

STORMWATER REVIEW

Background

The applicant's stormwater design, taken by itself, appears to be a state of the art system, with solids and oil removal for up to a ten year storm event, and the capability of diverting all the stormwater from up to a 100 year event from the slowly draining ditch system that causes flooding issues on the Darkstar property. The applicant's submissions indicate that it will be discharged to the approved stormwater treatment area between Lot #3 and Lot #4.

Relevant Regulation:

4.3.4 Site Plan Review Standards:

(6) Adequacy of drainage and grading plan, ensuring treatment and control of stormwater runoff, control of soil erosion during and after construction, and proper design solutions for steep slopes and poorly drained areas.

Issues

- The state stormwater permit has expired – there is no approved stormwater area.
- The existing wetland near Mechanicsville Rd. runs on the surface feeding downstream wetlands and this now will be redirected into the stormwater system, mixing it with the runoff from the parking area, removing it from the natural flow.
- The site plan indicates that approximately 10 feet of an existing 30 foot width of a stormwater easement on the western side of the project will be filled in and retained by a wall and it is not clear if this would impact the functioning of this swale or if they have the legal right to fill it. Is the portion of the western drainage easement that they are proposing to impact needed for the drainage of the properties to the west?
- While the elimination of the swales for stormwater discharge may improve a neighborhood issue, their replacement by a piped discharge system has the potential to alter the velocity and timing of the entry of the stormwater into Patrick Brook.
- The subdivision originally received a state permit 3 – 9010 which was renewed in 2003 and expired last August. The lapsed renewal contains the allowed lot coverage's for each lot. The allowed coverage for lot #15, "because of the presence of wetlands", is presently one acre, far less than what is proposed. The applicant has remapped the wetlands, and their submission contains about 36% less wetland, in a very different configuration than a previous wetland delineation done in 2001. None of this has been reviewed by the State or the Army Corps of Engineers and it has significant ramifications for this project.

We have relied on the State stormwater permitting process for adequate review of the stormwater impacts of a project previously, however in almost all instances there have not been as many unresolved issues that will have to be addressed, or should be addressed, in their review.

The science of stormwater management is very complicated, and far beyond what I am capable of analyzing. If you feel that this project has the potential for unforeseen impacts I recommend that we get the proposal professionally reviewed before making a decision.

Peter Erb, Zoning Administrator.