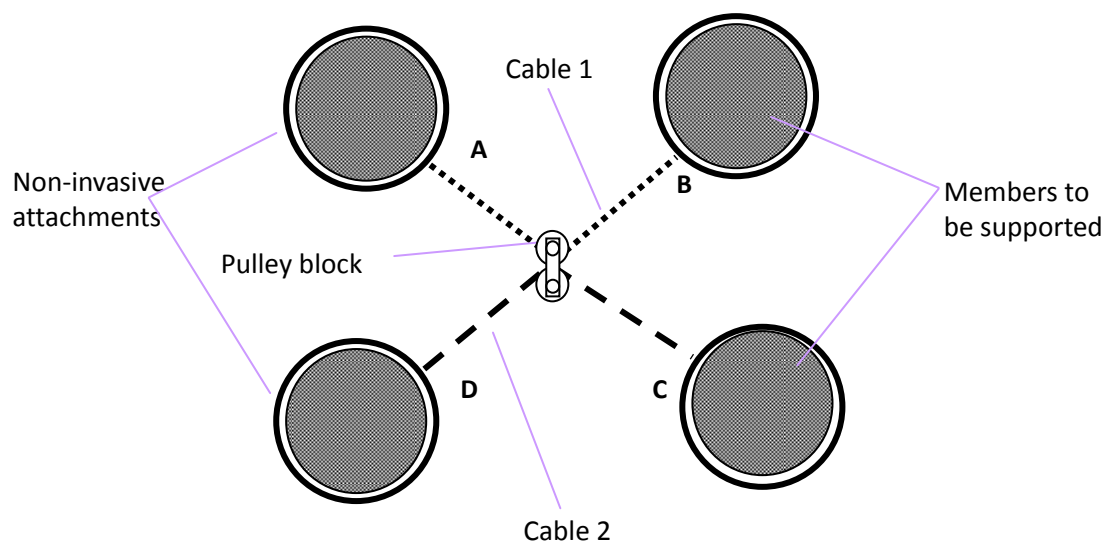


FRACTURE PREVENTION IN TREES THROUGH COMPOUND BRACING

Outline specification for bracing components

1. Bracing components to be mutually compatible, SWL certified, and load-compliant with ZTV Baumpflege Appendix B
2. Brace attachments to tree to comprise proprietary double-belt system (e.g. Osnabruck or similar)
3. Brace joiner to comprise proprietary semi-dynamic UV resistant twin-carrier compound braided rope with fail-warning indicator strand (e.g. Gefa by Liros GmbH)
4. The following example configurations may be considered:

X brace viewed from above, members shown in section

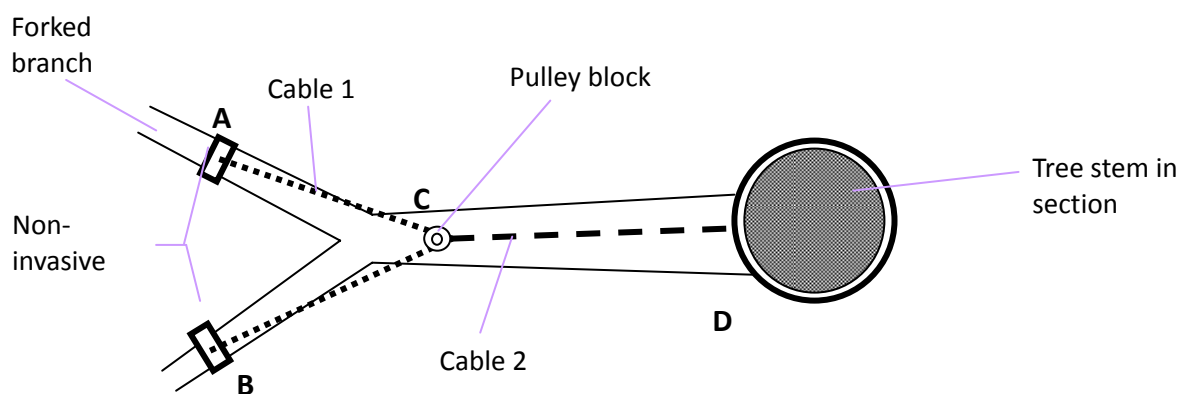


Cable 1 is fixed at A, passed through the pulley and tensioned at B

Cable 2 is fixed at C, passed through the pulley and tensioned at D

Two arborists may be required for the tensioning procedure

Y brace viewed from above, members shown in plan & section as appropriate

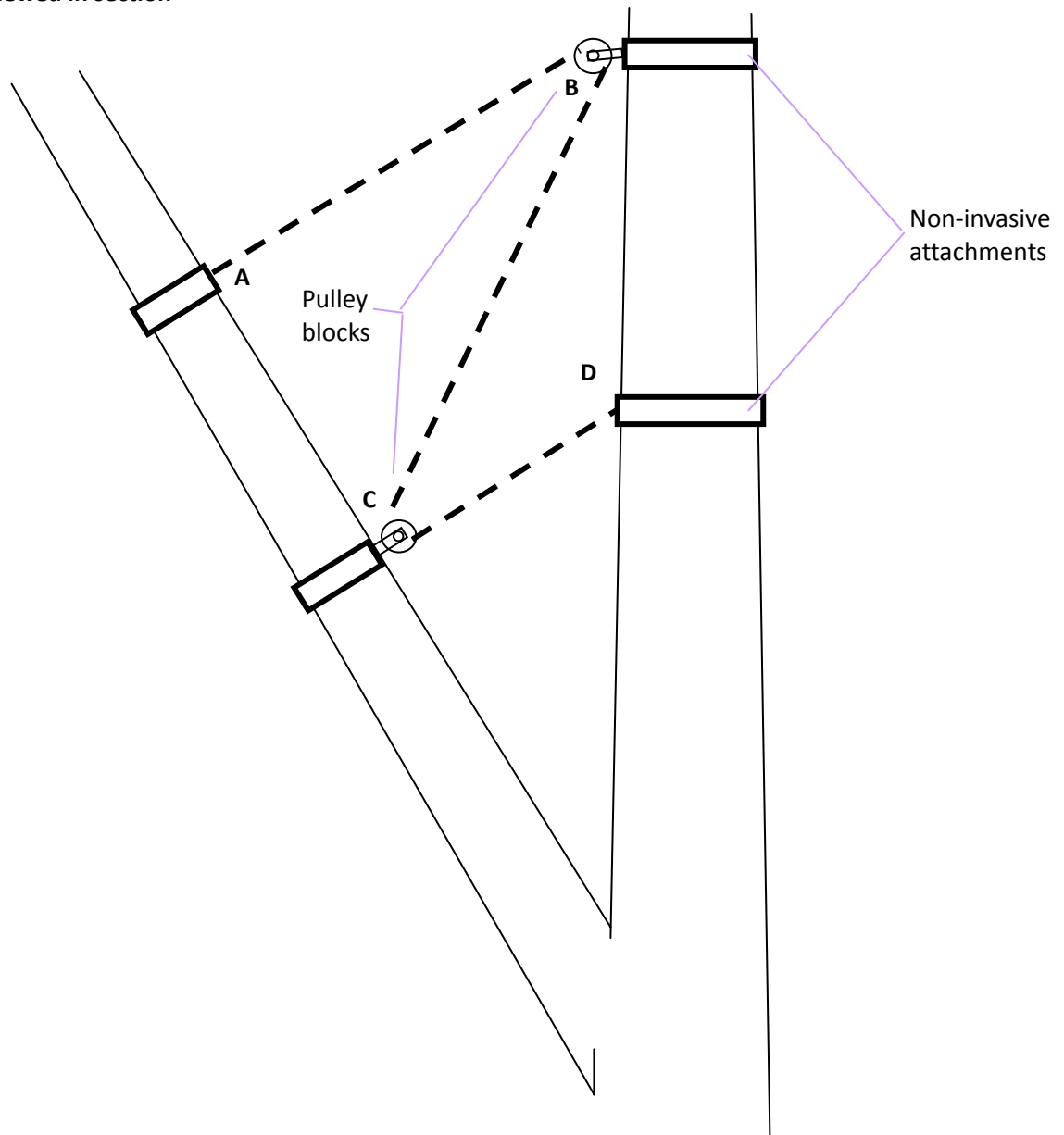


Y braces may be used either between three leaders, or to support a forked limb beyond the union, as shown here

Cable 1 is fixed at A, passed through the pulley C and fixed at B, its correct length having first been determined

Cable 2 is fixed to the pulley at C, and then the whole installation is tensioned at D

Z brace viewed in section



Z braces may be used between two or four leaders (the latter in place of an X brace), or to provide two points of support for large limbs, as illustrated

Where Z braces are used between four leaders, the Z shape is formed in the horizontal plane

A single cable is used for Z braces: it is fixed at A, passed through the pulley at B, then through the pulley at C, before being tensioned at D

The pulleys are shackled to the fixing points of the non-invasive attachments

JFL

Note

The author accepts no responsibility for harm arising from the installation or use of compound bracing systems: prospective users must satisfy themselves that compound bracing is suitable on a case-by-case basis