

**HALIFAX REGIONAL MUNICIPALITY
HALIFAX COUNTY/HALIFAX MAINLAND WATERSHED ADVISORY BOARD**

6:30 p.m.
Board Room 1
1750 Dutch Village Road
May 19, 1999

PRESENT: Dr. Wayne Stobo, Chair
Mr. Keith Manchester
Mr. David Dwyer
Ms. Colleen McNeil
Mr. Walter Regan
Dr. Jack Burney
Mr. Ross Evans
Mr. Glen Williams
Mr. William O'Toole
Mr. Michael Guilcher
Mr. Jim Holmes
Mr. McMenemy

REGRETS: Peter Shacklock, Jim MacLean, Frank Hope and David Haley

ALSO PRESENT Lynne Le Boutillier, Assistant Municipal Clerk

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1.0 **APPROVAL OF AGENDA, ADDITIONS AND DELETIONS**

The following changes were made to the agenda:

Item 4.1, Lake View Mobile Home Park was moved up on the agenda as was
Item 4.2, Rezoning at mouth of Little River, Petpeswick Inlet

Added to the agenda were:

Item 3.14, Planning Advisory Committees
Item 3.15, Update on CWRA Conference
Item 4.4, Status Sheet
Item 4.5, New Environmental Organization Spryfield - McIntosh Run

The agenda, as amended, was adopted on motion of Glen Williams and David Dwyer.

2.0 **APPROVAL OF MINUTES**

It was noted that on page 13 of the April 21, 1999 minutes, Item 4.9, first sentence, the word "feet" should be inserted after "50 to 60".

The minutes, as amended, were adopted on motion of Mr. O'Toole and Mr. Holmes.

4.0 **NEW BUSINESS**

4.1 **LAKE VIEW MOBILE HOME PARK**

Andrew Whittemore, Planner, Tom Swanson and Neil Wilton, Whitman Benn were in attendance to discuss Application #00069 related to an application for a development agreement to create a Mobile Home Park.

During his introduction, Andrew Whittemore indicated that Mobile Home Parks are not allowed as-of-right. To date only a Public Information Meeting has been held with regard to this application. The Planner was seeking advice from the Board on whether the sanitary sewage system proposed was adequate and input on what the development's impact would be on Webber Lake and how the Lake can be protected. The presentation was turned over to the project consultants for United Gulf Limited to discuss technical aspects.

The project in question relates to the development of a 193 lot mobile home park off Lucasville Road in the vicinity of Webber Lake.

It is being proposed that water for the development be taken out of Webber Lake and treated. Permission has been requested from the Department of Environment. The Department of the Environment has indicated it would be their preference that the development hook up to the Water Commission system. As this site is outside the boundary for the Halifax Regional Water Commission, their water can't be used. Any change to the boundary requires the approval of the Utilities Board and Council. Studies of future extensions of the infra-structure system are not yet complete. It was also determined that wells would only yield one or two gallons a minute of water, while a flow of 40 gallons a minute is required. The intake pipe for water would be placed as far out into the lake and upstream of the sewage treatment discharge system as possible. No answer has been received from the Department of Environment on the withdrawal from the Lake. From a public health perspective, it would be better if water could be used from the Water Commission, but the developers were confident that the process they will use to treat the lake water will make it safe.

Following Mr. Swanson's presentation, the floor was opened for questions from the members.

During his review of the proposal, a map of the proposed development was circulated to the members.

Mr. Swanson addressed the following aspects of the development:

Streets: Paved 20 ft. street, not curbed.

Storm water: Will be directed towards swales along the road edges. Some filtering of the storm water will be done by the construction of rock berms, as well as use of filter fabric and dispersal into the existing shoreline wet land before eventual discharge into Webber Lake.

Sanitary sewage will be treated on site by a tertiary, custom designed, sewage treatment plant which will discharge effluent through an artificial wetland into Webber Lake.

