



City & Guilds Level 4 Certificate of Competence in ETR 132 Resilience Arboricultural Surveyor (0038-41)

January 2026 Version 1.3

Assessment Pack – Centre and Candidate Version

Version and date	Change detail	Section
1.0 December 2021	First version	
1.1 March 2022	Corrected formatting and typographical errors Added 'In areas where different voltages are used to the ones listed within this guidance, regional variation may be applied.' Amended Assessment time to 3-4 hours Added to Site/workshop requirements Added to Consumables Added pre-requisites Activity 3 Added 'number of consumers affected' to criteria Amended to 'critical infrastructure' in criteria Activity 7 Added 'stem bleeds' to criteria Activity 12 Removed 'frequency of use' from criteria	Throughout Page 4 Practical observation descriptor table
1.2 August 2025	Activity 7 changed 'basic tree survey' to 'resilience tree survey'. Activity 8 'management recommendations' added. Activity 9 'management recommendations' added. Activity 10 & 11 updates to content.	Practical observation descriptor table, and Practical Tables.
1.3 January 2026	Assessment timing updated	Introduction

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Pre-requisites

Candidates must have achieved:

Level 3 Certificate of Competence in Utility Arboriculture Basic Electrical Knowledge (0038-30)

Level 3 Certificate of Competence in Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards (0038-31)

Level 4 Certificate of Competence in Utility Arboriculture Surveyor (0038-40)

or equivalent qualifications.

Centres must ensure that any pre-requisites stated are met.

Introduction

This assessment relates to the units in the Qualification Handbook. The assessment(s) can be achieved at pass grade only. If any task is not achieved the candidate is unsuccessful.

This assessment is for unit 403 ETR 132 Resilience Arboricultural Surveyor covering the following learning outcome:

1. Understand the requirements of ETR 132 Resilience Arboricultural Surveyor

General guidance on the requirements for assessment can be found in the Assessor Guidance document available on the City & Guilds web site www.nptc.org.uk

The assessor must complete the Practical Table mark sheet for each candidate which should be kept by the assessor for a minimum period of twelve months.

Record of assessment (ROA)

A prepopulated record of assessment must be completed by the assessor following an assessment. The number of learning outcomes is listed above, these must be ticked in the relevant 'met' or 'not met' sections of the ROA.

ARAS Forms

An Assessment Result Advice Slip (ARAS form) must be completed by the assessor following an assessment. The ARAS is not a certificate but, based on the evidence of the candidate's performance, is a recommendation to City & Guilds that the candidate has either met or not met the assessment criteria. All feedback is to be recorded by the assessor on the feedback section of the ARAS form.

Assessment Time

The practical observation and oral questioning should take between **2 - 4 hours**.

Site/workshop requirements:

Classroom, overhead electrical network with associated electrical equipment, a minimum of two mature trees containing multiple hazards

Equipment/Machinery:

n/a

Consumables:

Paper, pencils, data collection devices, tree inspection equipment

This is not an open book assessment; however fungal identification reference material may be used if required.

In areas where different voltages are used to the ones listed within this guidance, regional variation may be applied.

Practical observation descriptor table

Unit 403 ETR 132 Resilience Arboriculture Surveyor

Activity number and description from check list		Assessment criteria
1	Identify the hazards, risks and controls associated with the site and task	Identify hazards, risks, and controls relevant to the site and task
2	State the reasons behind undertaking an Electrical Technical Report ETR 132 survey	The reasons behind undertaking an Electrical Technical Report ETR 132 survey may include: • government stipulation as part of the ESQCR regulations 2006 amendment • provide network resilience in both normal and adverse weather conditions • helps to maintain a continuous supply to homeowners and business • a proactive approach can be cost effective for network operators and stakeholders • reduces the chances of overhead operatives reinstalling network during unsociable hours in potentially dangerous conditions • required work has the timescale to be meticulously planned • other
3	Explain the elements to be considered for an office-based pre-survey, prior to visiting site	The elements covered with an office-based pre-survey, prior to visiting site may include: • landownership • number of consumers affected • environmental restrictions, e.g., SSSI • restricted areas • ancient monuments • EPS present on site • generation issues windfarms, solar • other utilities • critical infrastructure • other
4	State the equipment that could assist in the process of inspecting trees for safety reasons may include	Equipment that could assist in the process of inspecting trees for safety reasons may include: • diameter (DBH) tape • 30m measuring tape • probe • compass • torch

