# CITY & GUILDS NPTC LEVEL 3 AWARD IN AERIAL TREE RIGGING (QCF) QAN 600/6498/5



Version 3

## **QUALIFICATION GUIDANCE**

## **Independently Assessed**

## **Essential Qualification Information**

### Not to be used by the Candidate during Assessment

You will require some of this information to accurately complete the Record of Assessment (ROA)

Qualification Group No	0 0 2 1	Forestry & Arboriculture Level 3
Qualification Programme No	0 0 2 1 - 0 9	Award In Aerial Tree Rigging
Unit(s)	3 0 9	Carry out aerial tree rigging
Learning Time (LT)	3 0 9	LT 19 (3 Credits) (* see note on page 2)
Recommended Assessment Duration		2.0 – 4.0 hours per Candidate
Pre-Requisite Units	2 0 1	Carry out maintenance of chainsaw and cutting system
	2 0 2	Cross-cut timber using a chainsaw
	2 0 3	Fell and process trees up to 380mm
	2 0 6	Access a tree using a rope and harness
	3 0 6	Carry out aerial rescue operations
	3 0 8	Carry out aerial cutting of trees with a chainsaw using free-fall techniques

### City and Guilds NPTC Level 3 Award in Aerial Tree Rigging (QCF) **Qualification guidance**

#### Introduction

The scheme will be administered by City & Guilds

City & Guilds will:

Publish - Scheme regulations - Qualification guidance - Training material - Trainers support material Approve centres to co-ordinate and administer the scheme Set standards for the training of verifiers and assessors Recruit, train and deploy verifiers Manage verification Issue certificates to successful Candidates

#### The Qualification

The qualification will be awarded to candidates who achieve the required level of competence in the units to which their certificate relates.

#### What is the Qualifications and Credits Framework?

OFQUAL have introduced the Qualifications and Credit Framework (QCF) to increase flexibility for learners and employers. Qualifications may be built up from individual units according to rules of combination. The units are derived from the National Occupational Standards, which are compiled by Lantra SSC, the Sector Skills Council for the Land-based industries.

#### Instruction

Attendance at a course of instruction is not a pre-requisite for an application for an assessment but potential Candidates are strongly advised to ensure that they are up to the standards that will be expected of them when they are assessed.

#### \* Learning Time (LT)

Learning Time (LT) is a better indicator of the time requirement needed for a candidate to achieve competence in this qualification. It has replaced Guided Learning Hours (GLH) which are defined as "tutor or teacher led hours". LT is defined as "a notional measure of the learning time a typical learner might be expected to take to complete and achieve all learning outcomes". It takes into account prior learning and encompasses: formal learning (including classes, tutorials, on line tuition), coaching and mentoring, practical work, relevant IT activity, information retrieval, expected private study and revision, work-based activity which leads to assessment, practice to achieve competence, formative assessment, programme planning and feedback.

#### Access to Assessment

Assessment centres will be responsible for arranging assessment on behalf of the Candidate.

The minimum age limit for Candidates taking Certificates of Competence is 16 years. There is no upper age limit.

The assessment is one Mandatory unit:

Unit	309
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Carry out aerial tree rigging Outcomes

- Be able to promote health and safety and industry good practice (1) (Criteria 1.1 1.4) 1.
- 2 Be able to carry out aerial tree rigging (2) (Criteria 2.1 - 2.7)
- 3. Understand relevant health and safety legislation and industry good practice (3) (Criteria 3.1 - 3.5) 4.
  - Understand how to carry out aerial tree rigging (4) (Criteria 4.1 4.11)

Candidates must successfully achieve all assessment activities in the above unit.

#### **Quality Assurance**

Verification is a process of monitoring assessment; it is an essential check to confirm that the assessment procedures are being carried out in the way City & Guilds has laid down. The overall aim of verification is to establish a system of quality assurance that is acceptable in terms of both credibility and cost effectiveness.

Approved Assessors will be subject to a regular visit by the verifier at a time when assessments are being undertaken.

A selection of assessment reports completed by the Assessor will be evaluated by a City & Guilds approved verifier.

Compliance with the verification requirements is a pre-requisite for Assessors remaining on the list of approved Assessors.

After assessment has been completed the Qualification Guidance is to be forwarded to the centre and retained by the centre until after the annual centre visit has taken place by a Quality Systems Consultant (QSC).

#### **Performance Evaluation**

The result of each assessment activity is evaluated against the following criteria:

- M = Met Meets or exceeds the assessment criteria by displaying a level of practical performance and/or underpinning knowledge. If the Criterion has been MET, a tick  $\square$  is to be put in the box provided in the bottom right-hand column of each section.
- NM = Not Met Does not satisfy the requirements of the assessment criteria, being unable to perform the practical task satisfactorily or safely or being deficient in underpinning knowledge. If the Criterion is NOT MET, a cross ⊠ is to be put in the box provided in the bottom right-hand column of each section.

#### Appeals and Equal opportunities

Centres must have their own auditable, appeals procedures. If a Candidate is not satisfied with the examination conditions or a Candidate feels the opportunity for examination is being denied, the Centre Manager should, in the first instance, address the problem. If, however the problem cannot be resolved, City & Guilds will arbitrate and an external verifier may be approached to offer independent advice. All appeals must be clearly documented by the Centre Manager and made available to the external verifier or City & Guilds if advice is required.

Should occasions arise when centres are not satisfied with any aspect of the external verification process, they should contact Verification Services at City & Guilds.

