

**Stormwater Coalition of Albany County
September 24, 2013 Green Infrastructure Tour
11:30am to 5:00pm**

**Registration and Lunch
Cook Park, Village of Colonie, New York**



Stormwater Coalition Green Infrastructure Local Law Advisory Committee (GILLAC) —planning, registration, lunch coordination, troubleshooting

Helping Out For The Day: Jeremy Cramer, Town of New Scotland; Melissa Ashline-Heil, City of Cohoes; Leslie Lombardo, Albany County; Maryella Davenport, City of Albany; Mike Lyons, Town of Colonie.

Tour Host (Registration and Lunch): Village of Colonie, Carl Freshman and Randy Rivera....waiting for the buses!

**Introductions
Green Infrastructure Explained...**



Nancy Heinzen
Stormwater Coalition of Albany County
Program Coordinator

Welcome!



Daniel P. McCoy, County Executive, Albany County

Getting Around—School Buses!



Antoinette Estates



Top of Rapp Road landfill



End of Tour! Cook Park

Tour Funding: NYSDEC Environmental Protection Fund Stormwater Implementation Grant (Round 10)
Stormwater Coalition of Albany County: 112 State Street, Room 720, Albany, NY 12203. www.albanycountystormwater.org

Site 1: Rain Garden (Cook Park, Village of Colonie)

Background: The purpose of the rain garden is to treat small volumes of stormwater runoff using a conditioned planting soil bed and planting materials to filter runoff stored within a shallow depression. This garden receives runoff from a portion of a parking lot and was built in November, 2011. Albany County Cornell Cooperative Extension Master Gardeners designed the garden; Albany County Soil and Water Conservation District provided labor and planting material, and the Village of Colonie Department of Public Works provided equipment and helped dig the garden. The garden is maintained by the Village of Colonie. The Stormwater Coalition of Albany County monitors rain garden performance and facilitates coordination and training as needed. This is one of eight demonstration rain gardens throughout Albany County. Estimated cost of each demonstration rain garden: \$1,500 (labor, equipment, materials). Plant supplier: Project Natives, Fiddlehead Creek Nursery, Helderledge, splits of plants from other rain gardens. Multiple sources of funding for all eight demonstration rain gardens.



Presenter: Susan Pezzolla, Cornell Cooperative Extension of Albany County Master Gardeners



Presenter: Randy Rivera, Village of Colonie, Stormwater Program Coordinator



Rain Garden (November, 2011)



Rain Garden (September, 2013)
Two years of growth, multiple native plants.

Presenter: Susan Lewis, Albany County Soil and Water Conservation District (right of Randy Rivera)



Site 3: Green Roof (University at Albany-SUNY, Uptown Campus, Liberty Terrace Dorm)

Background: This green roof was installed in 2012 and was one of several natural and sustainable elements incorporated into the Liberty Terrace project. This LEED Gold project also includes a ground source heat pump, rain gardens, daylight maximization, and the use of recycled and locally-sourced materials. The roof garden supplier was Carlisle/S & L Roofing and from top to bottom the roof components include: Carlisle's vegetated sedum mats; Carlisle's 2.5" growth media; Carlisle's Miradrain G4; .060 White EPDM; EPDM Bonding; 1/2" securrock cover-board; tapered insulation; 725 TR vapor barrier; 702 Primer; 1/2" DENS deck prime; wood deck. Carlisle's pressure sensitive molded walkway pads surround the vegetated area. An authorized contractor installed the green roof.



Presenter: Diana Delp, Registered Architect, Project Manager, University at Albany-SUNY

Presenter: Peter Spoor, Construction Manager, University at Albany-SUNY (available for questions)

Site 2: Porous Pavement, Downspout Disconnect, Soil Restoration, and Reduction of Impervious Cover (Antoinette Estates, Town of Colonie)

Background: As originally planned this was a 13 lot residential sub-division resulting in a total disturbance of 4.8 acres. The original Basic SWPPP (Erosion and Sediment Control Plan) included small rear lots and deed restricted areas. After construction commenced, to address changing market conditions, the developer favored larger lots. This resulted in a redesign of the site to include post construction stormwater practices.

Given site opportunities and constraints, various green infrastructure practices were proposed which met the needs of the developer and addressed the Town's interest in testing out and promoting green infrastructure. These practices included porous pavement for both the Town road and individual lot driveways, plus roof top disconnection. While porous asphalt had been used elsewhere in Albany County, this application involved residential, rather than commercial property and a Town road, rather than the more typical parking lot, or foot/bike path. This novel application resulted in heightened oversight of the project and careful attention to all design, construction and maintenance details. A variety of individuals participated in this project and presentation: John Dzialo, Town of Colonie Stormwater Program Coordinator; Dan Hershberg, PE, Stormwater Design Engineer; Anthony Guidarelli, Owner, Guiderelli Construction, Inc.; Bob Higgins, Town of Colonie Stormwater Inspector; Adam Wands, Town of Colonie, Stormwater Inspector.

