SPRINGFIELD TOWNSHIP
ZONING BOARD OF APPEALS
SPECIAL MEETING
February 8, 2017

Call to Order: Chairperson Wendt called the February 8, 2017 Zoning Board of Appeals Special meeting to order at 7:30 pm at the Springfield Township Civic Center, 12000 Davisburg Road, Davisburg, MI 48350.

In attendance: Ginny Fischbach
Denny Vallad
Skip Wendt
Bill Whitley

Absent: Dean Baker

AGENDA: Board members agreed to proceed with the agenda as presented**.**

PUBLIC COMMENT: None

OTHER BUSINESS:
Minutes of the January 17, 2017

Board member Whitley moved to defer consideration of approval of the January 17, 2017 meeting minutes until the February 15, 2017 meeting. Supported by Denny Vallad. Vote yes: Fischbach, Vallad, Wendt, Whitley. Vote no: None. Absent: Baker. Motion approved.

OLD BUSINESS:

1. (Tabled on January 17, 2016) Request from Kelly Katnik, 6032 Long Point Drive, Davisburg 48350 to construct an accessory building resulting in the following variances:

a. Distance from a septic system to the high water mark of Big Lake of twenty-five (25) feet rather than the one hundred (100) feet required per Springfield Township Code of Ordinances, Chapter 40, Section 40-639
b. Side setback of four (4) feet rather than the fifteen (15) feet required per Springfield Township Code of Ordinances, Chapter 40, Section 40-572
c. Front setback of six (6) feet rather than the fifty (50) feet required per Springfield Township Code of Ordinances, Chapter 40, Section 40-572

The property that is the subject of the request is located at 6032 Long Point Drive in Springfield Township and is zoned R2 One family residential. P.I. #07-28-251-017.

Ms. Kelly Katnik introduced herself to the Board.

Brian Biskner, Powell Engineering, introduced himself to the Board members. The garage has been moved back from six feet to nine feet; ten inches from the front property line to be in line with the neighboring garages with the four feet requested side setback variance. The current septic proposal has been submitted to Oakland County for their approval which they have not yet received.

Board member Whitley asked how many systems has Mr. Biskner installed at 25 feet from water's edge.

Mr. Biskner responded several; he has never seen one closer than 20 feet. The placement is governed by the adjacent wells and septics. The 100 feet distance from a waterway is designed for a conventional septic system that would be the standard tank and field.

Chairperson Wendt stated that the statement being 100 feet away from waterway deals with property that has the ability to be suitable for those standards; it is not an open ended statement, there are criteria.

Mr. Biskner replied that he was trying to explain why they sometimes have to put the septic system closer than 100 feet. They have done several systems on lake lots using pretreatment.

Chairperson Wendt asked what guarantees come with the variations of 100 feet, 75 feet or 50 feet at the max. He is looking for guarantees that they are safe from an environmental standpoint.

Mr. Biskner answered that the DEQ had a traditional septic system in mind when they set the 100 feet. The type of fluid at the end of the septic system is going to be a much stronger sewage so they like to keep it at 100 feet. Pretreatment cleans up the sewage 10, 15 or 20 times depending on different factors that you would get from a standard septic system. The type of liquid that you get out of an Advantex RT pretreatment unit is remarkably clean compared to what you to get out of a standard septic system. He stated that he doesn't know a guarantee that can be made but he can guarantee that it is remarkably cleaner and is a vast improvement on the old septic system that is there. The system proposed has a UV unit present which is the first one that he has ever done; this kills the viruses which doesn't normally get done. All that will be left in the effluent is phosphorous which was covered at the last meeting. There is very little data on how much phosphorus is left and how it will travel because of the soil profile.

Chairperson Wendt asked how many soil borings and how many different types of soil are on this property where the system is proposed and how that lends itself to create an evaluation of whether or not what they are proposing has any validity.

Mr. Biskner replied that there are three test holes in the area of the field.

Chairperson Wendt replied that this is not what he asked. How many soil borings have taken place in the multileveled area where he is putting the system? What is the stratification, what is the amount of water that will be precipitated through the various

levels of the soil as it percolates through? There was a 35 to 40-degree angle from the residence to the water's edge.

Mr. Biskner replied that there were three borings done in the area of the field. The one closest to the lake edge, Test Hole #5, 1.5 of sandy loam topsoil, 2 foot of gravel/sandy loam, ground water was not observed and it was to a depth of 3.5 feet and this is what he is what he would expect.

Board member Whitley asked what was the elevation above the water table at this soil boring location.

Mr. Biskner replied that it is 1022 minus three so they are at about 1019 so the water level is 1016.5 feet. He described Test Hole #3. It went to deeper depth of 6.5 feet and encountered ground water at 6.5 feet. It was a hand auger test and he does not know what time of year it was done. It was permeable soil at this site. This field is a field dosing field and each time that you dose the bed, there is only a few gallons that is released at once. Usually the water evaporates before it reaches to a depth of 18 inches below a septic system.