Access to the qualification is open to all, irrespective of gender, race, creed, age or special needs. Subject to H&S restrictions the Centre Manager should ensure that no learner is subjected to unfair discrimination on any grounds in relation to access to assessment and to the fairness of the assessment. QCA requires City & Guilds to monitor centres to check whether equal opportunities policies are being adhered to.

#### Validation of Equipment

A Manufacturer's instruction book or other operator's manual should be available for the Candidate to use during the assessment if required.

All equipment being used for this assessment must comply with the relevant requirements of the Provision and Use of Work Equipment Regulations (PUWER) 1998.

Vehicles must comply with department of Transport and road Traffic acts where relevant.

Any appropriate item of machinery complying with current legal requirements is acceptable for the assessment, provided it is suitably equipped for **all** assessment activities to be carried out.

#### Safe Practice

#### Appropriate Personal Protective Equipment (PPE) must be worn at all times.

The Assessor must ensure that a site specific risk assessment is carried out.

All equipment must be operated in such a way that the Candidate, Assessor, other persons, or other equipment are not endangered.

All ancillary equipment, when detached, must be safely parked.

Failure to operate safely and comply with these requirements will result in the Candidate not meeting the required standard.

Warning signs stating that an assessment is in progress should be available.

The Assessor may stop the assessment on the grounds of safety at any time at his/her discretion.

Before any assessments take place, Assessor & Candidate should to be aware of any local or national issues to prevent breach of security, safety and any cross contamination or damage to the local environment.

## A breach of Health and Safety that puts any person at risk during the assessment process will result in the assessment being terminated and the Candidate not meeting the required standard.

#### **Additional Information**

May be sought from the relevant manufacturer's operator manuals or any other appropriate training or safety publication.

Questions should be related to the background or employment aspirations of the candidate.

Candidates who undertake this assessment and have met the requirements are reminded of their legal obligation to receive/undertake appropriate additional training in the use of any equipment that differs from that used during the assessment, but which they are nevertheless qualified to use.

#### Assessment Guidance for the Assessor

This qualification can only be assessed by an Assessor who is suitably qualified and meets the requirements of the awarding body. The Assessor must be independent **and cannot have been involved with the training of the Candidate**. Please see City & Guilds Centre Manual for guidance.

The Candidate is to be notified of the place and time of assessment and when formal assessment commences and ceases.

Assessors are reminded that assessment is a formal process and that assessment must be carried out using this Qualification Guidance. All relevant assessment criteria must be assessed against the criterion as specified in the Qualification Guidance. Assessment will be carried out by direct observation and by oral questioning of the Candidate. Where a specific number of responses are required theses may include other suitable answers not specified if they are deemed to be correct by the Assessor. The performance of the Candidate is to be recorded on the Qualification Guidance for the person assessing to record relevant information which can be utilised to provide feedback to the Candidate. After assessment has been completed the Qualification Guidance document is to be retained by the assessor and provided if required by a Quality Systems consultant (QSC).

#### Assessment Guidance for Candidate

A list of registered assessment centres is available from City & Guilds NPTC. (www.nptc.org.uk)

Assessment is a process by which it is confirmed that the candidate is competent in the unit(s) within the award to which the assessment relates. It is the process of collecting evidence about his/her capabilities and judging whether that evidence is sufficient to attribute competence.

The Candidate must be registered through the City & Guilds approved assessment centre for this qualification prior to the assessment.

The results of the assessment will be recorded on the Record of Assessment form (ROA).

The qualification guidance contains criteria relating to:

- Observation of practical performance
  - Assessment of underpinning knowledge

#### **Chainsaw Safe Practice**

#### At all times during the assessment, equipment must be used in accordance with industry good practice, whatever the task being carried out. 1. Assessors must hold a current 'First Aid at Work' Certificate.

- 2. All chainsaws used in assessments must comply with relevant Arboriculture and Forestry Advisory Group (AFAG) guidance and HSE
- Chainsaws at Work INDG317(rev1), in terms of safety features, and be a model and size suited to the task(s) required.
- Recommended guide bar lengths should be observed, although variations may be accepted at the discretion of the assessor where this is appropriate to the task.
- 5. Candidates should be familiar with the machinery, equipment and tools that they are going to use.
- 6. During chainsaw based assessments a spare working chainsaw must be available.
- 7. Appropriate Personal Protective Equipment (PPE) must be worn at all times by both the candidate and the assessor. All PPE used must comply with relevant AFAG guidance, industry good practice, Health and Safety Executive publications and current legal requirements in terms of specification and use.
- 8. A First Aid kit meeting current regulations, of the appropriate size for the number of persons on site, must be available, along with appropriate fire fighting and suitable welfare facilities e.g. hand cleansing wipes.
- 9. The use of personal first aid kits must be line with current industry good practice.
- 10. The assessor must ensure a site specific risk assessment has been carried out, sufficient control measures implemented and appropriate emergency procedures recorded. All recorded risk assessment information should be clearly legible and accessible to candidates and completed for all locations where assessment activities are scheduled to take place.
- 11. Manual handling techniques must comply with current legislation and industry good practice.
- 12. Any necessary permission must have been granted, and notifications made as appropriate.
- 13. All equipment being used for this assessment must comply with relevant legislative requirements.
- 14. Information may be sought from the relevant operator manuals or any other appropriate training or safety publication.
- 15. The current regulations for transport, handling and storage of fuel and oils must be complied with.
- 16. Provision must be made to avoid the risk of environmental pollution.
- 17. It is the responsibility of the assessor and the candidate to ensure that any additional requirements and provisions are met as relevant to this gualification.
- 18. At all times during the assessment, candidates must act in a way so as not to endanger themselves, the assessor or any other person or equipment. Work must be carried out to achieve the requirements of the assessment criteria in accordance with all relevant and current legislation and good practice guidance.
- 19. If required, relevant records must be accurately kept.
- 20. Appropriate steps should be taken to maintain effective teamwork in respect of other persons on site during the assessment.
- Any appropriate item of machinery complying with current legal requirements is acceptable for the assessment, provided it is suitably equipped for all assessment activities to be carried out.
- 22. All equipment being used for this assessment must comply with the relevant requirements of the Provision and Use of Work Equipment Regulations (PUWER) 1998.
- 23. A breach of Health and Safety that puts any person at risk during the assessment process will result in the assessment being terminated and the Candidate not meeting the required standard.

