Version: February 2016

Individual Permit Application

for a **Lake Encroachment Permit** under Chapter 11 of Title 29, § 401 *et seq.*

RECEIVED MAR 22 2016 VSMD

For Lake Encroachment Permitting Use Only

Application Number: 2016-006

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

Submission of this application constitutes notice that the person in Section B intends to encroach beyond the mean water level of a lake or pond, and certifies that the project will comply with Chapter 11 of Title 29, § 401 *et seq.* All information required on this form must be provided, and the requisite fees (Section I) must be submitted made payable to the State of Vermont, to be deemed complete.

A. Project Information

1. Physical Address (911 Address): Silver Lake State Park 214 North Road

2. Town - County: Barnard - Windsor | 2b. Zip: 05031

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

4. Name of lake/pond: Silver Lake - Barnard

B. Applicant (landowner if applicable) Contact Information

1. Name: State of Vermont Department of Forests, Parks, & Recreation

2a. Mailing Address: 1 National Life Drive, Davis 2

2b. Municipality: Montpelier | 2c. State: Vermont | 2d. Zip: 05620

3. Phone: Parks Project Coordinator, Frank Spaulding @ 802-522-0798 | 4. Email: frank.spaulding@vermont.gov

C. Application Preparer Contact Information

1. Name: Sheila Fowler Regional Parks Coordinator, Region 1

2a. Mailing Address: VT Dept FPR - 515 Route 100

2b. Municipality: Killington | 2c. State: Vermont | 2d. Zip: 05751

3. Phone: 802-773-2657 | 4. Email: sheila.fowler@vermont.gov

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

E. Abutting Land Owners

Using the abutter addendum available on watershedmanagement.vt.gov/permits/htm/pm_encroachment-application.htm, attach a list of land owners who abut the proposed project.

F. Project Description

1. Describe the proposed project including a description of the materials and mechanical equipment which may be used during construction and the anticipated work schedule. Identify whether or not the project includes placement or removal of fill and if so, specify the number of cubic yards of fill or dredged materials to be placed or removed beyond the shoreline at mean water level.

The proposed project consists of the replacement of an existing standing dock system with a floating polyethylene dock system. The new system will be used during the Park operating season and will be placed into the water each May and will be removed each September. The new system will not require any permanent stabilizing structures placed in the water. Shore anchoring will consist of two driven pilings (2-3" diameter galvanized pipe) installed above high water mark allowing connection between an integrated access ramp and the floating portion of the system. No excavation work will be required. The existing rebar anchoring system being utilized by the current docks will be removed. The proposed system will be of a "T" shape and will extend a total of 52 feet outward from the anchoring point. Total square footage of the proposed system is 392 square feet. The proposed system will be stabilized in the water by pipes dropped through prefabbed anchor points at 4 locations. These will be removed with the system each season. Nothing permanent is required in the water. Attached documents show a similar installation of the proposed system which has been in use at Camp Plymouth State Park since 2007, both a plan and profile sketch of the proposed system, as well as a google map showing the current inadequate system in use.

2. Describe the purpose of the proposed project:

The primary purpose of the dock system is for mooring and accessing Forest, Parks, & Recreations (FPR) fleet of non-motorized rental boats. The dock also provides recreational viewing of the lake area by Park visitors. Upgrading of the current dock system is being proposed to facilitate remediation of the following problems:

- Elimination of the difficult installation and removal of the existing system. The current system requires several people, tools, and entry into the water each time it is installed and removed.
  - A floating system can be installed and removed with minimal water entry, does not have to be assembled and dissembled and requires no special tools.
- Water fluctuation. The current system does not allow for fluctuations in the water level. Although it can be adjusted – it is difficult to do so. When the water level stabilizes at a low level, during most of the summer, it does not adjust low enough to accommodate the water's low depth. This not only creates unusable mooring space at the head of the dock, resulting in boats being pulled and trapped on shore, it also creates a situation where portions of the remaining moored boats float under the docks causing damage to the boats and an unsafe entry and exit point for boaters.
  - The proposed floating system will move with the water level, no adjustments are needed at any time. Boats will stay at the same level as the dock ensuring safer entry and exit from the boats and mitigating damage that occurs when the boats float under the system.
- At low water the current system does not accommodate all of the rental boats.
  - The proposed system will extend far enough into the water to accommodate current mooring needs. No increase of boat numbers is proposed.
- Existing system is narrow, is not ADA accessible, and can shift when a large number of people are on it.
  - Of wider design, the proposed floating system will meet ADA requirements and lends itself to being very stable. It is constructed for heavy loads and because rides in the water shifting is minimal. The surface is essentially one piece and is made to be slip resistant.
- Existing docks require ongoing maintenance. Through out the season bolts must be checked for tightness, boards inspected for damage and adjustments in height need to be made. Regular off season maintenance includes refinishing and repair of the wooden planking.
  - The proposed system is relatively maintenance free. It is made of UV resistant durable polyethylene and is completely wood free. The system in place since 2007 has had minimal maintenance requirements since installation.

