DECISION
TALBOT COUNTY BOARD OF APPEALS
Appeal No. 19-1692

Pursuant to due notice, a public hearing was held by the Talbot County Board of Appeals (the Board) at the Bradley Meeting Room, Court House, South Wing, 11 North Washington Street, Easton, Maryland, beginning at 6:30 p.m. on May 6, 2019, on the Application of **GARY and MARIANN RADZIEWICZ** (the Applicants). The Applicants are seeking approval of a variance that would allow replacement of existing HVAC mechanical equipment located in the crawl space of an existing dwelling unit with new HVAC equipment that will be located partially below the minimum floor protection elevation of seven feet (7') above mean sea level.

The request is made in accordance with Chapter 70. Article II, §70-16-1 of the Talbot Floodplain Management Ordinance of *Talbot County Code* (the *Code*). The property owners are Gary and Mariann Radziewicz and the property is located at 26362 Westerly Road, Easton, Maryland 21601 in the Rural Conservation (RC) District, and is shown on county tax records as Tax Map 41, Grid 14, Parcel 274, Lot 3.

Present at the hearing for the Board of Appeals were: Phillip Jones, Chairman; Frank Cavanaugh, Vice Chairman; members Paul Shortall, Jr., John Sewell and alternate member Zak Krebeck. Anne C. Ogletree served as attorney for the Board of Appeals. Brennan Tarleton, Planner I, and Miguel Salinas, Assistant Planning Officer, and Douglas Reedy, Floodplain Management Coordinator were in attendance.

The Chairman inquired if all members had visited the site and received affirmative responses.

The following Board exhibits were then offered and admitted into evidence as indicated:

Exhibit 1. Application for a Floodplain Management Ordinance Variance with attachment A;
Exhibit 2. Copy of tax map with subject property highlighted in yellow;
Exhibit 3. Notice of Public Hearing to be published in the Star Democrat;
Exhibit 4. Newspaper confirmation;
Exhibit 5. Notice of Public Hearing & Adjacent Property Owners List;
Exhibit 6. Standards for a Floodplain Ordinance-Variance Standards with attachment B;

Exhibit 7. Staff Report prepared by Douglas Reedy, Floodplain Management Coordinator;
Exhibit 8. Sign Maintenance Agreement;
Exhibit 9. MDE letter from Kevin Wagner dated 05/03/2019;
Exhibit 10. Authorization letter;
Exhibit 11. Independent Procedures Disclosure and Acknowledgment Form;
Exhibit 12. Aerial Photo;
Exhibit 13. Deeds (3);
Exhibit 14. Finished floor elevation certification
Exhibit 15. Talbot County Floodplain Management Ordinance;
Exhibit 16. Letter from Zach Smith with attachment received 04/04/2019;
Exhibit 17. Site Plan received 03/20/2019.

Mr. Jones requested that those who might wish to testify rise and be sworn. All witnesses were then sworn. He invited the Applicants to tell the Board about the project.

Mr. Zack Smith, Armistead, Griswold, Rust and Wright, 113 Bay Street, Easton, Maryland introduced himself and explained that he represented the Applicants, Gary Radziewicz, and Mariann Radziewicz. He thought the Board might find some of the history of the property important. The Applicant purchased the subject property in late 2013. The residence was constructed in 1987, and an HVAC system was installed at the time of construction. The existing system appears to be the original system. It was properly permitted at the time the structure was built. The Applicants planned substantial renovations, but, at the time those renovations commenced had no plans to replace the original HVAC system. During the construction process it was determined that the system had to be replaced. It cannot be replaced without a variance as there is not enough clearance between the flood protection elevation and the lowest finished floor of the structure to replace the system in its current location.

