

# **Town of Hinesburg Planning Commission**

**April 9th, 2014**

Approved 4/23/14

Members Present: Maggie Gordon, Tim Clancy, Joe Iadanza, Dennis Place, Kyle Bostwick, Russell Fox, Rolf Kielman.

Members Absent: Aaron Kimball, Grace Ciffo.

Also present: Alex Weinhagen (Planning & Zoning Administrator), Freeda Powers (Recording Secretary), Jeff Zweber (engineer).

Public Present: Johanna White.

Joe I. chaired the meeting which was called to order at 7:30p.m.

## **Stormwater Regulation Revisions (Cont'd from 3/26/14)**

The Board welcomed Jeff Zweber, engineer from Engineering Ventures, to discuss proposed standards and feedback.

Jeff Z. described to the Board some of the different treatment standards and encouraged them to consider down-stream impacts when looking at storm water runoff and treatment options. Explaining the "10% rule", Jeff Z. said look at a given sites drainage area. At the point where the development site is 10% (or less) of the larger drainage area, the impact from that site is considered negligible. In an example, he said, a development site of 2.3A with impervious surface area of .5A (20%) the accompanying drainage basin would be 23.0A (size of drainage basin where site area is 10%).

Kyle B. asked how the drainage basin area is determined (Town, maps, property owners?). Jeff Z. said this is not regulatory, look at all of the area of drainage (there are maps with 2' contours and GIS applications available to staff). He said it does help to do field reconnaissance to get an idea of existing culverts etc.

Kyle B. asked about the practicality of review, how easy is it to ascertain the drainage basin area? Jeff Z. said it is objective and easy to determine; look at the stream channel and contour maps for the steepest areas. Joe I. said so this is addressing more than just steep slopes, an inclusionary area. Jeff Z. said that is correct.

Rolf K. asked when out of the drainage basin "envelope" is the impact moving into another area or does that drainage basin move with the site envelope? Jeff Z. said it is per the downstream ratio impact. In another example, if impervious surface area is less than 1A, the project is exempt from the state's stormwater review. Joe I. asked if he were interpreting this correctly in that projects farther down slope should expect an easier "pass" as it relates to this 10% impact rule. Tim C. reassured the rest of the Board by reminding them that this is only one clip-point, to evaluate pre/post development runoff;

this is only one element for storm water runoff. He wonders, is it commonly understood among engineers?

Kyle B. asked if a project gets more scrutiny if it is within the 10% zone. Joe I. said it depends on how you write the regulations. Dennis P. asked how to know pre-development flood potential; where is a record? Rolf K. added that frequency should be considered as well; a parcel could be prone to flooding every 50 years. Joe I. said modeling can help in determining these considerations. Kyle B. said he feels this is an engineers' determination to make.

Rolf K. asked Jeff if there is no tolerance at all for augmentation of the water flow; the intention to deal with it entirely on-site? Jeff Z. said yes, on larger scale development, that is practical. On smaller development attenuation is the more likely aim.

Alex W. asked how far from a site should the town be evaluating impact. Jeff Z. said he proposes the 10% threshold, while some suggest more absolute language (which he finds is not abided by as well).

Tim C. said costs could rise significantly. Jeff Z. said potentially, yes. Rolf K. reminded the Board that every site is different; distance is relative, but part of a formula. Tim C. said distance, specifically, is not a measure of the proposed language. Jeff Z. concurred, saying it is a matter of geography.

Joe I. asked if a project impacts less than 10% of the drainage basin, does it still have to measure its impact? Jeff Z. said yes. Joe I. spoke to his concern regarding erosion, which he sees as a separate issue. Rolf K. asked if as the impervious surface area in a drainage basin increases, does the scrutiny also get tighter? Tim C. said in his view, no, it's aggregate. Jeff Z. said that is true, but added there is some advantage to the first development in terms of erosion impact.

Tim C. said if this is easy for an engineer to determine, he feels it is a valid tool. Jeff Z. brought for the Board to review a 3-pg document from the state explaining the process/formula for the 10% rule. Kyle B. asked if the slope and soil condition are also considered, or are we just noting the nearest body of water. Jeff Z. said the soil and topography does affect the hydraulic model and plays into the evaluation of your study points.

Kyle B. said with small, incremental development, could the 10% be a moving target due to the increase in overall impervious surface within the drainage basin? Jeff Z. said it won't change the drainage basin area, but the study points would show increased erosion, etc. Joe I. said indeed, all development contributes. Jeff Z. said to determine if downstream analysis is required, 1) at each unique discharge point from the site does pre development exceed post development flow? And 2) if so, perform the lowest analysis and provide onsite storm water treatment measures to reduce the post development flow to = or less than pre development rates. Analysis at the study points should look for erosion or damage. Tim C. said this sounds rational to him.

