

RARE Project: Development of Green Infrastructure (Rain Gardens/Bioswales) to manage stormwater in Urban Areas of Puerto Rico



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RARE project: Development of GI (cont.)

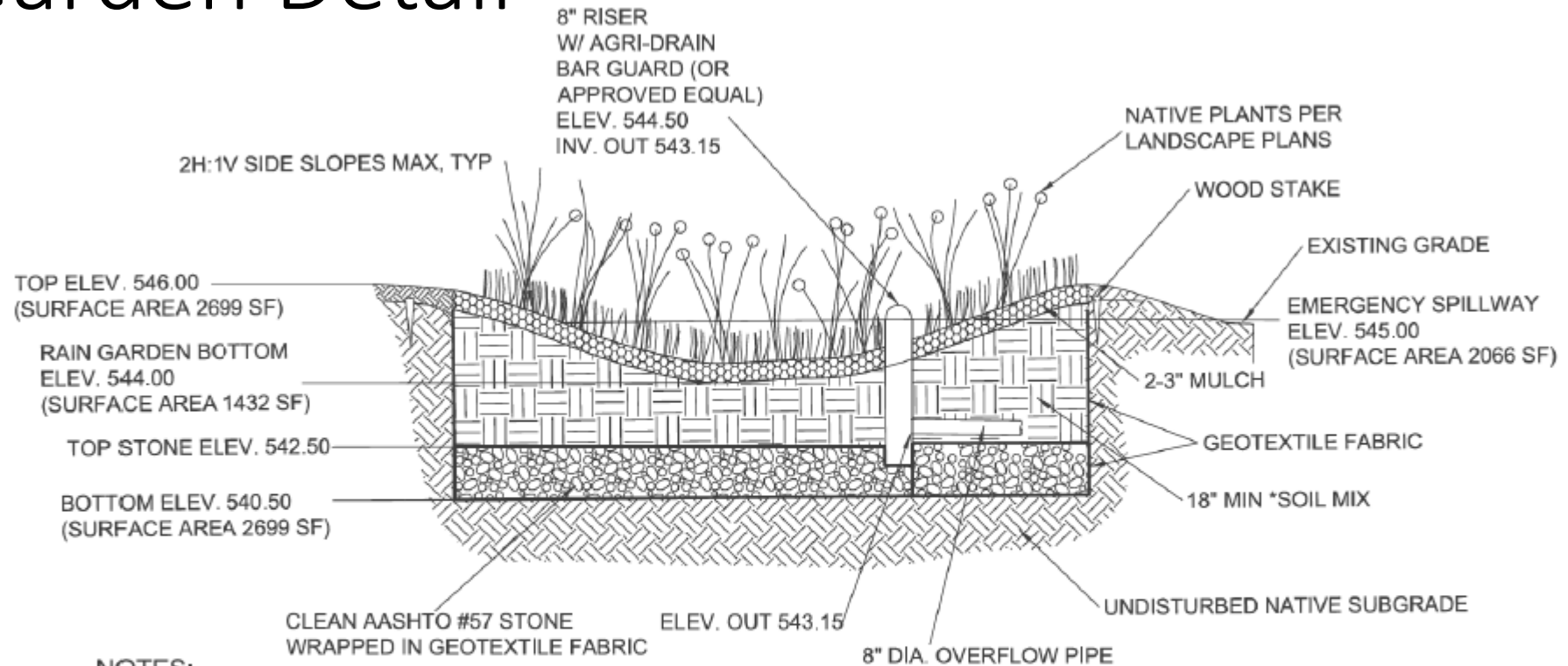
- Investigators: Thomas P. O'Connor, EPA-ORD/NRMRL/WSWRD; Evelyn Huertas, Alex Rivera Region 2 leads; Contractor- Steve Dadio, Cedarville
- Timeline: 2015-2016
- Budget: \$68,400
- This project will study green infrastructure as a way to reduce storm water runoff and improve water quality in the urbanized community in Puerto Rico's San Juan Bay Estuary watershed. The study will monitor effectiveness, determine maintenance needs, assist in the review of designs, and provide general assistance for the development and installation of a green infrastructure practice for treating storm water in this community.



RARE project: Development of GI (cont.)

- GI seeks to capture and treat stormwater at its source (a principle of LID – low impact development) through the use of green practices (e.g., bioretention and rain gardens, grassed swales and filter strips) as opposed to traditional grey infrastructure.
- Includes estimating influent and effluent flow rates, as well as sampling and analysis of the influent and effluent from the treatment systems for a variety of water quality constituents and ensuring adequate maintenance.

Rain Garden Detail



NOTES:

1. BASE OF RAIN GARDEN VARIES

2. *SOIL MIX: 25%-40% COMPOST

25%-40% TOPSOIL

25%-40% SAND

(CHAPTER 6 PENNSYLVANIA STORMWATER BEST MANAGEMENT PRACTICES MANUAL)

RAIN GARDEN DETAIL

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