

BOARD OF HEALTH
Special Meeting Minutes
Tuesday, January 26, 2021
7:00 PM

Remote Participation
<https://us02web.zoom.us/j/86751194223>
Meeting ID: 867 5119 4223

AGENDA

7:00 Benfield Farms Conceptual Plan for System Upgrade (Meridian Engineering)

DISCUSSION ITEMS

COVID-19 Vaccination Clinic Staffing

Attendance members: Tony Mariano Chairman, Jean J Barry, Catherine Galligan, Donna Margolies, Todd Thorsen

Attendance nonmembers: Linda Fantasia Health Agent, Mark Beaudry (Meridian Associates), Bev(?), Maureen Deery, Dave Erickson, Rob Frado(Technical Consulting Group), Phil Giffie (NOAH), Mal Nelson
The meeting was called to Order at 7:00 pm.

1. Review of Benfield Farms Conceptual Plan for System Upgrade

Meridian Associates did soil testing at Benfield Farms in October and December. They started by testing in the primary septic area where they found the soils not suitable so they moved on to testing the reserve area. They noticed inconsistencies with the testing done in 2003 (the 2003 testing was not done by Meridian). While the Northern part of the reserve area was unsuitable (around 18min/inch) they did find soils in the lower part of the reserve area (5 min/inch or better, although they did not find soils with 2min/inch as indicated in 2003). The soils were variable across both the primary and the reserve areas. They were able to basically duplicate the current design in the reserve area, although they needed to rotate it some to keep it within suitable soils and in the easement area. They saw a seasonal high water table 64"-68" below grade, which was a little higher than 2003 but fairly consistent.

Beaudry sent the Soil Evaluation Logs to Fantasia today confirming all the test pits and ground elevations. Beaudry also sent Fantasia two versions of preliminary septic plans. In Plan A, the elevations were based on a mound of .9' which Meridian had calculated in 2013 or 2014. Mariano asked about the .9' mounding versus an earlier analysis calculating 2.6' mounding. Beaudry said that the 2.6' mounding was based on the Title 5 Minimum Required Design Flows of 3900 gallons/day (design flow) whereas the observed average flow is 1045 gallons/day with a peak of 1369 gallons in 2018 and 1800 gallons in 2019. In response to a question by Frado, Beaudry said he does not expect these flows to increase because of water conservation requirements. Beaudry realized that he made a mistake in the calculations. He had shown a 2' separation to groundwater whereas the BOH under Local Upgrade Approval could waive the normal 4' separation to 3' it cannot waive it to 2'. Beaudry noted that the Perc-Rite tubing runs do not necessarily need to be level. A mound above ground level elevations, such as shown in Plan B, would need a Conservation Restriction (CR) change. Beaudry asked for feedback from the Board, since he would be going to the ConsCom meeting later in the week. Beaudry also noted that adding an aeration unit to the FAST pretreatment system will improve the quality of the effluent coming into the field from the pretreatment system.

Frado said that the contractor should be told to remove restrictive features (such features are a large part of the reason for the failure of the current system). Beaudry mentioned that someone asked if the system could be done on the recreation land. Beaudry's understanding at the time was that there was a Conservation

Restriction on the rec land but that is not the case. Still, the rec land is heavily wooded and Beaudry feels it would be expensive putting the system on the rec land. He was asked to look into that and provide more details on what expenses would be involved, it was noted that the expense could help justify a waiver to go to 3' separation. Frado asked whether the board was resigned to living within the CR. Galligan was not resigned to that; she understands that it would take time to modify the CR but she doesn't get the impression that the soils in the reserve area are as good as might be hoped. She is also unclear whether aeration with the FAST unit will work as well as hoped and noted that while they expected Micro C to take care of the problems earlier, it has not. She is also reluctant to grant a waiver because of the past problems with the operation and maintenance of the system including filing timely reports, replacing missing bolts and addressing excessive noise in the blower. Beaudry noted that the idea of aeration came from the independent consultant (Onsite Engineering, Inc). He went on to note that the Micro C system took care of nitrogen issues but led to a carbon surplus which led to BOD (Biochemical Oxygen Demand) issues. The aeration is designed to take care of the BOD issue. Mariano noted that regardless of the source of design suggestions, the ultimate design will be Meridian's and not a third party consultant. Beaudry felt the relief being requested for the 3' offset to groundwater was minimal and allowed under Title 5.

