SEG Awards Level 1 Award and Certificate in Practical Environmental and Conservation Skills

Qualification Guidance

England
Level 1 Award – 500/4086/8
Level 1 Certificate – 500/4085/6

About Us

At the Skills and Education Group Awards we continually invest in high quality qualifications, assessments and services for our chosen sectors. As a UK leading sector specialist we continue to support employers and skills providers to enable individuals to achieve the skills and knowledge needed to raise professional standards across our sectors.

Skills and Education Group Awards has an on-line registration system to help customers register learners on its qualifications, units and exams. In addition it provides features to view exam results, invoices, mark sheets and other information about learners already registered.

The system is accessed via a web browser by connecting to our secure website using a username and password: https://ors.skillsandeducationgroupawards.co.uk/

Sources of Additional Information

The Skills and Education Group Awards website www.skillsandeducationgroupawards.co.uk provides access to a wide variety of information.

Copyright

Specification Code, Date and Issue Number

The specification code is A9021-01 and C9016-01

Version	Date	Details of change
10.3	August 2021	Qualification guide created in new format
10.3	August 2021	New review date
10.4	July 2023	Operational end date and certification end date set for Level 1 Award

Contents

This is a live document and as such will be updated when required. It is the responsibility of the approved centre to ensure the most up-to-date version of the Qualification Guide is in use. Any amendments will be published on our website and centres are encouraged to check this site regularly.

Qualification Summary

Skills and Education Group Awards Level 1 Award in Practical Environmental and Conservation Skills

Qualification	Level 1 Award in Practical Environmental and Conservation Skills							
Qualification Purpose	**B**. Prepare for further learning or training and/or develop knowledge and/or skills in a subject area							
Entry Requirements	14+							
Age Range	Pre 16	✓	16-18	✓	18+	✓	19+	✓
Regulated	The above identified qualification is regulated by Ofqual and Qualifications Wales.							
Assessment	Internal assessment, internal and external moderation							
Type of Funding Available	See FaLE (Find a learning aim)							
Grading	Pass/Fail							
Operational Start Date	01/09/2008							
Review Date	31/08/2025							
Operational End Date	**31/12/2023 Level 1 Award**							
Certification End Date	**31/12/2024 Level 1 Award**							
Guided Learning (GL)	90 hours							
Total Qualification Time (TQT)	90 hours							
Credits	9 credits							
Skills and Education Group Awards Sector	Land Based							
Ofqual SSA Sector	03.4 Environmental Conservation							
Stakeholder Support	This qualification is supported by Lantra, the Sector Skills Council for the Environmental and Land Based Sector							
Administering Office	See Skills and Education Group Awards website							

Level 1 Award in Practical Environmental and Conservation Skills

Rules of Combination: Learners must achieve a minimum of 9 / maximum of 12 credits. This will include 5 credits from the mandatory units. Only one unit can be chosen from Group B, the optional Level 2 units.

Unit	Level	Credit Value	GL
Mandatory Units			
Health and safety for environmental studies [F/504/1229]	1	2	20
Teamwork in environmental studies [M/501/4883]	1	3	30
Group B Optional Units (Level 1)			
Practical skills for grassland areas [F/501/4886]	1	5	40
Practical skills for woodland areas [J/501/4887]	1	6	40
Practical skills for coastal areas [L/501/4888]	1	4	40
Practical skills for pond and wetland areas [R/501/4889]	1	5	40
Practical skills for hedgerows [J/501/4890]	1	5	40
Prepare and erect post and timber fencing [L/501/4891]	1	4	40
Practical skills for ditches [R/501/4892]	1	5	40
Practical skills for dry stone walls [Y/501/4893]	1	6	40
Practical skills for footpath and surfacing work [D/501/4894]	1	5	40
Practical skills for bio swales [J/504/4469]	1	6	60
Practical skills for eco grass swales [F/504/4468]	1	4	40
Practical skills for eco mulch swales [A/504/4470]	1	4	40
Practical skills for floating reed beds [F/504/4471]	1	5	40
Access and security in the countryside [K/501/4896]	1	5	40
Group C Optional Units (Level 2) **Learners may choose only one unit from this group**			
Collect, sort and process materials for recycling [A/502/3182]	2	3	23
Transport physical resources within the work area [J/502/1404]	2	2	15
Load and unload physical resources within the work area [J/501/1421]	2	2	15

If learners achieve credits from units of the same title (or linked titles) at more than one level, they cannot count credits achieved from both units towards the credit target of a qualification.

Qualification Summary

Skills and Education Group Awards Level 1 Certificate in Practical Environmental and Conservation Skills

Qualification	Level 1 Certificate in Practical Environmental and Conservation Skills							
Qualification Purpose	**B**. Prepare for further learning or training and/or develop knowledge and/or skills in a subject area **B1**. Prepare for further learning or training, B2. Develop knowledge and/or skills in a subject area							
Entry Requirements	14+							
Age Range	Pre 16	✓	16-18	✓	18+	✓	19+	✓
Regulated	The above identified qualification is regulated by Ofqual.							
Assessment	Internal assessment, internal and external moderation							
Type of Funding Available	See FaLE (Find a learning aim)							
Grading	Pass/Fail							
Operational Start Date	01/09/2008							
Review Date	31/08/2025							
Operational End Date								
Certification End Date								
Guided Learning (GL)	170 hours							
Total Qualification Time (TQT)	180 hours							
Credits	18 credits							
Skills and Education Group Awards Sector	Land Based							
Ofqual SSA Sector	03.4 Environmental Conservation							
Stakeholder Support	This qualification is supported by Lantra, the Sector Skills Council for the Environmental and Land Based Sector							
Administering Office	See Skills and Education Group Awards website							

Level 1 Certificate in Practical Environmental and Conservation Skills

Rules of Combination: Learners must achieve a minimum of 18 credits. This will include 5 credits from the mandatory units plus a minimum of 13 credits from Group A, **or** a minimum of 14 credits from one of the following pathways

Group B – Habitat
Group C – Boundaries
Group D - Access

Unit	Level	Credit Value	GL
Mandatory Units			
Health and safety for environmental studies [F/504/1229]	1	2	20
Team work in environmental studies [M/501/4883]	1	3	30
Group A – Optional Level 1 Units			
Practical skills for grassland areas [F/501/4886]	1	5	40
Practical skills for woodland areas [J/501/4887]	1	6	40
Practical skills for coastal areas [L/501/4888]	1	4	40
Practical skills for pond and wetland areas [R/501/4889]	1	5	40
Practical skills for hedgerows [J/501/4890]	1	5	40
Prepare and erect post and timber fencing [L/501/4891]	1	4	40
Practical skills for ditches [R/501/4892]	1	5	40
Practical skills for dry stone walls [Y/501/4893]	1	6	40
Practical skills for footpath and surfacing work [D/501/4894]	1	5	40
Practical skills for bio swales [J/504/4469]	1	6	60
Practical skills for eco grass swales [F/504/4468]	1	4	40
Practical skills for eco mulch swales [A/504/4470]	1	4	40
Practical skills for floating reed beds [F/504/4471]	1	5	40
Access and security in the countryside [K/501/4896]	1	5	40
Practical skills for steps and gates [H/501/7232]	2	6	20
Practical skills for effluent cleansing reed beds [J/504/4472]	2	6	60
Practical skills for naturalised reed beds [L/504/4473]	2	6	60
Group B – Habitat Pathway			
Practical skills for grassland areas [F/501/4886]	1	5	40
Practical skills for woodland areas [J/501/4887]	1	6	40
Practical skills for coastal areas [L/501/4888]	1	4	40

Practical skills for pond and wetland areas [R/501/4889]	1	5	40
Group C – Boundaries Pathway			
Practical skills for hedgerows [J/501/4890]	1	5	40
Prepare and erect post and timber fencing [L/501/4891]	1	4	40
Practical skills for ditches [R/501/4892]	1	5	40
Practical skills for dry stone walls [Y/501/4893]	1	6	40
Group D – Access Pathway			
Practical skills for footpath and surfacing work [D/501/4894]	1	5	40
Access and security in the countryside [K/501/4896]	1	5	40
Practical skills for steps and gates [H/501/7232]	2	6	30

If learners achieve credits from units of the same title (or linked titles) at more than one level, they cannot count credits achieved from both units towards the credit target of a qualification.

Introduction

The Skills and Education Group Awards Level 1 Award and Certificate in Practical Environmental and Conservation Skills provide learners with an understanding of environmental conservation, together with practical skills that can be used in the workplace.

Aims

The Skills and Education Group Awards Level 1 Award and Certificate in Practical Environmental and Conservation Skills aim to stimulate, encourage and develop

- A basic understanding of what working in environmental conservation involves
- Basic practical skills relevant to environmental conservation
- A responsible attitude to health and safety at work, hygiene and general working conditions
- An interest in returning to study and progressing onto further courses
- Skills to improve future job prospects
- Basic numeracy, literacy and written skills

Target Group

The qualification is designed for learners from a wide variety of backgrounds, including

- 14-16 year olds, who wish to obtain a practical qualification in environmental conservation through vocational study
- School-leavers (16+) who are keen to undertake a more practical qualification in a realistic working environment/non traditional learning environment
- Mature learners who are returning to study, particularly for people working in conservation, conservation projects, wildlife schemes, rehabilitation, regeneration of rare species, creation of habitat, enclosures, boundaries, wildlife corridors as well as creation of access to view and enjoy

Skills and Education Group Awards expects approved centres to recruit with integrity on the basis of a learner's ability to contribute to and successfully complete all the requirements of a unit/s or the full qualification.

Progression Opportunities

Learners could progress from these qualifications into the Skills and Education Group Awards Level 2 Practical, Environmental and Conservation Skills or into other areas within the Land Based Industries.

Centres should be aware that Reasonable Adjustments which may be permitted for assessment may in some instances limit a learner's progression into the sector. Centres

must, therefore, inform learners of any limits their learning difficulty may impose on future progression.

Assessment

Internal assessment, external assessment, internal and external moderation. Specific requirements and restrictions may apply to individual units within qualifications. Please check unit and qualification details for specific information.

Teaching Strategies and Learning Activities

Centres should adopt a delivery approach which supports the development of all individuals. The aims and aspirations of all the learners, including those with identified special needs or learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

Tutor/Assessor Requirements

Skills and Education Group Awards require those involved in the teaching and assessment process to be suitably experienced and / or qualified. Assessors should also be trained and qualified to assess or be working towards appropriate qualifications.

Those responsible for Internal Quality Assurance (IQA) must be knowledgeable of the subject/occupational area to a suitable level to carry out accurate quality assurance practices and processes.

Language

These specifications and associated assessment materials are in English only.

Unit Details

Health and Safety for Environmental Studies

Unit Reference	**F/504/1229**
Level	**1**
Credit Value	**2**
Guided Learning Hours	**20**
Unit Summary	This unit covers a generic approach to all practical skills work requiring an awareness of health and safety issues, as well as a basic working knowledge of its legislation and recommended operational procedures. It focuses on risk, procedures, safe practice, first aid awareness, PPE maintenance of equipment
Learning Outcomes (1 to 3) ***The learner will***	**Assessment Criteria (1.1 to 3.5)** ***The learner can***
1. Know about risks and hazards when working in the environment	**1.1** Identify risks and hazards in their environment
2. Know about protective clothing	**2.1** Identify protective clothing appropriate to the practical operations **2.2** Wear protective clothing appropriate to the operation at all times
3. Know about health and safety procedures and legislation	**3.1** Follow standard health and safety procedures **3.2** Use safety equipment appropriate to a practical operation

	3.3 Demonstrate safe maintenance and storage of tools and equipment **3.4** Identify their responsibilities under the Health and Safety at Work etc Act 1974 **3.5** Leave the work site clean, tidy and safe

Supporting Unit Information

H/501/4878 Health and safety for environmental studies - Level 1

Indicative Content

Learners should understand the importance of

- the major potential risks and hazards in the work environment
- the reasons for wearing appropriate protective clothing
- the reasons for using appropriate safety equipment
- health and safety legislation/regulations
- correct maintenance of tools and equipment
- leaving the work site clean and tidy

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old learners may have to learn through observation rather than practical experience where they cannot use specific equipment.

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit

Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence for this unit could be generated from the practical work based activities linked to any of the optional units where group work is involved.

Evidence presented to support achievement is not prescribed for each learning outcome. It could typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

See Skills and Education Group Awards website for further information

Team Work in Environmental Studies

Unit Reference	**M/501/4883**
Level	**1**
Credit Value	**3**
Guided Learning Hours	**30**
Unit Summary	This unit explores effective communication to enable co-operative working when planning tasks and working towards achieving goals. Learners will also be asked to review their contributions and agree ways to improve work with others
Learning Outcomes (1 to 3) ***The learner will***	**Assessment Criteria (1.1 to 3.2)** ***The learner can***
1. Understand objectives for group activities	**1.1** Confirm the given objectives and contribute to the planning of a specific group task **1.2** Work co-operatively with colleagues and person in charge of the activity to achieve the group's objectives
2. Be able to reflect on performance	**2.1** Review their individual and the group's performance to identify how the objectives were met **2.2** Identify how they could improve their performance when working in a team
3. Be able to communicate effectively	**3.1** Report unexpected findings to the person in charge of the activity **3.2** Communicate with colleagues and person in

	charge to achieve the group’s objectives

Supporting Unit Information

M/501/4883 Team work in environmental studies – Level 1

Indicative Content

Learners should understand the importance of

- checking that they understand what has to be achieved together
- identifying what needs to be done, their individual responsibilities and the arrangements for working together
- communicating clearly and effectively to all involved in the activity
- reviewing the group's and their individual performance to identify what went well, what went less well and how to suggest improvements

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old learners may have to learn through observation rather than practical experience where they cannot use specific equipment

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the

units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence for this unit could be generated from the practical work based activities linked to any of the optional units where group work is involved.

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

See Skills and Education Group Awards website for further information

Practical Skills for Grassland Areas

Unit Reference	**F/501/4886**
Level	**1**
Credit Value	**5**
Guided Learning Hours	**40**
Unit Summary	This unit explores the steps needed to establish and maintain a new area of wild flower meadow. Learners will be involved in the practical tasks necessary to do this
Learning Outcomes (1 to 4) ***The learner will***	**Assessment Criteria (1.1 to 4.5)** ***The learner can***
1. Be able to prepare new wild flower meadows	**1.1** Contribute, as part of a group activity, to the identification of an area to be established **1.2** Contribute, as part of a group activity, to the identification and reporting of any plant species already present **1.3** Prepare ground for sowing and planting, using appropriate hand tools and/or machinery as necessary
2. Be able to establish new wild flower meadows	**2.1** Introduce plant species **2.2** Use appropriate methods to aid establishment **2.3** Water in as necessary **2.4** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

3. Be able to maintain wildflower meadow(s)/areas	**3.1** Contribute to the identification of an area to be maintained **3.2** Contribute to the identification and reporting of any plant species already present, using simple reference materials **3.3** Carry out hand weeding as instructed **3.4** Cut sward to a specified height at the appropriate time of year, using appropriate hand shears or machinery **3.5** Ensure cutting includes a distribution of seeds **3.6** Repair any environmental damage **3.7** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition
4. Be able to assist in the eradication of problem plants	**4.1** Contribute to the identification and reporting of all plant species present **4.2** Carry out hand weeding as instructed **4.3** Use hand tools and/or machinery safely where necessary **4.4** Repair any environmental damage **4.5** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

F/501/4886 Practical skills for grassland areas - Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context.

Note 1: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number listed e.g. LO1.3

Note 2: Examples are indicative of the range of considerations for assessment criteria but are by no means all inclusive

Learning Outcome 1. Be able to prepare new wild flower meadows

1.1 Contribute, as part of a group activity, to the identification of an area to be established working as part of a group identify the main site and then focus down to the specific location for the wildflower meadow e.g. using maps or internet maps of the area and then focussing down to job specification or site plan or photograph(s) of site. Agree the main site and specific location with the supervisor, client or land owner. Provide details e.g. annotate copy of site plan to identify why that area was chosen as being suitable - drainage, soil conditions, light etc. Carry out a risk assessment of the area to be established. Take photographs of original site for later comparison.

1.2 Contribute, as part of a group activity, to the identification and reporting of any plant species already present use identification reference material with specific emphasis on a pictorial approach. Develop a plan of the site and use key/coding system to indicate areas/specific locations of species of wild flowers e.g. ox-eye daisy, cowslips buttercup species, forget-me-not species. Also make note of species that might cause trouble later e.g. thistle species, nettles, ragwort, dandelions. Report verbally to supervisor, client or landowner on the species found, using the plan and key/coding system to inform the report.

1.3 Prepare ground for sowing and planting, using appropriate hand tools and/or machinery as necessary cut back existing vegetation e.g. by strimming/mowing/hand shears. Remove arisings. Prepare ground e.g. remove stones/debris, fork over or use rotary cultivator, rake ground following contours to create suitable tilth for seeds to germinate effectively. Dig out perennial weeds/plants to prevent them

from quickly re-establishing - refer to LO1.2. Tools and machinery e.g. hand shears, loppers, spade, fork, rake, brush, wheelbarrow, strimmer, rotary cultivator. PPE - ensure learners are wearing e.g. overalls, steel toe capped footwear, gloves, ear muffs if using machinery, goggles if using strimmer/rotary cultivator. CE marked

Learning Outcome 2. Be able to establish new wild flower meadows.

