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Starting Low Impact Development at the Bulldozer Stage

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Abstract Text:

Land development can result in erosion rates and sediment loads that dwarf those of typical agricultural land uses. In spite of this, most “green” or low impact development (LID) projects do not apply the same principles to the construction phase as they do the post-construction phase. As many rural areas become developed, the sediment and turbidity impacts on local streams and lakes can increase exponentially. We have been working on a wide range of devices and systems which can be used to greatly reduce these impacts. We have documented reductions in turbidity and suspended solids of 75-99% on active construction sites. Many of these devices and systems, such as porous baffles in basins, surface outlets, and alternative check dams have been adopted as standard practice by the North Carolina Department of Transportation and were also included in the state Erosion and Sediment Control Design manual. This presentation will cover the important aspects of these systems and how we are getting them adopted in North Carolina.

Impact Statement:

Land development can result in erosion rates and sediment loads that dwarf those of typical agricultural land uses. We have developed and are developing methods to reduce these impacts by up to 99%, without breaking the bank. These are beginning to be adopted through regulatory pressure and concern for the environment, which is often part of the appeal of the development.