The subject of the handling of storm water was also addressed, but the most discussion was related to the effect of the treated effluent entering Webber Lake, particularly as the Lake will also be the domestic water supply.

Vegetation: A lot of the trees to be left uncut. One-third of lots to be left uncut. The mobile home lots are to be rented, so the owner will have control. No cutting would be permitted without the owner's permission. It was later suggested that when any replanting is

considered, native species be used.

Prior to any work being carried out on the site, a detailed Erosion and Sediment Control Plan will be provided.

Reference was made to a proposed dam on Webber Lake for hydro purposes. It was noted that this would have an effect on the height of the water in Webber Lake. The highest level of water was recorded at an elevation of 74.9 feet and if the dam is constructed the maximum level, in the event of a 100 year storm, is calculated at an elevation of 76 feet. Any construction, such as the Sewage Treatment Plant would have to be above the 76 ft. elevation, in the event the dam was eventually constructed. Similarly, the artificial wetland will be moved back a little further from the location on the plan to avoid the flood plain.

Mr. Swanson noted that under the regulations of the provincial Department of Environment, a sewage treatment plant must engage a licensed operator, with appropriate training and certification. Effluent must be tested at least five times a month to ensure it meets guidelines for discharge into freshwater bodies. The maximum suspended solids, etc. in the effluent must not exceed five parts per million. While it is the intent that the plant will meet this standard, Mr. Swanson noted that the effluent will also be disinfected with ultraviolet radiation, as opposed to chlorine, before exiting the plant. The effluent would be directed to an artificial wetland. This wetland will be planted to aid in the removal of nutrients and metals. It is also anticipated that wetlands at storm water outfalls would also pickup nutrients from runoff of fertilizers, etc. from lawns.

It is anticipated that the wetland will process 60,000 gallons a day. The retention time would be one day minimum. If the Development Agreement is granted, a firm that specializes in wet lands will be engaged for the detailed designing.

The Board was assured that flow rates into the treatment plant will meet the Provincial Department of Environment Guidelines of 100 gallons per capita a day. There is sufficient capacity in the system to deal with days of higher flow.

The members questioned if any other development is currently taking water from the Lake. Mr. Whittemore indicated that there is a lot of interest in developing subdivisions in the area, but he was not aware of anyone taking water from the Lake. There is a lot of as-of-right activity in the area which would not come through the Planning Department. Applications for water and septic systems would have to go through the Department of the Environment. Mr. Swanson noted that what is being proposed for Lake View Estates is basically recycling.

Dr. Burney indicated he had some problems with the design of the artificial wetland, especially in winter conditions due to the proposed depth. He indicated he would personally also like monitoring of the effluent leaving the wetland. He felt it was important to have flow variations and a longer retention period than one day. It was pointed out to Dr. Burney that this stage is over and above the Provincial standard. Nevertheless, it was contended that since Webber Lake is likely to be a source for drinking water, the discharge into the Lake will have to be very clean.

Concern was expressed that the water intake is downstream of a golf course and a lot of pesticides might enter the water. Mr. Swanson noted that if the golf course is obeying regulations, this will not be a problem, but nonetheless Mr. Swanson made a note of this concern. Mr. Regan also noted that the development is downstream of a landfill and the water treatment plant should be able to handle any contaminants from this area. Thirdly, Mr. Regan expressed concern that if too much water is withdrawn from Webber Lake, fish passage could be affected. The Chair felt a baseline monitoring of water flow, etc. appears warranted, similar to what was done for the Glen Arbour development.

It was also suggested to Mr. Swanson that someone should study the water circulation pattern of the lake, as the water intake will be close of the sanitary sewage discharge. While the situation might be alright at high water times, during the summer season there may be a problem.

