

File: 0237702

October 4, 1989

File: ~~D720123~~

City of Nanaimo
Parks and Recreation Department
500 Bowen Road
Nanaimo, B.C.
V9R 1Z7

Attention: Mr. R. G. White,
Superintendent of Parks and Horticulture

Dear Mr. White:

Re: Cathers Lake Dam
Lot 1, Plan 38821, Your file A2-3/01-2-7

In regards to your letter of September 22, 1989, Water Management has recommended the following changes to Cathers Lake Dam to improve the operation and safety of the structure.

1. The spillway entrance and chute be cleared of all debris and a log boom constructed across the reservoir approximately 50 feet upstream of the dam to protect the spillway from further blockage and debris build-up.
2. The low level outlet works gate valve be cleared of debris and a lid constructed on the casing. The valve casing should be protected from vandalism.

The Water Licence authorizing the storage of water is presently held by Kathleen and Cheryl Buchanan, of East Wellington Road, Nanaimo, B.C.

If the City of Nanaimo wishes to screen the spillway entrance and fence the top section, Water Management would have no objection, however, the spillway chute should not be covered or culverted. This would make the spillway difficult to maintain and inspect. The City of Nanaimo should negotiate with the owner before making any changes.

If you wish a joint inspection with the owner to present these proposals, I would be pleased to attend. A few days notice would be appreciated. I can be reached at 758-3951.


... 2

City of Nanaimo
Mr. R. G. White

- 2 -

October 4, 1989

Yours truly,

A handwritten signature in cursive script, appearing to read "Alan Boom".

Alan Boom
Dam Safety Technician
Water Management

AB/jlp

cc: Mrs. Kathleen



CITY OF NANAIMO

VANCOUVER ISLAND • BRITISH COLUMBIA

File: A2-3/D1-2-7

1989-September-22

OFFICE OF ENVIRONMENTAL
RECEIVED

SEP 27 1989

Water Management Branch
Ministry of the Environment
2569 Kenworth Road
Nanaimo, B.C.

NANAIMO, B.C.

ATTENTION: GEORGE BRYDEN

Dear Mr. Bryden:

Re: Cathers Lake, Lot 1, Plan 38821

The residents of Cathers Lake subdivision plan to develop this lot as a park. Prior to development the residents and the City of Nanaimo have to address the existing structures on-site; namely the weir and spillway.

The following modifications to these structures would be required to accommodate development and address the safety concerns of the residents.

1. Weir entrance to be screened off
2. Weir/spillway top section to be fenced
3. Exit spillway to be covered and/or culverted and backfilled

We understand that the holder of the water licence for Cathers Lake Water Retention Area owns these structures. Could you please contact the licence holder and ask if they would like to participate in the required improvements, and/or give the City of Nanaimo permission to do so. It is understood that the required modifications will not alter the water flow from the retention area, and that access to the site will not be restricted.

Yours truly,

R.G. White,
Superintendent of Parks
and Horticulture

RGW/sm

cc s.22

J. Pike, M. Patton, C. Galloway

WATER MGR.		
ENG.		
Bryden		GB
Blom		AD
TECH.		

CITY HALL • 455 WALLACE STREET • V9R 5J6 • 754-4251
FIRE DEPARTMENT • 555 FITZWILLIAM STREET • V9R 3B5 • 753-7311
PARKS AND RECREATION DEPARTMENT • 500 BOWEN ROAD • V9R 1Z7 • 753-7788

A2-3/D1-2-7

MINUTES OF THE ON-SITE CATHERS LAKE PARKLOT DEVELOPMENT MEETING
HELD THURSDAY, 1989-NOV-02 AT 3:00 P.M.

In Attendance: K. & C. Buchanan, A. Boom, C. Galloway, G. Brown,
J. Pike & R. White

The site was inspected and the following was determined:

1. WEIR ENTRANCE - can be screened off for safety - a sketch of the proposal is to be submitted to Water Management Branch, (Alan Boom) by City Public Works.
2. WEIR/SPILLWAY TOP SECTION - has been fenced for safety by City Public Works.
3. EXIT SPILLWAY - can be enclosed for safety but cannot be covered and backfilled. Suggested that spillway be covered with extruded steel plates or wood bolted into existing concrete structure to allow for inspection and removal for clean-out. Sketch of proposal to be submitted to Water Management Branch by City Public Works.

The slopes immediately adjacent to the spillway are not to be backfilled to allow for inspections of leaks. However, other slopes can be filled and fenced back to top of spillway from property line.

4. LOG BOOM - Water Management Branch suggests that the owners install a log boom across the entrance to the spillway to collect and prevent debris from washing into weir.

RW/jh

cc F.M. Patton

WATER MGR.		
ENG.		
TECH.		
CLERK-STENO		
FILE		

November 22, 1989

Our File: ~~D720123~~
Your File: ~~A2-3/D1-2-7~~

City of Nanaimo
500 Bowen Road
Nanaimo, B.C.
V9R 1Z7

ATTENTION: Mr. Richard White
Superintendent of Parks and Horticulture

Dear Mr. White:

Re: Cathers Lake Dam

It has come to our attention that Mrs. Kathleen Buchanan of s.22 wishes to abandon the Cathers Lake Dam and the accompanying Water Licences. The dam is presently storing approximately 80 ac. ft. of water on Crown Land adjacent to City Park Property. Under the Water Act, past licensees are responsible for works affecting private property, therefore, the dam will either have to be removed, or taken over by another party.

If the City of Nanaimo wishes to assume responsibility for the structure to enhance the park property, there is some remedial work which should be done to improve the operation and safety of the structure:

1. The spillway entrance should be screened and a log boom placed across the spillway entrance to prevent debris from entering the concrete chute.
2. The spillway chute should be cleared of the existing debris buildup.
3. The spillway and upstream face should be fenced to prevent the public from accidentally entering the waterway.

If the City wishes to proceed, the water licence may be transferred from Mrs. Buchanan to the City. If you have any further questions regarding this matter, please feel free to contact me at 758-3951.

Yours truly,



Alan Boom, A.Sc.T.
Regional Dam Inspector

AB/jlp



CITY OF NANAIMO

VANCOUVER ISLAND • BRITISH COLUMBIA

File: 0237702

File: D720123
A2-3/D1-2-7

1990-March-07

Mr. Alan Boom, A.Sc.T.
Regional Dam Inspector
Ministry of Environment
2569 Kenworth Road
Nanaimo, B.C. V9T 4P7

MINISTRY OF ENVIRONMENT
RECEIVED

MAR 8 - 1990

NANAIMO, B.C.

Dear Mr. Boom:

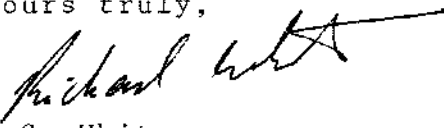
Re: Cathers Lake Dam

In regards to the licencing of the above structure, the Parks and Recreation Commission would like to know if your Department can help with the following:

1. Can the Ministry of the Environment put pressure on the current licence holder to bring the dam up to standard? (the remedial work which should be done to improve the operation and safety of the structure as per your correspondence)
2. Can the City of Nanaimo recover any of the \$2,800 (City estimate for the remedial works) from the:
 - a) Ministry of the Environment
 - b) Current licence holder
3. Can the City of Nanaimo have a complete list of all water licence holders of the Millstream River?

Please contact myself if any clarification of the above is required.

Yours truly,


R.G. White,
Superintendent of Parks
and Horticulture

RGW/sm

cc M. Patton

WATER MGR.		
ENG.		
TECH.		
① Boom		
CLERK-STENO		
FILE		

CITY HALL • 455 WALLACE STREET • V9R 5J6
FIRE DEPARTMENT • 666 FITZWILLIAM STREET • V9R 3B5
PARKS AND RECREATION DEPARTMENT • 500 BOWEN ROAD • V9R 5Z7
753-7311
753-7380



CITY OF NANAIMO

VANCOUVER ISLAND • BRITISH COLUMBIA

File: 0237702

1990-APR-25

Ministry of Environment
2569 Kenworth Road
Nanaimo, B.C.
V9T 4P7

Attention: Mr. Allen Boom,
Regional Dam Inspector

Dear Mr. Boom:

RE: CATHERS LAKE DAM

As you are aware, for some time now the licencing of the Cathers Lake Dam has been the subject of ongoing discussion between the Ministry of Environment and the Parks and Recreation Commission. Most recently, the City's Superintendent of Parks and Horticulture, Mr. Richard White, forwarded you a letter requesting the Ministry's assistance with respect to remedial works to improve the operation and safety of the dam structure.

For your information, at the regular meeting held Monday, 1990-APR-23, City Council received a report from the Parks and Recreation Commission recommending that the City apply for the water licence at Cathers Lake, and undertake the remedial work at an estimated cost of \$2,800.00. Subsequent to receipt of the Parks and Recreation Commission report, Council referred this issue to its Budget Committee for further consideration, and also endorsed the establishment by the Commission of a committee to investigate decreased water flows and licencing of the Millstone River and its tributaries.

During discussion related to this overall matter, Council noted that the proposed remedial work is a requirement of your Ministry. As such, Council has requested that a letter be forwarded to the Ministry of Environment formally requesting that the Ministry share in the costs of undertaking the necessary work. Council would be interested in entertaining a proposal from your Ministry to equitably share the costs of undertaking the necessary upgrading to bring the dam up to standard.

Should you have any questions with respect to Council's intent or request, please do not hesitate to contact the undersigned directly. Council looks forward to hearing from your Ministry at the earliest available opportunity.

Yours truly,



G. C. Nason,
Director of Administrative Services/
City Clerk

c.c. A. Laidlaw,
Director, Parks and Recreation

GCN/ef

2619/CSMIS

July 3, 1990

File: 0237702

City of Nanaimo
455 Wallace Street
Nanaimo, B.C.
V9R 5J6

ATTENTION: Mr. G. C. Nason
Director of Administration Services
City Works

Dear Mr. Nason:

Re: Cathers Lake Dam

In reply to your letter dated April 25, 1990, we do not have funds available for the upkeep and maintenance of dams. The water licensee is responsible for the costs associated with the maintenance and safety of their dam.

Our dam inspection program ensures that the water licensee is maintaining his dam to current structural safety standards. However, most of the remedial work proposed is related to the safety of children in a park to be located directly on top of the subject dam. The water licensee, if not the city, should not be held responsible for works associated with park safety. Our interest in the proposed works constructed by the city is that they not impair the function or structural safety of the dam.

If you have further questions regarding the above, please call or write.

Yours truly,



George Bryden, P.Eng.
Head, Water Allocation
and Regulation

GB/jlp

Date: June 3, 1991

File: 0237702

Nanaimo Ridge Holdings Inc.
7164 - 120th Street
Surrey, B.C.
V3W 3M8

Dear Sirs:

Enclosed is an Order issued under Section 37 of the Water Act.

Any appeal to this decision must be made in accordance with Section 38 of the Water Act.

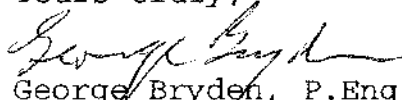
Attached is a copy of the Water Act. Please note the following Sections therein:

- Section 35 - Powers of the Comptroller if Disobeyed;
- Section 37 - Powers of the Engineer;
- Section 38 - Rights of Appeal from Engineer and Comptroller;
- Section 41 - Offenses of the Water Act.

For your information it is an offence under 41(1)(q) of the Water Act for a person to wilfully contravene an order of the Engineer, and may be liable to prosecution.

I would be please to meet with you at the dam site in Nanaimo and if you have any questions regarding this matter please telephone 758-3951 in Nanaimo.

Yours truly,


George Bryden, P.Eng.
Head, Water Allocation
and Regulation

GB/

Attachment

cc: City of Nanaimo, David Nicols, Office of the Land Agent, 455 Wallace St., Nanaimo, B.C., V9R 5J6

Norm Locke, s.22

Enclosure

June 4, 1991

File: 0237702

City of Nanaimo
Office of the Land Agent
455 Wallace St.
Nanaimo, B.C.
V9R 5J6

ATTENTION: Mr. David Nicols

Dear Mr. Nicols:

Re: Sabiston Creek - Cathers Lake Dam and Park

Further to our recent telephone discussion, enclosed is a copy of the order issued to the licensee regarding repairing the diversion facilities at the dam. I have also enclosed past correspondence regarding this matter and a copy of the Water Act for your further information.

It appears that the City of Nanaimo has allowed the land on and around the dam at Cathers Lake to be designated as city park lands and created public expectation from the residents around Cathers Lake reservoir that the reservoir and the dam will be maintained by the city for public recreation and enjoyment. Also I have been advised that the city may have constructed a water supply pipeline and sewer pipeline through the dam structure.

The land on and around the dam at Cathers Lake may be acquired by the water licensee, as I have previously indicated in my correspondence in 1982. The owner of the dam structure, possibly the water licensee if not acquired in part by the city during subdivision, may also require compensation for the pipelines through the dam structure.

Also our records indicate that Cathers Lake is almost totally a reservoir created by construction of a dam to store 69.3 acre feet of water. The existing water licences are for 38.4 acre feet storage and irrigation withdrawal. There appears to be 30.9 acre feet still available for licensing further uses from the lake. This water may be acquired by water licence by the City of Nanaimo for land improvement purposes to be maintain in the lake for recreational purposes.

. . . 2

Mr. David Nicols
File: 0237702

-2-

June 4, 1991

Therefore in order to protect the city's interests in the lake and dam, we advise the city to acquire a water licence for the remaining water in Cathers Lake. We have enclosed application forms for your convenience. The city will have to determine the ownership of the dam structure and negotiate agreements for joint ownership, access, maintenance and repair with the existing licensee.

If you have any questions regarding the above please telephone (758-3951) or write.

Yours truly,



G. Bryden, P.Eng.
Head, Water Allocation
and Regulation

GB/sls

cc. Nanaimo Ridge Holdings Inc., 7164 - 120th Street,
Surrey, B.C., V3W 3M8

Norm Locke, s.22

Enclosures

ORDER
WATER ACT
SECTION 37

IN THE MATTER OF a dam authorised under Final Water Licence
55734 on Sabiston Creek and the reservoir is
Cathers Lake on or about R.1, Plan 38821,
Section 12, Range 7, Mountain District.

