

VERMONT ENVIRONMENTAL BOARD  
10 V.S.A. Chapter 151

RE: Mt. Mansfield Co., Inc.  
d/b/a **Stowe** Mountain Resort and the  
State of Vermont  
Land Use Permit Amendment #5L1125-4-EB

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

The **Environmental** Board grants the Mt. Mansfield Co., Inc., d/b/a Stowe Mountain Resort and the State of Vermont, a permit amendment authorizing installation and operation of lighting for night skiing on certain ski trails.

I. PROCEDURAL BACKGROUND

On November 10, 1992, the District #5 Environmental Commission ("**District Commission**") issued Land Use Permit Amendment #5L1125-4 ("**Permit**") to the Mt. Mansfield Co., Inc., d/b/a Stowe Mountain Resort ("**Mansfield**") and the State of Vermont ("**State**"). The Permit authorizes Mansfield and the State '(collectively "**Permittees**") to install and operate 130 light fixtures on 65 twenty-five foot high wooden utility poles' ("**lights**") on the Gondolier trail and a portion of the Perry Merrill trail for purposes of night skiing on Wednesday through Sunday evenings from dusk to 11:00 p.m. between December 15 and April 15 ("**Project**").

On November 24, 1992, the District Commission received a letter from Mansfield and/or the State seeking a clarification regarding the Project's operating schedule for certain holidays. The District Commission treated the letter as a Motion to Alter under Environmental Board Rule ("**EBR**") 31(A) ('"**Motion to Alter**").

On December 11, 1992, Joy Fagan appealed the Permit ("**Appeal**"). She contends that the District Commission erred with respect to 10 V.S.A. § 6086(a)(1) (air pollution) and (8) (aesthetics, scenic beauty and rare and irreplaceable natural areas).

On December 16, 1992, the District Commission granted the Motion to Alter and added the following sentence to the Permit: "**This** permit also authorizes the use of the trail system 7 days a week during holiday periods (i.e. Christmas, Martin Luther King, Jr. weekend and Presidents' Week).

On January 11, 1993, Ms. Fagan filed a Motion for Relief pursuant to EBR 20(A) and 42 ("**Motion for Stay**"), and on January 20, 1993, Mansfield filed a Motion to Dismiss.

On February 8, 1993, Board Chair Elizabeth Courtney convened a prehearing conference in the Town of Stowe ("**Stowe**").

On February 11, 1993, the Board denied Mansfield's Motion to Dismiss and deferred a decision on Ms. **Fagan's** Motion for Stay.

On February 27, 1993, Ms. **Fagan** abandoned her effort to obtain party status under Criterion 1. Ms. **Fagan** has party status before the Board only under Criterion 8.

On June 8, 1993, the Board ordered that the Appeal be held in abeyance pending completion of the State's night lighting study and related policy ("**Study**").

On July 5, 1994, Board Chair Arthur Gibb scheduled a hearing on the merits of the Appeal for January 25, 1995.

On August 15, 1994, the State filed the Study.

On January 23, 1995, Chair Gibb convened a second prehearing conference in Montpelier. During this conference, Mansfield filed a Motion to Dismiss which Chair Gibb denied. Chair Gibb also ruled on all pending evidentiary objections except three which were filed by Ms. **Fagan** and based upon the contention that an analysis of economic benefit was not appropriate under Criterion 8 ("**Economic Benefit Objections**").

During the evening of January 24, 1995, the Board viewed the Project from several nearby locations ("**Site Visit**").

A hearing on the merits of the Appeal was held by the Board on January 25, 1995 in Stowe ("**Hearing**"). Mansfield and Ms. **Fagan** participated at the Hearing.

At the outset of the Hearing, the Board described the Site **Visit**.<sup>1</sup> Additionally, it considered and affirmed Chair **Gibb's** denial of Mansfield's Motion to Dismiss and his evidentiary rulings. However, the Board held in abeyance its decision concerning the Economic Benefit Objections.

