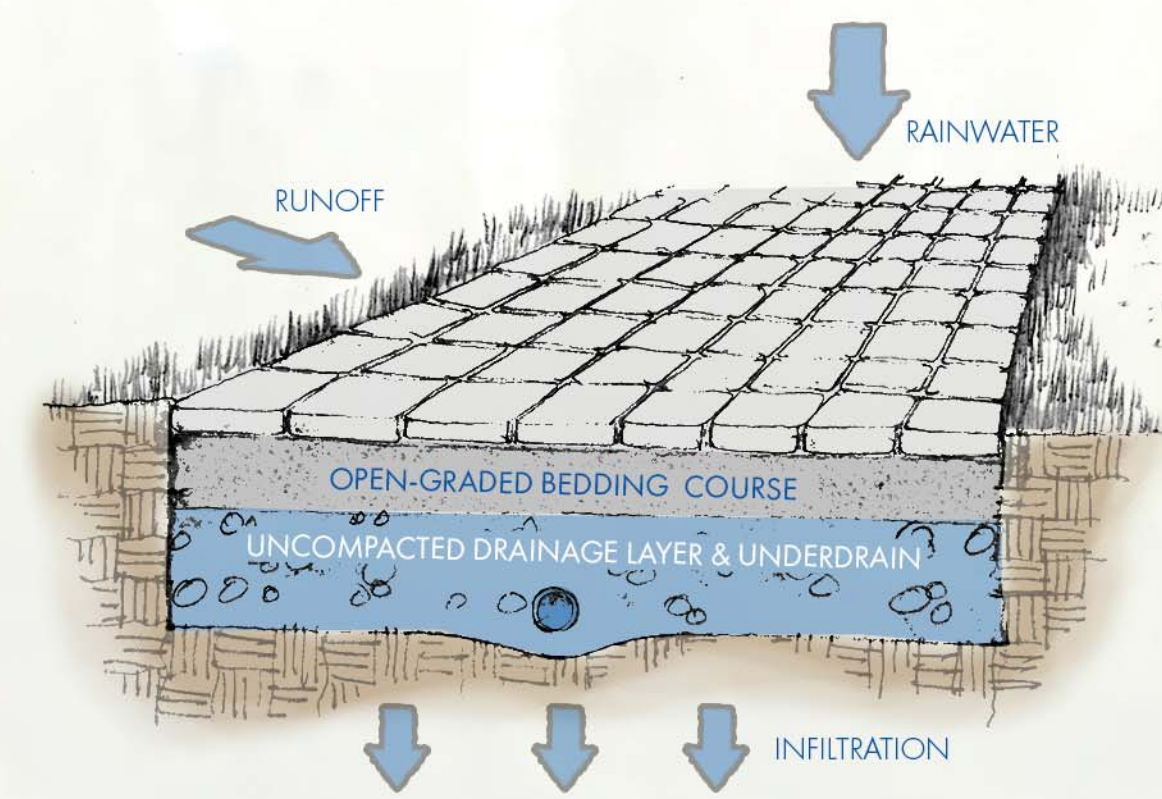


Porous/Permeable Pavements

The **Pavers** that envelope the **Performance Pavilion** are actually part of a permeable paver system. The pavers not only allow you to bust a move as you dance along to your favorite band, but allow water to flow through the highly porous joints and infiltrate into the ground, reducing surface run-off while replenishing the urban groundwater reserves.

And that colorful cushioned surface that you allows you to jam out on the **Sculptural Musical Instruments**, that's porous as well. The **Poured in Place Rubber** is not only comfortable and safe for children's play, but has such a high void percentage that it allows stormwater to run easily through the material and seep well into the ground below, refreshing layers of uncompacted subgrades.