HAVING DETERMINED that the intake works, gate works, valves
and security have deteriorated and no longer
function adequately.

HAVING DETERMINED that you have, or permitted to have water
diverted from Cathers Lake into Sabiston
Creek through a faulty gate works and thence
into an uncontrolled outlet into Sabiston
Creek at the base of the dam and that this
water was not used for irrigation purpose as
authorised in Final Water Licence 55733.

WHEREAS a person commits an offence under Section 41(1)(n) who
diverts water that he does not use beneficially.

WHEREAS I, George Bryden, Engineer under the Water Act, am
empowered under Section 37 (1)(b), (c) and (d) of the
Water Act to:

(b) inspect, regulate, close or lock any works;

(c) determine what constitutes beneficial use of
water;

(d) order the repair, alteration, improvement,
removal of or addition to any works;

WHEREAS I, George Bryden, engineer under the Water Act, having
determined that the diversion of water through the
faulty gate and thence uncontrolled pipe into Sabiston
Creek at the base of the dam does not constitute
beneficial use of water.

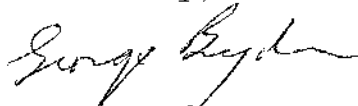
I HEREBY ORDER you Nanaimo Ridge Holdings Inc. to:

1. to stop all diversion of water from Cathers Lake until the following repairs and improvements are completed to my satisfaction;
2. place a gate or valve on the intake pipe in the wet well so that the water supply from the intake to the wet well can be closed and the wet well drained for maintenance and repair;
3. replace the faulty gate on the irrigation supply pipeline in the wet well with an adequate gate or valve;
4. provide a permanent blockage (such as filling the pipe with concrete or grout) at the inlet to the third, nonoperating pipe inlet in the wet well;
5. remove all debris and earth material from in and around the uncontrolled outlet from the irrigation supply line into Sabiston Creek for my inspection and, after my inspection and at my direction, replace or repair this uncontrolled outlet with a controlled outlet into the creek at the base of the dam;
6. provide secure structures around all gates or valves in and around the dam so that there is no general public access to the controls;
7. provide any other pressure reduction valves or other works that may be required for the irrigation supply;

by June 28, 1991.

Dated at Nanaimo, British Columbia, this 31 day of May 1991.

Yours truly,



George Bryden, P.Eng.
Engineer under the Water Act

June 4, 1991

File: 3-31-30

City of Nanaimo
Office of the Land Agent
455 Wallace Street
Nanaimo, BC
V9R 5J6

Dear Mr. Nicols:

Re: Application for a Water Licence

In response to your recent request, we are enclosing a file folder containing a set of forms for an "Application for a Water Licence". Instructions as to the correct procedure for their completion are noted in the file folder.

Please complete this application in full and submit with \$25.00 plus 7% Goods and Services Tax which equals \$26.75 application fee (payable to the Minister of Finance) to any:

Water Management Office in British Columbia (addresses listed on the left inside panel of the file folder),

or any

Government Agent in British Columbia.

If we may be of any further assistance in this matter, please do not hesitate to contact us by telephoning 758-3951 in Nanaimo and ask for Ms. E. Wright, Local 243.

Yours truly,

J. L. Parry
Water Management Secretary

GB/JLP

Enclosure

October 3, 1991

File: 0237702

Nanaimo Ridge Holdings Inc.
7164 - 120th Street
Surrey, B.C.
V3M 3M8

Attention: Mr. Erik Trygg

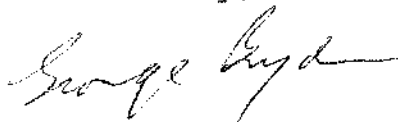
Re: Cathers Lake Dam
Plan 38821, Section 12, Range 7, Mountain District
Final Water Licence 55734

The Cathers Lake Dam has been inspected by our Regional Dam Inspector and it has been determined that the items of the Engineer's Order dated May 31, 1991, have been complied with as pertaining to the intake works, gate works, valves, and security.

It should also be noted that as part of the routine maintenance work, the heavy alder growth on the downstream face of the embankment should be removed to ensure the integrity of the embankment material and allow for proper inspection of the structure.

Thank you for your cooperation in this matter.

Yours truly,



George Bryden, P.Eng.
Head, Water Allocation
and Regulation

AB/jlp
nanridge.ab

cc: City of Nanaimo
Attn: David Nicols, Office of the Land Agent
455 Wallace St., Nanaimo, B.C., V9R 5K3

Norm Locke, s.22

BILL SAMPTON
S.K. & S. DIVORCE

file: 0237702

LORNE

PLEASE ASK BILL SAMPTON TO CONTACT

1) GAS COMPANY

- TO LOCATE THEIR PIPE ADJACENT TO THE DRAIN FLUME & ANY DIGGING OR SHOVEL WORK.
- GAS LINE CROSSES JUST BY INTAKE FLUME??

2) CITY OF NAMATMO

PARKS DEPT - MIKE PATTON OR
RICHARD WHITE

- TO ADVISE THEM OF WORKS TO BE DONE ON MUNICIPALLY OWNED LANDS (ALL THE LANDS SURROUNDING DAME SPILLWAY)

- LES KING @ ENVIRONMENTAL DEPT. ADVISES NO PROBLEMS WITH SEWER OR WATER LINES.

3) MINISTRY OF ENVIRONMENT - 758-3951

GEORGE BAYDEN
EVELYN RICHERT

- ADVISE GEORGE BAYDEN 2 DAYS BEFORE THEY EXPOSE THE Y CONNECTION AT BOTTOM OF SPILLWAY - HE WANTS TO BE IN ATTENDANCE WHEN THIS PIPE IS EXPOSED SO HE CAN DECIDE HOW TO ISOLATE / ABANDON IT. SINCE IT IS PROBABLY NOT REQUIRED IF WE INSTALL A PRESSURE REDUCTION VALVE DOWN STREAM "ON THE FARM".

Wright, Eileen

From: Morgan, Chris
To: Wright, Eileen
Subject: File 0237702
Date: Tuesday, July 25, 1995 5:31PM

Eileen, I am sorry I didn't reply to this sooner.

Your proposal to cancel the irrigation licence and reissue the storage rights to the City would be acceptable provided all the owners of the appurtenant land were notified.

It is not necessary to offer the land owners a portion of the licence if you notify them of your intention to cancel it.

In some instances where the land has been extensively subdivided it may be advisable to publish your notice of proposed cancellation in a newspaper than to notify by mail.

Chris

REPLY FROM: Morgan, Chris
Microsoft Mail v3.0 IPM.Microsoft Mail.Note
From: Wright, Eileen
To: Morgan, Chris
Subject: File 0237702
Date: 1995-06-14 08:09
Priority:
Message ID: 2329EB80
Conversation ID: 2329EB80

There are two water licences on the above file. The source is Sabiston Creek, with storage in Cathers Lake. One licence (CL55733) authorizes irrigation of 38.4 acres on a farm within Section 13, Range 7, Mountain District. The other (CL55734) provides for supporting storage in the lake.

This property is within the City of Nanaimo and in recent years has been subdivided. There are a number of residential lots surrounding the "lake" which is actually an irrigation pond. We have had numerous phone calls in recent years with complaints about the irrigation use which causes a drop in the "lake" level. In the last couple of years the City has created a park area immediately adjacent to the lake.

Now the owner of the remaining farm land wishes to subdivide further and create more residential lots.

We would like to cancel the irrigation rights and assign the storage licence to the City of Nanaimo for recreation (park) purposes.

Since CL55733 was intended for irrigation of farm land, and there will no longer be any farm land to irrigate after this subdivision, is it legitimate for us to proceed with this proposed cancellation and new assignment of the storage rights, provided that all the property owners are notified?

Can we notify them of our intentions, without offering them the right to their portion of the licence?

Please advise as soon as you can. Thanks.

Eileen

REGISTERED MAIL

September 28, 1995

File: 0237702

*Sent to All adjacent
Land owners*

Dear Bonnie Stebbings:

Re: Final Water Licences 55733 and 55734

Enclosed is a notice which sets out our proposal for apportioning the rights authorized by the above water licence.

If you have any comments or concerns regarding this proposal, please advise the Regional Water Manager, in writing, on or before November 27, 1995.

With regard to the proposed cancellation of 15.9 acre feet of storage rights on Cathers Lake, if you would prefer that these rights be transferred to the City of Nanaimo for park enhancement, please sign the statement enclosed with this letter and return it to our office.

Yours truly,

Eileen Wright

Eileen Wright
Licence and Permits Officer

Enclosure

cc: City of Nanaimo

File 0237702

TO THE REGIONAL WATER MANAGER
2569 Kenworth Road
Nanaimo, BC V9T 4P7

IN REGARD TO THE PROPOSED CANCELLATION OF A PORTION OF THE
STORAGE RIGHTS (15.9 ACRE FEET) ON CATHERS LAKE UNDER FINAL
WATER LICENCE 55734, I/WE WOULD PREFER THAT THESE RIGHTS BE
TRANSFERRED TO THE CITY OF NANAIMO FOR PARK ENHANCEMENT.

SIGNED: _____

DATE: _____

Owner of Lot B, Plan 48320

Aug 17 1995

Bill Hollingshead
c/o Vancouver Island Region 1
Regional Headquarters
2569 Kenworth Road
Nanaimo, British Columbia
V9T 4P7

Dear Mr. Hollingshead:

Re: Final Water Licences 55733 and 55734

Recently received your proposal via registered mail, made telephone contact with Eileen Wright and now feel obliged to take up your offer to submit written comments with respect to this proposal. As well we have several questions which need to be answered prior to submitting our notice.

Questions which need to be answered include the following:

- 1) Who is lobbying for this rather significant change?
- 2) Why is the individual(s) anxious to see this change?
- 3) How might this change affect our potential to draw water from the water line, the "lake," or from Sabiston Creek?
- 4) We note that under point c) of your letter, dated September 28, 1995, we have a legal right to a portion of this water, for irrigation, etc. What do we need to do to this water for our land? Notification of this cancellation would have been appreciated.
- 5) Could we please see the City of Nanaimo's proposed park enhancement plan for this area?

most importantly

- 6) How will this water storage proposal be beneficial to our families and our property located within the potentially affected area? (please consider our present zoning)

As you ponder these questions, it is perhaps timely to remember the history of the area. In particular we find it intriguing that an "old timer" told us that, in the past, Sabiston Creek generated enough water flow to generate power for a portion of East Wellington! As well if one looks at maps as recent as the mid 1950's, one discovers that Cathers' "Lake" does not exist!

More recently the Cathers' Landing development has also raised some issues. When this subdivision was first "put on the market" there was a very obvious buffer of trees left on the Jingle Pot Road side of the "lake." (on the "lake" side of each building lot) Our understanding of the development was that these were to be left to provide support for the

environment. Now few, if any, of the residential properties have any trees left. One suspects that this clearly violates what was to have happened.

Another Cathers' "Lake" concern happens during heavy rains or snow melts. On several occasions every year we have had to remove the "dam" of debris which clogs the spillway - on more than one occasion, water levels were coming dangerously close to the top. Granted beaver live in the "lake" but after quick examination one realizes that the majority of the debris is the result of human carelessness. Clearly to many this "lake" is nothing more than a dumping ground. Had proper foliage been maintained around the perimeter of the "lake" far less garbage would end up "blown" in the "lake."

We look forward to your response to our many questions and hope our "ramblings" give you some "food for thought." Once we have received your answers we are confident we can make a decision regarding this issue. Radical, but sensible solutions to this issue might well be to forget this proposed cancellation and leave the licence as is ... or to return Sabiston Creek to the way it was. This would mean removing the entire dam and allowing the creek to return to its prior state. Then people could apply for licence to withdraw water, at a sensible rate, to provide for such needs as irrigation.

Yours truly,



Joseph Ronald Skipsey
s.22



William B. Walker
s.22

Owner: Lot 6

Owner : Lot 5

January 8, 1996

File: 0237702

Joseph R. Skipsey
s.22

and

William B. Walker
s.22

Gentlemen:

Re: Final Water Licences 55733 and 55734

I have been asked to reply to your letter received November 7, 1995. I apologize for the delay in our response, but I shall attempt to address your questions and concerns.

You asked who is lobbying for this change. No one.

As a result of the normal updating of our maps and records, we became aware that the land for which these licences were issued (appurtenant land) had been subdivided and sold to separate owners. In order to meet our legislated mandate for management of the water resources, we want to ensure that our records accurately reflect the current situation. Therefore, it is necessary for us to amend the above water licences. Local knowledge of the area confirmed that, except for the Remainder of DD18809F, those portions of the appurtenant land which had been subdivided and sold, are not, and have not been in recent years, used for farming purposes.

The appurtenant land was subdivided approximately ten years ago, and the parcels within Plans 41146 and 48320 have remained as residential lots. There has been no use of the licensed water on those parcels for over three successive years so, under Section 20(a) of the Water Act, there is justification for cancelling a part of the water licences.

... 2.

There is no intent to change the storage of water in Cathers Lake, as licensed. We merely intend to cancel the **right** of Naniamo Ridge Holdings (owners of the remaining licensed farm land) to utilize a portion of the water.

The City of Nanaimo has not conceived any plans for park enhancement in that area, as far as we know. On several occasions in past years they have approached us about obtaining the water licence on Cathers Lake for recreation/conservation purposes. The storage site (Cathers Lake) and the dam structure are within City-owned land and the City has installed works for other services there. It seems reasonable to us that they should have at least partial responsibility for the integrity and maintenance of the works associated with the water licence. This can only be achieved if they are water licensees.

Sabiston Creek is tributary to the Millstone River. The Millstone system is considered to be "fully recorded" and we are not likely to grant any further licences for consumptive use of water from those sources, even if a part of the rights under the above licences is cancelled. This would be especially true for properties which are served by a municipal water supply.

The issues which you have raised concerning removal of trees from the perimeter of the lake in the Cathers Landing subdivision, are outside of Water Management jurisdiction, so we cannot deal with them. You should discuss your concerns with City of Nanaimo staff.

In the meantime, we intend to proceed with cancellation of a portion of the irrigation and storage rights held under Final Water Licences 55733 and 55734, as set out in our notice of September 28, 1995.

