CITY OF NANAIMO
THE HARBOUR CITY

DEVELOPMENT PERMIT NO. DP000840

DONALD R. GEORGE / ZENOBIA A KOTWALL
Name of Owner(s) of Land (Permittee)

3326 STEPHENSON PT ROAD
Civic Address

1. This development permit is issued subject to compliance with all of the bylaws of the municipality applicable thereto, except as specifically varied or supplemented by this permit.

2. This development permit applies to and only to those lands within the municipality described below, and any and all building structures and other developments thereon:

   Legal Description:

   LOT 1, SECTION 11, WELLINGTON DISTRICT, PLAN 13155, FORESHORE LEASE ON 19061.500

   PID No. 004-724-089

3. The land described herein shall be developed strictly in accordance with the following terms and conditions and provisions of this permit and any plans and specifications hereto which shall form a part thereof.

   Schedule A Location Plan
   Schedule B Site Plan
   Schedule C Qualified Environmental Professional Assessment

   a) If the applicant does not substantially commence the development permitted by this permit within two years of the date of this permit, the permit shall lapse.

4. This permit is not a building permit nor does it constitute approval of any signage. Separate applications must be made for a building permit and sign permit.

5. The City of Nanaimo "ZONING BYLAW 2011 NO. 4500" is varied as follows:

Section 6.3.1.2

- Required leave strip reduction adjacent to the sea (Departure Bay) from 15 m to 0 m, a variance of 15 m.

AUTHORIZING RESOLUTION PASSED BY COUNCIL
THE **13th** DAY OF **MAY**, **2013**.