Giffie thinks that since they have taken over management of the system, it has been running well. Fantasia suggested it is worth exploring how rigid the restrictions are so that it might be possible to build the system without a waiver, especially since this is a matter of public health. Beaudry shared the CR document with the Board and noted that whereas some of the language related to existing ground elevations is very precise, it also refers to a "maximum feasible" elevation over the soil absorption field. Beaudry interpreted the spirit of the CR as having more flexibility. This might also apply to the restrictive easement which is actually a rider to the CR and which could possibly be enlarged. It was agreed that Beaudry would bring these issues up with ConsCom and consult back with the BOH before proceeding to a final design.

Barry asked why there was disagreement in the soil testing logs. Beaudry said that soils do not change but there may be a buildup of the biomat resulting in the restrictive layer in the field. Beaudry then provided additional details on the proposed design and the possibility of using the pump chamber for the aeration unit which could be a smaller FAST unit.

In order to move forward, the Board agreed to require the following information:

- A decision from the Conservation Commission on changes to the grade under the CR to eliminate the need for a waiver on the separation to groundwater
- Estimated cost of locating the system on Recreation Land
- Legal Opinion on whether the Restrictive Easement can be enlarged
- Progress report mid-February and Design by the end of February

Galligan said it should not be assumed that the Board of Health is willing to grant the waiver on separation to groundwater. It is important for the Conservation Commission to understand this. The Board of Health decision will be based on safety of the public health and environment. Fantasia suggested that Beaudry contact the Conservation Administrator about the Board's concerns so that the Commission will be prepared to respond at their meeting. Frado agreed the CR may be open to interpretation. He said the primary role of the Board is to protect the public health. Galligan suggested that the intent of the CR focused on the location of the primary field and not necessarily the reserve area. Frado and Board members were in agreement that public health should pre-empt a land use restriction. All parties agreed that the soils at Benfield were just adequate and not very good. This is reason to proceed carefully with a replacement system. Frado agreed that with poor soils the Board should err on the side of caution, especially because it is a large system. He also disagreed that the system will always have limited flows. There was no guarantee that the system will

not need to function at full capacity at some point in the future. The question was asked why a conventional system was not being considered. Frado said either way the system will require pressure dosing because of its size. Fantasia was concerned that the proposed design is the same configuration as the failed system – a FAST pre-treatment and a Perc-Rite leaching area. Beaudry said by using the same types of I/A systems they will be able to re-use some of the components. He is confident in proposing the two I/A systems.

Maureen Deery, Benfield resident and Carlisle Housing Trust (CHT) member, said there are flow limits placed on Affordable Housing. She also asked that the CHT Chair, Kate Reid, be kept informed of the Board's meetings on Benfield. The CHT is considering placing an Article on the Town Meeting Warrant to help with some of the costs of replacing the system. It will be important to have an idea of the potential costs. Mariano said he had spoken with Reid about tonight's meeting.

Beaudry thanked the Board for their comments. He does not want to move forward on a final design until he is confident that it can be approved by the Board.

2. COVID-19

Mariano said that there is a lot going on, Barry, Fantasia and Thorsen have been very active with vaccine clinic planning. Fantasia said that the Health Dept. has been granted access to PrepMod, the vaccination sign up system. Carlisle is also enrolled in the state immunization program (MIIS) and has received approval from the DPH Vaccine Unit to receive and administer vaccine. The state is rolling out new guidance on who is eligible to be vaccinated. Gines is preparing information for the website. To order vaccine the town will fill out a survey Monday morning as to the number of vaccine doses required. Unfortunately, towns cannot request more than 100 doses/week. Barry offered to do a press release because it is important to keep people informed. Mariano notes that at 100 doses/week, there will not be enough vaccine to cover any of the top groups quickly. After Phase 1 which includes health care workers, first responders and home health aides, Phase 2 starts with individuals 75+ years of age. There are 423 people in Carlisle who are 75 or older. Since the vaccine will be so limited, Fantasia suggested checking the PHN for a list of the more critical residents in this age group. The Board discussed whether to wait on advising residents about local clinics until there is available vaccine.

Betsy Fell, Mosquito editor, joined the meeting and Barry suggested the Mosquito publish a list of vaccination sites. These are currently listed on the state website. Barry also said hospitals will send out letters to people who are 75 or older. Fell is putting an article in the paper about the vaccine so she could get information from Barry to include in the article.

The vaccine advisory meeting is scheduled for Monday.

Meeting adjourned at 21:04

The next regular BOH meeting will be on 2/2/21.

Respectfully submitted,

David Erickson,
Recorder

(All documents discussed are available for review in the office of the Board of Health)