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55 YEARS

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Permeable pavement - A rising star in stormwater runoff, removing contaminants and looks good

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A month of unusually high rainfall amounts in the Boston area has touched most of us in some way. Traffic issues due to flooded roads, wet basements, and contaminated water supplies are all the result of heavy rainfall and the ensuing runoff. Even as waters recede, the effects will be felt long beyond June because contaminants carried by stormwater runoff end up in our streams, ponds, lakes, rivers and oceans.

Permeable pavement has been considered a Best Management Practice by the EPA for well over a decade. Yet, like many new concepts offering solutions to age old problems, it has incurred an uphill fight to gain mainstream understanding and acceptance. As a company who embraced the value of Permeable Interlocking Concrete Pavement (PICP) early on and began its manufacture in the early 1990s, Pavers by Ideal is well versed on the subject both from a research standpoint and a practical standpoint.

Recently while visiting a 17 year old PICP parking lot installation in Hampton, N.H. we were able to video a torrential rain event and its effect on the pavement. The heavy rain infiltrated into the PICP with only minor puddling whereas a nearby section of traditional asphalt experienced significant sheet runoff and substantial puddles. Noteworthy is this PICP has received little, or no, maintenance over the past 17 years, and yet it still infiltrated most stormwater. Although we do not advocate ignoring maintenance, the level of function is impressive. View the video at www.facebook/PaversbyIdeal. Seeing is believing.

One of the most prominent misconceptions regarding PICP is the relationship of void space to the percentage of stormwater the pavement can infiltrate. Although voids typically make up 9% to 15% of a PICP, 100% of stormwater can infiltrate through these voids when permeable interlocking pavement is properly designed, installed and maintained. Virtually all runoff is eliminated in 95% of all rainfall events that occur in the Boston area.

Case studies demonstrating the economics of PICP are growing in number and are helping to dispel the impression that PICP is more expensive than traditional pavements using structural systems to collect and convey stormwater. Unlike other types of porous pavements, PICP supports heavy loads and can be plowed and cleaned using conventional plows and street sweeping equipment.

As a rising star, PICP eliminates stormwater runoff, removes contaminants, and is aesthetically pleasing. Pavers by Ideal promotes its use through education including Lunch-n-Learns and by providing project guidance.

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