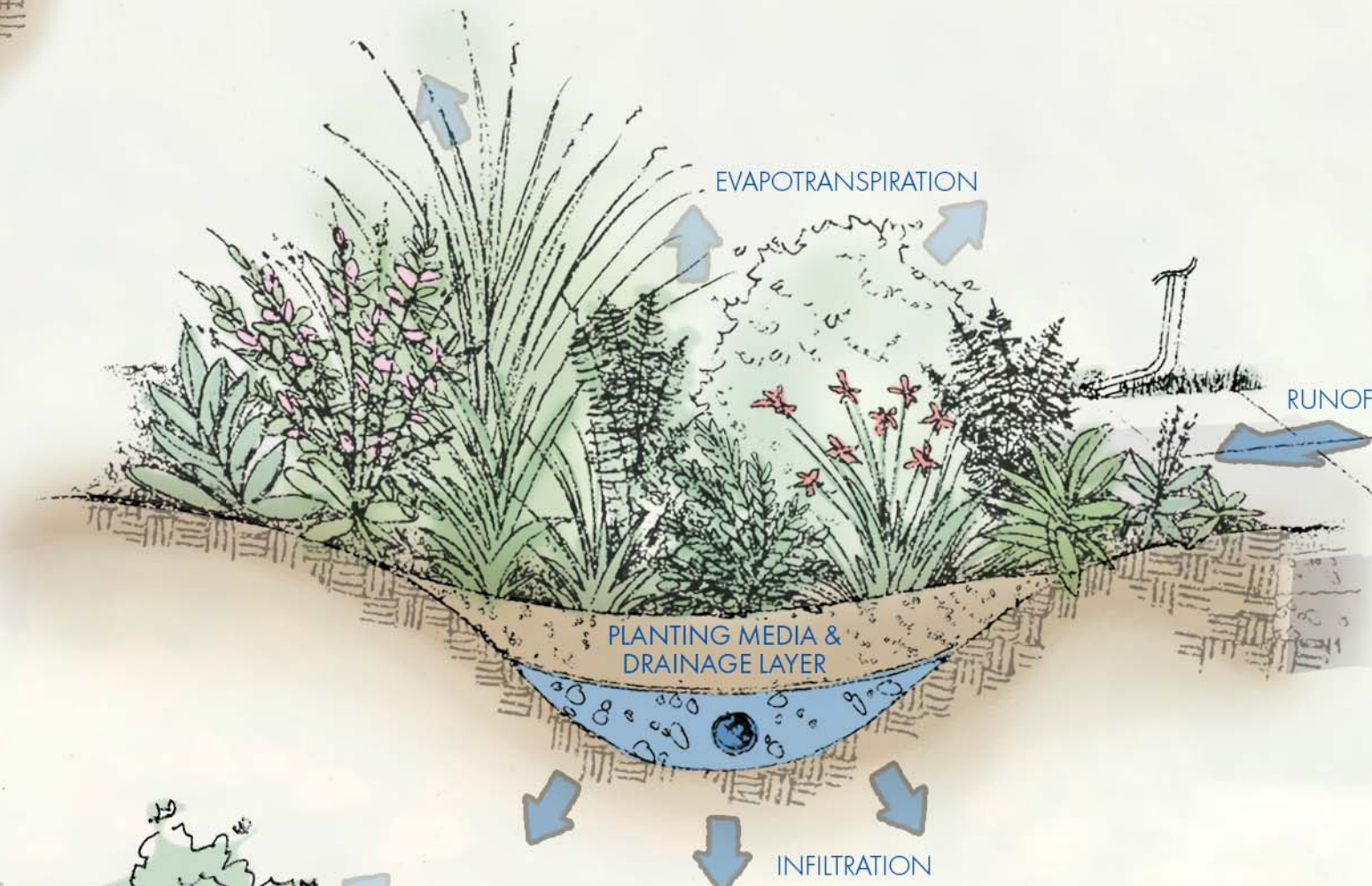
“Water can flow through porous pavement at anywhere from 4 to 18 gallons per minute - reducing run-off and replenishing groundwater reserves in record time!”