2.1 Introduce plant species check websites or contact suppliers of British provenance seed stock and list five species that would be suitable for acid or alkaline soils or poor or fertile soils e.g. fertile soil - mix containing annual cornfield flowers such as corn marigold, poppy species, cornflower, corncockle, chamomile, pansy species, etc. Agree with client/landowner plant species mixture that would be suitable for specific location/area. Obtain wildflower meadow seeds e.g. from wholesaler/catalogue/internet.

2.2 Use appropriate methods to aid establishment once area is prepared for sowing e.g. broadcast sow seeds, rake over lightly and firm. Planting can be carried out using a hand trowel e.g. dig planting holes of appropriate depth for plant - avoid planting too shallowly and causing roots to dry out, avoid covering leaves. Protect seeded/planted area e.g. from birds netting or set up bird scarer - or wire netting to keep the rabbits out

2.3 Water in as necessary depending upon weather conditions there may be a need to water to aid establishment e.g. use a watering can with a rose head or it may be possible to use a sprinkler system/irrigation. If the area is far away from the taps it may be possible to obtain water from nearby water courses - avoid stagnant/polluted water

2.4 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition organic plant arisings e.g. to be recycled by shredding/composting - care not to perpetuate perennial weeds. Inorganic waste - stones, rubbish, plastic. Correct disposal e.g. re-use on site if possible - stones to fill holes/depressions or depending upon access remove using wheelbarrow/bags or place in skip for disposal as instructed by supervisor. Cover safe manual handling and PPE - refer to LO1.3. Clear debris from any areas adjacent to site and clear away all tools and equipment, final brush up of site and then walk around to check it is safe. Check original photograph against end product to ensure specification met - wildflower meadow established, original trees, shrubs, paths etc left in good condition

Learning Outcome 3. Know how to maintain wildflower meadow(s)/areas

3.1 Contribute to the identification of an area to be maintained refer

to process followed in LO1.1 to identify specific area to be maintained. Annotate on plan of site reasons for area to be maintained. Carry out risk assessment of area to be maintained/activities. Take photographs showing original site to be used later for comparison

3.2 Contribute to the identification and reporting of any plant species already present, using simple reference materials refer to LO1.2. Remember to make note of any species that may need to be controlled to maintain the wildflower meadow

3.3 Carry out hand weeding as instructed weed area specified by supervisor. Pull weeds or remove using hand trowel/fork - ensure perennial weed roots are completely removed - refer to LO2.4. PPE - wear gloves/use knee pads when carrying out hand weeding. Care required to avoid bad posture - strained back, sharp objects, prickles

3.4 Cut sward to a specified height at the appropriate time of year, using appropriate hand shears or machinery agree with client/landowner most appropriate cutting regime e.g. lawn areas which are to be allowed to flower but must be kept looking neat and tidy throughout the season - cut in the early spring using hand shears, strimmer or rotary mower at a high setting - not below 5cm and remove the clippings, leave gap in mowing during May/June to allow flowering then return to regular mowing and removal of clippings. Note - first cut after sowing ideally using sharp hand shears or rotary mower with sharp blades - care not to pull up roots.

3.5 Ensure cutting includes a distribution of seeds seasonality should be taken into account e.g. aim should be to allow flowering to take place and seeds to be set - refer to LO3.4. Once cutting is taking place again the seeds will be distributed during the task being carried out. Remove clippings so that new seedlings are not smothered.

3.6 Repair any environmental damage care needs to be taken not to carry out tasks in adverse weather conditions. If damage has occurred e.g. muddy ground, holes or ruts - fill in, level and re-seed. Any damage to boundaries to be repaired to ensure livestock cannot gain access. Prune any damaged branches or roots to avoid disease

3.7 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition refer to LO2.4 in context of removing arisings/debris etc resulting from maintenance activities

Learning Outcome 4. Know how to assist in the eradication of problem plants

4.1 Contribute to the identification and reporting of all plant species present refer to LO1.2 and LO3.2. Report to owner/client/supervisor

4.2 Carry out hand weeding as instructed refer to LO3.3 for hand weeding, also LO4.5

4.3 Use hand tools and/or machinery safely where necessary tools

and/or machinery that can be used e.g. hand fork/trowel, hoe, secateurs, loppers, wheel barrow. Safely e.g. ensure tools are properly maintained - blades sharp, working parts oiled and secure, safe working distances, correct PPE - refer to LO3.3.

4.4 Repair any environmental damage refer to LO3.6

4.5 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition refer to LO2.4 - particular care not to spread perennial weeds e.g. in compost heaps - burn these if possible

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old learners may have to learn through observation rather than practical experience where they cannot use specific equipment

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit

Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Evidence from this unit would be appropriate to cross reference to the mandatory units 1 & 2.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

Useful sources of reference

- For pre-16 year olds, powered tools must not be used as per current, relevant legislation
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully
- It is important to ensure that cutting takes place at the correct time of year e.g. to protect nesting birds/seeding
- In identifying plant species it is be expected that the common name would be stated as a minimum

See Skills and Education Group Awards website for further information

Practical Skills for Woodland Areas

Unit Reference	**J/501/4887**
Level	**1**
Credit Value	**6**
Guided Learning Hours	**40**
Unit Summary	This unit explores the steps needed to establish and maintain woodland areas. Learners will be involved in the practical tasks necessary to do this
Learning Outcomes (1 to 3) ***The learner will***	**Assessment Criteria (1.1 to 3.7)** ***The learner can***
1. Be able to plant woodland areas	**1.1** Contribute to identifying an area in need of planting **1.2** Contribute to identifying and reporting any plant species already present using simple reference materials **1.3** Prepare ground for planting using appropriate hand tools and/or machinery as necessary **1.4** Contribute to identifying and preparing trees to be planted **1.5** Plant trees or transplants / whips **1.6** Use appropriate methods to aid establishment, guards, weed control, support, mulch **1.7** Water in as necessary **1.8** Repair any environmental damage

	1.9 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition
2. Be able to maintain woodland	**2.1** Contribute to identifying an area of woodland where work is to be carried out **2.2** Contribute to identifying and reporting any plant species for removal **2.3** Carry out thinning, brashing, clearing, weeding and pruning as directed, using hand tools and/or machinery **2.4** Repair any environmental damage **2.5** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition
3. Be able to carry out coppicing operations by hand	**3.1** Contribute to identifying and marking trees to be coppiced **3.2** Assess individual trees prior to any work **3.3** Prepare ground around trees as necessary **3.4** Contribute to identifying the line of fall and escape routes **3.5** Extract converted timber as necessary **3.6** Repair any environmental damage **3.7** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

J/501/4887 Practical skills for woodland areas – Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context.

Note 1: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number listed e.g. LO1.3.

Note 2: Examples are indicative of the range of considerations for assessment criteria but are by no means all inclusive.

Learning Outcome 1. Be able to plant woodland areas

1.1 Contribute to Identifying an area in need of planting working as part of a group identify the main site and then focus down to the specific location for the woodland area to be established e.g. using maps or internet maps of the area and then focussing down to job specification or site plans or photograph(s) of the site. Agree main site and the specific location with supervisor, client or land owner. Walk around the woodland area and identify the specific area that is in need of planting and its edges.

1.2 Contribute to identifying and reporting any plant species already present using simple reference materials use identification reference material at the site with specific emphasis on a pictorial approach and taking seasonality into account e.g. identification pictures of buds/leaves. Develop a plan of the site and use a key/coding system to indicate areas/specific locations of species of trees, flowers or grasses. Report verbally to supervisor, client or landowner on the species found, using the plan and key/coding system to inform the report.

1.3 Prepare ground for planting using appropriate hand tools and/or machinery as necessary cut back existing vegetation e.g. by slasher/strimming. Remove arisings and debris. Prepare the ground as necessary e.g. dig or fork over ground or use rotary cultivator depending on site. Tools/machinery e.g. spade, shovel, fork, brush, slasher, loppers, strimmer, wheelbarrow, rotary cultivator. PPE - e.g. overalls, steel toe capped footwear, gloves, ear muffs and goggles if using machinery. CE marked.

1.4 Contribute to identifying and preparing trees to be planted working as part of a group follow the plan or instructions provided by the client/landowner indicating the species and pattern of trees to be planted. Identify species to be planted and check with supervisor (so that pattern can be achieved) e.g. by the shape and configuration of the buds. Prepare trees e.g. at planting time cut the tie on bundles and check the twigs/ stem/roots have not been damaged, keep roots covered with hessian - avoid drying out.

1.5 Plant trees or transplants/whips dig planting holes e.g. wide enough for the roots and a bit more and deep enough for compost/fertiliser to be added but no deeper than the soil mark on the stem, fork over the base of the hole, plant, back fill with soil. Slit plant whips e.g. dig down with a spade, pull back the ground and carefully put in the roots of the whip before pushing back the ground. In both cases firm ground around the transplants/whips to avoid air pockets in the soil and to secure the tree.

1.6 Use appropriate methods to aid establishment, guards, weed control support and mulch guard from rabbits using plastic spirals around the stems. Remove perennial weeds to avoid competition for water, nutrients, light etc. Support trees with stakes or canes but avoid damaging the roots when putting/knocking them in. If using stakes also use tree ties. Mulch can be applied to retain moisture, add nutrients, and keep down weeds.

1.7 Water in as necessary depending on the weather conditions and seasonality it may be necessary to add water to aid establishment - definitely if planting in dry conditions e.g. if tapped water is anywhere close by use a hose pipe or use water transported in for the purpose or if trees are a considerable distance from a tap use water from nearby stream, ditch or water course, ensuring it is not stagnant/polluted.

1.8 Repair any environmental damage there is likely to be damage as a result of access to the site during transportation of machinery/tools/equipment and materials especially if ground conditions are wet or boggy. If damage has occurred e.g. muddy ground, ruts or holes - fill in, rake level and re-seed. Repair any damage to boundaries to ensure livestock cannot gain access. Prune any damaged branches or roots to avoid disease.

1.9 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition organic plant arisings e.g. to be recycled /composted. Inorganic waste - rubbish, plastic. Correct disposal e.g. re-use on site if possible - branches for habitat piles or depending upon access remove using wheelbarrow/bags and place in skip for disposal as instructed by supervisor. Cover safe manual handling and PPE - refer to LO1.3. Clear away all tools and equipment and then walk site to check it is safe. Check original photograph against end product to ensure

specification is met - trees planted over desired area and site left in good condition as close as possible to original

Learning Outcome 2. Be able to maintain woodland

2.1 Contribute to identifying an area of woodland where work is to be carried out refer to the process followed in LO1.1 to identify the specific area to be maintained including agreement with client/landowner. Draw up a simple plan of the area. Carry out a risk assessment of the area to be maintained and annotate the maintenance requirements on the plan. Cat scan if appropriate. Take photographs showing the original site to be used later for comparison

2.2 Contribute to identifying and reporting any plant species for removal walk the area and identify trees that are dead, dying, diseased, in poor condition, thin, too tightly packed. Trees to be felled for timber to be marked on the plan of the site. Report to supervisor, client or landowner so that appropriate permissions can be obtained.

2.3 Carry out thinning, brashing, clearing, weeding and pruning as directed, using hand tools and/or machinery thinning e.g. identify trees to be thinned - ref LO2.2 plan felling/escape routes, warn co-workers, cut with bow saw. Brashing e.g. cut off branches up to specified height using pruning saw/loppers - ensure cut is clean and close to trunk. Clearing e.g. use strimmer or slasher taking care not to damage the bases of growing trees. Hand weeding e.g. pull up/dig out weeds - remove weeds to avoid them going to seed or roots of perennials re-establishing. Pruning e.g. using loppers/secateurs. PPE refer to LO1.3, plus hard hat/visor for brashing/pruning above head level. All as directed by supervisor.

2.4 Repair any environmental damage refer to LO1.8. Damage may also occur when removing arisings/timber. If soil damage/run off is occurring use brash to shelter ground

2.5 Remove arisings/debris from the area using the correct methods of disposal, leaving the area clear, tidy, safe and in good condition refer to LO1.9. Re-use as much material as possible e.g. brash for ground cover or put through shredder to give a supply of chippings / mulch.

Learning Outcome 3. Be able to fell and coppice by hand

3.1 Contribute to identifying and mark trees to be coppiced working as part of a group walk the site to identify e.g. dead, diseased, thin, tightly packed trees for felling - use a colour marker on the bark. Identify suitable trees for coppicing e.g. hazel, hornbeam, sweet chestnut, ash; use a marker of different colour to confirm coppicing. Record trees to be coppiced on a simple plan of the site and agree actions with client or landowner.

3.2 Assess individual trees prior to any work check identified trees

e.g. for direction of lean, hung up or rotten branches, rotten or ivy clad trunk or trunk leaning/supported by another tree or supporting another tree.

3.3 Prepare ground around trees as necessary carry out a risk assessment. Check the escape routes carefully to ensure they have no obstructions in the way, particularly checking there are no trip hazards e.g. remove logs or briars along line of escape route. Also check along line of fall to ensure that the falling tree will not damage boundaries/drystone walls or drive debris/branches/splinters into the air and cause injury

3.4 Contribute to identifying the line of fall and escape routes working as part of a team carry out a risk assessment, check the site in detail and discuss escape/line of fall options e.g. ensure routes of escape are clearly available, have no obstructions in the way and everybody involved is fully aware of the escape routes. Consider possible consequences when the tree follows a particular line of fall.

3.5 Extract converted timber as necessary following the instructions of the supervisor identify suitable access routes which are likely to be least damaged by extraction activities and will be efficient and effective. Extract timber e.g. to an agreed storage area and stack up as instructed. Consider safe manual handling of the timber

3.6 Repair any environmental damage refer to LO1.8 and LO2.4.

3.7 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe, and in good condition refer to LO1.9 and LO2.5. There is likely to be considerable debris/arisings - re-use as much of this as possible e.g. build wood piles to provide habitats for small animals and invertebrates

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old learners may have to learn through observation rather than practical experience where they cannot use specific equipment

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It could typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

Useful sources of reference

- In identifying plant species it is be expected that the common name would be stated as a minimum
- For pre-16 year olds, powered tools must not be used as per current, relevant legislation.
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation.
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully
- It is important to ensure that cutting takes place at the correct time of year e.g. to protect nesting birds/hedgehogs
- Pesticides only to be applied according to Pesticide Regulations.
- Ensure that Tree Preservation Order status is verified prior to any work being carried out.

See Skills and Education Group Awards website for further information

Unit Reference	**L/501/4888**
Level	**1**
Credit Value	**4**
Guided Learning Hours	**40**
Unit Summary	This unit deals with skills related to the management of coastal areas. Learners will be involved in the practical tasks necessary to do this
Learning Outcomes (1 to 2) ***The learner will***	**Assessment Criteria (1.1 to 2.6)** ***The learner can***
1. Be able to carry out sand trapping	**1.1** Contribute to identifying and establishing the position of the fence **1.2** Correctly erect suitable sand trapping fences **1.3** Carry out thatching, when appropriate, to prevent sand blow **1.4** Leave the area clean, tidy and safe
2. Be able to carry out the re-vegetation of denuded dunes	**2.1** Contribute to identifying an area to be re-vegetated **2.2** Contribute to identifying and reporting any grasses already present, using simple reference materials **2.3** Apply the correct techniques for planting new dune grasses **2.4** Adhere to suitable conditions and times for

	planting **2.5** Repair any environmental damage **2.6** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

L/501/4888 Practical skills for coastal areas - Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context.

Note 1: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number listed e.g. LO1.3

Note 2: Examples are indicative of the range of considerations for assessment criteria but are by no means all inclusive

Learning Outcome 1. Be able to carry out sand trapping

1.1 Contribute to identifying and establishing the position of the fence working as part of a group identify the main site and then focus down to the specific location for the sand trap fence e.g. using maps or internet maps of the area and then focussing down to job specification/site plans or photograph(s) of site. Agree the main site and specific location with the supervisor, client or land owner taking into account habitats, the contour of the land, and location of any areas to be protected from blown sand, the position of the access path/route. Provide details e.g. annotate a copy of the site plan with details of each of these aspects of site choice. Carry out a risk assessment of the sand trap fence area. Take photographs of the original site for later comparison.

1.2 Correctly erect suitable sand trapping fences erect fence e.g. dig post holes to specified depth, insert post, backfill and tamp down firmly; alternatively knock the posts in with a driveall or sledge hammer if ground conditions allow specified depth to be achieved; fit brushwood, palings or slats between posts, dig bases in if appropriate and use wire/staples/nails to secure ensuring that tension is maintained. Select tools and equipment e.g. spade types, shuv-holer, fork, mattock, bow saw, billhook, hand saw, claw hammer, pliers, wire cutters, sledge hammer, driveall, spirit level, wheel barrow. Materials e.g. fence posts, wire, staples, slats, chestnut palings, brushwood bundles, plastic mesh. PPE e.g. overalls, sun hat/glasses and suitable loose clothing for hot conditions plus contingency clothing against rapid changes of weather, steel toe capped footwear, gloves, goggles, hard

hat. CE marked. Consider transport of tools/materials to site e.g. Land Rover or ATV and trailer with final transport by wheelbarrow/manually by volunteers - may need to put boards down for access over soft sand.

