

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

# REPORT FOR WATERSHED ADVISORY BOARD RE: PERMIT APPLICATION NO: 068/21 DATE: SEPTEMBER 2, 2021

An application for development has been submitted by Christopher Sequin on behalf of the landowner, 2620553 Ontario Inc., 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 a vacant lot on an island in Gunter Lake can **not be approved** by CVCA Regulations Officers as it fails to meet the requirements as per the CVCA Watershed Planning and Regulations (O.Reg 159/06) Policy Manual (Policy Manual). The development proposed is as follows: to construct an cabin being 336sq. ft. on piers (4' high), with attached deck and floating dock, with a composting or incendiary toilet, being 3m from Gunter Lake and 3m from a wetland. The lot is a vacant lot of record on Gunter Island in Gunter Lake, Block A Registered Plan 1733. The application does not meet CVCA policies around development within flood hazards, erosion hazards, river and stream valleys, and wetlands. The proposed development is within the 15m flood hazard of Gunter Lake, within the 15m setback to a wetland less than 2 ha, and within the erosion hazard setback of Gunter Lake.

#### **Background and Subject Lands**

On 29 March, 2021 a permit application was submitted for the proposed development. In early 2020 the agent of the property owner contacted the CVCA about potential development on a vacant lot of record on Gunter Island. CVCA staff indicated that there appeared to be a wetland on the lot requiring delineation of the wetland and that development could only be permitted outside of the wetland provided it satisfied the setback requirements. The owner/agent had a consultant company perform a "Wetland Investigation", essentially a scoped Environmental Impact Study, to assess the property and determine if there were development envelopes outside the wetland.

The subject site is a lot of record situated on an island lot (Block A - Gunter Island), Registered Plan 1733, Township of Tudor and Cashel (Cashel) and is surrounded by other recreational cottage/cabin lots that have been developed. The total size is 0.36ha (0.88ac) with much of the property consisting of unevaluated wetland (<2ha) with some small areas that occur higher than the normal water levels of the lake. The wetland vegetation is typically inundated throughout the year in conjunction with the water levels of Gunter Lake.

The "Wetland Investigation" (prepared by Oakridge Environmental Ltd.; 21 October 2021; Titled "Wetland Investigation – Proposed Single Residential Development"; Project No. 20-2741) determined there were 3 upland areas on the property. The largest upland area was toward the southeast lot line but would require a boardwalk, or other access, to facilitate any construction resulting in more significant impacts to the form and function for the wetland. Another upland area (island) was observed entirely within the wetland, again requiring development to access it, and is entirely under a hydro line and its setback. The upland area/island chosen as a potential building site is surrounded by the wetland on 3 sides and the lake to the north side, allowing access directly form the lake (reducing impact to the wetland). Wetland boundaries were determined using the Ontario Wetland Evaluation System, which identifies wetland boundaries predominantly using vegetation through a stratified assessment (first trees are assessed, then shrubs, then understory vegetation). Therefore, it is important to note that undergrowth between the trees did include some emergent lake/wetland vegetation including

White-water-lily, Pickerel Weed, Watershield, and Large-leafed Pondweed. The report indicated that the proposed location is the "best option" when using a "least impact approach".

#### The report states:

"In the event that a suitable location could not be identified within the upland areas, our mandate was to inform the property owner that it may not be possible to construct a cabin on the property."

Yet the report/analysis of the site did not include the setback requirements required per CVCA Policies/the provincially recommended setbacks to wetlands and lakes determined through research into the area of interference for wetlands. Further the report did not provide justifications to reduce the setback to 0m from the recommended 15m setbacks for the preservation of ecological functions, corridors, sensitive vegetation, and terrestrial use by fauna. The proposal indicated that having the dwelling and deck on piers and having the dock and decks toward each other would reduce impacts to vegetation by allowing vegetation to grow underneath and directing/limiting traffic around the cabin. While hypothetically true usage around the dwelling could not be controlled and, with the exception of a few shade tolerant species, the majority of vegetation would die under the deck and dwelling leaving those areas susceptible to disturbance/erosion and interrupt ecological functions on the "island".

The report did state that the proposed development on piers will reduce the potential for damage from flood waters, but does not address any other flood related hazard (ex. water born debris/ice). Further Gunter Lake does not have an evaluated flood elevation, nor has the CA monitored lake levels at this location, so elevation requirements can not be established. Therefore, the CA applies a flood hazard of 15m around the shoreline.

The report did not specifically address erosion hazards, but the findings on soil depth, parent material (bedrock), and relief on the lot allow CVCA Regulations Officers to determine potential erosion hazards using the MNRF Technical Guide – River and Stream Systems: Erosion Hazards Limit. The only area where erosion would occur is with the loose soils on top of bedrock where water interacts with the soil on top of the "island". With this being the only erosion hazard the proposed development is outside of the hazard, with the exception of the dock which by its nature is within a hazard, but the CVCA would enforce a 4-6m setback from the shoreline erosion to permit access by equipment if required.

