

AGENDA
Inland Wetland Agency
Special Meeting
Monday, October 19, 2009
Council Chambers, Audrey Beck Building

Call to Order: 7:00 PM

Public Hearing Continuation:

W1438- Beall & Higgins- Wormwood Hill Road-Single Family House in Buffer

Adjournment:

THIS IS A SPECIAL MEETING. NO OTHER BUSINESS WILL BE CONDUCTED.

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Memorandum:

October 15, 2009

To: Inland Wetland Agency
From: Grant Meitzler, Inland Wetland Agent
Re: W1438 - Beall & Higgins - Wormwood Hill Rd

plan reference: dated revised 10.06.2009

This plan revision has added:

- a section of staked hay bales downhill of the septic system, house, and the portion of the driveway that drains towards the Stephenson/Handwerker property. A detail has been added on sheet 2.
- rip-rap protection has been added at the outlet of the footing drain.

In order to assess the information on the area drainage for this site I have done the following:

1. I poured water on the road to see where drainage actually goes after running along Wormwood Hill Rd to points along the frontage of this lot. The next day we had a heavy rain that provided further information.

I found the following:

- A. water running on Wormwood Hill Rd coming from Ashford runs to the north side of the road and to Knowlton Pond. With the rain one the day following the day I poured water on the road, a very conspicuous puddle about 40 feet long and 3 or 4 feet wide was present along the north side of the road.
- B. water running on Wormwood Hill Rd coming from Mansfield at a point where a single catch basin carries water to the north side of the road runs largely on the north side of the road at this lot location. After the heavy rain there was a continuous stream of water at the north roadside (other side of the road).
- C. the water I poured on the pavement along the front of this lot near the low point where runoff onto this lot would occur flowed to this lot from only the first 3' or so of the road width. Before water runs onto this lot water builds up and runs to the north side of the road.

I saw no sign of erosion due to water running from the edge of Wormwood Hill Rd onto the Beall/Higgins lot. On the north side of the road there is ample erosion. Interpreting this is complicated by the presence of a parking and boat launching area that is bare of plants due to frequent traffic. I did note that all of this area is at a lower elevation than the road edge and that there are two obvious paths that have been eroded by water flowing

to the pond.

2. I visited the Stephenson/Handwerker site, spoke with them, and walked the area along their drive that is downhill of flows that come from the Beall/Higgins lot. I am convinced they occasionally have a water problem on their driveway, however, my explanation for the problem differs from theirs (see below).
3. I walked the drainage basin indicated on the plan submitted by Donald Aubrey, Towne Engineering Inc., and found the limits of the 2.1 acre drainage area essentially the same as submitted by him.

The water that flows from this area runs onto the Stephenson/Handwerker land and driveway that is adjacent to a Conservation Easement held by the Town that is south of and downhill of the Beall/Higgins lot. Drainage calculations performed with the street water going to the Knowlton Pond on the opposite side of Wormwood Hill Rd showed the following:

	presently	after development
100 year storm flow	2.02 cfs ...	2.48 cfs
50 year storm flow	1.89	2.32
25 year storm flow	1.68	2.07
10 year storm flow	1.43	1.76
5 year storm flow	1.22	1.50
2 year storm flow	0.88	1.09

These flows are small and are of a size that might normally occur from one lot uphill to another downhill.

Information submitted by Mr. Aubrey showed a 15' pipe under the Stephenson/Handwerker driveway that crosses the driveway to Leander Pond. Using the 100 year storm (a worst case event) and a Bureau of Public Roads chart for determining the depth of water going into a pipe required to pass a given flow, I found that the present 100 year storm will pass through the pipe with 9.5" of water depth. After development the depth increases to 10.8" water depth. These are low flows and the 15" pipes should be able to easily carry the water. That they are not indicates grading problems or pipe blockage.

Observation of the area around the one visible 15" pipe in place shows minimal grading to lead water to the pipe inlet. This will result in water ponding along and on the driveway. Regrading of this area so that water can flow into the existing pipe(s) should eliminate or greatly reduce any flooding that now occurs along the Stephenson/Handwerker drive.

While I find myself disagreeing on some of Donald Aubrey's comments about the area drainage, I also find myself in essential agreement with his recommendations.

Commenting on the NRCS classification of the soils the indication is one of concern for potential sedimentation and erosion impacts resulting from poor construction planning. With this concern in mind he has recommended the following:

- 4.A. Diversion of the uphill drainage watershed around the construction area into a temporary sediment trap with a level spreader.

I don't agree with placement of a level spreader outlet that moves this portion of the drainage from the 2.1 acre drainage area into the adjacent 2.0 acre drainage area. Water from this second drainage area flows downhill to the Stephenson/Handwerker property in the vicinity of a second 15" pipe that I did not find on the ground. It may be buried in which case any water problem there would be buried.

The combination of double silt fence and work site grading will provide ample area within the site for controlling sediment.

- B. temporary sediment trap/rain garden - as practical.

This is essentially what I have suggested in 4.A. above.

- C. Heavy duty silt fencing with hay bales and silt fence below work areas.