		• mallet • trowel • binoculars • mobile phone • clinometer/Laser range finder • knife with retractable blade • recording equipment (pens, paper, or tablet) • reference material • other
5	State the minimum level of data to be recorded on a survey	State the minimum level of data to be recorded: • circuit/line name/identification • voltage • pole numbers • tree/site number • species • age class • height • spread • distance from conductors • tree category • condition/details of defects • direction of lean if applicable • risk rating • management recommendations • live line /dead line working • time/staff/equipment required • details of access/egress • details regarding disposal of arisings
6	State the different methods of identifying that a tree is within falling distance of the overhead network	Different methods of identifying that a tree is within falling distance of the overhead network may include: • laser range finder • clinometer and measuring tape • reference to known distances • experience • other
7	Identify tree defects and indicators to be recorded on a resilience tree survey	Tree defects and indicators to be recorded on a resilience tree survey may include: • root heave • undermining of root system • cavities • fruiting bodies • staining/bacterial infections • stem bleeds • insect damage • included/compression unions • cracking/splitting • flaking bark

		• hazard beams • reaction wood/adaptive growth • crown dieback • thinning crown • major deadwood • storm damaged/hanging branches • other
8	Identify and demonstrate knowledge of principal fungal decay organisms	Identification and knowledge of principal fungal decay organisms: <i>Armillaria mellea</i> (honey fungus): • host – wide range of conifers and broadleaves • area affected – lower stem • type of decay – white rot Management recommendations: • removal of the tree, • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Kretzschmaria deusta</i> (brittle cinder): • host – wide range of broadleaves • area affected – buttresses, roots and pollard points • type of decay – soft rot in early stages, a white rot may develop Management recommendations: • removal of the tree, preferably by mechanical means. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Meripilus giganteus</i> (giant polypore): • host – common on beech • area affected – main root structure • type of decay - white rot but with soft rot in early stages Management recommendations: • removal of the tree, preferably by mechanical means. • a comprehensive work at height assessment should be undertaken before any aerial