Concern was expressed that the plan indicates access to the Sewage Treatment Plant between lots 190 and 191, which appears to provide very limited access. As the plant is so close to the Lake, concern was expressed for the potential for the system to overflow and enter the lake. Mr. Swanson assured the Board that by using 8 inch sewers there will be more than enough capacity and the plant will be further away from the Lake, than in the plan circulated. Whether or not the set back distance would suffice in a flood situation was discussed. It is anticipated that the Development Agreement would specify minimum elevations.

Dr. Burney had a number of comments and questions regarding the proposed dam. Mr. Whittemore will do some checking regarding whether the dam can be constructed as-of-right.

Following Mr. Swanson's departure, the Board formulated the following recommendations. The resultant report to be drafted by Mr. Regan, with the assistance of Colleen McNeil for approval at the June meeting.

It was noted that the report should include a short section on background, areas of

possible problems and recommendations.

The concerns identified are:

- C Acidic Rock - potential problems if construction disturbs.
- C Impact on existing wetland along Webber Lake shoreline by introduction of effluent. It was felt that if the effluent enters at one small location a problem could be created.
- C Trenching of wetland to accommodate water intake pipe from Lake.
- C The size and location of the artificial wetland to handle the 60 thousand gallons of effluent wasn't identified.
- C Whether there was enough distance from the 100 year flood plain for the sewage treatment plant and artificial wetland. It was proposed by Mr. Swanson that any portion of the treatment system be constructed ½ meter above the 100 year flood level.
- C The ability of the wetlands to operate efficiently in the winter. Very little nutrient removal can be done in the winter. It was however noted by Mr. Regan that to the best of his knowledge wetlands apparently do work in the winter. Mr. Guilcher felt this might be the case with natural wetlands, but he did not feel this to be the case with artificial ones.
- C No details given on the wetland that the storm water is to enter.
- C Potential impact of removing water from the Lake on the outfall of Webber Lake. Also the impact of other developments taking their water from the Lake, since the area is outside the Halifax Water Commission Service Boundary. A precedent might be set.
- C Effect of the return of the treated effluent on the Lake.

Recommendations/mitigation:

- C Has to have as a minimum, a tertiary sewage treatment plant. The Board supports the idea of the artificial wetland.
- C In winter conditions an alternative chemical treatment be used instead of the wetlands.
- C Wetland be utilized in the spring, summer and fall with chemical treatment for nutrient removal, followed by bacterial treatment being used in the winter months.
- C Storm water should be directed into artificial wetland.
- C The use of sand instead of salt on the road ways.
- C Avoid disturbance of acid shale. If it must be disturbed, follow the Provincial Guidelines for its removal, disposal and restabilization.
- C The Board supports the use of ultraviolet radiation rather than chlorine, as the impact on the Lake will be less.

- C While the Department of Environment requires five samples a month from outflow, it was felt that the water should be sampled before construction.
- C Effluent be diffused when entering lake, versus a single entry point. Also applies to storm water.
- C Sample at discharge from wetlands. HRM to set level.

It is recognized that even if these measures are put in the Development Agreement, enforcement presents problems. It was felt that there should be a requirement that reports be submitted to the HRM. In the event the tests indicate poor results, it was felt that there would be direction needed in the agreement as to what action should be taken. A realistic level would have to be arrived at. Mr. Whittemore will check the provisions in the Mobile Home Bylaw. Since the outflow from the wetland is a potential source of drinking water for the development and would thus have to meet the Canadian Drinking Water Standards, stringent testing of the effluent could be justified. Reference was made to the fact that there will likely be swimming in the area.

- C A baseline study prior to construction and seasonal monitoring post construction.
- C Move intake pipe further out into the Lake if being used for domestic supply.
- C Consideration be given to beach and/or boat launch in appropriate place, not encroaching on the existing wetland area.
- C Support idea of wetland designed to maximize the amount of time water held, thereby improving nutrient removal. Dr. Burney had pointed out that by alternating the depths, the wetlands can be effective both aerobically and anaerobically.

