

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
ADMINISTRATIVE ADJUDICATION DIVISION

IN RE: Marcia Grant
ISDS Application No. 8823-28

DECISION AND ORDER

This matter came before Hearing Officer McMahon on August 7, 1990 pursuant to § 42-17.1-2 (l), (m) and (s) of the General Laws of Rhode Island, 1956 (1988 Reenactment) as amended, and the Rules and Regulations Establishing Minimum Standards Relating to Location, Design, Construction and Maintenance of Individual Sewage Disposal Systems, December 13, 1989 promulgated by the Department of Environmental Management (hereafter "ISDS Regulations"). The hearing was conducted in accordance with the Administrative Procedures Act and the Administrative Rules of Practice and Procedure for the Department of Environmental Management Administrative Adjudication Division for Environmental Matters, July 1990.

At the pre-hearing conference immediately prior to the hearing, applicant's attorneys Stephen B. Kenyon and James V. Aukerman and DEM's attorney Charles J. Moore agreed to the submission of eight joint exhibits marked as follows:

JOINT EXHIBITS

- JT1 Application No. 8823-28.
- JT2 ISDS Plan.
- JT3 Request for Variance.
- JT4 Denial of Variance.

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JT5 North Kingstown Tax Assessor's Map.

JT6 Abutters List.

JT7 Appeal Request.

JT8 Notice of Hearing.

Applicant filed additional exhibits:

Pet. A Warranty Deed, Trustee's Deed

Pet. B Petition of Support

Pet. C Letter from James Baker and Carmen J. Baker

Pet. D Letter from Kathleen A. Gregory

Pet. E Resume of Wesley Grant III.

Wesley Grant III for the applicant and Vincent A. Mattera for the Department of Environmental Management were stipulated to be qualified as expert witnesses.

On March 7, 1988, Marcia Grant filed an application (JT1) and a request for variance (JT3) from the ISDS Regulations with the Department of Environmental Management ("DEM") Division of Land Resources, Individual Sewage Disposal Systems Section ("ISDS Section") for issuance of a permit to construct an individual sewage disposal system ("ISDS"). The system would be located in the vicinity of Pole # 5217, Lexington Avenue, North Kingstown, Rhode Island.

The variance was denied (JT4) by the ISDS Variance Board and applicant appealed (JT7). The variance requested by applicant (SD 10.01) was to install a system based on a two bedroom design.

Pursuant to ISDS Regulations 21.01 (b) and (d), applicant bears the burden of proving that literal enforcement of the ISDS Regulations,

specifically SD 10.01, would result in unnecessary hardship and that such a permit or variance would not be contrary to the public interest and public health. In addition, applicant must prove through clear and convincing evidence that:

1. The disposal system to be installed will be located, operated and maintained so as to prevent the contamination of any drinking water supply or tributary thereto;
2. The waste from such system will not pollute any body of water;
3. The waste from such system will not interfere with the public use and enjoyment of any recreational resource;
4. The waste from such system will not create a public or private nuisance; and
5. The waste from such system will not be a danger to the public health.

Applicant presented three witnesses: Wesley Grant, III, a registered professional engineer and a licensed land surveyor in the State of Rhode Island and a licensed professional engineer in the State of New Hampshire who designed the proposed system; John Gates, a licensed realtor; and Marcia Grant as applicant and owner of the subject property.

Applicant testified that she purchased the property in November, 1986, from family members with the intent to build a single family home and that a two bedroom structure would be sufficient for her needs.

Wesley Grant, III testified about the characteristics of the property, its soil, percolation rate, water table, elevation and slope as well as various aspects of the system's design and the necessity for the variance. His testimony also clarified that the design was based on combining lots 68 and 69 (Transcript p. 27) and not solely lot 69 as had been indicated on the application and request for variance.

He indicated that the variance was necessary because of the fast percolation rate of 1.33 at 36 inches and 1.11 at 48 inches (Transcript p. 43) and the high water table (Transcript p. 38). He had designed the system to increase percolation to a five-minute rate by reducing the capacity of the system (a two bedroom house instead of a three bedroom design) and by enlarging the leaching field (Transcript p. 43).

Mr. Grant's testimony deserves much scrutiny as it is fundamental to applicant's case. While he concluded that there would be no detrimental effect on any body of water, on the public use and enjoyment of any recreational resource and would not cause any public nuisance or have any effect on the public health (Transcript pp. 18-20), under both direct and cross-examination, Mr. Grant testified to the importance of the system being "properly designed and properly installed" (Transcript p. 19). There would be a detrimental effect on recreational resources across the street (the playground) as well as to Narragansett Bay and it would be a public or private nuisance and detrimental to public health if the system failed (Transcript p. 41).