1.3 Carry out thatching, when appropriate, to prevent sand blow thatching e.g. covering dune faces with arisings from forestry, hedge trimming operations or waste products such as Christmas tree branches to reduce the impact of wind erosion or of human trampling of vulnerable areas within a dune system. When waste materials are readily available thatching is a useful way of re-using them, if regular maintenance is feasible. Usually best carried out in conjunction with planting. Prevent sand blow e.g. cover 20 to 30 percent of the sand surface to be protected with layers of brash, sticking the ends into the sand and correctly orientating the brash so that it is not easily blown loose and discourages people walking between rows. Where brash may be blown away /used for bonfires, tie down e.g. using wire attached to stakes at the specified distances.

1.4 Leave the area clean, tidy and safe clean and tidy e.g. remove excess materials, cut-offs, bits of wire, debris using wheelbarrow/bags. Remove tools and equipment - count items back in to ensure none are lost through being buried in the sand. Remove access boards. Walk site to check it is returned to its original condition and no sharp items - wire fragments are left in the sand or sticking out from stakes or posts. Rake over area.

Learning Outcome 2. Be able to carry out the re-vegetation of denuded dunes

2.1 Contribute to identifying an area to be re-vegetated refer to process followed in LO1.1 to identify specific area to be re-vegetated and agree this with client/landowner. Record on plan of site. Record reasons for area to be re-vegetated e.g. annotate on plan of site - to complement sand trap fences or thatching work carried out in LO1.2 and LO1.3. Carry out risk assessment of area to be re-vegetated. Take photographs showing original site to be used later for comparison

2.2 Contribute to identifying and reporting any grasses already present, using simple reference materials use identification reference material with specific emphasis on a pictorial approach to identify any grasses already on the site. Develop a plan of the site and use key/coding system to indicate areas/specific locations of grass species. Report verbally and in writing to supervisor/client/landowner. Take care not to damage any plant material or create disturbance in sensitive surface vegetation during identification

2.3 Apply the correct techniques for planting new dune grasses take plants to the site e.g. in wheelbarrow/bags. Cover roots to keep them moist and also take care not to allow the plants to get too hot, water

before planting. Use spade to create planting gap or dibber of suitable size but in warmer weather conditions try not to open sand up so that it dries out more easily. Plant ensuring appropriate depth of base of leaves below the surface e.g. 10 cm and in drier conditions down to damp sand. Plant from two to five or six plants per hole depending on their size. Firm around each planting. Adopt planting pattern as agreed with client/landowner e.g. spaced 45 cm apart in offset rows.

2.4 Adhere to suitable conditions and times for planting agree planting time with client/landowner as appropriate for area e.g. ideal time to plant is often in March. Avoid planting in adverse weather conditions e.g. weather that is too warm /drought – when plants will quickly dry out, frost etc.

2.5 Repair any environmental damage if damage has occurred e.g. during access to site - formation of ruts or displacement of surface vegetation - fill/rake in holes or ruts, level and re-plant/re-seed. Any damage to boundaries to be repaired to ensure livestock cannot gain access or damage to boardwalks or paths to be repaired to ensure walkers do not digress and create more erosion problems

2.6 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition organic plant arisings or inorganic waste - rubbish, plastic. Correct disposal e.g. use on site if possible - buckthorn trimmings for fencing to discourage access or depending upon access to site remove using wheelbarrow or place in bags for disposal as instructed by supervisor. Cover safe manual handling and PPE - refer to LO1.2. Clear debris from any areas adjacent to site and clear away all tools and equipment. Walk around area to check it is safe - refer to LO1.4 and then give site a final rake if appropriate to leave it as it was found. Check this against the original photograph and also to ensure the job specification is met.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old learners may have to learn through observation rather than practical experience where they cannot use specific equipment

Methods of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It could typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the

learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

Useful sources of reference

- In identifying plant species it is be expected that the common name would be stated as a minimum
- For pre-16 year olds, powered tools must not be used as per current, relevant legislation
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully
- Pesticides only to be applied according to Pesticide Regulations
- Practical operations relating to this unit need to take into consideration impact on habitat management for nesting birds
-

See Skills and Education Group Awards website for further information

Practical Skills for Pond and Wetland Areas

Unit Reference	**R/501/4889**
Level	**1**
Credit Value	**5**
Guided Learning Hours	**40**
Unit Summary	This unit explores the steps needed to establish and maintain pond and wetland areas. Learners will be involved in the practical tasks necessary to do this.
Learning Outcomes (1 to 2) ***The learner will***	**Assessment Criteria (1.1 to 2.7)** ***The learner can***
1. Be able to establish ponds and wetlands	**1.1** Contribute to identifying an area to be established **1.2** Contribute to identifying and report any plants already present **1.3** Prepare ground for sowing and planting, using appropriate hand tools or machinery **1.4** Identify and introduce plant species **1.5** Use appropriate planting methods to aid establishment **1.6** Protect spare planting material **1.7** Repair any environmental damage **1.8** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

2. Be able to maintain/preserve pond and wetland habitat	**2.1** Identify correct levels of water **2.2** Maintain sluice gates or dam control as appropriate **2.3** Identify potential sources of pollution **2.4** Clear excess or unwanted vegetation, including overhanging branches if appropriate **2.5** Excavate silted areas as needed and dispose of spoil as directed **2.6** Repair any environmental damage **2.7** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

R/501/4889 Practical skills for pond and wetland areas – Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context.

Note 1: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number listed e.g. LO1.3

Note 2: Examples are indicative of the range of considerations for assessment criteria but are by no means all inclusive

Learning Outcome 1. Know how to establish ponds and wetlands

1.1 Contribute to identifying an area to be established working as part of a group identify the main site and then focus down to the specific location for the pond and/or wetland area to be established e.g. using maps or internet maps of the area and then focussing down to job specification/site plans or photograph(s) of the site. Record the specific location of the pond/wetland area on a copy of the site plan or map and ensure that the main site and specific location are agreed with the supervisor, client or land owner. Carry out a risk assessment of the area to be established. Cat scan the area if digging is to take place. Take photographs of original site for later comparison.

1.2 Contribute to identifying and report any plants already present use identification reference material with specific emphasis on a pictorial approach. Develop a plan of the site and use a key/coding system to indicate areas/specific locations of species of plants already present e.g. ragged robin, water forget-me-not, brooklime, marsh marigold may be present on wet areas of land and worth retrieving for pond and wetland development. Also make note of species that might cause trouble later e.g. brambles, thistle species, nettles. Report verbally to supervisor, client or landowner on the species found, using the plan and key/coding system to inform the report.

1.3 Prepare ground for sowing and planting, using appropriate hand tools or machinery remove plants identified for inclusion in the new pond and wetland area. Cut back existing vegetation e.g. by slasher/strimming/mowing. Remove arisings. Prepare ground to develop a suitable substrate for sowing and planting e.g. remove

stones/debris, fork over or use rotary cultivator, rake ground following contours to create suitable tilth for seeds to germinate effectively, add fertiliser if appropriate to support establishment. Dig out perennial weeds to prevent them from quickly re-establishing - refer to LO1.2. Tools and machinery e.g. slasher, loppers, spade, fork, rake, brush, wheelbarrow, strimmer, rotary cultivator. PPE - ensure learners are wearing e.g. overalls, steel toe capped footwear/ Wellingtons, gloves/rubber gloves, ear muffs if using machinery, goggles if using rotary cultivator/strimmer. CE marked.

1.4 Identify and introduce plant species check websites or contact suppliers of British provenance pond**/**wetland plants and list five species that would be suitable for the pond e.g. branched bur-reed, lesser bulrush, greater spearwort, yellow water lily, amphibious bistort or suitable for the wetland area e.g. purple loosestrife, lesser spearwort, marsh woundwort, meadow sweet, water mint - also refer to the species listed in LO1.2. Agree with client or landowner plant species to be used and specific area of pond or wetland if appropriate. Obtain plants e.g. from wholesaler/catalogue/internet. Transport plant material to location e.g. wheelbarrow and/or bags ensuring materials do not dry out.

1.5 Use appropriate planting methods to aid establishment once area has been fully prepared plant e.g. using a hand trowel to dig planting holes for small plants - ensure appropriate depth for plant to avoid covering leaves, firm around plants to avoid air pockets. For shrubs or trees being placed a little away from the pond dig out holes ensuring appropriate depth and width, fork over base of hole, add fertiliser, may need to use a stake for support and plastic spirals around trees to protect against rabbits.

1.6 Protect spare planting material keep the roots of spare plant material in moist compost to avoid drying out and cover with sacking. Ensure that the plant material is not stored where it can get too hot or be damaged by mechanical means or treading.

1.7 Repair any environmental damage if damage has occurred e.g. during access to site when transporting physical resources - formation of ruts or displacement of surface vegetation - fill/rake in holes or ruts, level and re-plant/re-seed. Any damage to boundaries to be repaired to ensure livestock cannot gain access. Any damaged branches and roots to be pruned back to avoid disease.

1.8 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition organic plant arisings - from area clearance or inorganic waste - rubbish, plastic. Correct disposal e.g. use on site if possible or depending upon access remove using wheelbarrow or place in bags or skip for disposal as instructed by supervisor. Cover safe manual handling and PPE - refer to LO1.3. Clear debris from any areas

adjacent to site and clear away all tools and equipment. Walk around area to check it is safe and then check against the original photograph to ensure that the overall site has been left as it was found.

Learning Outcome 2. Know how to maintain/preserve pond and wetland habitat

2.1 Identify correct levels of water identify the appropriate water level e.g. by the profile of plants at the waterline and whether they are immersed or showing previously submerged foliage or identify level required with the client or landowner to ensure the pond and wetland habitat can be maintained and not be liable to drying out in periods of dry weather leading to the death of plant material and pond life.

2.2 Maintain sluice gates or dam control as appropriate ensure sluice gates and dam control are maintained on a regular basis so they can be quickly moved if needed. Test mechanisms regularly, oil/lubricate any machinery mechanisms to keep freely moving, check that ropes used to raise sluices remain sound/firmly attached - ease of use is essential in case of flooding. Clean out any debris which has collected e.g. litter, leaves.

2.3 Identify potential sources of pollution pollution can come from local farms e.g. from slurry spillages/inappropriate timing of fertiliser application that is flushed into ponds and may lead to rapid plant growth. Soil loss due to inappropriate cultivations can contribute to silting up of ponds and waterways at sluices/dams. In urban areas there could be pollution from litter/rubbish - discarded shopping trolleys/bicycles etc or oil/diesel washed off from roads. Ponds or wetlands may also be used as areas to discard bottles or drug syringes and needles so care is needed when clearing.

2.4 Clear excess or unwanted vegetation, including overhanging branches if appropriate cut back trees/overhanging branches to prevent the fall of leaves and twigs into a pond. Use netting in autumn to catch most of the falling leaves and dead branches. Plants such as bulrushes, irises, water lilies, reed types and the various pond weeds such as Canadian pond weed will all need to be monitored for excessive growth and periodically be partially removed. Tools e.g. bow saw, loppers, crome or rake. PPE - ensure learners are wearing e.g. overalls, steel toe capped footwear, waders or wellingtons, rubber gloves, hard hat for cutting branches. CE marked.

2.5 Excavate silted areas as needed and dispose of spoil as directed take the water level down in order to gain access, then dig out the silt with a spade or if large amounts use a small mechanised digger. The spoil can usually be recycled and used for landscaping e.g. used to contour land or as it is often very fertile - used on flower beds.

2.6 Repair any environmental damage refer to LO1.7. Silt material removed from channels e.g. between ponds or channelling run-off from

fields into/away from ponds may be used to repair puddle or rutted areas.

2.7 **Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition** refer to LO1.8. Silt can be recycled for contouring, on flower beds or in the compost heap. Inorganic debris from ponds may include e.g. discarded supermarket trolleys, bicycles, machines, furniture, bottles, drug syringes and needles - inform supervisor of any unusual findings and follow instructions regarding safe handling or lifting.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old learners may have to learn through observation rather than practical experience where they cannot use specific equipment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It could typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

Useful sources of reference

- For pre-16 year olds, powered tools must not be used as per current, relevant legislation. For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully
- Practical operations relating to this unit need to take into consideration

impact on habitat management for nesting birds, amphibians, invertebrates and fish

See Skills and Education Group Awards website for further information

Practical Skills for Hedgerows

Unit Reference	**J/501/4890**
Level	**1**
Credit Value	**5**
Guided Learning Hours	**40**
Unit Summary	This unit explores how to prepare, establish and maintain hedgerows. Learners will be involved in the practical tasks necessary to do this
Learning Outcomes (1 to 2) ***The learner will***	**Assessment Criteria (1.1 to 2.6)** ***The learner can***
1. Be able to establish a new or replacement hedgerow	**1.1** Contribute to identifying an area in need of planting **1.2** Contribute to identifying and reporting any plant species already present **1.3** Prepare ground for planting **1.4** Identify and prepare species to be planted **1.5** Plant material **1.6** Use appropriate methods to aid establishment, guards, weed control, support, mulch, irrigate **1.7** Repair any environmental damage **1.8** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

2. Be able to maintain a new or replacement hedgerow	**2.1** Contribute to surveying hedge and recording species **2.2** Remove dead wood and debris where necessary **2.3** Contribute to trimming hedge at an appropriate height using appropriate hand tools or machines **2.4** Contribute to creating correct hedge shape/profile **2.5** Repair any environmental damage **2.6** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

J/501/4890 Practical skills for hedgerows - Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context

Note 1: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number listed e.g. LO1.3

Note 2: Examples are indicative of the range of considerations for assessment criteria but are by no means all inclusive

Learning Outcome 1. Know how to establish a new or replacement hedgerow

1.1 **Contribute to identifying an area in need of planting** working as part of a group identify the main site and then focus down to the specific location for the new or replacement hedgerow e.g. using maps or internet maps of the area and then focussing down to job specification or site plans or photograph(s) of the site. Agree main site and the specific location with supervisor, client or land owner. Develop a plan of the site and record on it the line of the hedgerow - new or replacement. Identify why replacement or new hedge is needed e.g. boundary, security. Carry out a risk assessment of the work to be done. Take a photograph of the original site for later comparison.

1.2 **Contribute to identifying and reporting any plant species already present** use identification reference material at the site with specific emphasis on a pictorial approach and taking seasonality into account e.g. identification pictures of buds/leaves. Develop a plan of the site and use a key/coding system to indicate areas/specific locations of species of trees, shrubs or flowers. Report verbally to supervisor, client or landowner on species found, using the plan and key/coding system to inform the report.

1.3 **Prepare ground for planting** remove unwanted plant material along the line of the hedgerow e.g. by slasher/strimming. Remove perennials such as nettles and docks to avoid competition for light/minerals/water. Remove arisings. Prepare the ground as necessary e.g. dig or fork over ground or use rotary cultivator depending on the area, add fertiliser and compost to support

establishment as directed by the supervisor. Remove debris, stones/boulders. Tools and machinery e.g. spade, fork, rake, brush, slasher, loppers, wheelbarrow, strimmer, rotary cultivator. PPE - e.g. overalls, steel toe capped footwear, gloves, ear muffs and goggles if using machinery. CE marked. Cover manual handling. Cat scan the area if necessary for any underground utilities.

1.4 **Identify and prepare species to be planted** follow the plan or instructions provided by the client/landowner indicating the species and pattern of trees/shrubs to be planted. in the hedgerow. Identify species to be planted and check with supervisor (so that pattern can be achieved) e.g. by the shape and configuration of the buds. Prepare trees **/**shrubs e.g. at planting time cut the tie on bundles and check the plants have not been damaged, particularly the root ball - carefully prune any damaged roots/branches to prevent disease, keep hessian sacks around the roots to avoid drying out.

1.5 **Plant material** plant in a single or double row following the spacing guidelines given by the supervisor e.g. slit plant whips - cut plastic sheet mulch, if laid, at marked positions, dig down with a spade, pull back the ground and carefully put in the roots of the whip before pushing back the ground and firming to remove air pockets. Alternatively dig planting holes. Prune back any damaged roots/branches to prevent disease. Consider seasonality of planting and types of soil suitable for planting whips.

1.6 **Use appropriate methods to aid establishment, guards, weed control, support, mulch, irrigate** guard e.g. plastic spirals around stems/quills to protect from rabbits. Remove weeds to avoid competition for water, nutrients, light e.g. annuals/perennials - ensure that roots are dug out to prevent re-establishment. Support trees e.g. with canes /stakes - avoid damaging the roots when putting/knocking them in. If using stakes also use tree ties. Mulch can be applied to retain moisture, add nutrients, keep down weeds e.g. plastic sheet mulch, composts. Water if necessary e.g. watering can/hose pipe

1.7 **Repair any environmental damage** there is likely to be damage as a result of access to the hedgerow site during transportation of tools, materials and plants especially if ground conditions are wet or boggy - wheelbarrow/sack truck/ATV and trailer. If damage has occurred e.g. muddy ground, ruts or holes - fill in, rake level and re-seed providing protection from the birds if necessary.