This may include taking steps to ensure effective communication and safety precautions.

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CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	CANDIDA		IDAT	ſΕ
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
3.3	Summarise current health and safety legislation and	Summarise <b>four</b> key points from Lifting Operations and	The main requirements of the LOLER regulations relating to the inspection of rigging equipment include:				
3	industry good practice	Lifting Equipment Regulations 1998 (LOLER)	<ul> <li>equipment should be subject to a pre use check by the climber</li> </ul>				
0			<ul> <li>a written recorded interim inspection should be kept for equipment subject to high levels of wear</li> </ul>				
			<ul> <li>a thorough examination should be carried out at least every 12 months</li> </ul>				
			<ul> <li>equipment should be marked for unique identification</li> </ul>				
		Summarise <b>three</b> key points from Work at Height Regulations	The main requirements of the Work at Height Regulations relating to arboricultural operations include:				
		2005	<ul> <li>all work at height is properly planned and organised</li> </ul>				
			those involved with work at height are competent				
			<ul> <li>the risks from work at height are assessed and appropriate work equipment is selected and used</li> </ul>				
			• equipment for work at height is properly inspected				
		Summarise two key points	Health and Safety at Work Act (HSWA):				
		from Health and Safety at	<ul> <li>general duties for employers and employees</li> </ul>				
			maintain safe places of work				
			• other				
		from Provision and Use of	The Provision and Use of Work Equipment Regulations 1998 (PUWER):				
		1998 (PUWER)	<ul> <li>operators adequately trained</li> </ul>				
			<ul> <li>supervision and management of work equipment</li> </ul>				
		State <b>one</b> purpose of each:	other Arboriculture Forestry Advisory Group (AFAG)				
		Arboriculture and Forestry	information:				
		Guides	<ul> <li>providers of industrial good practice</li> </ul>				
			• other				
		AA/HSE Guide to Good	Guide to good climbing practice:				
			<ul> <li>defines industry accepted techniques for climbing operations</li> </ul>				
			other				
		Current rigging and	HSE RR668:				
		dismantling practices used in	practices used in arboriculture			П	
		arboriculture	• other				
			Met ✓ Not Met X				
4.2	Explain how to evaluate	State two hazards	Tree evaluation may be carried out via:				
4.2	the implications of the		visual observation				
4	hazards		hazard evaluation report				
-			• other				
		State <b>two</b> implications	Implications of the hazards when identified may include:				
			physical injury				
			damage to equipment				
			damage to retained part of the tree				
			• other				
			Met ✔ Not Met X				

