ASCE-TN EWRI Presentation

J. Jeremy Swilley

City of Chattanooga

Land Development Office

swilley j@Chattanooga.gov

(423) 643-5889

Construction Phasing & Installation

• **Do**- keep heavy equipment OUT of BMP's.

• <u>Don't</u>- Compact soil inside BMP area using heavy equipment.





Infiltration Areas Must be Protected During Construction





Infiltration Areas Must Be Protected During Construction



Controlling sediment during construction

***Infiltration beds, rain gardens, bio-swales, bio-ponds, certain underground detention systems and some other Low Impact Development (LID) or Green Infrastructure BMP's must be protected from sediment laden runoff during construction.

***Sedimentation of these types of BMP's may result in delays, re-installation or even total loss of suitable BMP conditions.



Construction Phasing and Installation

- BMP's must be protected from construction site runoff;
- Phasing of BMP construction is critical to its success;
- Sedimentation of a BMP may cause it to malfunction and may lead to delays or even reinstallation of the BMP.



Construction Phasing and Installation

- Q- Must I complete other areas of construction before installing the BMP?
- A- YES. Begin BMP construction only once rest of site is complete and/ or stable;
- Q- Does this mean I may have to provide stabilization before installing the BMP?
- A- YES. Sedimentation of a BMP may cause it to malfunction and may lead to delays and even reinstallation of the BMP;



IF phased & protected properly during construction Green Infrastructure can be completed in a timely, cost-effective way.



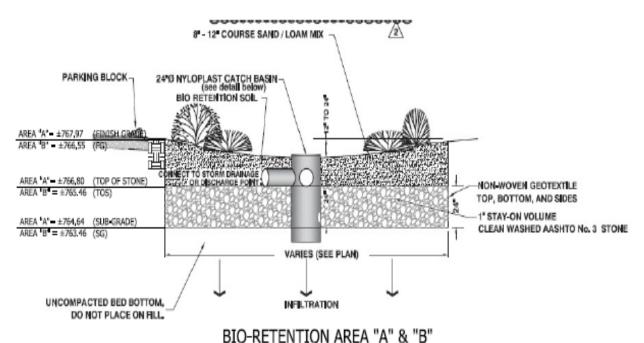


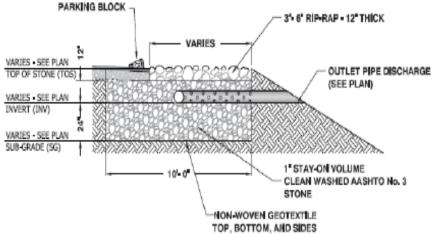
As-built drawings & Engineer's Certifications

- Survey shots must be taken during construction;
- **If you cannot survey after installation, then you must survey during installation;
- Survey data must be provided on the as-built drawings;
- **Engineer must certify that the BMP has been installed properly.



Provide detail with elevations on as-built drawings





BIO-RETENTION AREA "C" "D" & "E"

SECTION "B"

SECTION "A"

N.T.S.