

**Shoreland Permit Application**

for a **Shoreland Protection Permit** under  
Chapter 49A of Title 10, § 1441 *et seq.*

**For Shoreland Permitting Use Only**

Application Number: 280



VERMONT DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION  
**WATERSHED  
MANAGEMENT DIVISION**  
LAKES & PONDS PROGRAM

**Public Notice:** At the same time this application is filed with Shoreland Permitting, a copy of this application must be provided to the municipal clerk for posting in the municipality in which the project is located.

Submission of this application constitutes notice that the person in Section A intends to create impervious surface and/or cleared area within the Protected Shoreland Area, and certifies that the project will comply with Chapter 49A of Title 10, § 1441 *et seq.* All information required on this form must be provided, and the requisite fees (Section G) must be submitted made payable to the State of Vermont, to be deemed complete. Refer to *The Vermont Shoreland Protection Act - A Handbook for Shoreland Development* and related instructions for guidance in completing this application.

**A. Parcel Information**

1. Landowner's Name: **Thomas and Mary Maheux**

2a. Physical Address (911 Address): **141 Baker Place Lot 3**

2b. Town - County: **North Hero - Grand Isle**

2c. Zip: **05474**

3. SPAN (The School Parcel Account Number is required for your application to be deemed complete. It can be obtained from your : **444-140-11321** property tax bill. If you cannot locate your property tax bill, please obtain this information from your Town Clerk)

4. Phone: **802-372-6549**

5. Email: **tmaheux@us.ibm.com**

6. Name of lake/pond: **Champlain Lake (Northeast Arm) - Swanton**

7. Total shore frontage: **138.00** (feet)

8. Was the parcel of land created before July 1, 2014?  Yes  No

9. Are there wetlands associated with this parcel?  Yes  No

Contact the Wetlands Program: (802) 828-1535 or [watershedmanagement.vt.gov/wetlands.htm](http://watershedmanagement.vt.gov/wetlands.htm).

10. Have you ever applied for a permit with the Department of Environmental Conservation associated with this parcel?  
 Yes  No

11. What is the surface area of your parcel within the Protected Shoreland Area (PSA): **34,500** (square feet)  
See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix C, Determining Lakeside Zone & PSA

12. What is the surface area of existing impervious surface on your parcel within the PSA: **0** (square feet)  
See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix F, Calculating Percent Impervious Surface

13. What is the surface area of existing cleared area on your parcel within the PSA: **34,155** (square feet)  
See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix E, Calculating Percent Clearing

**B. Applicant Contact Information**

1. Name: **Thomas Maheux**

2a. Mailing Address: **400 Route 2**

2b. Municipality: **South Hero**

2c. State: **Vermont**

2d. Zip: **05486**

3. Phone: **802-372-6549**

4. Email: **tmaheux@us.ibm.com**

**C. Application Preparer Information** (If the individual preparing the application is not the landowner.)

1. Name:

2a. Mailing Address:

2b. Municipality:

2c. State:

2d. Zip:

3. Phone:

4. Email:

**D. Project Description**

1. Describe the proposed project. For this application to be considered administratively complete you must attach site plans that denote existing and proposed cleared areas and impervious surface and their distances from mean water level, no fewer than three photos of the project area, and dimensions and associated surface areas of cleared areas and impervious surfaces.

We are planning to build a house and garage. The garage is not in the protected zone, and the house is 34 feet in the protected zone with 15.5 feet not in the Upland zone. The attached PDF has the lot layout which maps the lot plat and the house to scale at 1" to 50'. The lot is undeveloped and has a State wastewater permit.

2. For developed parcels, how far is the existing habitable structure from Mean Water Level \_\_\_\_\_ (feet), and How far will new cleared area or impervious surface be from MWL \_\_\_\_\_ (feet)?

**OR**

For undeveloped parcels, how far will new cleared area or impervious surface be from MWL <sup>218</sup> \_\_\_\_\_ (feet)?  
See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix A – Estimating Mean Water Level

3. Can all new cleared area or impervious surface be set back at least 100 feet from MWL?  Yes  No  
If no, explain why below (attach support information as needed):

4a. What is the slope of the project site area: 2.00 %  
See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix B, Determining Slope

4b. Is the slope of the project area less than 20%?  
 Yes  No If yes, skip 4c.