... 3.

Skipsey/Walker

- 3 -

January 8, 1996

For your information, I enclose two pamphlets which provide some explanation of water rights and licence obligations in BC.

Yours truly,

A handwritten signature in cursive script that reads "Eileen Wright".

Eileen Wright
Licence and Permits Officer

Enclosure



WATER ACT

Section 15, 17 and 20

IN THE MATTER OF Final Water Licence No. 55733, which authorizes the diversion of 38.4 acre feet per annum of water from Sabiston Creek, for irrigation of farm land within that portion of Section 13, Range 7, Mountain District, described as parcel D.D. 18890F, except Parcel B (D.D. 10570N); and of Final Water Licence 55734 which authorizes storage of 38.4 acre feet of water in Cathers Lake to support the irrigation use.

AN INVESTIGATION has determined:

- a) That the appurtenant land has been subdivided by Plans 41146, 48320 and that there is a further subdivision of Lot 3, Plan 41146, pending. The resulting properties are now under separate ownerships;
- b) That works are installed and water is being beneficially used under the terms of the water licences, only on the remainder of D.D. 18890F.
- c) That no works, nor use of water under the terms of the licence, have existed on those lands within Plan 41146 and Plan 48320, for at least three consecutive years.

THEREFORE, I propose to:

- i) Apportion the rights granted and obligations imposed under the said licence;
- ii) Cancel a portion of the rights; and
- iii) Issue one new Final licence, in substitution of Final Water Licences 55733 and 55734, as follows:

On File 0237702 -

To the owner of that part of Section 13, Range 17, Mountain District, described as the remainder of D.D. 18809F, except Parcel B (D.D. 10570N), and except Plans 41146 and 48320 - a licence authorizing the diversion into storage on Cathers Lake of 22.50 acre feet per annum of water from Sabiston Creek, and use of 22.50 acre feet per annum of the stored water for irrigation purpose on the said remainder of Parcel D.D. 18809F1.

.../2

F:10563

September 28, 1995

The authorized period of storage will be the whole year and the authorized period for irrigation use will be 1st April to 30th September, subject to the water being available from storage.

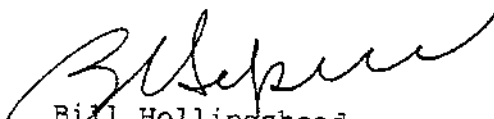
The new licence will retain the original date of precedence of 27th July, 1961.

The portion of the irrigation and storage rights proposed to be cancelled is 15.90 acre feet per annum.

Upon the issuance of new licences, Final Water Licences 55733 and 55734, will be recorded as cancelled.

Written comments with respect to this proposal may be filed with the Regional Water Manager, 2569 Kenworth Road, Nanaimo, B.C., V9T 4P7, up to 27th day of November, 1995.

Dated at Nanaimo, BC, this 28th day of September, 1995.


Bill Hollingshead
Regional Water Manager

For further information
Telephone: Eileen Wright (751-3125)

EW/

Sent by Registered Mail to:

Owners of Remainder of D.D. 18890F.
Owners of Lots 1, 2, 3, 5, 6, Plan 41146
Owners of Lots A and B, Plan 48320.

Wright, Eileen

From: Wright, Eileen
To: Bryden, George
Cc: Boom, Alan {PC}; Hansen, Deb; Baldwin, John {PC}
Subject: RE: Cathers Lake
Date: Tuesday, March 12, 1996 8:03AM

During my conversation with Richard White of the City, I mentioned to him that we would like to license them for at least part of the storage on Cathers Lake. Mr. White indicated that the City would prefer that they hold all the rights on the lake. I told him that as long as the farm still exists, in part, it is entitled to retain the water licence. We are currently processing a new licence for the farm to further decrease the rights under the licence and to restrict the appurtenancy. Eileen

> From: Bryden, George
> To: Wright, Eileen
> Cc: Boom, Alan {PC}; Hansen, Deb; Baldwin, John {PC}
> Subject: RE: Cathers Lake
> Date: Monday, March 11, 1996 7:09PM

>
> I want the City of Nanaimo to pick up a water licence on this
> source as they have built a park on top of the dam. I think
> that both the licensee and the city should be responsible for
> maintaining the dam and reservoir. Until I can get around to
> writing the letter Deb could you go out and look at the site
> to see if you can see any debris build-up at the outlet (take
> a picture or two) and contact the licensee by telephone and
> remind them of their responsibility to maintain the dam and
> the outlet free of debris. Thanks.

> -----
> > From: Wright, Eileen
> > To: Bryden, George
> > Cc: Hansen, Deb; Baldwin, John
> > Subject: Cathers Lake
> > Date: Monday, March 11, 1996 4:39PM
> >

> > There was a call from Richard White of City of Nanaimo Parks
> > Dept. The City has received a complaint from s.22
> > s.22 a resident in the vicinity of Cathers Lake.
> > He says the outlet is clogged with debris and needs cleaning
> > out. Would this be the responsibility of the licensees as
> > part of the maintenance of works? Can you take the necessary
> > action to notify them?
> >
> > The File No. is 0237702 and the licensees are Nanaimo Ridge Holdings.
> >
> > Eileen
> >

March 19, 1996

File: 0237702

Nanaimo Ridge Holdings
7164 - 120th Street
Surrey, B.C. V3W 3M8

Re: Final Water Licence No. 110563

Enclosed is a copy of your new water licence. Please make careful note of all its conditions.

This licence was issued in substitution, in part, of Final Water Licences 55733 and 55734, to confirm the apportionment and cancellation in part, of rights under the said licence, in accordance with our notice of September 28, 1995.

If additional fees are required, you will be advised by the Comptroller of Water Rights, in due course.

Please note the following:

1. Water licences do not authorize entry on privately owned land for the construction of works, or flooding. Permission of the affected landowner must be obtained, or an easement expropriated. **For your protection, we recommend that you obtain a written agreement which is registered with the appropriate Land Title Office.**
2. Permission for installing works on lands or roadways which are under the jurisdiction of any Government agency, **must be obtained from the agency concerned.**
3. **Please notify this office if:**
 - a) there is any change to your mailing address;
 - b) you sell the land for which the licence is issued;
 - c) you intend to subdivide the land described in the licence;
 - d) you propose to alter the works authorized under the licence.
4. **In order for you to keep your water licence in good standing, you must ensure the following:**
 - a) continued beneficial use of water, as authorized under your licence;
 - b) payment of annual rentals;
 - c) compliance with the terms of your licence;
 - d) compliance with the terms of the Water Act.

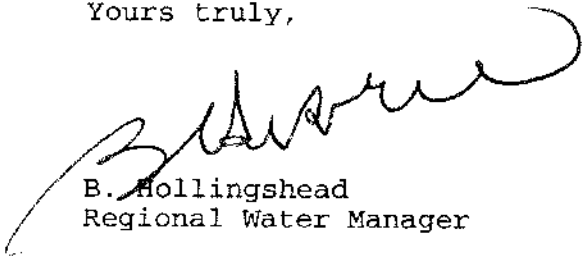
. . . /2

March 19, 1996

A right of appeal from this decision lies to the Comptroller of Water Rights. Notice of any appeal must (1) be in writing; (2) be made within 30 days of the date of this letter; (3) include grounds for the appeal and a statement of the order sought; and (4) be directed to the Deputy Comptroller of Water Rights, Ministry of Environment, Lands and Parks, 765 Broughton Street, Victoria, BC, V8V 1X4.

If you identify any error in your water licence, or if you have any questions on this subject, please contact Eileen Wright at this office. (Telephone 751-3125).

Yours truly,



B. Hollingshead
Regional Water Manager

/spf

cc: Deputy Comptroller of Water Rights
Owners of Lots 1, 2, 3, 5, 6, Plan 41146
Owners of Lots A and B, Plan 48320
City of Nanaimo

Enclosure

FILE COPY

July 11, 1996

File: 0237702 & D720123

Nanaimo Ridge Holdings Inc.
7929 - 120th Street
Delta BC V4C 6P6

ATTENTION: Jan Eric Trygg, President

Re: Cathers Lake dam - Final Water Licence 110563

Dear Eric Trygg:

A recent inspection of the Cathers Lake Dam in Nanaimo revealed that the concrete spillway structure is blocked with wood debris. This condition can lead to serious overflow problems during high-flow periods. This debris should be removed from the spillway as soon as possible.

Heavy alder growth on the downstream face of the dam should also be removed to ensure the integrity of the embankment material.

Section 18(1) of the Water Act states:

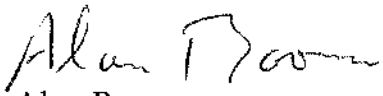
"Every licensee and person who has obtained approval under Section 7 shall exercise reasonable care to avoid damaging any land, works, trees, or property, and shall make full compensation to the owners for any damage or loss resulting from the construction, maintenance, use of operation of the licensee's works."

It is therefore to your advantage to keep the dam and spillway in safe operating condition. To facilitate this, a local person should be appointed to maintain and operate the dam responsibly.

.../2

Please contact Alan Boom, our Regional Dam Safety Officer, at (604)751-3100, to arrange for a joint inspection.

Yours truly,


Alan Boom
Regional Dam Safety Officer

AB/as
trygg.ab

FILE COPY

August 27, 1996

File: 0237702
0222531
0175978

City of Nanaimo
455 Wallace Street
Nanaimo BC V9R 5J6

ATTENTION: Gerald Berry
City Administrator

Dear Gerald Berry:

Re: Water Licences - City of Nanaimo

I am writing to you to seek a resolution to several issues regarding the above subject.

1. Cathers Lake (our file: 0237702)

Recently a water licensee was prevented from removing trees and bushes from a dam at Caters Lake by a City By-Law Enforcement Officer. Water Management required the licensee to remove the trees and bushes and clear the spillway in order to maintain the dam in a safe condition. The dam is an earth embankment structure. The city have denoted the dam, and the area around the dam, as a city park. Further, the city may have allowed the construction of gas, water and sewer pipelines through the dam structure without permission of the water licensee or authorization under the Water Act. The city may own the land around and under the dam, but the licensee is responsible for the dam. City staff may not have recognized the dam as a structure with hydraulic forces that require special consideration to maintain structural integrity and safety.

... /2

The city should undertake a structural assessment of the dam to ensure that the pipelines through the dam have not weakened the dam. The location, fill material and the compaction of the fill material around and above the pipe may affect the safety of the dam. Also, if the dam is to remain as a city park and the water levels in Cathers Lake are to be maintained at their present levels, the city should obtain a water licence and negotiate an agreement of joint ownership and maintenance with the water licensee (Nanaimo Ridge Holdings). The estimated total volume of water stored by the dam at Cathers Lake is 69.3 acre-feet. Nanaimo Ridge Holdings has a water licence for 22.5 acre-feet. The remaining 46.8 acre-feet is available to the city for a water licence for "Land Improvement (Park)" purposes. A water licence held by the city would assist both the city and Water Management in ensuring that the dam is maintained in a safe condition.

2. Westwood Lake (our file: 0222531)

According to information on our files, the dam on Westwood Lake (formerly Coal Creek Reservoir) was constructed by the Nanaimo Electric Light, Power and Heating Company Ltd., in 1904. The lake was created by the damming of Coal Creek and the diversion of McNeil Creek into the lake. Additional water was obtained by diverting the headwaters of McGarrigle Creek into McNeil Creek and thence into Westwood Lake.

The city, in the late 1950's, purchased most of the land around the shoreline of Westwood Lake to develop a park for recreational purposes. The city renovated and repaired the abandoned dam and agreed to apply for the necessary water licences. Furthermore, the small diversion dam on McGarrigle Creek (locally known as Witchcraft Lake) has breached. The dam on McGarrigle Creek should be totally removed by the city.

The city obtained a water licence for the dam and diversion on McGarrigle Creek. However, no water licence was ever obtained for the much larger (41 foot high) dam and storage on Westwood Lake. Therefore, with the city's concurrence, we would like to amend the city's Conditional Water Licence 24896, to delete McGarrigle Creek from the licence and add the storage of 2,200 acre-feet of water in Westwood Lake (dam on Darough Creek a.k.a. Coal Creek) and the diversion of the total flow at McNeil Creek into Westwood Lake.

... /3

3. Millstone River (our file: 0175978)

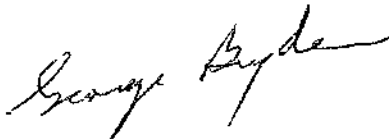
In 1960, the Nanaimo Park Board obtained a water licence (Conditional Water Licence 18816) to build two swimming pools in the Millstone River. Plans of the works associated with the pools were to be submitted to and approved by the Comptroller of Water Rights, prior to any construction. No plans were ever submitted and it is unlikely that we would approve the construction of swimming pools in the Millstone River at this time. No benefit accrues to the city in maintaining the licence. Therefore, with the city's concurrence, we wish to cancel Conditional Water Licence 18816.

4. Northfield Swamp

During the construction of the Nanaimo Parkway and Northfield Road connector, we became aware of a small dam near Boxwood Road, owned by the city and operated for stormwater detention. A water licence for land improvement purposes is required.

I have enclosed two "Application for a Water Licence" packages. If you have any questions or wish to meet to discuss the above, please give me a call at 751-3135.

Yours truly,



George Bryden, P.Eng.
Head, Water Allocation
and Regulation

GB/as
berry.doc

Enclosures

bcc: Sharon Erickson, Environmental Assessment Officer, Nanaimo
Al Boom, Dam Inspection Technician
Eileen Wright, Licence and Permits Officer, Nanaimo
Bill Hollingshead, Regional Water Manager

FILE COPY

October 28, 1996

File: 0237702
0222531
0175978

City of Nanaimo
455 Wallace Street
Nanaimo BC V9R 5J6

ATTENTION: Gerald Berry, City Administrator

Dear Gerald Berry:

Re: Water Licences within the City of Nanaimo

In reply to your letter of September 5, 1996, I would like to arrange a meeting with you and/or other city staff regarding the following matters:

1. Proposed water licence application for Cathers Lake (F055733, File: 0237702).
2. Amendments to Westwood Lake and McGarrigle Creek Water Licence (C024896, File: 0222531).
3. Cancellation of Millstone River Water Licence (C018816, File: 0175978).
4. Proposed licensing of Northfield Swamp dam.

