



REPORT FOR WATERSHED ADVISORY BOARD

RE: PERMIT APPLICATION NO: 021/19

DATE: FEBRUARY 28, 2017

An application for development has been submitted by Mr. Glenn Hayes on behalf of Matthew and Elizabeth Shearer with regards to Ontario Regulation 159/06 the Development, Interference with Wetlands & Alterations to Shorelines & Watercourses Regulation of the CVCA.

Executive Summary

An application to develop lands along Chandos Lake is recommended by staff to be **denied**. The development proposed is as follows: the alteration of grade and installation of landscaping encroaching into the 15m no development setback applied to all waterbodies without an evaluated 1:100 year floodplain. The application does not meet our policies for development around watercourses. The proposed development is within the setbacks described in Section 5.1 and the Quick Reference Guide in the CVCA Watershed Planning and Regulations (O.Reg 159/06) Policy Manual (Policy Manual).

Background and Subject Lands

On February 21, 2019 a site visit was conducted at the request of the agent Glenn Hayes Prior to the submission of the application being submitted. The site visit went over the concerns Mr. Hayes had around the proposed removal of trees on the property. I indicated that the CVCA only has concern with removal of trees if it creates an erosion hazard with stump removal, or is associated with fill importation for lawns. While on site we discussed the intention to plant dozens of new trees to try to naturalize portions of the property, reduce erosion risks, provide privacy, and reduce the impact of others viewing the property from the lake. On the site visit Mr. Hayes showed me his intended setback of 30' from the water. I informed him that the CVCA policies would require a 15m (~50') setback as there was no existing development within that setback, but I would investigate if there were any ways to work within our policies to get a permit with them.

On February 28, 2019 a permit application was submitted for the proposed development. The patio will consist of several walkways connecting three main areas being the hot-tub area, fire pit, and barbeque/bar area. The retaining walls between the tiers will be in general 1.5-3' high with sections closer to 5' where existing topography requires. This will be accomplished with large armour stone and with 1-4 passes. Each level will be installed with sandy clay fill wetted and packed with jump-jacks. On top of this fill will be 4-6" of ¾" crushed limestone and pavers. Along the upper edge of the retaining walls drainage/weeping tile socked "O" pipe will be installed below the level of the crushed limestone to facilitate drainage. The weeping tile/drainage pipe will move water away from walls to keep them completely dry and eliminate any risk of freeze/thaw damage. The outlet for the drainage will be into naturally vegetated areas on either side of the dwelling to allow natural infiltration of water and eventual release into Chandos Lake. The proposed works will be no closer than 30' (~10m) for the barbeque/bar regions (approximately 50' wide) and the remainder of the landscaping will be stepped farther back between 40-50' (12-15m). The landscaping will not encroach 15m from the small wetlands to the east-southeast of the dwelling. Verbal and written descriptions of the work establish a 30-35' setback will be made with the closest portion of the patio and the remainder set back to ~45'. The drawings provided, show the patio significantly closer to the shore (14' setback), but it has been confirmed through written and verbal communications that the patio will

be compressed to accomplish the 30-35' setback. An existing trail to the water is proposed to be improved from the patio area to the existing dock using a combination of stone steps and mulch, and will not exceed 1.8m (~6') wide.

As part of the landscaping and rehabilitation of the property after the construction of the dwelling under CVCA Permit 101/17 over 75 trees, the majority indigenous to the area, will be planted to help naturalize the property, replace some decadent trees that will be taken down, and to provide privacy/obscure the artificial stone walls from the lake. Trees are to be planted in areas to the east and west of the dwelling to help revegetate and stabilize disturbed soils.

After thorough review of our policies and previous board discussions around Chandos Lake an email describing options available to the property owners was sent on April 16, 2019. This described our rationale for our policies and our mandate and indicated what options were available to the proponents, Mr. and Mrs. Shearer. It was also stated that we are currently working with stakeholders that wish to work with the CVCA to undertake the floodplain delineation on Chandos Lake.

While discussing the purpose of the 15m setback I detailed that it is linked to the standard assumed setbacks for flood hazards on lakes without an engineered floodplain. I explained that Chandos Lake has not had an engineers study to define the floodplain so that is why the 15m is applicable. I also stated that we have observed a level of 314.02 Meters Above Sea Level (MASL) in 1997 as per our records, and this had not occurred during a 1:100yr storm event so we have reason to believe the floodplain would likely be higher. Our discussion detailed other considerations with flood risks and I explained stated that Peterborough County Road 620 across the north of the lake spans the outflow of Chandos with two large culverts and the potential for ice jamming would likely be considered during any analysis of a floodplain on Chandos Lake, and the lowest point on the road (~314.5MASL as per Peterborough County Data interpretation) could potentially be observed. Based on this information Mr. Hayes took a laser level and measured the difference in elevation of the lake to the low point of County Road 620 and marked out this elevation on the property. Mr. Hayes also measured the elevation difference between the proposed base of the development to the County Road 620 elevation and it was determined that it was approximately 7' (~2.1m) higher. A second site visit on April 27, 2019 confirmed that if the base of the proposed development at it's closest point is set back 30' from normal shoreline there would be a setback between 20'-26' (6m-8m) from the development to the County Road 620 elevation.

The agent, Mr. Hayes, informed the CVCA his clients would like to proceed with recommendation for denial of their application and proceed with a hearing.

CVCA Regulations & Policy Manual

Based on the information submitted, the CVCA staff recommended denial of the permit application for the following reasons:

Our policies will permit development within 30m (~100') of a shoreline under specific conditions and do not permit new development within 15m (~50') of the shoreline on lakes without a delineated floodplain.

The proposed new landscaping is to occur up to 30' (10m) from the shoreline, approximately 5m into the 15m setback.

The subject site is located in a regulated area as described in Ontario Regulation 159/06. The proposed development of a dwelling of the proposed size will not be permitted in accordance with Section 2. (1) (b) which states:

Section 2. (1) Subject to section 3, no person shall undertake development, or permit another person to undertake development in or on the areas within the jurisdiction of the Authority that are,
(b) hazardous lands;

The *Conservation Authorities Act* and the Crowe Valley Conservation Authority Watershed Planning and Regulations Policy Manual (2017) defines *hazardous lands* as “land that could be unsafe for development because of naturally occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock.” In this case, processes associated with flooding are our concern.

The manual is intended to provide CVCA staff with policies for the purpose of administering our Regulation (159/06). When reviewing development applications, the Authority must have regard for its objectives of preventing loss of life and minimizing property damage.

The individual policies that apply to this application are listed below and are specific to Administrative Policies and Policies for Flooding Hazards. Sections that are not relevant to this application have been removed.

Administrative Policies

The following sections speak to over-arching policies that every application must be tested against. The One Zone concept explains that the entire CVCA watershed is within a single zone where all applications adhere to the same policies. In other Conservation Authorities that have a two zone concept there are different policies depending on what zone development is proposed within. Areas subject to the regulation include several different items with hazardous lands being a critical component. Hazardous lands include all lands that are or could be flooded.

3.2 One Zone Concept

Under the one zone approach, construction activities are restricted within the Regulatory Flood Plain. Permitted development may include reconstruction or minor additions to existing structures as well as extension to existing agricultural operations. Other uses, such as open space, that is not likely to create damage to other properties from floodwater, or cause a threat to public safety, or are not of a polluting nature may be permitted within the flood plain. Examples of uses or structures that would create adverse impacts in the flood plains of our riverine systems include, but are not limited to, new buildings, swimming pools, filling activities, septic tile fields and tanks, as well as manure storage and handling facilities.

The One Zone Concept of floodplain management is applied throughout the entire Crowe Valley Conservation jurisdiction.

3.4 Areas Subject to the Regulation

Ontario Regulation 159/06 sets out areas where development is prohibited as well as setbacks from various ecological features. The features that are encompassed by the regulation are as follows: (irrelevant sections have been removed)

Hazardous Lands

This component of the Regulation applies to development within hazardous lands which is defined under Section 28 of the CA Act as land that could be unsafe for development due to naturally occurring processes associated with flooding, erosion, dynamic beaches, or unstable soil or bedrock. Unstable soil and bedrock include, but is not limited to sensitive marine clays, organic soils, and karst topography. Sensitive marine clays are not identified within the watershed. Organic soils are normally formed by the decomposition of vegetative and other organic materials. Peat soils are the most common type of organic soil in Ontario. Karst topography may be present in limestone or dolomite bedrock and are extremely variable in nature.

