Zoning Board of Adjustment Minutes August 31, 2023

ZBA members present: Vance Bell, Dawn Bower, Chris Cummings, Bill Dunkel, Cathy Fales, John Finley, Tom Johnson, Kate Wright, Michael Simonds (Town Zoning Administrator (non voting)

Members of the Public Present: Keith and Kathy Jungermann, Ellen McDuffie, Cathy Stover, Randall DiStefano (appellant), John Dupras (Trinity Engineering)

The meeting was called to order at 6:35 PM by Bill Dunkel, ZBA chairman. Mr. Dunkel read the conditions that the ZBA attached to the dimensional waiver that the DiStefanos were granted last August. He emphasized that the most important condition for the purpose of this meeting was the first one which says:

1.) Prior to the stop-work order being lifted, the applicants, at their sole expense, must present, and adhere to, a plan created by a licensed civil or environmental engineer, and approved by the ZBA, such that the rate of stormwater runoff from development of the building site will not exceed the rate of runoff prior to development. The engineer shall certify to the Zoning Administrator the completion of the stormwater plan.

Based upon that statement, Bill suggested that the focus of the meeting was for the ZBA to answer two questions:

- 1. Does the Trinity Engineering Plan, as far as we can determine, limit stormwater runoff after development to the same rate, or less, than stormwater runoff before development?
- 2. Are we satisfied with the process that will be used to determine that the plan has been implemented?

Everyone agreed these were the fundamental questions for the meeting. Bill also suggested that this meeting was not for the purpose of adjudicating last year's dimensional waiver decision or debating the merits of any other stormwater plan besides the one that Trinity had produced. Everyone also agreed with this.

Mr. DiStefano then thanked everyone for taking the time to be at the hearing and yielded the floor to Mr. Dupras, who explained how he did his stormwater analysis. Mr. Dupras began by noting that because this is a relatively small work site which has less than a half acre of impervious surface a Vermont DEC operational stormwater permit is not required. A construction permit also is not needed because less than one acre of earth will be disturbed.

Mr. Dupras then explained how he calculated peak stormwater runoff rates for 1, 5, 25 and 100 year storms. He referred to several graphs and charts that were projected on everyone's screen. We focused on a chart which showed that post development peak runoff would actually be slightly less than pre-development peak runoff. When asked by Ms. Wright and Mr. Dunkel to explain in less technical terms how this could occur, he referred everyone to a diagram which showed two sub-catchment locations on the property where rainwater is channeled. He said that when stormwater from one subcatchment drains faster than water from the other sub-catchment, peak runoff can be less than peak runoff before development occurs and the land is undisturbed. He used the analogy of a herd of cattle trying to get through a gate. When one group gets through the gate first and the rest of the herd passes through a bit later, it creates less pressure and easier flow than when the entire herd bunches up and tries to pass through the opening at the same time. He said the same thing can happen with stormwater runoff, and when it does additional flow control devices are not necessary. Based upon the data his analysis produced, Mr. Dupras concluded that it is not necessary to construct retention ponds on the property. Instead, in his cover letter and

during the course of the meeting, he suggested using the following methods to prevent erosion and control sedimentation:

- 1. A siltation fence must be in place throughout construction.

 Mr. DiStefano noted that he had installed such a fence when he began clearing the site more than a year ago. Mr. Dunkel mentioned that he had visited the site that afternoon and that the fence seemed intact, although he did not closely inspect it. The group viewed a short video Mr. Dunkel posted which showed part of the black plastic siltation fence.
- 2. Rip rap should be placed at the outlet of the foundation drain. Mr. DiStefano said he already had done that. Another video showed the drain and the rip rap. Mr. Dunkel asked Mr. Dupras if more rip rap was needed. Mr. Dupras indicated that what was there probably is sufficient because relatively little water will drain from those pipes.
- 3. The driveway should be built according to the dimensions, and in the location that already has been planned for it. Mr. Dupras noted that a gravel driveway of that size was included as an impervious surface in his modeling.
- 4. There shall be no further clearing at the site and no increase in impervious surfaces.
- 5. The land should be re-seeded with grass and mulch that will help absorb stormwater and prevent erosion.

