Kiawah Island®
ARCHITECTURAL
REVIEW BOARD

KIAWAH ISLAND

COMMUNITY

ASSOCIATION

TOWN of KIAWAH ISLAND
ESTABLISHED 1988

Kiawah Conservancy
NATURALLY KIAWAH

Kiawah Encourages the Installation of Pervious Surfaces to Reduce Flooding and Filter Out Pollutants

DEFINITION

Pervious

(of a substance)
allowing water to pass
through; permeable

RESIDENTIAL PROPERTY

A Water-Pervious Driveway, Walkway or Patio Can Reduce Flooding and Improve Water Quality

If you are replacing or building a driveway, patio, or walkway consider a pervious material to allow water to penetrate through the surface and absorb into the ground.

If water is able to penetrate the ground, it can **reduce flooding on your property** and **filter out environmental pollutants**.

BENEFITS

Why Choose Pervious vs. Impervious?

LESS FLOODING

If water can penetrate the ground, less water will accumulate on your property, your neighbor's, or congest the island's drainage system.

LESS RUNOFF & POLLUTANTS

If water can penetrate the ground, it prevents runoff that can cause damaging erosion or carry surface pollutants into the drainage system that could detrimentally impact the pond and marsh ecosystems. Water that is absorbed directly into the soil filters out pollutants before entering the groundwater.

ALIGN WITH KIAWAH'S NATURAL AESTHETIC

Kiawah's planned design embraces the natural environment. Pervious materials are inherently more natural and environmentally-friendly than traditional concrete and asphalt surfaces.

DRIVEWAY, WALKWAY & PATIO SURFACES

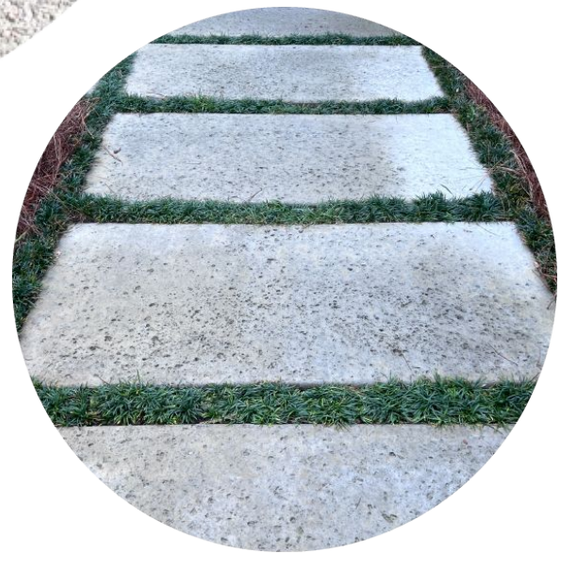
Pervious Solutions

DRIVEWAY, WALKWAY & PATIO SURFACES

Pervious Concrete & Asphalt

Did you know PERVIOUS CONCRETE and ASPHALT exists?

Pervious concrete and asphalt are just as durable as traditional concrete and asphalt, but water can penetrate through, instead of accumulating and running off.



The **Architectural Review Board** has previously approved:

- Pervious Concrete & Asphalt

Approval is not limited to the listed material above. The ARB welcomes requests to use any pervious material that aligns with the Designing with Nature guidelines.

DRIVEWAY, WALKWAY & PATIO SURFACES

Pervious Pavers, Cobblestone, and Brick

Pavers, cobblestone and brick are commonly used for walkways and patios, but they are also a great pervious solution for your driveway.

Some pavers themselves are pervious and some are not, but if installed correctly, they will all allow water to penetrate in between each paver.

DRIVEWAY, WALKWAY & PATIO SURFACES

Pervious Pavers, Cobblestone, and Brick

The **Architectural Review Board** has previously approved:

- Manufactured pavers in muted colors with pervious joints. (Products that include interlocking spacer bars should have blind spacers capable of being concealed by joint mix.)
  - Cambridge Cobble pavers by Belgard in Appalachian, Savannah or Cobble Blend
  - Villagio by Techno-Bloc in Shale Grey, Camplain Grey or Onyx Black
  - Blue 80 Smooth (modular layout) by Techno-Block in Shale Grey, Champlain Grey or Onyx Black
- Brick with pervious joints
  - Charlestowne by Old Carolina Brick Company
  - Savannah Grey by Old Carolina Brick Company
- Granite Cobblestone with pervious joints

Approval is not limited to the listed materials above. The ARB welcomes requests to use any pervious material that aligns with the Designing with Nature guidelines.

