

Kent Hospital: Transitioning to a Sustainable Campus Landscape Model

By Thomas S. Benjamin, RLA, LEED-AP

In the early 2000s, Kent Hospital's campus looked like many other institutional campuses characterized by a relatively high maintenance, lawn-oriented landscape. This conventional landscape treatment required constant mowing, fertilizing, and irrigation. Landscape beds of exotic, non-native flowers and shrubs needed frequent weeding and pruning. The campus' main road frontage, driveways, and entrances were not as welcoming as they might have been. Further, large expanses of pavement lacked defining edges, while lawn areas located next to paved areas progressively deteriorated from repeated winter snow removal activities or simply succumbed to constantly hot, drought-like conditions in the summer.

Around 2003, Kent began to reassess its appearance as well as the healthfulness of its high maintenance landscape. At the same time, the hospital was also studying how the campus might grow to meet increasing demands in changing times. A constraint to adding more buildings and parking, or impervious surfaces, was storm water management. Kent officials became aware of sustainable design principles as the LEED (Leadership in Energy and Environmental Design) Rating System for sustainability. Thomas Benjamin, a landscape architect and LEED professional, was called in to help guide the hospital's growth and landscape transition process. Since 2003, Kent Hospital has pursued a bold and timely vision to create a more sustainable campus landscape and growth model.

Starting in 2003, we prepared a number of campus plans to maximize the storm water filtration, ecological, and aesthetic benefits of Kent's green spaces and edges. We designed a series of sustainable landscape improvements including: rain gardens at the Women's Diagnostic Imaging Center; bioswales at the Trowbridge (Data) Center; and, most recently, a healing "Serenity Garden" for patients, families, and staff at the new Infusion Center. Wellness of Kent's patients and staff as experienced through a healthful landscape treatment has been at the core of our approach.

The landscape designs have protected significant stands of large shade trees and added beneficial understory trees, shrubs, and groundcovers to increase seasonal interest, habitat values, and sense of place. These landscape treatments featured extensive use of native plant materials to strengthen Kent's regional and coastal zone identity while conserving resources, responding to tighter storm water requirements and fostering a more patient-friendly image. In many areas native grasses and perennial flowers provide continuous interest throughout the year, including winter, with their deep roots perfect for cleaning and filtering stormwater. Once established, these areas require little or no irrigation, no fertilizer, very little weeding, and one annual cutting. Soil treatments with natural compost-mulch material have greatly enriched the growing media, without adding harmful fertilizers, and provided stormwater filtration and moisture retention benefits, significantly reducing the need for irrigation. Tom has also prepared easy-to-digest integrated maintenance plans featuring economical transplanting of "divisions" from mature existing plantings to newly prepared beds. Kent's savings on maintenance have helped fund expansion of this sustainable landscape approach to other sections of the campus.

Some favorite native and/or low maintenance species have emerged on the Kent campus. Prairie Dropseed, a low growing, gracefully weeping clump-forming grass, provides an exceptionally beautiful and salt- and drought-tolerant edge to walkways and driveways in place of lawn, turning bright gold in fall. Thick stands of tall Switchgrass catching the seabreezes remind all that the coast is near. Shrubby St. Johnswort, a medicinal plant, provides low, dense, lush cover with showy yellow flowers blooming through most of the summer. Sweetfern, a tough native shrub, and the spreading Yellowwood tree, perfume the air with aromatic foliage and flowers, respectively. Native Serviceberry, Redbud, and Mountain Laurel flower through the spring, with Serviceberry also providing tasty berries for birds in June and turning an eye-catching orange-red in the fall. Wild Lupine, Blue Hill Sage, Black-eyed Susan, Purple Coneflower and New England Aster provide an ever-changing, butterfly attracting mosaic of color from spring through fall.

Tom led a tour of Kent's sustainable landscape areas on September 29 during the NEHES Conference.