8 cont.		operations. • other <i>Inonotus hispidus</i> (shaggy/velvet bracket) • host – broadleaves, mainly ash • area affected – upper stem and principal branches • type of decay – simultaneous white rot Management recommendations: • removal of infected limbs, possible removal of the tree if the main stem is compromised. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Heterobasidion annosum</i> (Fomes root rot): • host - range of conifers and broadleaves • area affected – roots then stem • white pocket rot Management recommendations: • removal of the tree, preferably by mechanical means. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Phellinus ignarius</i> (willow bracket): • host – mainly willow • area affected – main stems • type of decay – white rot Management recommendations: • removal of infected limbs, possible removal of the tree if the main stem is compromised. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Fomitopsis betulina</i> (birch polypore): • host – birch • area affected – main stems • type of decay – brown rot
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8 cont.		management recommendations: • removal of infected limbs, possible removal of the tree if the main stem is compromised. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Fistulina hepatica</i> (beefsteak fungus): • host – oak and sweet chestnut • area affected – heartwood • type of decay – brown rot Management recommendations: • This fungus remains largely benign regarding its impact on the tree, long standing decay can cause structural failure, assess the magnitude of colonisation, removal in extreme circumstances. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Ganoderma</i> species (artists bracket): • host – broadleaves • area affected – buttresses, main stems • type of decay – white rot Management recommendations: • assess the magnitude of colonisation, removal in extreme circumstances. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Grifola frondose</i> (hen of the woods): • host – oak and hornbeam. • area affected – central root plate or stem • type of decay – soft rot in early stages then white rot Management recommendations: • removal of the tree, preferably by mechanical means. • a comprehensive work at height
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8 cont.		assessment should be undertaken before any aerial operations • other. <i>Laetiporus sulphureus</i> (chicken of the woods): • host – broadleaves and conifers • area affected - roots, buttresses, main stems and branches • type of decay – brown rot Management recommendations: • removal of the tree, preferably by mechanical means. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Cerioporus squamosus</i> (dryad's saddle): • host – broadleaves • area affected - main stem and branches • type of decay - white rot Management recommendations: • removal of infected limbs, possible removal of the tree if the main stem is compromised. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Sparassis crispa</i> (cauliflower fungus): • host – conifers • area affected – roots and main stem • types of decay – brown rot Management recommendations: • this is a weak parasite, infected trees can live for many years, assess condition of the tree at time of survey, eventual removal will be required, • a comprehensive work at height assessment should be undertaken before any aerial operations. • other
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8 cont.		<i>Phaeolus schweinitzii</i> (dyer's mazegill): • host – conifers • area affected – roots • type of decay – brown rot Management recommendations: • removal of the tree, preferably by mechanical means. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Perenniporia fraxinea</i> (giant ash bracket): • host – ash • area affected – buttresses and roots • type of decay – white rot Management recommendations: • removal of the tree, preferably by mechanical means • a comprehensive work at height assessment should be undertaken before any aerial operations. <i>Rigidoporus ulmarius</i> (giant elm bracket): • host – broadleaves • area affected – buttresses • type of decay – brown rot Management recommendations: • relatively weak pathogen however removal of the tree is necessary, preferably by mechanical means. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Pseudoinonotus dryadeus</i> (Eiffel Tower bracket): • host – oak, occasionally beech • area affected – central buttresses • type of decay – selective delignification Management recommendations:
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8 cont.		• removal of the tree, preferably by mechanical means. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other <i>Pholiota squarrosa</i> (shaggy scalycap): • host – broadleaves • area affected – buttresses and principal roots • type of decay – white rot Management recommendations: • removal of the tree, preferably by mechanical means. • a comprehensive work at height assessment should be undertaken before any aerial operations • other. <i>Pleurotus ostreatus</i> (oyster mushroom): • host – broadleaves • area affected – main stem and principal branches • white rot • other Management recommendations: • removal of the tree, preferably by mechanical means. • a comprehensive work at height assessment should be undertaken before any aerial operations. • other
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9	Identify and demonstrate knowledge of notifiable pests and diseases including who to contact if found.	Notifiable pests and diseases: <i>Phytophthora ramorum</i> (ramorum disease) • host – larch, sweet chestnut • spread – waterborne Management recommendations: • *contact regional forestry bodies • removal of the tree, preferably by mechanical means • a comprehensive work at height assessment should be undertaken before any aerial operations • consider biosecurity measures and follow current guidance for disposal of arisings including timber. <i>Hymenoscyphus fraxineus</i> (ash dieback): • host – ash • spread – wind, movement of infected plants and timber Management recommendations: • *contact regional forestry bodies • removal of the tree, preferably by mechanical means • a comprehensive work at height assessment should be undertaken before any aerial operations • consider biosecurity measures and follow current guidance for disposal of arisings. <i>Thaumetopoea processionea</i> (oak processionary moth): • host – oak • spread – eggs laid on host trees Management recommendations: • *contact regional forestry bodies • do not disturb, health hazard. • removal should be undertaken by approved contractors • monitor tree for leaf loss. <i>Dendroctonus micans</i> (great spruce bark beetle): • host – spruce and pine • spread – beetle movements Management recommendations: • contact regional forestry bodies and follow advice.
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10	Explain factors to be considered when dealing with hardwood woodlands in relation to resilience requirements.	Factors to be considered when dealing with hardwood woodlands in relation to resilience requirements • Compensation for landowners. • Spread of disease. • Windfirm edges. • Adverse ground conditions. • Harvesting machinery to be used. • GS6 requirements. • Felling license requirements. • Adhere to good forest practice regarding processing and extraction. • Replanting. • Timing of works. • Historical treatment/owner requirements. • Silvicultural thinning. • Historical/archaeological features/importance.
11	Explain the factors that must be considered when dealing with commercial softwood forestry plantations in relation to resilience requirements.	Factors that must be considered when dealing with commercial softwood forestry plantations in relation to resilience requirements: • Age of planting. • Species. • Ground conditions. • Windthrow hazard classification. • “Red zone” harvesting and ENA ER G96. • Felling licence implications including all environmental considerations in line with new licence requirements. • Forestry produce, felling and extraction methods. • Stump treatment. • Site watercourse management. • Replanting requirements. • GS6 requirements. • Owner requirements/compensation for early felling.
12	Describe key factors that need to be included in a risk rating.	Key factors included in risk rating: • probability of failure occurring. • severity of the damage. • people/property/equipment present – target. • frequency of use. • overhead electrical network - 100% target – constantly

