

HALFMOON TOWNSHIP
Planning Commission Meeting
June 1, 2010 7:00 pm

Present: Danelle Del Corso, Bob Eberhart, Larry Fennessey, Jordan Finkelstein, John Stevens, Joe Tylka
Absent: Lorin Nauman, Sebastian DeGregorio
Others present: Susan Steele, Township Manager; Jim May, CRPA; D. J. Liggett, CRPA; Todd Giddings, Spring Creek Watershed Commission; Mark Ralston, Converse Consultants; Melissa Gartner, recording secretary

1. Call To Order

Vice-Chair John Stevens called the meeting to order at 7:01 p.m.

2. Citizen Comments

None

3. Approval of May 4, 2010 Minutes

Motion. Mr. Eberhart moved to approve the minutes of May 4, 2010. Ms. Del Corso seconded. Vote: 5-0. (Mr. Finkelstein was not present for the vote.)

4. Reports

a. BOS Update

The BOS met on May 27. They approved Halfmoon's share for CATA buses for the next year. They also sent out proposals for bid for road work on Sentinel, James Hill, and Ike Circle.

The Open Space Board will meet on June 2 regarding Dennis Thompson's request to amend the ordinance regarding financial hardship. Mr. Fennessey asked for clarification. When Mr. Thompson submitted his application, he asked for changes in the conservation lease agreement. Now, the Township's attorney and Mr. Thompson's attorney feel the changes should be made in the ordinance, not in the lease agreement. Mr. Thompson would like to have the option of terminating the lease if his taxes increased dramatically. Currently, the only way an individual can break the lease is to prove financial hardship, receive the Open Space Board's approval, and have the land as the owner's primary source of income. Mr. Thompson owns approximately 600 acres of land. Mr. Fennessey suggested that Mr. Thompson could keep his property out of the Open Space program and just not develop it. Ms. Steele stated that this was the way the Open Space Board was leaning. Mr. Tylka said that allowing an individual to break the lease establishes a dangerous precedent and defeats the purpose of the program. Ms. Steele pointed out that Mr. Thompson is not using the property as his primary source of income, so he does not fit the requirement. Mr. Tylka also suggested that Mr. Thompson could scale back the amount of land he would put into the Open Space Program; Ms. Steele replied that apparently Mr.

Thompson once had separate parcels of land but the Township attorney at the time told Mr. Thompson that he needed to consolidate before the Open Space Board would consider his property, which he did.

Citizens have requested a return of the ice skating rink. The BOS has also requested construction of a tennis court. This summer, they will pave the stone area near the batting cages for the ice skating rink. Next year, they will construct a tennis court with fencing.

In regard to RVD, Ms. Steele stated that there is an immense amount of interest in this ordinance. (She is receiving one phone call and one e-mail daily on this issue.) Mr. Mark Maloney requested a meeting with Ms. Steele, Mr. Mark Stevenson, and Ms. Kathleen Yurchak. At this meeting, Mr. Maloney presented a four-page list of revisions from his land-use attorney. In Ms. Steele's opinion, most of the revisions focused on economic issues, rather than land use. The staff recommendation was to go ahead with the ordinance as is.

The current plan is to hold the public hearing and allow citizens to ask questions and if needed, publish the information again if further changes are made in the ordinance. The current schedule for the RVD ordinance is as follows:

June 3	CRPA and CRPC review Posting of property
June 6	Receipt of recommendations from County and CRPC
June 7	Open House to present the RVD to the Community
June 10	Public Hearing before BOS and action to enact ordinance after public hearing

The results of the senior citizen activities survey done on the primary election day (May 20) showed that seniors would like to have opportunities for fitness and guest speakers. One local resident has offered to present Zoomba Gold for local seniors. Mr. Andy Merritt will try to schedule some guest speakers

The meeting for the Five-Year Review of the Open Space Program will be held Thursday, June 3 at 7 p.m. Ms. Steele stated that the books are ready. One topic to discuss was the issue of clustering properties. Mr. Eberhart recommended that the PC should compile a list of items for specific consideration, and Mr. Tylka offered to bring the list to the OSP Board. Ms. Steele also mentioned since the committee will be reviewing the staff as part of the process, it might be helpful to look at the job descriptions of the recording secretary, secretary, and administrator.

b. Zoning Officer's Report

Mr. Piper was not present. Ms. Steele stated that the COG Codification meeting will be held Thursday, June 3, at 10 a.m. The Township has paid for the whole process through 2007, but the editorial analysis was never sent back to them. If the Township continues this process, it will cost another \$6,000. Ms. Steele's suggestion was that whatever was in place and/or revised by July or August, 2010 will be reviewed. Prior to 2007, the last time the Township codified was in 1996 or 1999.