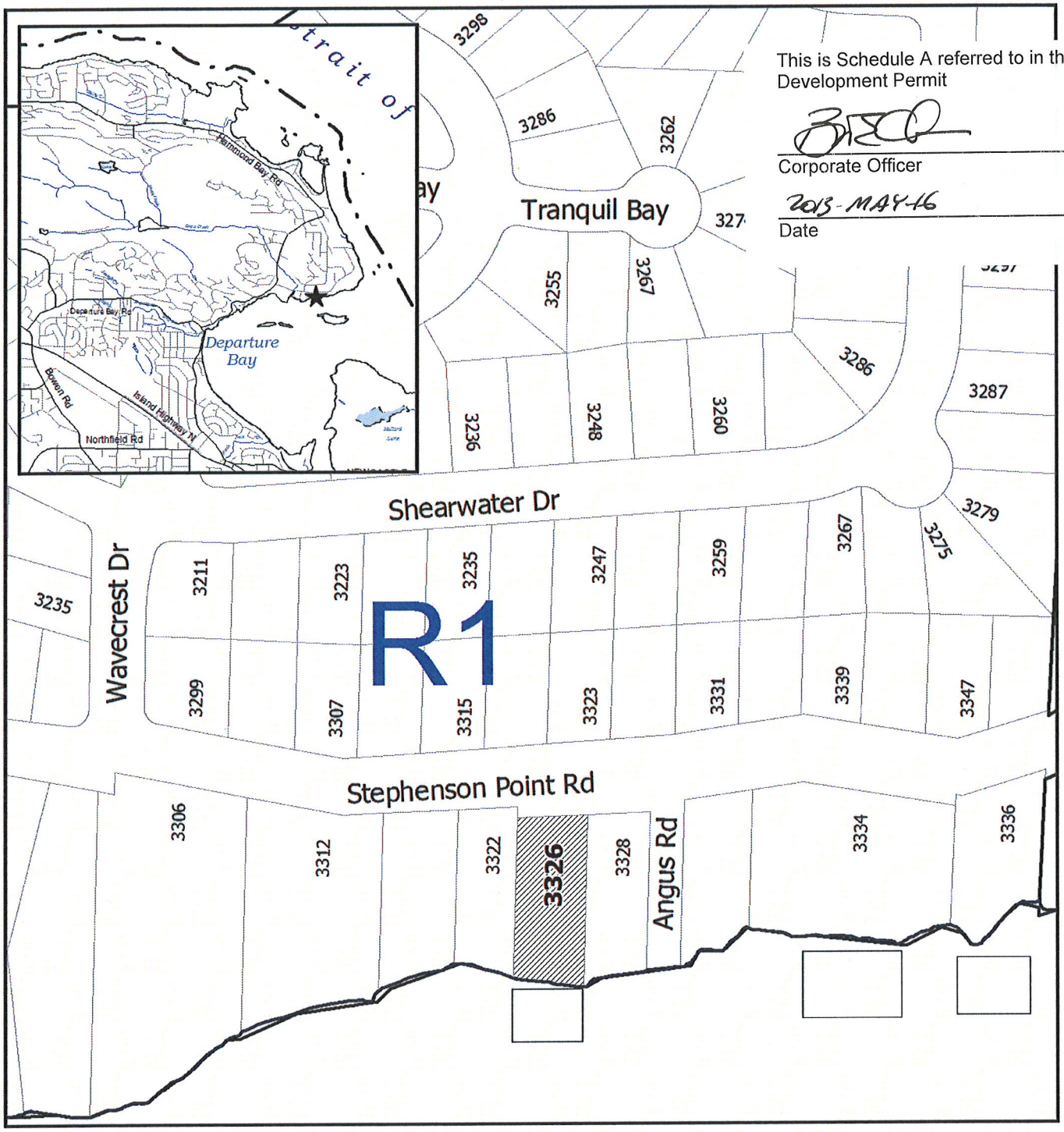
Corporate Officer

2013-MAY-16
Date

GN/lb

Prospero attachment: DP000840

SCHEDULE A



This is Schedule A referred to in the Development Permit

Corporate Officer

2013-MAY-16
Date

DEVELOPMENT PERMIT NO. DP000840

LOCATION PLAN

Civic: 3326 Stephenson Point Road
Lot 1, Section 11, Wellington District, Plan 13155

N

Subject Property

J.E. ANDERSON & ASSOCIATES
SURVEYORS - ENGINEERS
TEL: 250-758-4631 FAX: 250-758-4660
NANAIMO - VICTORIA - PARKSVILLE

SKETCH PLAN

Scale 1:300

0 5 10 15 20

File: 87642

Civic: 3326 Stephenson Point Road, Nanaimo, B.C.

Legal: Lot 1, Section 11, Wellington District, Plan 13155

Dimensions are in metres and are derived from Plan 13155.

This sketch does not constitute a redefinition of the legal boundaries hereon described and is not to be used in any matter which would assume same.

