

# The 2017 Tour de Subterrane

April 7, 2017. Downtown Minneapolis, MN

Downtown, urban trees often face a short, merciless life. Not given enough space, assaulted with unintentional vandalism, deicing chemicals, too much water, too little water, and random attention. But things are changing in downtown Minneapolis. Small soil volumes (often less than 75 cu. ft.) are being replaced with much larger volumes (500 cu. ft. or more tree pits, suspended pavement systems) and much better growing media (MnDOT Topsoil A, sand-based structural soil, and other load-bearing structural soils).

Tree selection and genetic diversity of trees is getting better and better, too. You will witness some of the “bullet-proof” urban trees, but you won’t witness block after block of the same tree species. Pavement systems are becoming more porous, too, allowing that precious rainwater to slowly percolate down to the tree roots, rather than rushing into the gutters and stormwater drainage systems. And where supplemental irrigation is needed, we’ll hear about some creative ways of transferring responsible ownership of the trees to abutting private properties.

Join Chad Giblin and Gary Johnson from the University of Minnesota, and Craig Pinkalla from Minneapolis Park and Recreation Board Forestry Division on a tour of altered undergrounds that are making tree lives longer, more merciful, and more diverse.

## The Itinerary Stops

**1. The Beginning.** We will begin at the urban park across the street from the northwest side of the Minneapolis Convention Center. What a difference soil volume makes when it comes to tree health and a reasonable approach to mature sizes. These are the winnable battles, those areas where favorite trees can be planted and actually thrive.

**2. Open pits on 3<sup>rd</sup> Ave. and 6<sup>th</sup> St.** Get a groundhog’s view of what the roots of newly planted trees will be growing in (MnDOT Topsoil A) on some open planting pits and trenches, almost ready for tree installation.

**3. The Commons Park.** For all tree geeks, especially installing-big-tree-geeks, this is a treat. Sand-based structural soil supporting resin-based aggregate surfaces with drip irrigation and large volumes of growing media by Minneapolis’ newest sports venue and urban park.

**4. Topography and volume in downtown at the Federal Courthouse.** Another example of when reasonable soil volumes meet happy chlorophyll...the end result is a healthy, verdant urban pocket garden.

**5. 2<sup>nd</sup> Ave. and Marquette Ave. for some creative funding and suspended pavement.** If you’re not familiar with suspended pavement systems, this is a treat. Efficient stormwater runoff management, very generous rooting volumes, a rooting media that most trees would die for (maybe a poor choice of metaphor).

**6. Rounding the bases to home.** Back to where we began at the west end of the Convention Center to examine a stellar tree preservation effort that saved some bullet-proof urban canopy trees.