On February 14, 1995, Ms. **Fagan** filed a Motion to Reopen Hearing ("**Motion to Reopen**"), a letter regarding the relevancy of "**economic benefit**" under Criterion 8 and Proposed Findings of Fact and Conclusions of Law. On

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<sup>1</sup> Ms. **Fagan** objected to the Board describing the Site **Visit** on the record.

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February 15, 1995, Mansfield filed its Proposed Findings of Fact and Conclusions of Law.

On February 27, 1995, Mansfield filed a response to Ms. **Fagan's** Motion to Reopen.

The Board deliberated on January 25, 1995, February 22, 1995, March 22, 1995 and June 1, 1995. On June 1, 1995, the Board declared the record complete and adjourned the Hearing. The **matter** is now ready for decision. To the extent any proposed findings of fact and conclusions of law are included below; they are granted; otherwise they are deemed irrelevant and/or inaccurate and denied.

## II. PRELIMINARY MATTERS

### A. Motion to Reopen Hearing

In the Motion to Reopen, Ms. **Fagan** asks the Board to reopen the Hearing **for** the limited purpose of accepting into evidence a draft document entitled: ~~Stowe Mountain Resort -- Proposed Night Skiing Master Plan -- August 4, 1994~~. The Board concludes that the document was available to Ms. **Fagan** prior to and during the Hearing. Furthermore, Gary Kiedaisch, Mansfield's President, was available for and subject to cross-examination regarding the document during the Hearing.

Ms. **Fagan** had the opportunity to pursue her concerns. She failed **to take** advantage of it. The Board will not require the Permittees to supplement the evidence they filed during the Hearing even though the Board has the authority to do so under EBR 20(A).

The Motion to Reopen is denied.

### B. Economic Benefit Under Criterion 8

The Economic Benefit Objections raise the following question: **does** the Board evaluate the overall economic benefit of a project when it considers whether the project is acceptable under Criterion 8? The Board has thoroughly considered **this** question and concludes that while an analysis of **economic** benefit may be relevant under some Criteria, it **is** not an appropriate consideration under Criterion 8.

- illumination would point north towards an uninhabited area.
16. Attached to each pole and aimed across or down the Trails are two 400-watt metal halide lights.
  17. Each light fixture is equipped with a visor and shield to reduce the spread of light from the light fixture and provide an even distribution of light to the Trails. The visors and shields are a muted dull grey color.
  18. Mansfield has installed louvers or hoods, in addition to the visors and shields, to the top fifteen light fixtures of the Project. The louvers operate much like Venetian blinds and can be adjusted to alter the direction in which light is projected from the light fixture. The light fixtures on the remaining portion of the Project do not have louvers or hoods due to concerns for skier safety.
  19. Due to the visors and shields, the Lights emit light which is reflected downward.
  20. The visors and shields which Mansfield installed on the lights are generally available in the ski industry. They improve the harmony of the Project with its surroundings.
  21. The visors and shields mitigate the impact of the Lights beyond the Trails.
  22. Sky glow results when light is emitted into the atmosphere, illuminating air-borne particles, water vapor and pollutants. Sky glow is particularly **noticeable under** cloudy or partly cloudy sky conditions. Glare results when light directly hits the eye, preventing the eye from fully dark adapting, thereby preventing the viewer from seeing as many stars, or details in celestial objects, as would otherwise be possible.
  23. The Project's visibility is affected by weather conditions, distance, topography, vegetation and other factors.
  24. During the Site Visit, snowmaking equipment was in use on the Trails, and the Project was somewhat obscured.