3. Describe what less intrusive feasible alternatives have been considered:

Both the existing system and the proposed upgrade minimally affect the water body. It can however be shown that the proposed system poses less of an impact to the water body than the current system resulting in a less intrusive alternative.

- Fewer in water stabilization points will be required with the proposed system. In addition these stabilizers have a smaller footprint than the currently used flat bottomed feet in use now.
- By extending the system further into the water enough water depth will be gained reducing the need for rental boats to be pulled up on shore or touching the lake bottom while being moored. This will minimizing shore erosion and silt disturbance at times of low water.
- Installation and removal is much simpler with the proposed system again minimizing lake bottom disturbances and siltation disruption.
- Land anchoring is essentially the same for both systems – neither design has any undue impacts on the water body.

4. Describe the public benefits of the proposed project:

Silver Lake State Park saw over 30,000 visitors during the 2015 operating season. The Park dock system provides Park visitors with lake viewing, fishing and mooring and access for recreational peddle boats and kayaks. The proposed system is of superior design and construction over the existing system which will enhance these public uses. The replacement docks meet ADA guidelines and are an important first step in enhancing public access to our Park lake front amenities. The proposed system is of an unobtrusive neutral color which negates heat build up and is constructed of a slip resistant surface. Because of the added width and lower center of gravity it is more stable than the current system and because it fluctuates with the water level it maintains a safer exit and entry height when the public enters and exits a boat.

G. Encroachment Effects (describe how the proposed project will affect the following)

1. What measures are proposed to minimize the project's effects on water quality (e.g., use of a turbidity curtain)?:

Given the design, purpose, and construction of the proposed system no affects to water quality are expected.

2. How will the project minimize effects to fish and wildlife habitat (e.g., project is not to commence until after fish spawning July 1 of any calendar year)?:

Given the design, purpose, and construction of the proposed system no affects to fish and wildlife habitat are expected.

3. Does the project propose removal of aquatic or shoreline vegetation? If so, what measures are proposed to reduce the effects of vegetation removal?:

Given the design, purpose, and construction of the proposed system no affect to aquatic or shoreline vegetation is expected. This system is replacing a current system and requires only a minor modification to the shoreline anchoring system already being used. No excavation or vegetation removal will be necessary to accomodate the proposed system.

4. Describe the surrounding shoreline. Is the project consistant with these surroundings? What measures are proposed to ensure the project is in-keeping with the surroundings?:

It is recognized that this is a commercial structure in the water body and may not be consistent with the natural surroundings. It is, however, a necessary component of the State Park operations and will be an upgrade to the existing system currently in use. The anchor point is at the intersection of the mowed lawn and the naturally gravelly shoreline approximately 2 feet above the mean high water mark. Little to no vegetation, larger rocks and silt are evident in the littoral zone. Immediately to either side of the system brushy shore land vegetation and a rocky littoral zone minimize access to the water from the adjacent lawn. Although not a natural element the proposed system is of an unobtrusive neutral color. It has no shiny metal which unlike the current system will minimize sunlight glare and reflection that can now be seen from both shore and out in the water. Additionally, because it floats on the water it is of a lower profile than the existing standing system making it more visually acceptable.

5. Will the project affect navigation, recreation, and other public uses? If so, how will these effects be minimized?:

User benefits are clear with the proposed upgrade. Stability, durability and accessibility are all addressed with the new system directly resulting in an enhanced recreational experience for each Park visitor. Although the proposed system will extend further into the water body it is not felt that an undue impact on navigation will be present. The beach and boating area is currently identified with floating swim area buoys warning water vessels that they are in a high use area and to use caution. Silver Lake also has restrictions on the size and speed of motor craft on the water making the extra length a negligible issue. Although it is of light color it is clearly visible to water body users and should have no foreseen impacts on navigation.

H. Applicant 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 Chapter 11 of Title 29, § 401 *et seq.*, 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 if applicable) Signature: _____ Date: _____

I. 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: 3/21/16

J. 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 with aerial and cross section views
- ☑ Application description includes dimensions and surface areas of cleared areas and impervious surfaces
- ☑ Application includes photos of project area

K. Permit Application Fees

Select the most applicable permit description and requisite fee. If the proposed project involves more than one of the project types, multiple fees may apply. For example, a project involving structural erosion control and marina improvement will require both fees (2) and (3).