The first witness for the Applicants was Mr. Gary Radziewicz, 6029 Canterbury Drive, Easton Maryland 21601. He told the Board that he and his wife have been county residents for about twenty-eight (28) years. They purchased the Westerly Road property about five (5) years ago as a retirement home. The renovations were planned as the Applicants wished to retire to the new residence and downsize from their existing home. The residence was dated, and they began the renovation project to create a more open floor plan while using the same footprint as the original structure. After renovations were well underway it was discovered that components of the existing HVAC system were

damaged, provided a home for black mold, and had to be replaced for the health and safety of the residents. The HVAC components currently installed in the crawl space consist of an air handler and associated ductwork. The Floodplain Management Ordinance (FMO) requires that the mechanical equipment and ductwork all be located a minimum of two feet (2') above mean sea level. At this site mean sea level is five feet (5'). This requirement mandates that the equipment be installed above the seven foot (7') mark. As the finished floor elevation of the lowest existing floor is seven and sixty-three one hundredths feet (7.63') above mean sea level, Mr. Radziewicz believed that it is impossible to meet the FMO requirements. The Applicants simply wish to replace the existing HVAC system in the same location. This is the reason they have requested the variance.

Mr. Jones asked if the Applicants were aware of the potential for flooding and whether they had considered raising the house structure. Mr. Radziewicz responded that they had considered shifting the house location but the septic system location would not permit that action. They had also considered raising the structure but discarded that idea due to anticipated cost and design issues.

Mr. Smith added that if the Applicants were building today, they could alleviate the problem easily by changing the construction plans. However, they are working with an existing structure and are limited by its footprint.

The Applicant's next witness was the contractor, Jay Cappa 3025 Rabbit Hill Road, Easton, Maryland 21601. Mr. Cappa is the general contractor for the project. He has been licensed as a contractor for thirty-five (35) years. He confirmed that the original intention had been to keep the existing HVAC system, but he discovered black mold and water in the crawl space and ductwork – not necessarily from tidal flooding but from groundwater due to the very wet conditions of the last several years.

Answering a question posed by Mr. Smith, Mr. Cappa stated that the house design, which included cathedral ceilings, required that the system be located in the crawl space to be efficient. In his opinion, as an experienced contractor, the only reasonable way to continue the project was for the HVAC equipment to be replaced in the original location.

Mr. Smith submitted Applicants' Exhibit 1 and 2, pictures of the mold present in

the existing ductwork.

Mr. Jones wished to know if there were going to be electrical components in the crawl space, and whether they would have all of the appropriate seals and water resistant features required. The witness stated that the materials would meet all requirements of the FMO. He added that an electrical disconnect would be located close to the equipment to enable servicing the unit, but the subpanels as well as the external equipment would be located above the flood protection elevation.

Mr. Jones commented that the Board had received a letter from the Maryland Department of the Environment (MDE) suggesting that the public interest would be affected by a decision allowing the variance. He believed he understood Mr. Smith's response -- that the action taken would only affect the Applicants' property and asked if his understanding was correct. Mr. Smith agreed. The Chairman then asked Mr. Smith to address MDE's argument that the granting of variances in general could affect flood insurance rates for the entire county – as the county currently receives a discount for rigorous enforcement of the FMO.

Mr. Smith first acknowledged that wholesale granting of variances to the FMO might affect the county's favorable rates but pointed out that MDE had approved the county's FMO which includes a variance procedure for unusual cases. He believed that the Applicants' situation was unique. He added that in his discussions with Mr. Reedy, the Floodplain Management Coordinator, he understood that gentleman was unaware of similar variance requests.

Mr. Jones noted that there were two issues that Mr. Smith needed to address (1) whether the variance may be contrary to the public interest and (2) whether there were special conditions in this case, so that a literal enforcement of the requirements of the ordinance would result in unnecessary hardship.

Mr. Smith felt that the situation was unique because the Applicants were constrained by the footprint of the house as well as the existing floor elevation. Not allowing the replacement of the existing HVAC system in its current location would result in unnecessary hardship by requiring the Applicants either to go without a usable system or would result in substantial cost if the Applicants were required to raise the entire structure.

Mr. Krebeck asked for some clarification. He acknowledged that he was having difficulty understanding why, with an open floor plan, it would not be possible to relocate the equipment. Mr. Cappa stated that first floor systems were generally in the crawl spaces while second floor systems were generally located in the attics.

Mr. Jones commented that the Board members were not experts. He was aware of the placement of HVAC systems in homes he had owned -- some were in the crawl space, some in the attic and some on the first floor. The Board members were looking to Mr. Cappa, the expert, to explain why this was the only practical location for the system in this project. The Board wanted to hear the expert's opinion of the most practical way to cool the residence. The members were expecting that the witness would be able to educate them so that they could adequately evaluate the request.