- 4c. If no above (4b), describe the measures taken to ensure the slope is stable, resulting in minimal erosion and impacts to water quality (attach support information as needed):

5a. What is the surface area of new impervious surface associated with this project: 1,608.75 (square feet)  
See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix F Calculating Percent Impervious Surface

5b. What is the total resulting impervious surface after completion of the project and prior to implementation of best management practices: 1,608.75 (square feet)  
For D5b, add A12 to D5a

- 5c. Is the total in 5b. 20% or less of the parcel area within the PSA?  Yes If yes, skip 5d.  No  
If 5a is 0, check the n/a box, otherwise divide 5b by A11 and multiply by 100 for percentage. Total percentage = \_\_\_\_\_%  N/A

- 5d. If no above (5c), describe the best management practices used to manage, treat and control erosion from stormwater from the portion of impervious that exceeds 20% (attach support information as needed):

6a. What is the surface area of new cleared area associated with this project: 0.00 (square feet)

See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix E, Calculating Percent Clearing

6b. What is the total resulting cleared area after completion of the project and prior to implementation of best management practices: 34,155.00 (square feet)

For 6b, add A13 to D6a.

6c. Is the total in 6b. 40% or less of the parcel area within the PSA?  Yes If yes, skip 6d.  No

If 6a is 0, check the n/a box, otherwise divide 6b by A11 and multiply by 100 for percentage. Total percentage = \_\_\_\_\_%

N/A

6d. If no above (6c), describe the best management practices used to provide erosion control, bank stability, and wildlife habitat functionally equivalent to clearing less than 40% (attach support information as needed).

### E. Landowner Certification

As APPLICANT, I hereby certify that the statements presented on this application are true and accurate and recognize that by signing this application, I agree to complete all aspects of the project as authorized. I understand that failure to comply with the foregoing may result in violation of the Shoreland Protection Act, 10 V.S.A. Chapter 49A, and the Vermont Agency of Natural Resources may bring an enforcement action for violations of the Act pursuant to 10 V.S.A. chapter 201.

Applicant/Landowner Signature: Thomas Makeux Date: 4/1/2016

### F. Application Preparer Certification (if applicable)

As APPLICATION PREPARER, I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Application Preparer Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### G. Additional Required Documentation (Please check to ensure you have completed the following)

- All sections of the application are complete (or otherwise indicate "not applicable")
- Application includes site plans denoting existing and proposed cleared area and impervious surface and distances from mean water level
- Application description includes dimensions and surface areas of cleared areas and impervious surfaces
- Application includes photos of project area

### H. Permit Application Fees

|   |   |                  |
|---|---|------------------|
| Administrative Fee: \$125.00                |   | \$ 125.00        |
| Impervious Area Fee: \$0.50 per square foot | Enter new impervious area as entered in item (5a.) <u>1,608.75</u> x .5 | \$ 804.38        |
| <b>Total:</b>                               |   | <b>\$ 929.38</b> |