1.8 **Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition** organic plant arisings e.g. to be recycled/composted or use to make habitat piles - branches/roots etc. Inorganic waste -rubbish, string, plastic, broken guards. Correct disposal e.g. re-use on site if possible or depending upon access remove using wheelbarrow/bags or place in skip for disposal as instructed by supervisor. Cover safe manual

handling and PPE - refer to LO1.3. Clear away all tools and equipment and then walk site to check it is safe. Check original photograph against end product to ensure specification is met - hedgerow planted along desired line and site left in good condition as close as possible to original

Learning Outcome 2. Know how to maintain a new or replacement hedgerow

2.1 Contribute to surveying hedge and recording species refer to LO1.2.

2.2 Remove dead wood and debris where necessary prune back dying wood/branches. Cut out dead material e.g. branches or could be plants that have not established - gaps to be filled in at next planting period with respect to seasonality. Remove debris from the base of the hedge with a fork or rake - the arisings could be used as habitat piles. Get rid of any old barbed wire/mesh/fence posts-remove with wheelbarrow/bags.

2.3 Contribute to trimming hedge at an appropriate height using appropriate hand tools or machines trim a section of a hedge using shears or a powered hedge cutter e.g. use hedge clippers particularly when access is an issue or use powered hedge trimmers where hedge is easily accessible from level ground as directed by supervisor. Height to be agreed with supervisor/client/landowner. Consider time spent on hedge trimmer. PPE is essential e.g. goggles, ear protection. Carry out a risk assessment and ensure that safe working practices are followed e.g. check prior to trimming for obstructions in hedgerow and also tripping or slipping hazards along the hedgerow.

2.4 Contribute to creating correct hedge shape/profile agree with supervisor / client / landowner on the shape of hedge to be achieved e.g. in keeping with other hedges in the locality and depending on its purpose - rectangular profile to 1.5 m height for livestock retention or A profile to 2m for shelter from the wind. Shape a section of the hedge using shears or a powered hedge cutter as instructed by supervisor. Ref LO2.3.

2.5 Repair any environmental damage refer to LO1.7

2.6 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition refer to LO1.8.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be

considered and appropriate support mechanisms put in place.

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old learners may have to learn through observation rather than practical experience where they cannot use specific equipment

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules

- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

Useful sources of reference

- For pre-16 year olds, powered tools must not be used as per current, relevant legislation
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully
- Practical operations relating to this unit need to take into consideration impact on habitat management e.g. nesting birds/hedgehogs

See Skills and Education Group Awards website for further information

Prepare and Erect Post and Timber Fencing

Unit Reference	**L/501/4891**
Level	**1**
Credit Value	**4**
Guided Learning Hours	**40**
Unit Summary	This unit explores how to prepare and erect post and timber fencing. Learners will be involved in the practical tasks necessary to do this
Learning Outcomes (1 to 3) ***The learner will***	**Assessment Criteria (1.1 to 3.6)** ***The learner can***
1. Be able to mark out a fence line	**1.1** Contribute to identifying a fence line on site **1.2** Select appropriate tools and material **1.3** Move vegetation and other obstructions as required **1.4** Mark out the position of all posts to appropriate specification as directed
2. Be able to erect posts for timber fencing	**2.1** Excavate post holes to the depth, shape and line appropriate to the style of the fence **2.2** Erect the first post and subsequent ones at the correct centres and set firm
3. Be able to attach rails	**3.1** Attach and connect rails securely at the required height according to specifications

	3.2 Use alternating joints on the rails where appropriate **3.3** Ensure that the fence follows the contour of the land **3.4** Carry out a full inspection of the fence and rectify any faults **3.5** Repair any environmental damage **3.6** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

L/501/4891 Prepare and erect post and timber fencing – Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context.

Note 1: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number listed e.g. LO1.3

Note 2: Examples are indicative of the range of considerations for assessment criteria but are by no means all inclusive

Learning Outcome 1. Know how to mark out a fence line

1.1 Contribute to identifying a fence line on site identify main site and then focus down to the specific location where the fence is to be located e.g. using maps or internet maps of the area focussing down to job specification or site plans or photograph(s) of site and agreed with supervisor, client or land owner. Need to consider contours of land and any existing features. Carry out a risk assessment of the site including the need to cat scan in relation to insertion of posts - mark on plan of site. Mark line of fence e.g. spot paint for posts. Take photograph of the original site for later comparison.

1.2 Select appropriate tools and material tools e.g. spade, fork, shovel, brush, hand saw, crow bar, hammer/nails, spirit level, tamper, mallet, driveall, wheelbarrow, sheeting. Material e.g. timber, posts, nails, cement/sand to secure posts. PPE e.g. overalls, steel toe capped footwear, industrial rubber gloves. CE marked

1.3 Move vegetation and other obstructions as required cut back or dig out perennial weeds, particularly focussing on their roots to prevent grow back. Remove or dig out obstructions after checking utilities cannot be damaged e.g. rocks, wire, old posts. Remove to a safe distance and temporarily store. Refer to LO3.6

1.4 Mark out the position of all posts to appropriate specification as directed find out specifications from client or landowner and work from plan of site. Measure out length of fence and calculate number of posts and their locations. Mark positions on ground e.g. spot paint. Position so that fence constructed is aesthetically pleasing and if possible blends in with the landscape rather than being obtrusive e.g.

slanting across a hill slope rather than straight up the slope

Learning Outcome 2. Know how to erect posts for timber fencing

2.1 Excavate post holes to the depth, shape and line appropriate to the style of the fence confirm with client, landowner or supervisor depth and line of posts. Excavate post holes to the depth, shape and line appropriate to the style of the fence, placing spoil on sheeting alongside hole to reduce damage to site. Ensure post hole is vertical and also not too wide e.g. width to accommodate post plus room for backfill/mortar/ concrete. May need to use crow bar to break down hard ground

2.2 Erect the first post and subsequent ones at the correct centres and set firm erect posts at correct depth using spirit level for accurate vertical positioning. Obtain help to hold post in position, put in backfill/mortar/concrete, tamp down hard to secure post firmly, repeat same procedure with other posts.

Learning Outcome 3. Know how to attach rails

3.1 Attach and connect rails securely at the required height according to specifications follow agreed specifications for height and distance between rails. Obtain help to hold rail at one end. Nail one end loosely and then use spirit level to ensure rail is level, once fully and accurately in place nail other end and then return to first end to securely nail. Repeat same procedure with other rails. Use blocks of wood cut to correct lengths to ensure rails are consistent distances apart

3.2 Use alternating joints on the rails where appropriate ensure rails are nailed in such a way that they overlap on each post e.g. the top and bottom rails span and are nailed to 3 posts, the ends of the middle rails are nailed to the middle of these posts and will extend one post along on each side from this first group of three posts. This will ensure the fence is more secure and firm, particularly in windy conditions and if being leant on by people or livestock

3.3 Ensure that the fence follows the contour of the land once the fence line has been agreed with the client or landowner to take into account and follow the contours of the ground this should then be followed unless unforeseen circumstances arise. Any changes must be agreed with the client or landowner. The top line of the posts should complement the contour of the ground and the top rail should be fixed first to set the lines of the lower rails and establish a continuous and pleasing line.

3.4 Carry out a full inspection of the fence and rectify any faults e.g. during construction of the fence continue to inspect it from different angles on an ongoing basis. Stand back from the fence and walk around to different viewpoints - it is much easier to rectify a fault that

is identified early in the process than at the end. Faults e.g. posts out of line, not vertical, height of tops noticeably variable

3.5 Repair any environmental damage e.g. damage to access route and ground either side of the fence. Fill in holes, level and re-seed. Repair e.g. brush/shovel up any excess materials, prune back any damaged branches or roots to prevent disease gaining entry, fork/rake over compacted ground, brush up at the end. Refer to LO3.6

3.6 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition organic plant arisings e.g. to be recycled by shredding/composting. Inorganic waste - treated off-cuts of posts/rails, stones/rubbish/plastic. Correct disposal e.g. use on site - stones to provide extra support for posts in soft ground or depending upon access remove using wheelbarrow and place in bags or skip for disposal as instructed by supervisor. Cover safe manual handling and PPE, visual inspection along fence line for safety - no tripping hazards and condition - even post height/spacing, rail height/spacing, meets specification. Check against the original photograph - LO1.1 - to ensure the site has been returned as close as possible to its original state.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old learners may have to learn through observation rather than practical experience where they cannot use specific equipment

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

Useful sources of reference

- For pre-16 year olds, powered tools must not be used as per current, relevant legislation
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully

See Skills and Education Group Awards website for further information

Practical Skills for Ditches

Unit Reference	**R/501/4892**
Level	**1**
Credit Value	**5**
Guided Learning Hours	**40**
Unit Summary	This unit explores how to construct and maintain ditches. Learners will be involved in the practical tasks necessary to do this
Learning Outcomes (1 to 2) ***The learner will***	**Assessment Criteria (1.1 to 2.8)** ***The learner can***
1. Be able to create a ditch	**1.1** Contribute to identifying and marking out the line of the ditch **1.2** Remove any debris or excess vegetation from the area as directed **1.3** Check for any underground services **1.4** Excavate to the correct depth, width and gradient as directed **1.5** Create a suitable batter and stable banks as directed **1.6** Dispose of or ramp spoil **1.7** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition
2. Be able to maintain	**2.1** Inspect the ditch for flow, obstructions and

a ditch	stability **2.2** Remove debris and excess vegetation as directed **2.3** Straighten the line of the ditch where required **2.4** Re-excavate to the correct depth and fall **2.5** Check and re-grade batter **2.6** Dispose of soil as directed **2.7** Repair any environmental damage **2.8** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

R/501/4892 Practical skills for ditches – Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context.

Note 1: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number listed e.g. LO1.3

Note 2: Examples are indicative of the range of considerations for assessment criteria but are by no means all inclusive

Learning Outcome 1. Be able to create a ditch

1.1 Contribute to identifying and marking out the line of the ditch working as part of a group identify the main site and then focus down to the specific location where the ditch is to be excavated e.g. using maps or internet maps of the area and then focussing down to job specification or site plans or photograph(s) of the site. Agree the specific location with the supervisor, client or land owner. Carry out a risk assessment of the area to be established including the need to cat scan the area where digging is to take place. Work with group members and taking into account any obstructions/changes of elevation, mark out the line of the ditch e.g. using stakes and line or marker paint.

1.2 Remove any debris or excess vegetation from the area as directed remove e.g. debris - fallen tree branches, stones, rubbish; excess vegetation - turf, grass, scrub, small trees; cut back overhanging branches. Directions to include e.g. safe use of tools, safe manual handling, PPE, suitable weather conditions for work. Removal - ref LO1.7.

1.3 Check for any underground services under close supervision - check e.g. by cat scanning the area after consulting site plans of buried services or confirming positions of buried services with landowner/client or looking for telltale signs of previous works - manhole covers, disturbed or sunken ground. Underground services e.g. electricity/data cables, water/sewage/gas pipes.

1.4 Excavate to the correct depth, width and gradient as directed excavate e.g. manually. Directions to include e.g. right tools for soil

type - fork/pick/mattock for stony/ compacted soil/roots; digging technique - loosen each layer of soil, throw onto ditch side/tarpaulin depending on situation, dig upwards along line of ditch, stand at lowest point/secure footing. Depth and width e.g. fit for purpose - open ditch/lay drainage pipe. Gradient e.g. ensure even gradient, minimise depressions, remove obstructions - roots /stones, steep enough to encourage flow - 1:12, not too steep - erosion. Ref to LO1.2.

1.5 Create a suitable batter and stable banks as directed suitable batter e.g. width of ditch top 2 to 3 times that of bottom depending - soil type/stability and chamfered as directed during digging. Stable banks e.g. use spare turf, seed and mulch, netting, set stones in banks as directed.

1.6 Dispose of or ramp spoil dispose of spoil e.g. reuse - landscaping, fill depressions/ eroded areas, stone to strengthen ditch sides; dispose - spread spoil where it will not be carried by rain or flood water or trodden back into ditch - down slope side/above flood level. Ramp spoil e.g. bank up top of ditch edges. Refer to LO 1.7.

1.7 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition arisings - organic e.g. see LO1.2 - recycle by shredding/composting, make dead hedges/habitat piles with woody material, use turf to protect banks/sides. Take care not to perpetuate perennial weeds. Arisings inorganic - re-use on site - ref to LO1.6. Inorganic debris e.g. stones, rubbish, plastic - remove with wheelbarrow/bags/skip for disposal as instructed by supervisor. Safe removal e.g. cover safe manual handling, PPE, personal hygiene. Clear and tidy e.g. clear away all equipment and tools, final rake/tidy up of site. Safe site e.g. carry out a visual check of the area beside the ditch for safety - no tripping/slipping hazards, sharp small tree stumps, broken glass. Good condition - level finish, ditch water flowing evenly, meets specification.

Learning Outcome 2. Be able to maintain a ditch

2.1 Inspect the ditch for flow, obstructions and stability inspect e.g. visually check ditch for flow - water running smoothly/fast eroding flow, pooled areas within ditch, boggy areas around ditch; obstructions - deposited sediment, encroaching plants/tree roots, fallen branches/leaves, open junctions/correct fall at main ditches; stability - slippage of sides, erosion from fast flow.

2.2 Remove debris and excess vegetation as directed e.g. pull out branches, weeds and rubbish and reuse/remove - ref toLO1.6, LO1.7. Ensure that water proof gloves and footwear are worn throughout ditch clearance operations.

2.3 Straighten the line of the ditch where required ditch may loose its line due to e.g. lack of maintenance, fallen leaves/vegetation encroaching, flooding or erosion. Re establish line e.g. use stakes and

line between existing parts, cut back encroaching vegetation, dig out along the line, re-establish/reduce gradient - ref to LO1.4.

2.4 Re-excavate to the correct depth and fall e.g. check original depth, dig out sediment and debris to maintain correct fall - ref to LO1.4. Check junctions of side to main drains e.g. remain open and correct height of side ditch at entry point into main ditch.

2.5 Check and re-grade batter e.g. check original batter requirements - ref to LO1.5, use sediment from ditch to ramp up batter if slumping; strengthen with stones/netting; ensure banks stable - ref LO1.5.

2.6 Dispose of soil as directed e.g. ref to LO1.6, LO1.7. Use good topsoil for flower/ vegetable beds, ref to LO2.7.

2.7 Repair any environmental damage there is likely to be damage to the access route and the ground on either side of the ditch. Use recycled top soil to fill in holes or ruts, restore banks. Fork over any compacted ground. Re-seed disturbed areas/ditch edges using a seed mix in keeping with the native flora - may need protection from birds. Prune damaged roots and branches to avoid disease.

2.8 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition refer to LO1.6, LO1.7. Rushes and water plants removed from an existing ditch may initially be piled beside the ditch to allow trapped amphibians/invertebrates to return to their habitat.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old learners may have to learn through observation rather than practical experience where they cannot use specific equipment

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

See Skills and Education Group Awards website for further information

Practical Skills for Dry Stone Walls

Unit Reference	**Y/501/4893**
Level	**1**
Credit Value	**6**
Guided Learning Hours	**40**
Unit Summary	This unit explores how to prepare the area and construct a dry stone wall. Learners will be involved in the practical tasks necessary to do this
Learning Outcomes (1 to 2) ***The learner will***	**Assessment Criteria (1.1 to 2.10)** ***The learner can***
1. Be able to prepare foundations	**1.1** Contribute to identifying the area **1.2** Clear the line of rubble and vegetation **1.3** Mark out the line and arrange stones on site as directed **1.4** Identify and arrange suitable stones as directed **1.5** Ensure that foundations are to the correct depth, line and width according to style **1.6** Repair any environmental damage **1.7** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition
2. Be able to construct a wall	**2.1** Select appropriate tools **2.2** Set up a batter frame

	2.3 Select stone of a suitable size and shape **2.4** Place stone securely and safely in the wall **2.5** Insert through stones at appropriate heights and centres **2.6** Use suitable fillings at each stage **2.7** Achieve an appropriate batter for the style of wall **2.8** Securely fix copings **2.9** Repair any environmental damage **2.10** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

Y/501/4893 Practical skills for dry stone walling – Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context.

Note 1: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number listed e.g. LO1.3

Note 2: Examples are indicative of the range of considerations for assessment criteria but are by no means all inclusive

Learning Outcome 1. Know how to prepare foundations

1.1 Contribute to identifying the area identify main site and then focus down to specific location where dry stone wall is to be located e.g. using maps or internet maps of the area and then focussing down to job specification or site plans or photograph(s) of site. Agree main site and specific location with supervisor, client or landowner. Develop a plan of the site taking into account terrain and drainage and including points of access and transportation of materials. Carry out risk assessment of site and tasks undertaken including need to cat scan area. Photograph of the original site for later comparison.

