

MINIOTA 4884.10
ROSSBURN 94.2

Webb, Bruce (CWS)

From: Upper Assiniboine CD [uarcd@mymts.net]
Sent: January-12-15 2:37 PM
To: Webb, Bruce (CWS)
Subject: RE: Miniota Lagoon Effluent Irrigation
Attachments: rossburn lagoon irrigation site.jpg; Rossburn Lagoon WholeTopo_2013_2.jpg

Thanks Bruce, I have attached the map of the land surrounding the Rossburn Lagoon. I will be attempting to irrigate a portion of the field indicated within the rectangle. The other map is a topo survey we completed for the town. I understand that they have just purchased some of the property to the west (25-19-25)

As far as monitoring goes in Rossburn;

- I will take before and after soil samples
- Record the duration of the trial and estimate volumes of water diverted
- Plot the irrigated area
- Monitor yield response to irrigation (somehow) ? height of plant two weeks prior to applications?

The Miniota trial went ok, we ended up only irrigating for a combined total of about 6 hours. Between set-up problems and then the limited availability of water (due to the complete draw down of the second cell) to accommodate the construction. I am significantly hampered by the need for two pumps and power units (tractors) to run the irrigation unit. But am hoping the municipalities see value in the alternate use of the effluent.

I almost need to set up a trial that focuses on the economic benefit as that is the motivator not the fact that we are diverting nutrient rich water from the river..

Regardless , I will get you a report but the months end and will be interested in pursuing a repeat trial in Miniota next year. The other site that I am kinda focused on is Oak river. I will be trying to meet with their council in Feb.

Ryan Canart P.Ag
District Manager
Upper Assiniboine River CD
Box 223, Miniota, Manitoba
e-mail uarcd@mts.net
Ph 204-567-3554
fax 204-567-3587
On the web: <http://www.uarcd.com>
On Facebook: <http://www.facebook.com/uarcd>



Mr. Bruce Webb

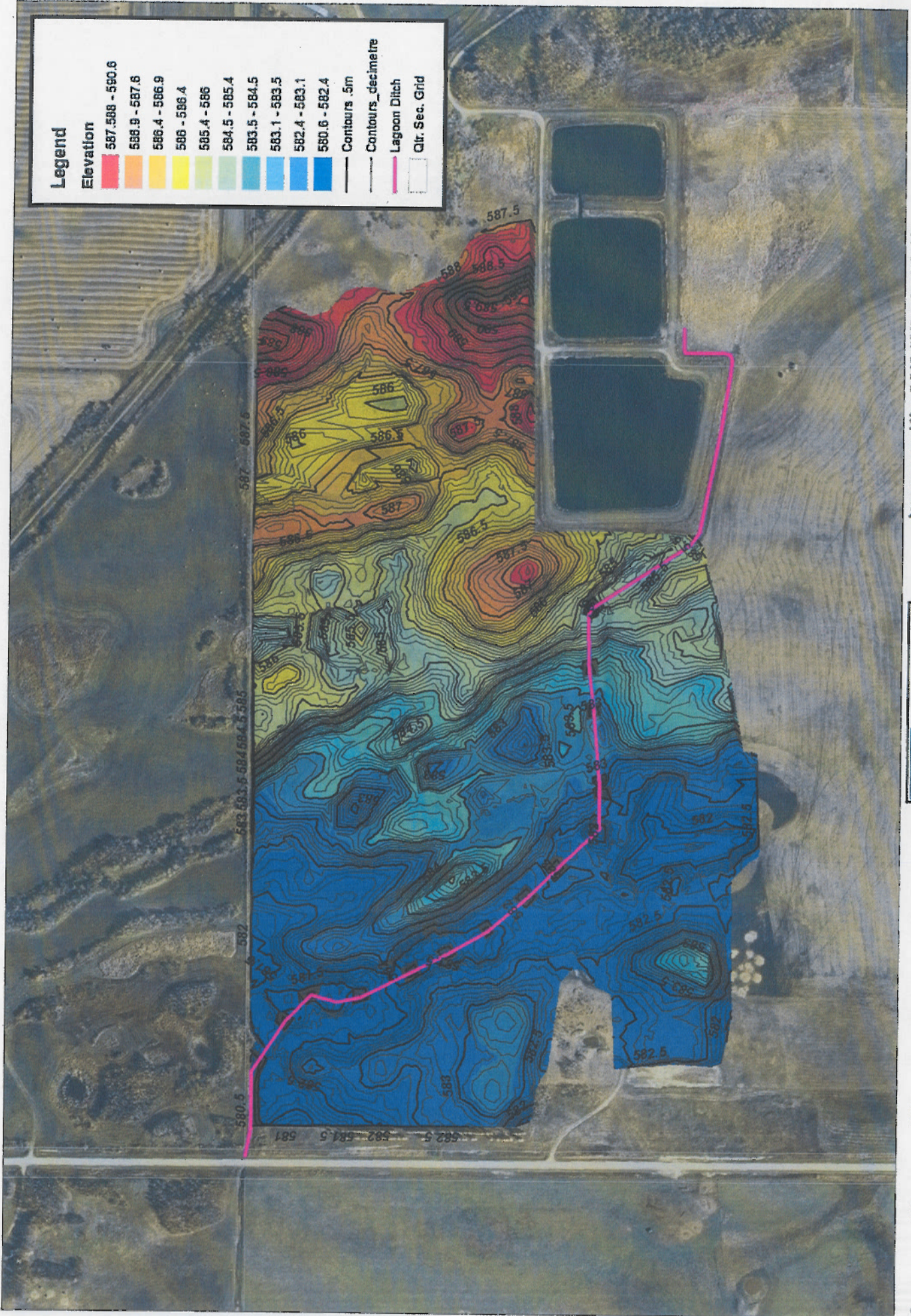
Re: alteration to Rossburn Municipal Lagoon license

The Rural Municipality of Rossburn is requesting an alteration in the discharge of their effluent treatment facility. Working with the Upper Assiniboine River Conservation, we would like to demonstrate the feasibility and technical/mechanical ability needed to irrigate effluent to adjacent arable lands. We will rely on the district staff to ensure that measures are taken to prevent any surface runoff or other negative impacts from effluent irrigation. Limited monitoring will be undertaken as a small trial of the logistics and proximity will be the main focus of this demonstration. An estimated 90,000 gallons of effluent will be applied via irrigation in this initial trial. If the site logistics are favorable and equipment is readily available we may seek further more permanent alterations to the current license. The Municipality owns the lands which are to be utilized (see attached map). Water quality samples have been analyzed and we have no concerns with regards to nutrient content or sodium absorption ratio's etc. We are requesting this alteration for the upcoming year (2015).



sw-36-19-25

Lagoon Topo Survey



Legend	
Elevation	
	587.588 - 590.6
	588.9 - 587.6
	586.4 - 586.9
	586 - 586.4
	585.4 - 586
	584.5 - 585.4
	583.5 - 584.5
	583.1 - 583.5
	582.4 - 583.1
	580.6 - 582.4
	Contours .5m
	Contours_decimetre
	Lagoon Ditch
	Qtr. Sec. Grid

Area surveyed May 9 & 13, 2013 using Trimble R8 RTK survey unit. Elevations are in metres and are relative to previous KGS survey dyke elevation of 587.5m.

Upper Athabasca River
Conservation District
Alberta, Canada
On the web: [uncd.com](http://www.uncd.com)