Hazardous Lands Policies

The following policies are specific to development in the flood hazard. Any development within a flooding hazard requires permission from the CVCA. In general development within the Regulatory floodplain shall not be permitted except in accordance with the policies contained below. Policies that do not apply to this case have not been included.

The following policies apply to the development proposed:

Defining the Flooding Hazard and Associated Regulated Area

5.1 ... *The Regulated Area Includes the Floodplain and for not apparent valley systems, an allowance. The allowance is not to exceed 15m from the hazard.*

The Crowe Valley watershed uses the 1:100 year storm to delineate its regulated area. With the exception of the lakes in Table 1 that have a known 1:100 year elevation, the CVCA regulates 30m from all shorelines.

With the 30m regulated area, 15m of which being the allowance, there is 15m that is assumed to contain the flooding hazards and emergency access on all lakes that have not had the flood elevation studied.

General Flood Hazard Policies

5.2.1 *Development within the Regulatory floodplain shall not be permitted;*

Fill Placement, Excavation and/or Grade Modifications

5.3.13.1 *Fill Placement or excavation for the purpose of changing the grade on a property within the flood hazard for the purpose of permitting development will not be permitted.*

For this application the General Flood Hazard Policies and Fill Placement, Excavation and/or Grade Modifications policies apply to the application. The proposed addition is within the 15m floodplain setback where there is no pre-existing development and all portions within that setback are prohibited.

Summary

The application for the development of patios, gardens, and outside amenities does not meet our current policy manual based on the unconfirmed floodplain on Chandos Lake. The Shearers and Mr. Hayes were made aware of the restrictions associated with development on this property, made some modifications to their original plans to try to keep most of the development farther back than the 30' closest point, and recorded site elevations in comparison to the road that crosses the outflow of Chandos Lake (County Road 620). As the application does not meet the requirements of the Policy Manual the application has been recommended for refusal.

Figures Enclosed: Original and Revised Site Plans/Application Documents
CVCA Generated Maps

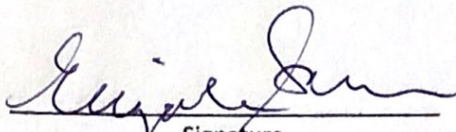


P.O Box 416, 70 Hughes Lane
Marmora, ON
K0K 2M0

Phone: 613-472-3137
Fax: 613-472-5516
www.crowevalley.com

I, Elizabeth Shearer, agree to waive the two week review period to proceed with the

Hearing on May 16, 2019 as opposed to the original recommended Board Meeting on June 20, 2019.


Signature

Robert Cole

From: Elizabeth Shearer <easmith18@hotmail.com>
Sent: May 9, 2019 10:46 AM
To: Robert Cole
Cc: Matty; info@amherstgreenhouses.com; Glenn; tim.pidduck@crowevalley.com; rcwannop@hotmail.com
Subject: Re: Notice of Hearing and Report for Executive Committee
Attachments: Scanned Documents 2.pdf

Good morning Robert,

Thank you for your assistance in working through this process with us. Please consider this email as confirmation to name Rick Wanop as an authorized agent to represent us alongside Glenn Hayes. Both Glenn and Rick will be attending the hearing on our behalf.

I've also included a scanned copy of the signed waiver you've requested. Should you need a hard copy, Rick and Glenn will have the waiver with them at the hearing.

Best regards,
Elizabeth and Matt Shearer

authorized agents

On May 8, 2019, at 4:56 PM, Robert Cole <robert.cole@crowevalley.com> wrote:

Good day Matthew, Elizabeth, and Glenn,

Please find attached the Notice of Hearing and the Report for the Executive Committee that I will be providing to board.

Tomorrow I will be organizing all of the submitted information that you have provided to be given to the Board. If any additional information is to be provided please get it to me by 3:00pm tomorrow.

In order to fit you into this meeting we have to compress our timelines to be sure everything gets to the board, the notice does have a waiver you need to sign and send in acknowledging that in order to be fit into the May 16th meeting the standard review timelines are waived. We have been able to keep open dialogue between the office and Mr. Hayes and, as you will be able to confirm with the report, no new information has come up since the previous letter I sent you.

I appreciate your co-operation and look forward to seeing you at the hearing.

Yours in Conservation,

Robert Cole

<image003.png>**Robert Cole** - Regulations Officer – Provincial Offences Officer
Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0
Tel: 613-472-3137 Fax: 613-472-5516

Any maps/screen shots provided in emails are produced by Crowe Valley Conservation Authority with data supplied under licence by the Ontario Geospatial Data Exchange and local County data. These maps/screen shots have been created for demonstrative purposes only and are not to be used as an official source of data.

<Hearing Report.pdf><Notice of Hearing_Shearer.pdf>



CVCA File #:

P.O. Box 416, 70 Hughes Lane, Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516 www.crowevalley.com

PERMIT APPLICATION FORM

FOR A DEVELOPMENT, INTERFERENCE WITH WETLANDS AND ALTERATIONS TO SHORELINES AND WATERCOURSES PERMIT
(CONSERVATION AUTHORITIES ACT - ONTARIO REG. 159/06)

Contact Information (please print clearly)			
Property Owner's Name(s): <i>Matthew and Elizabeth Shearer</i>			
Mailing Address (Street, P.O. Box) <i>3365 Hollywood Court</i>		City <i>Pickering</i>	Postal Code <i>L1X 0A3</i>
Telephone: Home <i>905-686-9183</i>	Work <i>416-891-8152</i>	Mobile <i>416-738-8230</i>	
Email <i>easmith18@hotmail.com OR mshearer@underarmour.com</i>			
Agent's Name(s): <i>GLENN HAYES</i> <small>*property owner's letter of authorization or signature to be attached</small>			
Mailing Address (Street, P.O. Box) <i>3455 Old Brock Road</i>		City <i>CLAREMONT</i>	Postal Code <i>L1Y 1A1</i>
Telephone: Home <i>cell 416-990-6671</i>	Work <i>905-649-1858</i>	Mobile <i>416-990-6671</i>	
Email <i>GLENN HAYES</i>			

Is the Owner aware of this application? ☒ Yes ☐ No - Please explain: _____Is a Planning Act application (minor variance, zoning by-law amendment) required for this development? ☐ Yes ☐ No

Location of Proposed Works (please ensure a map and driving directions are attached)		
Lot <i>Parcels 18</i>	Concession <i>con 10</i>	Municipality <i>NORTH PARADISE</i>
Municipal Street Address <i>129- FINE BOUGHY RD</i>		
Assessment Roll Number <i>153601010109301 0000</i>		Watercourse/Waterbody <i>CHANDLER LAKE</i>
Existing Land Use (vacant, residential, etc.) <i>VACANT</i>		Proposed Land Use <i>RECREATIONAL COHABITATION</i>

This application must be accompanied by **TWO COPIES** of a detailed site plan and payment of a processing fee as determined by the Conservation Authority. The site plan **MUST** include the following information:

1. General location of property in relation to roads, etc.
2. Location and dimensions of all existing structures on property and a survey plan with lot dimensions.
3. Location of any waterway, open water, wetland, steep slope on or near the property and any drainage features (ditches/culverts).
4. Intended location and dimensions of fill, construction, or waterway alteration proposed.
5. Cross-section of proposal showing existing and final grade with elevations from the current water level of any nearby waterway, and elevations of the lowest structure opening if applicable.