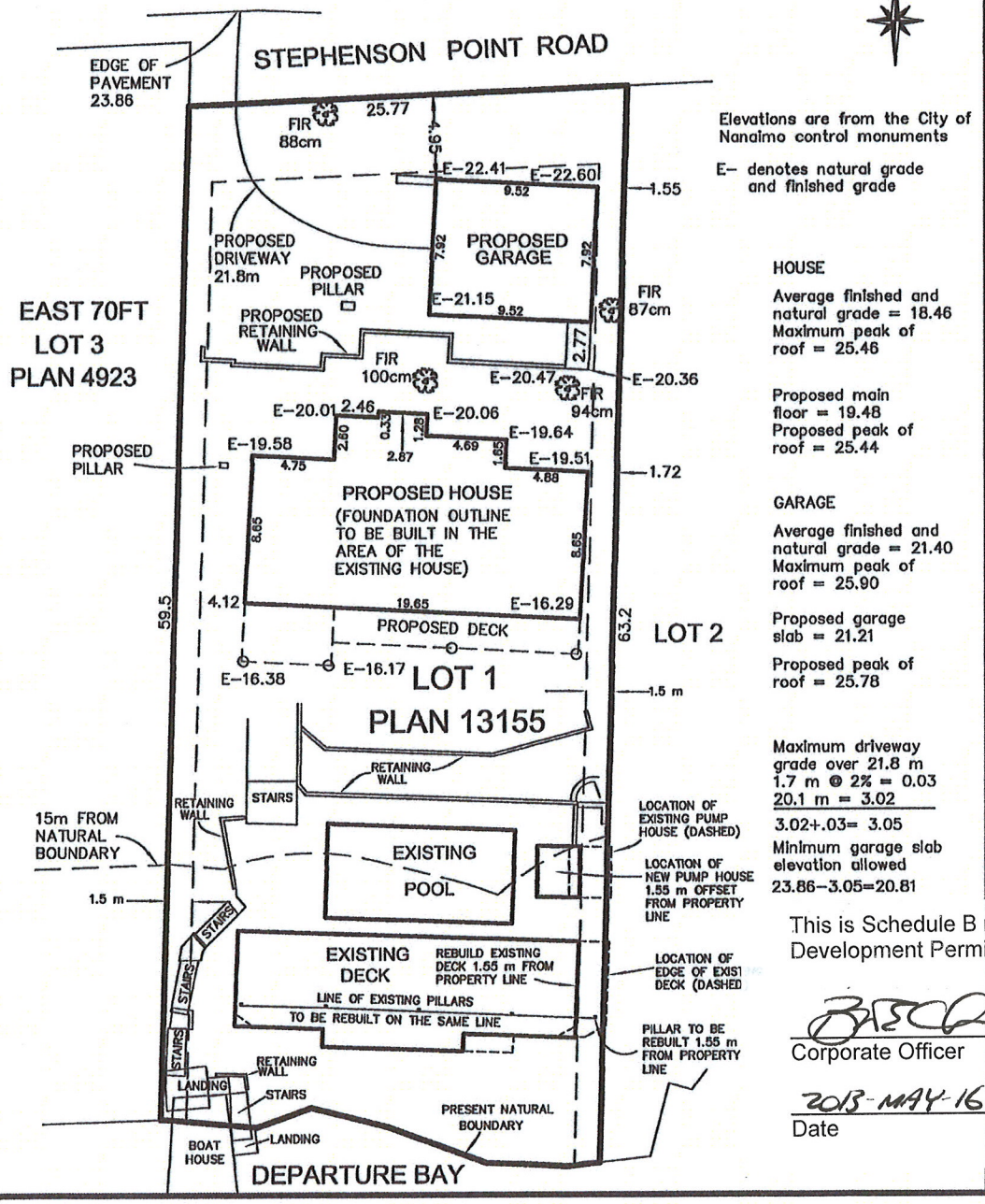
This sketch plan has been prepared in accordance with the Professional Reference Manual and is certified correct this 23rd day of April, 2013.

This document is not valid unless originally signed and sealed

B.C.L.S.

The signatory accepts no responsibility or liability for any damages that may be suffered by a third party as a result of any decision made, or actions taken based on this document.

Subject to charges, legal notations, and interests shown on: Title No. CA270581 (P.I.D. 004-724-089)



Elevations are from the City of Nanaimo control monuments

E- denotes natural grade and finished grade

HOUSE

Average finished and natural grade = 18.46
Maximum peak of roof = 25.46

Proposed main floor = 19.48
Proposed peak of roof = 25.44

GARAGE

Average finished and natural grade = 21.40
Maximum peak of roof = 25.90

Proposed garage slab = 21.21

Proposed peak of roof = 25.78

Maximum driveway grade over 21.8 m
1.7 m @ 2% = 0.03
20.1 m = 3.02
3.02+.03= 3.05

Minimum garage slab elevation allowed
23.86-3.05=20.81

This is Schedule B referred to in the Development Permit.

Corporate Officer

2013-MAY-16
Date

ENVIRONMENTAL DYNAMICS INC.

208A – 2520 Bowen Road
Nanaimo, BC V9T 3L3
P: (250) 751-9070 ▪ F: (250) 751-9068

This is Schedule C referred to in the Development Permit.