1.2 Clear the line of rubble and vegetation identify the line of the wall and clear the area ready for work to commence. Remove vegetation e.g. grass or scrub and including perennials - dig out the roots to ensure stability. Cut back any encroaching branches. Remove rubble and litter. Wear suitable PPE e.g. overalls, steel toe cap footwear, leather gloves for stone handling, back support belt - repetitive lifting. CE marked.

1.3 Mark out the line and arrange stones on site as directed initially colour mark the line and then mark out using peg and line ensuring sufficient space on either side of the wall for access and room to work. Transport stone to the site on a power barrow or wheelbarrow and store in well drained areas to avoid damage to the ground.

1.4 Identify and arrange suitable stones as directed place stones in rows adjacent to the wall with the largest stones nearest and the smallest furthest away. Select large stones for the base, medium for the middle and smaller stones for the top. Identify coping and through

stones used to strengthen the wall and infill material. Cover safe manual handling of the stones e.g. correct posture, lifting, carrying and placing stones

1.5 Ensure that foundations are to the correct depth, line and width according to style following the line dig out a trench**,** deep enough to reach a firm layer of soil or rock to provide a solid foundation on which to construct the wall - follow instructions of supervisor regarding suitable depth, fill/level any depressions. The wall profile is based on a batter frame and this is used to establish the appropriate width e.g. wider at the bottom and tapering up to a narrower top to ensure stability.

1.6 Repair any environmental damage there is likely to be damage as a result of access to the site. If damage has occurred e.g. muddy ground, ruts or holes - fill in, rake level and re-seed/plant - protect seeded areas from the birds. Prune any damaged branches or roots to avoid disease.

1.7 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition organic plant arisings e.g. to be recycled by shredding/composting - care not to perpetuate perennial weeds, burn these if possible. Inorganic waste - broken stones, rubbish, plastic. Correct disposal e.g. use on site - store broken stones to use as fill in the middle of the wall to get stability or depending upon access remove using wheelbarrow/bags or place in skip for disposal as instructed by supervisor. Cover safe manual handling and PPE - refer to LO1.2. Clear debris from any areas adjacent to site and tidy away anything that will not be needed for the next phase of work. Carry out visual inspection to check site is safe.

Learning Outcome 2. Know how to construct a wall

2.1 Select appropriate tools e.g. spade, shovel, brush, hammer, chisel, crow bar, trowel, spirit level and may need wheelbarrow/hand sack truck for transporting larger stones.

2.2 Set up a batter frame set up a batter frame at the start of a wall section, ensure the frame is correctly aligned - level, upright and square across the foundations, support as directed. Develop the frame with pegs and lines to the next batter frame as instructed

2.3 Select stone of a suitable size and shape select larger stones for base of the wall to ensure strong foundations, medium size stones in the middle with smaller stones near the top and coping stones on top. Infill with reclaimed stone chippings/off cuts etc.

2.4 Place stone securely and safely in the wall ensure the stones are firmly placed and secured by over lapping - there must be no common line running down from the top to the bottom of the wall as this will be a weak point and may lead to a collapse. Use smaller stones to fill in

gaps and secure the larger stones as necessary.

2.5 Insert through stones at appropriate heights and centres through stones link both sides of the wall with the aim of pulling the wall together to strengthen it. These large long stones are most effective when well incorporated in amongst the other stones.

2.6 Use suitable fillings at each stage as each layer is constructed ensure all gaps are filled with reclaimed filings/backfill. This provides a firm base for the next layer and secures the stones. In some instances there may be a need to mix mortar.

2.7 Achieve an appropriate batter for the style of wall the style of the wall should fit into the landscape and be in keeping with other walling around the location - this must be agreed with the client/landowner and the batter frame - widths/height constructed based on these discussions. The wall should then be built checking frequently to ensure that it accurately follows the batter.

2.8 Securely fix copings identify the appropriate coping style based on the other walls in the area. Aim for the top of the wall to follow the contour of the ground. Fix a line to set the top level. Lay the coping stones and wedge firmly or use mortar mix to secure. Take care not to group slightly less suitable stones creating weaknesses e.g. shorter than the normal width. Check that there are no loose stones at the end as these may easily become dislodged.

2.9 Repair any environmental damage refer to LO1.6.

2.10 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition refer to LO1.7. Ensure that any broken stone that has not been reclaimed as infill material is removed from the site or re-used in other appropriate ways. Clear any remaining debris and remove all tools and equipment. Carry out a final visual inspection of the wall to check for safety. Check against the original photograph - LO1.1 - to ensure the site has been returned as close as possible to its original state.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old

learners may have to learn through observation rather than practical experience where they cannot use specific equipment

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Evidence from this unit would be appropriate to cross reference to the mandatory units 1 & 2.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

Useful sources of reference

- For pre-16 year olds, powered tools must not be used as per current, relevant legislation
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully
- Practical operations relating to this unit need to take into consideration impact on habitat management

See Skills and Education Group Awards website for further information

Practical Skills for Footpath and Surfacing Work

Unit Reference	**D/501/4894**
Level	**1**
Credit Value	**5**
Guided Learning Hours	**40**
Unit Summary	This unit explores how to prepare the area, construct and maintain a footpath. Learners will be involved in the practical tasks necessary to do this
Learning Outcomes (1 to 2) ***The learner will***	**Assessment Criteria (1.1 to 2.6)** ***The learner can***
1. Be able to lay a path	**1.1** Contribute to identifying the course of the path **1.2** Select appropriate tools **1.3** Identify and remove any debris, including plant species impeding the path line as directed **1.4** Accurately and clearly mark out the path line and width to specification **1.5** Excavate the path, removing any waste material as directed **1.6** Fit edging boards and revetment as required **1.7** Lay hardcore evenly to a specified thickness, levelling and consolidating as directed **1.8** Lay surface material evenly to a specified thickness and consolidate

	1.9 Repair any environmental damage **1.10** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition
2. Be able to maintain footpaths	**2.1** Check the condition of footpath and structures for safety and condition **2.2** Resurface a footpath as directed using appropriate tools and materials **2.3** Clear drains of obstructing debris and vegetation to maintain correct fall **2.4** Repair or replace edging as required **2.5** Repair any environmental damage **2.6** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

D/501/4894 Practical skills for footpath and surfacing work – Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context.

Note 1: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number listed e.g. LO1.3

Note 2: Examples are indicative of the range of considerations for assessment criteria but are by no means all inclusive

Learning Outcome 1. Be able to lay a path

1.1 Contribute to identifying the course of the path working as part of a group identify the main site and then focus down to the specific location where the path is to be constructed e.g. using maps or internet maps of the area and then focussing down to job specification or site plans or photograph(s) of the site. By group discussion decide on how the course of path is to be indicated e.g. markers and tapes

1.2 Select appropriate tools tools selected e.g. spade, shovel, fork, rake, brush, pick axe, crowbar, bow saw, tape measure, peg and line, sprit level, hand saw, hammer, wheelbarrow, risk assessment of tasks, tools and site including need to cat scan. PPE selected e.g. overalls, steel toe capped footwear, gloves, hard hat. CE marked.

1.3 Identify and remove any debris, including plant species impeding the path line as directed remove vegetation, stones and rubbish, cut back overhanging branches, dig out perennial plants in the line of the path - nettles, dock, plantain, dandelion. Cover safe manual handling and PPE, seasonality and suitable weather conditions for working

1.4 Accurately and clearly mark out the path line and width to specification tape off the area to indicate work in progress. Use the job specification to mark out the path e.g. paint spots, marker pegs and line. Accurately measure the width of the path at points for consistency along the line of the path.

1.5 Excavate the path, removing any waste material as directed excavate the path tray e.g. using spade/shovel/pick axe/crowbar depending on whether the ground is soft, rocky or hard. Remove the

spoil to a storage area as directed or identify for recycling into e.g. sunken areas, digression points, repairing ruts or holes - refer to LO1.9.

1.6 Fit edging boards and revetment as required knock in posts at specified distances and nail on the edging boards. Aim to follow the general contour of the ground, smoothing out the path as practical by use of back filling and revetments e.g. use recycled spoil, stones, cut timber.

1.7 Lay hardcore evenly to a specified thickness, levelling and consolidating as directed wheelbarrow in the hardcore and tip along the line of the path, level to the specified thickness using rake and/or shovel, consolidate layers using a wacker plate to ensure compaction.

1.8 Lay surface material evenly to a specified thickness and consolidate wheelbarrow in the surface material and tip over the hardcore, level to the specified thickness, rake to ensure consistent spread, consolidate using a wacker plate.

1.9 Repair any environmental damage there is likely to be damage to the access route and the ground on either side of the path. Use recycled top soil to fill in holes or ruts, restore banks. Fork over any compacted ground. Re-seed disturbed areas using a seed mix in keeping with the native flora - may need protection from birds. Prune damaged roots and branches to avoid disease. Dig or clear channels and/or ditches to drain boggy ground and protect the path from becoming boggy.

1.10 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition organic arisings e.g. vegetation fromLO1.3 to be recycled by shredding/composting or used to protect the edges of the path - dead hedges or habitat piles. Take care not to perpetuate perennial weeds. Inorganic waste - re-use on site - bricks/stones for edging/revetments or depending upon access remove rubble/rubbish by wheelbarrow, bag or place in skip for disposal as instructed by supervisor. Cover safe manual handling and PPE - refer to LO1.2. Clear away all tools and equipment, final brush/tidy up of site and then carry out a visual check of the path for safety - no tripping/slipping hazards and in good condition - level finish, edging secure, meets specification.

Learning Outcome 2. Know how to maintain footpaths

2.1 Check the condition of footpath and structures for safety and condition check for safety by carrying out a risk assessment e.g. check for tripping hazards, slippery patches - moss/algae, boggy/wobbly parts of the path that might force walkers onto less safe areas, protruding branches/nettles/briars/thorns, wobbly hand rails. Condition e.g. physically walk the footpath checking all aspects including the integrity and levelness of the surface, the soundness and security of any structures such as edging boards, drains, revetments,

steps, hand/safety rails, gates/stiles.

2.2 **Resurface a footpath as directed using appropriate tools and materials** e.g. check the base level is solid and level, fill in any holes, remove tripping hazards, remove any perennial weeds growing in the path (refer to LO1.3), remove moss. Wheelbarrow in materials e.g. crush and run or bark, tip materials on the part to be resurfaced, level and consolidate. Tools e.g. spade, shovel, rake, wheelbarrow - ref LO1.2

2.3 **Clear drains of obstructing debris and vegetation to maintain correct fall** check the drains for blockages, remove debris at the openings such as leaves, roots, litter by hand, use draining rods to clear within the drain. Remove vegetation and roots growing into drains to avoid blockage leading to flooding. Dig debris out of drainage ditches to maintain the correct fall and check that the water continues to run. Ensure that water proof gloves and footwear are worn throughout drainage clearance operations.

2.4 **Repair or replace edging as required** e.g. replace rotten or damaged edging, digging out and replacing posts and cutting out new boards and nailing onto posts as needed

2.5 **Repair any environmental damage** refer to LO1.9. There may also be a need to repair environmental damage from people digressing off the path to take short cuts or avoid puddles/boggy patches causing braiding e.g. replace edging stones, plant thorn trees/gorse at digression points, refer to LO2.2 for removal of puddles/boggy patches, use spoil to fill in ruts in braided areas or fork over and re-seed/re-turf

2.6 **Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition** refer to LO1.10

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old

learners may have to learn through observation rather than practical experience where they cannot use specific equipment

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Evidence from this unit would be appropriate to cross reference to the mandatory units 1 & 2.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

Useful sources of reference

- For pre-16 year olds, powered tools must not be used as per current, relevant legislation
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully
- Practical operations relating to this unit need to take into consideration impact on habitat management

See Skills and Education Group Awards website for further information

Practical Skills for Bio Swales

Unit Reference	**J/504/4469**
Level	**1**
Credit Value	**6**
Guided Learning Hours	**60**
Unit Summary	This unit will provide the learner with the knowledge and skills to create bio swales
Learning Outcomes (1 to 3) ***The learner will***	**Assessment Criteria** **(1.1 to 3.9)** ***The learner can***
1. Know about swales	**1.1** Identify different types of swale **1.2** State the uses of swales
2. Be able to prepare to create a bio swale	**2.1** Check for any underground and/or overground services **2.2** Contribute to identifying and marking out the line of the swale **2.3** Remove any debris or excess vegetation from the area as directed
3. Be able to create a bio swale	**3.1** Excavate to the correct depth, width and gradient as directed **3.2** Disperse soil **3.3** Line planting area **3.4** Re-cover lining with soil

	3.5 Plant lined area as directed **3.6** Prepare ground for seeding **3.7** Disperse seed **3.8** Protect area from erosion **3.9** Make good work area

Supporting Unit Information

J/504/4469 Practical skills for bio swales – Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Skills and Education Group Awards will provide specialist support for providers wishing to use this unit in order to develop and agree customised delivery and assessment regimes that maximise access and opportunities for the target learners and employers in this sub-sector and ensure that all aspects of content, delivery and assessment are fit for purpose and promote best practice in the sector.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place

Delivery of the practical learning outcomes could be by supervised practical operational work giving learners the opportunity, first to practice the various tasks and then to be observed correctly doing each task to demonstrate achievement of the assessment criteria.

Prior to, during and after completion of practical operational work photographs or video could be taken to provide evidence of progress.

It is important that practical assessment activities are supervised appropriately

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

The assessment of some knowledge and understanding may take place in a non-work based environment e.g. training centre, however it must link directly to workplace performance and include performance evidence.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It could typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

- For pre-16 year olds, powered tools must not be used as per current, relevant legislation.
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation.
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully

See Skills and Education Group Awards website for further information

Practical Skills for Eco Grass Swales

Unit Reference	**F/504/4468**
Level	**1**
Credit Value	**4**
Guided Learning Hours	**40**
Unit Summary	This unit will provide the learner with the knowledge and skills to create eco grass swales
Learning Outcomes (1 to 3) ***The learner will***	**Assessment Criteria** **(1.1 to 3.6)** ***The learner can***
1. Know about swales	**1.1** Identify different types of swale **1.2** State the uses of swales
2. Be able to prepare to create an eco grass swale	**2.1** Check for any underground and/or overground services **2.2** Contribute to identifying and marking out the line of the swale **2.3** Remove any debris or excess vegetation from the area as directed
3. Be able to create an eco grass swale	**3.1** Excavate to the correct depth, width and gradient as directed **3.2** Disperse soil **3.3** Prepare ground for seeding **3.4** Disperse seed

	3.5 Protect area from erosion **3.6** Make good work area

F/504/4468 Practical skills for eco grass swales – Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Skills and Education Group Awards will provide specialist support for providers wishing to use this unit in order to develop and agree customised delivery and assessment regimes that maximise access and opportunities for the target learners and employers in this sub-sector and ensure that all aspects of content, delivery and assessment are fit for purpose and promote best practice in the sector.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place

Delivery of the practical learning outcomes could be by supervised practical operational work giving learners the opportunity, first to practice the various tasks and then to be observed correctly doing each task to demonstrate achievement of the assessment criteria.

Prior to, during and after completion of practical operational work photographs or video could be taken to provide evidence of progress.

It is important that practical assessment activities are supervised appropriately

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

The assessment of some knowledge and understanding may take place in a

non-work based environment e.g. training centre, however it must link directly to workplace performance and include performance evidence.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

- For pre-16 year olds, powered tools must not be used as per current, relevant legislation.
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation.
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully

See Skills and Education Group Awards website for further information

Practical Skills for Eco Mulch Swales

Unit Reference	**A/504/4470**
Level	**1**
Credit Value	**4**
Guided Learning Hours	**40**
Unit Summary	This unit will provide the learner with the knowledge and skills to create eco mulch swales
Learning Outcomes (1 to 3) ***The learner will***	**Assessment Criteria** **(1.1 to 3.6)** ***The learner can***
1. Know about swales	**1.1** Identify different types of swale **1.2** State the uses of swales
2. Be able to prepare to create an eco mulch swale	**2.1** Check for any underground and/or overground services **2.2** Contribute to identifying and marking out the line of the swale **2.3** Remove any debris or excess vegetation from the area as directed
3. Be able to create an eco mulch swale	**3.1** Excavate to the correct depth, width and gradient as directed **3.2** Disperse soil **3.3** Backfill with mulch **3.4** Profile mulch

	3.5 Protect area from erosion **3.6** Make good work area

A/504/4470 Practical skills for eco mulch swales – Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Skills and Education Group Awards will provide specialist support for providers wishing to use this unit in order to develop and agree customised delivery and assessment regimes that maximise access and opportunities for the target learners and employers in this sub-sector and ensure that all aspects of content, delivery and assessment are fit for purpose and promote best practice in the sector.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place

Delivery of the practical learning outcomes could be by supervised practical operational work giving learners the opportunity, first to practice the various tasks and then to be observed correctly doing each task to demonstrate achievement of the assessment criteria.

Prior to, during and after completion of practical operational work photographs or video could be taken to provide evidence of progress.