1. Non-structural erosion control project (e.g., rip rap):

Non-structural erosion control project: $155.00		
Total:		

2. Structural erosion control project (e.g., concrete wall replacement):

Structural erosion control project: $250.00		
Total:		

3. Other projects (e.g., marina improvements): N/A - Exempt capital construction project if this is not the case any longer - we will have to perform an interagency transfer. Please call me - thanks SL

Other Project: $300.00		
Project Cost Fee: 0.01 times project cost	Project cost _____ x **0.01**	
Total:		

Print Form

Submit this form and application fee, payable to:

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

Direct all correspondence or questions to Lake Encroachment Permitting at: ANR.WSMDShoreland@vermont.gov

For additional information visit: www.watershedmanagement.vt.gov

Version: March 2015

Lake Encroachment Application Addendum

for a **Lake Encroachment Permit** under Chapter 11 of Title 29, § 401 *et seq.*

For Lake Encroachment Permitting Use Only

Application Number:

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

This Abutting Land Owner Addendum is intended to accompany a completed *Lake Encroachment Permit Application* in instances of a proposed lake encroachment abutting land owners other than the applicant.

I. Abutting Land Owner Information
1. Name: Marcel C. & Josette B. Wolfensberger
Address: 8 Ridgeway Road Port Washington, NY 11050
2. Name: Gilson LLC C/O Catherine Richmond, ESQ
Address: PO Box 200 Norwich, VT 05055
3. Name: Ralph L. & Joan Lessard Trustees - Lessard Family Trust
Address: PO Box 3 Barnard, VT 05031
4. Name: Robert F. & Linda J. Ramrath
Address: 67 Juniper Road Hollistan, MA 01746
5. Name: Kurt & Anne Lessard
Address: PO Box 1 Barnard, VT 05031
6. Name: Town of Barnard
Address: PO Box Barnard, VT 05031
7. Name: Cory D. Manning
Address: PO Box 121 Barnard, VT 05031
8. Name: Dwain L. & Cory D. Manning
Address: PO Box 121 Barnard, VT 05031
9. Name: Craig & Joan Hadden
Address: PO Box 82 Barnard, VT 05031-0082
10. Name:
Address:

Submit this form as an addendum to a complete Lake Encroachment Application to:

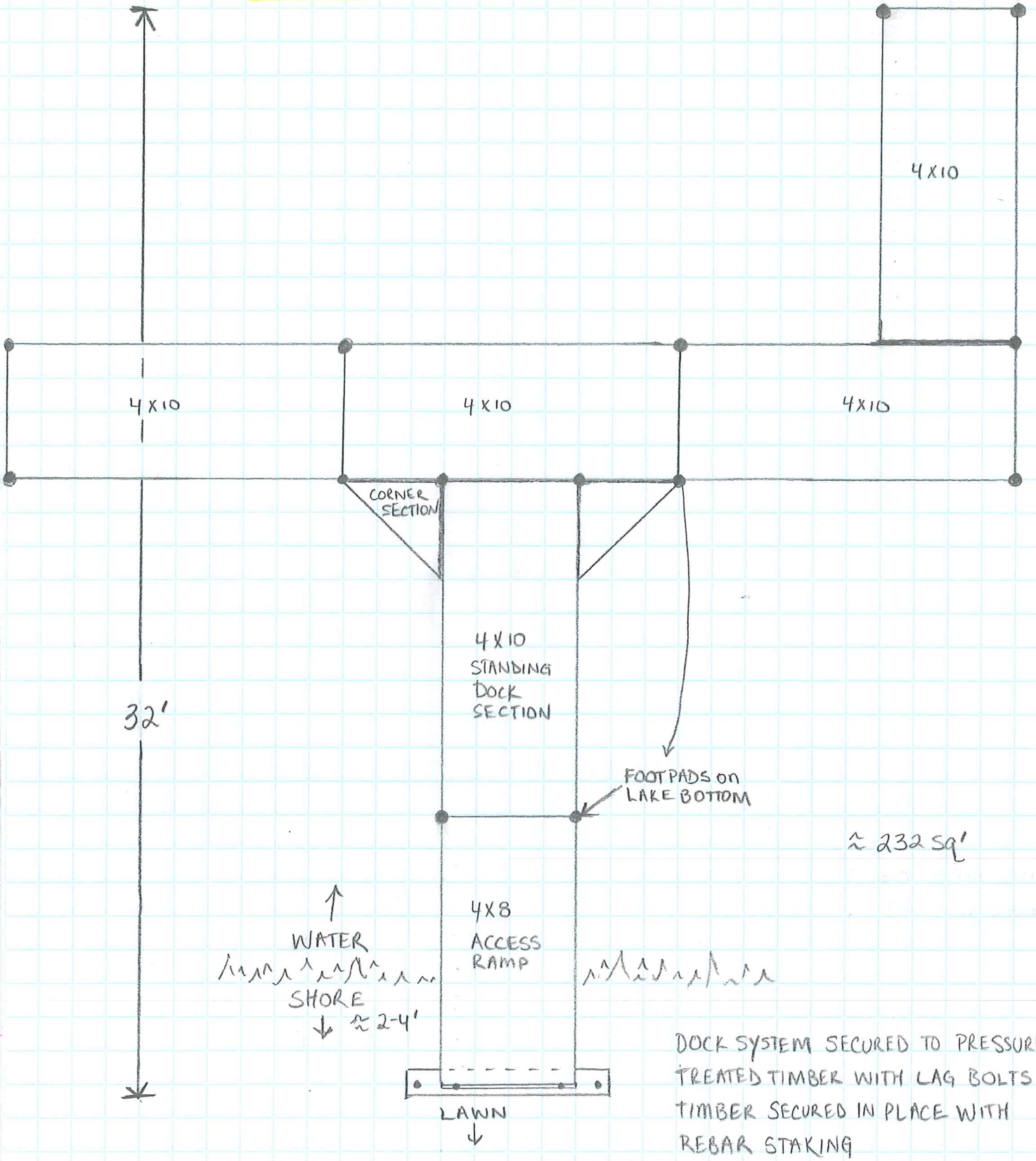
State of Vermont
Vermont Department of Environmental Conservation
Watershed Management Division
Lake Encroachment Permitting
1 National Life Drive, Main 2
Montpelier, VT 05620-3522