Corporate Officer

2013-MAY-16
Date

May 2, 2013

T S Williams Construction Ltd.
P.O Box 39
Nanoose Bay, BC V9P 9J9

Attention: Taran Williams, Owner

Re: Proposed works within the Environmentally Sensitive Areas Development Permit Area at 3326 Stephenson Point Road, Nanaimo

This letter has been prepared to provide environmental recommendations for proposed works adjacent to the marine environment at 3326 Stephenson Point Road, Nanaimo. At the subject property, it is proposed that the existing house be removed and a new home constructed. In addition to rebuilding the house, a garage will be constructed and some of the existing ancillary structures on the property will be rebuilt. A portion of the proposed works are within the Watercourses Development Permit Area (DPA1 – City of Nanaimo Official Community Plan Bylaw 2008 No. 6500), which is the marine riparian zone that extends 15 m inland from the natural boundary of the sea.

The proposed works within DPA1 (15 m from the natural boundary) include:

1. Replacement of an existing deck.
    - Remove existing timber decking and posts.
    - Excavate and install new concrete footings.
    - Construct new deck.
2. Replacement of an existing pool.
    - Drain and remove existing concrete pool and surrounding concrete deck.
    - Construct new concrete pool and surrounding concrete deck.
    - Install new rainwater drain outlet beneath new deck.

The other works related to replacing the existing house are to occur in conjunction with the above works but all such works are beyond 15 m from the natural boundary and, therefore, not within DPA1 and not further discussed within this report.

I conducted an environmental site assessment at the subject property on March 18, 2013. The findings are summarized below. The assessment does not consider slope stability or geotechnical issues. It is understood the project's geotechnical engineer will be providing inspection services related to such issues during construction.

Assessment Results

As the proposed works are located within previously disturbed areas, a detailed bio-inventory of the marine riparian zone was not warranted. The following is a general description of the site's biophysical characteristics.

The entire subject property has a south-facing aspect and slopes towards the shoreline and the portion of the property within DPA1 is steeply sloped down to the high water mark. The upper intertidal zone is comprised primarily of moderately sloped bedrock.

Much of the area within 15 m from the natural boundary on the subject property is covered by existing structures (the pool, deck and stairs down to the boathouse). Vegetation is present to the east of the deck and pool and on either side of the stairs, which are on the west side of the deck. Vegetation in these areas include some non-indigenous landscaping, native shrubs (such as salal and Oregon grape), invasive shrubs (such as Himalayan blackberry and Daphne laurel) and some larger trees (Douglas fir, arbutus and big leaf maple). Vegetation is also present beneath and south of the deck. Vegetation beneath the deck, which is cantilevered out over the slope, is sparse and consists primarily of sword fern and some Himalayan blackberry. The area south of the deck (between the deck and the shoreline) is densely vegetated with a mix of native plants and introduced species. Himalayan blackberry appears to be taking over the area and choking out native understory plants and some small trees.

Recommendations

Given that all proposed works within DPA1 are within previously disturbed areas, there is not likely to be any damage or disturbance to natural marine riparian vegetation that is adjacent to the work sites.

This report shall be attached to a Project Notification Form and submitted to Fisheries and Oceans Canada (DFO) at least 10 working days before commencing any works within 30 m of the natural boundary. It is our professional opinion that the project does not require DFO review for the following reasons:

- The project involves the replacement of existing structures within their existing footprints and does not require disturbance to previously undeveloped areas.
- The works are not expected to adversely affect the adjacent marine environment.
- All proposed works are located well above the natural boundary of the ocean.
- Provided the following measures are followed, the proposed works are not expected to adversely impact the features, functions and conditions of the marine riparian environment at the subject property nor the marine environment below the proposed work sites.

Deck Replacement

1. Prior to removing the deck, install orange snow fencing on the ground below the entire outer perimeter of the deck (fence shall align vertically with the outer edges of the existing deck on south, east and west sides). This will protect existing vegetation from accidental disturbance during construction.

