STATE OF VERMONT
AGENCY OF NATURAL RESOURCES
INTERAGENCY ACT 250 REVIEW COMMITTEE

RE: BLANCHE DUBOIS AND MARYLyn DUBOIS DELUGAN,
For an 8-lot subdivision and construction of a 600 ft. roadway along the western shore of Island Pond. Brighton.

APPLICATION 7EO790
JANUARY 23, 1990

ENTRY OF APPEARANCE

Please enter the appearance of the Agency of Natural Resources, State of Vermont, in the above-captioned matter.

PRE-HEARING COMMENTS

CRITERION 1(B) - STORMWATER DISCHARGE

In an enclosed letter, Nancy Manley of the Permits and Compliance Section of the Department of Environmental Conservation states that it appears a stormwater discharge permit will be needed for the project. The applicant has been contacted with a request to apply for a permit.

CRITERION 1(E) - STREAMS

District Fisheries Biologist, Leonard Gerardi, states that a small stream which is a tributary to Island Pond borders the southern edge of the project. This stream may support the spawning of smelt and other fish. Mr. Gerardi notes that the house site and driveway on Lot #5 as well as the cul-de-sac are all in close proximity to the stream. He recommends that Lot #5 be eliminated and that a 50 foot buffer strip be maintained along the stream for protection of the fish and keeping the stream in its natural condition. No clearing, construction, machinery operation or other disturbance should occur within this buffer.

CRITERION 1(F) - SHORELINES

Susan Warren, an Aquatic Biologist with the Lakes and Ponds Program, has reviewed the project plans and offers the following comments relative to the project’s effect on the Island Pond shoreline.

1. Ms. Warren concurs with Leonard Gerardi’s recommendation for the establishment of a 50 foot, undisturbed, permanently-vegetated buffer strip along the stream at the southern edge of the property.

2. The existing tree and shrub border between the lake and the property varies in width between 10 and 40 feet. The vegetation in this border should be encouraged to grow further so as to protect the long-term stability of the lakeshore and to screen the subdivision from recreational users of the lake. Therefore, a 50 foot undisturbed, permanently-vegetated buffer
strip should be maintained along the lakeshore.

3. No shoreline alterations should be allowed, including the creation of new docks, temporary docks which are presently exempted from the permit requirements of 29 V.S.A. Chapter 11, are permissible.

4. The area lying between the edge of the 50 foot boundary and 100 feet from shore can be mowed, but no soil-disturbing activities should be allowed here. The location of the septic tanks as indicated on the applicant’s site plans will have to be moved back from the shore at least 100 feet. The present location of the septic tanks, as close as 25 feet from the lake, disrupts the integrity of the shoreline and may result in the removal of buffering vegetation which could lead to erosion problems either during or after placement of the tanks.

5. The creation of pathways for access to the lake is permissible, but the path should be no wider than 6 feet.

6. The restrictions specified under items #3, #4 and #5 should be included in the deed restrictions for each house lot.

7. A setback for buildings and other impervious surfaces (including gravel driveways) should be established at 125 feet. This would allow room for maneuvering any construction equipment without disturbance of the 100 foot buffer strip. Also, during construction, a temporary fence should be set out to clearly mark the limits of the 100 foot buffer strip.

8. An erosion control plan should be developed for both construction of the access road as well as the subsequent development of the individual lots. Stormwater runoff from construction and from driveways should be diffused rather than be directed towards the lake.

CRITERION 4 - EROSION CONTROL

Jerome McArdle, Water Resources Planner with the Water Quality Division, has reviewed the application and feels the applicants have not satisfied their burden of proof with respect to demonstrating that the project will not cause unreasonable soil erosion. Despite the applicants’ assertion that no soil erosion will result because the soils are sandy, Mr. McArdle requests that a professional engineer or other qualified person prepare an erosion control plan which contains site-specific erosion control measures necessary to provide a level of protection at least equivalent to the procedures outlined in the "Vermont Handbook for Soil Erosion and Sediment Control on Construction Sites", and that the plan, if followed, will cause the project to meet the technical requirements of the Vermont Water Quality Standards. Mr. McArdle is particularly concerned about erosion since the project is in close proximity to both a stream and Island Pond.

