

Bailey_Russell2.txt

From: Ian Bailey [ianbailey@ns.sympatico.ca]
Sent: Monday, March 14, 2005 6:33 PM
To: Shalom M. Mandaville
Subject: Re: Further info: -- RE: Russell Lake

Hi Mr. Mandaville

I did not mean to cause a problem.

Having seen the drainage structures at the south end of Red Bridge Pond, the stream on the map quite a number years ago and

the huge increase in flow on days with heavy rainfall, it never occurred to me that the water went anywhere but Red Bridge

Pond until I saw your flow chart.

However, since I have challenged a significant point about the drainage of the lakes, I had better defend my comment.

From a water quality point of view where the old stream went does not matter. What matters is, where does the water from

Penhorn Lake go now.

From my point of view, the problem can be looked from two directions.

1. Where do the major outlet pipes into south east end of Red Bridge pond originate?
2. Is there a major outlet pipe into Russell Lake?

1. Today (March 14, 2005) at Red Bridge Pond, there is an open stream 10-15 feet wide running into the pond. There is an

older concrete structure containing 1- ~5 foot concrete pipe and 1--3 concrete foot pipe. Both are covered by large steel

grates to stop people. The area is partially protected by a chainlink fence mounted on the concrete structure. (Corner of

Mountain Road and Plymouth Road). Following south towards Penhorn Lake, the Ira Settle sports field has several large

concrete structures, running in a line towards Red Bridge pond. By the look of these structures and the raised bed they stand

on someone is moving a significant amount of water underground. Behind the Canadian Tire (Tacoma) on the short street of

Oakwood ""Court"" there are 4-6 pairs of dual manhole covers flowing a line directly down from Penhorn Lake to towards

Canadian Tire. It appears that there is a significant pipe or set of pipes heading from the Penhorn Lake area to Red Bridge

pond. (Note: I did not have a tape measure with me, hence the "~" approximate symbol.)

If these pipes do not connect to Penhorn Lake where do they go?

2. From the look of the ice in the swampy end of the Russell Lake there is no appreciable amount water running into Russell

Lake today. I did not find infrastructure that would indicate a large amount of

water ever flows, into the northern end of

the Russell Lake. Originally a small stream came from the swamp at the Woodlawn Mall area into Russell Lake. I suspect this

is now directed into the pipe behind the garden care center. There appear to be three storm pipes, behind the Canada Trust

Mall and the Auto dealers, moving virtually no water into the lake. There is no appreciable amount of open water to be seen.

None of these pipes appear to be constructed to hand heavy water flows unlike the structure at Red Bridge Pond.

3. On a day with very heavy rainfall, until the last upgrade of the culverts under Waverley Road, Red Bridge Pond would flow

over the top of the Waverley Road. While I have seen the Russell Lake rise and flood the park paths it does not seem to

exceed the drainage culverts built for the Lake. Oddly the flow of Red Bridge Pond appears to be several times the flow of

Russell Lake which is several times larger and supposedly drains the Penhorn area also. I wonder if someone has measured the

flow rates?

4. In defense of the consultants and their comment on drainage basins, where does the asphalt at Penhorn Mall drain?

Directly to Russell Lake, to Penhorn Lake, the harbour? Until recently MicMac mall drained to settling ponds at Lake

MicMac, the original stream still flows from the mall area and beyond to Lake Banook. God knows what they did in the 70's.

Hopefully someone who knows the underground pipes of the city can solve this or on St. Patrick's day we can dye the outfall

of Penhorn Lake green and see where it goes. There should be a plan for the work done on the Ira Settle field, it is

relatively new.

Ian Bailey

On an interesting note, there is a sudden drop in the land behind the homes on Virginia Avenue to Louisbourg Lane and a

gentle slope towards Canadian Tire which would line up with the old stream bed on the topographical maps. This subdivision

was built in the days before the contractors plowed the land flat then built.