Description of Works (please check all that apply)	
Construction of a Structure <input type="checkbox"/> NO	Interference with a Wetland <input type="checkbox"/> NO
Alter, Add to or Renovate a Structure <input type="checkbox"/> NO	Pond Construction, cleanout or repair <input type="checkbox"/> NO
Install a Septic System (please indicate type and volume of fill below) <input type="checkbox"/>	Watercourse Crossing (culvert, bridge) <input type="checkbox"/> NO
Place or Remove Fill Material (please indicate type and volume of fill below) <input checked="" type="checkbox"/>	Shoreline Protection (please indicate length of shoreline affected below) <input checked="" type="checkbox"/>
Type and Volume of Fill (m ³) 147 CUBIC METERS	Length of Shoreline Affected (m) 224 FEET FILTER CLOTH FENCE
Other OF Fill Armour Rock TOPSON LINERED PAVED ECT	
What is the purpose of the work? TO NEW HOME/COHAGE ENTRANCE STAIRS, PATIO'S LANDINGS BBQ AREA	
Proposed Start Date: JUNE 1 2019	Completion Date: MID JULY 2019

I/We the undersigned hereby certify to the best of my/our knowledge and belief that all of the above-noted, attached and/or supporting documentation and information is correct and true. I/we further solemnly declare that I/we have read and fully understand the contents of this application and specifically the terms and conditions on the following page, and the declaration written below.

By signing this application, consent is given to the Crowe Valley Conservation Authority, its employees and authorized representatives to access the property for the purposes of obtaining information and monitoring any approved works pursuant to Section 28(20) of the Conservation Authorities Act.

I, (please print name) GLENN HAYES declare that the above information is correct to the best of my knowledge and I agree to abide by Ontario Regulation 159/06.

Signature: [Signature] Date: JUN 27 2019

NOTE: Signature or Written Authorization of Landowner is Mandatory. Landowner authorization form follows this page.

I am the: ☐ Owner ☒ Agent ☒ Contractor ☐ Other: _____

The information on this form is being collected, and will be used, for the purposes of administering a Regulation made pursuant to Section 28 of the Conservation Authorities Act, R.S.O. 1990 C27.

NOTE: Further information and studies may be required by the Crowe Valley Conservation Authority (CVCA) in order to process this file, the cost of which will be borne by the applicant or their agent. This information may include details related to wetlands, floodplains, hydraulics, slope stability or stream systems. Once completed, all studies become the property of the CVCA and the information may be used by the CVCA, its member municipalities and partners. In order for members of the public to view any studies, plans and reports related to your permit, a formal request under the **Municipal Freedom of Information Protection and Privacy Act**, RSO 1990, c.M.56, is required. Access is subject to statutory exemptions. The same is true should you wish to access any studies, plans and reports pertaining to other's permits. Insufficient information may delay the processing of your application. This application does not relieve the applicant of the obligation to secure any other necessary approvals. Fees are subject to change without notice.

Landowner Authorization

If this Application of Permit is to be submitted by a solicitor/ contractor/ agent on behalf of the owner(s), this Landowner Authorization must be completed and signed by the owner(s). If the owner is a corporation acting without agent or solicitor, the application must be signed by an officer of the corporation and the corporation's seal (if any) must be affixed.

NOTE TO OWNER(S)

Please note that the Crowe Valley Conservation Authority staff reserve the right to discuss any or all aspects of the permitting process with the property owner.

If the Application of Permit is to be prepared by a solicitor/ contractor/ agent, authorization should not be given until the Application of Permit and its attachments have been examined and approved by you the owner(s). All submissions are the responsibility of the owner(s).

I/ We Matthew and Elizabeth Shearer
Print full name of owner

Hereby Authorize Glenn Hayes and/or Rick Wasep
Print full name of Solicitor/ Contractor/ Agent

To submit the enclosed Application of Permit to the Crowe Valley Conservation Authority and to provide any further information or material required by Authority Staff relevant to the Application of Permit for the purpose of obtaining a Permit to fill, construct or alter a watercourse in accordance with the requirements of the Ontario Regulations.

Signature of Owner(s) [Signature] Date Feb 27, 2019

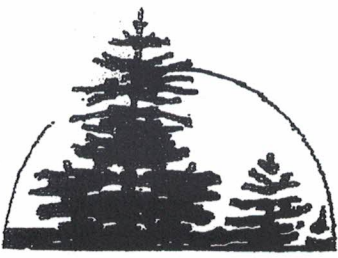
Signature of Solicitor/ Contractor/ Agent [Signature] Date Feb 27, 2019

TERMS AND CONDITIONS

The Applicant, by acceptance and in consideration of the issuance of this Application of Permit, agrees to the following conditions:

1. The Owner and Applicant agrees:
 - a. to indemnify and save harmless, the CVCA and its officers, employees, or agents, from and against all damage, loss, costs, claims, demands, actions and proceedings, arising out of or resulting from any act or omissions of the Owner and Applicant or any of his/her agents, employees or contractors relating to any of the particulars, terms or conditions of this Application of Permit;
 - b. that this Application of Permit shall not release the Owner and Applicant from any legal liability or obligation and remains in force subject to all limitations, requirements and liabilities imposed by law;
 - c. that at all complaints arising from the proposed works authorized under this Application of Permit shall be reported immediately by the Owner and Applicant to the CVCA. The Owner and Applicant shall indicate any action which has taken place or is planned to be take, with regard to each complaint.
2. This Application of Permit shall not be assigned or assumed by any subsequent purchaser, transferee or grantee.
3. This Application of Permit does not absolve the Applicant of the responsibility of obtaining necessary permission from applicable federal, provincial or local agencies.
4. Should default be made by the Owner and Applicant in compliance with, or satisfaction of, the enumerated conditions and or submitted application, the CVCA may enter upon the property with respect to which conditional approval is granted and cause said conditions to be satisfied if necessary, the expense of which will be the sole responsibility of the Owner and Applicant.
5. The work shall be carried out as per the approved plans and specifications submitted in support of the application and as amended by the approval of this permit.
6. The Owner and Applicant agree to maintain all existing drainage patterns, and not to obstruct external drainage from other adjacent private or municipal lands.
7. The permit granted under this regulation is valid for TWO years from the date of issue and it is the responsibility of the Owner and Applicant to ensure that a valid permit is in effect at the time of works occurring.
8. The Owner and Applicant may appeal any or all of the stated conditions of the permit to the Board of the Conservation Authority.

PLEASE NOTE THAT ONLY THE FIRST THREE (3) PAGES OF THIS PACKAGE NEED TO BE RETURNED ALONG WITH SUPPORTING DOCUMENTATION. PLEASE DO NOT RETURN THE FOLLOWING PAGES WITH YOUR APPLICATION.



Hayes Landscaping

Telephone: (905) 649-1858

*Design & Construction * Residential * Commercial
Landscape Supplies*

Feb 27th 2019

Attn: Robert Cole.

Crowe Valley Conservation

Regarding Matthew and Liz Shearer's new cottage at Fire Route 200, Chandos Lake, part of lo 18, Concession 10. Register plan 45R – 13410. Township of North Kawartha.

(Regarding the construction of Landscaping). All storage of material will be behind cottage and protected from run off. Before start there will be silt fence installed properly. The armour stone and patios will have heavy filter cloth in 2 layers. Not only vertical but horizontal. From top to bottom and across horizontal of each rock course so nothing can escape. The fill material will be a mix of clay base and sand so if ever major rains or flood it will not wash out easy like straight sand.

In all gardens and edges of pavers where water runs off, there will be 6" of clear drain stone fabric, soil for planting and mulch on top. Once the soil has absorbed water for plants it will drop through into drain stone, which will have network of sock 0 pipe in drain stone and fabric on top of drain stone. It will all be planted to make root network and mulched on top of that. All armour stone if needed will have ends cut and chiseled for very tight joints.

All the stairs will be 6" risers so fill will be put in 6" lifts compacted by big diesel plates tampers, jumping jacks for heavy compaction. That will ensure no need for equipment to ever return for repair.

Most of walls will be 1.5ft to 3ft tall. One outer wall will be 4ft tall on outside corner for short distance, may be closer to 5ft. This rock will be large size material all courses except top will be 3ft minimum from front to back to ensure very stable wall.

I have been installing large scale landscaping for 30 years. Never had a failure. All drains from gardens will drain to opposite side of the property from wetland. The rock wall will have a heavy planting of native Hemlock and Cedar to stop the overpower look of rock.

The owners and myself can see a heavy planting of trees on all sides. We need to remove 7 smaller trees of poor quality at best and replace with 119 trees and garden planting. This will ensure it goes back to nature for the natural look.

