## excerpts from:

## "TREES AND SIDEWALKS IN CHILLICOTHE"

http://www.chillicothe.com/documents/Trees%20and%20Sidewalks.pdf

Sidewalks and trees aren't hot topics unless there are conflicts with them.

Both sidewalks and trees are crucial in providing important services to our residents and visitors. When there are conflicts between trees and sidewalks, we must be thoughtful in our approach to effectively spend limited dollars and truly address the problem.

Surprisingly, there are often efficient and inexpensive ways to repair walks and at the same time retain nearby trees.

Street trees are community assets.
They provide tangible benefits that contribute to the quality of life in any town.

Street trees absorb air and water pollution. They abate noise pollution, they provide shade and energy conservation and even raise property values and decrease crime and illness.

The value of trees varies according to tree age, size, species and health and structure. Typically, bigger trees provide more benefits and are more valuable.

People often lose sight about two important aspects of community forestry.

- Trees take decades or even centuries to get big.
- Most large trees are not replaceable or renewable in the urban environment due to site constraints and other environmental and social factors.
- Once they are gone, eighty years or more of growth and services is gone.
- Canopy loss translates into increased pollution, increase stormwater flooding, bigger carbon footprints, lower property values, and many other social, economic and environmental problems

Once trees mature, they reach their genetic or environmental size and stop growing aggressively. *Mature trees rarely do extensive damage to infrastructure.* 

When considering sidewalk repair, there are several well established and inexpensive techniques available. The typical approach of ripping out the old and re-constructing a new walk is the most expensive and this can damage nearby trees.

Techniques like ramping, grinding and leveling are less expensive than redoing a sidewalk. These do not threaten nearby trees.

Sidewalk grinding: Sidewalk grinding is a temporary measure that restores the offset or heaved portion of a sidewalk to original grade.

Sidewalk cutouts: "Borrowing" space from the adjacent sidewalk creates sidewalk cutouts. This alternative minimizes the sidewalk width for a limited distance adjacent to the tree.

Sidewalk meandering: Meandering—realigning the sidewalk's direction of travel—allows for more growing space for trees in an aesthetically appealing way. The amount of growing space created can be substantial and, therefore, sidewalk meandering is usually the most feasible way to retain large, mature trees. Also, increased distance from sidewalk edge to lateral roots or trunk flare allows for root pruning, when necessary, to occur further from the trunk, which reduces direct contact between the sidewalk and tree roots or trunk.

Sidewalk meandering often requires permission from the abutting property owner to dedicate more of their property to the public right-of-way. Sidewalk ramping: Sidewalk ramping allows existing crushed limestone is placed adjacent or around the subject roots. A new sidewalk is then installed on top of this new base crushed limestone is placed adjacent or around the subject roots. A new sidewalk is then installed on top of this new base.

Leveling: Leveling is a technique where a hole is drilled through the sidewalk and silicone/concrete liquid is pumped underneath the slab to raise it. This is becoming a common technique to extend the service life of sidewalks.

Flexible paving materials: Flexible paving comes in many forms, which include: interlocking pavers, common brick and pavers and rubber (Dublin, Ohio uses rubber.) This is the most tree friendly of all the sidewalk repair options.