With the NRCS commentary on these soils this is advisable. The revised plan includes this additional protection.

- D. "... a less erodible driveway surface than a gravel surface would be advisable such as a wearing surface of processed trap rock, etc."

A non-erodible surface is recommended.

- E. "... permanent protection or conservation of the steeply wooded areas located along and just uphill of your (Stephenson/Handwerker) property ..."

This area between the Beall/Higgins' lot and the Stephenson/Handwerker land is already under a Conservation Easement held by the Town. I don't see the need for any additional restrictions on this land.

- F. Best Management Practices are recommended.

I agree with this recommendation.

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Jessie L. Shea

From: Donald Baxter [donald.baxter@uconn.edu]
Sent: Tuesday, October 06, 2009 1:52 PM
To: PlanZoneDept
Subject: Inland Wetlands Agency

Rudy Favretti, Chair
Inland Wetland Agency

Dear Mr. Favretti and other commissioners:

I attended the hearing last night concerning the application by J.C. Beall and K. Higgins to build on a property on Wormwood Hill Road. As a long-time resident of Mansfield I support their application. They will be good and responsible neighbors. The objection to their building that was presented at the hearing was by the engineer's own admission "outside the box." In other words, he admitted that their plan meets all the town's regulations. He was just asking for some precautions, above and beyond what is usually required, to contain water run-off during construction. Beall and Higgins, through their representatives, expressed a willingness to take these extra precautions. So I don't see why the hearing was left open. There were no further objections to be addressed. I urge the commission to repeat their previous unanimous approval of the permit.

Sincerely,

Donald Baxter
5 Storrs Heights Road

Jessie L. Shea

From: Scott Lehmann [slehmann@snet.net]
Sent: Monday, October 12, 2009 10:01 PM
To: Jessie L. Shea
Subject: Comment on W1438 to Inland Wetlands Agency

Jessie, please forward this comment to the IWA. I will be out of town when the hearing on this application resumes and cannot be present to speak.

To: Mansfield IWA
From: Scott Lehmann, 532 Browns Rd., Storrs 06268
Re: W1438 (Beall & Higgins)
Date: 12 October 09

Because the applicants are friends, I did not vote or participate in discussion when this application (or its identical earlier submission) came before the Conservation Commission. However, I would like to comment briefly for the record as a private citizen.

While I would have much preferred to see this land and the rest of Claude McDaniel's farm preserved as open space, I cannot see any basis for denying this application. The septic system & driveway are about 120 ft. from a small wetland, the reserve septic area about 80 ft. Standard erosion controls during construction should render any impact on it (or Leander Pond, which lies downslope) insignificant.

While it was interesting to hear Don Aubrey in a role different from his usual one of advertising the virtues of some proposed development, his lengthy presentation on behalf of the abutters at the October 6 hearing struck me as much ado about nothing. The concern seems to be a potential for disaster, should a 100-year rain occur during the construction: rainwater would gush down Wormwood Hill Road and into the swale containing the wetland, sweeping tons of sediment onto the abutting property and into Leander Pond. This scenario appears to me to have no basis in topography: most runoff down the road during a heavy rain would flow into Knowlton Pond across the road. Even if the lay of the land supported Mr. Aubrey's claim, it probably does not make sense to require applicants to plan for such low-probability threats (expected net benefits are negative).

Scott Lehmann
532 Browns Rd.
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(860) 423-5807

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October 9, 2009

Mr. Grant Meitzler, Inland Wetlands Agent
Town of Mansfield Inland Wetlands Commission
Audrey P. Beck Municipal Building
4 South Eagleville Road
Mansfield, CT 06268

Subject: J.C. Beall & Katrina Higgins – Wormwood Hill Road, Mansfield, CT.

Dear Mr. Meitzler:

In response to concerns raised at the October 5th public hearing regarding the aforementioned application, we have enclosed 6 sets of the design plans revised as follows:

- We have added a row of staked haybales along the southwestern limit of clearing to alleviate potential erosion or sediment transport from stormwater "run on" through the construction area footprint. As stated during the public hearing, the watershed that drains to this area is relatively small (approximately one half an acre) and we do not feel that creation of a swale as suggested by the engineer for the opposition is necessary or prudent.
- The down gradient silt fence has been reinforced with staked haybales to add an additional measure of protection in the event of a significant rainfall event. A detail for silt fence backed with haybales has been added to sheet 2 of the plans.
- We have added trap rock scour protection at the footing drain outlet.

Although we believe that the plans as originally submitted and approved by the Commission depict responsible and effective erosion and sedimentation controls, we submit these modifications in an effort to quell the concerns of the abutting property owners and as confirmation that we are committed to reaching a final resolution in this matter.

Please feel free to contact me prior to the October 19th special meeting if you have any additional questions or concerns. We look forward to presenting to the Commission and completing the application process.

Sincerely:

Normand Thibeault, Jr., P.E.
Project Engineer

Cc: JC Beal & Katrina Higgins w/enclosures
Antoinette M. Webster, Esq.

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