Bioretention and Rain Gardens

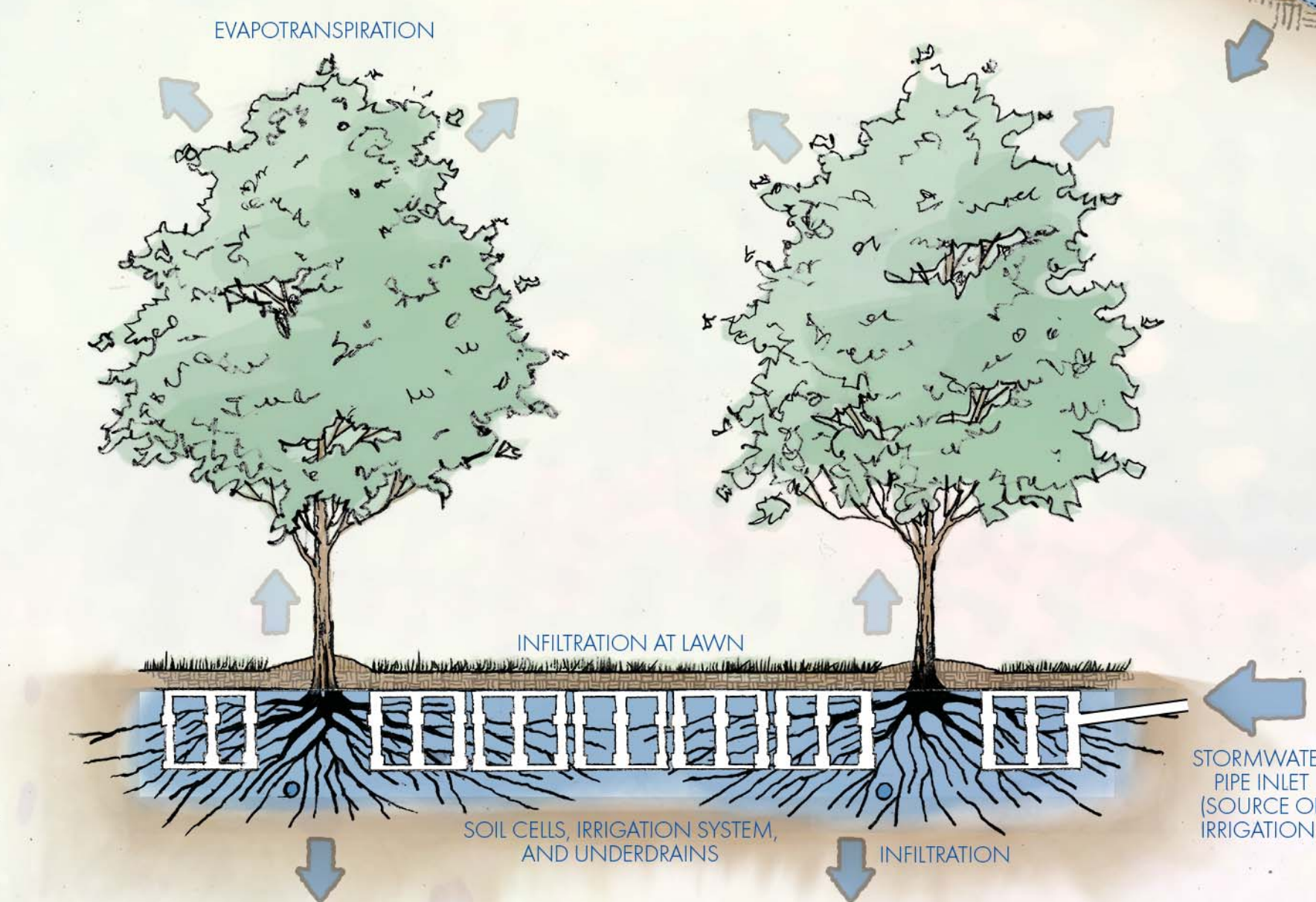
The **Perennial Beds** surrounding the event lawn are not only colorful, attractive, and teeming with life, but are essential to the site's stormwater management. These rain gardens are **Low Areas in the Landscape** that collect stormwater from surrounding impervious pavements and allow it to soak back into the ground during a rain event. Planted with sweeping grasses and flowering perennials, rain gardens are both a cost effective and beautiful way to capture and treat urban stormwater runoff. And while the water allows the carefully selected plants to thrive, the plants then help filter out pollutants and provide much-needed food and shelter for butterflies, song birds and other wildlife in the urban landscape.

“Rain gardens are effective in removing up to 90% of nutrients and chemicals and up to 80% of sediments from urban stormwater runoff.”



Soil Cells and Root Space

The **Tree Allée** framing the South lawn not only provides an audience cooling shade at a hot summer's concert, but is also a critical component to the site's stormwater management system. The trees are carefully situated within a series of **Soil Cells** that collect stormwater via underground piping from an adjacent parking lot, porous pavement underdrains, and cistern overflow. Made from recycled material, these cells are effectively the architecture of the soil. They prevent compaction while providing ample room for stormwater and roots to commingle. This leaves more air pockets in soil and more space for urban stormwater to be stored, absorbed, and ultimately released back into the atmosphere via evapotranspiration. Acting as a reservoir, the cells also enable trees to accept, store and transmit water, nutrients, and energy - the necessary biochemical exchanges for growth of these much needed green shelters in the urban environment.



