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



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
Guided Learning Hours (GLH)	3 0 9	GLH 19 (Credit Value 3)
Total Qualification Time (TQT)		30 Hours
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

	Change detail	Section
1.2 November 2017	Added TQT details Deleted QCF / Learning Time	Qualification at a glance, Structure
		Throughout

City and Guilds NPTC Level 3 Award In Aerial Tree Rigging 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.

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.

Total Qualification Time

Total Qualification Time (TQT) is the total amount of time, in hours, expected to be spent by a Learner to achieve a qualification. It includes both guided learning hours (which are listed separately) and hours spent in preparation, study and assessment.

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

3.5)

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 ☑ 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 as directed by completing the tick boxes. Space has been provided 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.
- 4. 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 qualification.
- 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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Candidate	A Name:		Dat	te:	Start Time:	Dura	atior	ו:		
Candidate	B Name:		Date: Start Time:		Start Time:	Duration:				
Candidate	C Name:		Dat	te:	Start Time:	Duration:		Duration:		
Candidate	D Name:		Dat	te:	Start Time:	Dura	atior	ו:		
CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE			SSESSMENT ACTIVITIES		C. A	AND B	IDA1 C	TE D
3.1 3	Explain the risk assessment process	Five steps to risk assessm	ent	five steps: identify the hazar decide who migh evaluate the risks record the finding	It be harmed and how s and decide on precautions gs and implement them te the assessment as neces	s ssary				
	Identify the hazards and	Three hazards and risks w	ith	Identify bezorde (envit	Met ✓ Not I					
1.1 1	risks associated with the working area and the proposed work	Three hazards and fisks w the working area Three hazards and risks w the proposed work		 harm) and risks (who relevant to: The work area The work to be d 	hing with the potential to ca might be harmed and how), lone Met ✔ Not I					
4.1 4	Explain control measures to be implemented relevant to the working area and proposed work	Two control measures for working area Two control measures for proposed work		Candidate explained of identified in section 1. Typical control measure warning signs PPE adequately traine industry good pra- other	res may include: ed operators	ls —				
					Met ✓ Not I	Met X				
3.2 3	Outline the emergency planning procedures relevant to the working area	State five emergency procedures		 include: location name grid reference designated meet site location nam nearest access p street name/distr type of access (p wheel drive) suitable helicopte phone number of location of neare hospital and pho works manager of 	ne point rict public road/light vehicles, for er landing area f nearest doctor ist accident and emergency ne number	ur-				
					Met ✓ Not I	Met X				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT				1
NUMBER	CRITERIA Summarise current health	GUIDANCE Four key points from Lifting	ACTIVITIES The main requirements of the LOLER regulations	Α	В	С	D
3.3	and safety legislation and	Operations and Lifting	relating to the inspection of rigging equipment include:				
3	industry good practice	Equipment Regulations 1998 (LOLER)	 equipment should be subject to a pre use check by the climber 				
			• a written recorded interim inspection should be kept for equipment subject to high levels of wear				
			• a thorough examination should be carried out at least every 12 months				
			 equipment should be marked for unique identification 				
		Three key points from Work at Height Regulations 2005	The main requirements of the Work at Height Regulations relating to arboricultural operations include:				
			 all work at height is properly planned and organised 				
			• those involved with work at height are competent				
			 the risks from work at height are assessed and appropriate work equipment is selected and used 				
			equipment for work at height is properly inspected				
		Two key points from	Health and Safety at Work Act (HSWA):				
		Health and Safety at Work Act 1974 (HSWA)	 general duties for employers and employees 				
			maintain safe places of work				
			• other				
		Two key points from Provision and Use of Work Equipment Regulations 1998	The Provision and Use of Work Equipment Regulations 1998 (PUWER):				
		(PUWER)	 operators adequately trained supervision and management of work equipment 				
			other				
		One purpose of each: Arboriculture and Forestry Advisory Group (AFAG) Guides	Arboriculture Forestry Advisory Group (AFAG) information:				
			 providers of industrial good practice 				
			• other				
		AA/HSE Guide to Good climbing practice	Guide to good climbing practice: • defines industry accepted techniques for climbing				
			operationsother				
		HSE RR668 Evaluation of	HSE RR668:				
		current rigging and dismantling practices used in	evaluation of current rigging and dismantling		_	_	_
		arboriculture	practices used in arboricultureother				
			Met ✓ Not Met X				
4.2	Explain how to evaluate the tree for hazards and	State two	Tree evaluation may be carried out via: • visual observation				
-716	the implications of the		 visual observation hazard evaluation report 				
4	hazards		 other 				
		State two	Implications of the hazards when identified may include:				
			physical injury				
			damage to equipment				
			damage to retained part of the tree				
			• other				
		1		1	1	1	1