2. Immediately after the existing deck has been removed, cover any exposed soils below the deck with a certified weed free, native seed mix and cover seed with a 2 cm layer of straw (not hay) mulch. Soils appear to be coarse so erosion of soil beneath the existing deck is not expected to be a significant problem; however, as the slope is very steep, placement of seed and mulch will assist with surface soil cohesion, prevent rainfall erosion from occurring and prevent soil disturbance from foot traffic. Avoid disturbance to existing sword ferns as much as practicable. If sword ferns require removal, it is recommended that they be carefully transplanted to adjacent areas within DPA1 that are not to be disturbed.
3. No vegetation shall be removed within the areas beyond the snow fencing. Once deck reconstruction is complete snow fencing can be removed.
4. If desired, non-indigenous species can be removed and replaced with native species (see notes in suggestions section for further guidance). It is recommended that non-indigenous species not be removed until construction is complete because removal of the plants in conjunction with adjacent construction could cause surface soil instability and erosion towards the shoreline.
5. Do not conduct earthworks (footing excavations for posts) during heavy rainfall events.
6. Excavate footings by hand and immediately remove all excess soil from the slope. Excess soil shall be placed beyond the 15 m DPA1 area. This is to prevent loose soil from eroding towards the shoreline.
7. Ensure inspection is made by the project's geotechnical engineer to confirm that the proposed works do not compromise slope stability. Follow all geotechnical recommendations made to ensure the slope is stable upon completion of the work.

Pool Replacement

1. During removal of existing concrete pool and surrounding concrete deck, ensure that no concrete falls south towards the shoreline. Construction of a temporary wooden containment fence immediately below the concrete structure may be warranted as a preventative measure.
2. Take all necessary precautions to prevent sediment laden runoff from entering the slope below during construction of the new concrete structure. As soils appeared to be coarse, the introduction of sediment laden runoff towards the marine environment is not expected to be a substantial concern but as the works are located immediately above a steep slope above the shoreline, precautions should be taken.
3. During concrete pours for the new pool and deck, care must be exercised to ensure all concrete remains within forms and does not leak down the slope and towards the shoreline. Concrete tools and equipment shall not be rinsed within 30 m from the natural boundary. Runoff from rinsing shall not be allowed to drain towards the marine environment or into drains that lead to the marine environment.
4. It is anticipated that rainwater runoff from the new pool will be directed into a perforated drain pipe that disperses discharged water along the slope beneath the deck. Dispersal drains are often preferred as runoff is not concentrated and has less potential to cause erosion. It is recommended that the project's geotechnical engineer comments on the feasibility, design and location of the drain to ensure that slope stability issues are adequately addressed.

General

1. If any environmental concerns arise during construction, it is recommended that EDI be contacted immediately to conduct a site inspection. Possible environmental concerns include but are not limited to:
    a. hydrocarbon spills
    b. generation of sediment laden runoff into the marine environment
    c. any damage to existing vegetation outside of the identified construction sites
    d. slope erosion
    e. the introduction of uncured concrete into the marine environment
2. A hydrocarbon spill kit shall be on site at all times during construction. In the event that an accidental hydrocarbon spill occurs, the spill kit shall be readily available to contain and clean up any fluids. Spills of greater than 100 L or any spills that enter the marine environment must be reported immediately to the BC Emergency Spill Reporting Line (1-800-663-3456).