Mr. Cappa emphasized that having the equipment in the crawl space made it easier to "push" air. He explained that one had to be concerned not only with pushing out air, but with the air returns, which are generally not all located in the same part of the residence. If the air handler is on the first floor the duct work will have to run up through the walls and then down the length of the house, thus reducing the ceiling height. The system will have to work harder and be less efficient.

Mr. Cavanaugh inquired if there will be only one air handler. The witness replied that there are two (2) zones one for each floor. Responding to a question from Mr. Shortall, he clarified that each zone has its own air handler. The existing system has the same configuration.

Mr. Cavanaugh opined that the heat pump on the outside will be smaller with a geothermal system, but the air handlers will be the same size as those currently in place. He referred Mr. Smith to the MDE's correspondence. He asked if the proposed improvements would meet all the requirements set out in the MDE letter. Mr. Smith believed that Mr. Cappa could confirm that the proposed improvements do meet those requirements.

Mr. Cavanaugh noted that the FMO required flood openings (vents) in the foundation. Mr. Cappa agreed, explaining that the property now had existing foundation vents. New flood vents were to be installed. They have louvers that allow water to flow in and out according to exterior or internal pressure. He added that there are two (2) sump

pumps underneath the residence to assist in getting water out of the crawl space. He explained that he had found approximately one (1) foot of water underneath the house when the project first began as the original sump pump had stopped working.

Mr. Shortall inquired if water flow in and out of the louvers would be impeded if the sump pumps were on. Mr. Cappa explained that the pumps were supposed to come on automatically when any water entered the crawl space, however, the louvers would only be activated by tidal surge, so that the pumps would not interfere with the louvers' ability to handle tidal surge. He also opined that the sump pumps by themselves would not be able to handle the water a tidal surge produced.

Mr. Sewell asked if there were separate vents for inflows and outflows. The witness explained that they were the same vents, but that the louvers could move either way -- to allow water in or to allow it to go out.

Mr. Smith posed a hypothetical question -- if there comes a time when the sump pumps are not working and the water in the crawl space is high enough -- would the louvers activate and allow water to flow out?

Although he believed that it might be possible, Mr. Cappa could not give a definitive answer. He added that the house was supposed to have had flood vents when constructed, but they were not installed in the flood openings. The openings were there, but new vents needed to be put in. He clarified that the new cooling equipment would be elevated (suspended on the floor joists) as were the existing HVAC elements. Mr. Cavanaugh commented that there were no fuel tanks involved.

Mr. Reedy asked if he could add some information regarding the flood vents. There are two types – a vent that remains permanently open, and an engineered vent. The open vent has a screen installed to prevent flotsam, insect or animal intrusion into the crawl space; the engineered vent is louvered. He added that the engineered vent is generally considered the safest. The vent is "clipped" so that it remains closed until water pressure releases the clip and opens the louvers. The residence does not currently have approved flood vents, but the plan is to remove the existing vents and add approved vents. They are designed to be placed one foot (1') above the highest grade outside or inside when installed. In response to a query from Mr. Smith, Mr. Reedy recommended that the existing vents be removed and engineered vents be installed. As the residence

was constructed in 1987, Talbot County had a flood ordinance at the time, and was a part of the national flood insurance program, so he believed that the height of the flood openings would be adequate under today's ordinance.

Mr. Krebeck asked if Mr. Reedy concurred with the position taken by MDE and by the county staff. The witness responded that he did.

Mr. Krebeck noted that the staff report suggested that the object was to minimize the cost of repair of flood damage to the air handler and other components of the HVAC systems. Mr. Cappa stated it was not a problem with respect to the air handler, but might be an issue with ductwork where the ductwork was not sealed or watertight. He had done research and would be using duct material similar to PVC that was sealed and approved for use even if inundated.

Mr. Smith offered Applicants' Exhibit 3, a manufacturer's brochure pointing out a paragraph (located on the third page) stating that the ductwork had been tested and could withstand substantial water pressure for a period of seven days,

Mr. Krebeck wanted clarification of the difference in references to the lowest floor. Mr. Reedy explained that in May of 1985 Talbot County had accepted the then existing flood insurance rates maps developed by the Federal Emergency Management Agency (FEMA). Those maps were premised on a measurement in accordance with the National Geodetic Vertical Datum of 1929 (NGVD 29) in use at the time.