Serious questions about the reliability of the data were raised during his testimony and later when Vincent Mattera was under oath. One of the first issues, apparent even on direct examination, dealt with a water table which ranged anywhere from four inches to two feet, two inches (Transcript p. 14). Mr. Grant testified that he had taken the latter reading "prior to the close of the wet season" and his recollection was that "after the close of the wet season in 1987, when the Department of Environmental Management, when their field

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inspector came out and measured the water table, I don't remember their exact reading ... I believe what they got was a four-inch water table..." (Transcript p. 14). He then prepared a design based on a twelve-inch water table (Transcript p. 14).

When asked by applicant's attorney about his experience in designing individual sewage disposal systems based on twelve-inch water table readings, Mr. Grant responded by citing one he had done based on an 18-inch water table (Transcript p. 20).

Further inconsistencies appeared in information provided on the ISDS Plan and application. The Plan's legend indicates a scale of one inch equals twenty feet, yet the body of the drawing shows a scale of one inch equals ten feet (JT2). When asked about this discrepancy on cross-examination, Mr. Grant indicated that the proper reference for the drawing was one inch equals ten feet (Transcript p. 37). His explanation for the second designation of one inch equals twenty feet failed to clarify the matter: "There are several items on this plan, such as some of your details made reference to the fact that some of these are drawn at one inch equals 20 as a possibility" (Transcript pp. 37-38). Applicant's attorney quickly stipulated that "the ISDS and part of the plan is one inch equals ten " (Transcript p. 38), but the question remains as to where the 1" = 20' scale applied.

As for the application (JT1), Mr. Grant testified that there was "a typo on the date, excavated on 9/27/84" and that the soil test hole was actually dug in 1987 (Transcript p. 40). Yet the ISDS Plan (JT2) also identifies 9/27/84, as the date of excavation.

Applicant's final witness was John Gates, a licensed realtor in South Kingstown. DEM attorney Charles Moore objected to the entire line of real estate questions as being irrelevant. Mr. Aukerman sought to develop the issue of a "taking" if the permit was not granted but, pursuant to SD 21.01 (b), testimony was limited to whether denial of the permit would result in an unnecessary hardship to applicant (Transcript p. 58).

Having been qualified as an expert in real estate, Mr. Gates testified that any development of the property pursuant to zoning requirements would generally necessitate some sort of septic system (Transcript p. 61). No clear demonstration was provided that literal enforcement of the ISDS Regulations would result in unnecessary hardship to applicant as a result of the inability to develop the land. It should also be noted that one of applicant's exhibits not addressed in testimony, was a letter from Kathleen A. Gregory which inquired about purchasing the property in order to donate it to the Land Conservancy of North Kingstown (Pet. D).

DEM's sole witness, Vincent A. Mattera emphasized the problems with applicant's Plan and request for variance. He had conducted site visits on March 26, 1990, and July 21, 1990 and checked the test hole on both occasions. In March the water table appeared to be "at six inches or higher at times" (Transcript p. 68). During Mr. Mattera's July visit, he observed that the test hole was silted in at approximately 12 to 15 inches; "normally when you're silting in, the water table can be anywhere from six inches to a foot higher above the silted area" (Transcript p. 69).

His conclusion, based on 28 years of experience, was that the water table could be anywhere from six inches to surface. (Transcript p. 71).

This presents applicant with two problems: if the water table is indeed that high, then the separation from water table to invert is no longer sufficient, and, because the water table is less than two feet, a variance was needed under SD 15.02 Site Suitability. (Transcript pp. 70-71). While Mr. Grant had argued that, under his interpretation of DEM procedure, requesting the variance on the two-bedroom design also meant a variance on the water table (Transcript pp. 17, 38-40), SD 15.02 clearly imposes additional design requirements when the water table is less than four feet from the original ground surface. These requirements include a much slower percolation rate than provided in Mr. Grant's ISDS Plan ("in no case shall the design percolation rate be faster than 10 minutes/inch") as well as more soil exploration holes over the area of the proposed disposal system. And because the groundwater table was less than two feet, the Variance Board may well have imposed other requirements.

Mr. Mattera's testimony also called into question whether the ISDS design had properly accounted for the elevation and contours of the property (Transcript pp. 72-73, 75-76). Mr. Grant's Plan was based on elevation 6 through the field (Transcript p. 16) while Mr. Mattera estimated it averaged 6.5 because the northwest end at elevation seven sloped southeast to elevation six (Transcript p. 75).

The uncertainty as to elevation was compounded by the debate as to which scale applied (one inch equals ten feet v. one equals twenty) and whether spot elevations were properly represented on the Plan. (Trans-

cript pp. 77, 84).