The policies at play around the proposed development were discussed with Chris Seguin and it was understood that a hearing before the Watershed Advisory Board is the only way the development could be approved.

The official letter detailing that a permit can not be approved was provided on August 24, 2021 and the applicant and agent, Chris Seguin, requested a hearing for September 16, 2021.

# **CVCA Regulations & Policy Manual**

Based on the information submitted, the CVCA staff can not approve the permit application for the following reasons per the CVCA Watershed Planning and Regulations (O. Reg 159/06) Policy Manual:

- No development permitted on vacant lots within a flood hazard (assessed or assumed).
- No development within the setback to an erosion hazard.
- No development within 15m of the wetland boundary/within the setback of a wetland on vacant land (wetland <2ha)

The subject site is located in a regulated area as described in Ontario Regulation 159/06. The development of a dwelling in the proposed location 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;...

(d) other areas where development could interfere with the hydrologic function of a wetland, including areas within 120 metres of all provincially significant wetlands and wetlands greater than 2 hectares in size, and areas within 30 metres of wetlands less than 2 hectares in size. O. Reg. 159/06, s. 2 (1); O. Reg. 54/13, s. 1 (1).

The *Conservation Authorities Act* and the Crowe Valley Conservation Authority Watershed Planning and Regulations Policy Manual (2017) defines *hazardous lands* and *wetland* as:

"hazardous land" means land that could be unsafe for development because of naturally occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock;

"wetland" means land that,

(a) is seasonally or permanently covered by shallow water or has a water table close to or at its surface,(b) directly contributes to the hydrological function of a watershed through connection with a surface watercourse,

(c) has hydric soils, the formation of which has been caused by the presence of abundant water, and(d) has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which has been favoured by the presence of abundant water,

but does not include periodically soaked or wet land that is used for agricultural purposes and no longer exhibits a wetland characteristic referred to in clause (c) or (d). ("terre marécageuse") 1998, c. 18, Sched. I, s. 12.

The manual is intended to provide CVCA staff with policies for the purpose of administrating 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, be subject to erosion, or unstable soils or bedrock.

# 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)

#### **River and Stream Valleys**

This component of the Regulation applies to development within river and stream valleys that have depressional features associated with a river or stream, whether or not they contain a watercourse, the limits of which are

determined in accordance with the following rules: • where the river or stream valley is apparent and has stable slopes, the valley extends to the stable top of bank plus 15 metres to a similar point on the opposite side;

#### 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.

#### Wetlands

*This component of the Regulation applies to development within a wetland or interference in any way with a wetland.* 

# **River or Stream Valleys Policies**

The following policies are specific to development in the Apparent Valley of Gunter Lake. Any development within the apparent valley of a watercourse or waterbody requires permission from the CVCA. In general development within the apparent valley shall not be permitted except in accordance with the policies contained below. Policies that do not apply to this case have not been included.

**Section 4.2** For lakes that do not have a known flood hazard, Section 3.8 and the policies contained within this section will apply. Development will not be permitted within a 15m setback from the shoreline with the exception of properties with existing development in the setback.

# **Hazardous Lands Policies**

The following policies are specific to development in any natural hazard. Any development within a hazard, setback or it's regulatory allowance requires permission from the CVCA. In general development within any hazard or its setback 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:

#### FLOODING HAZARD

#### 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 strip that is considered to contain the flooding hazards 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;

#### New Residential Development

**5.3.1.2** New single residential development on an existing lot will not be permitted within a flooding hazard regardless of previous approvals provided under the Planning Act or other regulatory process (e.g., Building Code Act).

## EROSION HAZARD

## 5.8 Development Within the Allowance of the Erosion Hazard

The CVCA will require all new development to be setback 6m from any natural hazard. For constrained lots, a reduction of the access setback from 6 metres to 4 metres may be considered where the adjacent slope is equal to or less than 3 metres in height as small equipment will be able to perform necessary maintenance if required.

**Section 5.8.1** Development may be permitted within the allowance adjacent to the erosion if it has been demonstrated to the satisfaction of CVCA that the control of flooding, erosion, pollution or the conservation of land will not be affected. The submitted plans should demonstrate that:

• development will not prevent access to and along the erosion hazard in order to undertake preventative actions/maintenance or during an emergency;

# **Wetland Policies**

The following policies are specific to development in the area of interference of a wetland. Any development within a wetland, its setback, and/or its area of interference requires permission from the CVCA. In general development within wetland and its setback shall not be permitted except in accordance with the policies contained below. Policies that do not apply to this case have not been included.