		present. • other.
13	Explain different machinery that may be used for safe and efficient tree management	Different machinery to aid safe and efficient tree management may include: Mobile Elevating Work Platform: • wide range of MEWP's are now available and can eliminate the need to use a climber in a tree with known defects Remote controlled winch/mulcher: • can be fitted with attachments such as a winch for controlled felling and mulcher to improve access to trees 360' Excavator: • 360' excavators can be fitted with attachments such as a timber grab to move timber on site Articulated telescopic telehandler: • articulated telescopic telehandler can be fitted with grapple saws or timber shears to safely dismantle trees • other
14	Explain the considerations when using machinery in proximity to the network	Considerations when using machinery in proximity to the network may include: • whether the use of certain machinery requires the line to be isolated • GS6 regulations may apply • operators should be suitably trained and competent • other
15	Carry out a tree inspection, record the findings and state recommendations.	Carry out a visual tree assessment: • accurate network location established • tree species correctly identified • reference number attributed • generic data collected • (height, spread, weighting, age class, tree category) • defects correctly identified • appropriate risk rating given • suitable management recommendation and timeframe for work to commence • correct allocation of

		time/staff/equipment disposal of arisings
16	Worked in a way which maintains health and safety and is consistent with relevant legislation and industry good practice.	All activities must be completed in a way which protects the operator and those around them, consistent with relevant legislation and industry good practice.

Practical tables

Unit 403 ETR 132 Resilience Arboricultural Surveyor

Candidate name:

Date:

Start time:

Finish time:

All criteria must be achieved.

Activity number and description	Achieved
1. Identify the hazards, risks and controls associated with the site and task	
2. State the reasons behind undertaking an ETR 132 survey	
3. Explain the elements considered in an office-based pre-survey, prior to visiting site	
4. Identify a range of equipment used to inspect trees	
5. State the minimum level of data to be recorded on a survey	
6. Explain methods to identify trees within falling distance of the overhead network	
7. Identify tree defects and indicators to be recorded on a resilience tree survey	
8. Identify and demonstrate knowledge of principal fungal decay organisms	
9. Identify and demonstrate knowledge of notifiable pests and diseases including who to contact if found.	
10. Explain factors to be considered when dealing with hardwood woodlands in relation to resilience requirements.	
11. Explain the factors that must be considered when dealing with commercial softwood forestry plantations in relation to resilience requirements.	
12. Describe key factors that need to be included in a risk rating.	
13. State different machinery used for safe and efficient tree management	
14. Explain the considerations when using machinery in proximity to the network	
15. Carry out a tree inspection, record the findings and state recommendations.	
16. Work in a way which maintains health and safety and is consistent with relevant legislation and industry good practice.	
Grade (P/X)	

