



A Resident's Guide to Permeable Paving

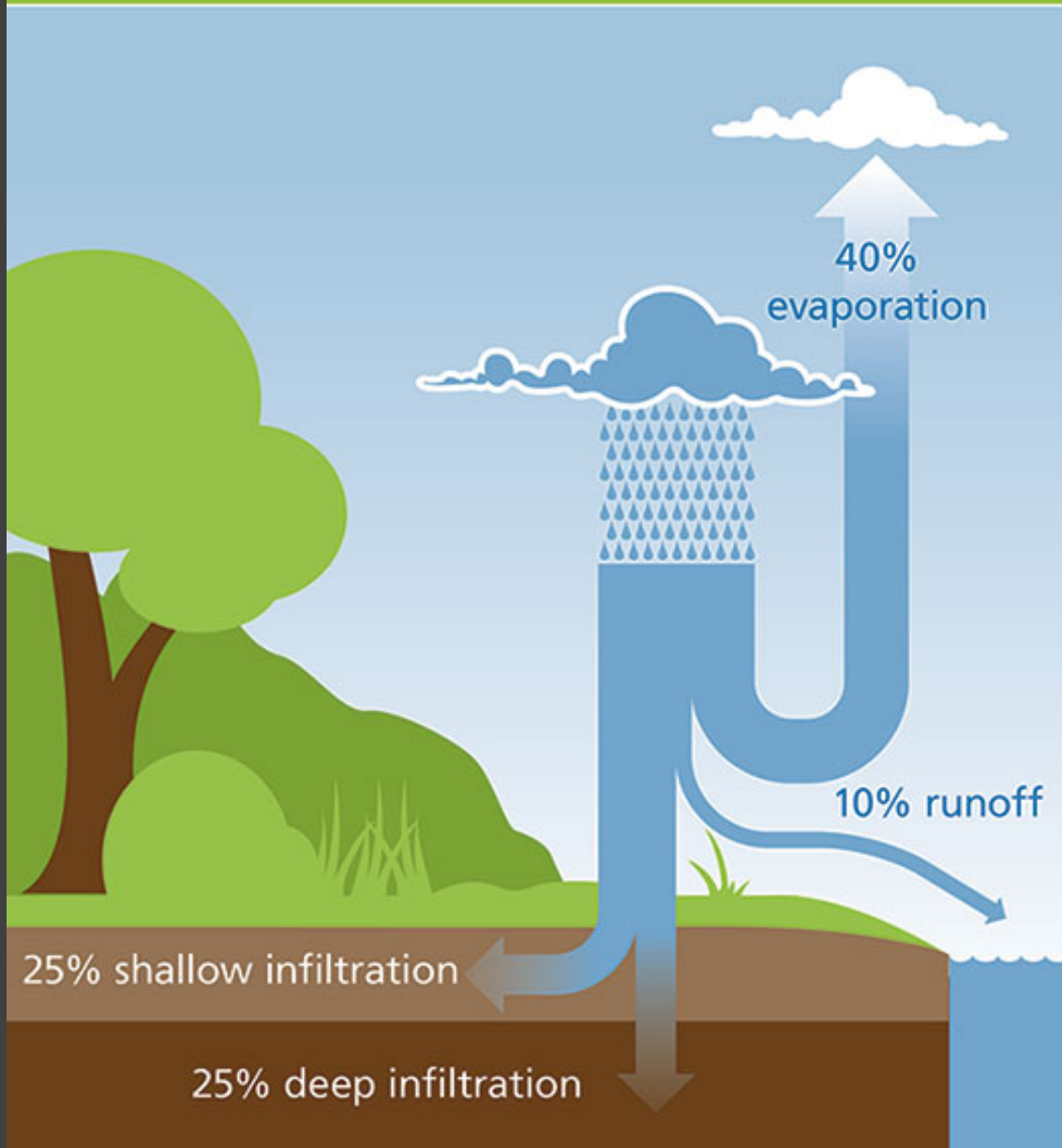
9/29/2022 - 7PM

AGENDA

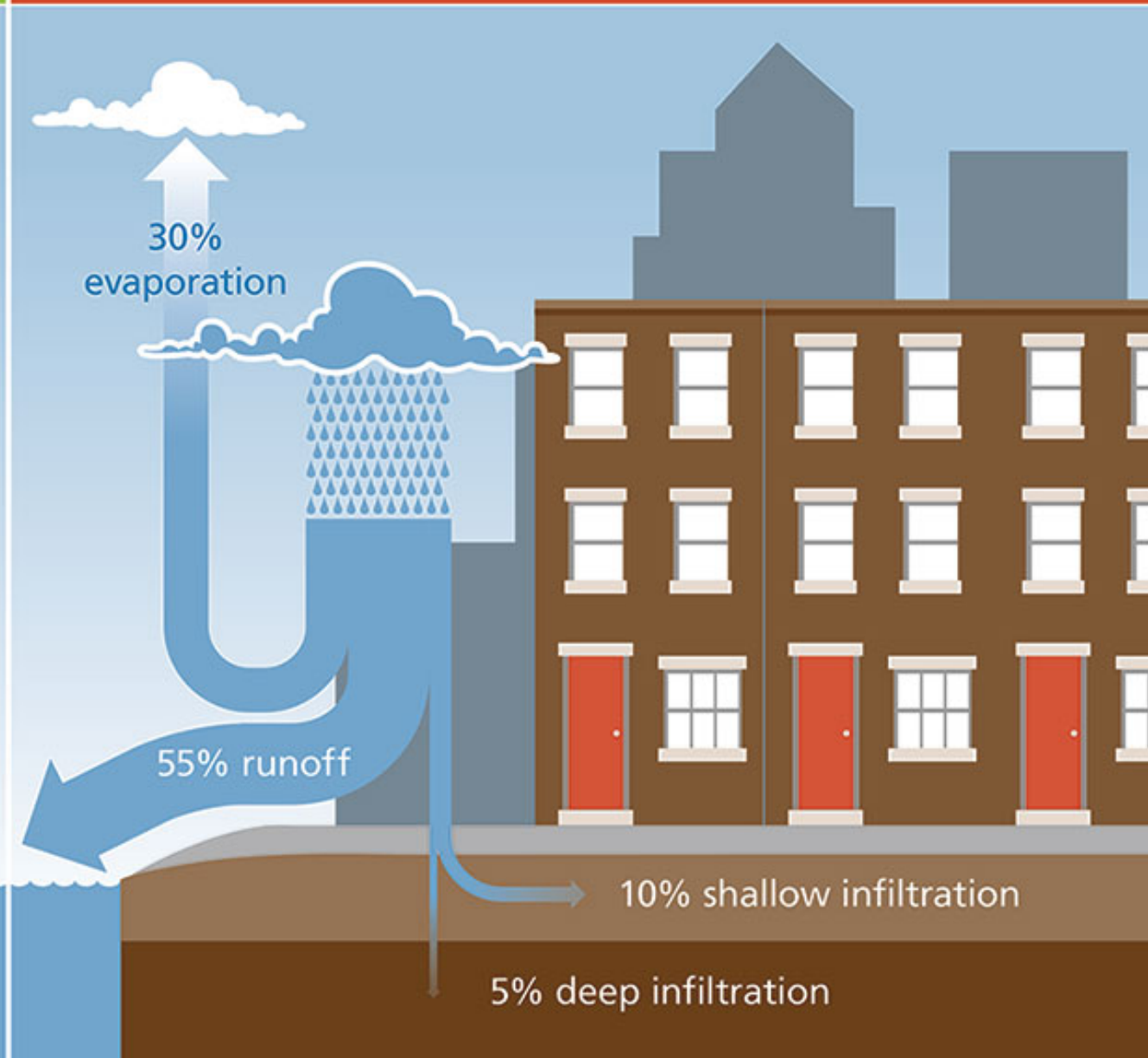
- Need for Stormwater Management
- Intro to Permeable Pavement
- Design Considerations
- Construction
- Design Resources
- Maintenance
- Cost
- Local Contractors