It is important that practical assessment activities are supervised appropriately

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

The assessment of some knowledge and understanding may take place in a

non-work based environment e.g. training centre, however it must link directly to workplace performance and include performance evidence.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

- For pre-16 year olds, powered tools must not be used as per current, relevant legislation.
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation.
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully

See Skills and Education Group Awards website for further information

Practical Skills for Floating Reed Beds

Unit Reference	**F/504/4471**
Level	**1**
Credit Value	**5**
Guided Learning Hours	**40**
Unit Summary	This unit will provide the learner with the knowledge and skills to create floating reed beds
Learning Outcomes (1 to 3) ***The learner will***	**Assessment Criteria (1.1 to 3.6)** ***The learner can***
1. Know about floating reed beds	**1.1** Describe the characteristics of a floating reed bed **1.2** Explain why a floating reed bed would be used
2. Know about the risks involved in working near deep water	**2.1** State the risks involved in working near deep water **2.2** State what personal protective equipment should be used
3. Be able to create a floating reed bed	**3.1** Install coir matting and retaining nets into reed raft flotation frames **3.2** Locate the frame at the waters edge **3.3** Plant rafts whilst gradually launching onto water **3.4** Join further modular rafts as directed

	3.5 Anchor floating bed as directed **3.6** Make good work area

F/504/4471 Practical skills for floating reed beds – Level 1

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Skills and Education Group Awards will provide specialist support for providers wishing to use this unit in order to develop and agree customised delivery and assessment regimes that maximise access and opportunities for the target learners and employers in this sub-sector and ensure that all aspects of content, delivery and assessment are fit for purpose and promote best practice in the sector.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place

Delivery of the practical learning outcomes could be by supervised practical operational work giving learners the opportunity, first to practice the various tasks and then to be observed correctly doing each task to demonstrate achievement of the assessment criteria.

Prior to, during and after completion of practical operational work photographs or video could be taken to provide evidence of progress.

It is important that practical assessment activities are supervised appropriately

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

The assessment of some knowledge and understanding may take place in a

non-work based environment e.g. training centre, however it must link directly to workplace performance and include performance evidence.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

- For pre-16 year olds, powered tools must not be used as per current, relevant legislation.
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation.
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully

See Skills and Education Group Awards website for further information

Access and Security in the Countryside

Unit Reference	**K/501/4896**
Level	**1**
Credit Value	**5**
Guided Learning Hours	**40**
Unit Summary	This unit explores access and security issues on countryside sites and requirements for disabled visitors
Learning Outcomes (1 to 2) ***The learner will***	**Assessment Criteria (1.1 to 2.3)** ***The learner can***
1. Be able to survey a site for access, safety and security	**1.1** Contribute to carrying out a site survey recording the condition of paths and any safety issues on the site **1.2** Check the security of the site with regard to stock and public access **1.3** Draw a sketch showing the position of footpaths, identifying any access, safety and security issues
2. Be able to plan for disabled access, visitor information and security	**2.1** Carry out practical measures to improve site security **2.2** Draw a sketch for improving disabled access showing path widths, surface materials and routes **2.3** Produce a design for a poster for an interpretive panel or leaflet to inform visitors about a site, access, safety and security

Supporting Unit Information

K/501/4896 Access and security in the countryside – Level 1

Indicative Content

Learners should understand the importance of

- The requirements for disabled access
- The importance of site security and safety
- Types of Rights of Way and the Countryside Rights of Way Act
- The uses of fences, barriers, gates, locks and cattle grids in site security
- Methods of informing and educating visitors to a site
- How signs can be used to aid access, safety and security
- Environmental impact assessment

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old learners may have to learn through observation rather than practical experience where they cannot use specific equipment

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately

qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

See Skills and Education Group Awards website for further information

Practical Skills for Steps and Gates

Unit Reference	**H/501/7232**
Level	**2**
Credit Value	**6**
Guided Learning Hours	**30**
Unit Summary	This unit explores how to prepare the area and construct a gate and steps suitable for a particular location. Learners will be involved in the practical tasks necessary to do this.
Learning Outcomes (1 to 2) ***The learner will***	**Assessment Criteria (1.1 to 2.9)** ***The learner can***
1. Be able to construct and install wooden gates	**1.1** Identify the location for a gate and select a suitable gate type and dimensions **1.2** Correctly identify and select appropriate hand tools or machinery **1.3** Select and check suitable materials and cut to size with appropriate tools or machinery **1.4** Select and fit suitable hinges and catches **1.5** Transport and install the gate safely and securely **1.6** Repair any environmental damage **1.7** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

2. Know how to construct steps	**2.1** Identify appropriate materials sensitive to the site **2.2** Identify the line of steps and dimensions of treads and risers **2.3** Correctly identify and select appropriate hand tools or machinery **2.4** Mark out the step line, width and location of risers **2.5** Excavate for steps **2.6** Construct treads and risers and fix securely and accurately **2.7** Fit side supports and handrails as required **2.8** Repair any environmental damage **2.9** Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe and in good condition

H/501/7232 Practical skills for steps and gates - Level 2

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context.

Note 1: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number listed e.g. LO1.3

Note 2: Examples are indicative of the range of considerations for assessment criteria but are by no means all inclusive

Learning Outcome 1. Be able to construct and install wooden gates

1.1 Identify the location for a gate and select a suitable gate type and dimensions identify main site and then focus down to the specific location where the gate is to be installed e.g. using maps or internet maps of the area focussing down to job specification or site plans or photograph(s) of site, record location of the gate on a simple plan of area and agree this with supervisor, client or land owner. Suitable gate type e.g. fit for purpose - to provide access for livestock - five barred gate, walkers or wheelchair users - kissing gate designs, horse riders - bridle gate; fits into and in keeping with specific locality with respect to aesthetic appearance. Dimensions e.g. accurate measurement to ensure gate will fit into the gap, height appropriate to purpose. Carry out a risk assessment of the site including the need to cat scan in relation to insertion of gate posts. Take original photograph on which to make a comparison.

1.2 Correctly identify and select appropriate hand tools or machinery e.g. spade, fork, crow bar, shuv-holer, post hole borer, driveall, brush, rake. tape measure, spirit level, hand saw, hack saw, hammer, sledge hammer, spanner, screw driver, plane, power drill, tamper, wheelbarrow, sack truck, tarpaulin for spoil. PPE e.g. overalls, steel toe capped footwear, gloves/industrial rubber gloves - newly treated gates. CE marked.

1.3 Select and check suitable materials and cut to size with appropriate tools or machinery materials selected e.g. oak gate and suitable sized gateposts, hinges and suitable latch type plus screws - galvanised, may require sand/cement for securing posts. Check e.g.

wood used fits in with the locality, pressure treated, durable, galvanised fittings. Cut to size e.g. may need planning or cutting with a hand saw to ensure an exact fit.

1.4 Select and fit suitable hinges and catches select hinges e.g. galvanised, heavy duty, swing in one or both directions, appropriate to the type/style of gate being fitted; catches e.g. easy to fit and operate, operable from both sides, long lasting. Gate should open and close easily and be secure when closed. Fitting e.g. use galvanised screws/ bolts, not prone to corrode easily/break - screwdriver/powered screwdriver - normally battery operated. Ensure spacing/level in accordance with client/landowner requirement

1.5 Transport and install the gate safely and securely cover safe manual handling during transport and fitting - gates are often quite heavy and/or awkward. Transport to the site in appropriate weather conditions avoiding boggy ground or icy conditions when more likely to slip. Use a truck - pedestrian operated or powered wheelbarrow. Ensure help is available - more than one person may be needed to lift the gate into position.

Place the gate on a block(s) so it is above ground level and won't scrape along the ground after installation. Use a spirit level to ensure it is vertical and secure using screwdriver/powered screwdriver. Check the gate is free moving, does not catch.

1.6 Repair any environmental damage e.g. damage to the access route and ground either side of the gate. Fill in holes/ruts, fork/rake over compacted ground, level and re-seed. Repair e.g. brush/shovel up any excess materials, prune back any damaged branches or roots to prevent disease gaining entry. Brush up at the end.

1.7 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe, and in good condition organic plant arisings e.g. to be recycled by shredding/composting. Inorganic waste - treated off-cuts of gate, stones, rubbish, plastic. Correct disposal e.g. use on site - stones to provide extra support for gate posts or depending upon access remove using wheelbarrow/power barrow and place in bags or skip for disposal with local authority/private contractor. Cover safe manual handling and PPE. Brush/rake area surrounding gate and then visually inspect for safety - no tripping hazards and condition - even height, free swing, specification met. Check against the original photograph - LO1.1 - to ensure the site has been returned as close as possible to its original state.

Learning Outcome 2. Know how to construct steps

2.1 Identify appropriate materials sensitive to the site materials e.g. railway sleepers, logs, stone, preservative treated timber, aggregate/fill, mortar, chicken wire, nails. Sensitive to site e.g. logs or

timber for steps in woodland or stone if required for specific locations e.g. SSSI's/National Parks.

2.2 Identify the line of steps and dimensions of treads and risers identify main site and then focus down to the specific location where the steps are to be located e.g. using maps or internet maps of the area focussing down to job specification or site plans or photograph(s) of site, record location of the steps on a simple plan of area and agree this with supervisor, client or land owner. Identify the dimensions required within the specification and discuss and confirm with supervisor, client or land owner e.g. width of 1.2m, riser height 20 cm and tread depth specified to vary within sets to accommodate a variable slope. Carry out a risk assessment and CAT scan for services in urban environments.

2.3 Correctly identify and select appropriate hand tools or machinery select tools or machinery e.g. slasher, bow saw, loppers, mattock, fork, spade, rake, brush, crowbar, hammer, chisel, mell, spirit level, pegs, wheel barrow, powered barrow, wacker plate, tarpaulin, first aid kit. Select PPE e.g. overalls, heavy duty steel toe cap footwear gloves, safety helmet - felling branches/trees, goggles - hammering stone. CE marked.

2.4 Mark out the step line, width and location of risers mark out line and width e.g. with peg and line. Ensure marked out width will fit steps within the line of the existing path. Measure out and use spot paint to identify the specific lines and dimensions of treads and risers. Refer to LO2.2. Put in risers at the most suitable locations with the aim of avoiding too much environmental damage e.g. try to avoid roots, large rocks/outcrops.

2.5 Excavate for steps dig out the steps to appropriate width and depth using spade, fork and crowbar as needed. Place spoil on sheeting next to paths/steps. Aim to obtain a firm base for each step. Thoroughly clean out debris, if specified add a layer of sand covered with geo-textile to prevent weeds growing up through the steps.

2.6 Construct treads and risers and fix securely and accurately knock in stakes vertically at the points set out, check they are vertical using a spirit level. Nail or screw on the risers checking that each is level. Back fill with excavated spoil if appropriate or use materials brought in e.g. crush and run, bark chippings, tamp down or use wacker plate to ensure consolidation. Ensure no trip hazards e.g. stakes standing proud. Check everything is firmly in place with no potential of loosening or collapsing.

2.7 Fit side supports and hand rails as required cut to specified lengths and nail or screw side supports to the risers. Incorporate additional stakes on the outside if necessary to ensure they are secure. Fit handrails e.g. these may be carried by posts knocked into the ground or cemented into prepared holes. Rails should be pre-drilled

and fitted to the posts with screws at an appropriate height to be effective. They must be strongly fitted e.g. to withstand someone tripping and grabbing the rail for support. Ensure that the style of the steps/handrails fits in with the locality.

2.8 Repair any environmental damage refer to LO1.6 in the context of the steps.

2.9 Remove arisings/debris from the area using correct methods of disposal, leaving the site clear, tidy, safe, and in good condition refer to LO1.7 in the context of the steps.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

NB The equipment that 14-16 year old learners are able to use is governed by the current regulations. Tutors will need to be aware of this, and adapt learning programmes accordingly. 14-16 year old learners may have to learn through observation rather than practical experience where they cannot use specific equipment

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

See Skills and Education Group Awards website for further information

Practical Skills for Effluent Cleansing Reed Beds

Unit Reference	**J/504/4472**
Level	**2**
Credit Value	**6**
Guided Learning Hours	**60**
Unit Summary	This unit will provide the learner with the knowledge and skills to create effluent cleansing reed beds.
Learning Outcomes (1 to 3) ***The learner will***	**Assessment Criteria (1.1 to 3.8)** ***The learner can***
1. Know about reed beds	**1.1** Describe the characteristics of an effluent cleansing reed bed **1.2** Explain why an effluent cleansing reed bed would be used
2. Be able to prepare to create an effluent cleansing reed bed	**2.1** Check for any underground and/or overground hazards **2.2** Contribute to identifying and marking out the area of the reed bed and the required work area **2.3** Remove any debris or excess vegetation from the area as directed
3. Be able to create an effluent cleansing reed bed	**3.1** Excavate to the correct depth, width and gradient as directed **3.2** Ramp spoil

	3.3 Line area, anchoring as appropriate **3.4** Install pipework and risers for effluent inflow as directed **3.5** Install pipework for clean water outflow as directed **3.6** Install infill as directed **3.7** Plant reed bed as directed **3.8** Make good work area

J/504/4472 Practical skills for effluent cleansing reed beds – Level 2

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Skills and Education Group Awards will provide specialist support for providers wishing to use this unit in order to develop and agree customised delivery and assessment regimes that maximise access and opportunities for the target learners and employers in this sub-sector and ensure that all aspects of content, delivery and assessment are fit for purpose and promote best practice in the sector.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place

Delivery of the practical learning outcomes could be by supervised practical operational work giving learners the opportunity, first to practice the various tasks and then to be observed correctly doing each task to demonstrate achievement of the assessment criteria.

Prior to, during and after completion of practical operational work photographs or video could be taken to provide evidence of progress.

It is important that practical assessment activities are supervised appropriately

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

The assessment of some knowledge and understanding may take place in a

non-work based environment e.g. training centre, however it must link directly to workplace performance and include performance evidence.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

- For pre-16 year olds, powered tools must not be used as per current, relevant legislation.
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation.
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully
-

See Skills and Education Group Awards website for further information

Practical Skills for Naturalised Reed Beds

Unit Reference	**L/504/4473**
Level	**2**
Credit Value	**6**
Guided Learning Hours	**60**
Unit Summary	This unit will provide the learner with the knowledge and skills to create naturalised reed beds
Learning Outcomes (1 to 3) ***The learner will***	**Assessment Criteria (1.1 to 3.5)** ***The learner can***
1. Know about reed beds	**1.1** Describe the characteristics of a naturalised reed bed **1.2** Explain why a naturalised reed bed would be used
2. Be able to prepare to create a naturalised reed bed	**2.1** Check for any underground and/or overground hazards **2.2** Contribute to identifying and marking out the required work area **2.3** Remove any debris or excess vegetation from the area as directed
3. Be able to create a naturalised reed bed	**3.1** Excavate to the correct depth, width and gradient as directed **3.2** Ramp spoil and/or create levies

	3.3 Install infill as directed **3.4** Plant area to create a naturalised wetland environment as directed **3.5** Make good work area

L/504/4473 Practical skills for naturalised reed beds – Level 2

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Skills and Education Group Awards will provide specialist support for providers wishing to use this unit in order to develop and agree customised delivery and assessment regimes that maximise access and opportunities for the target learners and employers in this sub-sector and ensure that all aspects of content, delivery and assessment are fit for purpose and promote best practice in the sector.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place

Delivery of the practical learning outcomes could be by supervised practical operational work giving learners the opportunity, first to practice the various tasks and then to be observed correctly doing each task to demonstrate achievement of the assessment criteria.

Prior to, during and after completion of practical operational work photographs or video could be taken to provide evidence of progress.

