

TLWI RESPONSE TO PROPOSED “BREAKWATER”, BETWEEN TURTLE LAKE SOUTH BAY AND KOPP'S KOVE

JULY 31, 2019 SUBMISSION TO THE RM OF MERVIN #499

This is the second proposal for the development of this property by this developer. The Breakwater presentation area was dominated by an impressively large, colourful, detailed computer-generated image of how this extensive, complex and obviously expensive development would appear if it were to be constructed as proposed.

Concerns about the proposed Breakwater development as presented.

- i) The proposed development as presented would be constructed on a property that slopes relatively steeply from west to east. The property at its greatest elevation is at least 20 metres above the water level of Turtle Lake. The project as presented require that virtually every square metre of the property would have to be stripped of vegetation and topsoil before landscaping to begin. The area designated as a marina would require very extensive excavation of underlying glacial till and its transportation to the western edge of the property to create an earthen berm along the western edge of the property next to SK-795.

Due to the slope of the land, the nature of the subsoil, and lack of protective vegetation, the entire property would be extremely vulnerable to erosion from wind and water until protective vegetation was established. The Turtle Lake area regularly experiences summer thunderstorms and intensive rainfall.

- (a) The Breakwater presenter acknowledged the fact that erosion from a sudden downpour was a concern but assured the questioners that a catch basin would be in place to keep the runoff from entering the lake. The presenter added that the planned catch basin was designed to contain the runoff from a once in a hundred-year event of 1-inch sudden rainfall on the property. (A downpour of 25mm (1 inch) would generate approximately 18,100 m³ or 178,000 imperial gallons of runoff.) Many local residents have experienced

sudden rainfalls of 3 inches or more rendering the size and capacity of the catch basin as being totally incapable of preventing the contaminated water from entering Turtle Lake. The presenter suggested that the marina once constructed could easily contain excessive runoff. That might possibly be true providing the marina was not connected directly to the lake which is the main feature of a marina.

- (2) The water supply requirements for the proposed development left many questions
 - (a) The source of the water?
 - (b) The water supply and distribution plans for the proposed development in its entirety?
 - (c) Wastewater collection and disposal system?
 - (i) Wastewater is usually collected and processed using gravity flow but the waste management facilities in the proposed development were positioned on the western edge of the property at the highest elevation.
- (3) The proposed marina, due to its size and location elevation would require the excavation and transport to the western property border of many thousands of cubic metres of subsoil. The presenter, when questioned, hinted at the extent of construction planning to date
 - (a) the volume of earth to be excavated had not yet been calculated
 - (b) The property had not yet had a geo-technical study to
 - (i) determine its suitability for the construction, particularly of the marina, water feature.
 - (ii) the presence of aquifers that may be encountered during construction and excavation. Aquifers releasing water into the marina or water feature would be problematic.
 - (iii) The presence of contaminants from previous human usage
- (4) the proposed water feature generated more questions than answers
 - (a) was the water feature to be filled with treated or untreated water?

(b) How was it to be drained? Where was it to be drained? Would water drained from the water feature require treatment?

ii) The TLWI asks that the RM of Mervin deny the proposed Breakwater Development for the following reasons

- (1) The proposed development is just a larger, more complete version of the owners 2018 development proposal that tries to overcome the properties lack of direct access to the shore of Turtle Lake by creation of an inland water feature complete with beach and an enlarged marina.
- (2) The developer used a year formally name the property, expand the size of the development, develop an impressively large graphic presentation, hire a presenter, but does not appear to have spent much time or money on additional engineering to develop solutions to the technical issues that their original plan proposed that put the ecological health of Turtle Lake at risk. It appears that the developers interpreted their failure to secure RM of Mervin approval last year to poor communication and sales rather than to the design and engineering problems identified in their 2018 development proposal.
- (3) The geo-technical studies by qualified civil engineers have not been done. Until and unless they are completed, and the results reviewed by the authorizing agencies it is not known if the proposed construction is possible on the property.
- (4) The increased size and complexity only intensify
 - (a) the problem of erosion control, runoff containment, adequate sewer and water containment of runoff more difficult and problematic. The failure of any of these systems would seriously endanger the ecological health of Turtle Lake.
 - (b) Increases the costs of development. Likely makes the financial feasibility of the proposed development more questionable and likely increase the risk of project abandonment prior to completion
- (5) The increased population resulting from the development completion would

- (a) Increase boat traffic in the southern area of the lake
 - (i) The RM of Mervin's own research describes boat usage in this area already at or above maximum.
 - (ii) Increased fishing sport fishing pressure with the likely results of decreased lower daily fishing limits on the entire lake
 - (iii) Increased demand on public lake access areas in the neighbouring resort hamlets as the water feature offered is not likely to satisfy the demand for swimming, canoeing, water skiing etc. of the resident population in the Breakwater Development

(6) Definitely authorization until

- (1) RM of Mervin has received and reviewed a geotechnical assessment by a qualified engineer attesting to the capability of the surface and subsurface soil structure to support the proposed development.
- (2) The RM of Mervin has received and reviewed detailed topographical study detailing elevations by a signed qualified civil engineer that show the natural water drainage pattern prior to construction and the detailed plan for water drainage during and after construction.
- (3) The RM of Mervin has received and reviewed an environmental report from a qualified professional report detailing the flora and fauna that presently live on land or in the water near proposed area of development.
- (4) The RM of Mervin has received and reviewed a report from a qualified archeologist detailing the presence or likely presence on native artifacts on or in the area of