Ms. Katnik confirmed that the soil borings were done on May 5, 2016.

Chairperson Wendt asked if there was anything in the soil from the lake side to the house that would be an impairment to flow of water, such as clay. He stated that there was soil present in this area that has no significant barrier.

Mr. Biskner replied that they do not have clay but they are 4 feet above the water table. The water will go down and disperse horizontally. There is a significant level of confidence that the water from this system will never get down to the water table.

Chairperson Wendt asked about event water. On Long Point, this lot is a catch basin for water that comes off the road.

Mr. Biskner stated that generally they consider runoff negligible when they design septic systems. In this situation, there is a pretty good slope and runoff will not be a factor. He stated that many of the lake lots on Big Lake will be in the same situation if and when their septics fail. When these types of septic systems are installed, they dramatically improve the lake quality for everyone including the wells.

Chairperson Wendt asked if the formula for capillary action had been taken into consideration.

Mr. Biskner replied no; this is a level of detail that they do not get into.

Board member Fischbach asked if there was a test or alarm for the UV light.

Mr. Biskner replied that part of the maintenance program is to check the UV light.

Board member Fischbach asked how often the inspection is done.

Mr. Biskner replied once every six months.

Board members stated that it is an annual inspection.

Board member Vallad asked about the telemetry alarm system.

Mr. Biskner answered that there is an audio and visual alarm on the panel. It can be shut off manually but after a period of time, it will turn back on. Every event that occurs with that septic system is sent to the maintainer's laptop. It hooks up wirelessly through the property owner's Wi-Fi. The operational permit from Oakland County will require that there is communication between the property and the maintainer.

Board member Vallad stated that these alarm codes would be relayed to the maintainer.

Mr. Biskner concurred. He stated that the printouts that they receive are pretty sophisticated. All sanitary codes require the auditory and visual alarm and this panel with these alarms is the only thing that is required. There are not many systems that have the telemetry.

Board member Vallad asked if the owner/operator receives an email or text.

Mr. Biskner replied that you could design the system so that several different people could receive emails.

Board member Vallad asked if they have any indication from the County as to when they can expect feedback.

Mr. Biskner replied that he spoke to the sanitarian today and he said that they will do a full review but at first look, he did not see any issues.

Board member Vallad stated that it appears that the County is still finalizing the process and has not completed all of the steps yet.

Mr. Biskner confirmed that the County adopted a new sanitary code in November and they are putting the finishing touches on their Operational Permit which anything approved after November 16th is required to have. Each year they will have to pay to get the system re-permitted and will have to show the maintenance records. The County does not have this all laid out yet. The sanitary code has not changed much in regard to approving the system.

Board member Vallad reiterated that all of the steps are still being developed by the County.

Mr. Biskner replied yes; they are still working on their Operational Permit procedure.

Board member Vallad stated that the Board wants some proof that the County is looking at all of these approval procedures not just for tomorrow but for years down the road. He

agrees with an annual permit renewal procedure to make sure that the inspections and maintenance are occurring. There is detail not yet completed.

Mr. Biskner replied that the Sanitary Code is clear that there will be an Operational Permit that the owner/maintainer is required to supply them records for every event that occurs. They will also have to renew this permit every year. The details do not matter much; it matters that they have adopted the Operational Permit that they are going to require perpetual permitting and reporting on.

Board member Whitley stated that he had no further comments or questions at this time.

Chairperson Wendt asked if there was an absolute in the system that would shut it down and has a grace period to allow the occupant a window to stop using it before there is sewage back up inside the residence.

Mr. Biskner replied no. If there was a high flow situation over the system design of 500 gallons per day, there would be a panel alert sent to the maintainer. It will have a typical pump on and off cycle and the panel is going to know if the pump is on continually.

Chairperson Wendt asked if there was a malfunction that says you can't flush the toilet.

Mr. Biskner answered that if the pump fails, it will shut down. There will be an alert to the owner and maintainer and the alarm would go off. The owner has to exercise judgment to not use it.

Board member Vallad stated that everything they have seen does not address the drain field itself.

Mr. Biskner replied that the drain field is not addressed in the maintenance contract for the unit. The drain field has inspection ports which the maintainer can inspect to see if there is an issue. The health of the drain field is directly related to the health of the pre-treatment unit. He explained where the ports are located.

Chairperson Wendt asked if there was a life expectancy on the unit based on physical testing.

Mr. Biskner replied that it has to be operated properly to have long life. The first Advantex unit that he put in was in 2002 and there are no current issues with that system. It is made up of plastic materials and he estimated the life to be 40 to 50 years.

Chairperson Wendt asked if the company has done real life testing and analysis on the system.

Mr. Biskner replied yes and he summarized the history of the development of the Advantex system.

Board member Vallad stated that the Board is right where they were three weeks ago. The system has been explained and is perhaps the most appropriate system within 25 feet

of the water; it is as good as it is going to get. The data provides a reasonable expectation that the system will work fine with the information provided. The concern is still finalizing details; the agreements that have to be reached, the licensed contractors used, the notification to the Township.