NATURAL ENVIRONMENT



URBAN ENVIRONMENT



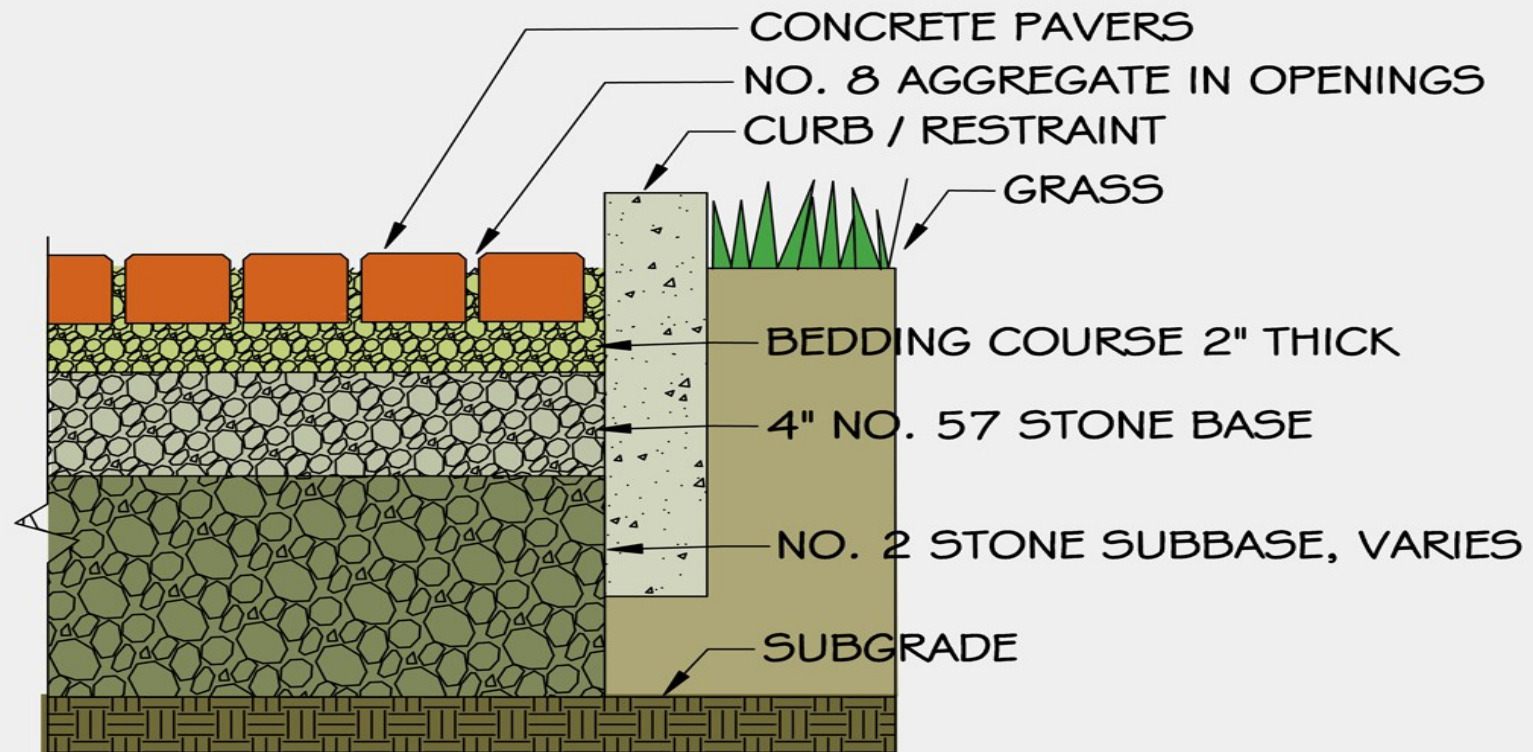
Old School Driveway Alternative



Old School Walkway Alternative



What is Permeable Pavement?



CONCRETE PAVERS

What is Permeable Pavement?



“Pavers” can look like this but contractors default to bedding them in impermeable concrete unless explicitly scoped to be permeable

Permeable Pavers



Other Permeable Paving Options

- Porous Pave – stone/rubber/polymer binder
- Gravel-Lok – set stone, then pour over binder
- Not as Durable – Light Use
- Used for walking paths – not for driveways or high-water flow areas



Other Permeable Paving Options

- Permeable Plastic Pavers - Geogrids



Permeable Pavement Design Considerations

- Current Use vs. Future Use
- Loading – Cars or People
- Stormwater Run-on
- Soil Type and Infiltration Rate
- Water Table Depth (Typ. 2' clearance to base of storage)
- Slope (Max. 5%)
- Sediment Loading
- Existing Underground Utilities



Construction

- Installer experience / qualifications
- Quality control in the field
- Protection during construction

Design Resources

- Montgomery County, MD Permeable Paver Retrofit Guidance

<https://www.montgomerycountymd.gov/DEP/Resources/Files/downloads/rainscapes/factsheets/Permeable-Paver-Retrofit-Guidance.pdf>



Cost

Most projects cost between \$30 to \$50 per square foot compared to \$4-\$15 per square foot for standard concrete driveway paving

Preventative Maintenance



Remove debris from the pavers by sweeping regularly.



Reduce clogging by limiting areas of loose mulch or soil near pavers, specifically upslope of pavers.



Observe during rain events. If there is ponding water, your system may be clogged. Remove any debris from the surface to improve infiltration.



Do not store materials such as sand and dirt atop the pavers that cause clogging.

Winter Maintenance

01

When snow accumulates, remove snow with a hand shovel or snow blower with a rubber edge. Pavers typically thaw faster than regular pavements.

02

Salt can damage pavers, so use sparingly in areas of highest use.

03

Replace stone: Every few years, it may be necessary to replace some of the small stones between the paver joints. Purchase clean-washed stone and sweep it into the joints with a push broom.

Local Contractors

- Philadelphia Water Department List of Contractors:
<https://www.pwdraincheck.org/en/meet-the-team#contractors>
- Robert J Kleinberg - <https://www.kleinberg.com/permeable-paving/>
- Gessler Construction – Media, PA
- Joes Driveways - joesdriveways.com

Q&A

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