### For Wetlands less than 2 hectares in size the following shall apply:

*Section 7.3.1.d* In general, there shall be no development within 15 metres of the wetland boundary

Section 7.4.2.1 Development shall not be permitted within the setback of a wetland on vacant land.

# Staff Assessment

While the permit does not meet the CVCA Policy Manual the application can still be assessed to determine if it satisfies the Regulation and the core purpose of the Conservation Authorities Act. Permission can be granted based on Section 3 of O. Reg. 159/06 which states:

#### Permission to Develop

3.(1) The Authority may grant permission for development in or on the areas described in subsection 2 (1) if, in its opinion, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land will not be affected by the development. O. Reg. 159/06, s. 3 (1).

From this section Conservation Authorities developed the "Five Tests" to determine if a permit could be approved. Policy Manuals were developed by each Conservation Authority to sure that, if followed, proposed development would satisfy the "Five Tests" within their own watershed. Due to the significant geophysical and ecological differences between watersheds, Authorities respective Regulation and Policy Manuals can vary significantly, but the "Five Tests" are consistent across all Conservation Authorities. Based on Section 3 the "Five Tests" for development are:

- 1. Not impact the control of flooding/not impacted by flooding.
- 2. Not impact/be impacted by the erosion hazard.
- 3. Not increase the potential for pollution.
- 4. Not impact/be impacted by dynamic beaches.
- 5. Conservation of land.

#### Breakdown of application per each test:

- 1. Not impact the control of flooding/not impacted by flooding.
  - a. The proposed development is within 15m of the lake which is the area considered to be the flood hazard on un-assessed lakes;
  - b. The application is for a new dwelling on a currently empty lot increasing the number of dwelling units within a potential hazard;
  - c. The application indicates that all structures be lifted 4' above grade:
    - i. No flood elevation has been determined through assessment of the lake so actual flood elevations are unknown.
    - ii. While this may indeed keep development out of flood waters it may not address all dangers associated with floods, especially floating debris/ice which could damage footings/posts and take down the developments.
  - d. Safe ingress and egress/emergency services in a flood event have not been confirmed with municipality.
- 2. Not impact/be impacted by the erosion hazard.
  - a. The proposed development is not within the hazard itself but is within the 4-6m setback to the erosion hazard.
    - i. This is a vacant lot and the proposed would potentially be placing people into the setback of the hazard.
  - b. Addressed further with "Conservation of land" vegetation changes could result in increases of surface erosion/sediment movement into the lake even if not reducing overall stability of parent material.
- 3. Not increase the potential for pollution.
  - a. The dwelling is proposed to have a Class 1 (digesting, incinerating, etc.) which will address solid wastes and some liquid wastes.
  - b. Grey water disposal not addressed.
  - c. Land use changes on the "island" within the wetland/lot could increase potential for pollution (ex. fuels, soaps, trash/debris).
- 4. Not impact/be impacted by dynamic beaches.
  - a. Dynamic Beaches are limited to the Great lakes, Lake Simcoe, and Lake Nipissing.
- 5. Conservation of land.
  - a. The proposed development is outside of the wetland.
  - b. The proposed development is recommended to be raised and oriented to direct us and limit damage to vegetation.
    - i. Physical removal/displacement of vegetation may not be occurring, alteration to the flora species regimes likely through alteration of dominant species to shade tolerant species or the complete die off of plants from lack of direct sunlight.
    - ii. Potential vegetation alterations could impact the use of the "island" in the wetland by amphibians, reptiles, birds, or mammals.
    - iii. Vegetation alteration may impact potential for sediment/nutrient management in the immediate area.
    - iv. Actual land use of the "island" can not be controlled and alteration could occur (small lawn, clearing for views, landscaping for fire-pit, etc.)

The decision as to whether the permit application satisfies these tests will remain with the Watershed Advisory Committee.

# <u>Summary</u>

The application for a dwelling, deck, dock, and sewage treatment does not meet the requirements detailed in the Policy Manual due to the flood hazard on Gunter Lake, setbacks to erosion hazards, and setbacks to wetlands. The lot/wetland was assessed to determine where "least impact" development may occur through a "Wetland Investigation"

(approximately a scoped EIS). The applicant and agent were made aware of the restrictions associated with development on this property, but would like to proceed with the hearing for the dwelling, deck, dock, and waste treatment on the lot. As the application does not meet the requirements of the Policy Manual the application can not be approved by Regulations Officer Robert Cole. With the application/report and presentation provided by the agent of the applicant, the owner would like the Watershed Advisory Committee to assess their application per the "Five Tests" to determine if their application satisfies the purpose of the CA Act and Regulation.

Figures Enclosed: Application Package Including: original application, survey, Wetland Investigation