LANTw31

Carry out aerial tree rigging

Overview

This standard is about carrying out aerial tree rigging. It includes the removal of sections from a tree crown under the control of rope rigging and lifting gear. The work will be carried out by an operator with extensive experience of arboriculture operations and chainsaw operations in a canopy.

As part of this standard, you will carry out a tree hazard and a “working at height” assessment to determine if the operative is safe to perform the work and to determine the safest and most efficient access method.

This aerial work must be supported by a ground worker with extensive experience of aerial treework and rigging techniques.

This standard covers the use of rigging for the removal of small tree sections. This is in relation to pruning operations, where targets below may pose a significant risk, and includes the removal of part/whole trees, where targets do not allow for free-fall/hand-thrown techniques.

When working with machinery you need to be appropriately trained, and hold current certification where required, in line with relevant legislation.

Your work must conform to all relevant legislation and codes of practice when carrying out this work.

Performance criteria

You must be able to:

1. assess the risks associated with the site and the proposed work, including working at height
2. plan and implement a rescue plan and update this throughout the work
3. select and implement appropriate working methods in accordance with the assessed risks
4. select and use appropriate personal protective equipment (PPE) for the work
5. meet the specified legislative and organisational environmental requirements in relation to carrying out aerial tree rigging
6. select and use access and positioning methods appropriate to the assessed risks and the method statement
7. inspect access equipment to ensure it is safe and fit for use according to the manufacturer's instructions and relevant legislation
8. calculate the expected loads the rigging needs to take, within its design/safety factors and select compatible components to make up the rigging system
9. assess the position and select anchor points for rigging components taking into account the expected load, ground crew, other anchor points, access equipment position, planned drop zone and processing area
10. remove tree sections that can be lowered down using suitable cuts, minimising shock loading in the rigging system
11. communicate with ground staff in relation to the appearance and progress of the operation
12. deal appropriately with the arisings
13. ensure the site is left in a condition which meets environmental requirements, in accordance with the specification
14. maintain the health and safety of yourself and others at all times, in accordance with relevant legislation

Knowledge and understanding

You need to know and understand:

1. how to identify hazards and assess risks
2. how to interpret risk assessments
3. the control measures to be implemented for the risks involved, including working at height
4. the selection, use and care of personal protective equipment (PPE)
5. emergency planning and procedures relevant to the site
6. how to select, prepare and use appropriate tools and equipment, safely and effectively in line with the manufacturer's recommendations
7. the legal requirements for checking equipment
8. how to evaluate the tree for hazards and the implications of the hazards identified
9. how to calculate the expected loads generated by the rigging operation
10. how to select compatible components to make up a rigging system appropriate for the expected load
11. how to select suitable anchor points for the expected loads without compromising the workers' access position.
12. how to select the suitable access position and the planned drop zones
13. how to plan and lay out the rigging site on the ground to safeguard the ground crew, aid workflow, deal with the arisings and place the desired drop zones
14. how to set up communication systems
15. how to remove tree sections that can be lowered down by using suitable cuts, minimising shock loading in the rigging system
16. when tree rigging would be required and its limitations
17. how, when and where to use compound or complex rigging systems
18. how to install and use pull/tag line to aid the removal of sections.
19. the potential impact of your work on the environment and how this can be minimised
20. your responsibilities under relevant environmental and health and safety legislation

Glossary

Compound/complex rigging systems:

- drift line
- load transfer
- balance
- cradle
- spider leg
- speedline/skyline
- fake anchor points
- craning and lifting techniques
- crane removal

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