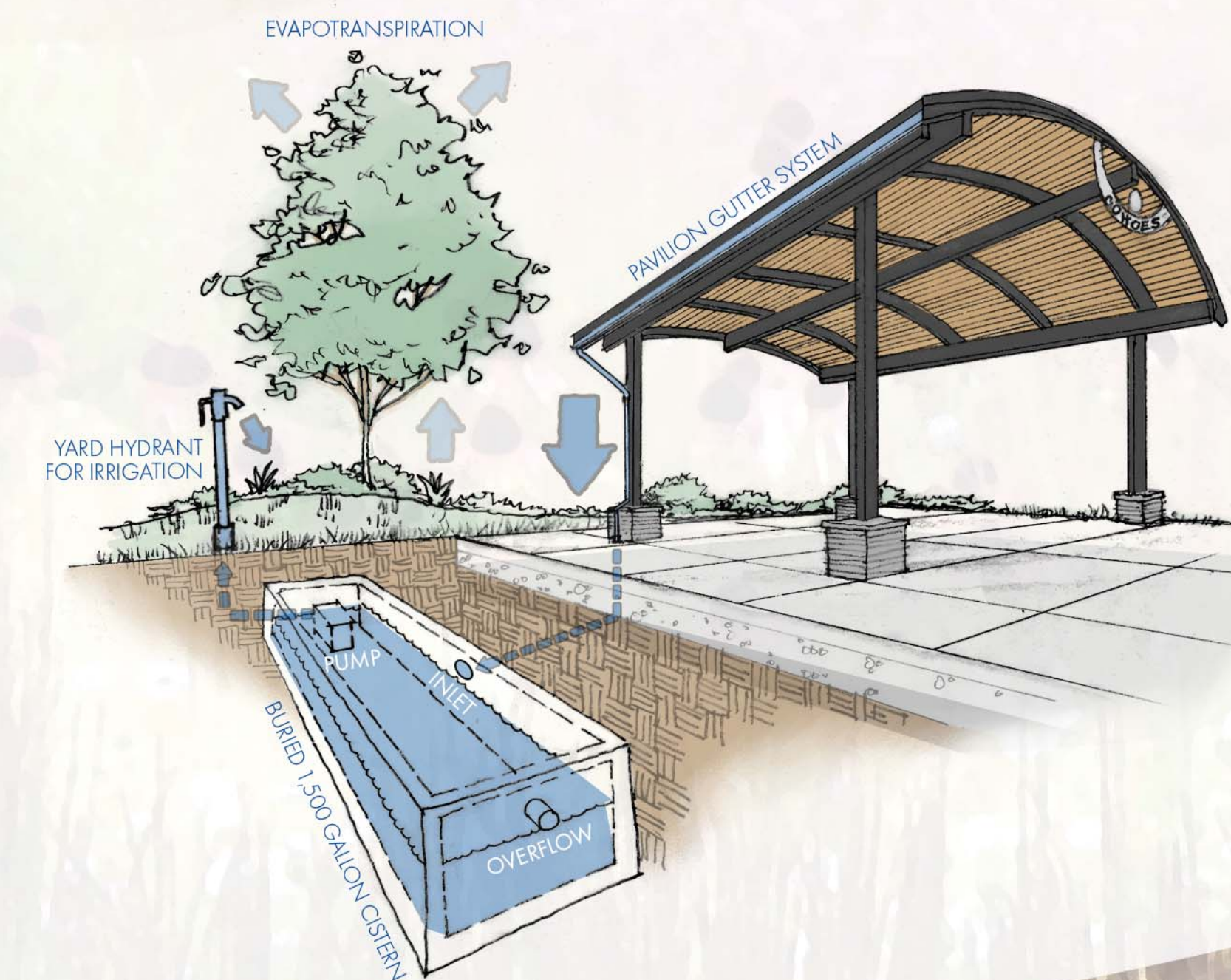
“Trees in the urban environment are an especially effective way to manage the runoff rate, quality, and volume of urban stormwater.”



Underground Cistern

Standing here, you would never guess there was a **Rainwater Harvesting System** right under your feet that is used to irrigate the surrounding landscape beds as well as to keep up with ongoing streetscape maintenance. The underground **1,500 Gallon Cistern** at Canal Square Park is designed to collect rain that falls on the roof of the Performance Pavilion and store the water for later reuse via submersible pump and flush ground-mounted yard hydrant. The use of a cistern ultimately reduces consumption of water from the public supply and re-purposes the water on site and throughout the City.

“Water collected from the roof of the Pavilion will fill the cistern with up to 24,000 gallons of water per year, equating to 65 gallons of water per day.”



COHOES CANAL SQUARE PARK

A Vision for Urban Stormwater Management