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES	C.	AND B		
	Perform a hazard	Candidate to state six	Hazards that may be encountered may include:	^		Ĕ	
2.1	evaluation of the tree and	hazards that may be present	 evidence of cavities, decay or decay fungi 				
	Work At Height Assessment prior to		 deadwood and broken branches 				
2	carrying out the work		dead or flaking bark				
			 v shaped unions 				
			cracks				
			nesting insects				
			the presence of power lines or telephone wires				
			 targets and obstacles underneath the tree 				
			• other				
		State three	Factors to be considered as part of the Working at Heights Assessment may include:				
			 tree hazard evaluation is complete 				
			 equipment selection and inspection 				
			 adequately trained operator 				
			 planned operation 				
			• other				
			 Met ✓ Not Met X				
	Describe the potential	One cause	Potential environmental damage may include:				
3.5	environmental damage that could occur and how to		 damage to retained trees 				
•	respond appropriately		 contamination of watercourses 				
3			wildlife disturbance				
			• other				
		One prevention	Appropriate prevention may include:				
			 containment and clearance of spills 				
			 good housekeeping, use of spill mats etc 				
			 work sequence chosen to minimise subsequent 				
			damage to retained trees				
			 wildlife assessments completed prior to work 				
			• other				
			 Met ✓ Not Met X				
	Describe when tree rigging	Three reasons	Rigging may be required when:				
4.9	may be required and its		 obstacles are located beneath the tree 				
	limitations		 free fall techniques are not possible 				
4			 ground damage must be minimised 				
			• other				
		Three limitations	Limitations may include:				
			 higher competency levels of staff required 				
			 potentially time consuming to set up and use 				
			 equipment intensive 				
			• other				
		2	Met ✓ Not Met X				
4.7	Describe how to layout a work site to safeguard the	Candidate to discuss	 Work site layout factors to consider may include: tree size/position 				
	ground crew, aid workflow,						
4	and deal with arisings		accocc and ogroco				
4	during rigging operations		• utilities				
			targets				
			number of personnel				
			method of managing arisings				
			a she su				
			• other				

CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT		AND		
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
4.4	Describe how to select compatible components to make up a rigging system appropriate for the	State three	 Selection of compatible components may include: knowledge of loads that equipment may be subject to 				
4	anticipated load		consideration of strength loss due to configuration, age and condition				
			compatibility with any other components				
			• other				
			Met ✓ Not Met X				
2.5	Select compatible components to make up	For rigging point:above load	 Candidate to select components which may include: rigging blocks 				
	the rigging system	below load	rigging ropes				
2			connectors				
			• slings				
			• strops				
			lowering devices				
			redirect pulleys				
			• other				
			Met ✔ Not Met X				
1.3	Use and maintain tools, equipment and personal		Candidate to select PPE and safety clothing for tree climbing as per AFAG and include:				
-	protective equipment		helmet with chinstrap, ear and eye protection				
1	(PPE)		personal first aid kit				
			knife with retractable blade or handsaw				
			chainsaw foot protection with good grip and ankle support				
			non- snag clothing				
			chainsaw leg protection				
			Chainsaw:				
			appropriate size				
			suitable for the task				
			appropriate safety features				
			appropriate chainsaw lanyard used				
			Candidate to select appropriate climbing equipment for tree climbing to include:				
			harness as per AFAG guide				
			• rope systems of suitable diameter, length and strength for the climbing line and for the friction				
			hitches				
			 triple action auto-locking karabiners for main attachments 				
			 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	 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 				
			 all hardware components should be checked for visible damage, corrosion and to ensure that any locking mechanism works correctly 				
		1	hernesses should be shocked for demoge to	1	1	I I	1
			 harnesses should be checked for damage to stitching, security of the anchor point(s), cuts and frays and general wear 				