Joe I. asked about the language in the second bullet regarding *existing structures*. He voiced his concerns with the unintended consequence of potential damage to undeveloped lots, which may decrease their value or development potential. Jeff Z. said while he hears and understands the concern, he does not think there are many examples where a lot was rendered unbuildable as a result of runoff from neighboring small scale development. Kyle B. said the language needs to work and be understandable. Tim C. asked if the DRB has an easy way to determine the 10% impact? Jeff Z. said the VT Streams Statistics works well for small areas. Alex W. clarified that we always look at the downstream impact of projects that come before the DRB, this is a matter of how far from a

development site should we be measuring that impact? Watersheds can be huge, how does that factor into how to choose the “top” of a drainage basin? Jeff Z. said it will be obvious from the site itself; to the nearest receiving water body. Alex W. asked how to define how far upstream from a project analysis should go. Jeff Z. said start on site and look at the distance between the watershed/receiving body and the site (where erosion occurs, sediment deposits).

Joe I. said he understands the recommendation but agrees we need to work on the policy language. Tim C. said he feels this is important to keep as it is in sync with the State and is recognizable and familiar to engineers.

Rolf K. asked about projects that exceed the 10% threshold. Alex W. said the standards we’re coming up with have lower triggers than the State but we encourage applicants to follow the state standards with a few extra measures for LID implementation etc., and the State permit does satisfy the larger development requirements. Rolf K. said it seems to him that the converse should be true. Joe I. agreed, adding that the analysis guidelines are important. He recommends adding *parcels* to the language in the second bullet, to address his concern regarding impact on undeveloped lots. He does not agree that smaller development projects can’t or won’t impact adjoining properties. Tim C. said that seems reasonable.

Dennis P. said keep in mind that the cost of these requirements goes to someone, and that can’t always be on the developer. Joe I. reminded the Board that the entirety of a project also must be taken into consideration; not just the main structure but also the driveway, garages, and other impervious surface areas will trigger the 10,000sq. ft. threshold. Rolf K. said he feels the impact on neighbors is an appropriate consideration. Tim C. reiterated the caution of an aggregate impact of smaller development projects as well.

### **Shoreline Zoning District Regulation Revisions**

The Board discussed the idea of an overlay district concept. Tim C. asked why consider an overlay district? To him it seems more complicated. Joe I. explained the idea behind the overlay district, saying the shoreline is mostly residential small lots, where the Allowed Uses of the Ag and RR2 districts would simply not “fit”. Further from the shoreline, but still within the watershed, you may contemplate some of these uses. These lots would tolerate some of these uses, but would still be impacting pretty directly the lakes’ water quality. Rolf K. added that overlay districts are rather common. Though he is not saying it is uncomplicated, it would address some fundamental issues that impact the watershed. He feels it is worth considering. Tim C. said it might be worthwhile. Dennis P. asked what if a project were able to prove no impact through mitigation? Alex W. said this can be performance based rather than prescriptive. Dennis P. encouraged this tact. Rolf K. said he feels that language should encourage rather than restrict.

Regarding steep slope development, Tim C. voiced his concerns citing as an example the Dynamite Hill run-off impacts. Estimating the grade of Dynamite Hill at 16%, he said remedial action should be taken at a grade much lower than that. Alex W. said the Select Board has adopted road standards which address grade requirements (up to 16% allowed if engineered). He suggested the Board could address this concern within the overlay district by including a provision to limit steep slope development (including driveways) to something they are more comfortable with, perhaps 10%. Tim C. agreed.

Of the 6 proposed points addressing Special Provisions, the Board felt that #1, #3 & #6 were relatively similar in scope. These provisions address impacts from steep slope development and impervious surface area contributing to storm water run-off concerns.

The Board spoke briefly about expansion of non-complying structures. Tim C. said this is an important discussion to have. He said vegetative buffers are a low cost, well-known benefit that most lake-front home owners can achieve. Joe I. suggested using mitigation as a trade-off to allow expansion.

Dennis P. asked about the stream buffer, is that referring only to mapped streams? Alex W. said it refers to streams as defined on map with specific exemptions for man-made ditches, canals, etc.

Rolf K. asked if it would be prudent to wait for the state's outcome on this issue before moving forward. Alex W. encouraged the Board to continue discussions and working on the draft language but agreed it should not be finalized ahead of the pending state legislation.

### Minutes of the 3/26/14 Meeting:

Maggie G. made a motion to approve as amended the 3/26/14 meeting minutes. Kyle B. seconded the motion. The Board voted 7-0.

### Other Business:

- VT Gas Systems – wetland permit application revision
- Thistle Hill project – wetland permit issuance notice
- Town of Richmond – zoning regulation revision public hearing on April 16
- Letter from Barbara & Bob Forauer regarding Haystack Crossing project

Joe I. made a **motion to adjourn**. Rolf K. **seconded the motion**. The board voted **7-0**. The meeting ended at 9:53pm.

Respectfully Submitted,  
Freedra Powers--Recording Secretary