It was felt that proponent should be complimented in the preamble for considering the use of a tertiary sewage treatment plant, the use of ultraviolet radiation instead of chlorine and the proposal to create artificial wetlands. Their plans to limit the removal of trees in general, and retention of natural vegetation on the open spaces, was felt very desirable.

4.2 **REZONING AT MOUTH OF LITTLE RIVER, PETPESWICK INLET**

Information pertaining to a rezoning request in West Petpeswick was circulated with the agenda package. In addition, copies of a drawing of the area were provided by Mr. Dwyer.

The rezoning in question relates to an application to rezone an approximately 42,000 sq. ft. parcel of land on the West Petpeswick Road from R-6 (Rural Residential) to MU (Mixed Use) to permit the subdivision of the parcel into nine water access lots for private recreational purposes. The lots are so small that the Land Use Bylaw would only permit

the construction of a boat/fish shed. Staff was looking for comments and concerns the Board might have. In absence of Susan Corser, Andrew Whittemore was dealing with the item.

Mr. Dwyer outlined to the Board concerns the community has with the proposal. In particular it was noted that this is a very fragile area and the negative effect if vegetation is removed from the narrow strip or if fill is put into the water lots.

The application was reviewed in detail but it was concluded this application was outside the jurisdiction of the Board as it was not a watershed issue. There was very little the Board could do in such a situation, but indicate to the community that the Board understands the problem. The only violation would be of the Board's guidelines if anything is constructed within 15 meters of a fresh water body and 30 meters of the high tide mark on saltwater bodies.

It was moved by Colleen McNeil and seconded by David Dwyer that the Board outline its recommendations regarding setbacks from fresh and saltwater, noting any attempt to put in a septic system would likely cause infiltration.

A discussion followed on whether the minutes would suffice or a recommendation be sent to Community Council. Mr. Holmes volunteered to write the recommendation based on the Board's standard format. The Chair will help Mr. Holmes finalize the recommendation and due to time constraints pass it along without the normal practice of the Board approving at the June meeting. This was agreed to by consensus.

3.0 **BUSINESS ARISING FROM MINUTES**

3.1 **MARITIME AND NORTHEAST PIPELINES**

Circulated with the agenda package were a list of reports held by HRM Engineering on the Maritimes and Northeast Pipeline Project as of April 21, 1999.

Correspondence to Glen Williams from the Canadian Environmental Assessment Agency and the Manager, Environmental Affairs, Maritime Northeast Pipeline regarding comments Mr. Williams had provided on the Comprehensive Study of the Halifax Lateral Pipeline project were provided in a follow-up mail out.

In his update Mr. Williams noted that a downsizing of the pipe to Tufts Cove from 12 inches to 10 inches has been proposed. An environmentally approved dump site for any acid shale has yet to approved. Glen Williams will continue to report further developments.

3.2 WATER QUALITY MONITORING - GLEN ARBOUR

Deferred in the absence of Ms. Corser. Peter Shacklock was going to check with Ms. Corser on the data and ensure any missing data was given to Shalom Mandaville.

3.3 INCLUSION OF PENINSULAR HALIFAX UNDER A WATERSHED BOARD

No response yet received from Mr. Meech. Whether to not to write a follow-up letter will have to be decided upon.

3.4 CO-CORRECTIONAL FACILITY

A copy of the Project Update of March 1999 on the Co-located Correctional and Forensic Facility was circulated with the agenda package. Also circulated was a letter from Austin French, Regional Planning Coordinator to Mr. Grant Walker, Chair of the Community Advisory Committee indicating that the newsletter had been misleading by suggesting that negotiations for a Development Agreement are underway.

In his update to the Board, Mr. Regan noted that several Public Meetings have been held. The access road to the site has now been relocated. Since a minimum of 800 car trips a day are expected to the facility, for safety purposes consideration of building a \$5 million interchange is now being considered. The site of the facilities is situated 100 meters above Jack Lake. Forty acres have been clear cut for the site and road. It is still planned that 850 acres will be given to the HRM for park. The Chair recalled the intent was for these lands to be used for passive recreation. The Committee plans to invite HRM and Provincial park planners to an upcoming meeting.

