

Minutes of a Meeting of
BOARD OF ZONING APPEALS
Held July 19, 2012

Members Present: Bruno, Dostal, Norton, Tyo

Absent: Burke, Campbell, Taylor

Also Present: Dan Galli, Director of Building and Engineering

Audience: Ronald Gibson, Stephen M. Schill, John Suter, Bill Clements, David Maddux, David L. Tadych

Chairman Norton called the meeting to order at 7:30 p.m.

A copy of City of Bay Village Codified Ordinance 1127.01 was posted and Mr. Norton advised that the code states that the Board shall consist of seven electors of the City not holding other municipal office or appointment. If all members are not present at a meeting, the applicant may request a delay so that all members may be present. An applicant may delay a decision up to two times.

Motion by Dostal, second by Bruno, to approve the minutes of the meeting held July 5, 2012 as prepared and distributed. **Motion carried 4-0.**

Susan Nottingham
25926 Lake Road

C.O. 1360.10 (c) Variance for 2 gas wells located less than 200 ft. from new dwelling
Special permit for Generator

Mr. Norton stated that the Board has had an opportunity to visit the site and review the application.

Mr. Stephen M. Schill of Schill Architecture LLC, Charles Morgan, LLC, architect for Mr. and Mrs. Nottingham, the property owners, addressed the Board. Mr. Schill introduced Mr. Ronald A. Gibson, P.E., Ronald A. Gibson & Associates, Inc., a petroleum engineer who has worked with the Nottinghams prior to them purchasing the lot at 25926 Lake Road.

Mr. Norton acknowledged receipt of a copy of Mr. Gibson's letter to Mr. Stephen M. Schill dated April 26, 2012 relative to the gas wells on the properties at 25826, 25912, and 25926 Lake Road.

July 19, 2012

Mr. Norton asked Mr. Gibson to address the Board regarding the current technology of gas wells. He noted that at some time in the past, the City Council of Bay Village set up regulations for this type of use. There have been occasions when a home was allowed to be built over a non-producing well that had been capped and sealed according to regulations. Vaulting and venting techniques were part of the regulations for capping and sealing. Mr. Norton stated that he is not aware of where a house is able to be constructed on, or very near, a well that is producing. He asked Mr. Gibson to provide information for review of the proposal in light of today's technology.

Mr. Gibson stated that he does not understand the requirement of 200 feet, as a new well can be drilled within 150 feet of a domestic dwelling in the State of Ohio. In most cities you can build a house next to a well but you can't drill a new well next to a house. There are houses that have been built in the last ten years in the city very close to wells, i.e., next to the footer. The main thing is to make sure there is no chance for gas to migrate into the house. In this particular situation, vaults will be put in that will be vented away from the home around the well. Most of the wells have a brick vault around them, sometimes with a concrete floor, and can either have a stone top or wooden top. If there is any migration of gas alongside the pipe, it must be diverted away from the dwelling. The wells on the Nottingham's property are not leaking. Both have been inspected and tested. One was flow tested this past week for 72 hours. The other well was not leaking on April 26, 2012, when the letter was written to Mr. Schill regarding an inspection of the properties. It was witnessed producing gas into the old home when the temperature was five degrees outdoors. The gas was racing through the regulator and going into the furnace. There are no leaks and the wells are in a good area where there haven't been any casing failures. If there is anything that leaks out of the casing in the next 100 years, it would rise out of the ground alongside the pipe into the vaulted area and be vented out to the side. What is sometimes seen is that the casing gets a hole in it across from the ground water.

Mr. Gibson explained the way that wells are made. He stated that basically a hole is drilled and a six-inch water-well casing is dropped to 175 feet, or a strong water flow. They drill through it and pound the rock with a chisel at the end of a line, turning the rock into mud. A baler is used to pull the mud out. They drill down to 850 to 1000 feet in depth. Since they do not put cement around the back sides of the wells, the ground water at about 150 feet corrodes the pipe causing a leak and the pipe to fill up with water. If nothing is done quickly, the water goes down and soaks the shale that the gas is coming out of, turns the shale into mud, and the well is ruined. It is either plugged immediately or the state comes in to plug. The basic construction of the well is 175 feet of pipe and then an open hole, like a cave. The western well on the Nottingham property is dry. The well was tested and should make 5 to 7 Mcf per day, continuous. The other well will do 7 to 10 Mcf per day, saving the homeowner \$11,000 per year in heating costs. The well should last another fifteen years.

July 19, 2012

Mr. Norton commented that most people these days are in favor of anything that is eco-sensitive. As a general idea, the Board would be in favor. There is concern because the three feet distance from the dwelling on one well seems to be a radical departure from the 200 feet required by ordinance.

Mr. Norton further noted that information was distributed this afternoon from Dan Galli, Director of Building and Engineering, who has consulted with Fire Chief Lyons regarding the gas wells and proposal at 25962 Lake Road. Chief Lyons has conferred with Norburt Lowder, Mineral Resources Inspector with the Ohio Department of Natural Resources, and Mr. Lowder has offered the following additional recommendations:

- 1) That a minimum distance of 50 feet from any structure be maintained from any gas well (active or plugged/capped)
- 2) If either or both wells are active, that the owners fulfill all requirements of the Ohio Department of Natural Resources (including registration, permitting, additional insurance, etc.)

