

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: OLD TOWN HARBOUR LTD.
PROPOSAL NAME: OLD TOWN HARBOUR
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: WATER DEVELOPMENT
CLIENT FILE NO.: 5482.00

OVERVIEW:

On May 28, 2010, Manitoba Conservation received a Proposal dated May 25, 2010, from Old Town Harbour Ltd. to construct a boat channel to Lake Dauphin as part of a proposed subdivision of 27.5 hectares. The proposed development is located at 34-24-17 W in the Rural Municipality of Ochre River along the south shore of Lake Dauphin.

Public comments were received in response to the advertisement of this proposal in the Dauphin Herald on Tuesday, September 14, 2010. The proposal was placed in the Public Registries at the Millennium Public Library, the Manitoba Eco-Network, Conservation Library (Main) and Dauphin Public Library. The proposal was distributed to TAC on September 10, 2010, with the closing date for TAC and Public comments on October 12, 2010.

COMMENTS FROM THE PUBLIC:

David Adams

Email #1

My family is one of 42 cabin owners that are currently located at Crescent cove. The new development is directly behind our cabin, to the south. With the development already in progress we are becoming more concerned. The canal is already about 6 - 8 feet deep. The clay being excavated from the canal is building up the surrounding land between the canal, the current road, and our cabin. We still have not seen a plan for drainage. To show that there is no risk of flooding from the new development to the current cabin/land owners. Crescent Cove was developed over 50 years ago. All the spring run off was into the pasture behind us where the new development is now currently under construction.

I had asked the Reeve and Councilors from the RM of Ochre River, that were present at our annual beach committee meeting if they had seen a blueprint or plan for drainage for the new development. They had assured me that the developer has an engineer working on that plan. To date, none of the current

cabin owners have seen any plans for drainage to allow the spring run off, and rain fall to get away from the cabins.

Our cabins are all built on a sand ridge along the lake, the lots are all much lower at the back side (road side). With the new development being built at the 100 year flood level, there is great concern that the elevated side will dike us in. Where will the water go? The contractor has excavated out the area where they intend to build a new road. But it doesn't appear to have any ditches on either side of the road. People have commented that there is no where for the water to drain even if there were ditches. Further, the ditches would cause sitting water and a breeding habitat for mosquito's.

This year was a perfect example for our concern. The canal at Ochre Beach had flooded over and into the field to the south of it. The boat launch area had flooded and the RM had to build up the path to the boat dock, as it was 5" - 8" under water at times. The water remained that high for July and August. It is still quite high.

Have you had an engineer out to study the impact the canal and building up the entire development area to the height of the 100 yr flood. What effects it will have on the area, particularly the current cabins and land at Crescent Cove?

Cabin owners were told that a migratory bird study was being done on the area under development. I have not heard of the results. Do you know where these results would be available from? The clay is already being dumped in this area from the excavation of the canal so it really is of no concern now. I would assume all of the approvals must be in place with the canal half done, and the road excavated.

My biggest overall concern is the drainage of run off surface water, and the canal overflowing the bank.

If you could advise me when the further information will be available from the Dauphin Library it would be appreciated.

Email #2

In the information it states that the new development will be built up to allow all surface run off to run into the canal. That would mean the north end of the new lots directly behind our cabins would be at the highest elevation for the development and that the water would run south to the canal.

How will the water that runs off our lots, then run up hill? As the new development is going to be approximately 2 feet higher in elevation? On page 8 of the report by GD Newton & Associates, it states that the area within the development is a collection area for run off from the surrounding area. Where is

that water going to go after they fill that area with the material from excavating the canal?

After the canal is completed, who will maintain it? If the entrance silts in, who will pay for the cost of maintaining and dredging the canal if required?

Who is responsible for maintaining the public reserve that is to be set up for the development?

If you have any information to address these concerns it would be appreciated.