It is Mr. Walker's intention to meet with the Board sometime in July or August. The Community Advisory Committee is attempting to set up a meeting with the Board and BWAC regarding environmental concerns. A petition with 200 names expressing environmental concerns has been received.

A member of BWAC is to be invited to join the Committee. BWAC has particular concerns regarding Jack Brook and the effect it might have on Paper Mill Lake eventually.

Mr. Holmes reported on a site visit of the area. He noted that there are no water courses in the area clear cut, while there are some wet spots.

3.5 CONCEPT PLANS - LETTER TO MR. BIGELOW

Mr. Regan's draft letter which was sent to Colleen McNeil has been sent to Susan Corser for revision. Instead of just referring to concept plans, subdivision plans will be included. It is anticipated that it will be brought to the next meeting.

To date Ms. Corser has not spoken to Sharon Bond, Regional Coordinator, Subdivision/Development regarding her response to earlier correspondence.

3.6 WATER COMMISSION PLANS

No response has been received from Mr. Meech regarding the Board's suggestion that all Halifax Regional Water Commission plans come to the Board for comment.

3.7 STORM WATER MANAGEMENT POLICY

There has not been a response to the Board's correspondence and this item will be moved to the Status Sheet.

3.8 PROTOCOL DISTRICT 2

Mr. Williams noted that he still has been unsuccessful making any progress with the Development Officer, Kevin Warner or the Planner, Angus Schaffenburg. He expressed frustration and the Chair suggested that perhaps it is time that the supervisor be contacted. If Mr. Williams has nothing more positive to report by Tuesday, the Chair is to be contacted.

3.9 MEMBERSHIP - DISTRICT 17 AND WILLIAMS LAKE CONSERVATION SOCIETY

No response has yet been received from Councillor Reid to the Board's request for a new member to be identified from District 17 to replace Jennifer Barr.

At the April meeting it was noted that the correspondence to the Williams Lake Conservation Company on the process of becoming a member of the Board was misleading. The Clerk has drafted a letter to clarify the procedure, which was approved by the Chair for mailing.

3.10 IMPACT GOLF COURSES HAVE ON WATERCOURSES

Ms. McNeil provided copies of a publication entitled "GREENING - Your BC Golf Course - A Guide to Environment Management" from Environment Canada and Fisheries and Oceans.

Mr. Holmes noted that British Columbia also has some very good guidelines for subdivision development. He will bring a copy to the next meeting.

Mr. Holmes questioned whether developers have to give the park land required for subdivisions to HRM or could it be deeded to organizations such as Nature Trust. It was felt that if such organizations were to petition HRM, they would likely agree to such an arrangement.

3.11 **MIDYAT INVESTMENTS MAINLAND SOUTH**

There was no further update and it was suggested that this item be removed from the agenda and put on the status sheet until the Development Agreement has been signed. The Board would like to see a copy.

3.12 **BENNERY LAKE - AD HOC COMMITTEE**

The update on the May 13th meeting was deferred in the absence of Susan Corser.

3.13 **OPEN HOUSE SESSION - HEMLOCK RAVINE PARK NORTH MASTER PLAN** **STUDY AREA**

Mr. Regan had attended the Open House and reported to the Board on his impressions. He felt that most of the large land owners appear to see the merit of having a Master Plan for the whole area.

While George Armoyan has been given permission to proceed with Stage 1 of his Hemlock Estates Development, the HRM wants this development included in the Master Plan.

The residents of the area expressed concern about water hookups, the effect blasting will have on their properties and the increase in traffic from an additional 800 acres of housing.

Mr. Regan was confident that the Master Plan will go forward and lot services charges will be included. School construction charges will be included in these charges.

The Chairman noted that the Board was to review the Hemlock Estates Development, but

this has apparently been pushed back.