NUMBER	ASSESSMENT	ASSESSOR	ASSESSMENT			1	
	CRITERIA Explain the importance of	GUIDANCE Three reasons	ACTIVITIES The importance of maintaining tools, equipment and	Α	В	С	D
3.4	maintaining tools,		PPE may include:				
	equipment and personal protective equipment		operator safety				
3			ensuring equipment works when required				
			reduces downtime				
			 reduces emissions and possible environmental damage 				
			• other				
			Met ✓ Not Met X				
4.0	Describe how to select suitable work positions and	Two work positions	Factors to consider when selecting a work position may include:				
4.6	planned drop zones		 minimising climbers risk 				
4			 minimising potential equipment damage 				
-			available anchor points				
			risk assessment				
			• other				
		The days are a					
		Two drop zones	Factors to consider when selecting an appropriate drop zone may include:				
			suitable areas				
			identification of targets				
			access and egress				
			other				
	Describe how to calent	Otata faun	Met ✓ Not Met X			\vdash	
4.5	Describe how to select suitable anchor points for	State four	Suitable anchor points may be selected in terms of: • sufficient size and strength				
4.0	the anticipated load without		 tree form and condition 				
4	compromising the workers access position		 work to be completed 				
			anticipated load				
			obstacles beneath				
			climbers position and anchor points				
			planned drop zone				
			• other				
			Met ✓ Not Met X				
	Estimate the anticipated						
2.4		This is an estimate only and	The weight of a section may be calculated using a loss			<u> </u>	
2.4	loads	NOT an exact weight!	The weight of a section may be calculated using a loss mass chart by:				
		NOT an exact weight! Candidate may use chart or	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 				
2.4 2		NOT an exact weight!	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or 				
		NOT an exact weight! Candidate may use chart or own experience	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 				
		NOT an exact weight! Candidate may use chart or own experience Species correction factor =	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or Candidates experience Estimation of the peak load for the rigging points when 				
		NOT an exact weight! Candidate may use chart or own experience Species correction factor =	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or Candidates experience 				
		NOT an exact weight! Candidate may use chart or own experience Species correction factor = 1.27 Candidate only required to	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or Candidates experience Estimation of the peak load for the rigging points when 				
		NOT an exact weight! Candidate may use chart or own experience Species correction factor = 1.27 Candidate only required to estimate worst case scenario	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or Candidates experience Estimation of the peak load for the rigging points when lowering: 				
		NOT an exact weight! Candidate may use chart or own experience Species correction factor = 1.27 Candidate only required to estimate worst case scenario of anticipated loads	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or Candidates experience Estimation of the peak load for the rigging points when lowering: Pulley above the load 				
		NOT an exact weight! Candidate may use chart or own experience Species correction factor = 1.27 Candidate only required to estimate worst case scenario of anticipated loads e.g. safety factor = 1.3	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or Candidates experience Estimation of the peak load for the rigging points when lowering: Pulley above the load weight of the section to be removed x 2 Pulley below the load weight of the section to be removed x 14.3 (safety 				
		NOT an exact weight! Candidate may use chart or own experience Species correction factor = 1.27 Candidate only required to estimate worst case scenario of anticipated loads	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or Candidates experience Estimation of the peak load for the rigging points when lowering: Pulley above the load weight of the section to be removed x 2 Pulley below the load 				
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2	loads Explain how to calculate	NOT an exact weight! Candidate may use chart or own experience Species correction factor = 1.27 Candidate only required to estimate worst case scenario of anticipated loads e.g. safety factor = 1.3 anchor force factor = 11 Candidate to explain the	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or Candidates experience Estimation of the peak load for the rigging points when lowering: Pulley above the load weight of the section to be removed x 2 Pulley below the load weight of the section to be removed x 14.3 (safety factor x anchor force factor) Met ✓ Not Met X Estimation of the anticipated loads for the rigging point 				
	loads	NOT an exact weight! Candidate may use chart or own experience Species correction factor = 1.27 Candidate only required to estimate worst case scenario of anticipated loads e.g. safety factor = 1.3 anchor force factor = 11	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or Candidates experience Estimation of the peak load for the rigging points when lowering: Pulley above the load weight of the section to be removed x 2 Pulley below the load weight of the section to be removed x 14.3 (safety factor x anchor force factor) Met ✓ Not Met X 				
2 4.3	loads Explain how to calculate	NOT an exact weight! Candidate may use chart or own experience Species correction factor = 1.27 Candidate only required to estimate worst case scenario of anticipated loads e.g. safety factor = 1.3 anchor force factor = 11 Candidate to explain the process only 14.3 = factor of safety(1.3)	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or Candidates experience Estimation of the peak load for the rigging points when lowering: Pulley above the load weight of the section to be removed x 2 Pulley below the load weight of the section to be removed x 14.3 (safety factor x anchor force factor) Met ✓ Not Met X Estimation of the anticipated loads for the rigging point when lowering timber may include: Rigging point above the load – 				
2	loads Explain how to calculate	NOT an exact weight! Candidate may use chart or own experience Species correction factor = 1.27 Candidate only required to estimate worst case scenario of anticipated loads e.g. safety factor = 1.3 anchor force factor = 11 Candidate to explain the process only 14.3 = factor of safety(1.3) X	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or Candidates experience Estimation of the peak load for the rigging points when lowering: Pulley above the load weight of the section to be removed x 2 Pulley below the load weight of the section to be removed x 14.3 (safety factor x anchor force factor) Met ✓ Not Met X Estimation of the anticipated loads for the rigging point when lowering timber may include: 				
2 4.3	loads Explain how to calculate	NOT an exact weight! Candidate may use chart or own experience Species correction factor = 1.27 Candidate only required to estimate worst case scenario of anticipated loads e.g. safety factor = 1.3 anchor force factor = 11 Candidate to explain the process only 14.3 = factor of safety(1.3)	 The weight of a section may be calculated using a loss mass chart by: Length x diameter = log mass x species correction factor or 1.27 Or Candidates experience Estimation of the peak load for the rigging points when lowering: Pulley above the load weight of the section to be removed x 2 Pulley below the load weight of the section to be removed x 14.3 (safety factor x anchor force factor) Met ✓ Not Met X Estimation of the anticipated loads for the rigging point when lowering timber may include: Rigging point above the load – 				
2 4.3	loads Explain how to calculate	NOT an exact weight! Candidate may use chart or own experience Species correction factor = 1.27 Candidate only required to estimate worst case scenario of anticipated loads e.g. safety factor = 1.3 anchor force factor = 11 Candidate to explain the process only 14.3 = factor of safety(1.3) X anchor force	The weight of a section may be calculated using a loss mass chart by: • Length x diameter = log mass x species correction factor or 1.27 Or • Candidates experience Estimation of the peak load for the rigging points when lowering: Pulley above the load • weight of the section to be removed x 2 Pulley below the load • weight of the section to be removed x 14.3 (safety factor x anchor force factor) Met ✓ Not Met X Estimation of the anticipated loads for the rigging point when lowering timber may include: Rigging point above the load – • log mass x 2				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES		AND B		1
NOMBER	Describe how to minimise	State Three	Shock loading may be minimised by:	Α	Б	C	D
4.8	shock loading in the rigging		 allowing sections to run 				
	system		 removing smaller sections 				
4			 placing more rope in the system 				
-			 reconfigure rigging system 				
			• other				
	Describe how, when and	Candidate to describe all	driftload transfer line:	_	<u> </u>	<u> </u>	
4.10	where to use:		 moving suspended loads from one place to another 				
4	driftload transfer line						
-	balance/cradle		balance/cradle:		_	_	_
	spider legspeedline		lower a horizontal section				
	 false anchor points 		spider leg:				
	craning and lifting techniques		used to create a multiple attachment				
	crane removal		speedline:				
	pull/tag line		transport a suspended load				
			false anchor points:				
			• to create an artificial anchor				
			craning and lifting techniques:				
			 to divert and lift loads 				
			crane removal:				
			 increase efficiency and safety of a lifting operation 				
			pull/ tag line:				
			 assist the removal of a section 				
	Markin a waxwhich		Met ✓ Not Met X				
1.2	Work in a way which maintains health and	Assessor to observe	 all activities must be completed in a way which protects the operator and those around him or her 				
	safety and is consistent with relevant legislation		Met ✓ Not Met X				
1	and industry good practice						
	Carry out work to minimise environmental damage	Assessor to observe	It is ensured that any possible environmental				
1.4	environmental damage		damage is minimised at all times during aerial tree rigging 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		 suitability of the technique used 				
2	assessed risks and the method statement		accuracy of the throw				
_	method statement		rope organisation				
			 safety and position of the anchor point 				
			 safety and position of the anchor point testing of the anchor point by thorough loading prior to ascent 				
			 safety and position of the anchor point testing of the anchor point by thorough loading 				
			 safety and position of the anchor point testing of the anchor point by thorough loading prior to ascent Candidate accesses and climbs tree taking into 				
			 safety and position of the anchor point testing of the anchor point by thorough loading prior to ascent Candidate accesses and climbs tree taking into account: 				
			 safety and position of the anchor point testing of the anchor point by thorough loading prior to ascent Candidate accesses and climbs tree taking into account: efficient use of access technique chosen 				
			 safety and position of the anchor point testing of the anchor point by thorough loading 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 				
			 safety and position of the anchor point testing of the anchor point by thorough loading 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 				
			 safety and position of the anchor point testing of the anchor point by thorough loading 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 correct use of adjustable strop or alternative system when changing anchor points loading new anchor points before previous anchor 				
			 safety and position of the anchor point testing of the anchor point by thorough loading 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 correct use of adjustable strop or alternative system when changing anchor points loading new anchor points before previous anchor point is removed 				
			 safety and position of the anchor point testing of the anchor point by thorough loading 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 correct use of adjustable strop or alternative system when changing anchor points loading new anchor points before previous anchor point is removed slack within system less than 500mm 				
			 safety and position of the anchor point testing of the anchor point by thorough loading 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 correct use of adjustable strop or alternative system when changing anchor points loading new anchor points before previous anchor point is removed 				