NUMBER         CRITERIA         GUIDANCE         ACTUTITES         A         B         C         D           2.1         Profina in hazard         Candidian to state six         Hazards that may be proteen in work of heights         Image: state six of heights	CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND	IDA	ΓЕ
2.1       Perform a hazard work whether the addition of the time and Work whether the addition of carlies, decay of decay fungi - evidence of decay fundies - evidence of evidies -	NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
<ul> <li>2.1 evidence of cavies, decay or decay (ung) cavies of the volume of cavies, decay or decay (ung) cavies of the volume of cavies, decay or decay (ung) cavies of the volume of cavies, decay or decay (ung) cavies of the volume of cavies, decay or decay (ung) cavies of the volume of cavies, decay or decay (ung) cavies of the volume of cavies, decay or decay (ung) cavies of the volume of cavies, decay or decay (ung) cavies of the volume of cavies, decay or decay (ung) cavies, decay (ung) cavies, decay (ung) cavies, decay (u</li></ul>		Perform a hazard	Candidate to state <b>six</b>	Hazards that may be encountered may include:				
<ul> <li>Assessment prior to carrying out the work carrying ou</li></ul>	2.1	evaluation of the tree and	hazards that may be present	<ul> <li>evidence of cavities, decay or decay fungi</li> </ul>				
<ul> <li>carrying out the work</li> <li>carrying out the work</li> <li>carrying out the work</li> <li>v shaped unions</li> <li>v cracks</li> <li>v crack</li></ul>		Assessment prior to		<ul> <li>deadwood and broken branches</li> </ul>				
<ul> <li>4.9</li> <li>Describe when tree rigging may be required when:         <ul> <li>active three limitations</li> <li>bescribe when tree rigging may be required when:             <ul></ul></li></ul></li></ul>	2	carrying out the work		dead or flaking bark				
<ul> <li>4.9</li> <li>Describe the potential damage that or decide and the result of the potential damage to relate the end of the potential damage that or decides are control to backbacking used of split as completed point on work.</li> <li>3.5</li> <li>Describe the potential damage that or decide and the result of the potential damage that the result of the potential damage that or decide are control to backbacking used of split as completed point on work.</li> <li>Appropriate potential damage that or decides are control to main the result of the potential damage that the resul</li></ul>				<ul> <li>v shaped unions</li> </ul>				
<ul> <li>ensing insects         <ul> <li>the presence of power lines or telephone wires             <li>targets and obstades underneal the tree             <li>targets             </li> <li>targets             </li> <li>targets and obstades underneal the tree             <li>targets             </li> <li>targets and obstades underneal the tree             <li>targets             </li> <li>targets and obstades underneal the tree             <li>targets             </li> <li>targets             </li> <li>targets and obstades underneal the tree             <li>targets             </li> <li>targets             </li> <li>targets and obstades             </li> <li>targets and obstades underneal the tree             <li>targets             </li> <li>targets</li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></ul></li></ul>				cracks				
4.9       Describe when tree rigging may be required when:       0				nesting insects				
<ul> <li>targets and obtackes underneath the tree         <ul> <li>targets and obtackes underneath the tree</li> <li>the hear of obtackes underneath the un</li></ul></li></ul>				the presence of power lines or telephone wires				
<ul> <li>state three</li> <li>state three</li> <li>other</li> <li>choice</li> <lichoice< li=""> <li>choic</li></lichoice<></ul>				<ul> <li>targets and obstacles underneath the tree</li> </ul>				
3.5       Describe the potential environmental damage may include:       i </th <th></th> <th></th> <th></th> <th>• other</th> <th></th> <th></th> <th></th> <th></th>				• other				
4.9       Describe when the rigging may be required there invision       0       0       0       0         4.9       Describe when the rigging may be required there invision       0			State three	Factors to be considered as part of the Working at Heights Assessment may include:				
<ul> <li>equipment selection and inspaction</li> <li>equipment selection and inspaction</li> <li>planned operation</li> <li>planned operati</li></ul>				<ul> <li>tree hazard evaluation is complete</li> </ul>				
4.9       Describe when the regring may be required when: may be required and its limitations       Describe three imitations       Describe three imitations       Right consumption of staff required other				<ul> <li>equipment selection and inspection</li> </ul>				
4.9       Describe there regimms       □       □       □         3.5       Describe the potential environmental damage that environmental damage that collaborate how to respond appropriately       Describe one cause       Potential environmental damage may include:       □       □         3.5       Describe the potential environmental damage that collaborate prevention of watercourses       □				adequately trained operator				
3.5       Describe the potential damage that could occur and how to respond appropriately       Describe one cause       Potential environmental damage may include:				planned operation				
Met ✓ Not Met X       □				• other				
3.5       Describe the potential damage that ladmage may include::       -<				Met ✓ Not Met X				
<ul> <li>3.5 demutromental damage intel could occur and how to respond appropriately</li> <li>3</li> <li>a</li> <li>a</li> <li>bescribe one prevention</li> <li>bescribe one prevention</li> <li>containment and clearance of spills</li> <li>good housekeeping, use of spill mats etc</li> <li>containment and clearance of spills</li> <li>good housekeeping, use of spill mats etc</li> <li>work sequence chosen to minimise subsequent damage to retained trees</li> <li>work sequence chosen to minimise subsequent damage to retained trees</li> <li>work sequence chosen to minimise subsequent damage to retained trees</li> <li>work sequence chosen to minimise subsequent damage to retained trees</li> <li>work sequence chosen to minimise subsequent damage to retained trees</li> <li>work sequence chosen to minimise subsequent damage to retained trees</li> <li>work site to safeguard the work three limitations</li> <li>bescribe three limitations</li> <li>conter methany include:</li> <li>contained trees</li> <li>ground damage must be minimised</li> <li>conter methany include:</li> <li>conter methany include:&lt;</li></ul>		Describe the potential	Describe <b>one</b> cause	Potential environmental damage may include:				