Disposition:

Comments were provided to the proponent. Comments regarding ownership, drainage and flooding concerns were forwarded to Manitoba Water Stewardship and the proponent with a request for further information (see 'Request for Additional Information' section of this summary). A copy of the lot grading is attached. The biological survey report was received by Manitoba Conservation on September 3, 2010 and was subsequently submitted to the Public Registry for public review on September 17, 2010.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Canadian Environmental Assessment Agency

- The Department of Fisheries and Oceans Canada (DFO) conducted the federal coordination review of the project. DFO has determined that it may issue an authorization under subsection 35(2) of the *Fisheries Act* and must subsequently conduct an environmental assessment in accordance with the *Canadian Environmental Assessment Act*.
- Transport Canada and Environment Canada (EC) were contacted as part of the federal process. EC expressed an interest in the project and provided a letter of advice to DFO.
- Manitoba Conservation (MC) was provided a copy of the project proposal. On April 15th, 2010, MC determined that the project requires licensing under the provincial *Environment Act*.
- In July, 2010, DFO posted a Notice of Commencement on the Canadian Environmental Assessment Registry stating that a screening assessment has started.
- On September 15th, the Agency received copies of the Class 2 Development Environment Act Licence proposal for the project. No further comments were received from DFO and EC.

Disposition: Comments were provided to the proponent. Manitoba Conservation will continue to work cooperatively with federal agencies on this project.

Manitoba Conservation, Pollution Prevention Branch

- I have no significant concern on the proposal. However, the proposed project has a potential to generate PM (dust) during construction from earthmoving, material handling/transport and emissions from heavy equipment and vehicles.

Disposition: Comments were provided to the proponent.

Manitoba Conservation, Environmental Operations

- In view of recent subdivision proposals and increased development in the Rural Municipality of Ochre River, this office is requesting analysis from an environmental consultant confirming the existing lagoon can accommodate the loading of all wastewater in the R.M. of Ochre River based on current and future development in the area.

Disposition: Comments were forwarded to the proponent for further information (see 'Request for Additional Information' section of this summary).

Manitoba Water Stewardship

- The Licencee shall comply with Manitoba Water Stewardship's Wetland Policy. The net loss of semi-permanent or permanent wetlands shall not occur. Wetlands are defined as areas that are periodically or permanently inundated by surface or ground water long enough to develop special characteristics including persistent water, low-oxygen soils, and vegetation adapted to wetland conditions. These include but are not limited to swamps, sleughs, potholes, marshes, bogs and fens. A proponent shall establish and maintain a buffer zone with at least a 15-metre width.
- The Licencee is required to submit—prior to beginning construction of the proposed development—an application for a Water Rights Licence to Construct Water Control Works, including the submission of an engineered drainage plan, prepared by a Professional Engineer, registered to practice in the Province of Manitoba. contact person is Mr. Ed MacKay, C.E.T., Senior Water Resource Officer, Water Control Works and Drainage Licensing, Manitoba Water Stewardship, 1129 Queens Avenue, Brandon, Manitoba R7A 1L9, telephone: (204) 726-6226, email: ed.mackay@gov.mb.ca.

- In order to protect riparian areas, establish and maintain an undisturbed native vegetation area located upslope from the ordinary high water mark and adjacent to all waterbodies and waterways connected to the provincial surface water network and canals:
 - A 15-metre undisturbed native vegetation area is required for lands located adjacent to all canals;
 - A 30-metre undisturbed native vegetation area is required for lands located adjacent to all surface waters, including Dauphin Lake;
 - Permanent development is prohibited within an undisturbed vegetation area;
 - The combined alteration—including new and existing structures—within this undisturbed native vegetation area is limited to a maximum of 25 % of the canal and/or shoreline length (for example: 25 metres per 100 metres of canal and/or shoreline length) of each lot for a boat house, path, dock, etc.; and,
 - Alteration within this undisturbed native vegetation area—including a dock and/or the removal of near shore or stream aquatic habitat—shall not occur unless an activity conforms to a Department of Fisheries and Oceans Canada Operational Statement or an activity is reviewed by the Department of Fisheries and Oceans Canada.
- An Environment Act Licence shall clearly identify the responsibility for the long term operation and maintenance of canals, including the following:
 - Dredging;
 - Fish kills;
 - Water quality monitoring and issues; and,
 - Boat velocity restrictions.
- The Licencee shall be required to develop and implement the following water quality monitoring program:
 - Baseline water quality data is required before construction of canals and site preparation begins. The location of sampling needs to be at the mouth where the canal entrance is planned. This would be Dauphin Lake water near the mouth of the canal entrance (as seen in the diagram below taken from the proposal drawings). At least 3 samples temporally spaced should be taken during the construction phase.
 - Once the site preparation and canals have been excavated, monthly samples should be retrieved at:
 - the mouth of the canal entrance and