The landscape will not encroach any closer to the lake than disturbed areas now. Will only be 8ft off the corner of the building on wetland corner. 15m, 50ft or more from the wetland and across the front will



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be over the 9 meters away from the lake, with only one existing path to lake. If possible, going to shrink plan in build to try to be 35 feet, 10.67 metres or more from the lake. Only short section 35 feet from the lake, most will be more. (only deadwood to be removed from 9 meters, 30ft protected zone.

Planting

Hemlock	27 – 6-8 foot
Maple	13 – 2.5" 18 foot
River Birch	7 – 2.5" 18 foot clump
Oak	4 – 2.5" 18 foot
White Pine	4 – 3" 18 foot
White Cedar	53 – 6 foot Hedging cedar for random plant
Saskatchewan Berry	3 clump
Preston Lilac	3 clump
Balsam Fir	1 – 6-8 foot
Beech	1 – 2.5" 18 foot

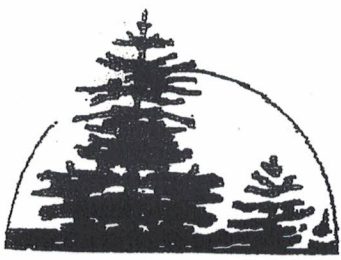
Gardens planted as per plan.

Cottage Roof Drainage

The down spouts from roof will be run toward lot line, not to wetland and ensure no damage to neighbours property. No water from the roof to run through landscaping.

The level of the main patio start is 10 feet, 3.05 meters above the existing lake level. That will ensure water level never comes close to the patio.

This landscaping package of natural stone steps, walls and BBQ. Having a heavy planting of native trees in front and the 35 foot natural will hardly be seen from the lake. The cottage will also be hidden by planting the 119 trees on the plan. The driveway is being kept on the smaller side and planting around it. Heavy planting on neighbours side for privacy for both sides. We think this landscape will give



Hayes Landscaping

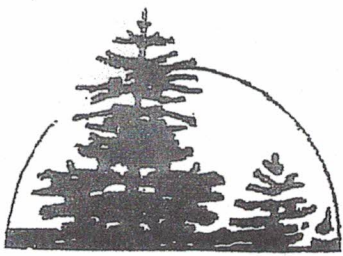
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Telephone: (905) 649-1858

owners and others privacy and keep water front very natural. This is a 5 week build so won't drag on for neighbours and be good for everyone.

Please review and call.