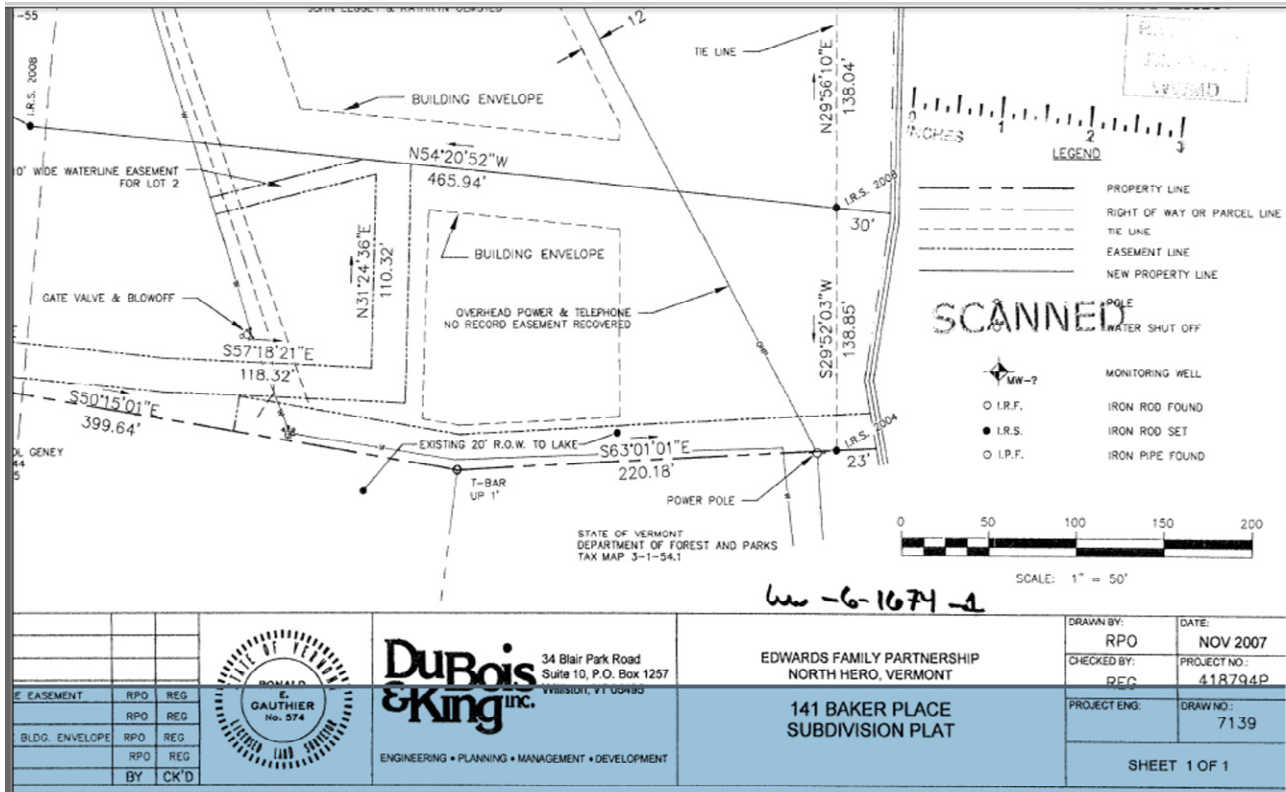
**Print Form**

**Submit this form and application fee, payable to:**

**State of Vermont  
Vermont Department of Environmental Conservation  
Watershed Management Division  
Shoreland Permitting  
1 National Life Drive, Main 2  
Montpelier, VT 05620-3522**

Direct all correspondence or questions to Shoreland Permitting  
at: [ANR.WSMDSshoreland@vermont.gov](mailto:ANR.WSMDSshoreland@vermont.gov)

For additional information visit:  
[www.watershedmanagement.vt.gov](http://www.watershedmanagement.vt.gov)



VT Shoreland Protection Act  
 Permit Proposal  
 141 Baker Place, lot 3  
 North Hero, VT

Thomas and Mary Maheux  
 400 Route 2  
 South Hero, VT 05486  
 802-372-6549  
[tmaheux@us.ibm.com](mailto:tmaheux@us.ibm.com) or [marymaheux@hotmail.com](mailto:marymaheux@hotmail.com)

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## Lot 3 Baker Place North Hero, VT on Lake Champlain

Lot 3 is Town Tax Parcel ID # North Hero: 3-1-36 and referenced in deed recorded in Book 42 Page 291 of the Land records in North Hero, VT, and again most recently in Book 96 Page 367-369.

**SPAN # 444-140-11321.**

Lot 3 has a Wastewater System and Potable Water Supply permit # WW-6-1674-1.



Lot 3 is located near the north end section of Lakeview Dr. as indicated by the X on the map.

Lot 3 is 4.25 acre irregular shaped lot. The section within the 250 set back from mean water level is more rectangular with the easterly lake side being 138'.

**The size of the lot is 138 x 250 or 34500 square feet.**

## Determined Mean Water Level using USGS measurements at 95.5'

When determining mean lake level I used the USGS (United States Geological Survey) data from their web site:

[http://waterdata.usgs.gov/vt/nwis/uv?dd\\_cd=03&format=gif&period=31&site\\_no=04294500](http://waterdata.usgs.gov/vt/nwis/uv?dd_cd=03&format=gif&period=31&site_no=04294500)

This USGS web site shows the most recent time and date stamped depth value at the ECHO center in Burlington, VT.

My process in determining mean lake level was to wait for a calm day, gather the web site's lake level value, which at the time was 96.8', then mark a site off the beach where the water level was the difference between current lake level 96.8' and the mean 95.5', or a spot where the water level was 1.3' deep.



Additionally, I visually inspected the mark when the water level dropped to exactly 95.5 according to the USGS. The actual lake level at 95.5 was six inches east of the initial mark which indicated that the mark was sufficient to conduct all measurement to the 250' control zone.

The foot long white float in the picture to the left is anchored by a piece of concrete which is directly under the float. This picture was taken when the USGS web site posted the lake level at 95.5'. The float is dry and the wave action varies horizontally along the beach by two feet.