25. There are several significant light sources other than the Project in the area around Stowe. They include but are not limited to the Mountain Road, Stowe, the Village of Stowe and the Trapp Family Lodge. From far away, the Project generally appears as a series of points of light, with a fluorescent-like glow coming off the Trails as a result of reflection.
26. The Project is visible from a large portion of Routes 100 and the Mountain Road.
27. The potential **viewshed** of the Project, based on **line-of-sight** visibility, is extensive. Line-of-sight visibility is generally greatest in directions east and southeast of Mt. Mansfield. The Project is visible within a wide portion of central and eastern Vermont.
28. The Project makes it more difficult to view stars and other celestial objects from Stowe and other nearby communities during those times when the Lights are on. The Project diminishes the rural feeling of those areas from which it is visible. The Project will have an adverse effect on the aesthetics of its surrounding environs including the night sky.
29. The Project stands out, in part, because it is the highest night sky intrusion visible from Stowe and the surrounding communities. In addition, the Project creates a striking contrast between highly lit areas and dark forested lands.
30. The Stowe Zoning Ordinance ("Zoning Ordinance") contains clear, written community standards for outdoor lighting. These standards provide that:  
  
    **"All outdoor area lighting shall be installed or shielded in such a manner as to conceal light sources, lamps and reflector surfaces from view substantially beyond the perimeter of the area to be illuminated. The area illuminated should not extend beyond the boundary lines of the property. Sodium vapor lights are prohibited."**  
  
    Zoning Ordinance, Section 4.4.
31. The light fixtures and related reflectors on the lights are hidden from view substantially beyond the Trails although light which they generate is visible

from off the Trails. The light fixtures are not sodium vapor lights.

32. The light fixtures illuminate the Trails. The Trails do not extend beyond the Boundaries of the Property.
33. The current Stowe Municipal Plan was adopted on June 19, 1990 ("**Municipal Plan**"). It provides in part:

Even though an assessment of **Stowe's** scenic resources is difficult because of the subjective nature of such a survey, results from a series of public forums indicate a general consensus on the importance of maintaining **Stowe's** scenic beauty.

\* \* \*

Under consideration is a Visual Resource Ordinance designed to protect specific viewsheds throughout the town. Another possibility is to establish special criteria for developments proposed on major ridgelines in the town.

\* \* \*

A number of special natural resources are identified in other parts of this chapter. Four types of scenic resources are discussed here:

\* \* \*

**Major Land Forms:** Mt. Mansfield, Sterling Mountain, the Pinnacle, Sunset Rock and other significant land forms create the scenic background of our community and in so doing, become one of **Stowe's** most important visual resources.

Municipal Plan, Page 3-3 (emphasis original).

34. Stowe has a Scenic Roads Ordinance.

#### IV. CONCLUSIONS OF LAW

10 V.S.A. § 6086(a)(8) requires that, prior to issuing a permit for a proposed project, the Board must find that the project "[w]ill not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics or rare and irreplaceable natural areas ...."

The Board uses a two-part test to determine whether a project meets Criterion 8. First, it determines whether the project will have an adverse effect. Second, it determines whether the adverse effect, if any, is undue. Re: Ouechee Lakes Corp., #3W0411-EB and #3W0439-EB (January 13, 1986).

A. Adverse Effect

If a project "**fits**" its context it will not have an adverse effect. In evaluating the "**fit**", the Board looks at the nature of the project's surroundings and the compatibility of the project with those surroundings.

A "potential **viewshed map**" prepared as part of the Study indicates that the Project is visible within a wide portion of central and eastern Vermont. Mt. Mansfield dominates the western landscape of Stowe.

There is a great deal of outdoor lighting in the Village of Stowe and along the Mountain Road (Route 108). However, the Project is not a part of this lower elevation intrusion into the night sky.

The Project stands out, in part, because it is the **highest** night sky intrusion visible from Stowe and the /surrounding communities. In addition, the Project creates a **striking** contrast between highly lit areas and dark forested lands.

The Project can be seen from rural portions of the **State** where there is relatively little night lighting. The Project is an artificial intrusion into the evening **landscape** even when viewed from many miles away. It commands attention. One may or may not like it. One cannot ignore it.

The Board concludes that the Project does not "**fit**" its surroundings. It will have an adverse effect on aesthetics and the scenic and natural beauty, including the night sky, of the Stowe area.