- in the mid channel where surface drainage is being directed (as in the diagram below).
 - Monthly samples should be taken from both sites from April to October (depending on freeze-up), and one site of samples (one from each site) should be collected under ice conditions.
- The first and second year after canal construction is complete, spring, summer and fall samples should be collected the mouth of the canal entrance.
 - Samples should be analyzed for:
 - Total phosphorus
 - Dissolved phosphorus
 - Total Kjeldahl nitrogen
 - Nitrate/nitrite nitrogen
 - Ammonia
 - Total suspended solids
 - Conductivity
 - pH
 - turbidity
- Samples should be submitted to a laboratory accredited by the Canadian Association for Laboratory Accreditation Inc. A copy of the laboratory test results shall be submitted within a month of sample submission to the Water Quality Management Section of Manitoba Water Stewardship.
- The proponent shall submit a summary report—to the Water Quality Management Section of Manitoba Water Stewardship—after three years of water quality testing is completed.
- The Licencee shall implement gravel/cobble substrates to diversify the bottom substrate of the canal.
- Manitoba Water Stewardship submits the following concerns:
 - Canals need a flow through water exchange.
 - Canals should not interface with aquifers. A Proposal indicates there is an artesian aquifer that is contained 30 metres below the surface of the ground.
 - The proponent needs to provide documentation such as drill logs to confirm that an aquifer will not be compromised.
 - The Department understands that a portion of this proposed development area is a wetland, providing a staging area for ducks and geese and a habitat for other birds and frogs.

- During a wet season, there was an increase in the diversity and abundance of animals, such as breeding sites for the American bittern and the bald eagle.
 - The proposed development will permanently infill wetlands and likely result in the displacement of the breeding locations and habitat for birds.
 - A rationale for requiring the proponent to conduct water quality monitoring is based on the fact that the development of new channels creates a situation during construction and/or development activities that will contribute nutrients, increase turbidity, and suspended sediments to surface waters. The variables listed for analyses would be reflective of influences caused by the proposed development.
- The Department needs to assess the effects of the following on the surface water quality of the canal and Lake Dauphin:
 - Discharging directly into an area where recreation will occur;
 - Draining wetlands;
 - It appears the proposed development will not have sufficient land to implement a 15-metre undisturbed native vegetation area adjacent to all canals; and,
 - Boat traffic in the canal would transport bottom sediment and thus increase nutrient load to the canal and the entrance of Lake Dauphin.
 - Furthermore, Lake Lake Dauphin experiences frequent and severe algal blooms due to nutrient concentrations that drive algal production. In the mid 1990's, pet deaths were reported resulting from concentrated cyanobacterial blooms along the shoreline. Lake Dauphin does not need additional nutrient loading.
- Manitoba Water Stewardship submits the following comments:
 - The flood protection works which will be provided for permanent structures and roadways within the proposed development satisfactorily address the flood protection requirements as recommended in Manitoba Water Stewardship's review of subdivision application number 4158-09-3628, located in the Rural Municipality of Ochre River.
 - Manitoba Water Stewardship does not object to this proposal, at this time.
 - The Manitoba Department of Water Stewardship is mandated to ensure the sustainable development of Manitoba's water resources. Manitoba Water Stewardship is committed to the goals of: protecting aquatic ecosystem

health; ensuring drinking water is safe and clean for human health; managing water-related risks for human security; and stewarding the societal and economic values of our waterways, lakes and wetlands; for the best water for all life and lasting prosperity. Manitoba Water Stewardship achieves these goals, in part, through administering legislation, including The Water Protection Act, The Water Rights Act, and The Water Power Act.