The 95.5' marked spot is on the south side of the shore and is further west than the north side, as can be seen in the picture above. This makes the southern marker most appropriate for establishing mean lake level.

### **The first 25' from mean water level was ledge.**

The first 25' west of the mean lake level marked by the float is solid ledge or loose rock.



My second marker is the steel post with a can atop labeled 25'. At that point is 25' from mean water level, 95.5'. All measurements were taken by using a standard tape measure on a horizontal plane.



This picture is looking north from the 25' mark. It corroborates that the 25' buffer is ledge or ledge with some light vegetation. The next picture clarifies that point even more.

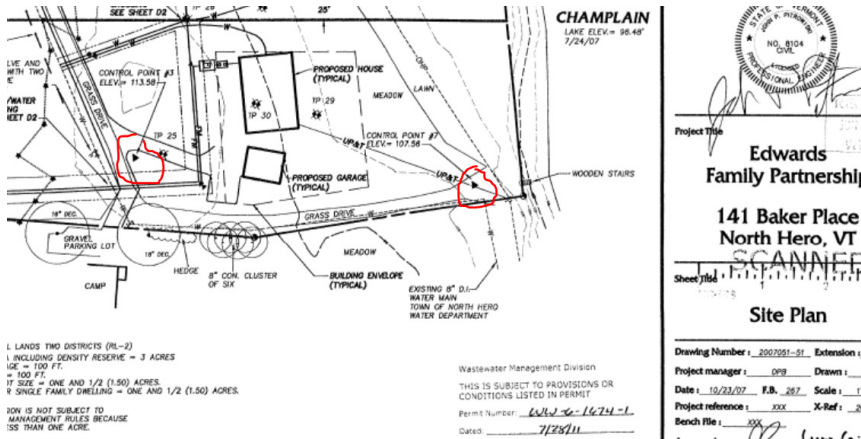




This picture faces south from the northern side of the lake front and has two red circles: one to the left by the water and one in the middle. The left circle marks the float at mean water level. The middle circle marks the steel post and can at 25' from mean water. The area left or east of the red line visualizes the 25' boundary.

Our plan in regards to the 25' control zone is to use it as a beach which implies occupying the zone. We intend to continue the preexisting use property which is to maintain a dock.

## Slope of the lot is 2%



According to the site plan for Wastewater Management Division permit number WW-6-1674-1, there are two elevation control points circled in red on the diagram to the left. The left or westerly circle is at elevation 113.58. The right or easterly circle is at elevation 107.56. The ground is flat from the easterly control

point to the bank which is approximately 50', and while the westerly control point is 87' out side of the 250' control zone, it reflects the slope of the lot overall. The delta between the control points is 6.02', and the distance between the control points is 262.5'. Giving a slope (6.02/262.5) of .0229 or 2%. The conclusion is that there is no restriction because of slope.

**Existing cleared area is 99%**



Lot 3 is an existing open area facing east toward Lake Champlain with one small tree 60’ from the mean water level, and a short row of small trees at the southern end of the bank which is 30’ from mean water level.

**Impervious Surface is 1608.75 square feet or 4.66%**

Total impervious surfaces is the area of the house that is within the 250’ control zone. The 1608.75

|   | A   | B     | C      | D       |
|---|---|-------|--------|---------|
| 1 | Description                               | width | length | Sqft    |
| 2 | House within 250ft buffer                 | 49.5  | 32.5   | 1608.75 |
| 3 |   |       |        |         |
| 4 | Lot size from mean water to 250 feet west | 138   | 250    | 34500   |
| 5 |   |       |        |         |
| 6 | <b>Percent impervious surface</b>         |       |        | 4.66%   |

square feet in row 2 column D of the spreadsheet to the left is the area within the zone.

The patio located directly east of the house is completely in the Upland Zone and will be constructed as a pervious surface. Currently we are considering four options: pervious