3       • contamination diverses       □       □         3       • contamination diverses       □       □         4       • widtife disturbance       □       □         • widtife disturbance       □       □       □         • containment and dearance of spills       □       □       □         • containment and dearance of spills       □       □       □         • containment and dearance of spills       □       □       □         • containment and dearance of spills       □       □       □         • widtife assessments completed prior to work       □       □       □         • widtifie assessments completed prior to work       □       □       □         • widtifie assessments completed prior to work       □       □       □         • widtifie assessments completed prior to work       □       □       □         • other       •       •       •       □       □         • other       •       •       •       □       □       □         • other       •       •       •       □       □       □       □         • other       •       •       •       •       □       □       □	3.5	environmental damage that		<ul> <li>damage to retained trees</li> </ul>				
3       L. H. Y. Y.       • wildlife disturbance       □		respond appropriately		<ul> <li>contamination of watercourses</li> </ul>				
<ul> <li>e other</li></ul>	3			wildlife disturbance				
4.9       Describe when tree rigging may be required and its initiations       Describe when tree rigging may be required when:       0				• other				
4.9       Describe when tree rigging may be required and its limitations       Describe three reasons       Rigging may be required when:       Image to retained trees         4.9       Describe when tree rigging may be required and its limitations       Describe three reasons       Rigging may be required when:       Image to retained trees         4.9       Describe when tree rigging may be required and its limitations       Describe three reasons       Rigging may be required when:       Image to retained trees       Image to retained trees         4.9       Describe three reasons       Rigging may be required when:       Image to retained trees       Image to retained trees         4.9       Describe three reasons       Rigging may be required when:       Image to retained trees       Image to retained trees         4.1       Describe three limitations       Describe three reasons       Image to retained trees       Image to retained trees         4.7       Describe three limitations       Describe three limitations       Image to retained trees       Image to retained trees         4.7       Describe how to layout a work site to safeguard the ground crew, aid workflow, and deal with arisings during rigging operations       Candidate to discuss (as per site requirements)       Vork site layout factors to consider may include:       Image to retained trees         4.7       Describe how to layout a work site to safeguard the ground crew, aid workflow, and deal with arisings			Describe one prevention	Appropriate provention may include:				
4.9       Describe when tree rigging may be required and its imitations       Describe three reasons       Rigging may be required when:       Imitations			Describe one prevention	containment and clearance of spills				
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4.9       Describe when tree rigging may be required and its limitations       Describe three reasons       Rigging may be required when:				<ul> <li>work sequence chosen to minimise subsequent damage to retained trees</li> </ul>				
4.9       Describe when tree rigging may be required and its limitations       Describe three reasons       Rigging may be required when: <ul> <li>obstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>offer</li> <li>offer</li> <li>opstacles are located beneath the tree</li> <li>offer</li> <li>opstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>offer</li> <li>opstacles are located beneath the tree</li> <li>opstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>opstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>opstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>opstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>opstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>opstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>opstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>opstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>opstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>free fall techniques are not possible</li> <li>opstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>free quipment intensive</li> <li>opstacles are located beneath the tree</li> <li>f</li></ul>				wildlife assessments completed prior to work				
4.9       Describe when tree rigging may be required and its limitations       Describe three reasons       Rigging may be required when: <ul> <li>obstacles are located beneath the tree</li> <li>free fall techniques are not possible</li> <li>ground damage must be minimised</li> <li>ground</li></ul>				other				
4.9       Describe when tree rigging may be required and its limitations       Describe three reasons       Rigging may be required when:				Met ✓ Not Met X				
<ul> <li>4.9 may be required and its limitations</li> <li>4</li> <li>4</li> <li>4</li> <li>5</li> <li>6</li> <li>6</li> <li>7</li> <li>7</li> <li>4.7</li> <li>4.8</li> <li>4.7</li> <li>4.8</li> <li>4.7</li> <li>4.8</li> <li>4.8</li> <li>4.9</li> <li>4.9</li> <li>4.9</li> <li>4.9</li> <li>4.9</li> <li>4.9</li> <li>4.9</li> <li>4.9</li> <li>4.9</li> <li>4.9<th></th><th>Describe when tree rigging</th><th>Describe three reasons</th><th>Rigging may be required when:</th><th></th><th></th><th></th><th></th></li></ul>		Describe when tree rigging	Describe three reasons	Rigging may be required when:				
4 <ul> <li>free fall techniques are not possible</li> <li>ground damage must be minimised</li> <li>other</li> <li>other</li> <li>Limitations may include:</li> <li>higher competency levels of staff required</li> <li>other</li> <li>potentially time consuming to set up and use</li> <li>other</li> <li>other</li> </ul> 4.7         Describe how to layout a ground crew, aid workflow, and deal with arisings during rigging operations         Candidate to discuss (as per site requirements)         Work site layout factors to consider may include:         Image: site requirements in the site site position         Image: site requirements in the site site position         Image: site requirements in the site site position         Image: site requirements in the site site site position         Image: site site site site site site site position         Image: site site site site site site site site	4.9	may be required and its		<ul> <li>obstacles are located beneath the tree</li> </ul>				
4       • ground damage must be minimised       □		Infinations		<ul> <li>free fall techniques are not possible</li> </ul>				
<ul> <li>4.7</li> <li>Describe how to layout a work site to safeguard the ground crew, aid workflow, and deal with arisings during rigging operations</li> <li>Candidate to discuss (as per site requirements)</li> <li>Candidate to discuss (as per site requirements)</li> <li>Work site layout factors to consider may include:         <ul> <li>tree size/position</li> <li>tree size/position</li> <li>tragets</li> <li>tragets</li> <li>tragets</li> <li>number of personnel</li> <li>method of managing arisings</li> <li>method of managing arisings</li></ul></li></ul>	4			<ul> <li>ground damage must be minimised</li> </ul>				
4.7       Describe how to layout a work site to safeguard the ground crew, aid workflow, and deal with arisings during rigging operations       Candidate to discuss (as per site requirements)       Work site layout factors to consider may include: 				• other				