In 2016 new flood insurance rate maps were prepared by FEMA. The newer maps have a higher accuracy and are based on measurements contained in the North American Vertical Datum of 1988 (NAVD 88). The difference in accuracy is what one sees reflected in the MDE letter, a difference of seventy-seven one hundredths feet (0.77'). The application of the NAVD standard results in a slightly lower minimum flood protection elevation that is rounded up to seven feet (7') for use by the national flood insurance program in determining rates.

Mr. Cavanaugh commented that the application of the NAVD 88 standard complies with the requirement of the FMO that there be two feet of 'freeboard' between the mean sea level and the lowest finished floor. Mr. Reedy concurred. Mr. Cavanaugh asked the contractor confirm that all ductwork in the crawl space would consist of the sealed duct material described in Applicants' Exhibit 3. Mr. Cappa stated that it would.

Mr. Cavanaugh asked if the Applicants had the opportunity to look at the astronomical cost that might apply to flood insurance for the property. Mr. Cappa opined that the cost should not increase, as the existing system is already located in the crawl space and that fact is already taken into consideration in the Applicants' existing flood insurance rate. Mr. Cavanaugh suggested that given the natural disasters and floods that have ravaged the country in recent years he believed FEMA was becoming more stringent in its standards. Rates have gone up. Referring to the MDE letter, Exhibit 9, he inquired if this variance would affect the county, and wondered if that effect was something the Board needed to take into consideration.

Mr. Reedy commented that over time variances accumulate. Talbot County has been in the national flood insurance program since the seventies, and has been in the community rating system, a voluntary part of the national program. Because Talbot County has gone above and beyond that which the national program requires. Talbot must be recertified every year at which time the variances are considered. Every five (5) years a more in-depth review is done, and the end product of both the recertification and the review establishes the rate for the county. Currently the county can offer homeowners in special flood hazard areas a discount of ten percent (10%) on flood insurance rates.

All variances are reported both to the federal government and MDE, Any flood plain variance has to be reported, but it is the accumulation of variances over time that negatively affects the flood insurance rates and the discount the county currently offers. Mr. Shortall paraphrased noting that while one variance might not affect the rate, ten might. Mr. Reedy agreed.

Mr. Jones asked how many total variances had been granted. Mr. Reedy stated his research showed only one other. Mr. Jones observed that he believed the Board had had one other request for a variance during his tenure. Mr. Shortall was uncertain when or if another similar request had been made. Upon reflection, Mr. Jones believed there were two earlier requests, one for a homeowner, one for the Miles River Yacht Club as its electrical panel was on the dock and had been severely damaged by Isabelle. He acknowledged that overall there had been very few. He did not believe that any of the other Board members had heard a request for variance of the FMO.

Mr. Reedy told the Board that he did agree with MDE's comment that there be a

flood elevation certificate that documented the elevation of the lowest finished floor and mechanical systems. Not only does appropriate flood venting affect the flood insurance rates, but so does the location of the electrical systems and the HVAC equipment. Having an elevation certificate that shows the location of the system. If below the minimum flood protection elevation may affect the flood insurance rate for that property. The certificate is a vital part of establishing the flood insurance rate for the property.

Mr. Smith wished to clarify that the increase would be for the Applicant only. Mr. Reedy disagreed. The variance, if granted, could be counted against the county in the annual recertification or the five (5) year review. The first thing the national flood program looks are elevation certifications – either those in issued in error, or those that disclose improvements constructed within the base flood elevation. There has to be ninety percent (90%) compliance with the FMO in those certificates for the county to remain in the community rating system.

Mr. Cavanaugh asked Mr. Cappa if he anticipated a problem if elevation certificates were required. Mr. Cappa asked if the requirement applied only to new systems or service, or whether the replacement system and service were also required to have the certification. Mr. Reedy replied that if there were new panels or sub-panels they would have to comply with the elevation certificate criteria, but if the panels were not changed, then they did not need to be located and certified. Since this project falls within the definition of 'substantial improvement' all other requirements of the FMO must be met.

Mr. Cavanaugh posed a hypothetical: if the variance is approved and several years later the panel or air handler have to be replaced would an elevation certificate be required? The response was yes, it would.