Fire Chief Lyons further states that in his opinion the recommendations made by both Mr. Gibson and Mr. Lowder would be the *minimum* level of safety requirements needed for the Board of Zoning Appeals to consider a variance of the code regulations.

Mr. Norton noted that one of the wells is 73 feet from the dwelling and one is 3 feet from the dwelling. He recommended that the Board of Zoning Appeals receive additional input and information prior to hearing this request before proceeding further. Cities in the near geographical area will be consulted to determine their codes regarding construction of dwellings near gas wells.

Mr. Gibson related his experiences of construction in other cities near or on gas wells. He noted that the well under consideration has low pressure of 42 ½ maximum pressure. In order to offer an equivalent for consideration, he stated that the line pressure in front of the city hall building is probably 35 pounds.

Mr. Norton asked what state level authorities have a say in wells involved in residential neighborhoods. Mr. Gibson stated that the sole governing body in the State of Ohio for gas wells is the Ohio Department of Natural Resources, Division of Oil and Gas Resource Management. Mr. Gibson stated that the Ohio Department of Natural Resources has no regulation where you can build near gas wells; they expect local building departments to manage that issue.

July 19, 2012

Mr. John Suter asked if the gas is odorless. Mr. Gibson stated that it has a musty odor. Mr. Suter asked if the owner of the property would be aware that he has a gas leak. Mr. Gibson stated that detection would be difficult.

Mr. Bill Clements stated that he is a long time neighbor, for approximately 40 years. Sometime since 1970, the current well being discussed was drilled and the former property owner was connected to it. Mr. Clements asked if the Nottinghams are asking to connect to both wells. Mr. Schill stated that they envision taking a gas line from the vault north and around the perimeter and tying it into the other well. Mr. Clements stated that the former owner was connected to Columbia Gas Company and when the pressure was high she sold the gas to the Columbia Gas Company. If the pressure was down, the valves reversed and she was using Columbia Gas. Mr. Gibson explained that this procedure is now protected by a three way valve. It is either the gas well going into the house, or the street gas coming into the house. It cannot be done simultaneously. A more sophisticated method is an automatic pressure cut-off valve, which was explained in detail by Mr. Gibson.

Mr. Dave Maddux, 265 Parkside Drive, neighboring property owner, stated that he is not particularly worried about the construction. His only thought is that he does not know if he would have built so close to an existing well if he knew it was there. He would have kept more of a distance from the well.

Mr. Galli asked how the technology has changed in the last 40 to 50 years regarding the valves and other equipment. Mr. Gibson stated that the same regulators used since the 1950's are still used. Filters are set up to reduce moisture for longer life of the regulators. Inspections are conducted periodically. There are no mandates for period inspection for these domestic, exempted wells. The plastic pipe will last forever. A suggested routine is for a licensed pipe line regulator installation technician to inspect everything to make sure the set points are holding.

Motion by Tyo, second by Dostal, to table the request of Sue Nottingham of 25926 Lake Road for a variance to construct a dwelling within 200 feet of two gas wells, pending further review and receipt of additional information. Mr. Bruno commented that he would like to receive information as to how many active wells are currently in Bay Village under the type of arrangement where they are heating a home, as well as what type of active wells are active but are not heating a home and have not been capped, and any other instances of homes that are in consideration for this type of arrangement, since this may become a trend. Mr. Bruno also asked for specific information regarding what is located physically at ground level and above ground level where this well is located, since it is so close to the house. Mr. Bruno noted that he does respect the comments that we do have gas lines coming into our homes that are a few feet below ground level. Mr. Norton would also like information concerning the codes for gas wells in

Board of Zoning Appeals
July 19, 2012

neighboring communities. Mr. Bruno would also like to know, for the record, the distance between the gas well that is 73 feet from the proposed home, and the residence to the east.

Roll Call Vote: Yeas – Bruno, Dostal, Norton, Tyo.
Nays – None.

Motion carried 4-0.

Councilman Tadych suggested that the Board ask the corporations that provide gas to homes for a definition of an insignificant leak of gas, as indicated in Mr. Gibson’s findings noted in his letter of April 26, 2012 concerning the non-producing well at 25912 Lake Road.

In regard to the special permit for a generator, it was **MOVED** by **Tyo**, second by Dostal, that a special permit be granted to the property located at 25926 Lake Road for the installation of a generator, with test runs only performed once per week between Monday and Saturday, between the hours of 8 a.m. to 5 p.m., for no longer than 30 minutes, in accordance with manufacturer’s recommendation, and that year-around screening to the west be provided to block the unit from view.

Roll Call Vote: Yeas – Bruno, Dostal, Norton, Tyo.
Nays – None.

Motion carried 4-0.

There being no further business to come before the Board, the meeting adjourned at 8:35 p.m.

Jack Norton, Chairman

Joan Kemper, Secretary