CRITERIA NUMBER	ASSESSMENT CRITERIA	ASSESSOR GUIDANCE	ASSESSMENT ACTIVITIES		AND B	IDA [.] C	1
NOWDER		GUIDANCE	Final anchor point selected taking into consideration:	Α	B		D
Cont			 size, strength and structure 				
			 position in relation to the parts of the tree to be 				
2.2			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				
			 controlled removal of equipment 				
			Met ✓ Not Met X				
2.6	Assess the position and selection of anchor points	Assessor to observe	Suitable anchor points selected for rigging components in relation to:			_	Ē
2.0	for rigging components in		tree form				
2	relation to:		tree condition				
-	• anticipated load		 work to be completed 				
	anticipated loadground crew		 anticipated load 				
	ground crewother anchor points		ground crew position				
	 access equipment 						
	position		other anchor points				
	planned drop zone		 access equipment position 				
	 processing area 		planned drop zone				
	communication		processing area				
			communication				
			Met ✓ Not Met X				
	Remove tree sections	One Tip tie	Tree sections removed using the following techniques:	<u> </u>			—
2.7	using suitable rigging and	One Butt tie	• tip tie				
	appropriate cuts	One Cradle	butt tie				
2		Minimum One , maximum	• cradle				
_		two, vertical free fall	 vertical free fall 				
		One vertical lowered section pulley below the load	vertical lowered section				
			Taking the following points into account:				
		One of the above must be a	 suitable anchor points for climbing and lowering 				
		sink cut	lines				
			relative positions of climbing and lowering lines				
			appropriate equipment selected for the anchor				
			point of the lowering line				
			 use of a craning fork where appropriate 				
			appropriate means for the control of friction				
			employed in the lowering system				
			manageable sections selected				
			 position and method of attaching rope to the section 		_		
			 use of pull line if appropriate appropriate safe and secure working position 				
			appropriate safe and secure working position attained				
			characteristics and properties of the wood		_		
			considered				
			correct position, depth and accuracy of cuts				
			 chain brake applied or saw switched off whilst lowering sections 				
			 the climber must direct the ground operations 				
			 limbs are lowered under control 				
		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				