4.7       Describe how to layout a work site to safeguard the ground crew, aid workflow, and deal with arisings during rigging operations       Candidate to discuss (as per site requirements)       Work site layout factors to consider may include:       Image: Site requirements in the site requirement interval include:       Image: Site requirement i				Limitations may include:				
4.7       Describe how to layout a work site to safeguard the ground crew, aid workflow, and deal with arisings during rigging operations       Candidate to discuss (as per site requirements)       Work site layout factors to consider may include:       Image: the size/position in access and egress in traduited in the size is the requirement intersive is the requirement is intersive is the requirement is intersive is the requirement is intersive is the requirement intersive is the requirement intersive is the requirement intersive is the requirement is intersive is therewise. <td< th=""><th></th><th></th><th>Describe three limitations</th><th>higher competency levels of staff required</th><th></th><th></th><th></th><th></th></td<>			Describe three limitations	higher competency levels of staff required				
4.7       Describe how to layout a work flow, and deal with arisings during rigging operations       Candidate to discuss (as per site requirements)       Work site layout factors to consider may include:       Image: Candidate to discuss (as per site requirements)         4       Describe how to layout a work flow, and deal with arisings during rigging operations       Candidate to discuss (as per site requirements)       Work site layout factors to consider may include:       Image: Candidate to discuss (as per site requirements)         4       Describe how to layout a work flow, and deal with arisings during rigging operations       Candidate to discuss (as per site requirements)       Work site layout factors to consider may include:       Image: Candidate to discuss (as per site requirements)         6       Tree size/position       Image: Candidate to discuss (as per site requirements)       Image: Candidate to discus (as per site requireme				night competency levels of start required				
4.7       Describe how to layout a work flow, and deal with arisings during rigging operations       Candidate to discuss (as per site requirements)       Work site layout factors to consider may include:       I <td< th=""><th></th><th></th><th></th><th>potentially time consuming to set up and use</th><th></th><th></th><th></th><th></th></td<>				potentially time consuming to set up and use				
4.7       Describe how to layout a work site to safeguard the ground crew, aid workflow, and deal with arisings during rigging operations       Candidate to discuss (as per site requirements)       Work site layout factors to consider may include:       I				• equipment intensive				
Met ✓ Not Met X       I				• other				
<ul> <li>4.7</li> <li>4.8</li> <li>4.8</li></ul>			<b>2</b>	Met ✓ Not Met X				
<ul> <li>4.7 work site to sate goald une ground crew, aid workflow, and deal with arisings during rigging operations</li> <li>and deal with arisings during rigging operations</li> <li>tree size/position</li> <li>access and egress</li> <li>utilities</li> <li>targets</li> <li>number of personnel</li> <li>method of managing arisings</li> <li>other</li> <li>Met ✓ Not Met X</li> </ul>	47	Describe how to layout a	Candidate to discuss (as per	Work site layout factors to consider may include:				
4       and deal with arisings during rigging operations       • access and egress       □	4.7	ground crew, aid workflow		tree size/position				
4       during rigging operations       ●       utilities       □	<b>_</b>	and deal with arisings		access and egress				
• targets       □ <td□< th=""><th>4</th><th>during rigging operations</th><th></th><th>utilities</th><th></th><th></th><th></th><th></th></td□<>	4	during rigging operations		utilities				
● number of personnel       □ <th></th> <th></th> <th></th> <th>targets</th> <th></th> <th></th> <th></th> <th></th>				targets				
method of managing arisings     □ □ □     □ □     □     □ □     □				number of personnel				
• other □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □				method of managing arisings				
Met ✓ Not Met X □ □ □				• other				
				Met ✓ Not Met X				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	ANC	IDA <sup>-</sup>	ГЕ
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
	Describe how to select	State three	Selection of compatible components may include:				
4.4	make up a rigging system		<ul> <li>knowledge of loads that equipment may be subject to</li> </ul>				
4	appropriate for the		subject to				
4	anticipated load		<ul> <li>consideration of strength loss due to configuration, age and condition</li> </ul>				
			<ul> <li>compatibility with any other components</li> </ul>				
			• other				
			Met ✓ Not Met X				
	Select compatible	For rigging point:	Candidate to select components which may include:				
2.5	components to make up	above load	rigging blocks				
	the ngging system	<ul> <li>below load</li> </ul>	rigging ropes				
2		Assessor to observe	connectors				
		Assessor to observe	slings				
			strops				
			lowering devices				
			redirect pulleys				
			• other				
			Met ✓ Not Met X				
13	Use and maintain tools,		Candidate to use PPE and safety clothing for tree climbing as per AFAG and include:				
	protective equipment		<ul> <li>helmet with chinstrap, ear and eye protection</li> </ul>				
1	(PPE)		personal first aid kit				
-			<ul> <li>knife with retractable blade or handsaw</li> </ul>				
			• chainsaw foot protection with good grip and ankle				
			support				
			<ul> <li>non- snag clothing</li> </ul>				
			chainsaw leg protection				
			Chainsaw:				
			appropriate size				
			<ul> <li>suitable for the task</li> </ul>				
			appropriate safety features				
			appropriate chainsaw lanyard used				
			Candidate to use appropriate climbing equipment for				
			<ul> <li>harness as per AFAG guide</li> </ul>				
			<ul> <li>rope systems of suitable diameter, length and</li> </ul>				
			strength for the climbing line and for the friction hitches				
			<ul> <li>triple action auto-locking karabiners for main attachments</li> </ul>				
			adjustable strop or a system using both ends of				
			the rope				
			Met ✓ Not Met X				
2.3	Inspect all access and rigging equipment to	Candidate to inspect all equipment to be used and	Candidate to inspect all equipment to be used and comment on the condition/checks made:				
2	ensure it is safe and fit for use under manufacturer's instructions and relevant legislation	comment on the condition/checks made	<ul> <li>all textiles components should be checked for cuts, frays, correct end terminations, burns and glazing, contamination and excessive wear along with the candidate having the ability to tie, dress and set all knots/hitches used</li> </ul>				
			<ul> <li>all hardware components should be checked for visible damage, corrosion and to ensure that any locking mechanism works correctly</li> </ul>				
			<ul> <li>harnesses should be checked for damage to stitching, security of the anchor point(s), cuts and frays and general wear</li> </ul>				
			· · · · · · · · · · · · · · · · · · ·				
1							

