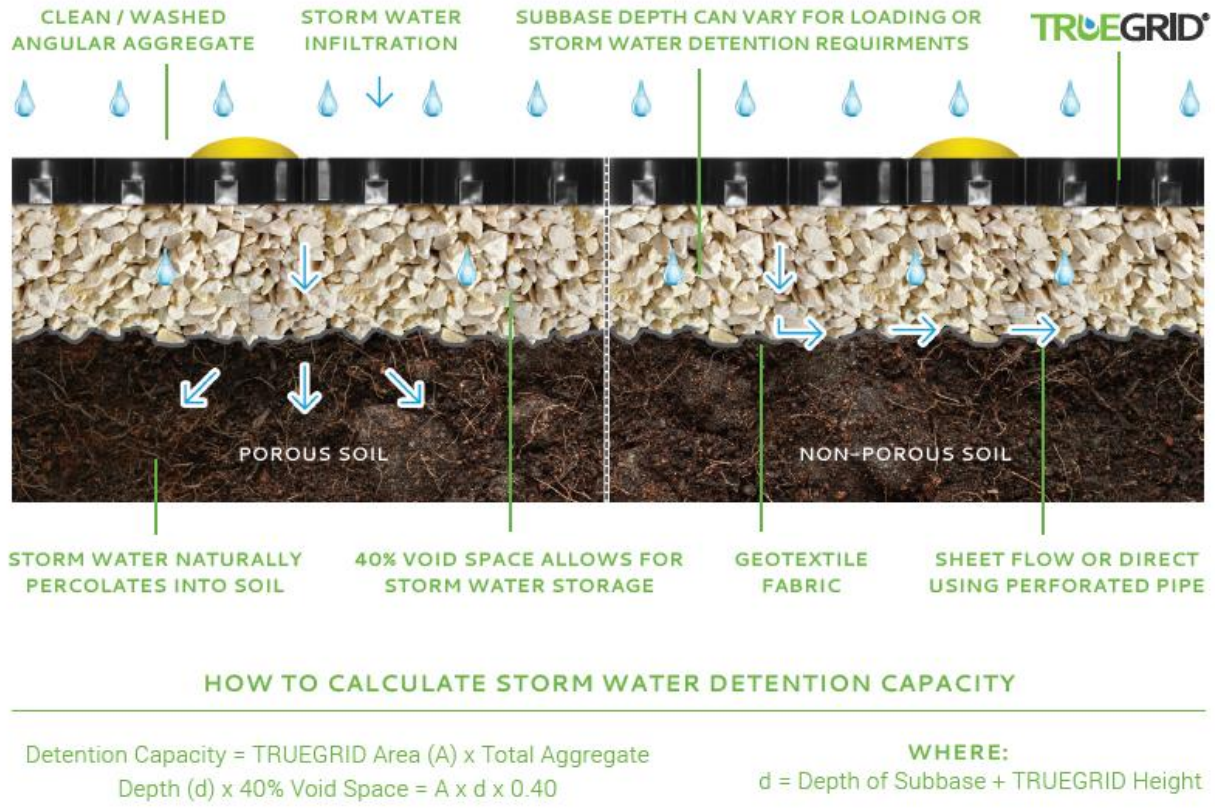
TRUEGRID®
True to your project. True to the environment.

40% Void Space in Base and Fill Material

TRUEGRID recommends to use AASHTO #57[1] stone or a similar ¾”-1.5” uniformly graded clean angular stone for the base material. The fill material can also be #57 stone or a similar ½”-¾” clean angular stone. All of these materials provide a 40% void space which is a common industry standard.

The Iowa Stormwater Management Manual[2] and Virginia DEQ Stormwater Design Specification No. 7[3] state the void ratio for #57 stone is 0.40.

The figure below defines how to calculate the detention capacity within a TRUEGRID cross section.



HOW TO CALCULATE STORM WATER DETENTION CAPACITY

Detention Capacity = TRUEGRID Area (A) x Total Aggregate Depth (d) x 40% Void Space = A x d x 0.40

WHERE:
d = Depth of Subbase + TRUEGRID Height

[1]AASHTO #57 stone gradation chart
http://laurelaggregates.com/aashto-57

[2]Iowa Stormwater Management Manual
https://www.cityofdubuque.org/DocumentCenter/View/26976/Iowa-SM-Manual-Permeable-Pavement-Systems?bidId=

[3]Virginia DEQ Stormwater Design Specification No. 7
https://www.vwrrc.vt.edu/swc/NonPBMPSpecsMarch11/VASWMBMPSpec7PERMEABLEPAVEMENT.html