Hayes Landscaping
Glenn Hayes
416 990 6671

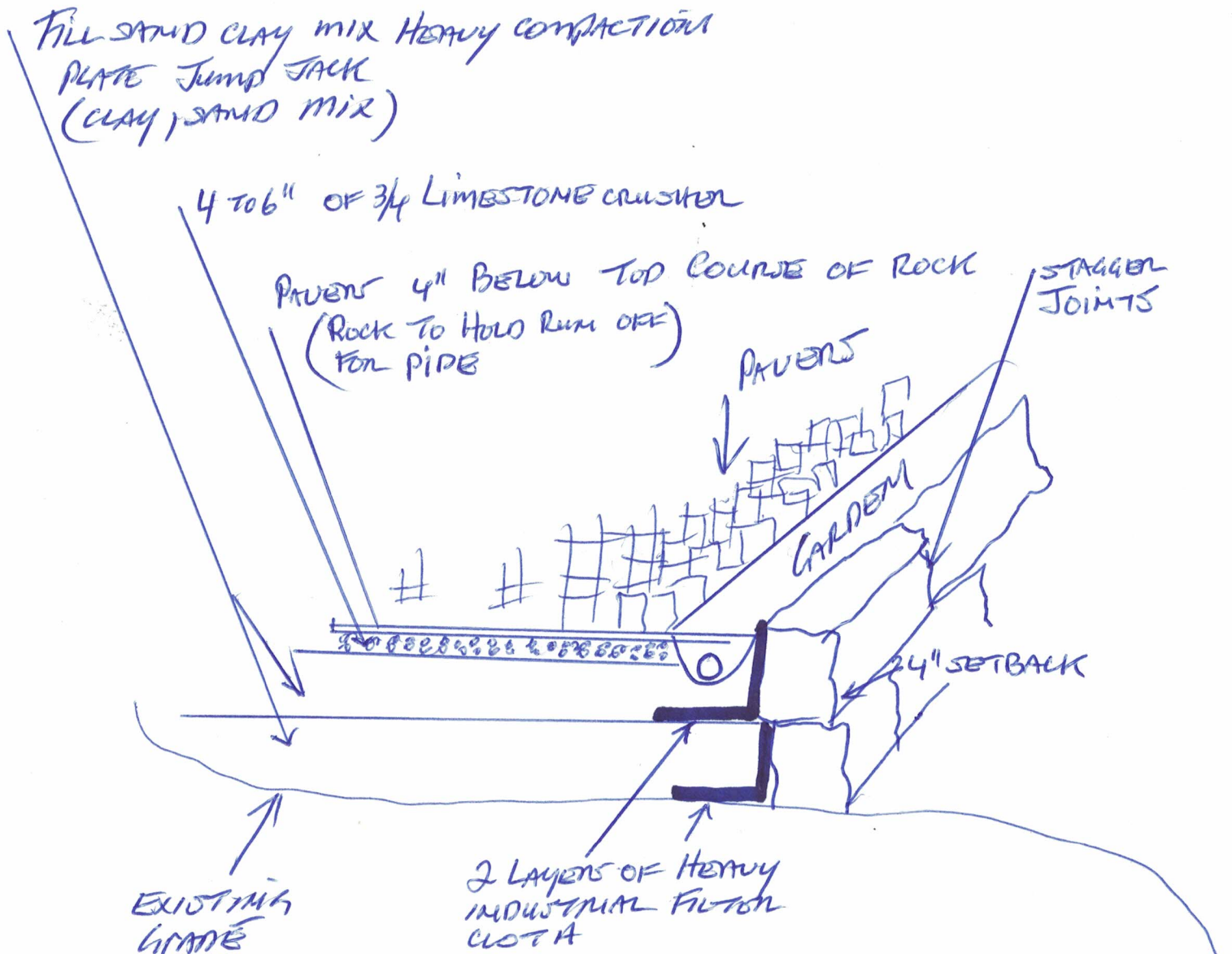


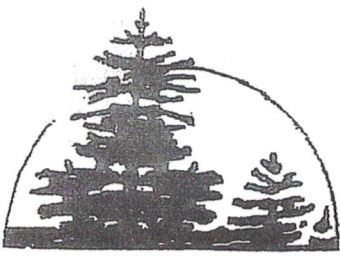
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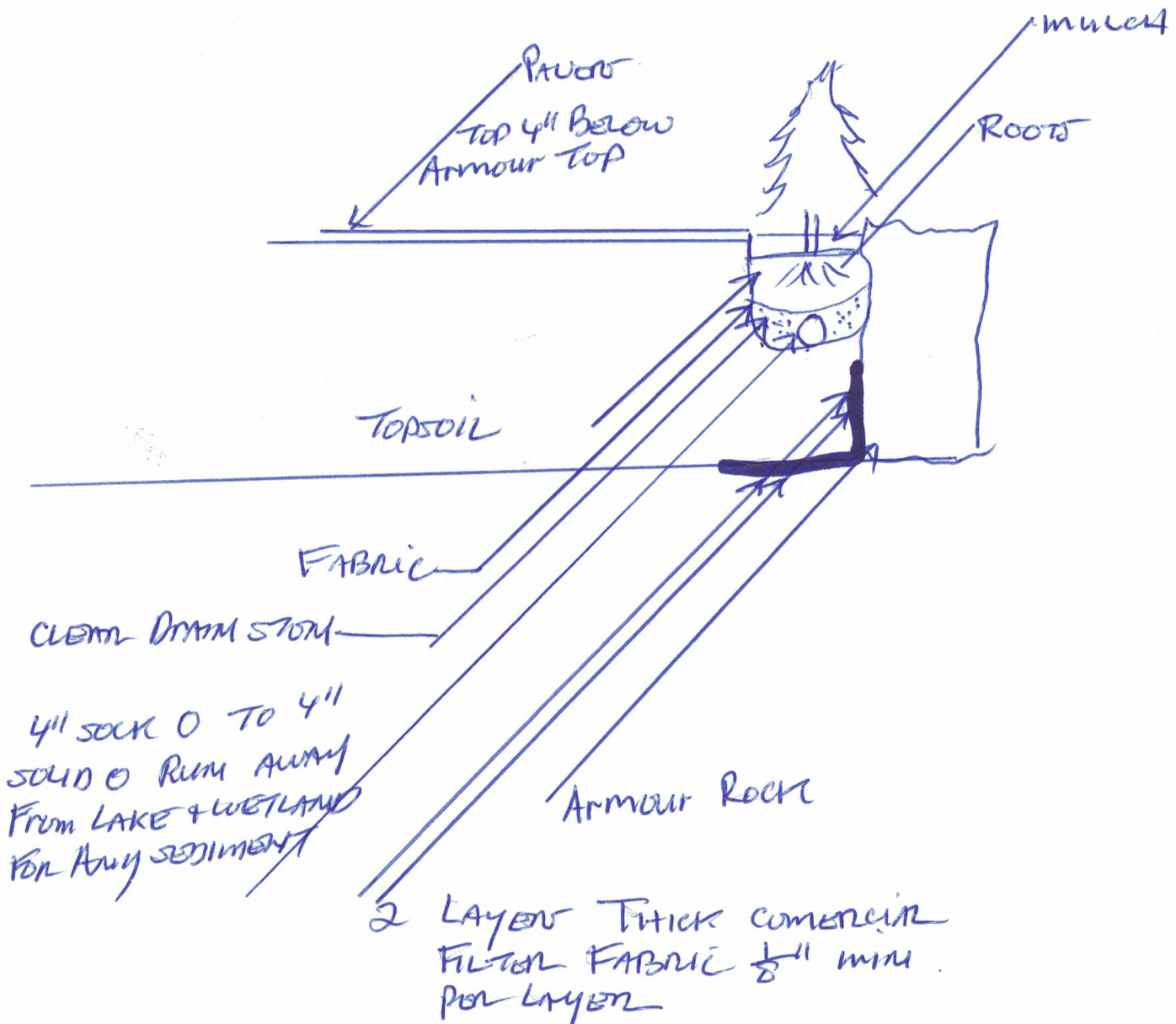


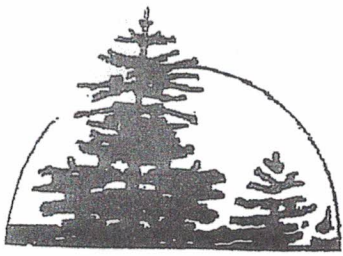
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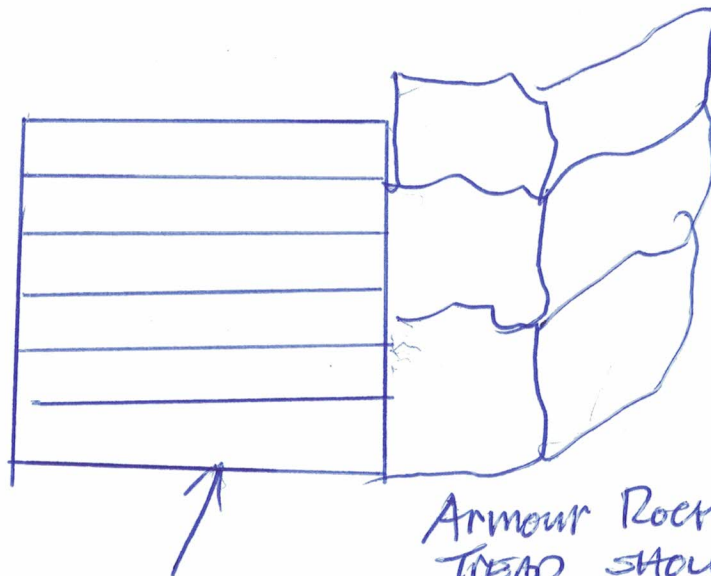


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Landscaping

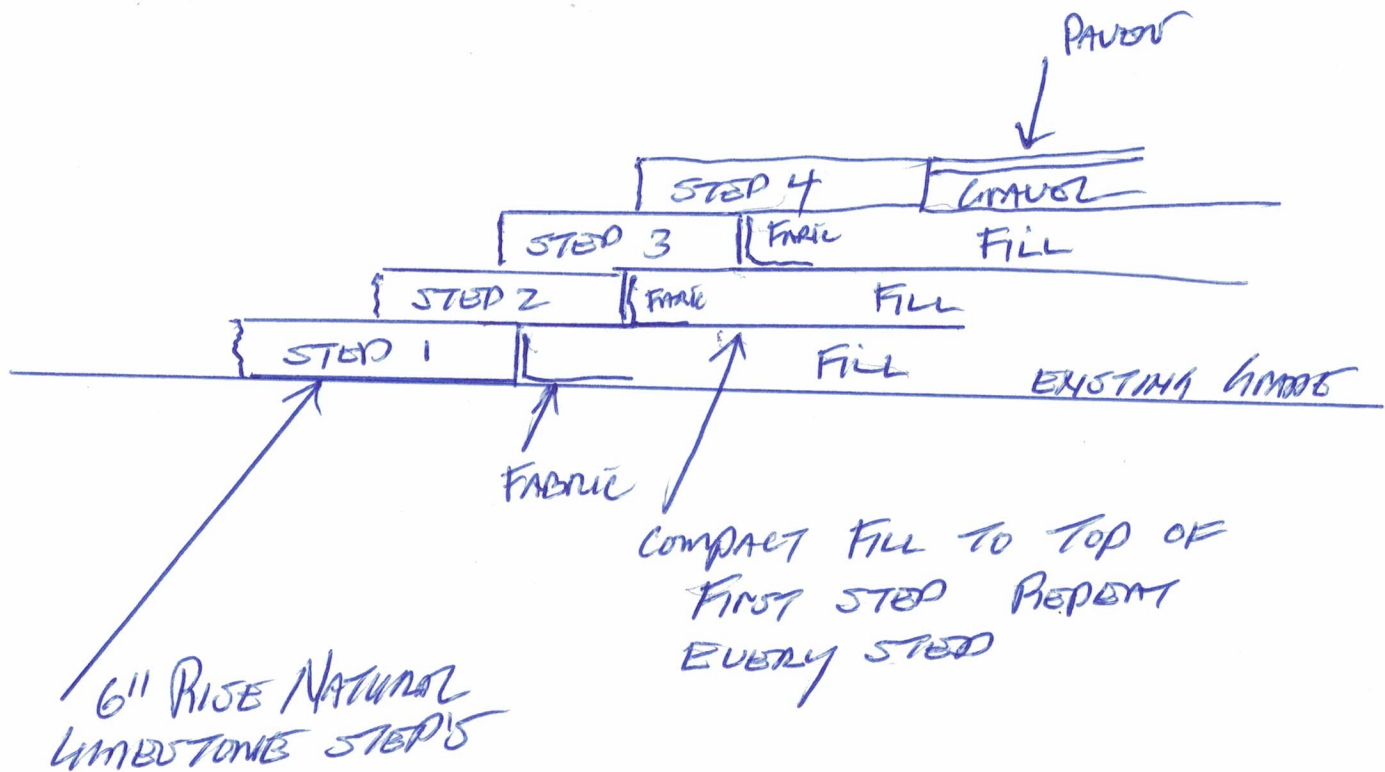
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STAIR
TREADS

Armour Rock STAIR
TREAD SHOULDER
(As per Drawing)

