

## Case Study 1: Valley View Middle School

**Lesson Learned:** It can take several rounds of testing to meet the specification for a bioretention soil mix, but ending with a successful project is worth it.

**Details:** Lenz Enterprises in Snohomish County has been making rain garden bioretention soil mixes. Two of their most recent projects included a rain garden at the Burlington Byway Center at Railroad Park in Burlington, Washington and another rain garden at Valley View Middle School in Snohomish, Washington. Earthscapes Northwest created the soil specification for the Valley View Middle School project. It took 6 months and 6 sets of tests to meet the parameters, but Lenz succeeded. The rain gardens have been installed and are functioning well.



## Case Study 2: Yelm Highway

**Lessons Learned:** Additional testing and processing can add extra cost to production. Anticipate these costs when negotiating with clients. Keep track of the chain of custody with your products. Have the customer verify the quality of each load that leaves the yard.

**Details:** The Yelm Highway project was a roadside bioretention project calling for a 60% sand and 40% compost mix. The client requested the cost of additional testing needed to meet the specification be carried by the compost supplier. The bioretention soil mix (BSM) was sampled every 5 loads on delivery to assure consistency of the product. Halfway through the project, the customer determined that the mix was too fine and returned the mix for reprocessing. After the project was completed, the customer found cobbles in the mix and brought up the issue with the bioretention mix supplier. The supplier indicated that cobbles could not make it through their grinder. After further site investigation, it was discovered that augers had been used to drill through the BSM to install trees and during that process, had mixed cobbles from the native soil into the BSM.