Direct all correspondence or questions to Lake Encroachment Permitting at:
ANR.WSMDShoreland@state.vt.us

For additional information visit: www.watershedmanagement.vt.gov

SILVER LAKE STATE PARK

EXISTING STANDING DOCK SYSTEM - N.T.S.



DOCK SYSTEM SECURED TO PRESSURE TREATED TIMBER WITH LAG BOLTS TIMBER SECURED IN PLACE WITH REBAR STAKING

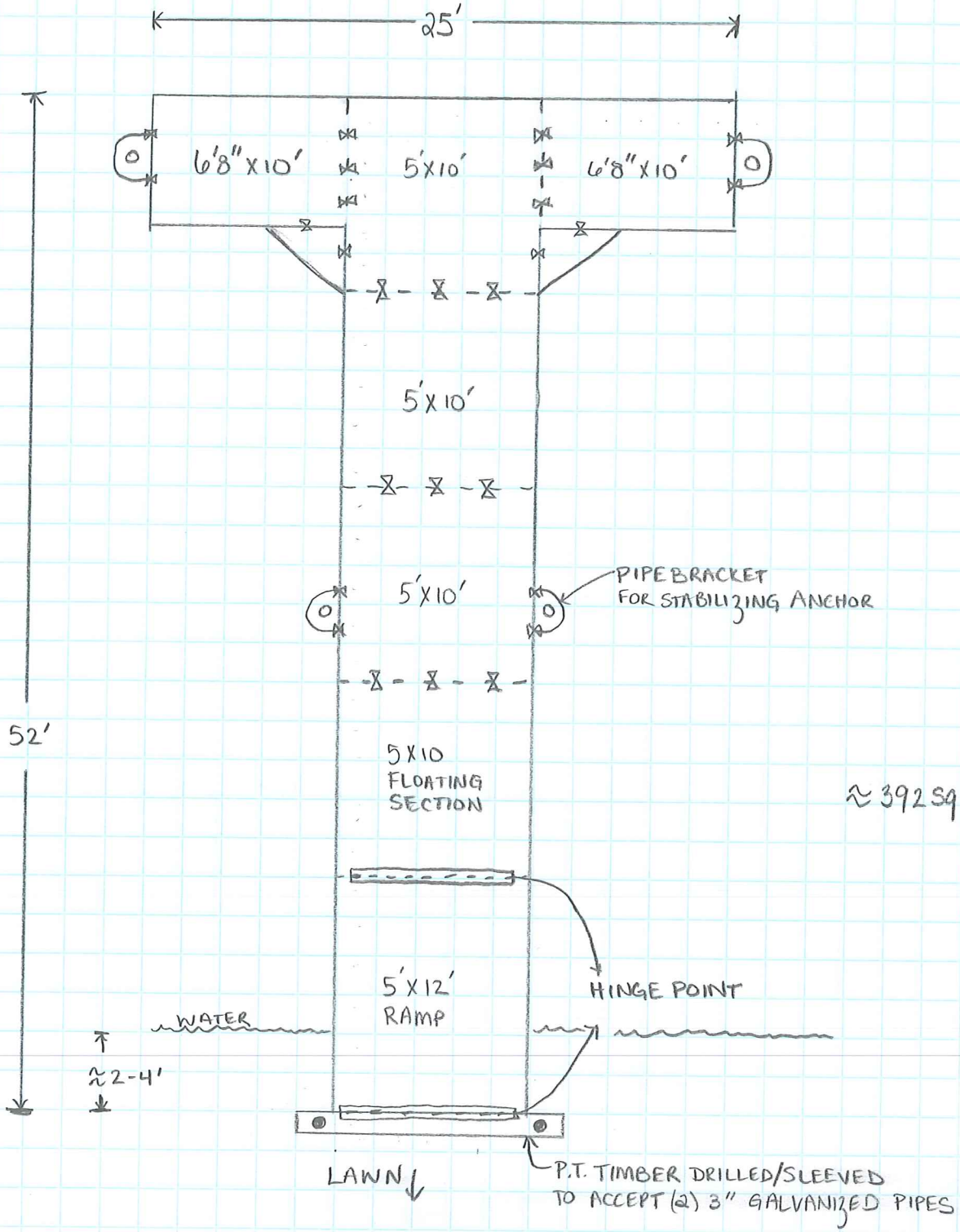

EXISTING
STANDING DOCK
SYSTEM
SWIM AREA
BUOYS
N
Google earth
1994