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CRITERIA	ASSESSMENT	ASSESSOR	ASSESSMENT	C	AND	IDA	ſE
NUMBER	CRITERIA	GUIDANCE	ACTIVITIES	Α	В	С	D
4.11	Explain how to remove tree sections by:		The basic principles of various rigging techniques may include:				
4	 tip tie technique butt tie technique balance/cradle snatching 		tip tie techniques: rope attached to tip end of branch butt tie techniques:				
	 speed line lifting techniques 		rope attached to butt end of branch balance/ cradle:				
			 use multiple attachment points to suspended a horizontal load 				
			 snatching: section tied above rigging point 				
			 speed line: after removal of tree section the load is transferred to the speed line to be moved to the 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				

Candidate A	Candidate has met all of the assessment criteria	Tick ✓	The Candidate has not met all of the assessment criteria; (<i>state reason(s))</i>	Tick ✓
	Signed: C	Date:		
Candidate B	Candidate has met all of the assessment criteria	Tick ✓	The Candidate has not met all of the assessment criteria; (<i>state reason(s))</i>	Tick ✓
	Signed: C	Date:		
Candidate C	Candidate has met all of the assessment criteria	Tick ✓	The Candidate has not met all of the assessment criteria; (<i>state reason(s))</i>	Tick ✓
	Signed: C	Date:		
Candidate D	Candidate has met all of the assessment criteria	Tick ✓	The Candidate has not met all of the assessment criteria; (<i>state reason(s))</i>	Tick ✓
	Signed:	Date:		
Foi	r use by Internal Verifier ONLY if the assessment process was i	nternall	/ verified	

(Internal Verifier to complete ONE of the boxes below)

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:	