Mr. Biskner stated that he read through the sample that was supplied by Supervisor Walls regarding a community septic system. He does not think they can legalize it here tonight but they can agree to build in notification to the Township for every event just like the County does. It can all be built in to a contract with the maintainer. The professional maintainers are used to doing it and they can agree to make sure it is done.

Board member Vallad stated that many of the Township's community septic provisions are applicable to this system.

Mr. Biskner concurred.

Board member Vallad asked if the applicant was opposed to any of the suggestions made and things that need to be done.

Mr. Biskner replied that he read through them and he did not see any of them that were a big problem. This is very similar to the arrangement that the maintainer will have with Oakland County and if he has to increase his rates to make sure that the Township is involved, this will not be a significant issue.

Board member Whitley moved that recognizing that existing township ordinances regarding community septic systems have been developed for multiple users of a single system, and recognizing that the appeal before the board relates to a single home site:

- **It is the intent of this motion that the requirements for any approved septic system on the subject site located at a 25-foot setback from the high water mark of Big Lake be in every reasonable aspect as similar to the community septic ordinance as possible, as it relates to operation, maintenance, township approvals, and authority of township intervention in the case of lack of system maintenance**
- **It further is the intent of this motion that the actual controlling document and legal requirements be drafted by the Township Attorney, and then submitted back to the Zoning Board of Appeals for final confirmation.**
- **It is intended that the document to be drafted by the Township Attorney include the following particularly important points:**

- **A professional operator must be engaged to oversee the maintenance and operation of the system, and that operator must be approved by the Township**
- **The owner cannot change the operator without township approval**
- **The Township has the authority to maintain, repair or replace the system if the owner fails to do so, with costs for such actions to be placed on the tax rolls for collection**

- **All requirements of this system are to be documented on a document to be recorded by the Oakland County Register of Deeds applying to the subject property**
- **The Township and OCHD shall work together on all enforcement issues, such that either party may take the lead on enforcement actions**
- **The approval of site plan shall be the latest date on the plan presented at this meeting tonight, and subsequent site plan changes shall then supersede upon approval by the Township**
- **Alarms alerting to system malfunction must include both audible and visual alarms at the site, in addition to any telemetric alerts**
- **The owner and/or operator shall indemnify and hold harmless the Township relative to any cost associated with Township intervention as a result of the owner's failure to comply with the agreement**
- **Penalties for non-compliance shall be as specified in the OCHD ordinance**
- **Installation and operation shall be consistent with Oakland County Health Department code**

With the foregoing stipulations, the request to place a AdvanTex septic system within 25 feet of the high water mark of Big Lake, per the submitted site plan, is approved. Supported by Board member Vallad. Vote yes: Fischbach, Vallad. Vote no: Wendt, Whitley. Absent: Baker. Motion failed.

Mr. Biskner asked if the Board members had any guidance for the applicant.

Chairperson Wendt replied that the applicant could call him or email him to get his opinion or any direction that they may get from him.

Chairperson Wendt asked if there was a septic system located between the house and the lake and it had to be serviced, what type of equipment could fit in that space to access that septic system.

Mr. Biskner stated that if they wanted to get a vehicle back there, they would have to get approval from a neighbor but he has seen contractors do some creative work with a Bobcat.

Mr. John Katnik, applicant's father, stated that they have already spoken to some potential installers and they could get a mini-excavator through that space. The critical thing is the well.

Mr. Biskner added that it also is possible to use a wheelbarrow.

Board member Whitley stated that he doesn't see how you can get a piece of equipment down there.

Applicant assured the Board that they could use a mini-excavator or a Bobcat.

Board member Whitley asked if the septic field has to be maintained or fixed, how would it be accessed?

Mr. Biskner replied that they would not be driving over the septic tanks. He assured the Board that they could do it using a wheelbarrow.

Board member Vallad moved to approve a side yard setback of 4 feet rather than the 15 feet required as per Springfield Township Code of Ordinances, Section 40-572 for the appeal before the Board as the existing home is currently sitting at 4 feet side yard setback for the garage which is intended on the roadside of this property and it is consistent with many small lot constructions around lakes. Supported by Board member Whitley. Vote yes: Fischbach, Vallad, Wendt, Whitley. Vote no: None. Absent: Baker. Motion approved.

Board member Vallad moved to approve the requested variance for a front yard setback of 9 feet, 10 inches for the property at 6032 Long Point Drive, Parcel ID #07-28-251-017 as the construction is consistent with most of our small lot lakefront lots and is employed in many areas around Big Lake. Supported by Board member Fischbach. Vote yes: Fischbach, Vallad, Wendt, Whitley. Vote no: None. Absent: Baker. Motion approved.

BOARD COMMENT: None

ADJOURNMENT:

Board member Whitley moved to adjourn the meeting at 8:53 pm. Supported by Board member Vallad. Vote yes: Baker, Vallad, Wendt, Whitley. Vote no: None. Absent: Fischbach. Motion approved.

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Erin Mattice, Recording Secretary