While this site was primarily an example of porous pavement and downspout disconnection, two other green infrastructure practices were discussed as well, soil decompaction and the reduction of impervious area (i.e. via Town law...reduce street width).



Dan Hershberg, explaining the project. John Dzialo and Anthony Guidarelli available for questions.



John Dzialo, Town of Colonie, Stormwater Program Coordinator

1. What our test pits showed...well drained soils, suitable for porous asphalt.
2. Decompact pavement sub-grade utilizing methods as described in Deep Ripping and Decompaction (April, 2008 NYSDEC) ...VERY IMPORTANT!
3. Maintenance agreements with homeowners—critical. They need to know how to maintain their porous asphalt driveway.



This is the third Tour demonstration of the day. John is spraying about ~ 200 gallons of water onto the porous asphalt pavement.



After ~ 30 seconds, this is what it looks like.



Adam Wands and Bob Higgins explaining street width dimensions...this site 32' wide (wing to wing). Town standard had been 36'. Town might consider 28' wing to wing. EPA Water Quality Scorecard recommends 18—22' street width.



Porous Driveway absorbs runoff from rooftop disconnection September 24, 2013

Downspout Disconnection —Antoinette Estates

Site 4: Stream and Habitat Restoration (City of Albany Rapp Road Landfill & Albany Pine Bush Preserve)

Background: June, 2009 NYSDEC issued a permit to expand the Rapp Road landfill (23-acre overfill; 15 acre lateral landfill expansion; extend life of landfill by 7 years assuming currently approved maximum daily tipping rates). Permit requires several actions to minimize and mitigate adverse environmental impacts. One action "...the City fully implement an Albany Pine Bush Ecosystem, Habitat Restoration Plan..." Restoration Plan: create ~20 acres of wetlands; 3200 feet of stream, native plant nursery. Phasing: restore ~ 130 acres of Preserve lands surrounding landfill; test native plant restoration on a closed portion of landfill; restore ~ 130 acres on the closed landfill



Stream and Habitat Restoration Albany Pine Bush Preserve

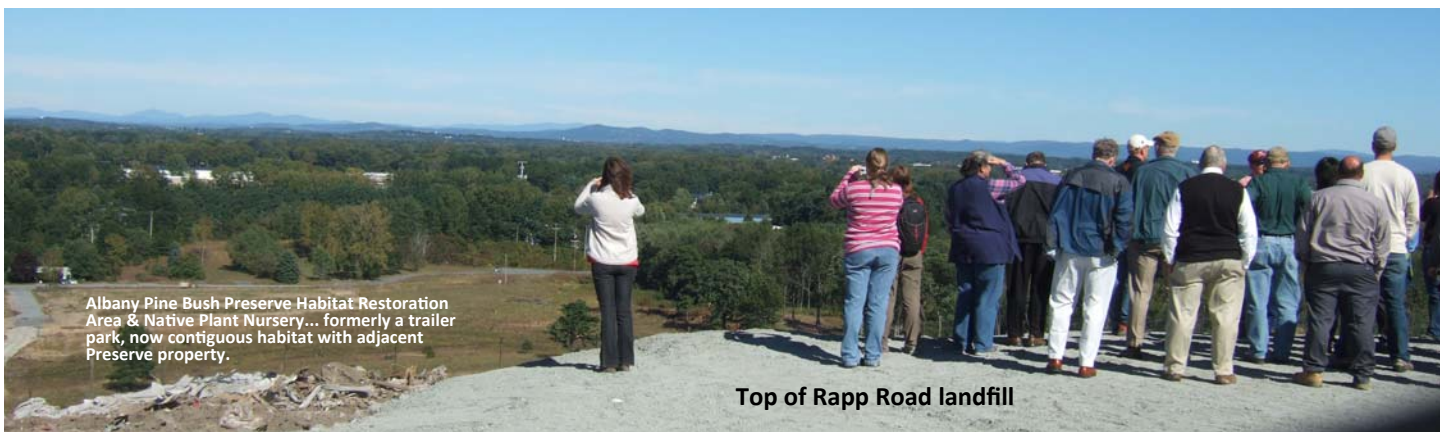


Presenters:

Left to Right:

Joe Giebelhaus, City of Albany Landfill, Solid Waste Manager

Neil Gifford, Albany Pine Bush Preserve Conservation Director



Albany Pine Bush Preserve Habitat Restoration Area & Native Plant Nursery... formerly a trailer park, now contiguous habitat with adjacent Preserve property.

Top of Rapp Road landfill



As the landfill closes, the NYSDEC Permit requires the restoration of closed portions (cap and contour with native sand and plant natives)

Solid waste