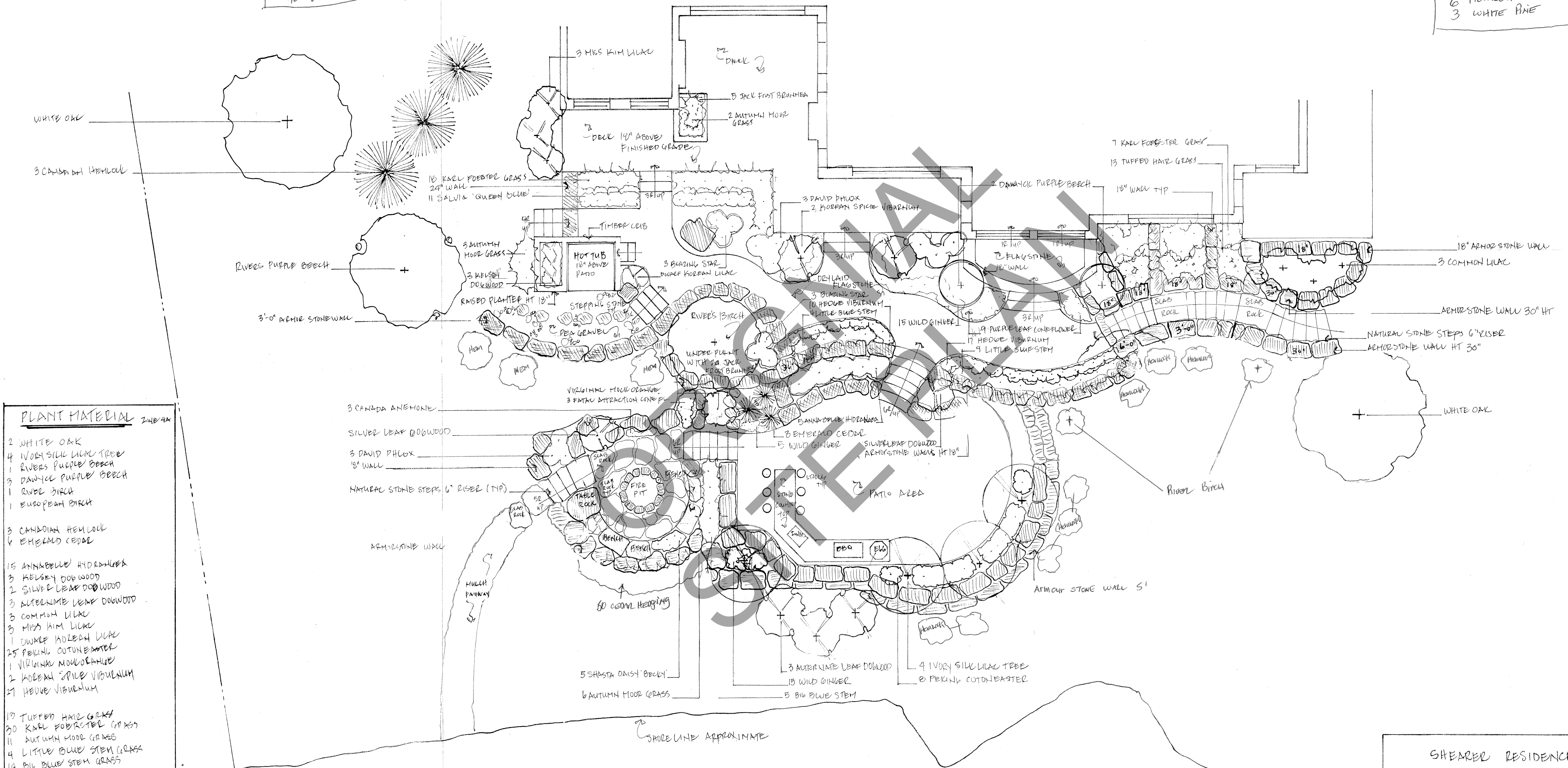


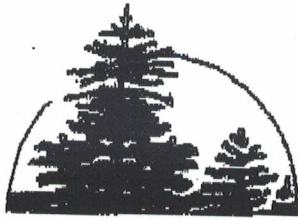
MATT & LIZ
SHEPHERD
COTTAGE
LAKE SIDE

27

ADDITIONAL TREES
6 Hemlock
4 Autumn Blaze Maple
3 River Birch
2 OAK
to be planted from here
to driveway

EXTRA TREES
4 Autumn Blaze Maple
6 Hemlock
3 White Pine





Hayes Landscaping

Telephone: (905) 649-1858

Design & Construction * Residential * Commercial
Landscape Supplies

April 24th 2019

CROW VALLEY CONSERVATION

Attn: Robert Cole,

Regarding the proposed landscape at Matt & Liz Shearer cottage build.

When started planning we understood that the build line is 30' from the lake so we designed close to that. Our drawing does overlap that line a bit but will make minor changes and keep inside the 30' line. That section on the 30 foot line is only 50' long, both sides set back further from the lake or 30 foot line. To keep low walls we need to go out as the grade keeps getting higher from 30 foot line toward cottage. Then cottage doors are approx 6' above ground at highest point. If we were to keep landscape any closer than 30' that would force us to have less levels. Therefore the walls would be higher. This drawing with multiple levels has drainage in every level and taken off to side so exit of water not close to the lake at exit point.

As it steps down in levels it will have geo gride (every) level planting for roots and oversize Armour to be very strong and safe for kids etc.

The base of it is above 7 foot above flood level, flood level is the centre of the road at the Chandos Beach (620). The walk out basement is much lower than the base of the proposed patio. During the cottage/build everything but 1 clump of poor-quality trees has been ripped out by machinery working on cottage. Robert Cole has no problem with those trees removed as not much value to them. The owners have agreed to plant 75 native trees, Pine's Hemlock, Tamerak, Maple Oak, 2.5 callper 15 and 7 foot Hemlocks.

These trees will completely block view to this build from neighbours but not obstruct their view to the lake. This planting will also completely block this landscape from the lake view. The balance of property will have heavy tree planting. Matt & Liz are very big on replanting, wanting to look as natural as possible. There is only one neighbour for hundreds of feet and in full support of this landscape plan.

Thanks for considering this plan.

Owners

Matt & Liz Shearer

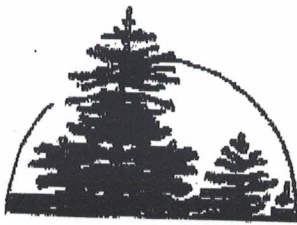
Matt 416 891 8252

Liz 416 738 8230

Contractor

Glenn Hayes

416 990 6671



Hayes Landscaping

Telephone: (905) 649-1858

*Design & Construction * Residential * Commercial
Landscape Supplies*

CROW VALLEY CONSERVATION

Property

1. They have approx 1700 feet of lake frontage (un touched)
2. Main build 7 feet above flood level
3. Support of neighbour

