



May 2, 2016  
File: 2016.4778.00.E.05.00

Tracey Braun, M.Sc.  
Director, Environmental Approvals  
Manitoba Conservation and Water Stewardship  
123 Main Street, Suite 160  
Winnipeg, MB R3C 1A5

**Re: MANITOBA WATER SERVICES BOARD  
MWSB 15 - 76 MACDONALD UPGRADES  
NOTICE OF ALTERATION FOR THE MANITOBA WATER SERVICES  
BOARD & THE RM MACDONALD WATER TREATMENT PLANT**

Dear Ms. Braun:

On behalf of the RM of Macdonald, please find enclosed one hard copy and one electronic copy of the Notice of Alteration request for the above mentioned project. Also enclosed is a \$500 check for the review fee.

This notice requests an alteration to the existing Licence 1599R for the construction of a new raw water impoundment pond. At 90 dam<sup>3</sup>, the new pond could be considered a Class 2 development.

We trust that the enclosed application contains sufficient information for your staff to conduct their review and approvals process in a timely and efficient manner. Should the reviewer require any additional information or require any clarifications, please do not hesitate to contact myself.

Yours truly,  
**ASSOCIATED ENGINEERING (SASK) Ltd.**



Ken Anderson, P.Eng.  
Manager, Water  
Encl.



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Associated Engineering (Sask.) Ltd.  
203 - Five Donald Street  
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April 27, 2016  
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Dear Tracey:

In accordance with the Environmental Act (Section 14), this submission is a request for an alteration to the current EAL No. 1599 R in submission for the Manitoba Water Services Board (MWSB) and the RM of Macdonald, for the above mentioned project. Under the Environmental Act Section 3, the proposed development would be classified a "Class 2 Development" as a water supply impoundment. Please find enclosed a cheque for \$500 fee for this alteration review.

This notice requests an alteration to the existing Licence 1599 R for the construction of the following:

- A fourth (4) raw water impoundment pond, including weir manhole and cross connection piping;
- A new aeration system, including blower building, piping for all four raw water ponds (including the proposed 4<sup>th</sup> pond) and berm expansion;
- Berm alterations on existing raw water pond (Cell 1).

The new raw water pond will be situated on existing Sanford Water Treatment Plant, Lot 1, Plan 40340, NW ¼ Section 29, Township 8, Range 1 E.P.M. The proposed Cell four consists of a new 90,000 cubic metre aerated raw water impoundment pond. The approximate cell dimensions and depth are 207 m x 207 m x 4.0 m deep, which closely matches the existing raw water impoundment ponds on site. To construct the pond, topsoil (0.25 m – 0.3 m) will be stripped from the proposed raw water pond area, excavation will lower the original ground to a depth of 236.00 (from approximate 237.40) to make available onsite fill material for all proposed berm construction: proposed Cell 4, raising Cell 1 berms, and berm expansion east of proposed blower building between Cell 2 and Cell 3. The proposed Cell 4 development will include fencing that equals pre-existing site conditions. The topsoil waste material left over after topsoil



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and seeding the proposed berms will be spread out over two selected site locations on the Water Treatment Plant property to an approximate depth of 0.2 m - 0.3 m.

Cell 1 berms will be raised from a height of approximately 237.6 to an elevation of 240.00. The Cell 1 berm will be raised on the west, south and east sides to match the common berm elevation between Cell 1 and Cell 2 (240.00).

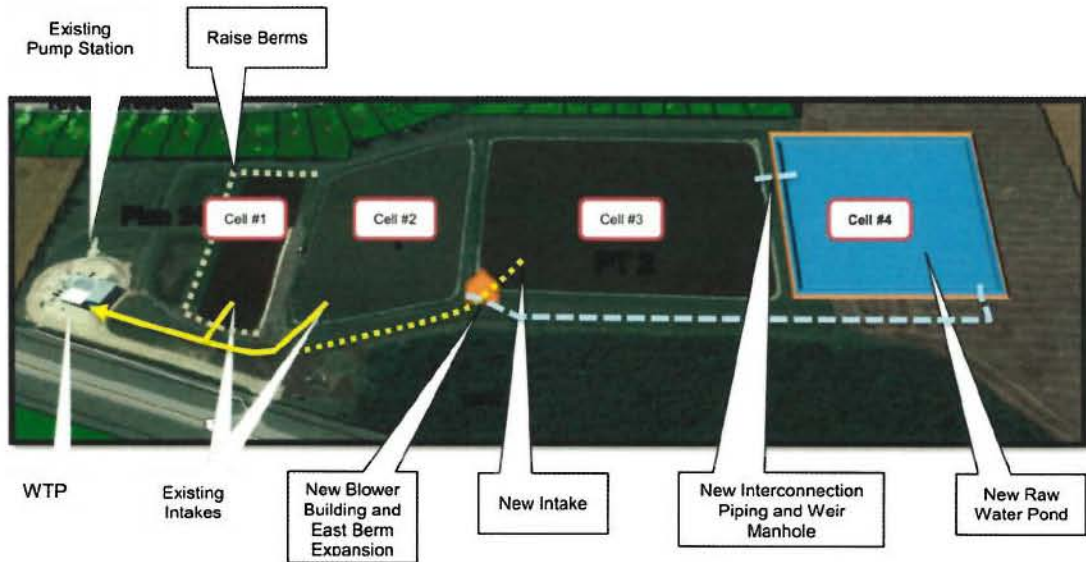
A new aeration system will be installed in all four raw water ponds. The system will include: aeration piping, pumps, blower building including power supply, and maintenance room. The aeration system will turn over the ponds six times per day to help eliminate undesirable tastes and odors that originate from the decaying organic matter in the raw water ponds. This work will include the expansion of the berm east of the proposed blower building site, to allow maintenance vehicles to safely navigate around the top of berms.

The proposed development will not alter the current operation of the existing water treatment plant. The plant capacity will remain unchanged as well as the withdrawal rate from the La Salle River (River). The increased storage volume will allow the plant to temporarily cease drawing water from the River during high turbidity events for a longer period of time and improve operational proficiencies during maintenance shut downs.

The proposed development site for Cell four (4) is predominantly agricultural land use where crops are currently produced on the land. Therefore the environmental impact on the proposed development and surrounding land is deemed to be insignificant. All the berm construction material will be supplied from the excavation of proposed Cell four (4) site and little to no material will leave the site, aside from waste construction materials that will be disposed of to designated landfill locations. The site has been designed to minimize the impact to any tree growth or vegetation with no proposed clearing or mulching. Standard environmental safety practices will be in place during construction to reduce any short term impacts to the site or surrounding area. As applicable to the environmental standards, proper erosion protection control will be in place to mitigate any sediment contamination on and off the site.

Figure 1-1 (below) is an overall site plan showing the property limits and the proposed development areas as they relate to the existing Water Treatment Plant. Figure 1-2 (below) shows the development area and its existing agricultural use.

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**Figure 1-1**  
**Overall Site Plan**

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**Figure 1-2**  
**Development Area and Existing Agricultural Use**



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We trust that the enclosed application contains sufficient information for your staff to conduct their review and approvals process in a timely and efficient manner. Should the reviewer require any additional information or require any clarifications, please do not hesitate to contact myself.

We thank you for your time and consideration on this application. Please contact us if you have any questions.

Yours truly,

A handwritten signature in blue ink that reads "Ken Anderson".

Ken Anderson, P.Eng.  
Manager, Water  
Email: [andersonk@ae.ca](mailto:andersonk@ae.ca)  
Ph: (204) 942-6391

Ecl.  
Fee.

KA/mg

cc: Manitoba Water Services Board  
RM Macdonald