It is important that practical assessment activities are supervised appropriately

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

The assessment of some knowledge and understanding may take place in a

non-work based environment e.g. training centre, however it must link directly to workplace performance and include performance evidence.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

Learners should demonstrate that they are able to successfully complete the learning outcomes and apply the related knowledge to different activities and situations, possibly linking with the optional units chosen.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

- For pre-16 year olds, powered tools must not be used as per current, relevant legislation.
- For post 16, the learners must not use any machinery/equipment unless they and the equipment comply with current, relevant legislation.
- All basic Health and Safety relating to the practical tasks in this unit should be explained prior to a demonstration by the tutor/assessor of how to complete the tasks successfully

See Skills and Education Group Awards website for further information

Collect, Sort and Process Materials for Recycling

Unit Reference	**A/502/3182**
Level	**2**
Credit Value	**3**
Guided Learning Hours	**23**
Unit Summary	The aim of this unit is to provide the learner with the knowledge and skills required to identify and collect recyclable materials using appropriate procedures and methods. It also covers the sorting and processing of recyclable materials
Learning Outcomes (1 to 7) ***The learner will***	**Assessment Criteria (1.1 to 7.3)** ***The learner can***
1. Be able to collect materials for recycling	**1.1** Identify three of the following materials as suitable or unsuitable for recycling • paper • card • glass • plastic • aluminium • other metals • compostable materials • textiles • electrical goods • wood • hazardous waste **1.2** Use at least two of the following methods to collect recyclable materials • kerb side • single materials • multi-materials • trade collection

	• civic recycling centre • park-up collection **1.3** Use at least two of the following types of equipment to collect recyclable materials: • vehicles • boxes/bins • bags • skips • other equipment
2. Be able to sort materials for recycling	**2.1** Use one of the following methods to sort materials: • hand sorting • machine sorting
3. Be able to process materials for recycling	**3.1** Use two of the following processing methods: • baling • bagging • guillotining • preparation for transfer to third party • composting **3.2** Deal with non-recyclable material
4. Be able to use equipment in recycling materials	**4.1** Prepare, check, maintain and use equipment for collecting, sorting and processing materials for recycling: • vehicles • boxes/bins • bags • skips • other equipment
5. Protect your own and others health and safety	**5.1** Protect your own health and safety and that of other workers and the public
6. Know how to	**6.1** Explain the different methods of collecting and

collect, sort and process materials for recycling	sorting recyclable materials • kerb side • single materials • multi-materials • trade collection • civic recycling centre • park-up collection **6.2** Explain the differences between recyclable, non-recyclable and hazardous materials **6.3** Describe the different roles of those involved in the recycling and waste industries including local authorities, the private sector and community groups and charities **6.4** Explain what a recycling unit can or cannot collect and how it deals with non-recyclable material **6.5** Explain how to Reduce, Reuse and Recycle and how to make others aware of this **6.6** Outline the equipment needed to collect, sort and process materials for recycling and how to prepare, check maintain and use it **6.7** Describe the processes that materials require in order to be recycled • baling • bagging • guillotining • preparation for transfer to third party • composting
7. Know the relevant health and safety and other legislation in recycling materials	**7.1** Describe your own role and responsibilities during collection, processing and sorting work **7.2** Detail your own responsibilities under health and safety and other relevant legislation **7.3** Describe the implications for your work of current health and safety, environmental and waste legislation

Supporting Unit Information

A/502/3182 Collect, sort and process materials for recycling - Level 2

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context.

Note 1: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number listed e.g. LO1.3

Note 2: Examples are indicative of the range of considerations for assessment criteria but are by no means all inclusive

LO1, LO2, LO3, LO4 and LO5 are the key area of competence for this unit

Learning Outcome 1. Be able to collect materials for recycling

1.1 **Identify three of the following materials as suitable or unsuitable for recycling: Paper, Card, Glass, Plastic, Aluminium, Other metals, Compostable materials, Textiles, Electrical goods, Wood, Hazardous waste**, for example: **Paper** - Suitable e.g. newspaper, office printing paper. Unsuitable e.g. paper with coatings - plastic, dirty/wet paper. **Card** - suitable e.g. cardboard boxes - cereals, pet food. Unsuitable e.g. card with plastic/foil liners. **Glass** - suitable e.g. jars, bottles - clean, no lids. Unsuitable e.g. pyrex, glass panes. **Plastic** - Suitable e.g. plastic bottles - flattened. Unsuitable e.g. margarine tubs, yoghurt pots. **Aluminium** - suitable e.g. aluminium foil - balled and placed in aluminium can. Unsuitable e.g. foil sheets/unclean. There is some variation between local authorities depending on what resources are available for recycling.

1.2 **Use at least two of the following methods to collect recyclable materials - Kerb side** e.g. periodic collection house to house of specific target materials such as shoes/clothing left at the doorstep/kerb or regular municipal collection of specified single or multi-materials and separate non-recyclable waste. **Single materials** e.g. paper/plastic types separated into colour coded bags/containers - loaded separately in hoppers on collection vehicle. **Multi-materials** e.g. glass jars/bottles, paper, cans/tins etc mixed together in bags or wheelie bins (separated from non-recyclable material) and loaded without segregation on collection vehicle. **Trade collection** e.g. glass

from hospitality businesses or paper/card from offices in larger bins - 240-1100litre - may be collected less frequently and loaded mechanically. **Civic recycling centre** e.g. materials can be dropped off by the public - batteries, engine oil, paper, scrap metal, wood etc placed in designated containers, skips or areas - use will involve placement/checking/emptying containers, making space, checking correct placement materials, rejecting materials etc. **Park-up collection** e.g. people drive to known collection sites to drop off old furniture, books, tools, bicycles etc, use involves similar activities as for civic recycling centres

1.3 **Use at least two of the following types of equipment to collect recyclable materials Vehicles** e.g. van types for making house to house collections of clothes, shoes or specialist items such as bikes, furniture, tins of paint. **Boxes/bins** e.g. to collect paper/cardboard or glass bottles. **Bags** e.g. to collect clothes/shoes or green waste for composting.

Skips e.g. to collect building rubble/bricks. **Other equipment** e.g. baling machines - plastic/cardboard, glass bottle crushers, compactors for materials such as cardboard in trade wheelie bins.

Learning Outcome 2. Be able to sort materials for recycling

2.1 Use one of the following methods to sort materials - Hand sorting e.g. manually sort materials in the shed/warehouse into those that can be re-used, recycled or any non-recyclable materials or manually sort to assess percentage of dirty/non-recyclable material prior to acceptance/rejection. **Machine sorting** e.g. sort materials on a conveyor picking line to remove recyclable materials/contaminants.

Learning Outcome 3. Be able to process materials for recycling

3.1 Use two of the following processing methods - Baling e.g. set binding mechanism, load baling machine - cardboard/plastics, operate machine, repeat until all batches compressed, tie-off, unload bale. **Bagging** e.g. load bags with recyclable materials according to bag colour/type, maximise use of bag space, manageable weight for handling. **Guillotining** e.g. set cutting parameters, manually load bales/plastic/rubber/ stone/carpet, operate guillotine, remove cut product. **Preparation for transfer to third party**. Physical e.g. collected materials inspected for contaminants, bulked up - baling/loading in containers, weighed - proof of weight obtained, transported to/picked up by third party. Checks and paperwork e.g. use a checklist to satisfy Duty of Care (and other legal requirements) - waste transfer note issued/appropriately signed for each collection, registered waste carrier being used, check that disposal facilities are correctly permitted etc. **Composting** e.g. green waste - gather raw materials, inspect to ensure no larger than specified/contaminant

materials present - large logs/meat products, shred bulky materials, transport/convey to composting windrows/piles.

3.2 **Deal with non-recyclable material** e.g. segregate batches of non-recyclable material - contamination/presence of hazardous waste, follow organisation's agreed systems of work to arrange re-loading/transfer for incineration/landfill depending on why rejected.

Learning Outcome 4. Be able to use equipment in recycling materials

4.1 **Prepare, check, maintain and use equipment for collecting, sorting and processing materials for recycling: Vehicles** prepare e.g. add fuel, oil, water etc. Check e.g. roadworthy - steering, brakes, indicators etc; fit to do job - lifting/materials segregation systems etc; safety mechanisms working - reversing alarm, mirrors. Maintain e.g. clean vehicle body, interior/waste hoppers, lubricate as appropriate. Use e.g. drive or collect recyclables and load vehicle. **Boxes/bins** prepare e.g. move into vehicle. Check e.g. empty, no holes/contamination - paint/grease. Maintain e.g. clean, attend to any sharp parts. Use e.g. load/unload/move to processing as appropriate. **Bags** prepare e.g. move into vehicle, stack, unroll. Check e.g. for holes/wear and tear. Maintain e.g. shake out rubbish, straighten and fold. Use e.g. load/unload/move to processing as appropriate. **Skips** prepare e.g. empty - ensure completely clear of materials, lock door; full - ensure even/safe load, sheet up. Check e.g. condition/safety of skip - structure/lugs/doors. Maintain e.g. clean skip inside/outside, promptly report any problems requiring specialised maintenance. Use e.g. load effectively to maximise use of space, sheet up. **Other equipment** example is Bailer. Prepare e.g. load/set up baling tape/wire. Check e.g. operation, emergency stop, door closure. Maintain e.g. sweep out debris, clean interior. Use e.g. refer to LO3.1. NB - Follow organisations agreed systems of work/checklists for equipment preparation and checking.

Learning Outcome 5. Protect your own and others health and safety

5.1 **Protect your own health and safety and that of other workers and the public** risk assessment e.g. routes, collection, sorting and processing equipment, systems of work, storage areas; effective pre-operation preparation/checking procedures prior to use of vehicles/equipment. Own H & S e.g. wear appropriate PPE/high visibility gear, safe manual handling, maintain personal hygiene. H & S of other workers e.g. check every time that other workers are clear before reversing/operating machinery, promptly report unsafe equipment/hazardous materials. H & S of public e.g. careful timing of activities, awareness of vulnerable people, avoid leaving tripping/slipping hazards.

LO6 and LO7 are the key areas of knowledge for this unit

Learning Outcome 6. Know how to collect, sort and process materials for recycling

6.1 Explain the different methods of collecting and sorting recyclable materials refer to LO1.2 for collection methods. Sorting - **kerb side** e.g. single focus of collection toys/clothes - sort at warehouse, or municipal collection see single or multi materials: **single materials** e.g. sorting into hoppers at collection or **multi-materials** e.g. sorting at the Materials Recycling Facility using a combination of manual sorting, conveyors, screens, separators. **Trade collection** e.g. sorted to filter recyclable materials - need for 'Duty of Care' Trade Waste Agreement with trade waste contractor. **Civic recycling centre** e.g. skips, bins or dropping areas for specified recyclables sorted prior to visit - attendants assist finding correct containers. **Park-up collection** e.g. bins/containers sited next to parking areas and identified for collection of specific recyclable materials.

6.2 Explain the differences between recyclable, non-recyclable and hazardous materials recyclable materials e.g. raw/processed waste materials which can be used again or broken down to extract materials for reuse. Non-recyclable materials e.g. either cannot be re-used/broken down for extraction of useful components - technology gaps, not cost effective, lack of demand for components, hazardous materials - risks/costs. All recyclable/non- recyclable materials may to some extent be a hazard to human health and/or environment but materials designated as hazardous can potentially cause more harm unless correctly managed - stringent controls apply to handling / movement / recovery of hazardous recyclable waste or to its disposal if it is non-recyclable.

6.3 Describe the different roles of those involved in the recycling and waste industries including local authorities, the private sector and community groups and charities role of local authorities e.g. manage/maintain collection/segregation of waste and treatment infrastructures, meet local/national statutory targets for recycling/reducing disposal in landfill sites. Private sector e.g. private companies contracted by local authorities to provide services including collection, pre-treatment, recycling - operation of Materials Recycling Facilities, disposal. Community groups and charities e.g. interested in delivering environmental/social/educational benefits for community, often operating on a not for profit basis/donating profits to charity and starting small scale recycling operations which may develop onto a more commercial footing.

6.4 Explain what a recycling unit can or cannot collect and how it deals with non-recyclable material collects e.g. single/mixed

recyclables - paper/bottles/cans/green waste or single focus - toys/clothes. Cannot collect e.g. food waste, types of plastic, electrical equipment, hazardous waste - batteries, light bulbs, pesticides etc; consider positioning/state of materials containers. Non-recyclable material e.g. left for normal refuse collections/special arrangements - hazardous materials - clinical/asbestos.

6.5 Explain how to reduce, reuse and recycle and how to make others aware of this reduce e.g. choose items that will have a long life span, hire, share or borrow items rather than purchasing new. Reuse e.g. checks if items can be mended when they appear to be broken, check for return schemes. Recycle e.g. sell/return computers to outlets where parts can be disassembled for recycling. Make others aware e.g. cost effective publicity - leaflet drops, newsletters, press/local radio releases, posters etc

6.6 Outline the equipment needed to collect, sort and process materials for recycling and how to prepare, check maintain and use it refer to LO4.1

6.7 Describe the processes that materials require in order to be recycled: baling, bagging, guillotining, preparation for transfer to third party, composting LO3.1

Learning Outcome 7. Know the relevant health and safety and other legislation in recycling materials

7.1 Describe your own role and responsibilities during collection, processing and sorting work role e.g. drive collection van or pick up sacks/containers from kerbside and load into hoppers. Responsibilities e.g. pre-operation checks, cleanliness of van, provision of PPE any tools/equipment that may be needed - brush and shovel. LO5.1.

7.2 Detail your own responsibilities under health and safety and other relevant legislation health & safety - brief consideration of responsibilities as relevant under e.g. Health and Safety at Work Act, Management of Health & Safety at Work Regs, Provision and Use of Work Equipment Regs (PUWER), Work at Height Regs etc. Health & Safety at Work Act e.g. responsibility to ensure own health and safety and of others affected by the activities; employer's responsibilities including providing adequate training. Other relevant legislation - brief consideration responsibilities as relevant e.g. Environmental Protection Act, Duty of Care Regs, Hazardous Waste Directive. Duty of Care Regs e.g. responsibility to ensure waste disposed of with licence/in accordance with terms of licence; does not escape from containment; transfer only to authorised persons - registered carriers/sites authorised to take waste; Waste Transfer Note - appropriately signed

and keep for two years. Ref to LO3.1.

7.3 **Describe the implications for your work of current health and safety, environmental and waste legislation** in relation to collection, sorting and processing of materials for recycling consider health and safety implications e.g. need for information, instruction, training, certification of competence; risk assessment, manual handling, hygiene, workplace transport, first aid provision, reporting and recording requirements. Consider environmental and waste implications e.g. need to recover/dispose of waste safely with respect to human health and the environment, the reduce, reuse, recycle' waste management hierarchy, targets for collecting/recycling - specific streams of waste such as packaging, oil, batteries, electrical equipment, etc, prevention/reduction of landfill and biodegradable waste.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit

Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

See Skills and Education Group Awards website for further information

Transport Physical Resources within the Work Area

Unit Reference	**J/502/1404**
Level	**2**
Credit Value	**2**
Guided Learning Hours	**15**
Unit Summary	The aim of this unit is to provide the learner with the knowledge and skills required to transport physical resources within the work area. The type of physical resources and methods of transportation can be applied to a number of environments
Learning Outcomes (1 to 6) ***The learner will***	**Assessment Criteria (1.1 to 6.1)** ***The learner can***
1. Be able to transport physical resources within the work area	**1.1** Transport resources using powered or manual transportation equipment **1.2** Minimise damage to the resources and environment during manoeuvres and transit **1.3** Ensure that load is secure and protected from contamination and adverse weather conditions **1.4** Monitor load during transit and take action if required **1.5** Provide clear and accurate information for recording purposes
2. Be able to select, use and maintain	**2.1** Select appropriate equipment for this area of work

relevant equipment	**2.2** Use equipment according to relevant legislation **2.3** Prepare, maintain and store equipment in a safe and effective working condition
3. Be able to work safely and minimise environmental damage	**3.1** Work in a way which maintains health and safety and is consistent with current legislation, codes of practice and any additional requirements
4. Know how to transport physical resources within the work area	**4.1** Describe the ways of handling transportation equipment to minimise damage to resources in transit **4.2** Describe the methods of protecting resources from contamination and adverse weather conditions during transit **4.3** State the reasons for monitoring loads during transit and the actions to take in case of problems with • imbalance • contamination • adverse weather
5. Know the types of equipment required and how to maintain them	**5.1** Describe the equipment which will be required for the activity and relevant legal restrictions on operation **5.2** Describe the methods of maintaining the equipment used
6. Know relevant health and safety legislation and environmental good practice	**6.1** Outline the current health and safety legislation, codes of practice and any additional requirements

J/502/1404 Transport physical resources within the work area - Level 2

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context.

Note: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number on the left e.g. LO1.3

The example of a physical resource in this case will be animal feed sacks. Activities for other physical resources need to follow this example.

LO1, LO2 and LO3 are the key areas of competence for this unit

Learning Outcome 1. Be able to transport physical resources within the work area

1.1 Transport resources using powered or manual transportation equipment - carry out pre transport checks. Consider Load, individual capability, task and environment to determine the method of transportation by hand or with mechanical aids such as trolleys or sack trucks or powered such as forklifts. Consider duel – lifting if by hand.

1.2 Minimise damage to the resources and environment during manoeuvres and transit minimise damage to environment by ensuring e.g. no spillages, minimal damage to structures and surfaces by selection of correct transporters

1.3 Ensure that load is secure and protected from contamination and adverse weather conditions demonstrate use of safe load secured and protection from elements such as rain or direct sunlight select correct method of securing load, e.g. ropes ,nets, protective covers

1.4 Monitor load during transit and take action if required demonstrate monitoring of load during transit by both visual and physical checks of load stability, weight and content of load, e.g. if load becomes unstable secure before continuing task.

1.5 Provide clear and accurate information for recording purposes complete relevant organisational documentation e.g. PUWER check list.

Learning Outcome 2. Be able to select, use and maintain relevant equipment

2.1 Select appropriate equipment for this area of work e.g. trolley, sack truck, lifting aids, forklift etc. Select correct PPE cross reference to L.O.3

2.2 Use equipment according to relevant legislation use relevant equipment according to Manufacturer's / supplier's / supervisor's instructions

2.3 Prepare, maintain and store equipment in a safe and effective working condition maintain and ensure correct storage of equipment follow guidance for working on slopes etc including differing ground conditions and different types of terrain. Ensure equipment is safe to use, undertake PUWER check and if applicable LOLER checks

Learning Outcome 3. Be able to work safely and minimise environmental damage

3.1 Work in a way which maintains health and safety and is consistent with current legislation, codes of practice and any additional requirements e.g. Health and Safety, Environmental Protection and Waste Acts, COPs as applicable and additional requirements such as HSE recommended weights to lift. Ensure correct PPE selected and used in safe manner safety boots, overalls, gloves, ear and eye protections and high visibility clothing. Environmental damage caused by activity to be minimised e.g. by carefully planning site access, working in appropriate weather conditions, care not to damage load or allow cross contamination. Clear immediately and spillages and keep work area clean and free from unauthorised access. Cross reference to L.O.6

LO4, LO5 and LO6 are the key areas of knowledge for this unit

Learning Outcome 4. Know how to transport physical resources within the work area

4.1 Describe the ways of handling transportation equipment to minimise damage to resources in transit e.g. correct stacking, sound packaging, secured safely with ropes, nets or sheeting.