5. Geothermal/Well Ordinance

Tonight's presentation was originally proposed by Mr. DeGregorio in February-March and then finalized by Mr. Jim May.

Mr. May and Ms. Liggett presented three general options to the BOS last month:

- a. adopt the regional well and borehole sections in the property maintenance code and do water quality testing with the Township's own ordinance;
- b. adopt just the geothermal portion of the property maintenance code and adopt the Township's own water well construction standards and water quality testing ordinances;
- c. take responsibility for all regulatory matters, construction standards, inspections, water quality testing, and geothermal and well water construction and testing.

Harris and Halfmoon Townships are still working on their well ordinances, but the other four municipalities (Patton, College, and Ferguson Townships, and State College Boro) have adopted well ordinances. This will rescind the previous Patton Township ordinance. Mr. Stevens asked to add language referring to Spruce Creek since Halfmoon is part of the Spruce Creek Watershed. Mr. May agreed.

PowerPoint Presentation: "Protecting Our Ground Water Through the Proper Installation of Residential Wells and Geothermal Heat Pump System Boreholes"

- Mr. Todd Giddings stated in his presentation that 51% of the sun's energy is absorbed by the ground annually. Geothermal heat is a completely green and renewable source of heat, unlike "hot rock" geothermal heat from molten rock. A geothermal heat pump works efficiently because for every 1 kwh of energy bought from Allegheny Power, the pump pulls 3 kwh of heat energy from the earth. (4 kwh of energy in the home divided by 1 kwh of energy purchased = a coefficient of productivity of 4) Currently, there is a 30% federal residential geothermal tax credit with no cap, effective January 1, 2008-December 31, 2016. This is why the geothermal industry is now rapidly expanding.
- Halfmoon Township is part of the headwaters of Big Spring, with 14 million gallons of water/day flowing into Bellefonte.
- The biggest concern is improperly drilled geothermal boreholes, in the same geological valley floor as all of the municipal well fields. Boreholes that aren't properly sealed can contaminate the ground water and affect residential water quality.
- Mr. Giddings explained the construction of a geothermal borehole as follows:
 - A borehole is drilled down to the desired depth.
 - A U-bend high density polyethylene loop pipe is inserted into the borehole. The problem is that people retrofitting old geothermal boreholes weren't inserting the tremie pipe and sealing the hole with bentonite grout. If there ever was a failure of an onsite septic system, the problem would only be tens of feet from a potentially improperly sealed borehole.
 - Bentonite in water swells ten times, and forms layers like a deck of playing cards. This prevents contamination.

- When drillers use limestone sand instead of bentonite grout, there is no protection from ground water contamination.
- In the event of an underground cavern in a borehole, drillers are allowed to use permeable “bridging” material but must have the top 20 feet (up to the ground level) filled with bentonite grout.
- Types of geothermal systems:
 - horizontal heat pump
 - pond loops
 - closed loop
 - open loop with discharge into a pond or discharge well
- The ordinance does not cover a.) or b.), only closed and open loop systems.
- The Model Ordinance addresses residential water wells and geothermal boreholes, isolation distance requirements, acceptable casing materials and minimum casing lengths, acceptable grouting materials and procedures, acceptable bridging and fill materials, decommissioning procedures/materials, and permit and reporting requirements. It addresses only the aspects that protect the ground-water quality (not poor heat performance if substandard materials are used).
- Training workshops for inspectors and companies drilling boreholes are already scheduled for June 18 from 8-10 a.m. and June 23 from 2-4 p.m. at the COG building. Also, on June 11, the Pennsylvania Ground Water Association’s Summer Field Conference will be held across the road from the Ag Progress location in Pennsylvania Furnace.

Mr. Mark Ralston further clarified that the intent of the ordinance is to protect ground water. He distributed a chart comparing Halfmoon’s ordinance with those from Patton Township and the Centre Region. Halfmoon’s original ordinance was in response to a problem at the Trotter Farm development. The Township also started with stringent water quality testing requirements eight years ago. Currently, Halfmoon has a scaled-down list of things to test for. Halfmoon requires 50 feet of casing and grout, while the Centre Region only requires 20 feet of casing and grout (more practical to the geothermal industry). Mr. Eberhart asked if 50 feet was better than 20 feet, or overkill. Both Mr. Ralston and Mr. Giddings said that a depth of 50 feet offers more protection and is comparable to ordinances in other states.