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND	IDA	ГЕ
NUMBER			ACTIVITIES	Α	В	С	D
34	Explain the importance of maintaining tools,	Explain three reasons	PPE may include:				
0.1	equipment and personal		operator safety				
3	protective equipment		ensuring equipment works when required				
_			reduces downtime				
			reduces emissions and possible environmental				
			damage				
			• other				
			Met ✓ Not Met X				
	Describe how to select	Describe two work positions	Factors to consider when selecting a work position may				
4.6	suitable work positions and		include:				_
			minimising climbers risk				
4			minimising potential equipment damage				
			available anchor points     risk assessment				
			other				
		Describe <b>two</b> drop zones	Factors to consider when selecting an appropriate drop				
			suitable areas				
			<ul> <li>identification of targets</li> </ul>				
			access and egress				
			other				
			Met ✓ Not Met X				
4.5	Describe how to select	State four	Suitable anchor points may be selected in terms of:				
4.5	the anticipated load without		sufficient size and strength				
Λ	compromising the workers		• tree form and condition				
4	access position		work to be completed				
			obstacles beneath				
			climbers position and anchor points				
			planned drop zone				
			• other				
			Met ✓ Not Met X				
13	Explain how to calculate	State all	Log mass:				
4.5	anticipated loads	For the purpose of this	Experience				
4		assessment	<ul> <li>Log mass chart x safety factors x sp correction</li> </ul>				
		Safety factor = $1.3$ Sp correction factor = $1.27$	factor				
		As stated in the HSE RR668	Pigging point load:				
			Above load				
			<ul> <li>Log mass x 2 (static load)</li> </ul>				
			Below the load				
			<ul> <li>Log mass x 11 (worst case scenario)</li> </ul>				
			Met √ Not Met X				
	Estimate the anticipated	Candidate to discuss with	Rigging point load estimated for:				
2.4	loads	Assessor.	Above the load:				
		The anticipated 'rigging point'	Above the load.				
2		load <b>must be</b> estimated prior	Section identified				
		to section removal for above	Mass of log section is estimated or calculated				
			Rigging point load is estimated				
			Below the load				
			Section identified				
			Mass of log section is estimated or calculated				
			Rigging point load is estimated				
			Met ✓ Not Met X				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	CANDID		<b>IDA</b>	ГЕ
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
	Describe how to minimise	State Three	Shock loading may be minimised by:				
4.8	shock loading in the rigging		<ul> <li>allowing sections to run</li> </ul>				
	system		<ul> <li>removing smaller sections</li> </ul>				
4			<ul> <li>placing more rope in the system</li> </ul>				
			<ul> <li>reconfigure rigging system</li> </ul>				
			• other				
			Met √ Not Met X				
	Describe have advected as a	Condidate to describe all					
4 10	Describe now, when and	Candidate to describe all					
4.10	where to use.		<ul> <li>to move suspended loads from one place to another</li> </ul>				
4	<ul> <li>driftload transfor line</li> </ul>						
4			balance/cradle:				
			<ul> <li>to lower a horizontal section</li> </ul>				
	<ul> <li>speedline</li> <li>false anaban pointe</li> </ul>		spider leg:				
	faise anchor points		<ul> <li>used to create a multiple attachment</li> </ul>				
	<ul> <li>craning and lifting tochniques</li> </ul>		speedline <sup>.</sup>				
			to transport a suspended load				
	<ul> <li>pui/tag line</li> </ul>		false anchor points:				
			to create an artificial anchor				
			craning and lifting techniques:				
			<ul> <li>to divert and lift loads</li> </ul>				
			crane removal:				
			• to increase efficiency and safety of a lifting				
			operation				
			pull/ tag line:				
			<ul> <li>to assist the removal of a section</li> </ul>				
			Met ✓ Not Met X	$\square$			
	Work in a way which	Assessor to observe	all activities must be completed in a way which	_	<u> </u>	<u> </u>	
1.2	maintains health and		<ul> <li>all activities must be completed in a way which protects the operator and those around him or her</li> </ul>				
	safety and is consistent						
1	with relevant legislation		Met ✓ Not Met X				
-							
	Carry out work to minimise	Assessor to observe	It is ensured that any possible environmental				
1.4	environmental damage		damage is minimised at all times during aerial tree				
			ngging activities				
1			Met ✓ Not Met X				
	Use access and	Assessor to observe	Candidate establishes their initial anchor point taking				
2.2	positioning methods		into account:				
	appropriate to the		<ul> <li>suitability of the technique used</li> </ul>				
2	method statement		<ul> <li>accuracy of the throw</li> </ul>				
			rope organisation				
			<ul> <li>safety and position of the anchor point</li> </ul>				
			<ul> <li>testing of the anchor point by thorough loading</li> </ul>				
			prior to ascent				
			Candidate accesses and climbs tree taking into				
			account:		_	_	_
			efficient use of access technique chosen				
			candidate is attached to the tree at all times				
			appropriate selection of anchor points				
			appropriate route taken up the tree				
			<ul> <li>correct use of adjustable strop or alternative</li> </ul>				
			system when changing anchor points				
			<ul> <li>loading new anchor points before previous anchor point is removed</li> </ul>				
			<ul> <li>slack rope within system loss than 500mm</li> </ul>				
			slack tope within system less than 30000000				
	1						
			anchor point				
Continued			<ul> <li>anchor point</li> <li>correct use of equipment</li> </ul>				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C		IDAT	ΓE
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
<b>•</b> •			Final anchor point selected taking into consideration:				
Cont			<ul> <li>size, strength and structure</li> </ul>				
2.2			position in relation to the parts of the tree to be     accessed				
2			• use of equipment to minimise damage to the tree if appropriate				
			Descent takes into account:				
			the speed of descent				
			rope organisation				
			appropriate descent route				
			controlled landing				
			<ul> <li>controlled removal of equipment</li> </ul>				
			Mot V Not Mot Y				
	Access the position and						
2.6	selection of anchor points	Assessor to observe	in relation to:				
	for rigging components in		tree form				
2	relation to:		tree condition				
_	anticipated load		work to be completed				
			anticipated load				
	<ul> <li>ground crew</li> </ul>		ground crew position				
	<ul> <li>other anchor points</li> </ul>		<ul> <li>other anchor points</li> </ul>				
	<ul> <li>access equipment</li> </ul>		access equipment position				
	position		<ul> <li>planned drop zone</li> </ul>				
	<ul> <li>planned drop zone</li> </ul>		<ul> <li>processing area</li> </ul>				
	<ul> <li>processing area</li> </ul>						
	<ul> <li>communication</li> </ul>						
		Q. /	Met ✓ Not Met X				
4.11	Explain how to remove tree sections by:	State all	The basic principles of various rigging techniques may include:				
1	<ul> <li>tip tie technique</li> </ul>		tip tie techniques:				
4	butt tie technique		• rope attached to tip end of branch				
	• balance/cradle		butt tie techniques:				
	<ul> <li>snatching</li> </ul>		<ul> <li>rope attached to butt end of branch</li> </ul>				
	<ul> <li>speed line</li> <li>lifting techniques</li> </ul>		balance/ cradle:				
			use multiple attachment points to a suspended				
			horizontal load				
			snatching:				
			<ul> <li>section tied above rigging point</li> </ul>				
			speed line:				
			after removal of tree section the load is				
			designated drop zone				
			lifting techniques:				
			• during the removal of a tree section the load is				
			lifted by an appropriate lifting device				
			Met ✓ Not Met X				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C/	AND	IDAT	ΓE
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
	Remove tree sections	One Tip tie	Tree sections removed using the following techniques:				
2.7 Using suitable rigging and One Butt tie	One Butt tie	tip tie					
	appropriate cuts		butt tie				
2		Minimum <b>Two,</b> maximum	cradle				
		four	vertical free fall				
		<ul><li>vertical free fall</li><li>vertical lowered section</li></ul>	vertical lowered section				
		pulley below the load	Taking the following points into account:				ĺ
		One of the above must be a sink cut	<ul> <li>suitable anchor points for climbing and lowering lines</li> </ul>				
			<ul> <li>relative positions of climbing and lowering lines</li> </ul>				
		Simulation is NOT acceptable for this criterion	<ul> <li>appropriate equipment selected for the anchor point of the lowering line</li> </ul>				
			<ul> <li>use of a craning fork where appropriate</li> </ul>				
			<ul> <li>appropriate means for the control of friction employed in the lowering system</li> </ul>				
			<ul> <li>manageable sections selected</li> </ul>				
			<ul> <li>position and method of attaching rope to the section</li> </ul>				
			<ul> <li>use of pull line if appropriate</li> </ul>				
			<ul> <li>appropriate safe and secure working position attained</li> </ul>				
			<ul> <li>characteristics and properties of the wood considered</li> </ul>				
			<ul> <li>correct position, depth and accuracy of cuts</li> </ul>				
			<ul> <li>chain brake applied or saw switched off whilst lowering sections</li> </ul>				
			<ul> <li>the climber must direct the ground operations</li> </ul>				
			<ul> <li>limbs are lowered under control</li> </ul>				
		Two to be demonstrated	Demonstration of the following knots must be demonstrated during the assessment:				
			• timber hitch				
			• cow hitch				
			running bowline				
			clove hitch				
			Met ✓ Not Met X	$\square$			