B. Undue

The Board next analyzes three factors in evaluating **whether** the Project's adverse effects are "**undue.**"

1. Does the project violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area?
2. Does the project offend the sensibilities of the average person? Is it offensive or shocking because it is out of character with its surroundings or significantly diminishes the scenic qualities of the area?
3. Has the Applicant failed to take generally available mitigation steps which a reasonable person would take to improve the harmony of the proposed project with its surroundings?

Quechee Lakes, at pps. 19-20.

a.) Clear Community Standard

The Municipal Plan addresses aesthetics. It acknowledges that the aesthetics or scenic beauty of Stowe is one of the Town's greatest assets. However, it does not contain a clear community standard designed to preserve this valuable resource. It identifies Mt. Mansfield as a major contributor to the natural beauty of the area. But, it does not set forth clear standards by which impacts to this resource can be evaluated and reduced or prohibited. It indicates that such standards were, in 1990, under consideration in the form of a Visual Resource Ordinance. <sup>2</sup>

The Zoning Ordinance specifically addresses night lighting. It states that: "All outdoor area lighting shall be installed or shielded in such a manner as to conceal light sources, lamps and reflector surfaces from view substantially beyond the perimeter of the area to be illuminated." Zoning Ordinance, Section 4.4. This is a clear community standard. It is intended to eliminate the annoying effects of "bare bulb" outdoor lighting which is directed off site. Thus, it is intended to preserve the aesthetics of the Town.

The Board concludes that this clear standard requires that all light sources and related reflectors must be

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<sup>2</sup> The parties did not advise the Board of the status of Stowe's efforts to create a Visual Resource Ordinance.

installed so that they are hidden from view substantially beyond the area which they are intended to illuminate. The Board does not construe this standard to require that the illuminated area must be hidden from view substantially **beyond** its perimeter. The latter interpretation would lead to absurd results. Almost all outdoor lighting illuminates an area that can be seen from off-site. Virtually all **outdoor** lighting would violate the standard if it were so interpreted.

The light fixtures and related reflectors on the Lights are hidden from view substantially beyond the Trails. Thus, the Lights do not violate Section 4.4 of the Zoning Ordinance.

**b.) Offensive or Shocking**

The Board viewed the Project from several locations **during** the Site Visit. At each location, other artificial **light** sources were noticed. The sky glow from Stowe is substantial. **The** Village of Stowe generates a great deal of sky glow. The Trapp Family Lodge is generously lit. **Lights** along the Mountain Road are quite noticeable. Artificial night lights are a part of the nightscape in Stowe and, to a lesser degree, in the surrounding areas.

Therefore, the Board's conclusions is that its sensibilities are not offended and the Project is not **s h o c k i n g**.

**c.) Mitigation**

Mansfield has installed visors and shields on the Lights to reduce their impacts beyond the Trails. These generally available mitigation measures improve the harmony of the Project with its surroundings. Consequently, Mansfield has taken generally available mitigating steps which a reasonable person would take to improve the harmony of the Project with its surroundings.

**d.) Conclusion**

The Board concludes that the Project will not have an undue effect on the scenic or natural beauty of the area, aesthetics or rare and irreplaceable natural areas pursuant to 10 V.S.A. § 6086(a)(8).

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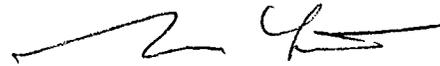
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V. ORDER

Based upon the foregoing Findings of Fact and  
Conclusions of Law, Land Use Permit Amendment 5L1125-4-EB is  
hereby issued.

Dated at Montpelier, this 15th day of June, 1995.

ENVIRONMENTAL BOARD



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Arthur Gibb, Acting Chair  
Rebecca Day\*  
John T. Ewing  
John M. Farmer  
Lixi Fortna  
Samuel Lloyd  
William Martinez  
Robert Page  
Steve Wright

Member Day dissents. She is unable to reach a decision on  
the Appeal without the benefit of a night lighting master  
plan and a determination by the Agency of Natural Resources  
("ANR") concerning whether or not the project and the night  
lighting master plan are consistent with ANR's Guidelines on  
Ski Area Trail Lighting - July, 1994.

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