



**GREENHORNE
& O'MARA**
CONSULTING ENGINEERS

<u>DATE</u>	July 18, 2007
<u>PROJECT</u>	Parkside – Pollin Memorial Community DC Zoning Commission Case No 06-30
<u>DATE OF MEETING</u>	July 18, 2007
<u>LOCATION</u>	DC-DOE officers, 51 N Street, NE
<u>PURPOSE</u>	SWM Concept meeting

MEETING NOTES

Participants

Tim Karkari, *Acting Chief* Director of Technical Services Branch, Watershed Protection Division
Rand Postel, PE, G&O
Ben Allen, G&O
Kyrus L. Freeman, H&K

Meeting Notes

The purpose of the meeting was to review the proposed grading and stormwater management plan and to discuss and agree upon certain concepts for implementation of the plan. As an initial matter, we reviewed the Applicant's proposal to construct new housing within the horizontal boundary of the floodplain. Based upon our review and discussion of the grading plans and sections, Mr. Karkari confirmed that the project, as designed, meets the applicable flood hazard rules in Title 20, DCMR, Chapter 31. Mr. Karkari further mentioned that quantity stormwater management practices would not be needed for this project because of the adjacent proximity to the Anacostia River and Watts Branch that are subject to tidal and riverine flooding, and because there is very little gradient in the unnamed tributary to Watts Branch. However, Mr. Karkari indicated that a comprehensive stormwater management plan could be developed that would include a number of low-impact development measures, as identified below, which the Applicant has agreed to incorporate into the project.

The following stormwater management best management practices (SWM BMP) were discussed as a means of developing a comprehensive stormwater management plan.

- "Filterra" tree box filters The project includes a total of 9 filterra unit locations that will require 10 - 6'x8' boxes and 3 - 4'x8' boxes. At each of four locations, two boxes side-by-side are required. The 6x8 filterra boxes are large enough to accommodate trees, as requested by DC-DOE. These filterra units will be

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EXHIBIT NO. 40

constructed adjacent to existing and proposed catch basins in public space. These units will be maintained by the Home Owners Association (HOA), and therefore will require a Perpetual Covenant with DC-WASA whereby they would be inspected and maintained and repaired as necessary by the HOA, according to a schedule approved by DC-DOE.

- Amended soil filtration areas The Applicant has agreed to locate a number of amended soil filtration areas on the site as a combination filtering and infiltration quality SWM BMP that has a similar affect as a bio-retention facility. These will be located as follows:
 - Approximate 170'x18' area in rear yards of adjacent L and M housing units
 - Approximate 112' x 12' area in rear yards of adjacent P housing units
 - Approximate 112' x 12' area in rear yards of adjacent R housing units
 - Approximate 198' x 10' area in rear yards of adjacent S housing units,

These soils amendment infiltration areas can be located where there is sufficient separation from building structures and the adjacent driveway pads such that there will be no possible effect on the soil stability for these structures. We will place the amended soil SWM BMP no closer than 15 feet to the rear building line, and 5-feet from the parking pads, such that the width of the amended soil section could range approximately between 10 feet to 18 feet for most of the specified units. In lieu of applying just 4-inches topsoil and sod to an approved subgrade, the amended soil section would consist of a 12-18-inch section of a sandy type of soil topped with 4-inches topsoil and sod that would enhance infiltration of stormwater into the ground, capturing almost all the stormwater from the rear half of the specified units. Subgrades would be compacted to approximately 85% maximum density sufficient for concrete leadwalks to be constructed, yet allow for partial infiltration. As a safety measure to prevent saturated soil conditions, an underground perforated pipe in a gravel bedding wrapped in filter fabric would be constructed the full length of the amended soil areas that would collect any seepage that does not infiltrate, and connect with a solid pipe at several of the new manholes in the alleys.

- Rain barrels The Applicant has agreed to place 42 rain barrels throughout the project, each approximately 80 gallons. These rain barrels will be located on the front and rear of the rental units shown on exhibit S10 of the PUD application. Maintenance and operation of these units will be enforced by the HOA. Rain barrels would be sized according to the manufacturer's recommendations, however 80 gallons appears to be a standard size. Additional to the stormwater management benefit, these would allow for re-cycling rain water for planter and lawn irrigation in the vicinity of rain barrel.

- Bay Saver Separator units, as manufactured by Bay Saver Technologies, Inc. This is a quality SWM BMP that is already shown at two locations on our plan, Exhibit S20. In addition to this BMP we would provide pre-treatment at 8 new catch basins and 9 new grate inlets, whereby an 18-inch catchment will be provided to collect grit and other contaminants that can either float or settle-out within the catchment. The outlet pipe from these catch basins and grate inlets would be adapted with a "turned down" outlet pipe to allow for the structures to drain from the middle of the stored water, thus enhancing the oil and floatables not to drain out of the structure, and to allow space for grit to settle-out.

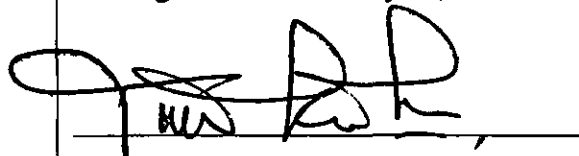
Mr. Karikari emphasized that the primary purpose of the SWM practices should be to address the water quality requirements to achieve treatment of the first 1-inch of rainfall, and that quantity practices were not required because of the adjacency to tidal waters.

It was discussed that if Mr. Karikari was satisfied with our proposed measures and these follow-up notes of our meeting, that he would sign a statement of concurrence as indicated below.

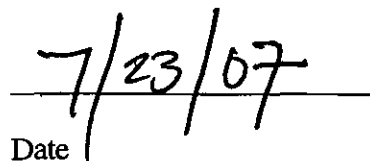
Benjamin L. Allen, PE

cc: Participants

CONCURRENCE I have reviewed the above notes taken by G&O for the SWM Concept meeting regarding subject project, and find they accurately reflect the discussions made at the meeting conducted on July 18, 2007.



Tim Karikari



Date