



# Porous Surfaces

## Description

Porous surfaces provide the structural support of conventional pavement, but allow stormwater to drain directly through the pavement surface into an underlying stone bed and the soil below, thereby reducing surface stormwater runoff. Porous surfaces include, but are not limited to, permeable pavers, reinforced turf, and artificial, or synthetic, turf. Porous asphalt, porous concrete, and resin-bound aggregate are strictly prohibited. Interlocking pavers have openings filled with stone to create a porous surface. For all these pavement types, stormwater flows through the porous surface during a rain event, then drains into the sub-base beneath the pavement, where it is stored until it infiltrates into the soil.

## Key Advantages

- Can be used in place of traditional paved surfaces
- Can fit into spaces of almost any size and be integrated into many different site layouts
- Reduces ponding and icing that can be associated with traditional hardscape surfaces
- Provides ancillary benefits such as better conditions for trees, reduced heat island effect, quieter vehicular traffic, and reduced vehicular glare compared to standard asphalt
- With permeable paver, reinforced turf, and DIC artificial turf athletic field surface types, eligible for inclusion in an Expedited PCSMP Review project

## Key Limitations

- Not recommended for high traffic loading areas or on heavy industrial sites where vehicles or equipment may contribute heavy sediment or gross pollutant loads to porous surfaces
- Typically not suitable for steep slope applications
- Requires frequent maintenance with specialized equipment to maintain performance
- May degrade more rapidly if located in areas with frequent vehicular turning

## DEVELOPMENT ATTRIBUTES

**Construction Costs**



**Operations & Maintenance Costs**



**Likelihood of Failure**



**Ground-Level Encroachment**



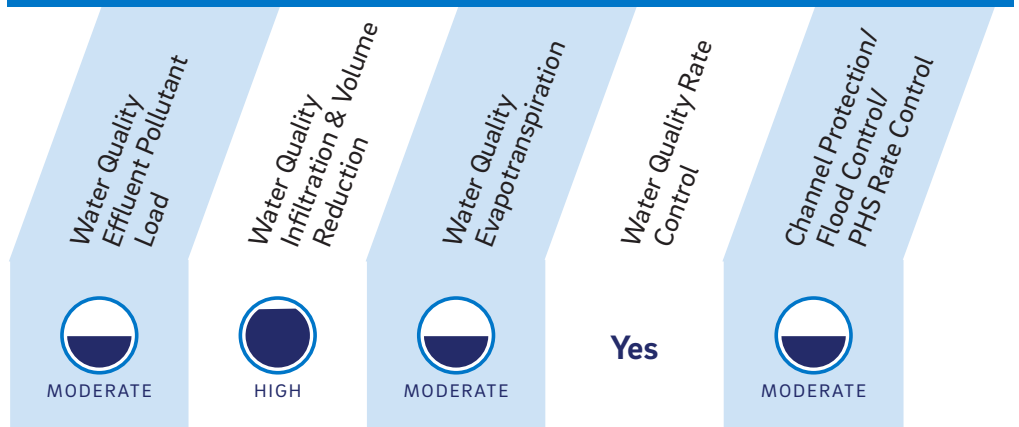
**Building Footprint Encroachment**



**Triple Bottom Line Benefits**



## COMPLIANCE ATTRIBUTES



A description of each evaluated attribute can be found in the SMP Hierarchy Ranking Criteria in Section 3.2.2.