



February 5, 2025

File #: 210816

2873633 Ontario Inc.
210 Prescott Street, Unit 1
Kemptville, Ontario
K0G 1J0

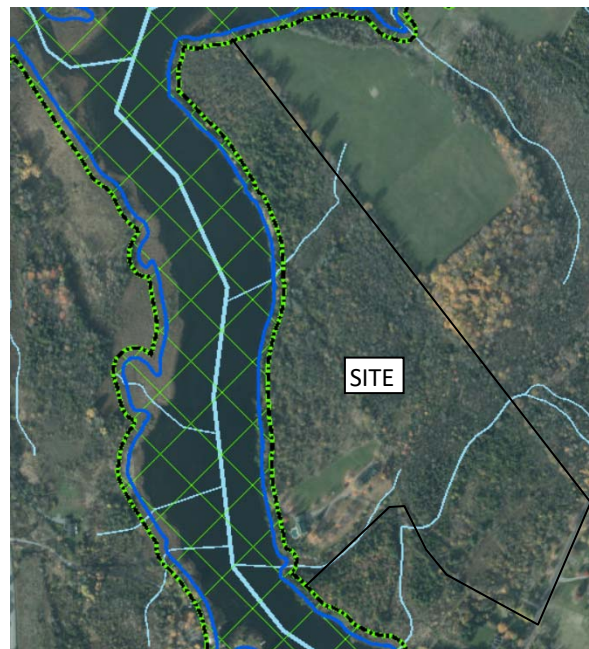
Re: Rideau River Floodplain Analysis Brief
Proposed Orchards of River Bend Estates, Residential Subdivision
819 County Road 23, Merrickville-Wolford, Ontario

Kollaard Associates Inc has been retained by 2873633 Ontario Inc to complete an assessment of the impact of the 100 year flood plain, of the Rideau River, on the proposed subdivision lands.

For the purpose of this brief, project north lies in a direction perpendicular to County Road 23, at the southern limit of the site. The site is located along the north side of County Road 23 and along the east and south side of the Rideau River. For the remainder of this brief County Road 23 will be considered to be oriented along an east-west axis.

The elevation of the 100 year flood plain was obtained from the Rideau Valley Conservation Authority online GeoPortal. The proposed development is within Rideau Reach 4. The 100 year flood level elevation adjacent the site is 89.30 m geodetic.

The adjacent image obtained from the RVCA Public GeoPortal provides the approximate location of the 100 year flood plain and limit of regulated area. This indicates that 100% of the shoreline of the proposed development is within the regulated area. As stated in the RVCA GeoPortal Disclaimer, the contour information on the map is an approximation of ground surface elevations. The contour information on this map shall not be used as a substitute for accurate ground surface elevations which shall be determined by an Ontario Land Surveyor or qualified Professional Engineer.





The topographic survey completed by Kollaard Associates for the development provides geodetic elevations of the existing ground surface of the proposed development extending upward from the winter water level of the Rideau River. The existing ground surface elevations are provided on Kollaard Associates drawings 210816-GR(1) and 210816-GR(2).

The portion of the development area immediately adjacent the Rideau River has an average depth ranging from 122m to 415m between the east property line and the top of the riverbank. The main portion of the riverbank has a height ranging from about 2.7 at the north end of the site to 7.5 metres at the south end of the site. The river bank is inclined downward toward the Rideau River at an angle of between 12 and 61 degrees from horizontal. The elevation along the top of the riverbank varies from about 91.1 metres at the northwest corner to 92.8 metres at the northeast corner and 96.5 metres at the southwest corner of the site. The table land above the top of bank is relatively level.

The 100 year flood plain elevation line is shown on the attached drawing 210816-FP following the text of the report. The regulation limit which consists of a 15 m horizontal offset from the 100 year flood plain line is also shown on this drawing. This drawing clearly shows that the 100 year flood line is below the top of the riverbank slope at all locations of the proposed development. The drawing also demonstrates that the proposed development will be completely outside the limits of the regulated area.

The proposed residential development includes a 30 metre no development setback from the Rideau River plus an additional 10 metre setback for a total of 40 metres to the proposed dwellings in order to preserve the vegetation adjacent the River and to preserve the historical appearance of the Rideau River adjacent the site. This imposed 40 metres setback extends further from the river than the limit of regulated area associated with the 100 year flood plain.

Since the 100 year flood plain elevation is below the top of the river bank at all locations along the proposed development lands, the 100 year flood plain of the Rideau River will have no impact on the proposed development.

Since the 30 metre no development setback from the Rideau River and the imposed 40 metres setback to the proposed dwellings extend beyond the limit of the regulated area associated with the 100 year flood plain, the regulated area will have no impact on the proposed development.



We trust that this brief provides sufficient information for your present purposes. If you have any questions concerning this brief please do not hesitate to contact our office.

Sincerely,
Kollaard Associates, Inc.



Steven deWit, P.Eng.