DRIVEWAY, WALKWAY & PATIO SURFACES

Pervious Gravel, Oyster Shell & Plantation Mix

Pea gravel (rounded aggregate), oyster shell (crushed shells) and plantation mix (granite sand/gravel mix) are excellent options for driveways and walkways.

Often they are used in combination with a paver apron or border, or metal edging.

The **Architectural Review Board** has previously approved:

- Gravel in muted colors with metal edging or paver borders
    - Cumberland or Hampton Mix gravel

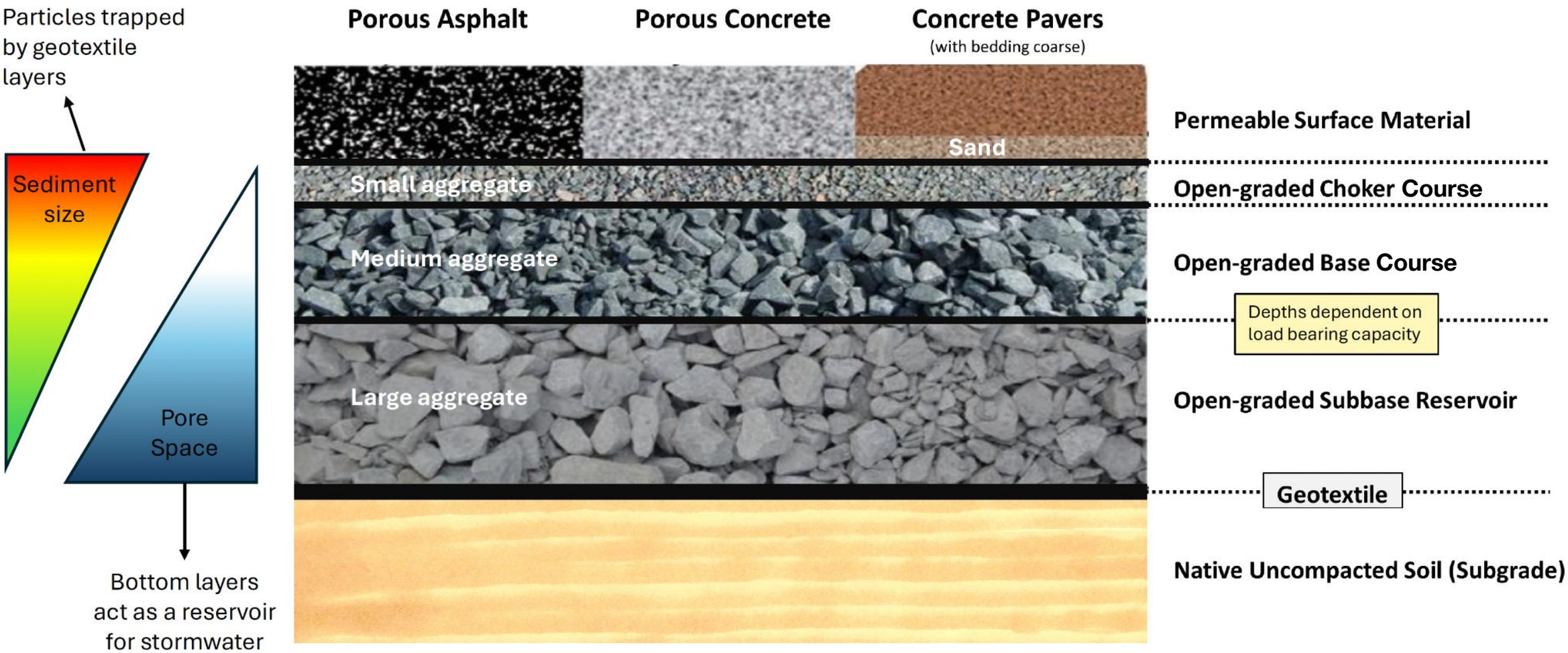
Approval is not limited to the listed materials above. The ARB welcomes requests to use any pervious material that aligns with the Designing with Nature guidelines.

DRIVEWAY, WALKWAY & PATIO SURFACES

Pervious Surface Installation

Pervious surfaces must be installed correctly to be effective. Layers below the surface allow for filtered drainage and bottom layers act as a reservoir for stormwater.

Provide the following graphic to your contractor.



Cost

Pervious materials can cost slightly more than conventional materials, but they are as durable and could result in flood insurance savings and potentially prevent the need for flood damage repairs or drainage improvements.

POTENTIALLY REDUCE THE COST OF FLOOD INSURANCE

The Federal Emergency Management Agency's (FEMA) Community Rating System (CRS) awards credits to communities that exceed the minimum National Flood Insurance Program (NFIP) standards for floodplain management.