4.2 Describe the methods of protecting resources from contamination and adverse weather conditions during transit e.g. – no cross contamination, secure packaging and protection from elements such as rain or direct sunlight e.g. sheeting ensure they are stable, cover sharp and abrasive edges.

4.3 State the reasons for monitoring loads during transit and the actions to take in case of problems with describe how high, wide stacks should be and how you would prevent any **imbalance** e.g. follow manufacturers instructions for stacking, readjust the load.

Contamination e.g. isolate the source, clean up the contamination, dispose of any waste material as per type (hazardous or organic) complete relevant documentation. **Adverse weather** e.g. rain- cover with waterproof sheeting.

Learning Outcome 5. Know the types of equipment required and how to maintain them

5.1 Describe the equipment which will be required for the activity and relevant legal restrictions on operation refer to LO 2. Correct pre-use checks undertaken to ensure the safety of operator and equipment. Describe e.g. trolleys, sack trucks any mechanical aids for lifting. Forklifts etc Report any faults. Refer to HASAW act and Manual Handling Regulations.

5.2 Describe the methods of maintaining the equipment used ensure PUWER and if applicable LOLER checks in place and recorded. Maintain equipment according to manufactures' instructions or guidelines.

Learning Outcome 6. Know the relevant health and safety legislation and environmental good practice

6.1 Outline the current health and safety legislation, codes of practice and any additional requirements Health and Safety e.g. Management of Health & Safety at Work Regulations Environmental Protection e.g. Environmental Protection Acts Waste e.g. Hazardous Waste Regulations. PUWER, LOLER, Manual Handling Regulations. Describe how environmental damage can be minimised e.g. clear up any spillages, don't cross contaminate loads. Ensure any hazardous wastes is correctly secured and packaged and clearly labelled.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

Learning Outcomes (LO)1, 2 and 3

Delivery of these learning outcomes is by supervised practical operational work giving learners the opportunity, first to practice the various tasks involved in transporting physical resources within the work area and then to be observed correctly doing each task to demonstrate achievement of the assessment criteria and therefore competence.

Prior to, during and after completion of practical operational work photographs or video could be taken to provide evidence of progress.

Learning Outcomes (LO) 4, 5 and 6
Delivery of these learning outcomes is by generation of knowledge evidence which could be linked to the practical work e.g. by observation of operational work and witness testimony, answering oral or written questions, assignments or internet research cross referenced to the knowledge evidence.

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion

- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

It is important that practical assessment activities are supervised appropriately

Additional Information

Useful sources of reference

- The Health and Safety Executive website http://www.hse.gov.uk/ has useful information about identifying what health and safety legislation applies to areas of work and lists of Acts, Statutory instruments and legal publications
- The Office of Public Information website http://www.opsi.gov.uk has year by year lists of UK Acts and Statutory Instruments
- The website http://www.netregs.gov.uk/ provides helpful guidance about environmental regulations
- The Provision and Use of Work Equipment Regulations PUWER. All plant or equipment used at work, either in the office or in the field, comes under PUWER
- The Lifting Operations and Lifting Equipment Operations LOLER. LOLER regulations apply in all premises and work situations. There are responsibilities for those in control of equipment, employers and employees

See Skills and Education Group Awards website for further information

Load and Unload Physical Resources within the Work Area

Unit Reference	**J/502/1421**
Level	**2**
Credit Value	**2**
Guided Learning Hours	**15**
Unit Summary	The aim of this unit is to provide the learner with the knowledge and skills required to load and unload physical resources within the work area. The type of physical resources and methods of loading and unloading can be applied to a number of environments
Learning Outcomes (1 to 6) ***The learner will***	**Assessment Criteria (1.1 to 6.2)** ***The learner can***
1. Be able to load and unload physical resources	**1.1** Assess the load to be moved to determine the method of lifting required **1.2** Carry out lifting operations safely, in accordance with instructions **1.3** Move heavy and bulky items correctly, in accordance with Instructions **1.4** Position resources safely, securely and in a manner which protects them from damage and contamination including • products or materials • equipment
2. Be able to select, use and maintain relevant equipment	**2.1** Select appropriate equipment for this area of work

	2.2 Use equipment according to relevant legislation and manufacturer's instructions **2.3** Prepare, maintain and store equipment in a safe and effective working condition
3. Be able to work safely and minimise environmental damage	**3.1** Work in a way which maintains health and safety and is consistent with current legislation, codes of practice and any additional requirements **3.2** Carry out work in a manner which minimises environmental damage
4. Know how to load and unload physical resources	**4.1** State the reasons for, and methods of, labelling resources for transportation **4.2** Describe how to assess the load to be moved to determine the safest the method of lifting **4.3** Describe the safe lifting and carrying techniques which should be used **4.4** Describe the loading and unloading requirements for transportation such as positioning, stacking and the weight of loads **4.5** Explain the ways of securing resources for transit in order to maintain safety and minimise damage **4.6** Describe appropriate methods of protecting resources from contamination and adverse weather conditions **4.7** Outline the methods for the safe stacking of products **4.8** Describe suitable methods of storing resources
5. Know the types of equipment required and how to maintain	**5.1** Describe the equipment which will be required for the activity and relevant legal restrictions on operation

them	**5.2** Describe the methods of maintaining the equipment used
6. Know relevant health and safety legislation and environmental good practice	**6.1** Outline the current health and safety legislation, codes of practice and any additional requirements **6.2** Describe how environmental damage can be minimised

J/502/1421 Load and unload physical resources within the work area – Level 2

Indicative Content

To successfully achieve this unit, learners need to provide evidence that they have met the learning outcomes and assessment criteria for the unit.

Indicative content is offered as guidance to aid delivery of the unit and to set the learning outcomes and assessment criteria in context.

Note: Cross references are first to the Learning Outcome (LO) e.g. LO1 and then to the Assessment Criteria number on the left e.g. LO1.3

The example of a physical resource in this case will be animal feed sacks. Activities for other physical resources need to follow this example

LO1, LO2 and LO3 are the key areas of competence for this unit

Learning Outcome 1. Be able to load and unload physical resources

1.1 Assess the load to be moved to determine the method of lifting required carry out pre-lift checks. Consider load, individual capability, task and environment to determine the method of lifting by hand or with mechanical aids such as trolleys or sack trucks. Consider duel – lifting if by hand.

1.2 Carry out lifting operations safely, in accordance with instructions demonstrate safe lifting techniques e.g. assess, plan, prepare, perform

1.3 Move heavy and bulky items correctly, in accordance with instructions consider mechanical aids and bio-mechanical techniques. Cross reference to LO4.3

1.4 Position resources safely, securely and in a manner which protects them from damage and contamination position resources safely and securely e.g. – not damaged, no cross contamination, secured for both products or materials and any equipment. Refer to LO1.1. Demonstrate reducing load by splitting to more manageable load etc.

Learning Outcome 2. Be able to select, use and maintain relevant equipment

2.1 Select appropriate equipment for this area of work e.g. trolley, sack truck, lifting aids. Select correct PPE cross reference to LO3.1.

2.2 Use equipment according to relevant legislation and

manufacturers instructions use relevant equipment according to manufacturer's / supplier's / supervisor's instructions Maintain and ensure correct storage of tools and equipment follow guidance for working on slopes etc including differing ground conditions and different types of terrain.

2.3 Prepare, maintain and store equipment in a safe and effective working condition ensure equipment is safe to use, undertake PUWER check and if applicable LOLER checks.

Learning Outcome 3. Be able to work safely and minimise environmental damage

3.1 Work in a way which maintains health and safety and is consistent with current legislation, codes of practice and any additional requirements e.g. Health and Safety, Environmental Protection and Waste Acts, COPs as applicable and additional requirements such as HSE recommended weights to lift. Ensure correct PPE selected and used in safe and appropriate manner safety boots, overalls, gloves, ear and eye protections and high visibility clothing.

3.2 Carry out work in a manner which minimises environmental damage e.g. by carefully planning site access, working in appropriate weather conditions, care not to damage load or allow cross contamination. Clear immediately and spillages and keep work area clean and free from unauthorised access.

LO4, LO5 and LO6 are the key areas of knowledge for this unit.

Learning Outcome 4. Know how to load and unload physical resources

4.1 State the reasons for, and methods of, labelling resources for transportation e.g. this way up and content of load, weight and type and state what to do if any hazards are foreseen.

4.2 Describe how to assess the load to be moved to determine the safest the method of lifting refer to L.O. 1.1 (load, individual capability, task and environment)

4.3 Describe the safe lifting and carrying techniques which should be used e.g. travel route clear and well lit, get close to load as possible - slide - don't stretch, correct foot position, adopt good posture - bend the knees, get secure grip (gloves), keep back straight - maintain spine curve by lifting the head, lift using thigh muscles - avoid jerking - smooth lift, keep load close to body - heaviest side to trunk.

4.4 Describe the loading and unloading requirements for transportation such as positioning, stacking and the weight of loads describe how to split heavy loads, ensure they are stable, cover sharp and abrasive edges ensure even distribution when stacking,

loading or unloading.

4.5 Explain the ways of securing resources for transit in order to maintain safety and minimise damage e.g. how to secure loads with ropes or netting.

4.6 Describe appropriate methods of protecting resources from contamination and adverse weather conditions e.g. no cross contamination, secure packaging and protection from elements such as rain or direct sunlight e.g. sheeting

4.7 Outline the methods for the safe stacking of products describe how high, wide stacks should be and how you would prevent any toppling over e.g. follow manufacturers instructions for stacking.

4.8 Describe suitable methods of storing resources follow manufactures' instructions for differing types of products e.g. how high to stack, correct way up and labels to front.

Learning Outcome 5. Know the types of equipment required and how to maintain them

5.1 Describe the equipment which will be required for the activity and relevant legal restrictions on operation refer to LO 2. Correct pre-use checks undertaken to ensure the safety of operator and equipment. Describe e.g. trolleys, sack trucks any mechanical aids for lifting. Report any faults. Refer to HASAW act and Manual Handling Regulations.

5.2 Describe the methods of maintaining the equipment used ensure PUWER and if applicable LOLER checks in place and recorded. Maintain equipment according to manufactures' instructions or guidelines.

Learning Outcome 6. Know the relevant health and safety legislation and environmental good practice

6.1 Outline the current health and safety legislation, codes of practice and any additional requirements e.g. Management of Health & Safety at Work Regulations Environmental Protection e.g. Environmental Protection Acts Waste e.g. Hazardous Waste Regulations PUWER, LOLER, Manual Handling Regulations.

6.2 Describe how environmental damage can be minimised e.g. clear up any spillages, don't cross contaminate loads. Ensure any hazardous wastes is correctly secured and packaged and clearly labelled.

Teaching Strategies And Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

Learning Outcomes (LO)1, 2 and 3
Delivery of these learning outcomes is by supervised practical operational work giving learners the opportunity, first to practice the various tasks involved in preparing to load and unload physical resources within the work area and then to be observed correctly doing each task to demonstrate achievement of the assessment criteria and therefore competence.

Prior to, during and after completion of practical operational work photographs or video could be taken to provide evidence of progress.

Learning Outcomes (LO) 4, 5 and 6
Delivery of these learning outcomes is by generation of knowledge evidence which could be linked to the practical work e.g. by observation of operational work and witness testimony, answering oral or written questions, assignments or internet research cross referenced to the knowledge evidence.

Methods Of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

All learners must complete a portfolio of evidence that shows achievement of all the relevant learning outcomes and assessment criteria

Centres will need to devise assessment tasks which should be practical where possible

Minimum requirements when assessing this unit
Skills and Education Group Awards expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

It is important that practical assessment activities are supervised appropriately.

Evidence Of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the Skills and Education Group Awards website).

Additional Information

Useful sources of reference

- The Health and Safety Executive website http://www.hse.gov.uk/ has useful information about identifying what health and safety legislation applies to areas of work and lists of Acts, Statutory instruments and legal publications
- The Office of Public Information website http://www.opsi.gov.uk has year by year lists of UK Acts and Statutory Instruments
- The website http://www.netregs.gov.uk/ provides helpful guidance about environmental regulations
- HSE website on recommended weights to lift and manual handling regulations etc
- The Provision and Use of Work Equipment Regulations PUWER
- All plant or equipment used at work, either in the office or in the field, comes under PUWER

- The Lifting Operations and Lifting Equipment Operations LOLER. LOLER regulations apply in all premises and work situations. There are responsibilities for those in control of equipment, employers and employees

See Skills and Education Group Awards website for further information

Recognition of Prior Learning (RPL), Exemption and Credit Transfer and equivalencies

Skills and Education Group Awards policy enables learners to avoid duplication of learning and assessment in a number of ways:

- Recognition of Prior Learning (RPL) – a method of assessment that considers whether a learner can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and do not need to develop through a course of learning.
- Exemption - Exemption applies to any certificated achievement which is deemed to be of equivalent value to a unit within Skills and Education Group Awards qualification but which does not necessarily share the exact learning outcomes and assessment criteria. It is the assessor's responsibility, in conjunction with the Internal Moderator, to map this previous achievement against the assessment requirements of the Skills and Education Group Awards qualification to be achieved in order to determine its equivalence.
  Any queries about the relevance of any certificated evidence, should be referred in the first instance to your centre's internal moderator and then to Skills and Education Group Awards.
  It is important to note that there may be restrictions upon a learner's ability to claim exemption or credit transfer which will be dependent upon the currency of the unit/qualification and a learner's existing levels of skill or knowledge.
  Where past certification only provides evidence that could be considered for exemption of part of a unit, learners must be able to offer additional evidence of previous or recent learning to supplement their evidence of achievement.
- Credit Transfer – Skills and Education Group Awards may attach credit to a qualification, a unit or a component. Credit transfer is the process of using certificated credits achieved in one qualification and transferring that achievement as a valid contribution to the award of another qualification. Units/Components transferred must share the same learning outcomes and assessment criteria along with the same unit number. Assessors must ensure that they review and verify the evidence through sight of:
  - Original certificates OR
  - Copies of certificates that have been signed and dated by the internal moderator confirming the photocopy is a real copy and make these available for scrutiny by the External Moderator.
- Equivalencies – opportunities to count credits from the unit(s) from other qualifications or from unit(s) submitted by other recognised organisations towards the place of mandatory or optional unit(s) specified in the rule of combination. The unit must have the same credit value or greater than the unit(s) in question and be at the same level or higher.

Skills and Education Group Awards encourages its centres to recognise the previous achievements of learners through Recognition of Prior Learning (RPL), Exemption, Credit Transfer and Equivalencies. Prior achievements may have resulted from past or present employment, previous study or voluntary activities. Centres should provide advice and guidance to the learner on what is appropriate evidence and present that evidence to the external moderator in the usual way.

Further guidance can be found in 'Delivering and Assessing Skills and Education Group Awards Qualifications' which can be downloaded from
https://skillsandeducationgroupawards.co.uk/for-centres/

Certification

Learners will be certificated for all units and qualifications that are achieved and claimed.

Skills and Education Group Awards' policies and procedures are available on the Skills and Education Group Awards web site.

Glossary of Terms

GL (Guided Learning)

GL is where the learner participates in education or training under the immediate guidance or supervision of a tutor (or other appropriate provider of education or training). It may be helpful to think – 'Would I need to plan for a member of staff to be present to give guidance or supervision?'
GL is calculated at qualification level and not unit/component level.

Examples of Guided Learning include:

- Face-to-face meeting with a tutor
- Telephone conversation with a tutor
- Instant messaging with a tutor
- Taking part in a live webinar
- Classroom-based instruction
- Supervised work
- Taking part in a supervised or invigilated formative assessment
- The learner is being observed as part of a formative assessment.

TQT (Total Qualification Time)

'The number of notional hours which represents an estimate of the total amount of time that could reasonably be expected to be required, in order for a learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification.' The size of a qualification is determined by the TQT.

TQT is made up of the Guided Learning (GL) plus all other time taken in preparation, study or any other form of participation in education or training but not under the direct supervision of a lecturer, supervisor or tutor.

TQT is calculated at qualification level and not unit/component level.

Examples of unsupervised activities that could contribute to TQT include:

- Researching a topic and writing a report
- Watching an instructional online video at home/e-learning
- Watching a recorded webinar
- Compiling a portfolio in preparation for assessment
- Completing an unsupervised practical activity or work
- Rehearsing a presentation away from the classroom
- Practising skills unsupervised
- Requesting guidance via email – will not guarantee an immediate response.