Assessor feedback:
Candidate feedback:

Candidate signature and date	
Assessor signature and date	

Appendix 1 Tree inspection form



Candidate Name		Date	
Candidate Number		Location	

Tree Number	Tree species	Height (m)	Crown Spread (m)				Diameter at 1.5m	Age	Structural condition	Physiological condition	Comments / Recommendations
			N	E	S	W					

Key:

species including the common names.

height measured in metres from the stem base. where the ground has a significant slope, the higher ground is selected.

stem diameter is measured in millimetres at 1.5m above the adjacent ground level (upslope on sloping ground) or immediately above the root flare for multi-stemmed trees.

crown spread is measured in metres and taken at the four cardinal points to derive an accurate representation of the crown.

age class of the tree is described as young, semi-mature, early-mature, mature, over-mature or veteran:

Y – young (newly planted tree), **SM** – semi-mature (1st 1/3rd of life expectancy). **EM** – mature (final 1/3rd of life expectancy). **M** – middle aged (2nd 1/3rd of life expectancy). **OM** – over mature (beyond life expectancy). **V** – veteran (over mature and of special conservation value).

Physiological condition is classed as good, fair, poor, or dead. This is an indication of the health of the tree and takes into account vigour, presence of disease and dieback: -

good – no health problems

fair – symptoms remedial of ill health

poor – declining

dead – dead

Structural condition is classed as good, fair or poor. This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions:

good – no significant defects

fair – remedial defects

poor – defects

very poor – significant defects

Comments include a description of the tree with comments on the form, vitality, health and any significant defects that may be present.

Appendix 2 Sources of general information

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

City & Guilds Centre Manual

This document provides guidance for organisations wishing to become City & Guilds approved centres, as well as information for approved centres delivering City & Guilds qualifications. It covers the centre and qualification approval process as well as providing guidance on delivery, assessment and quality assurance for approved centres.

It also details the City & Guilds requirements for ongoing centre and qualification approval, and provides examples of best practice for centres. Specifically, the document includes sections on:

- the centre and qualification approval process
- assessment, internal quality assurance and examination roles at the centre
- registration and certification of candidates
- non-compliance and malpractice
- complaints and appeals
- equal opportunities
- data protection
- management systems
- maintaining records
- internal quality assurance
- external quality assurance.

Our Quality Assurance Requirements

This document explains the requirements for the delivery, assessment and awarding of our qualifications. All centres working with City & Guilds must adopt and implement these requirements across all of their qualification provision. Specifically, this document:

- specifies the quality assurance and control requirements that apply to all centres
- sets out the basis for securing high standards, for all our qualifications and/or assessments
- details the impact on centres of non-compliance

Our Quality Assurance Requirements document encompasses the relevant regulatory requirements of the following documents, which apply to all UK centres working with City & Guilds:

- Ofqual's General Conditions of Recognition

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

- **Walled Garden:** how to register and certificate candidates online
- **Events:** dates and information on the latest Centre events
- **Online assessment:** how to register for e-assessments.

Useful contacts

UK learners General qualification information	E: learnersupport@cityandguilds.com
International learners General qualification information	E: intcg@cityandguilds.com
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	E: information@cityandguilds.com
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	E: singlesubjects@cityandguilds.com
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	E: intops@cityandguilds.com
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	E: walledgarden@cityandguilds.com
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: business@cityandguilds.com

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We work with Governments, employers, training providers, colleges and industry stakeholders to design and deliver high-quality training, qualifications, assessments and credentials that lead to meaningful career progression. We understand the life changing link between skills development, social mobility and success. Our solutions span critical sectors including construction, engineering, transport, energy and electrical, serving over 1 million learners annually.

Through our comprehensive portfolio of brands and trusted global network, we set industry-wide standards for technical, behavioural and commercial skills to improve performance and productivity. We believe you can achieve your potential - and we're here to help make it happen.

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