Please refer to my letter of August 27, 1996, for further details on each item.

I would appreciate a call at 751-3135, to set a meeting date that is convenient for everyone involved. Please call me if you have any further questions.

Yours truly,



George Bryden, P.Eng.
Head, Water Allocation
and Regulation

AB/as
berry.doc

THE PROVINCE OF BRITISH COLUMBIA—WATER ACT

FINAL WATER LICENCE

The owners of the land to which this licence is appurtenant are hereby authorized to divert, store, and use water as follows:

- (a) The source of the water-supply is Sabiston Creek, and storage is in Cathers Lake.
- (b) The point of diversion and storage site are located as shown on the attached plan.
- (c) The date from which this licence shall have precedence is 27th July, 1961.
- (d) The purposes for which this licence is issued are storage and irrigation.
- (e) The maximum quantity of water which may be held in storage is 22.50 acre feet per annum; and the maximum quantity of water which may be used for irrigation purpose is 22.50 acre feet per annum, subject to the water being available from storage.
- (f) The period of the year during which the water may be held in storage is the whole year, and the period of the year during which the water may be used for irrigation purpose is 1st April to 30th September.
- (g) The land upon which the water is to be used and to which this licence is appurtenant is the Remainder of DD 18809F, Section 13, Range 7, Mountain District, except Parcel B (DD 10570N), and except Plans 41146 and 46320; of which 22.50 acres may be irrigated.
- (h) The works authorized to be constructed are dam, intake, pipe, and sprinkler system, which shall be located approximately as shown on the attached plan.
- (i) The intake shall be adequately screened to prevent debris and fish from entering the works.
- (j) The construction of the said works has been completed and the water is being beneficially used. The licensee shall continue to make a regular, beneficial use of water in the manner authorized herein.
- (k) This licence is issued in substitution, in part, of Final Water Licences 55733 and 55734, under Section 17 and 20 of the Water Act.



B. Hollingshead
Regional Water Manager

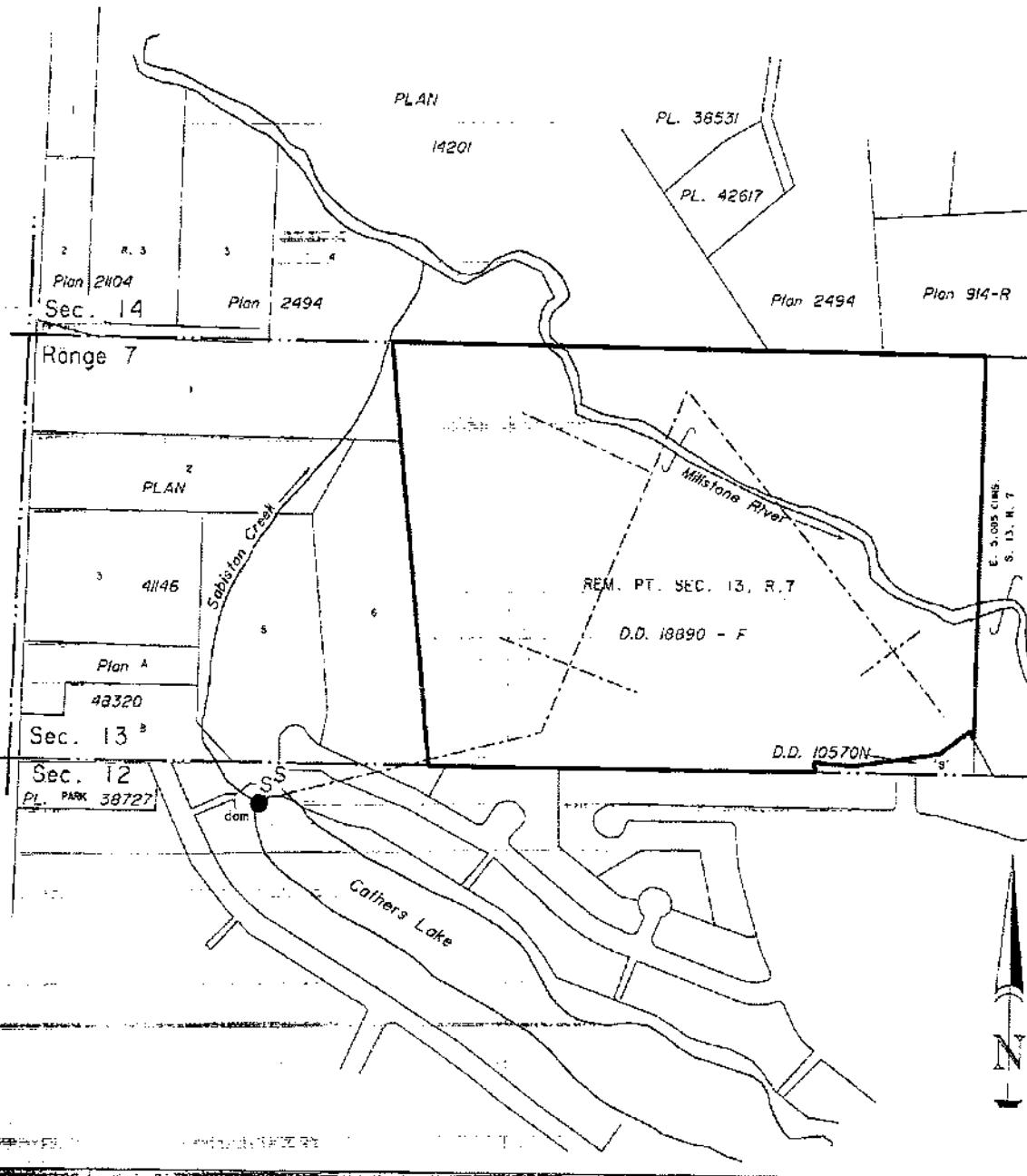
File: 0237702

Date Issued: March 19, 1996

Final Licence: 110563





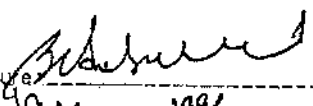
Province of British Columbia



WATER DISTRICT : NANAIMO
PRECINCT : NANAIMO
LAND DISTRICT : MOUNTAIN

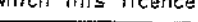
LEGEND

Scale : 1:5000
Point of Diversion : 
Map Number : WR 4804F
Pipe : 

Signature: 

Date: 19 March 1996

F.L. 110563 for F.L. 55733 & F.L. 55734
File 0237702

The boundaries of the land to which this licence
is appurtenant are shown thus: 



May 20, 2010

File No. 0237702

Kanwaljit Singh Grewal and Parwinder Kaur Grewal
s.22

Dear Kanwaljit Grewal and Parwinder Grewal:

Re: Water Licence Amendment

Reference No. AMD20080613-0002

The investigation of the above application has been completed. Enclosed is a copy of your Water Licence.

Please read the documents carefully. Any error(s) in these documents should be brought to the attention of this office as soon as possible.

The water licence attached to this letter is issued in substitution of FWL110563

The dam authorized under this licence is subject to the Dam Safety Regulations of British Columbia. Additional information on design, construction and maintenance can be found in the Canadian Dam Association Guidelines.

As you are required to meet Fisheries and Oceans Canada standards in the construction of the authorized works, a copy of the Fish Screening Directives, which provides specifications for screening intakes, is enclosed.

Please note that your water licence may require you to install a flow metering device to record the rate and volume of water diverted under this licence. You should ensure that your works can accommodate this request should it be made at a future date.

Please note the following:

- 1) Water licences do not authorize entry on privately owned land for the construction of works, or flooding. Permission of the affected landowner must be obtained or an easement expropriated. For your protection, permission should be in writing and registered with the appropriate Land Title Office.
- 2) Permission for installing works on lands or roadways which are under the jurisdiction of any government agency, must be obtained from the agency concerned.

Ministry of
Environment

Water
Stewardship
Division

Mailing Address:
2080A Labieux Road
Nanaimo BC V9T 6J9

Location:
2080A Labieux Road
Nanaimo BC V9T 6J9

Fax: (250) 751-7079

Web:
<http://www.env.gov.bc.ca/wsdl/>



Page 1 of 2



Please notify the Regional Water Manager if:

- a) there is any change in your mailing address;
- b) you sell the land to which the licence is appurtenant;
- c) you propose to subdivide the land to which the licence is appurtenant; or
- d) you propose to alter the works authorized under the licence.

FrontCounterBC will be able to assist you with notification and any applications required to make these changes.

In order for you to keep your water licence in good standing, the following must be observed:

- a) continued beneficial use of water, as authorized under your licence;
- b) payment of annual rentals;
- c) compliance with the terms of your licence; and
- d) compliance with the terms of the Water Act.

The enclosed Statement is for the first Annual Rental for your Licence, pro-rated to December 31st 2010. Payment in full must be received by the Due Date to avoid a late payment penalty.

The Water Act gives the recipient of this notice the right to appeal my decision. Information on filing an appeal can be found on the Environmental Appeal Board Website at: <http://www.eab.gov.bc.ca/>. A right of appeal from my decision lies to the Environmental Appeal Board. Notice of any appeal must (1) be in writing; (2) include grounds for the appeal; (3) be directed by registered mail to the Chair, Environmental Appeal Board, PO Box 9425 Stn Prov Govt., V8W 9V1 or personally delivered to the office of the Board at 4th Floor, 747 Fort Street in Victoria, BC V8W 3E9; (4) be delivered within 30 days of receiving this letter, and (5) be accompanied by a fee of \$25.00, payable to the Minister of Finance.

If you have any questions or concerns, please contact this office.

Yours truly,

Paul Marquis
Assistant Regional Water Manager

pc: HQ Water Licensing
395 Waterfront Crescent, Victoria BC V8T 5K3
Nanaimo Water Licensing
2080A Labieux Road, Nanaimo BC V9T 6J9

Ministry of
Environment

Water
Stewardship
Division

Mailing Address:
2080A Labieux Road
Nanaimo BC V9T 6J9

Location:
2080A Labieux Road
Nanaimo BC V9T 6J9

Fax: (250) 751-7079

Web:
<http://www.env.gov.bc.ca/wsd/>

Page 2 of 2



Ministry of Environment
Water Stewardship Division

Statement

May 20, 2010

Page 1 of 2

To: Kanwaljit Singh Grewal and Parwinder Ka
Grewal
s.22

Dec 31, 2009 Balance Overdue: 0.00

Outstanding Since Jan 2010: 0.00

New Charges After May 19, 2010: 350.00

(GST No. R107864738) GST on New Charges: 0.00

PST on New Charges: 0.00

Unapplied Credits: 0.00

Total Due: 350.00

New Charges Due Date: Jul 31, 2010

Client No. 112703

Account Activity - General Rentals:

Date	Reference	Description	Invoice/Receipt	Amount (\$)
May 20, 10	C125512	03B - Irrigation - 27,753.30000 m3/year	WSI27764	15.48
May 20, 10	C125512	03B - Irrigation - Bal Fwd - WSI16065 08/31/09	WSI27767	25.00
May 20, 10	C125512	03B - Irrigation - Bal Fwd - WSI16147 07/31/08	WSI27767	75.00
May 20, 10	C125512	03B - Irrigation - Bal Fwd - WSI27766 07/31/10	WSI27767	9.52
May 20, 10	C125512	08A - Storage-Non Power - 27,753.30000 m3/year	WSI27764	15.48
May 20, 10	C125512	08A - Storage-Non Power - Bal Fwd - WSI16065 08/31/09	WSI27767	25.00
May 20, 10	C125512	08A - Storage-Non Power - Bal Fwd - WSI22735 07/31/08	WSI27767	75.00
May 20, 10	C125512	08A - Storage-Non Power - Bal Fwd - WSI27766 07/31/10	WSI27767	9.52
C125512 Total:				250.00
Account Activity - General Rentals:				250.00

Account Activity - Miscellaneous Services:

Date	Reference	Description	Invoice/Receipt	Amount (\$)
May 20, 10	C125512	Apportionment	WSI27765	100.00
Account Activity - Miscellaneous Services:				100.00
Unapplied Credits:				0.00
Total Due:				350.00

Current Charges	< 1 Month Past Due	1 Month to <3 Years Past Due	3 or more Years Past Due	Total Due
\$350.00				\$350.00





Ministry of Environment
Water Stewardship Division

Statement

May 20, 2010

Page 2 of 2

Payment Stub

DETACH THIS PAGE AND RETURN WITH YOUR PAYMENT TO

WATER REVENUE UNIT
MINISTRY OF ENVIRONMENT
PO BOX 9340 STN Prov Govt
VICTORIA BC V8W 9M1

MAKE CHEQUE OR MONEY ORDER PAYABLE TO MINISTER OF FINANCE

PLEASE WRITE YOUR CLIENT NUMBER ON YOUR CHEQUE OR MONEY ORDER

To: Kanwaljit Singh Grewal and Parwinder Ka
Grewal
s.22

Dec 31, 2009 Balance Overdue:	0.00
Outstanding Since Jan 2010:	0.00
New Charges After May 19, 2010:	350.00
(GST No. R107864738) GST on New Charges:	0.00
PST on New Charges:	0.00
Unapplied Credits:	0.00
Total Due:	350.00
New Charges Due Date:	Jul 31, 2010

Client No. 112703

Payment Instructions:

- Payments may also be made at Front Counter BC Offices and Government Agent Offices.
- Payments should be made in Canadian funds.
- Please do not post-date cheques.
- Payments must be received by the due date to avoid late payment penalty. Note that payments made through an automated banking machine may be date stamped the next business day, and will be considered as received on that day.
- A late penalty of 1% over the prime lending rate will be assessed on overdue accounts.
- A service charge will be assessed on dishonoured cheques.

GA Service Code 0376

June 4, 1991

File: 0237702

City of Nanaimo
Office of the Land Agent
455 Wallace St.
Nanaimo, B.C.
V9R 5J6

ATTENTION: Mr. David Nicols

Dear Mr. Nicols:

Re: Sabiston Creek - Cathers Lake Dam and Park

Further to our recent telephone discussion, enclosed is a copy of the order issued to the licensee regarding repairing the diversion facilities at the dam. I have also enclosed past correspondence regarding this matter and a copy of the Water Act for your further information.