- The proponent needs to be informed that erosion and sediment control measures should be implemented until all of the sites have stabilized.
- The Manitoba Department of Water Stewardship's recent policy direction recommending Public Reserves to protect water is founded, in part, on the 135 recommendations in the Lake Winnipeg Stewardship Board's (December 2006) report titled, "Reducing Nutrient Loading to Lake Winnipeg and its Watershed, Our Collective Responsibility and Commitment to Action." All 135 recommendations were accepted in principle by the Minister of the Manitoba Department of Water Stewardship, on behalf of the Government of Manitoba.
- Maintaining an undisturbed native vegetation area immediately adjacent to the shoreline of lakes, rivers, creeks, and streams helps stabilize banks, provides aquatic and wildlife habitat and protects water quality through filtering overland runoff. The width of an undisturbed native vegetation area should be the widest width possible and practical. In conjunction with other best management practices such as eliminating fertilizer use adjacent to surface waters, and the proper management and disposal of waste water, maintaining an undisturbed native vegetation adjacent to waterbodies is important to help prevent degradation of water quality.

Disposition: Comments were provided to the proponent. Comments regarding long term operational responsibility were forwarded to the proponent for further information (see 'Request for Additional Information' section of this summary). Concerns related to nutrients, erosion and sediment control can be accommodated with licence conditions.

ADDITIONAL INFORMATION REQUEST:

EAL Branch contacted the proponent with questions from TAC members and the public concerning the project on October 20, 2010. A submittal in response to comments was received on December 2, 2010 and included the following information:

- Driller's Report
- Lot Grading Plan

Included in the submittal was a response to the following TAC and public questions:

- 1. The EAP indicates there is an artesian aquifer that is contained 30 m below ground. There are no soil samples or drilling information to confirm this. Please provide additional supporting information to confirm that there will be no impact to the aquifer.**

Attached is the drill log for a proposed raw water supply well. This well is located in the southwest corner of the proposed development site. As noted on the drill log the geology of the site is comprised of till material to a depth of approximately 32m. Based on this information there will remain a confining layer of approximately 27m between the bottom of the boat channel and the aquifer. Secondly it must be noted that the bottom elevation of the boat channel is similar to the bottom elevation of Lake Dauphin. Therefore the boat channel will not create any greater hazard to the aquifer than is presently created by Lake Dauphin.

- 2. Canals should be orientated to prevailing winds. Please provide information on the prevailing winds in the area.**

Information obtained from Environment Canada for Dauphin indicates that the prevailing winds in the area are from the west and southwest. However, the peak winds have been recorded as being from the north, northwest, west, southwest and south. No data is provided to indicate the frequency of winds from each direction. The prevailing winds are approximately along the same alignment as the canal in Phase I of the proposed development. The canal in Phase II would be approximately at a 90° angle to the prevailing winds. However, as noted by the diversity of wind direction noted for the peak winds the canal will be exposed to winds from virtually all directions.

Due to the geometry of the proposed development site altering the orientation of the boat channel would create significant difficulty.

Should the concern be potential erosion due to wave development it is the opinion of the author that the width of the canal is believed to be sufficiently narrow to prevent any substantial wave development. Further mitigating the development of waves will be the point that the water surface in the canal will normally be approximately 3m below the elevation of the top of the ground surface of the lots fronting on the canal. This will assist in sheltering the water surface from the wind and thus preventing the development of substantial wave action.

- 3. Please provide a drainage plan for the new development. Also, provide additional information on the new development will impact on the drainage and flooding potential of the existing cottages along Lake Dauphin.**

Attached is the section of the initial submission dealing with storm water runoff or drainage. Also attached is a more detailed drainage plan as submitted to Manitoba Water Stewardship as part of the application for a drainage license. For purposes of being readily legible the drawing illustrating the drainage plan has been exploded into two additional drawings.

In summary all runoff water that is either generated within the proposed development site or flows onto the site from the surrounding area will pass through the boat channel and out to Lake Dauphin. Runoff water generated either on the proposed lots which front on Lake Dauphin, from the existing cabin lots on Lake Dauphin or from neighboring properties will be collected by the ditch on the outside of the roadway. This water will pass through the roadway and flow to the boat channel. Based on the storm water design there are ten 600 diameter pipes that will convey this water through the roadway and ultimately into the boat channel. Three of these 600 diameter pipes are located in the northwest portion of this project and will convey any water that presently collects in the vicinity of the existing cabins.