CRITERION 8 - ARCHEOLOGICAL SENSITIVITY

Giovanna Peebles with the Division of Historic Preservation notes that the proposed subdivision lies within an area considered archeologically sensitive. (See enclosed memorandum). Ms. Peebles will conduct a site visit and attend the hearing to provide her recommendations.
CRITERION 9(F) - ENERGY CONSERVATION and EFFICIENCY

Although the current land use application is only for the subdivision of the house lots and not for the actual construction of the houses, the Department of Public Service requests the Commission to incorporate the enclosed "Energy Efficiency Recommendations for Residential Development" as conditions of the master land use permit to be applied later to the individual lots on an amended basis. The Department believes the applicant's burden of proof will be met under this criterion if these guidelines are made conditions of the land use permit.

I hereby certify that a copy of the foregoing Agency ENTRY OF APPEARANCE and PREHEARING COMMENTS was sent by U.S. Mail (Postage Prepaid) to all statutory parties.

Done on this 23 day of January, 1990 at Waterbury, Vermont.

Respectfully submitted,

State of Vermont
Agency of Natural Resources

By Elizabeth Lord
Assistant to the Land Use Attorney
January 10, 1990

Marilyn DuBois DeLugan
7 Lanz Lane
Ellington, CT 06029

Re: Stormwater Discharge Permit Determination
Residential Subdivision
Brighton, Vermont

Dear Mrs. DeLugan:

The above referenced project is currently being reviewed for interagency technical comment in the Act 250 process.

Based on a review of the information submitted with the Act 250 application it appears that a stormwater Discharge Permit will be required. Given the distance from the access road cul-de-sac to the unnamed tributary of Island Pond, it is probable that a discharge will occur thereby requiring a discharge permit.

Therefore, submit a stormwater permit application package (as detailed below and attached):

The application package should include the following:
- a WR-82 form completed and signed by the authorized agent for the project,
- Schedule D forms for each discharge point with complete discharge rate and watershed ratio calculations,
- a site plan with treatment areas annotated and detailed (ie. ‘grass’ swales so noted, etc.), and
- an application fee of $35.00.

As a note even though the Draft Stormwater Procedures treatment criteria requires a minimum of a 25 foot grassed buffer for sheet flow, the Fish and Wildlife is requiring a 50 foot buffer from the Brook. This latter requirement will take precedence over the minimum treatment criteria and will be reflected in the discharge permit.

If you have any questions, please feel free to contact me.

Sincerely,

Nancy R. Manley
Permits and Compliance

cc:
Cindy Cook, St. Johnsbury District Office
Memo to: Mark Sinclair, State Land Use Attorney  
From: Giovanna Peebles, Division for Historic Preservation  
Subject: Marilyn Dubois Delugan project, Brighton, #7E0790  
Date: 18 January 1990

The proposed project is located in an archeologically sensitive area on the west shore of Island Pond. While all lake shores can be considered archeologically sensitive, sensitivity is enhanced in settings where a stream enters a lake or pond. It is our understanding that a stream enters the lake in the general area of the project. This type of setting was conducive for prehistoric native american occupations, particularly seasonal camp sites or other specialized activities.

House development and other ground disturbing activities such as septic systems and road construction within this sensitive zone thus has the potential for impacting archeological sites.

One option to mitigate potential impacts is to designate the most sensitive areas as an open space or conservation area where no construction of any kind is allowed. For example, a 150'- 200' buffer zone between the lake shore and any proposed construction would preserve most types of archeological resources that could be expected in this environment. If archeologically sensitive areas cannot be avoided, an archeological survey by a qualified consulting archeologist to identify specific archeological sites would have to be conducted by the applicant. This option would precisely locate archeological resources and thereby limit areas to be included in the not-to-be-disturbed zones.

