THE HOWARD COUNTY DEPARTMENT OF EDUCATION 10910 Route 108, Ellicott City, Maryland 21042 (410) 313 6600

IMPROVEMENTS TO SCHOOL SITES OR SCHOOL FACILITIES

PROPOSAL

Date: November 2011

To: Director of School Facilities

From: Danielle Fallon

Intern, Youth Environmental Coalition (Youth ECo)

7761 Waterloo Rd Jessup, MD 20794

443-733-1234

Representing: The Green Building Institute

We submit for your consideration and advancement if appropriate a proposal affecting the River Hill High School.

This proposal may be described as follows:

1. What is the intent of the proposal?

Youth ECo, a youth-run and organized committee of the Green Building Institute, a 501 c(3) non-profit in Howard County, whose mission is to spread environmental awareness to students of all grade levels from K-12. The Youth ECo, in conjunction with the Green Building Institute is proposing to build a rain garden at River Hill High School to improve the water management system and reduce storm water from reaching the Chesapeake Bay. This rain garden will prevent potentially polluted water from the River Hill High School parking lot blacktop from reaching the Chesapeake Bay and will thus release cleaner water back into the environment through evaporation, evapotranspiration, infiltration, and filtration. It will also serve as an educational tool for River Hill High school students, younger students from Clarksville Middle and Clarksville Elementary, and the community as a whole.

2. What form will it take (attach sketch/drawings or detailed plan)?

A detailed sketch with site plans is provided in the attachment.

3. What precautions will ensure health and safety?

The actual building of the garden will be supervised and executed by a professional landscaping company and other professional volunteers of the Green Building Institute, including, but not necessarily limited to, architectural engineers. The students and community members will partake in the planting of the native plants upon completion of excavation and site preparation. To ensure health and safety, we will require one adult to accompany a group of no more than five elementary school students. All participants must sign a statement that they will follow all rules including proper use of gardening tools, will not "horse around", and that they will not plant or take any action not adhering to stated directions; these directions are yet to be developed.

- 4. What security is provided against vandalism and unauthorized use or occupancy?
 - The garden is open to the community and students of River Hill. It will be accessible for its educational purposes. Thus, we trust that the students will be respectful enough to treat it with care. Research of other rain gardens, show no vandalism by students or others. If required, while not in the budget and not recommended for safety reasons, a three wire barrier fence can be installed surrounding the rain garden to deter students from walking in the garden and to highlight the need for the garden and for preservation. However, if vandalism were to occur by students, the student will face the same consequences that apply to vandalizing other school property. We hope that this will discourage students from mishandling the garden in any way.
- 5. How will the improvement relate practically and aesthetically to existing structures and landscaping? The rain garden serves a practical purpose in that it will soak up stagnant water that currently lies in the drainage swale after it rains, improve a water management system, and reduce the amount of storm water runoff that reaches the Chesapeake Bay. Most importantly, it will also provide for a dry walking path from the adjacent community which accesses school property using an existing muddy shortcut. Whenever it rains, the walkway becomes flooded and students walk through mud, which then gets dragged into the school. Installing a rain garden with a defined path will make accessing school property easier and more convenient for students. It will also have great aesthetic appeal with the new native plants that are to be planted in the rain garden. Thus, while serving a greater purpose in helping the environment, it will also serve as an educational tool and brighten up the students' and faculty's moods with its beautiful aesthetic appeal and lack of mud.
- 6. Estimate probable costs both initial and operating, together with source(s) of funding.

 The building of the first phase of the rain garden will cost approximately \$7,000, which we anticipate will be covered by grants submitted to the Bright Minds Foundation and Chesapeake Bay Foundation. The likelihood of receiving mini-grants from these sources is high since their program funding is designed for projects such as this. If more plants or other necessary materials are needed than what the grant can provide, the plants will be obtained through in-kind donations from nurseries or bought with monetary donations from the community. We received a quote from *Babikow Greenhouses* that put our plant cost at about \$2,200 for the first phase of the rain garden they have offered to give us a small discount because of the educational and nonprofit affiliation with this program.
- 7. How much labor will be required and who will provide it?

The initial construction of the depression will be done by a landscaping contractor or business members of the Green Building Institute. No community members will take part in this initial process, other than planning. The Youth ECo members have been researching design requirements and planting requirements under the guidance of the Green Building Institute and now we are looking to implement the conceived design. When the rain garden is ready to be planted, community members will be allowed for two to three days to come and plant. All community members will be volunteers. Because we expect many students to partake in this rain garden, through groups such as River Hill's Ecology Club and National Honor Society, we predict that approximately 50 people, or more, will be planting this rain garden. *Land Development LLC* (Care of Green Building Institute) and *OakLawn Landscaping* are potential sources for construction and excavation assistance.

8. What amount of time will be needed to do the job?

We will need approximately two weeks in total to complete this rain garden. The initial creation of the depression will take approximately a week and the actual planting for the rain garden will take place the week after. This will be done after all approvals have been secured by HCPSS and the Howard County Government.

In submitting this proposal, we know and understand the policy of the Howard County Board of Education entitled "Improvements to school Sites or School Facilities" and will support its implementation relative to this project should my/our request be approved.

Signature(s) of initiator(s):

Submitted by:_

Danielle Fallon Intern, Youth ECo

Student representative of the Green Building Institute and River Hill High School

Stanley J. Sersen, NCARB

Board President, The Green Building Institute

ACTION RECORD

1.	Proposal received on by	
	(Date)	(Name)
2.	Evaluation of proposal completed	, by (check as appropriate):
	Director, School Facilities	(Date)
	Manager, Safety, Environment and Risk Management	(date)
	Chief Operating Officer	· · ·
	Project approved not approved Conditions (if any):	
3.	Project schedule: Begun: Completed:	
	Notes (if any):	