Imagery Date: 9/19/2013 43°43'51.19" N 72°36'48.72" W elev 1308 ft eye alt 1603 ft


1994
Imagery Date: 9/19/2013 43°43'51.37" N 72°36'48.81" W

EXISTING STANDING DOCK AT LOW WATER LEVEL

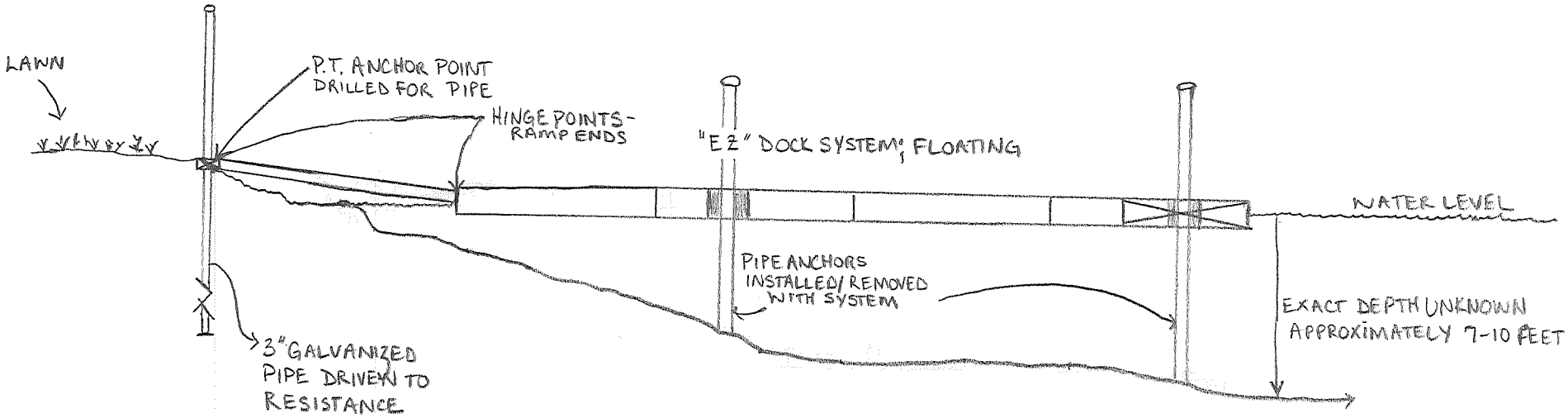
PROPOSED FLOATING SYSTEM - N.T.S.

PLAN VIEW



PROPOSED FLOATING SYSTEM - N.T.S

PROFILE



PROPOSED FLOATING SYSTEM

* Note: THIS IS A PHOTO OF AN EXISTING SYSTEM IN PLACE AT CAMP PLYMOUTH STATE PARK- IN USE SINCE 2007

CLOSE UP OF SHORE LAND ANCHOR POINT
ON FLOATING SYSTEM