I will conduct an on-site field inspection on the day of the hearing in order to provide the commission with the best recommendations to ensure protection of any archeological sites.

cc: Cindy Cook
The Department of Public Service (DPS) participates in the interagency review of Act 250 applications with regard to Environmental Board Criterion 9(F) Energy Conservation and 9(J) Public Utility Services. Criterion 9(F) Energy Conservation states: "... the planning and design of the subdivision or development reflect the principles of energy conservation and incorporate the best available technology for efficient use or discovery of energy." The DPS interprets "best available technology" to mean that option which results in either the least energy use or has the lowest life cycle cost.

The following recommendations, intended for all residential development, except mobile homes, are used as a guide by the DPS in commenting on Act 250 applications and have been found to generally satisfy Criterion 9(F). Equivalent alternate measures will be considered on a case-by-case basis. A typical single-family home which satisfies the recommendations may be able to obtain an Energy Rated Homes of Vermont, Inc., energy efficiency rating which would qualify the home for an energy efficient mortgage. (See other side for information on ERH.) Information and specifications regarding these measures should be included with any Act 250 permit application.

**ENVELOPE:**

- **Ceilings** ....... R-38
- **Walls** .......... R-19
- **Foundations** .... R-10
- **Doors** .......... R-10
- **Windows** ...... R-275 (double pane w/low-E glazing or storm, or triple pane)

- Doors and windows should be weatherstripped and all seams and joints sealed to minimize air infiltration.
- Siting should consider solar gain.

**MECHANICAL SYSTEMS:**

- Uncontrolled electric resistance space heating or water heating systems are generally unacceptable.
- Oil or gas heating systems should have a minimum Annual Fuel Utilization Efficiency (AFUE) of 80%.
- Water or heating systems should have a minimum energy factor (EF) of:
  - Gas: E.F.=.62 (.0019 x rated storage volume in gallons)
  - Oil: E.F.=.59 (.0019 x rated storage volume in gallons)
  - Electric: E.F.=.95 (.00132 x rated storage volume in gallons)

The Gas Appliance Manufacturers Association (see other side for information on GAMA) publishes a directory listing equipment AFUE and E.F. ratings.

- Installation of low-flow showerheads, maximum 3 gallons/minute.
- Installation of automatic setback thermostats.

**LIGHTING for multi-family housing**

- Common areas only (hallways, corridors, stairwells, clubhouses, etc.):
  - fluorescent lamps with electronic ballasts or,
  - energy-saving lamps with energy-saving electro-magnetic ballasts or,
  - compact fluorescent lamps with electronic ballasts.
- Exit signs: compact fluorescent lamps with electronic ballasts.
- Parking, walkway, and other exterior lighting: metal halide or high pressure sodium lamps.
CERTIFICATE OF SERVICE

I hereby certify that I, Elizabeth F. Lord, Assistant to the Land Use Attorney for the Agency of Natural Resources, sent a copy of the foregoing Prehearing Comments, dated January 23, 1990, regarding File #7E0790 by U.S. Mail, postage prepaid to the following:

Marilyn DuBois DeLugan
7 Lanz Lane
Ellington, CT 06029

Blanche DuBois
Lakeshore Drive
Island Pond, VT 05848

Brighton Board of Selectmen and
Town Planning Commission
c/o Town Clerk
Main St., PO Box 377
Island Pond, VT 05848

Northeastern Vermont Development Association
PO Box 640, 44 Main Street
St. Johnsbury, VT 05819

Larry Hammell
District Conservationist
Federal Building
St. Johnsbury, VT 05819

James Fay
NRCD Chair
RFD
Guildhall, VT 05905

Barbara Peaslee, District Clerk
Box 21
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Charles Willey
District Wildlife Biologist
180 Portland Street
St. Johnsbury, VT 05819

Leonard Gerardi
District Fisheries Biologist
180 Portland Street
St. Johnsbury, VT 05819

Stuart Slote
Department of Public Service
State Office Buildings
Montpelier, VT 05602

Dated at Waterbury, Vermont, this 23rd day of January, 1990.

[Signature]
Elizabeth F. Lord
Assistant to Land Use Attorney