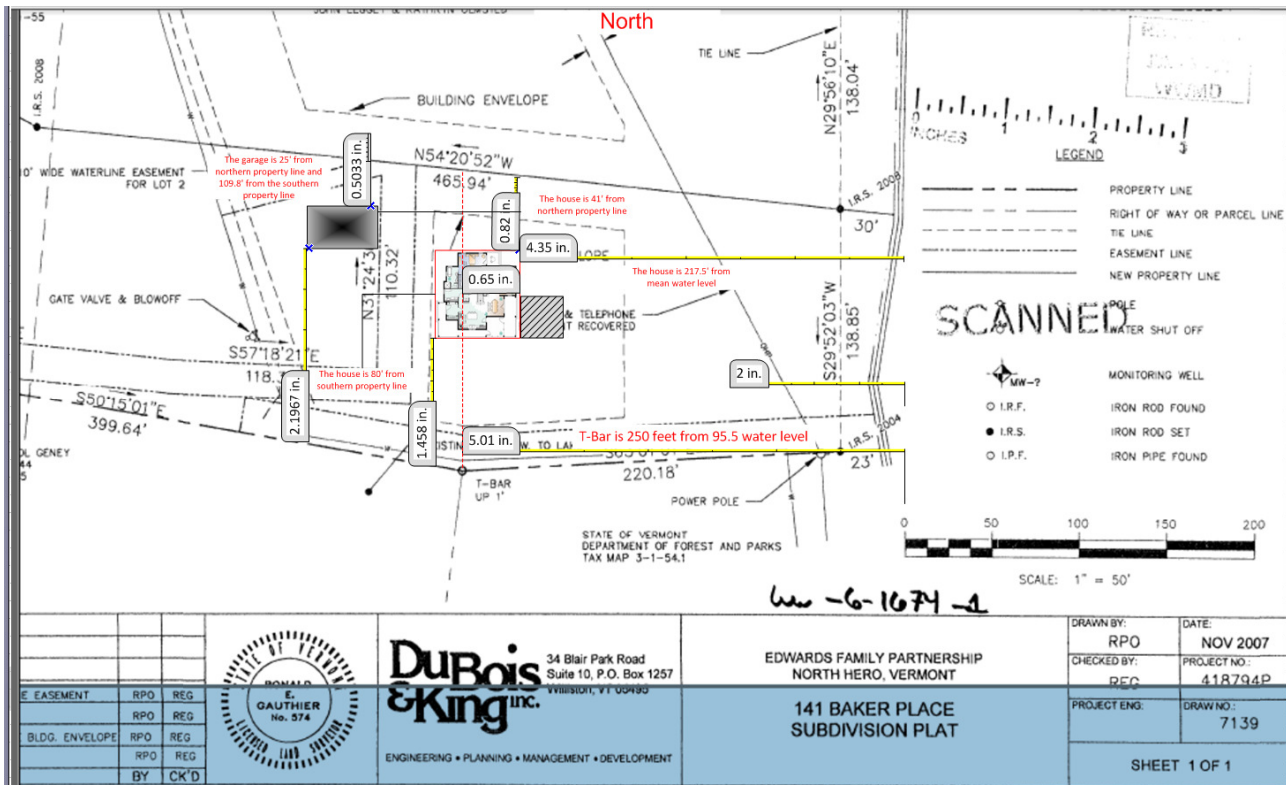
pavers, pervious gaps, gravel base, or a drip-line trench around the parameter.

The surface area of the lot within both Upland and Lakeside Zones (250’ control zone) is located at row 4 column D, and the percentage of impervious surface is located at row 6 column D.

The surface area of the house represents a horizontal plane of the structure. The surface area does not represent any vertical surface areas such the pitch of a roof.

# Lot layout

The image below is intended to visualize the lot and the structure. To render this image, I inserted an image of Lot 3 from the subdivision plat drawn up by the engineering firm DuBois & King into a Microsoft Visio diagram. This plat of Lot 3 is to scale 1" to 50', the Visio is set to the same scale as is the image of the house. They are all to scale (1" to 50'). The house is superimposed onto the lot. The image below shows the garage and 15.5 feet of the house outside of the Upland Zone.



To convert a tape measurement to feet, multiply the value on the measurement tape by 50'. Each inch represents 50'.

From the bottom of the diagram please note that the tape measure labeled 5.01 is measuring from mean water level, 95.5', to 250.5 feet west, or it marks the end of the Upland Zone. The location of the 250' mark was also measured physically and both measurements corroborate that the 250' mark aligns with the T-BAR marked on the diagram and is also physically on the lot. There is a red dashed line from the T-BAR vertical to the northern property line that represents the 250' boundary.

The 2 in. measuring tape originating from mean water level represents the Lakeside zone. There are only naturally occurring impervious surfaces in the Lakeside Zone, such as the ledge.

The house is positioned in the center of the diagram 41' from the northern property line and 80' from the southern property line.

**The house is 217.5' from the mean water level.**

The patio is directly east of the house and is depicted as the gray rectangle with black lines. The house is a two story structure that is 49.5' wide and 48' wide.

The garage is a single story structure 40' by 24' and is located outside of the upland zone 25' from the northern property line and 109.8' from the southern property line.