It was felt that the development of the Master Plan will involve subcommittees and whether the Board would wish to get involved was raised. By the time it is brought to the Board, it might be too late for the Board's input.

The Chair indicated he will give Stephen Feist a call to discuss whether the Board should join and the benefits of the Board getting involved at an early phase. *It was subsequently determined that Mr. Feist is no longer involved with this project but Paul Morgan.* The Chair will report back at the next meeting.

3.14 PLANNING ADVISORY COMMITTEES

Colleen McNeil is to draft a letter to the various PACs, similar to the letter sent out to construction organizations. An offer will be made in the correspondence for a Board representative to talk to the PACs about the role and function of the Board. If an invitation isn't extended, they will be provided with a written explanation.

3.15 UPDATE ON CWRA CONFERENCE

The Chair reported that he, Susan Corser and Colleen McNeil had finished the paper to be presented June 22 at the Conference. A copy of the report will be provided for the next meeting.

4.0 NEW BUSINESS (Cont'd)

4.1 EAST PETPESWICK GOLF COURSE

Deferred in the absence of Ms. Corser.

4.4 STATUS SHEET

A sample of a proposed Status Sheet was circulated. In addition to keeping track of outstanding issues, the Clerk noted that it would help reduce the amount of Business Arising each month on the agenda. **There was a motion by Mr. Regan and Mr. Evans to commence this practice. Motion carried unanimously.**

4.5 NEW ENVIRONMENTAL GROUP- McIntosh Run

Mr. Regan provided information on a new environment group associated with the McIntosh

Run. He provided for the records a copy of an article entitled "Spryfield Legion offers reclamation project to the community". Mr. Regan questioned whether the group should be invited to join the Board. The Board indicated that a similar letter to the one sent to the Williams Lake Conservation Company should be forwarded. Mr. Regan will provide the Clerk with a telephone number on how to reach Mr. Bobbitt, Legion President.

5.0 **CONCEPT PLANS**

5.1 **LANDS OF HARTLAND DEVELOPMENTS - HAMMONDS PLAINS**

Copies of plans related to the above development were circulated with the agenda package.

Mr. Evans noted that there is a small brook running through the site, which consists of a lot of acid shale. The area is adjacent the Halifax water supply. Reference was made to an amendment to the MPS passed by Council which requires a CDD for any subdivision which plans to develop more than 20 lots in five years.

Mr. Evans noted that there are two abandoned pits, high in acid producing shale on the site. If the development were to proceed as a CDD, the Board would have an opportunity for input. He wished to make sure that Susan Corser is aware that the Board's primary concern would relate to the acid slate and the run off potentially entering the water and the watershed. He felt this development could potentially pose a major acid slate problem.

Whether this development will qualify for a CDD will be checked out with Susan Corser.

6.0 **SUBCOMMITTEE**

6.1 **SUBCOMMITTEE ON PARAMETERS FOR WATER QUALITY TESTING**

Dr. Burney reported that they had not met since April 2nd. A meeting is planned for early June. A complete document is being put together at this stage. The idea is to provide a framework which will be flexible. It is hoped that all the concerns of the subcommittee have been incorporated and it will provide a forum for a complete discussion. Once the subcommittee had seen the document, he will bring it to the Board. The document could be eventually sent to the Department of Environment for their adoption as well.

A copy of David Haley's letter to the Deputy Minister is not yet available.

7.0 **BWAC MINUTES**

Copies of BWAC's approved minutes for March 1999 were circulated with the agenda package. In addition, the Clerk circulated their approved minutes for April.

8.0 **DATE OF NEXT MEETING**

The date of the next meeting is June 16, 1999. Mr. Dwyer gave his regrets.

9.0 **ADJOURNMENT**

Meeting adjourned at approximately 10:30 p.m.

Dr. Wayne Stobo
Chair

Lynne Le Boutillier
Assistant Municipal Clerk

(June7/99)