It appears that the City of Nanaimo has allowed the land on and around the dam at Cathers Lake to be designated as city park lands and created public expectation from the residents around Cathers Lake reservoir that the reservoir and the dam will be maintained by the city for public recreation and enjoyment. Also I have been advised that the city may have constructed a water supply pipeline and sewer pipeline through the dam structure.

The land on and around the dam at Cathers Lake may be acquired by the water licensee, as I have previously indicated in my correspondence in 1982. The owner of the dam structure, possibly the water licensee if not acquired in part by the city during subdivision, may also require compensation for the pipelines through the dam structure.

Also our records indicate that Cathers Lake is almost totally a reservoir created by construction of a dam to store 69.3 acre feet of water. The existing water licences are for 38.4 acre feet storage and irrigation withdrawal. There appears to be 30.9 acre feet still available for licensing further uses from the lake. This water may be acquired by water licence by the City of Nanaimo for land improvement purposes to be maintain in the lake for recreational purposes.

. . . 2

Mr. David Nicols
File: 0237702

-2-

June 4, 1991

Therefore in order to protect the city's interests in the lake and dam, we advise the city to acquire a water licence for the remaining water in Cathers Lake. We have enclosed application forms for your convenience. The city will have to determine the ownership of the dam structure and negotiate agreements for joint ownership, access, maintenance and repair with the existing licensee.

If you have any questions regarding the above please telephone (758-3951) or write.

Yours truly,



G. Bryden, P.Eng.
Head, Water Allocation
and Regulation

GB/sls

cc. Nanaimo Ridge Holdings Inc., 7164 - 120th Street,
Surrey, B.C., V3W 3M8

Norm Locke, s.22

Enclosures

DAM INSPECTION REPORT

Date: 1 October 1991

File: D720123

DAM: *Cathers Lake Dam*

DATE OF INSPECTION: *23 September 1991*

INSPECTED BY: *Alan Boom*

Cathers Lake Dam was inspected to determine whether the work required by the Order issued under Section 37 on 31 May 1991 to Nanaimo Ridge Holdings Inc., the new owners of the dam, has been completed.

An upstream gate valve has been placed in the low level outlet manhole to control the flow through the dam in the event of an emergency. This valve will permit the low level outlet to be shut off from the upstream side of the dam.

During construction it was determined that a valve could not be placed on the intake pipe to the wet well due to the deteriorated condition of the pipe and the adjacent concrete. Since this valve was not considered critical, it was agreed that this valve would not be required.

A downstream gate valve was placed in the low level outlet pipe at the toe of the dam. Since this pipe also serves as the irrigation supply intake, this valve will be used to control the irrigation water supply.

The uncontrolled pipe which was discharging water into the creek from the wet well was sealed with concrete.

Brush was cleared from the area around the downstream valve and the uncontrolled pipe. All debris was cleared from the spillway chute.

Steel plates were attached and locked in place over the wet well and the downstream valve to discourage vandalism.

The completion of these items fulfils the requirements of the Engineer's Order dated 31 May 1991.

The downstream face of the embankment has become heavily overgrown with

brush and alder. This growth could be detrimental to the embankment material and hinders proper inspection of the dam. It is also recommended this growth be removed.

A handwritten signature in cursive script that reads "Alan Boom". The signature is written in black ink and is positioned above the printed name and title.

Alan Boom, A.Sc.T.
Regional Dam Inspector

Oakhope Lab. 10/1/11
 File: 720123
 23 Sept. 1991

New concrete
 downstream
 control valve.



Downstream
 slope.



Downstream
 slope.





CITY OF NANAIMO

VANCOUVER ISLAND • BRITISH COLUMBIA

File: C3-5

1996-August-27

BC Environment
2589 Kenworth Road
Nanaimo BC V9T 4P7

ATTENTION: ALAN BOOM
DAM SAFETY OFFICER

Dear Mr. Boom:

Re: Final Water Licence 65734 - Cathers Lake Dam

This is to advise that the Parks, Recreation and Culture Department has no objections to completion of the maintenance work as outlined in your letter of 1996-August-26. Please ask the Licensee to notify the City Arborist, Mr. Gerry Genovese, at 755-7504 prior to commencement of activities.

Your letter has been referred to Mr. Alain Magnan, Environmental Co-ordinator with the City's Development Services Department. You are advised that the Licensee should contact Mr. Magnan, at 755-4409, before proceeding, as the proposed activity may be subject to a permit from the Development Services Department.

Sincerely,

F.M. Patton,
Manager of Maintenance
and Construction Services

FMP/sm
mlkap/cathere

pc G. Genovese
A. Laidlaw
A. Magnan
B. Mahaffey



DAM SAFETY INSPECTION REPORT

B.C. Environment
Dam Safety
Water Allocation and Regulation
Vancouver Island Region

27 August 1996
File: D720123

DAM: Cathers Lake
DATE OF INSPECTION: 26 July 1996
INSPECTED BY: *Alan Boom with Norm Lock*

History

The Cathers Lake Dam is an earthfill embankment structure built and licensed in the 1960's to store water for irrigation purposes. During the 1980's, the land surrounding the reservoir was subdivided into residential lots. As more farmland was developed, the water licence authorizing storage was reduced in quantity. Today the licensed quantity is only 22.5 ac-ft. Water Management has approached the City of Nanaimo on numerous occasions about licensing the remaining 46.8 ac-ft.

In 1991, Water Management determined the dam was in a state of disrepair. George Bryden, Head of Water Allocation and Regulation, issued an Engineer's Order to Nanaimo Ridge Holdings to upgrade the structure. The required repairs were completed in August 1991.

On 10 July 1996, Water Management sent the licensee, Eric Trygg of Nanaimo Ridge Holdings, a letter advising that the dam was again in poor condition. The spillway was blocked with debris, and the downstream face of the embankment was heavily overgrown with alder. The letter recommended a local person be appointed to maintain and operate the dam responsibly.

Embankment

The Cathers Lake dam is 6 metres (20 feet) high and 73 metres (240 feet) long. The downstream slope is slightly steeper than 2:1. Several years ago, a pressurized gas pipeline was placed laterally across the crest of the dam without Water Management's or the licensee's knowledge. There are no records of how the pipe was buried, or the compaction methods used.

Outlet Structures

The spillway is a concrete chute structure placed over the mid-section of the

embankment. The chute continually fills with floating debris from the reservoir. This prevents the spillway from operating as designed. If the spillway overflows, erosion of the embankment material will result.

A low-level outlet pipe extends through the embankment. This pipe also serves as an irrigation supply intake. A downstream gate valve at the toe of the dam controls the water supply. An upstream gate valve in a low-level outlet manhole controls the flow through the dam in the event of an emergency. Another uncontrolled pipe was sealed with concrete in 1991.

Reservoir

The reservoir has an area of 3.7 hectares (9 acres). The stored volume of water is 85 dam³ (69 ac-ft). There are many trees submerged beneath the water surface. These old trees are likely the source of most spillway debris.

Inspection

I made a joint inspection with the licensee's representative, Norm Locke, to assess the present condition of the dam. The concrete spillway chute was clogged with debris. The downstream face of the embankment was heavily overgrown with brush and alder. The heavy growth made it impossible to check for seeps or sloughing. The licensee agreed to remove the growth from the embankment, and clear the debris from the spillway before the winter rains set in.

Summary


Downstream of Cathers Lake there are several residential homes, a farm, a roadway, and the new island bypass highway. Sabastian Creek, which leads away from the dam, is an environmentally sensitive area. Sabastian Creek is tributary to the Millstone River. If the dam fails, the reservoir would most likely completely drain. On a scale from very-low to very-high, the hazard potential of this dam is high (Class "A").

The Cathers Lake dam is over 20 years old. The concrete spillway chute, which overtops the earthfill embankment, presently has a limited capacity due to debris blockage. A pressurized gas pipeline extends laterally through the embankment material. The downstream face of the dam is overgrown with alder to the point of causing permanent damage to the structure. Roots from these trees also provide a seepage path. It is impossible to check for any seepage abnormalities due to the dense undergrowth. A blow-down would cause permanent damage to the structure. The licensee presently does not have routine maintenance program in place. On a scale from very-low to very-high, the failure potential of this structure is high.

With both a high-hazard and high-failure potential, this structure is classified as high-risk.

RECOMMENDATIONS:

- 1) The spillway must be cleared of debris, and a log boom installed to prevent wood from entering the spillway structure.
- 2) All brush and tree growth must be removed from the downstream face of the embankment. The slope must then be monitored regularly to detect any signs of seepage along any remaining roots.
- 3) The licensee must continue a regular monitoring and maintenance program. After the tree growth is removed, the embankment must be routinely check for seepage. Any abnormalities should be reported to Water Management immediately, and corrective action taken.



Alan Boom, ASCT
Dam Safety Officer

FILE COPY

August 29, 1996

File: 0237702

City of Nanaimo
455 Wallace Street
Nanaimo BC V9R 5J6

ATTENTION: Les King, City Engineer

Enclosed is some correspondence concerning the Cathers Lake Dam. It is obvious that the water licensee is being placed in a catch-22 position. I would like to meet with you, or other appropriate city officials, as soon as possible to resolve this issue. Please give me a call at 751-3135, to arrange the meeting.

Yours truly,



George Bryden, P.Eng.
Head, water Allocation
and Regulation

GB/as
king.doc

Enclosures

bcc: Bill Hollingshead, Regional Water Manager, Nanaimo
Alan Boom, Dam Inspection Technician, Nanaimo
Sharon Erickson, Environmental Assessment Officer, Nanaimo

July 24, 2003

File: D720123

FILE COPY

City of Nanaimo
500 Bowen Road
Nanaimo BC V9R 1Z7

ATTENTION: Richard White

Dear Richard White

Re: Cathers Lake Maintenance

Further to our site meeting on July 23 200, with the water licence holder (Lorne Embree representing Nanaimo Ridge Holdings Inc) who is responsible for the maintenance of the dam structure on Cathers Lake, please note that the dam owner would like to proceed with maintenance work (removal of all vegetation on the embankment to ground level) that is required to address dam safety concerns with this water retaining structure. Under the *Water Act* of British Columbia the dam owner is responsible for inspection, operation and maintenance of the licenced structure to good engineering standards.

The dam owner plans to cut all the vegetation on the embankment (see attached sketch) to ground level, remove all large root systems, fill any holes and reseed all exposed soil. All debris on the structure will be removed from site. The work is planned for August 2003. A local contractor is to be used. Public safety during the work will be the dam owners responsibility. The dam owner has been informed of the City of Nanaimo's pipeline in the embankment.

It is noted that the Cathers lake dam is located on City Park property and that a tree removal permit maybe required. Further to your e-mail dated May 8 2003, (copy attached) please accept this letter as "the Provincial Authority" request that Nanaimo Ridge Holdings Inc remove the hazard that heavy vegetation growth causes to water retaining structures.

.../2

Land and Water British Columbia Inc. (LWBC) understands that the City of Nanaimo is in negotiations with Nanaimo Ridge Holdings Inc. to address the long term mowing of the embankment. Regular maintenance of the spillway, low level pipe and gate will be the responsibility of the dam owner.

I want like to take this opportunity to thank the City of Nanaimo for its cooperation in this matter.

Yours truly,

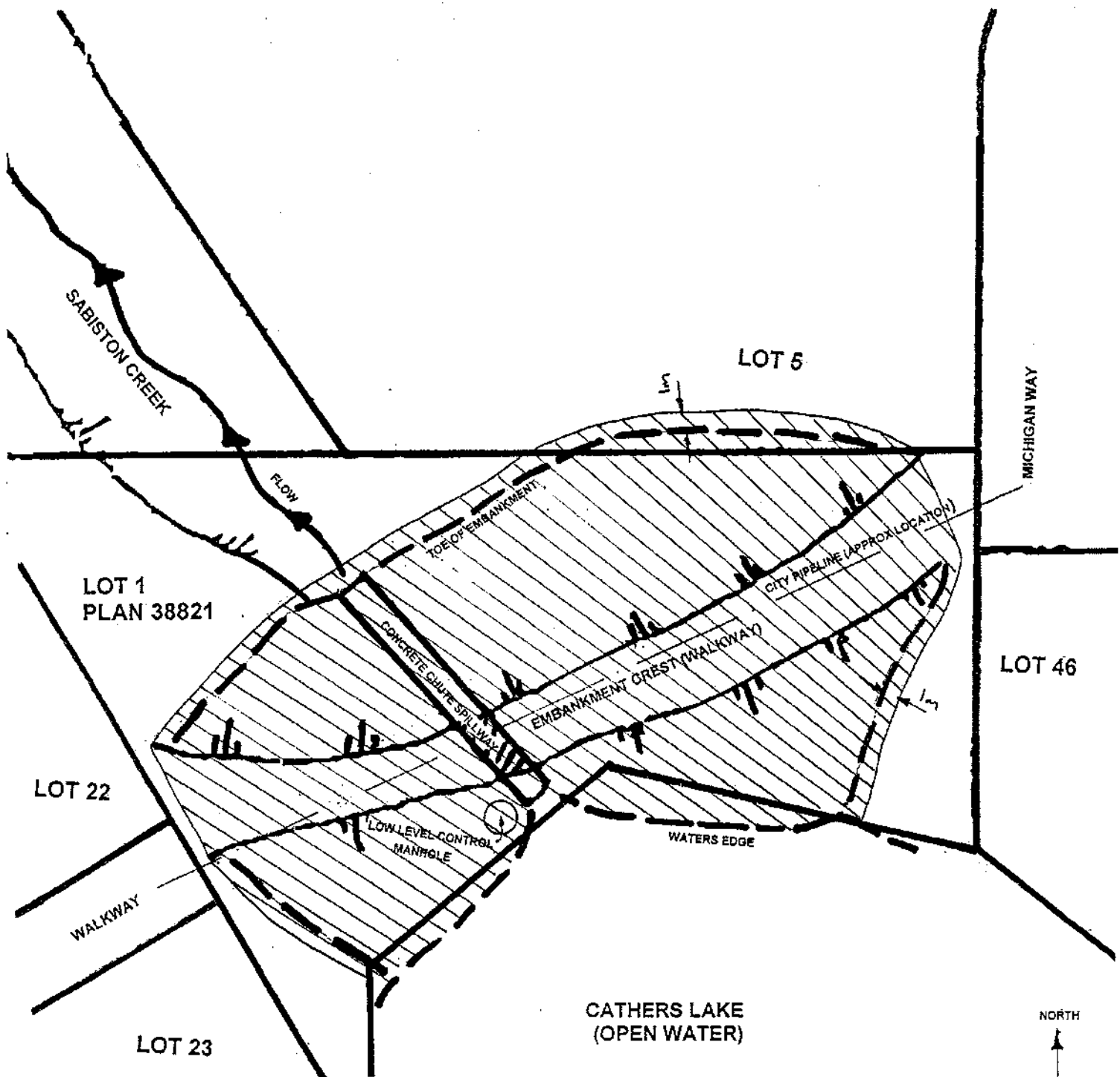
A handwritten signature in cursive script that reads "John Baldwin". The signature is written in dark ink on a white background.

