DOONBEG SUBDIVISION GAINS BETTER LAND USE WITH EAGLE BAY’S SWM PAVE STORMWATER SYSTEM

LOCATION: Winchester, VA
OWNER: Doonbeg Associates
PROJECT SIZE: 26,000 SF
ENGINEER: Greenway Engineering
CONTRACTOR: Eastern States Paving
PAVER TYPE: Eagle Bay SWM PAVE Aqua Bric Type 4 “L”

THE CHALLENGE

Doonbeg Associates were assigned to plan the private subdivision in Frederick County, Virginia. Their goal was to maximize land use. The original plan was to build a community that fit 21 homes, but the developer wanted to find a way to fit 24 homes. On top of that, the new community required a retention pond to manage stormwater runoff, which conflicted with the space needed to build the three additional homes.

THE SOLUTION

The developer discovered that he could add 3 additional homes to the subdivision with the use of Eagle Bay’s LID SWM PAVE Stormwater system. SWM PAVE is the “concept to discipline” permeable pavement system which uses engineer guidelines established by Virginia DEQ. The system provides a calm and serene landscape while fully satisfying the runoff reduction requirements for new development in Virginia. SWM PAVE converts budgeted impervious wearing surface dollars into a permeable pavement, allowing water to infiltrate its surface and be stored as it infiltrates back into the ground.
THE RESULTS

The SWM PAVE system allowed for the required volume treatment to be captured, held and treated in the road, which runs through the newly developed LID neighborhood. The system also satisfied the VA DEQ runoff reduction requirements set forth in the new EPA phase II requirement to manage storm events. The use of the permeable paver system in the road eliminated the need for a retention pond, creating space for three homes.

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