Communities earn points for activities in four categories: Public Information, Mapping and Regulations, Flood Damage Reduction, and Warning and Response. If Kiawah cumulatively reduces impervious surface area, Kiawah may gain credits that could result in reduced flood insurance rates across the island.

Cost

	CONVENTIONAL	PERVIOUS
Asphalt	$13-14 / square foot	$15-16 / square foot
Concrete	$7-11 / square foot	$11.5 / square foot
	GRAVEL ONLY	**GRAVEL WITH STEEL EDGING**
Plantation Mix Gravel	$4.25 / square foot	$16 / linear foot
Pea Gravel	$6.75 / square foot	$16 / linear foot

Please note the above costs are for reference only and represent approximate local installation costs. Site specific conditions, materials, and detailing may influence actual costs.

PERVIOUS ADOPTERS

Kiawah Owner Testimonials

“When it rained on my concrete driveway, water cascaded down into my garage. I replaced a portion of my driveway with gravel and sand and now the water absorbs into the ground and no longer floods my garage. I’m amazed!”

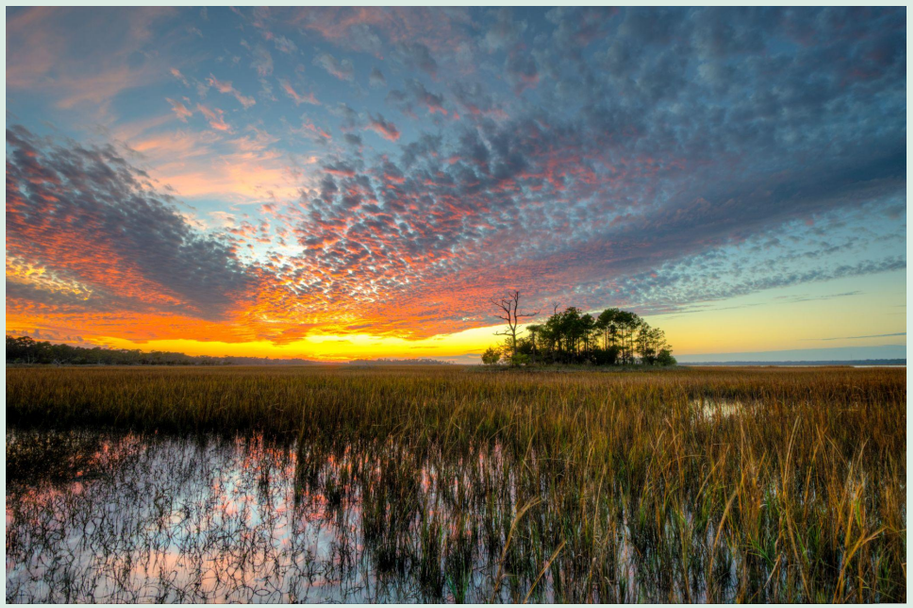
BECKI McSWAIN
Salt Meadow Cove

“Our neighborhood replaced 60 aging asphalt driveways with pervious pavers. By uniting as a group, we were able to negotiate cost savings that resulted in about 50% savings per owner.”

GENE HUTCHINSON
Vetch Court

KIAWAH'S COMMITMENT

Kiawah is Committed to Pursuing Strategies that Mitigate Flooding Risk



As a barrier island, Kiawah is committed to strategies that mitigate flooding risk and nurture the environment. Although Kiawah only has about 15% impervious surface coverage, maintaining or reducing that percentage as Kiawah approaches development build-out is one strategy that could have a long term positive impact.

COMPARISON OF NEARBY COMMUNITIES

Daniel Island - 14%* impervious surface coverage;
*significant portion of land is zoned agricultural
Kiawah Island - 15% impervious surface coverage
Seabrook Island - 16% impervious surface coverage
Folly Beach - 20% impervious surface coverage
Sullivan's Island - 28% impervious surface coverage
Isle of Palms - 32% impervious surface coverage
Downtown Charleston - 56% impervious surface coverage

(all percentages are approximate)

LEARN MORE

Resources

VIDEO

Pervious Surfaces on Kiawah

REPORTS

Nature-Based Solutions Manual for Kiawah Island

Kiawah's Stormwater and Impervious Surface Report

ARTICLES

Kiawah's Oceanwoods Neighborhood Converts 60 Driveways to Pervious Pavers

The Marsh is a Critical Barrier to Protect Our Island from Flooding; Let's Keep it Healthy