M John Baldwin, A.Sc.T.
Dam Safety Auditor

Attachments:

pc: Lorne Embree – BEL Group of Companies, 18509 – 96th Avenue, Surrey BC
V4N 3P7

MJB/bb
D720123.doc



NOTES:

1. LAKE WATER LEVEL BELOW SPILLWAY ELEVATION (FULL SUPPLY LEVEL)
2. NO FLOW IN SPILLWAY
3. ALL VEGETATION TO BE CUT TO GROUND LEVEL. MAJOR ROOT SYSTEMS REMOVED AND HOLES FILLED WITH CLEAN MATERIAL
4. ALL DEBRIS TO BE REMOVED FROM SITE
5. ALL DISTURBED AREAS TO BE SEEDED
6. NO SUBSTANCE, SEDIMENT, DEBRIS OR MATERIAL IS TO BE ALLOWED OR PERMITTED TO ENTER OR SEEP INTO THE STREAM OR LAKE FROM AN ACTIVITY, CONSTRUCTION, WORKSITE, MACHINERY OR FROM COMPONENTS USED IN CONSTRUCTION
7. MACHINERY SHALL BE IN GOOD MECHANICAL CONDITION SUCH THAT THERE IS NO LEAKAGE OF SUBSTANCE, DELETERIOUS TO FISH, INTO THE STREAM OR LAKE.
8. PUBLIC ACCESS TO BE CONTROLLED DURING CLEARING OPERATIONS



AREA TO HAVE ALL VEGETATION CUT TO GROUND LEVEL
(AREA TO BE FLAGGED ON THE GROUND BY LWBC STAFF)

CATHERS LAKE
2003 MAINTENANCE WORK
JULY 2003 **SCALE: NTS**

Baldwin, John LWBC:EX

From: Richard White [rwhite@city.nanaimo.bc.ca]
Sent: May 8, 2003 4:50 PM
To: Baldwin, John LWBC:EX
Cc: Gerry Genovese; Kevin Brydges; Richard Harding
Subject: Cathers Lake Park

John, in regards to to the maintenance of the dam structure located in the City park. Whereas we understand the requirement of the Ministry for the removal of the tree and shrub growth from the dam for the purposes of dam inspections, we would like as many trees be retained as possible. In regards to the requirement of a Tree Removal Permit, we will wave this requirement, but will issue a letter of permission to remove trees from a city Park. We will require a letter from the Provincial Authority of what the requirements are. We would need to know the extent of the clearing, including map, and that the resulting debris must be removed from site. If the dam slopes are to be totally cleared then we would recommend that they be seeded and maintained (mowed) 2-3 times per year. If the area is maintained then the illegal dumping may not occur. This correspondence shall not have any bearing on any other requirements of the City of Nanaimo or Provincial policies, by-laws or acts. Give me a call if we can assist further. Richard.

Richard G. White
 SUPERINTENDENT OF PARKS AND HORTICULTURE
 DEPARTMENT OF PARKS, RECREATION AND CULTURE

CITY OF NANAIMO
 THE HARBOUR CITY

OFFICE: 89 PRIDEAUX STREET • (250) 755-7505 • FAX (250) 753-7383
 MAILING ADDRESS: 500 BOWEN RD • NANAIMO
 VANCOUVER ISLAND • BRITISH COLUMBIA • CANADA • V9R 1Z7
 rwhite@city.nanaimo.bc.ca

13/05/2003

FILE COPY

May 14, 2003

File: D720123

Nanaimo Ridge Holdings Inc.
7929 -120th Street
Delta BC V4C 6P6

ATTENTION: Eric Trygg

Dear Eric Trygg:

Re: Cathers Lake Dam Safety

Further to our telephone discussion on Thursday May 1, 2003, regarding Land and Water British Columbia Inc.(LWBC) concerns with the maintenance of the water retaining structure (dam) at Cathers Lake, please note, as the water licence holder (Water licence F110563 on File 0237702, copy attached) Nanaimo Ridge Holdings Inc. is responsible for the operation and maintenance of the authorized dam. Note attached letter dated July 11, 1996 related to this matter.

The Dam Safety Regulations of British Columbia can be accessed on the LWBC website at www.lwbc.bc.ca/water/. This low consequence dam does require annual documented dam safety inspection.

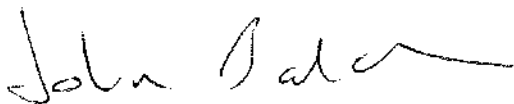
Please find attached a dam safety checklist and photographs of Cathers Lake, completed on May 1, 2003. A priority is to cleanout (remove debris and garbage) from the spillway "chute" (from lake to downstream stream channel) and remove the vegetation (trees, blackberries, broom and bushes) from the entire earth embankment. Waste debris is not to be stored on the structure. The dumping of garden waste on the embankment is not a good practice. Note copy of e-mail from the City of Nanaimo regarding any maintenance of the structure.

If Nanaimo Ridge Holdings Inc does not have a use for the dam then an abandonment of the water licence is required – note abandonment form attached. The dam will be required to be removed if the water licence is abandoned.

.../2

Please feel free to contact me at (250) 741-5685, in Nanaimo, if you require clarification on this matter.

Yours truly,



M John Baldwin, A.Sc.T.
Dam Safety Auditor

Attachments: *Copy water licence ✓*
Letter of July 1996
Dam safety checklist and photographs ✓
E-mail from City of Nanaimo ✓
Water licence abandonment form ✓

pc: Richard White – City of Nanaimo

MJB/bb
D720123.doc



2003-JUL-28

FILE: D1-2-7

Mr. Lorne Embree
BEL Group of Companies
18509 – 96th Avenue
Surrey, BC V4N 3P7

Dear Mr. Embree:

Re: Cathers Lake Park Maintenance

This letter authorizes you to enter City Park property to maintain your dam structure as outlined by the Provincial Ministry of Land and Water. Their letter of 2003-JUL-24 outlines their requirements and attached map identifies property lines. No tree removal permit will be required for the removal of the heavy vegetation, which causes the potential hazard to the water retaining structure. As noted during our site meeting of 2003-JUL-23 that the vegetation beside Sabiston Creek should be retained and no deleterious materials should enter the creek.

We will post notices as to your intent to effect improvements to the dam structure. In this regard please let us know when you expect to start the project. Public safety, including signage and barricades, will be required.

This correspondence shall not have any bearing on any other requirements of Provincial policies, bylaws or acts which may pertain to this project.

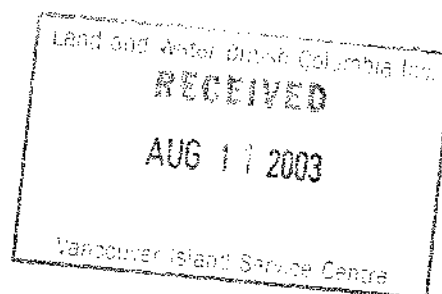
Jim Plasteras, 755-7540, our Parks Foreman and myself, 755-7505, will work with you on the project.

Yours sincerely,

R.G. White,
Superintendent of Parks
And Horticulture

RGW:sm
H:\data\richard\catherslake

pc R. Harding
J. Plasteras
G. Genovese
S. Crane
K. Brydges
J. Baldwin



Baldwin, John LWBC:EXDAM FILES
D 720123.**To:** Richard White**Subject:** RE: Cathers Lake Dam / Park Maintenance

Richard - it is great that the City of Nanaimo has committed to the regular control of the vegetation on Cathers Lake dam structure once the heavy vegetation removal/cleanup has been completed by the dam owner this summer - LWBC does not need to see a formal agreement on this matter - "the bottom line" is that the dam owner is still responsible for the operation and maintenance of the dam.

I have flagged the area of the dam site that requires the vegetation to be cut. LWBC understands that the major vegetation removal will take place on August 25 and 26th 2003 by a contractor for the dam owner. I hope to visit site on Monday August 25th.

- John

-----Original Message-----

From: Richard White [mailto:rwhite@city.nanaimo.bc.ca]

Sent: August 20, 2003 7:38 AM

To: 'Lorne Embree'

Cc: Richard Harding; Gerry Genovese; Baldwin, John LWBC:EX

Subject: RE: Cathers Lake Dam / Park Maintenance

Lorne, a formal agreement is not necessary as we can and will maintain the park under our Parks Policy. We will instruct our contractor to maintain those areas of the dam structure which will require maintenance e.g.: the cutting of the grass, weeds and other growth on a regular basis. A copy of this memo will go to the contractor to add to his maintenance schedule and a copy will go into the pertinent grass cutting file for future reference. Lorne, our agreeing to maintain the area only relates to the cutting of the grass, weeds and other herbaceous growth, and in no way implies that we have any responsibility for the maintenance of the dam or the dam structure.

Gerry, please add this responsibility to the grass cutting contract. (Cathers Lake Park at the end of Michigan Way)

John, do you see the need for anything else?

Lorne, we will meet your contractor on site for the clean up. I imagine that you, John, will want to OK the extent of the works?

Richard.

-----Original Message-----

From: Lorne Embree [mailto:Lorne@BelGroup.net]

Sent: August 19, 2003 2:09 PM

To: rwhite@city.nanaimo.bc.ca

Subject: Cathers Lake Dam / Park Maintenance

Richard

Are you working on the draft agreement between ourselves [Nanaimo Ridge Holdings Inc.] and City of Nanaimo Parks Dept. to take over the annual maintenance of the Park situated on the dam once we do the restoration Aug. 25 / 26th. to your satisfaction ?

Thanks

Lorne Embree

Baldwin, John LWBC:EX

From: Lorne Embree [Lorne@BelGroup.net]

Sent: August 19, 2003 11:36 AM

To: Baldwin, John LWBC:EX

Subject: RE: Cathers Lake

John

Good Morning , Yes , Micharel Schott will be on site Monday morning of the 25 th. of Aug. with his equipment and crew , I told him to expect a visit from yourself and Richard White . He has copies of all the correspondence sent to me from you and Richard. I will be on the Sunshine Coast , but will be on my Cel phone and I will also have my laptop with me , my Cel is s.22

Lorne Embree

-----Original Message-----

From: Baldwin, John LWBC:EX [mailto:John.Baldwin@gems3.gov.bc.ca]

Sent: August 18, 2003 2:02 PM

To: Lorne Embree of Cathers Lake (Lorne@BelGroup.net)

Subject: RE: Cathers Lake

Lorne - have you finalized a date for the cleanup at Cathers Lake? - John

-----Original Message-----

From: Baldwin, John LWBC:EX

n

Sent: August 7, 2003 8:19 AM

e

To: 'Lorne Embree'

Subject: RE: Cathers Lake

Lorne- the City of Nanaimo has confirmed that the clearing of the vegetation from Cathers Lake control is acceptable to them (see City letter dated July 28 2003). The City (advertisi) and LWBC (flag area on ground) need **confirmation from you when the work is to start** - we can discuss mid August but please note that I will be away until Monday August 18th. s.22
s.2 - John

-----Original Message-----

From: Lorne Embree [mailto:Lorne@BelGroup.net]

Sent: August 5, 2003 11:56 AM

To: Baldwin, John LWBC:EX

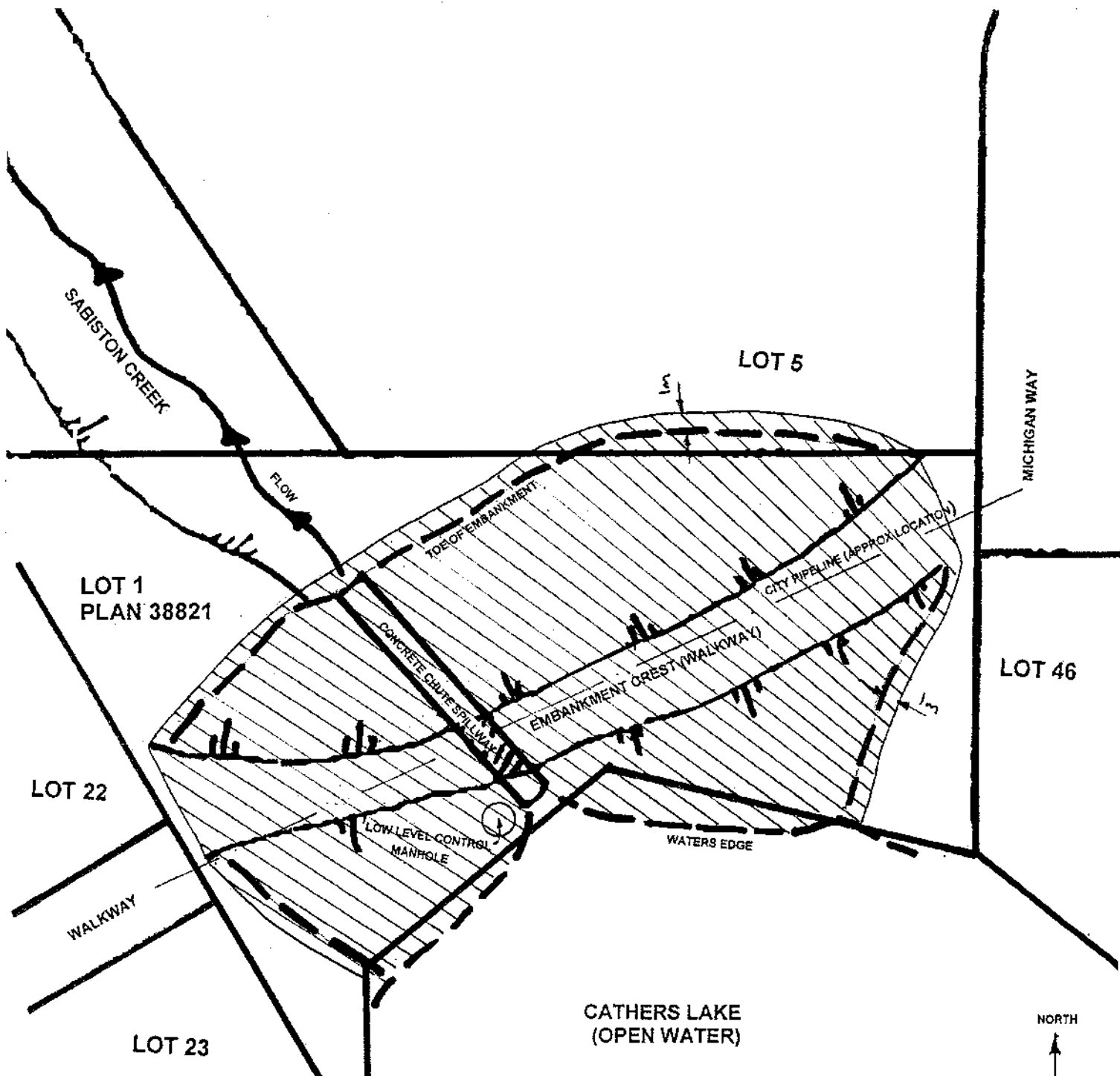
Subject: Cathers Lake

John

I have received a copy of your letter to City of Nanaimo ,but have not received a confirmation from the parks as yet or a permit to work in the park lands. I will keep you informed when I receive . Hope you are having an enjoyable summer.