Mr. Jones asked if there was other information that Mr. Reedy wished to share. The witness explained that in Talbot County the elevation certificates are not recorded with the deed. They are county records kept to show compliance with county ordinances. Mr. Jones understood that to mean that the certificate confirms that the lowest finished floor referred to in the ordinance is above the flood protection zone. The witness agreed, and explained that the 'lowest floor' could be a basement floor if below grade, but the lowest finished floor (above which is living space) is the floor referred to in the FMO.

Elevation certificates are critically important in making the proper determination.

Mr. Jones asked if the provisions of *Code*, §70-40 C applied. He first wished to know if the Board's written decision was required to have specific language notifying the Applicant that his rates might increase. Mr. Reedy stated that the notification was required. The Chairman then asked if Code §70-41 B required that the variance be recorded. Mr. Reedy responded that it did not, as it referred to the lowest floor (meaning a basement or crawl space), rather than the lowest finished floor.

Since there was no additional public comment, the Chairman opened the hearing for Board discussion.

Mr. Shortall stated he believed the request to be reasonable. It would have been nice if the issues with the existing system had been discovered at an earlier date, but that had not happened.

Mr. Cavanaugh cautioned the Applicants not to be "penny wise" on any issues involving the crawl space or system components installed in the crawl space. He observed that when he first looked at the materials it seemed to be an easy decision, but after having read the MDE letter, Exhibit 9, he is now aware there is a possibility that the request could affect the county as a whole. However, in this matter he believes that the Applicants and the contractor understand what is at stake, and does not believe they have any other reasonable or practical options.

Mr. Sewell believed that the request is reasonable, so long as all the conditions the Board will impose will be met.

Mr. Krebeck also believed the request reasonable, provided the conditions in the MDE letter are met and the air handler and ductwork are located as high as possible within the crawl space.

The Chairman noted that there were a lot of houses built in this time period and many of them are in low areas. This is one of those cases in which the Board is faced with a house that has been there. It may be possible to elevate or raise it, other people have done so with similar structures. However, here the reasons Mr. Radziewicz gave for not doing so are reasonable. In this specific situation, the impact is really just on the homeowner. There may be some cumulative effect on the public when reviewed by government regulators, but here the risk is really on the homeowner. In balance, Mr.

Jones believed the request is reasonable.

There being no additional discussion, the Board made the following findings of fact and conclusions of law based on the Applicant's written responses, the testimony and the evidence presented:

1. The Applicant has submitted a written application for the proposed variance.

2. The public hearing was properly advertised and posted, and the adjacent land owners were properly notified. Exhibits 3, 4, 5 and 8.

3. The residence on this property was built in 1987 and was properly permitted at the time. The existing HVAC system was installed during construction of the property, but is currently unsafe due to water intrusion and mold in the system.

4. The Applicants purchased the property in 2013 planning to renovate and use it as a retirement home. At the time they were unaware of problems in the HVAC system and had not planned to change out the existing system,

5. Renovations were underway at the time the mold issue was discovered.

6. Relocating the residence is prevented by existing septic fields and sewage reserve areas. Elevating the structure would require redesign and is exceptionally costly. The Applicants filed this variance to allow them to replace the existing HVAC system components in the crawl space with new components. The new components would be partially below the minimum flood protection zone and subject to flood damage.

7. The lowest finished floor of the structure based on NGVD 29 standards is seven and sixty-three one hundredths feet (7.63') above mean sea level. The residence is located within Special Flood Hazard area "AE" with a one percent (1%) annual chance of floodwaters reaching a height of five feet (5'). Hurricane storm surge of between four (4') and twelve feet (12') is a possibility. The property's minimum flood protection elevation under the FMO is seven feet (7').

8. The variance request is to replace the interior crawl space components of the HVAC system with new components. Those components would be partially below the minimum flood protection elevation and susceptible to flooding. The exterior components of the new geothermal system are to be elevated above the minimum flood protection elevation. No impact on neighboring properties is anticipated from storm flooding.

9. There is no likelihood of erosion from the replacement of the system components in their original locations. There will be no ground disturbance.

10. The potential impact of future flooding on the proposed improvements would be identical to those impacts that are potentially present at the current time. There might be flooded ductwork, a damaged air handler, water logged insulation, and water damaged wiring. Potentially all of the damaged property within the crawl space could become contaminated with mold. As a result of flooding, the property owners may be required to replace the damaged ductwork, insulation, wiring and mechanical equipment. The property owners might be required to vacate the property until repairs were complete. Increased flood insurance premiums are also a foreseeable consequence of property damage due to flooding.

