

PERVIOUS PAVEMENT ORDINANCE

**Lower Makefield Township
Environmental Advisory Council**

March 19, 2014

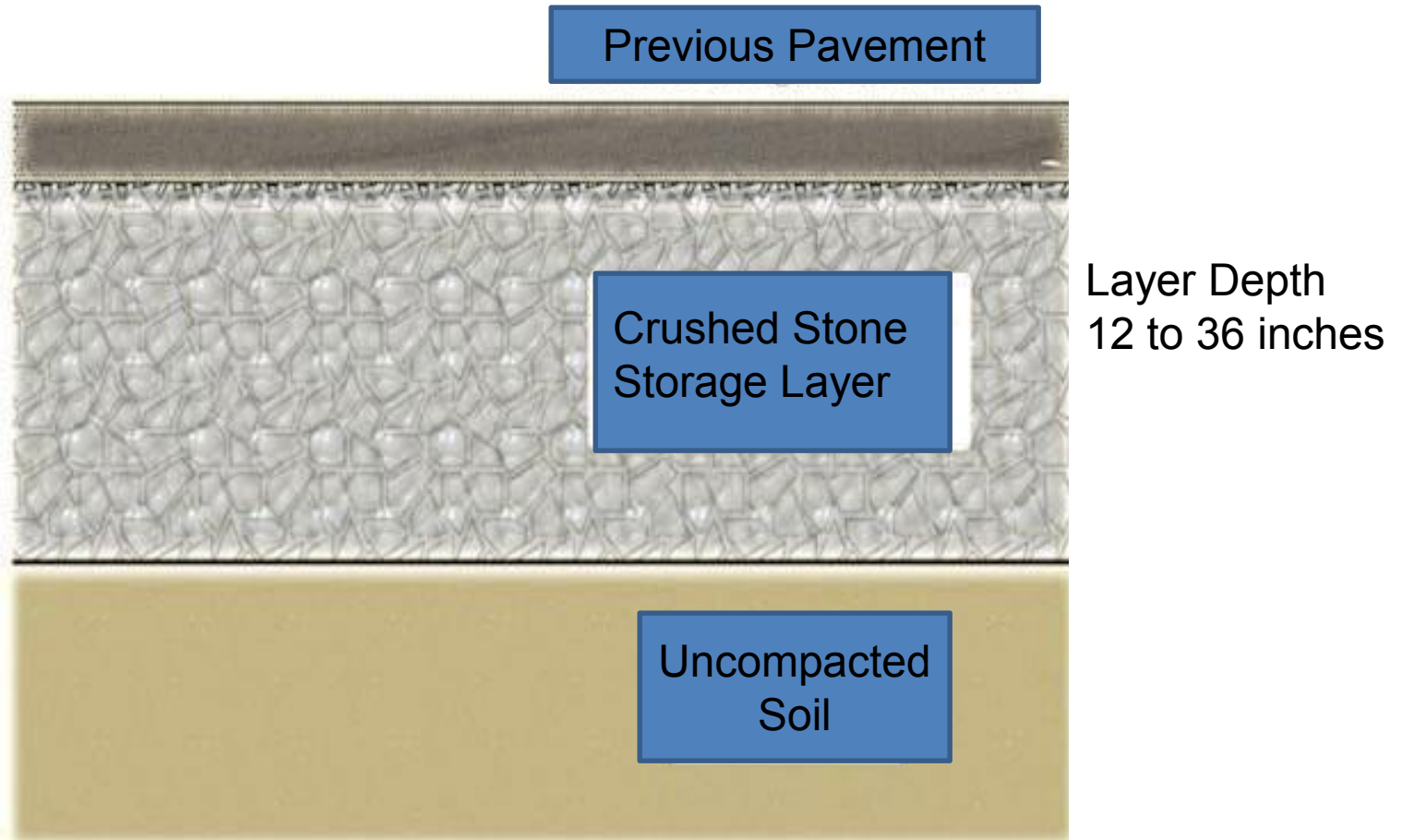
Overview

- 1. What is pervious pavement?**
- 2. Why is it beneficial?**
- 3. What are we proposing?**

What is Pervious Pavement?



Pervious Pavement System





**Standard
Concrete**

**Pervious
Concrete**

(c) Colorado Hardscapes



Impervious
Asphalt

Pervious
Asphalt

Pervious Interlocking Paver Blocks



Applications of Pervious Pavement

YES

- Parking lots
- Walking/Bike paths
- Sidewalks
- Patios
- Residential driveways
- Low volume roads (limited truck use)

No

- Pavement regularly used by large trucks and buses
- Slopes more than 5%
- Poorly drained soils or high water table

**Why is pervious
pavement
beneficial?**

The Environmental Benefits (LID)

- **Reduces stormwater runoff and flooding**
- **Replenishes water tables and aquifers**
- **Prevents polluted water from entering our streams**
- **Protects nearby trees and vegetation**
- **Quicker melting of snow, less ice, less salt needed.**

Makefield School



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Reduced stormwater runoff and flooding



Oil runoff from impervious parking pavement



Tree Protection

- Can have pervious pavement within the tree drip line
- Allows water to reach the roots

Pervious Pavement



Impervious Pavement



Parking Lots, Denver, CO – Next morning following snow. Sites are directly across street

Makefield School



No Icing on Pervious Surface

Other Benefits of Pervious Pavement

- More Efficient Land Development

Reduced need for detention basins and other stormwater facilities → lower cost/ less land use

- Fewer Zoning Variance Requests for Impervious Surface

- Easier Compliance with Stormwater Ordinance Requirements

**What are we
proposing?**

Pervious Pavement Credit

Currently our zoning ordinances consider all pervious pavement as impervious

- Proposed ordinance - only 50 % of the pervious surface is considered as impervious
- Credit available at commercial sites, schools, churches, etc.; cannot be taken by residential dwellings (R1, R2, R3, R4)

Limits to Credit

- **Total pervious and impervious surface at the site can be no greater than 1.25 of the Zoning impervious limit**

example: site with 20 % impervious limit can have no more than 25 % pervious plus impervious cover.

Design Criteria

- Designed according to the PA Best Management Practices Manual
- Applicant must demonstrate sufficient soil infiltration below pervious pavement
- The stone storage layer must have sufficient capacity to accommodate the 2-year storm (3.36 inches in 24-hours)

Maintenance and Inspections

- Owner must submit a signed and recorded maintenance agreement with the Township
- Pervious pavement must be cleaned at least once every two years
- Township inspection once every 3 years (similar to other stormwater BMPs)



Street Sweeper



Shop Vac



Power Washer



Leaf/Lawn Vacuum Sweeper