Thanks

Lorne Embree



NOTES:

1. LAKE WATER LEVEL BELOW SPILLWAY ELEVATION (FULL SUPPLY LEVEL)
2. NO FLOW IN SPILLWAY
3. ALL VEGETATION TO BE CUT TO GROUND LEVEL, MAJOR ROOT SYSTEMS REMOVED AND HOLES FILLED WITH CLEAN MATERIAL
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AREA TO HAVE ALL VEGETATION CUT TO GROUND LEVEL
(AREA TO BE FLAGGED ON THE GROUND BY LWBC STAFF)

CATHERS LAKE
2003 MAINTENANCE WORK
JULY 2003 **SCALE: NTS**

CITY OF NANAIMO

FILE COPY


MEMORANDUM

TO: Sandy Gray, Director, Administrative Services/City Clerk
FROM: W. F. Dillon, Approving Officer
DATE: 1983-MAY-30
FILE: SD 655
RE: CATHERS LAKE DAM - LOT 1, PLAN 38821

In response to your memo of 1983-MAY-05 regarding the transfer of Lot 1, Plan 38821 on which Cathers Lake Dam is situated, please be advised that as the dam and the lake are the responsibility of the Buchanan's under Final Water Licence Nos. 55733/4 and 0237702, I don't believe that the matter needs to be referred to the Parks and Recreation Department unless, of course, the City intends to apply for water licences on the dam and spillway.

As stated in the Ministry of Environment letter of 1983-APR-06 from Alan Boom, Regional Dam Inspector, if the City wishes to assume responsibility and benefits of the dam and reservoir, they would be required to negotiate with the Buchanan's for the transfer of the water licenses. As the licenses have not been transferred, the City is not intitled to regulate and use the reservoir. Mr. Boom also states in his letter that the structure appears to have been constructed and maintained to an acceptable standard. I believe that any remedial work to the structure is the responsibility of the current license holders. This would include the cleaning of the debris from the spillway and any other incidental work, and I believe that the Ministry of Environment advised the Buchanan's of this in 1982.

I trust the foregoing clarifies the situation. If I may be of further assistance on this matter, please feel free to contact me.



W. F. Dillon
APPROVING OFFICER

WFD:kk

cc: T. F. Moscrip, Engineering Development Officer
Robin Taylor, Subdivision Technician

Baldwin, John ENV:EX

From: Baldwin, John ENV:EX
Sent: Friday, April 23, 2010 3:20 PM
To: 'Ken Grewal's.22
Cc: Creber, Barb ENV:EX
Subject: amendment of Water licence F110563 on water file 0237702 (copy attached)

Further to your telephone call to this office today ,please note:

1. Above water licence needs to be apportioned as the original appurtenant land has been subdivided
2. Confirmation is required of location of authorized works ie dam, intake, pipe and sprinkler system – use the drawing attached to the water licence
3. Confirmation is required if water is being used at this time and crop being irrigated on what lands - complete attached application for apportionment of a water licence form.
4. There will be an apportionment application fee - \$100. Attached to info submitted to FrontCounterBC.
5. There are outstanding annual water rental fees associated with this water licence which will be collected once the apportionment has been finalized. Finalization of the water licence apportionment **before** new landowners are involved will simplify the process.
6. Forward requested information to FrontCounterBC here in Nanaimo at 2080 Labieux Road, Nanaimo, V9T 6J9.
7. Any major changes to the dam will require notification to this office 60 days before on site is undertaken. The dam is located on City park land. The City of Nanaimo Parks Branch had an agreement with the previous water licence holder to keep the vegetation cut on the dam. The condition of the pipe line from the dam to the field is unknown. The dam embankment is in good condition but the concrete spillway does require regular cleanout. This dam has a LOW downstream consequence rating at this time. See Ministry of Environment's website at www.env.gov.bc.ca under water and dam safety for dam safety information. Hand cleaning of works is considered minor activity but any heavy machine work will need to be approved by this office . My telephone number is 250-751-3179.
8. A water licence does not give permission to access private or crown lands. It is the responsibility of the water licence holder to obtain land access agreement(s).

Hope this helps

From: John.Baldwin@gov.bc.ca [mailto:John.Baldwin@gov.bc.ca]
Sent: Friday, April 23, 2010 2:44 PM
To: Baldwin, John ENV:EX
Subject:



20100423144420.p
df

Baldwin, John FLNR:EX

*Cathers Lake Dam
D720 123.*

From: Bill Sims [Bill.Sims@nanaimo.ca]
Sent: Thursday, March 20, 2014 3:01 PM
To: Bartle, Hardy T FLNR:EX
Cc: Baldwin, John FLNR:EX
Subject: RE: Cathers Lake Dam Audit
Attachments: 1458_001.pdf, 1460_001.pdf

Hi Hardy,
Your email eventually found its way to me.

I would like to clarify that to my knowledge, the City has never accepted responsibility for the operation, maintenance or rehabilitation of the Sabiston Creek dam at Cathers Lake. I have heard (hearsay) that the City agreed to cut the grass, since the dam happened to be located in a City park. I hope to have further information when Parks staff return next week.

My understanding of the history (which is probably not as extensive as your file):

- The dam was built in the early 60's to provide storage for irrigation of the farm along Millstone River
 - The farm has been subdivided many times over the years, even incorporating 'waterfront' property around Cathers Lake, but the dam/lake continued to be used for irrigation
 - Part of the subdivision process usually has developers dedicating park land. In this case, it seems the developer dedicated the land around the dam as park
 - City parks staff may have agreed to cut the grass and maintain the trailway across the dam. This is much different than assuming the responsibilities associated with dam ownership
- There seemed to have been some encouragement from the Ministry for the City to apply for a water licence in 1991, however we do not believe this occurred.

The City has no wish to assume ownership of the water licence, this dam, nor responsibility for its upkeep. To my knowledge, the City does not have any construction records of the dam, nor any inspection or maintenance records associated with the dam that would be helpful

I attach a couple of pieces of old correspondence that seem to reinforce your statement that there is no indication that the City had ever taken over the licences.

We do not wish to participate in the audit of Cathers Lake dam.

Regards,
Bill

Wm. D. Sims, ASCT
Manager, Water Resources
City of Nanaimo

250.756.5302
Bill.Sims@nanaimo.ca

*- 21st March 2014.
- Hardy lake placed vegetation
- Richard White - manager
- city infrastructure in dam.
- 2000 sent.
John*

From: Bartle, Hardy T FLNR:EX [<mailto:Hardy.Bartle@gov.bc.ca>]
Sent: Thursday, March 20, 2014 9:56 AM
To: Graham Trimmer
Cc: Baldwin, John FLNR:EX; 'KSG'
Subject: Cathers Lake Dam Audit

Morning Graham.

Ken (Kanwaljit) Grewal suggested I contact you. Ken holds a water licence for Sabastion Creek/Cathers Lake.

I am assisting John Baldwin, A.Sc.T., a Water Stewardship Officer who specializes in Dam and Dike Safety, with the provincial government's Dam Audit program. Ken indicates the City of Nanaimo assumed some- possibly considerable (almost all?)- responsibility for the Cathers Lake Dam 8+ years ago.

John and I are:

1. looking to organize an on-site dam audit for 10 AM April 2 or 3.
2. would like a city rep and Ken to participate in the audit. Audits typically take a few (2 to 4) hours to complete.

The provincial government's file upon the dam is about four centimetres thick and includes considerable correspondence with the City from 1996 to 2003. The file suggests the City assumed some responsibility for the dam about 15 years ago but the details are not clear to John, Ken or I.

Please:

1. call me to discuss details- if you are not the correct resource person within the city please let us know who we should contact for further information and invite to the audit.
2. reply to this email to ensure everyone has the correct electronic contact info.

John:

1. Graham's telephone is S.22
2. Ken's number is S.22

Ken: Later today I will sent you information from the provincial government files that appears to indicate you are responsible for, and hence the "owner", of the dam. I do not see anything in the file that indicates the water licensee who built the dam in 1961 was ever relieved by the City from their responsibility to inspect and maintain the dam in accordance with the BC Dam Safety Regulations. Parwinder and yourself inherited (purchased?) the water licence, and hence are responsibility for the dam, when you bought your property about eight years ago. Hopefully Graham and the city can enlighten us.

Regards,

Hardy T. Bartle, P.Eng.
Geotechnical Engineer
Coastal Engineering Group
Ministry of Natural Resources Operations
2100 Labieux Road
Nanaimo, B.C., V9 6E9
ph: (250) 751-7073 (s.17)
mailto:Hardy.Bartle@gov.bc.ca

fax (250) 751-7190

DAM FILE:
D720123

Baldwin, John FLNR:EX

From: Bartle, Hardy T FLNR:EX
Sent: Friday, March 21, 2014 11:51 AM
To: 'bill.sims@nanaimo.ca'
Cc: Baldwin, John FLNR:EX
Subject: City of Nanaimo/Cathers Lake Park & Dam

Morning Bill. Thank you for your timely response. It appears:

1. The dam was built in ~1961 for irrigation purposes
2. Property was subdivided and developed into its current state- numerous suburban homes- over the years
3. At some point during the development process(es):
 - a. the land the dam sits upon became a city park
 - b. municipal infrastructure- gas, water and sewer lines(?) - may have be buried beneath the walkway atop of the dam. It was recommended August 27, 1996 that the city should confirm "that the pipelines through the dam have not weakened the dam."
 - c. the city has considered, and declined, to take out a water licence or otherwise assume significant/dominate responsibility for the dam many times over the years
 - d. in 2003 the city's Parks and Horticulture department reached an agreement, with the dam owners of the day, to conduct routine mowing of the dam within the park. The information available to us:



Mowing
reement Aug 2003.

is pretty clear; the city was only agreeing to conduct mowing, weed and vegetation removal "and in no way implies... responsibility... for... the dam." Does Richard White still work for the city? If so perhaps he can assist us.

John, Ken and I would appreciate it if a city rep could attend the dam audit. Ideally a city rep would attend and:

1. Confirm the city's responsibility for the park/dam is limited to vegetation control.
2. Reaffirm the city's lack of interest in assuming significant responsibility for the dam.
3. Clarify what, if any, municipal infrastructure is buried within the dam. A pressurized water pipe, sewer or even a gas line would complicate matters for the dam owners. Hopefully our file in error and there are no pipe lines within the dam.
4. Clarify the Probable Maximum Flood (PMF) findings from the city's Westwood Lake Dam inundation studies.

Please:

1. Let us know what you learn from Parks staff next week.
2. Help us determine what, if any, municipal infrastructure is buried within the dam.
3. Let us know who within the city can clarify the Westwood Lake/Dam's PMF information.
4. Help us find a city rep to attend a portion of the dam audit or otherwise communicate with the dam owners. Someone from the city should communicate with the Ken; Ken and his family seem quite confused about the city's responsibility for the dam.

John and I are still planning to conduct the dam audit April 2 or 3. Best wishes. Hoping to hear from you soon,

Hardy T. Bartle, P.Eng.
Geotechnical Engineer
Coastal Engineering Group

Ministry of Natural Resources Operations

2100 Labieux Road

Nanaimo, B.C., V9 6E9

ph: (250) 751-7073 (s.17)

fax (250) 751-7190

mailto:Hardy.Bartle@gov.bc.ca

From: Bill Sims [mailto:Bill.Sims@nanaimo.ca]

Sent: Thursday, March 20, 2014 3:01 PM

To: Bartle, Hardy T FLNR:EX

Cc: Baldwin, John FLNR:EX

Subject: RE: Cathers Lake Dam Audit

Hi Hardy,

Your email eventually found its way to me.

I would like to clarify that to my knowledge, the City has never accepted responsibility for the operation, maintenance or rehabilitation of the Sabiston Creek dam at Cather's Lake. I have heard (hearsay) that the City agreed to cut the grass, since the dam happened to be located in a City park. I hope to have further information when Parks staff return next week.

My understanding of the history (which is probably not as extensive as your file):

- The dam was built in the early 60's to provide storage for irrigation of the farm along Millstone River
- The farm has been subdivided many times over the years, even incorporating 'waterfront' property around Cathers Lake, but the dam/lake continued to be used for irrigation
- Part of the subdivision process usually has developers dedicating park land. In this case, it seems the developer dedicated the land around the dam as park
- City parks staff may have agreed to cut the grass and maintain the trailway across the dam. This is much different than assuming the responsibilities associated with dam ownership
- There seemed to have been some encouragement from the Ministry for the City to apply for a water licence in 1991, however we do not believe this occurred.