Contractor

1. Years of building experience
2. Large crew complete in 5 weeks
3. Pictures of other builds.

Property

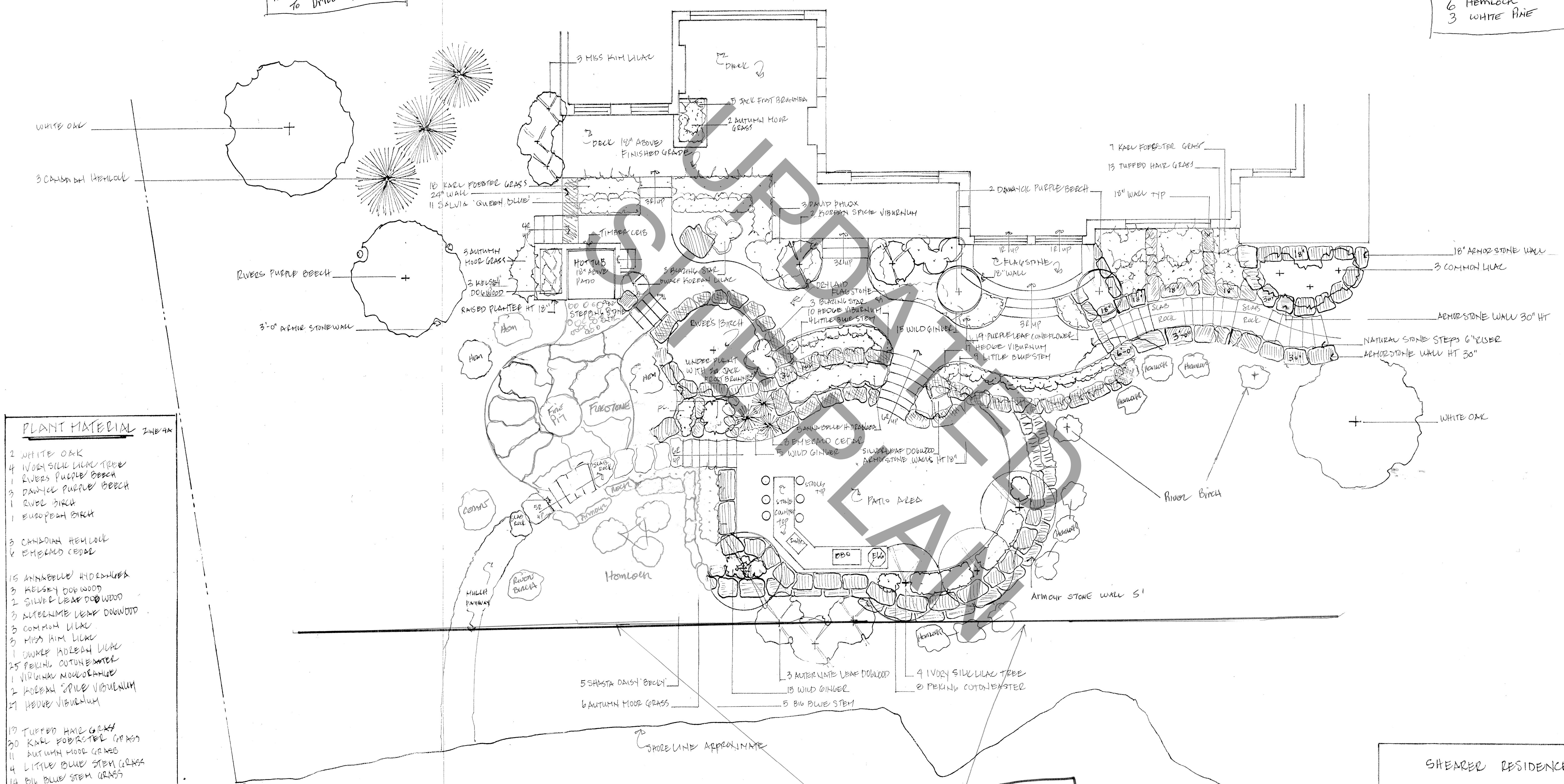
1. Pictures of damaged areas

Curran
Garvin

MATT & LIZ
SHEARER
COLLAGE
LAKE SIDE

ADDITIONAL TREES
6 Hemlock
4 Autumn Blaze Maple
3 River Birch
2 OAK
to be planted from
to Driveway

EXTRA TREES
4 Autumn Blaze Maple
6 Hemlock
3 White Pine



- PLANT MATERIAL** 2/18/18
- 2 WHITE OAK
 - 4 IVORY SILK LILAC TREE
 - 1 RIVERS PURPLE BEECH
 - 3 DANIELA PURPLE BEECH
 - 1 RIVER BIRCH
 - 1 EUROPEAN BIRCH
 - 3 CANADIAN HEMLOCK
 - 6 EMERALD CEDAR
 - 15 ANNABELLE HYDRANGEA
 - 3 KELSEY DOGWOOD
 - 2 SILVER LEAF DOGWOOD
 - 3 ALTERNATE LEAF DOGWOOD
 - 3 COMMON LILAC
 - 3 MISS KIM LILAC
 - 1 DWARF HOLEBERRY LILAC
 - 25 PEKING COTONEASTER
 - 1 VIRGINIA NODOSA RHODUS
 - 2 HOLEBERRY SPICE VIBURNUM
 - 21 HEDGE VIBURNUM
 - 13 TUFTED HAIR GRASS
 - 30 KAL FOSTER GRASS
 - 11 AUTUMN MOOR GRASS
 - 4 LITTLE BLUE STEM GRASS
 - 14 BIG BLUE STEM GRASS
 - 35 WILD GINGER
 - 1 LOBELIA ERIHUS HOODSON
 - 11 SALVIA 'BLUE QUEEN'
 - 6 PHLOX 'DAVID'
 - 23 PURPLE CONE FLOWER
 - 3 FATAL ATTRACTION CONE FLOWER
 - 35 JACK FRUIT BRUNNENIA
 - 3 CHERRY BLOSSOM
 - 5 CHERRY BLOSSOM
 - 6 BLAZING STAR
 - 6 MAGNOLIA BLUE FORTUNE
 - 7 FIRE AND ICE HORTIA

CLOSEST POINT 30' FROM
HIGH WATER FLOOD
LEVEL
ROAD AT ENTRANCE BOWEN
(620)

SHEARER RESIDENCE
CHABOS LAKE, APSLEY ONTARIO
LAKE SIDE LANDSCAPE PLAN
SCALE: 1/2" = 1'-0"
DATE: AUG 2018
DESIGN BY: MARLENE COMBES

Robert Cole

From: Robert Cole <robert.cole@crowevalley.com>
Sent: April 16, 2019 4:43 PM
To: 'easmith18@hotmail.com'; 'mshearer@underarmour.com'
Cc: 'info@amherstgreenhouses.com'; tim.pidduck@crowevalley.com
Subject: Crowe Valley Conservation Authority Permit Application 021-19 - Chandos Lake Landscaping

Good day Mr. and Mrs. Shearer,

As you are aware we have been assessing the application submitted to the CVCA for the proposed landscaping you wish to complete at your cottage on Chandos Lake. Upon review of your application we have determined and discussed with you that CVCA policies do not permit new development (including the placement of fill) within 15m (50') of the shoreline of Chandos Lake or other identified/delineated hazards. This means that some of your proposed works encroach into the noted development setbacks. Under these circumstances we cannot approve the permit application as it is submitted.

This email will first provide the rationale behind our CVCA mandate, development setbacks and CVCA Board approved policies. In addition, it will inform you of new considerations regarding Chandos Lake flood hazard mapping. Finally, we will outline three options for you to consider in moving forward.

The key mandate of all Conservation Authorities is to protect people lives and properties from natural hazards, be it flooding, erosion/landslides, or sink holes and cave-ins. As such setbacks have been delineated to capture steep slopes, shorelines, floodplains and unstable soils and bedrock. Regarding your application, the CVCA is primarily concerned with the erosion and floodplain hazards and their associated setbacks from the shoreline of Chandos Lake. On all lakes, such as Chandos Lake without an engineered 1:100 flood elevation (the maximum flood elevation which has a 1% chance of occurring in any given year), the CVCA policies enforce a 15m (50') setback for all new development. By restricting development in this regulated area, this should help to ensure the safety of lives and the protection of property. As well, the policy enables the CVCA to consider the cumulative effect on neighbouring properties and ensure the lake dynamics continues to function as naturally as possible in a flood scenario.

After the 15m (50') setback an additional 15m (50') allowance creates the commonly stated 30m (100') regulated area around lakes, but the regulated area can also be significantly expanded by the presence of other regulated features (ex. wetlands or erosion hazards). With Chandos Lake not having an engineered flood elevation, the CVCA has adopted the above noted setbacks (15m/50' "no development" + 15m/50' allowance = 30m/100' regulated area) as described in our policy manual.

At this time, I would also like to note that on our lakes with an engineered flood elevation, we establish a 6m (~20') no development zone from the maximum extent of the flooding. Since contours and elevations vary along the shoreline of a lake, the no development area can easily be closer to the shore or farther inland than the "default" zone used in the case of lakes like Chandos.

Fortunately, the CVCA had collected approximately 40 years of data on the daily levels of Chandos Lake. Based on observed flooding events and the elevation of County Road 620 which spans the historic outflow/inflow of Chandos Lake, staff have hypothesized the 1:100 year flood elevation is approximately 314.5 meters above

sea level (MASL). With this data and some additional analysis of the catchment of Chandos Lake an engineered flood elevation could be determined.

General Description

I would like to note that while reviewing the provided drawings I noticed a discrepancy between the setback confirmed on site (and in subsequent phone conversations) versus the submitted drawings. Using the scale, the drawings indicate a 14' (4.27m) setback from the base of the landscaping to the shoreline. My assessment of the file has been using the 30' (~9m) setback stated by Mr. Hayes, and I recommend that an update to the drawings be done to accurately demonstrate the 30' (~9m) setback.

