RESTORING RED CREEK, THE GRAND RIVER AND LAKE ERIE Improving Stormwater Management Using Permeable Pavement To Clean and Reduce Stormwater Runoff



In spring of 2016, Painesville Township Fire Station #3 parking lot was renovated to clean and reduce stormwater runoff to Red Creek, the Grand River and Lake Erie. The newly renovated lot includes 1,482 square feet of permeable pavers which helps the parking lot behave more like a natural landscape.



How does Permeable Pavement Work?

Rain and snow melt runoff drains through the spaces between pavers into layers of underlying stone. The water slows down as it flows through the stone layers and pollutants are removed. Some water soaks into the ground beneath the stone, and some is slowly released to a perforated pipe that carries it to a storm sewer that drains to Red Creek. In summer, heated water entering streams directly from conventional pavement can harm aquatic life and habitat. Reducing this thermal loading improves stream health. In winter, drainage of snowmelt through the pavers could reduce the amount of salt needed, also leading to improved water quality.

Permeable pavement Gravel F

Underdrain to Storm Sewer Gravel Filter Layer

Ohio Environmental Protection Agency





Stone Recharge Layer



Osborne Concrete & Stone Co.

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