Mr. Dupras concluded by saying that he could "confidently" say that if these methods are used post-development stormwater would not be a problem that subsequently would have to be addressed.

Mr. Finley said that he felt that Mr. Dupras had produced a stormwater analysis but not a plan for a contractor or excavator to follow. He asked why there were no elevations or grading lines which would guide an excavator when he was finishing the site. How would he know what the finished site should look like? He also asked what kinds of grasses would be planted, whether the debris on the property would be removed and the hole around the well filled in. Mr. Finey also raised questions about the size of the roof, whether there would be gutters, and how the roof runoff would be handled. Mr. DiStefano said there would not be gutters and Mr. Dupras displayed a chart showing the square footage of the roof which had been factored into his calculations. Mr. Finley expressed concern that roof runoff still could cause erosion problems.

Mr. DiStefano affirmed that it was his intention to remove all the debris and fill in the hole around well. He felt the black insulation on the foundation would be covered by dirt and that would provide guidance for an excavator to grade accordingly. Mr. Dupras suggested that it would not be particularly complicated for an excavator to grade the site and that the grade really can't be changed very much. He noted that the existing septic plan has contour lines and elevations on it. Grass and mulch would be used to stabilize the soil, which is routine in situations like this.

Mr. Cummings and Mr. Dunkel referred to the cover letter at the beginning of Mr. Dupras's report and the five erosion and sedimentation controls enumerated above.

Michael Simonds said he felt we were making too much out of the situation, that an extensive plan showing exactly what the finished site would look like was not necessary and that the ZBA should allow work to be restarted. Chris Cummings agreed and noted that the property is for sale, so we may not even know who will complete the work.

Bill pointed to the language in the ZBA's decision last August which says that the engineer shall certify to the zoning administrator the completion of the stormwater plan. Thus, once the work is finished there could be an inspection to determine whether it has been done in a manner that will adequately control stormwater runoff. Mr. Dupras agreed and reminded us that the overall goal is to protect Wheeler Brook.

Bill made a motion that the ZBA lift the stop work order and give Randall permission to resume work on the house under the following conditions: that the siltation fence must be in proper working order throughout construction, that rip rap must be placed at the outlet of the foundation drain, that no more impervious surface shall be added, that brush and other debris must be removed and the site properly reseeded, and that when the work is finished Mr. Dupras and Mr. Simonds must inspect the site and certify that the work has been satisfactorily completed in a manner which will control erosion and protect the brook. Vance seconded the motion.

Dawn Bower said that she was uncomfortable with the motion because it seemed like we were rushing things a bit.

Cathy Fales said that based upon her research Trinity Engineering is an excellent company, that the rest of us are not civil engineers and that she was in favor of the motion. She suggested that in the future the ZBA might be more precise when we use terms like "plan", "sketch" "drawing", etc.

Cathy Stover asked whether these constraints would apply to a new owner if the property is sold. The ZBA agreed that they would. She also asked if the driveway will be located to the right of the house and whether it would be paved. John and Randall confirmed the driveway would be located to the right of the house and would be made of gravel. Mr. Dupras noted that in Vermont a gravel driveway is considered to be impervious surface, just like

pavement, and that this had been factored into his stormwater runoff calculations.

There being no further discussion, a vote was conducted. The motion passed by a 6-2 vote. Voting for the motion were Mr. Bell, Mr. Cummings, Mr. Dunkel, Ms. Fales, Mr. Johnson and Ms. Wright. Mr. Finley and Ms. Bower opposed the motion.

Mr. Johnson made a motion that the ZBA accept the calculations made by Mr. Dupras which conclude that the rate of stormwater runoff from development of the building site will not exceed the rate of runoff prior to development. Vance seconded the motion. The motion was passed by a 7-1 vote, with Mr. Finley abstaining.

Bill thanked everyone for their time and said that he felt the work could be completed in such a fashion that the brook would be protected, which was the most important overall objective related to tonight's meeting.

John Finley moved to adjourn; seconded by Vance. All agreed. The meeting was adjourned at 8:07 PM.

Respectfully Submitted,

Bill Dunkel