ndidate A	Candidate has met all of the assessment criteria	Tick ✓	The Candidate <b>has not</b> met all of the assessment criteria; <b>(state reason(s))</b>	Tick ✓
Ca	Signed: D	ate:		
Candidate B	Candidate <b>has met</b> all of the assessment criteria	Tick ✓	The Candidate <b>has not</b> met all of the assessment criteria; <b>(state reason(s))</b>	Tick ✓
	Signed: D	ate:		
	Candidate has met all of the assessment criteria	Tick	The Candidate <b>has not</b> met all of the assessment criteria; ( <i>state</i>	Tick

	Candidate has met all of the assessment criteria	Tick ✓	The Candidate <b>has not</b> met all of the assessment criteria; <b>(state reason(s))</b>	Tick ✓
date C				
Candic				
	Signed: D	Date:		

	Candidate has met all of the assessment criteria	Tick √	The Candidate <b>has not</b> met all of the assessment criteria; ( <i>state reason(s))</i>	Tick ✓
date D				
Candio				
	Signed:	Date:		

For use by Internal Verifier ONLY if the assessment process was internally verified (Internal Verifier to complete ONE of the boxes below)

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I observed an assessment process taking place and I am satisfied that the assessment was conducted in line with the qualification requirements and that the judgement of the Assessor was appropriate.	Tick ✓
I observed an assessment process taking place. The following were noted as areas of concern.	Tick ✓
Signed: Date:	

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