It is the opinion of the author that the storm water design will not have any effect upon future flooding of the existing lots located along the shore line of Lake Dauphin. The ditch elevation along the proposed roadway is lower than the existing top elevation of Valhop Drive. Therefore any water that presently flows from the existing lots and passes over Valhop Drive will continue to do so in the future. The capacity of the proposed culverts under the proposed new roadway will have sufficient capacity to handle runoff water that will be collected along the outside of the roadway.

Flooding caused by high levels of Lake Dauphin will not be affected positively or negatively by this development. High water levels will still have the potential to flood the existing cabins. However, it must be noted that the water level of 262.04 as recorded in 1974 combined with a north or northeast wind has the potential to damage the existing cabins but will not affect the proposed lots.

4. Please confirm that the existing lagoon servicing the new development can accommodate the additional loading.

The development agreement with the Developer and the Rural Municipality of Ochre River stipulates that the Municipality will provide a location for sewage disposal. However, when preparing the initial site review the undersigned contacted Genivar, the designer of the Ochre River lagoon. The design information provided by Genivar indicated that there was more than ample capacity in the lagoon to handle wastewater generated by this development.

5. Who will be responsible for the maintenance of the canal once construction is complete?

The Rural Municipality of Ochre River agrees to maintain the entire public reserve within the development. This specifically includes the canal once it is developed.

6. Please provide additional information on how the proponent will address concerns related to nutrient loading in the canals and by extension on Lake Dauphin?

The impact on Lake Dauphin due to nutrient loading carried by water flow from the boat channel will be mitigated in several forms.

- I have been informed by Roy Dawson that the land within this development is within a “Nutrient Management Zone N4 and within the Nutrient Buffer Zone, therefore no person shall apply a substance containing nitrogen or phosphorus to their land. The application of lawn fertilizer is prohibited.”
- The wastewater sewer service to each lot will be via a holding tank. The wastewater will be transported to the Ochre River lagoon. There should be no nutrient loading from septic waste.
- The lots are relatively large. As well there is a 15m set back requirement for all structures from both front and back property lines. It is fully expected that these two items will result in a large vegetative covered buffer zone within each lot.
- The ground surface within the lots has quite a flat grade. In fact rough grading of the lots will create a flat area 20m in depth and the width of the lot. It is expected that during landscaping of the lots a slight grade will be created. However it is expected to be very small. This will minimize both the runoff coefficient and the velocity of the runoff water exiting the lots. Both of these items will increase nutrient uptake by the vegetation, decrease the potential for erosion and decrease the nutrients being carried by the runoff water.
- Along the channel, within the buffer zone, there will be a 15m wide area between the normal water level and the property line. It is a requirement to establish vegetation in this area. This will further increase the nutrient uptake by vegetation and slow the runoff water flow into the boat channel.

In summary I believe the development provides for several methods of mitigating concerns over transporting nutrients from the developed land into Lake Dauphin. However, should these concerns still persist I would like to address them as soon

as possible. I am certainly willing to meet with the appropriate parties from Manitoba Water Stewardship to discuss their concerns.

DISCUSSION AND ANALYSIS:

This information is sufficient to allow TAC concerns to be addressed through licence conditions. There are no overriding technical issues associated with this project that would preclude the issuance of an Environment Act Licence with appropriate conditions.

PUBLIC HEARING:

No requests were received for a public hearing on the project. Technical issues surrounding the project are sufficiently understood. A public hearing is not recommended for the project.

RECOMMENDATION:

All comments received on the Proposal can be addressed as licence conditions or have been forwarded to the proponent for information. It is recommended that an Environment Act Licence be issued for the project subject to the limits, terms and conditions as described on the attached draft licence. Administration of the licence should be assigned to the Western Region, with technical assistance to be provided by Environmental Assessment and Licensing Branch upon request.

PREPARED BY:

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