Based on the above, Mr. Mattera concluded that even with a twelve-inch water table, the ISDS Plan is a half-foot short of the necessary separation (Transcript p. 80). As a result, Mr. Mattera calculated a high probability the system would fail and therefore possibly cause a public health problem and nuisance, particularly to surrounding recreational areas (the playground, Narragansett Bay). (Transcript p. 74).

In applicant's favor, several abutting property owners welcomed the granting of the permit through public comment and a petition of support (Pet. B). In addition, a representative of the Poplar Point Association, which owns the playground across the street from the proposed system, spoke in favor of granting the variance. Applicant was also willing to abide by all sorts of conditions in order to obtain the permit: plan modification to increase separation; deed restriction limiting the building to a two-bedroom home; requirement of water-saving devices and low-flow toilets; and installation of swales to prevent runoff. (Transcript pp. 99-101).

Applicant's proposed modifications notwithstanding, too many questions remain regarding the accuracy and reliability of the data and the proposed system for this Hearing Officer to supplant a determination of the Variance Board.

Further, applicant's evidence demonstrated that ISDS Regulation 15.02 had not been complied with and that another variance was required. Applicant failed to introduce sufficient evidence to sustain her burden

of proof even assuming arguendo that a variance from ISDS Regulation 15.02 had been sought by applicant and denied by the Variance Board.

As a result of the testimony and documentary evidence presented, and, in addition to those facts stipulated to by the parties as set forth above, I make the following:

FINDINGS OF FACT

1. The Notice of Administrative Hearing and Pre-Hearing Conference was sent to the abutting property owners listed in Joint Exhibit 6, to the applicant, her attorney, the North Kingstown Town Clerk and the North Kingstown Building Inspector as well as to DEM legal counsel. (JT8).
2. The water table at the site is within one foot of the original ground surface.
3. The system is designed for a double lot with a capacity for a two bedroom home.
4. The proposed system is designed with a five-minute percolation rate.
5. The proposed system does not meet the requirements of ISDS Regulations 10.02 and 15.02.
6. The property is located in a public water supply area.
7. The proposed system would require excavation and removal of existing materials, replacement with alternative materials and filling to increase the elevation so that the invert of the system would be at elevation 8.55.
8. The proposed site is a double lot located in excess of 200 feet from Narragansett Bay and lies across Lexington Avenue from a playground owned by the Poplar Point Association.
9. On or about February 8, 1988, applicant requested a variance from ISDS Regulation 10.01 (JT3).
10. Applicant did not request a variance from ISDS Regulation 15.02.

11. On or about March 18, 1988 the Variance Board denied the requested variance citing the effect of the proposed system on any body of water; the effect of the proposed system on public use and enjoyment of any recreational resource; the effect of the proposed system as a cause of any public or private nuisance; and the effect of the proposed system on the public health. (JT4).
12. The water table has been tested at six inches to ground level.
13. The proposed system is designed with the original ground surface being elevation 6.
14. Portions of the original ground surface within the area of the proposed disposal system are at elevations between 6 and 7.
15. The proposed system does not maintain a three-and-a-half foot separation between water table and invert.
16. The proposed system has considerable potential for failure.
17. If the proposed system fails, the waste from such system may pollute Narragansett Bay, may interfere with the public use and enjoyment of Narragansett Bay and the Poplar Point playground, may cause a public or private nuisance and may pose a danger to the public health.
18. Narragansett Bay and the playground owned by the Poplar Point Association are recreational resources.

Based on the foregoing facts and the documentary and testimonial evidence of record, I make the following:

CONCLUSIONS OF LAW

1. Notice of the Administrative Hearing was duly provided in accordance with ISDS Regulations, the Administrative Procedures Act, and the Administrative Rules of Practice and Procedure for the Department of Environmental Management Administrative Adjudication Division for Environmental Matters.
2. Applicant failed to demonstrate that literal enforcement of ISDS Regulations would result in unnecessary hardship to her and that such a permit or variance would not be contrary to the public interest and public health.

3. Applicant provided clear and convincing evidence to the satisfaction of the Hearing Officer that the disposal system to be installed would be located, operated and maintained so as to prevent the contamination of any drinking water supply or tributary thereto.
4. Applicant did not present clear and convincing evidence to the satisfaction of the Hearing Officer that the waste from such system would not pollute any body of water, would not interfere with the public use and enjoyment of any recreational resource, would not create a public or private nuisance, and would not be a danger to the public health.

Wherefore it is hereby

ORDERED

The variance requested with respect to Application 8823-28 is DENIED.

11/1/90
date

Mary F. McMahon
Mary F. McMahon
Hearing Officer

5 NOV 90
date

[Signature]
Michael Annarummo
Director
Department of Environmental Management