Suggestions

The following suggestions have been made to improve the ecological condition of the area over the long-term:

1. Ongoing, hand removal of invasive plants within DPA1 is strongly encouraged (especially Himalayan blackberry, which abundant between the deck and the shoreline).
    a. Given that much of the slope is overgrown with blackberry, it is apparent that blackberry may be playing a role in surface soil stability and cohesion. It is recommended that no more than 25% of the blackberry be removed in a given year. If it is desired to remove more than 25% in a given year, it is recommended that a detailed site restoration plan be developed by an appropriately qualified professional. The plan should address replacement planting criteria and potential erosion and sediment control concerns. The restoration plan should then be submitted to City of Nanaimo for review as a DP may be required.
    b. Selectively cut plants at ground level. Do not dig up plants on steeply sloped areas as this can cause erosion of the slope.
    c. There are native plant species growing around and beneath the blackberry so extreme care must be exercised to prevent accidental removal of native vegetation. Removal of native vegetation adjacent to the marine environment is not authorized and could result in regulatory enforcement actions by municipal, provincial and/or federal authorities. If there is any uncertainty about what vegetation is native and what is not, it is strongly recommended that you seek the guidance of an appropriately qualified professional.
2. Additional planting of native trees and shrubs throughout the slope is encouraged, especially where invasive species have been removed. EDI can provide advice on native plant selection if needed.

Please let me know if you have any questions regarding this letter.

Yours truly,

EDI ENVIRONMENTAL DYNAMICS INC.

Adam Compton, R.P. Bio.
Project Manager/Senior Biologist

Attachments: Site Photos

COLLEGE OF APPLIED BIOLOGY
Adam Compton
R.P. Bio
#1605
CAB

Original signed + sealed May 2/13

Site Photos

Photo 1. Looking south at pool and deck.

Photo 2. Looking southeast at pool and deck.

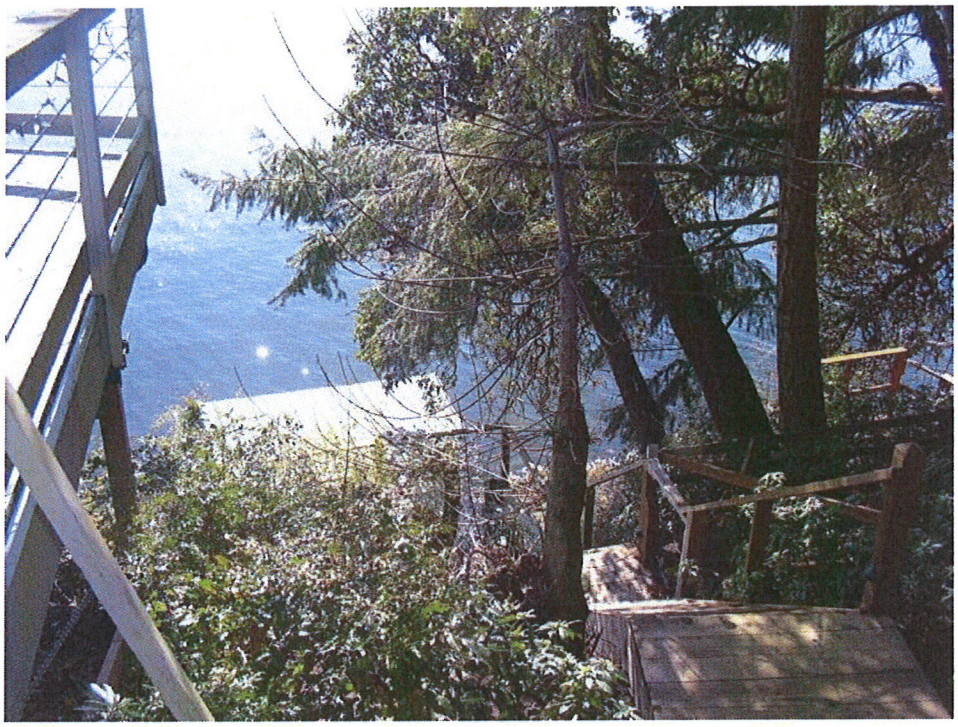


Photo 3. Looking north at portion of pond on neighbors lot.

Photo 4. Looking west at vegetation below deck, beach and boathouse.

Photo 5. Looking east at vegetation beneath and below deck.

Photo 6. Looking west at vegetation beneath and below deck.