A common cause of cracks in trunks is co-dominant stems--two leaders that grow from the main stem of a tree. This “V” shape is a structurally weak branch union, which typically has included bark. As the two stems increase in size, the two inner bark sides grow into each other resulting in structural weakness.

Although the entire tree may not fail, it’s possible at maturity that one of the main stems will break, especially in strong winds. It’s important to look for a “U” shaped union in trees, a wide enough space between the two stems that will not result in included bark.

When you have a mature tree with co-dominant stems that is of historical or significant value, cable and bracing can be an option to avoid tree failure. This technique uses a cable above the co-dominant stem junction connected by braces.

This cable and brace system keeps tension between the “V” union of the co-dominant stems to prevent splitting. As the tree grows the cable needs to have the tension released so the tree doesn’t grow around the brace, keeping the tension at a constant level.

Potentially high risk trees should be identified and assessed by a professional arborist to determine the risk level of that tree. The International Society of Arboriculture (ISA) Tree Risk Assessment Qualification (TRAQ) qualifies arborists to assign a risk rating for trees in question. A certified arborist with TRAQ qualification can be hired to perform an assessment on a tree, qualify the present risk, and make recommendations that assist tree owners and managers in managing their trees.

http://tfsweb.tamu.edu