

Core Physicians Dental Office First In Area to Use Environmentally Friendly Pavement in Design

EXETER, NH - The recently completed Core Physicians Dental office on Hampton Road in Exeter has set a benchmark for the community with its use of an environmentally friendly stormwater management strategy.

The dental office is one of the first building projects in the state to use an innovative storm water management system which employs porous pavement material in their design. The porous pavement differs from traditional asphalt in that it is made up of larger particles, which leaves open voids in the road surface.

'The idea behind using a porous pavement is that it allows the saturation of water back to the earth to happen where the water falls,' explained Robert Corson, the facilities architect for Core Physicians that worked on the project. 'Having more area constructed of a permeable surface allows stormwater and rain to naturally percolate into the earth instead of being forced into detention areas or creating significant runoff conditions.'

The pavement is part of an innovative stormwater management plan, which stems from Core Physicians' desire to adopt more environmentally aware building practices, both in construction and every day operations.

'Core Physicians is committed to conducting business in a conscious and eco-friendly manner,' said Corson. 'The responsibility of those who develop properties is changing as we become more sensitive to the benefits of making things sympathetic to the environment. It doesn't take a significant shift in your approach to develop projects that have less of an impact, it just requires a commitment to do so. As a major employer and member of the greater Exeter community, Core Physicians takes this commitment seriously and hopes others will follow their example.'

On a traditional parking lot, water picks up oil left behind by cars, debris, and other pollutants, before it runs off the parking lot to a catch basin, and then a detention pond. Those pollutants can seep into the area water supply. In some cases of heavy rainfall, a surge of water can flood nearby properties, causing erosion. The use of porous pavement means that developments do not need as much infrastructure such as catch basins, detention ponds or curbing. And the potential for flooding is greatly reduced. The nature of porous pavement leads to faster ice and snow melt in the winter months,

which means much less salt is required to maintain the surface.

'Traditional methods of treating stormwater runoff are not able to remove the chloride from road salt, which not only affects the surrounding plant material, but also accelerates the deterioration of most building materials, concrete and metals,' Corson said. 'The natural snow melting properties of this porous pavement will allow us to use up to 75 percent less salt to safely maintain this parking lot in the winter months.'

The porous pavement at the dental office was poured over a layer of crushed stone, which acts as a filter for the particles or contaminants in the water. 'Through the combination of the stone and the sand, much of what is picked up in the water is filtered out before the water is absorbed by the ground,' Corson explained.

The team that worked on the Core Physicians Dental project, including Jones and Beach Engineers in Stratham, sought input on the use of the porous pavement from researchers and scientists at the University of New Hampshire Stormwater Center. The center has been testing the material for the past three years.

'It is gratifying to see that our research results are fast-becoming the basis for the standards of practice in stormwater management,' said Thomas Ballestero, senior scientist and principal investigator in the University of New Hampshire's Stormwater Center. 'I cannot think of a more holistic setting to integrate the care for people and the environment than a medical facility. Core Physicians, as well as its site designers, is to be commended for the attention paid to effectively addressing stormwater management.'

The state of New Hampshire Department of Environmental Services is now recommending the use of porous pavement on projects. The Town of Exeter's Planning Board has been studying new stormwater management practices for several years and has stayed abreast of the research at the UNH Stormwater Center. While the town does not require the use of porous pavement, they were very excited to see it incorporated in the Core Physicians Dental office project.

'To have one of our local businesses actually implement one of these innovative approaches is just awesome,' said Exeter Town Planner Sylvia von Aulock. 'We can now point to this project as an example when we try to sell the notion of using porous pavement to different businesses and developers that come before the planning board.'

We are very confident that it was built to perfection and very well designed and we hope that other projects will follow suit.'

The Core Physicians Dental office, located at 23 Hampton Road, is in the area of a large watershed which flows into one of Exeter's prime wetlands. Managing stormwater from the property through the use of porous pavement will help maintain the integrity of that wetland as both a water source and habitat for native wildlife. Core Physicians, along with Exeter Hospital, are operating affiliates of Exeter Health Resources. The Core Physicians Dental Office, at 23 Hampton Road in Exeter, offers general dentistry under the direction of Tamatha Johnson, DDS, and oral and maxillofacial surgery under the direction of James M. Buchanan, DDS. The dental facility offers flat screen monitors at every station and a warm, comfortable environment for patients.

Core Physicians is a community based, multi-specialty group practice affiliated with Exeter Health Resources. Core Physicians fundamental mission is to improve the health of individuals and families in the communities it serves. As a major provider of primary care services in the region, Core Physicians continues to develop diagnostic and surgical services to meet the increasing healthcare needs of a rapidly expanding population. In addition, specialty care services continue to be added to compliment Core's community-based, patient-focused care. For more information call 603-580-7334 or go to www.corephysiciansdental.com