On the map below I extrapolated the drawings onto an air photo. Included is an approximation of the southern extremity of the proposed landscaping (the orange line), but moved it back to the 30' (~9m) setback as stated by Glenn. Developing a trail down to the lake for access to the dock/swimming is permitted but would be limited to 1.8m wide (6'). The more extensive works involving fill placement, excavation, and retaining walls are not permitted within the setback. The red line shows the 15m (50') setback from the shoreline and the blue line shows the shoreline as observed. Please keep in mind many of the setbacks shown initially on our mapping are for demonstration purposes and generally require field verification.



Based on our assessment we have outlined three potential options going forward.

OPTION 1.

Matthew & Elizabeth Shearer
129 FR 200
1536-010-101-09301-0000
Chandos Lake
Landscaping

Legend

- Subject_Property
- Lakes
- Regulated Area CVCA



1:750

Feet

0 15 30 60 90 120

Meters

0 5 10 20 30 40



Produced by Crowe Valley Conservation Authority
March 21, 2019

With data supplied under licence by the
Ontario Geospatial Data Exchange and local County data.
This map has been created for demonstrative purposes only
and is not to be used as an official source of data.

Based on the 15m setback the first option would be to have the landscaping redesigned to keep all development (except the trail down to the dock) outside of the 15m setback and submit a revised drawing. This could be accomplished by moving the bulk of the landscaping to the west of the proposed development and some to the east. Expansion to the east would be limited by the 15m setback to the wetland (not shown on map) that is between the north and south shoreline, isolating the high point to the east.

OPTION 2.

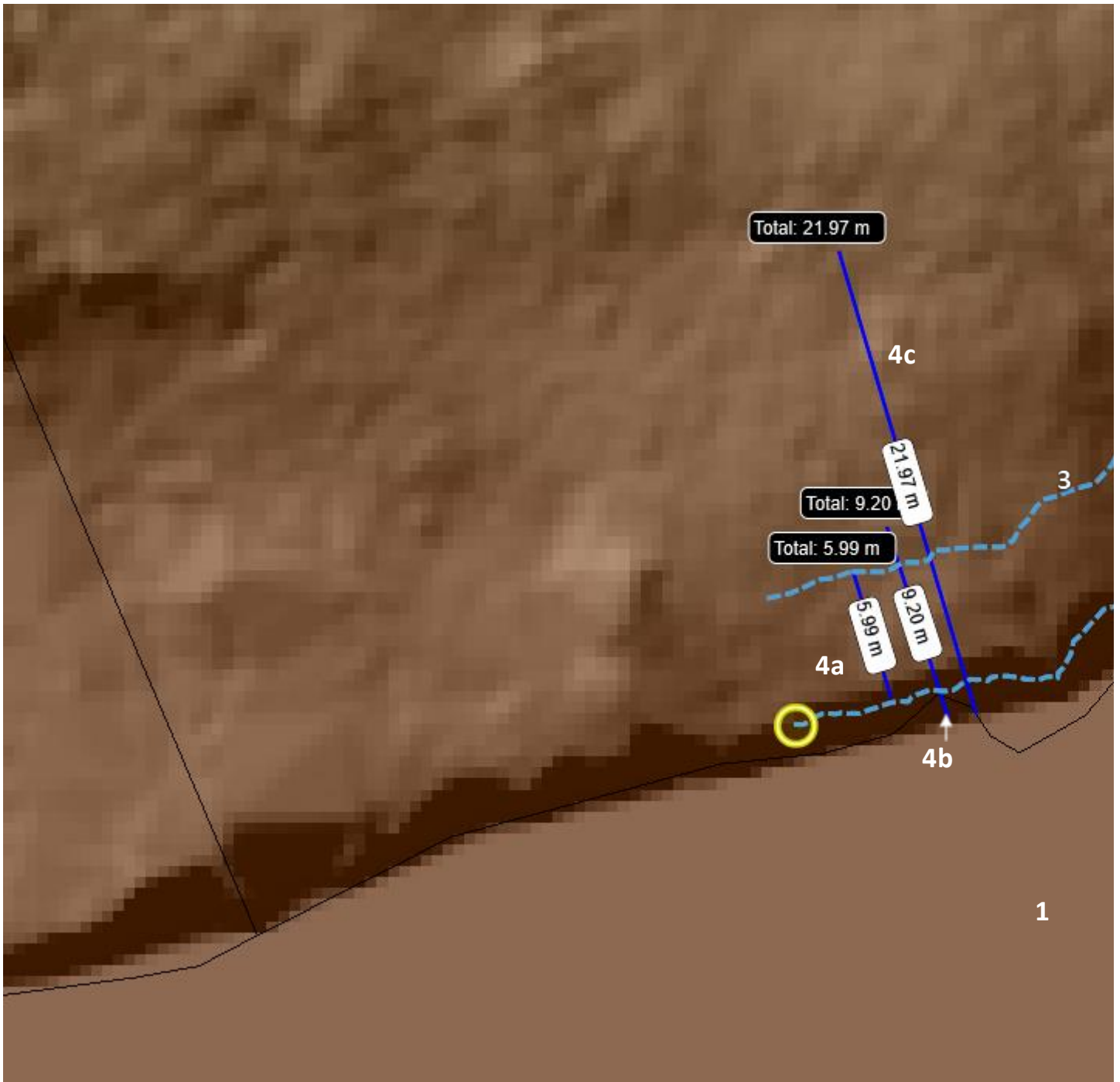
The second option would be that you re-submit drawings accurately showing the design with the 30' setback, at which time we will provide a "Recommendation for Denial" letter and the process to request a hearing before the Board of Directors. This option does not guarantee that the landscaping will be approved as the Board will have to decide that you provide justification for them to make an exception to the CVCA's approved policies.

OPTION 3.

Finally, the CVCA is currently working with several stakeholders and are in the preliminary stages of determining whether floodplain delineation is feasible on Chandos Lake. Below, I have included a map depicting the following:

- 1) The lake (flat monotone copper color);
- 2) The floodplain location at the assumed 314.5MASL (the first light blue hashed line)
- 3) The floodplain setback 6m back (the second light blue hashed line); and,
- 4) Dark blue lines measuring the distance between:
 - a. The floodplain and setback (labelled 5.99m);
 - b. The shoreline and 30' setback for the landscaping (labelled 9.20m); and,
 - c. The shoreline and approximately the closest point of the house (labelled 21.97m).

This map was created using the Peterborough County LiDAR elevation data so is a different color.



This map shows there is a fairly steep shoreline from the west property line towards the wetland(labelled). As such the floodplain, if at the expected 314.5MASL, is between 1-2m (3-6') from the water line. Therefore, the floodplain would be between 7-8m (23-26') feet from the shoreline. A such the proposed 30' (~9m) setback to the water is between 1-2m (4-6') outside the floodplain setback of 6m/~20'. As the shoreline approaches the wetland the grade becomes more gentle and the floodplain will move farther away from the shoreline.

In short, if the accuracy of our predicted floodplain was verified, the proposed landscaping works at 30' from the shoreline could be permitted. However, this would require patience on your part in order for the floodplain to be delineated through an engineered study.

House Closest Point

Total: 21.97 m

21.97 m

Total: 9.20

Total: 5.99 m

5.99 m

9.20 m

6m Setback

**Potential
Floodplain**

Wetland

Approximate County Rd 620 Elevation



Through the CVCA's policies we can require an applicant determine the floodplain of a lake or river, but this would be limited to very large development projects like major subdivisions or potentially more industrial/higher risk developments. Asking an individual property owner to determine an engineered 1:100 year flood elevation would be onerous and to date, the CVCA has not exercised this option in our policy.

I would like to offer you and your agent/contractor the opportunity to discuss the options available to you and the next steps regarding your permit application. Please advise me at your earliest convenience if you would like to schedule a meeting to further discuss your application.

I appreciate your patience and willingness to work toward a solution for your proposed development.

Robert Cole



Robert Cole - Regulations Officer – Provincial Offences Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516

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