11. The requested variance will have no impact on property access, public or community roadways or public services. Hurricanes, flooding or other natural disasters will always create stresses on government services and infrastructure and may affect the government's ability to assist with storm/disaster related evacuations. The installation of new HVAC components will not increase or diminish the possibility of disaster related stresses or required evacuations.

12. The location of the septic system and sewage reserve areas on the property prevent relocating the dwelling. The cost of elevating the structure would make that alternative unreasonable. Relocating the system components to the first floor will create inefficiencies in air delivery and return. Since the structure and its components cannot be rearranged, the installation of new components in the HVAC system will have no effect on the potential flood damage for this structure.

13. This residence is not involved with or used in conjunction with commercial waterfront activities. The replacement of HVAC system components in the residence is not a functionally dependent waterfront use.

14. The installation of new HVAC components will complement the use of the structure on the property as a residence, and that use is consistent with the county's comprehensive plan and the critical area ordinance.

For the reasons set out in the Board's findings, Mr. Cavanaugh made a motion to approve a variance to allow the replacement of existing HVAC components located in the

crawl space of the existing dwelling with new HVAC mechanical equipment that will be located partially below the minimum flood protection elevation of seven feet (7') above mean sea level, to include all MDE and staff recommendations as conditions, to include the use of engineered flood vents; and include the requirements of *Code* § 70-40. Those conditions are:

A. Flood Openings shall be required in enclosures below the flood protection elevation and shall meet all requirements of *Code* § 70-28 B(3).

B. To provide increased flood damage protection for the HVAC system, engineered flood openings (vents) shall replace the existing openings (vents) in the foundation. To meet the minimum National Flood Insurance Program minimum standard requirement, the Applicants shall use engineered flood openings that meet the requirements of *Code*, Ch. 70, §§ 70-28 B, 70-50.

C. Fuel tanks (if any) shall be anchored to prevent flotation, collapse or lateral movement. *Code* § 70-23.

D. To minimize the cost of system replacement/repair post flooding, the new HVAC system components, i.e. ductwork, air handler, etc. shall be composed of flood-damage resistant materials wherever possible and shall be constructed to prevent water from entering the system.

E. Any new exterior HVAC unit(s) shall be elevated to or above the minimum flood protection elevation and ductwork located below the minimum flood protection elevation shall be sealed to prevent water entry. *Code* § 70-16 D.

F. Compressor/evaporator units exterior to the crawl space installation shall satisfy the FMO requirement and be installed at or above the flood protection elevation of seven feet (7') above mean sea level, and a Certificate of Elevation Compliance shall be filed with the Talbot County Floodplain Management Coordinator for review and acceptance prior to final inspection to validate the required elevations.

G. A final elevation certificate shall be required to document proper flood openings; to confirm the structure's lowest finished floor elevation; and to document the elevation of the electrical and mechanical systems servicing the structure.

H. A copy of this decision shall be sent to the Applicants to notify them that the variance is to the floodplain management requirements of the *Code* only, and that the cost of federal flood insurance will be commensurate with the increased risk, with rates up to $25 per $100 of insurance coverage. *Code* §70-40 C

Mr. Sewell seconded the motion. There was no further discussion on the motion. The Chairman called for a vote. The motion passed, 5-0 with all members voting to grant the variance requested.

HAVING MADE THE FOREGOING FINDINGS OF FACT AND LAW, IT IS, BY THE TALBOT COUNTY BOARD OF APPEALS,

RESOLVED, that the Applicants, **GARY AND MARIANN RADZIEWICZ**, (Appeal No. 19-1692) are **GRANTED** the requested Variance consistent with the evidence presented to the Board of Appeals, and subject to the aforementioned conditions, by vote as previously noted.

GIVEN OVER OUR HANDS, this 25TH day of JUNE, 2019.

TALBOT COUNTY BOARD OF APPEALS

Phillip Jones, Chairman

Frank Cavanaugh, Vice Chairman

Paul Shortall, Jr. - Member

John Sewell, Member

Zak Krebeck, Alternate Member