Mr. Eberhart asked about water quality issues, since the Centre Region ordinance does not require testing, and then asked if this type of water quality requirement could be added into the current ordinance. Mr. Giddings and Mr. May stated that a work group could accomplish this. Mr. Ralston said that Halfmoon adopted the Penn State Cooperative Extension Water Testing Fact Sheet F-104 for specific and affordable parameters of water quality.

Mr. May asked what direction the PC wanted to move on the issue of geothermal boreholes, while keeping the water quality issue separate. Mr. Ralston added that in many other states, they regulate the grouting instead of water quality. Mr. Fennessey asked if the BOS asked for an ordinance, because his impression was that most people moved to Halfmoon to get away from overregulation of COG Code enforcement. Ms. Steele reported that the BOS would like the PC to consider adopting a Borehead and Geothermal Well Ordinance or add geothermal language

to the existing water well ordinance. Mr. Fennessey's recommendation was to customize and incorporate geothermal wells in the Halfmoon ordinance on the advice of Mr. Ralston.

Ms. Steele said there are several options: if the PC adopted the Centre Region ordinance (Chapter 10/Spring Creek) separately, Code would enforce regulation of the geothermal portion but the Township would enforce water quality. One supervisor also asked to adopt the Patton Township version. The third option would be to take Mr. Fennessey's recommendation and add language to the existing Halfmoon water well ordinance.

Ms. Liggett stated that the Chapter 10 ordinance does provide inspection capability for Halfmoon Township. The disadvantage with Chapter 10 is that it is a fixed document adopted by other municipalities without much "wiggle room" to customize. Mr. Eberhart asked what the current relationship is between Halfmoon Township and Code. Ms. Liggett said that Halfmoon is subject to new construction codes, but not property maintenance codes. Mr. Tylka remembered that when Mr. Schneider attended the PC meeting on February 2, he thought there was a possibility to customize some parts of the Chapter 10 ordinance. Mr. Fennessey said that Mr. Schneider said the Township could either adopt or not adopt specific sections, but not change any of the wording. Ms. Liggett said that Mr. Schneider did not want the Township inspecting water wells while the Code Officers would be inspecting geothermal boreholes.

Mr. May asked Ms. Liggett to explain the differences between Chapter 10 and Spring Creek ordinances (adopted by Potter Township). She said that section numbering is different and wording states either Code Official or Township/Municipal Official.

Mr. Eberhart and Mr. Fennessey remembered at the PC meeting on March 2, Mr. Nauman had suggested adding language to the existing Halfmoon ordinance and ask Mr. Ralston to write/review what needs to be done. Ms. Liggett stated that the Spring Creek Model Ordinance, which includes standards for construction and inspection of water wells and geothermal wells, could be dropped into Halfmoon's existing ordinance from 2007. This would expand the small section on well construction Halfmoon already has and provide more specifics.

Ms. Steele said that it seemed as if the PC wanted to adopt Option C: the Township takes municipal control of water wells and geothermal boreholes, including construction and inspections.

Ms. Del Corso suggested reviewing Chapter 10 so that if the PC is asked why they didn't adopt it, they would have specific reasons, and Mr. Eberhart agreed. Ms. Steele said that if the PC wants to hire Mr. Ralston as a consultant, it needs to be approved by the BOS.

Ms. Liggett asked that if the PC adopts a model ordinance, who would handle the inspections? Ms. Steele said that the SEO is working well as a third-party contract and could handle these well inspections. Mr. Fennessey added that the PC could require him to attend the geothermal training as well.

Mr. May said that Mr. Schneider could attend the next PC meeting on June 15 to answer further questions.

Ms. Del Corso and Ms. Steele reviewed Mr. Ralston's chart and said this would be a good place to start to compare and decide on further action. Mr. Fennessey said that if Ms. Steele needed to bring a message to the BOS, she could state that there are components in the Halfmoon ordinance that are more protective of the water quality than in the Spring Creek ordinance; the PC would like to review which parts of the Spring Creek ordinance should be incorporated into the Halfmoon ordinance.

For the next meeting, Mr. May and Mr. Stevens suggested the PC members review the existing materials and consider long-term issues. Mr. May will ask Mr. Schneider to report different options that Code can do and present these at the next PC meeting.

7. Adjournment

The meeting was adjourned at 9:16 p.m.

Respectfully submitted,
Melissa Gartner
Recording Secretary