The City has no wish to assume ownership of the water licence, this dam, nor responsibility for its upkeep. To my knowledge, the City does not have any construction records of the dam, nor any inspection or maintenance records associated with the dam that would be helpful

I attach a couple of pieces of old correspondence that seem to reinforce your statement that there is no indication that the City had ever taken over the licences.



1458_001.pdf



1460_001.pdf

We do not wish to participate in the audit of Cathers Lake dam.

Regards,

Bill

Wm. D. Sims, ASCT

Manager, Water Resources

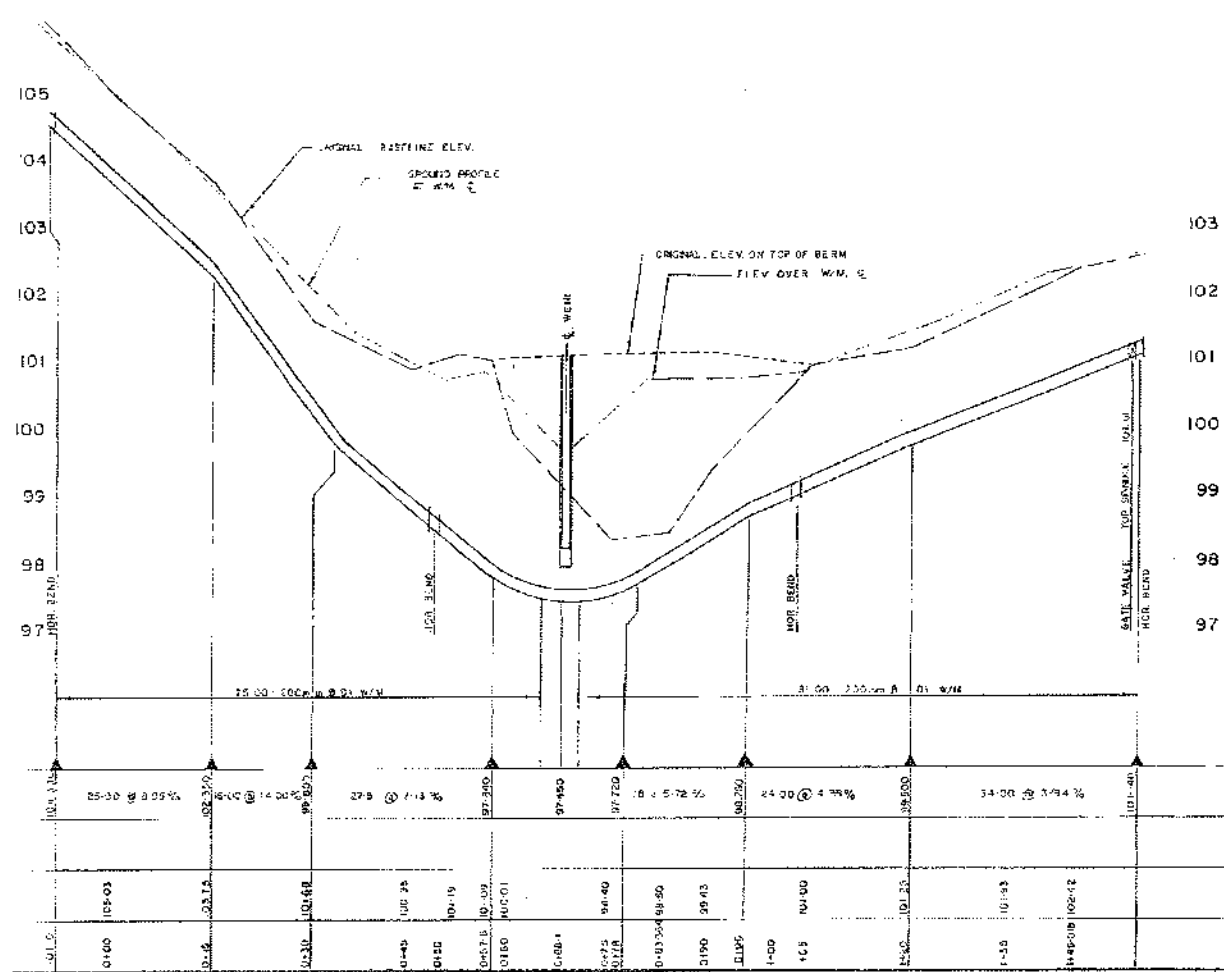
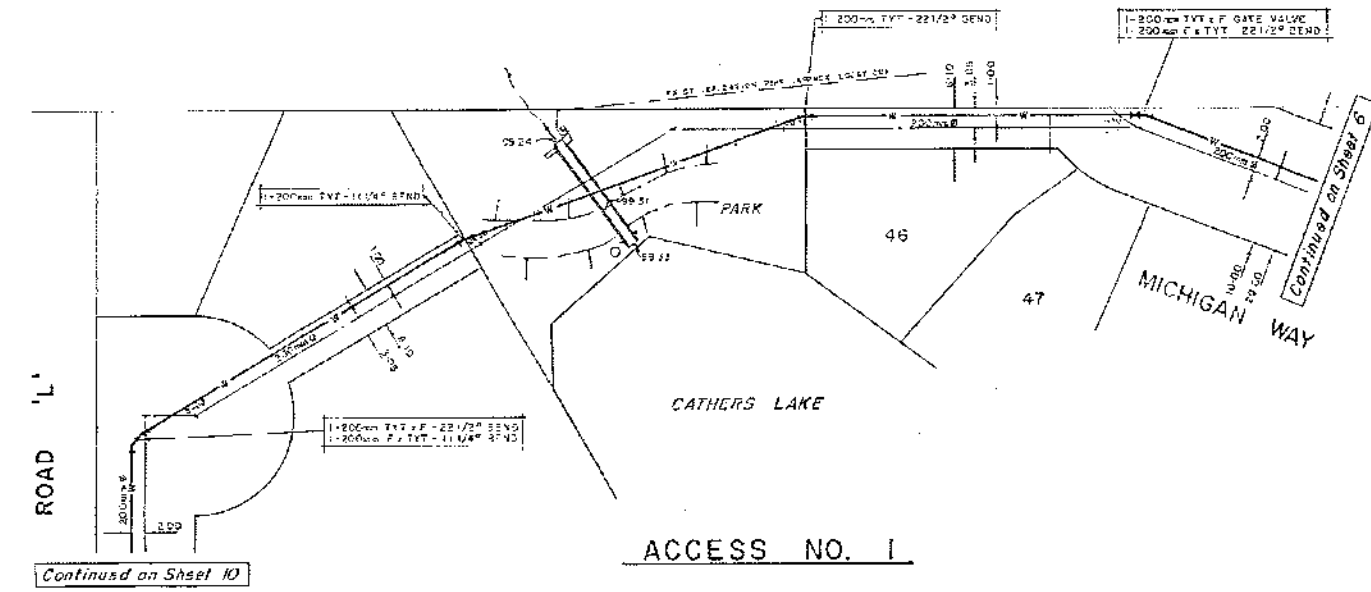
City of Nanaimo

250.756.5302

Bill.Sims@nanaimo.ca

BENCHMARK
 IS NORTH 81° 54' 11" W. ON WEST CO. RD. AT 7151.8, 15m LANT
 PLAN. 81.5411 (1000000)
 2. SPIKE ON POLE AT S.W. CORNER OF 1/4 SECTION 10.
 ELEV. 105.431 (1010000)

5600.12.108



WTM GOES UNDER DAM

Received from
 B. J. Summers
 City of Nanaimo
 April 2, 2014

CITY OF NANAIMO
 ENGINEER
 [Signature]
 [Stamp]

WATERMAIN INVS. LENGTH & GRADE		ORIG. BASELINE ELEV.		CHAINAGE	
25.00	2.00%	103.12	103.12	0+00	25.00
14.00	1.40%	102.48	102.48	25.00	39.00
27.0	1.13%	101.75	101.75	39.00	66.00
27.30	1.00%	101.00	101.00	66.00	93.30
31.00	2.00%	100.00	100.00	93.30	124.30
18.0	5.72%	98.40	98.40	124.30	142.30
24.00	4.75%	97.70	97.70	142.30	166.30
34.00	3.94%	97.00	97.00	166.30	200.30
101.41		96.40	96.40	200.30	301.71

McElhanney Surveying & Engineering Ltd.
 13160-88 Ave., Surrey, B.C., Canada V3W 3K3 Telephone (604) 596-0391



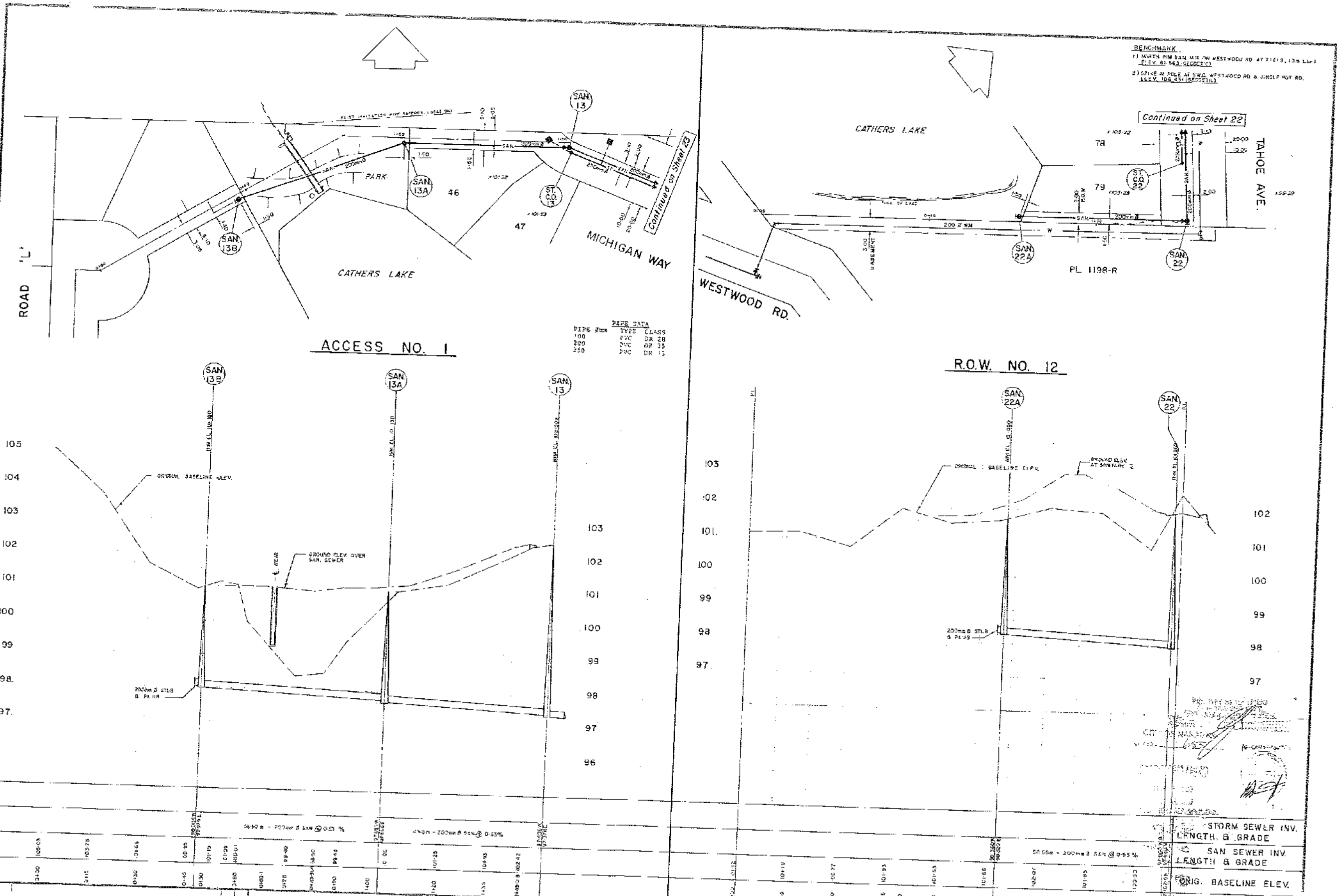
TYMAX DEVELOPMENT CORP.
 PLAN AND PROFILE
 WATERWORKS
 ACCESS NO. 1
 CATHER'S LAKE SUBDIVISION
 NANAIMO, B.C.

34414-1
 HORIZ. 1"=50'
 VERT. 1"=10'
 DATE DEC. 1981
 REVISION 2

4665-6-82

BENCHMARK
 1) NORTH PIN SAN. M. IN NW WESTWOOD RD. AT 7716.13, 13.8 LL-1
 ELEV. 87.943 (GEOIDAL)
 2) SPIKE IN POLE AT S.W. WESTWOOD RD. & JINDLE RD. RD.
 ELEV. 106.431 (GEOIDAL)

Continued on Sheet 22



PIPE DATA

PIPE SIZE	TYPE	CLASS
100	PVC	DR 28
200	PVC	DR 35
250	PVC	DR 41

ACCESS NO. 1

R.O.W. NO. 12

STORM SEWER INV.	LENGTH & GRADE
200mm Ø ST. S.	200m @ 0.55%

SAN SEWER INV.	LENGTH & GRADE
200mm Ø ST. S.	200m @ 0.55%

ORIG. BASELINE ELEV.	CHAINAGE
105.00	0+00
104.50	0+50
104.00	1+00
103.50	1+50
103.00	2+00
102.50	2+50
102.00	3+00
101.50	3+50
101.00	4+00
100.50	4+50
100.00	5+00
99.50	5+50
99.00	6+00
98.50	6+50
98.00	7+00
97.50	7+50
97.00	8+00
96.50	8+50
96.00	9+00

No. 4683

34414-1

REV.	DATE	DESCRIPTION
1	02-09-94	AS - CONSTRUCTED
2	02-03-98	REVISED LOCATION OF SAN. M. IN

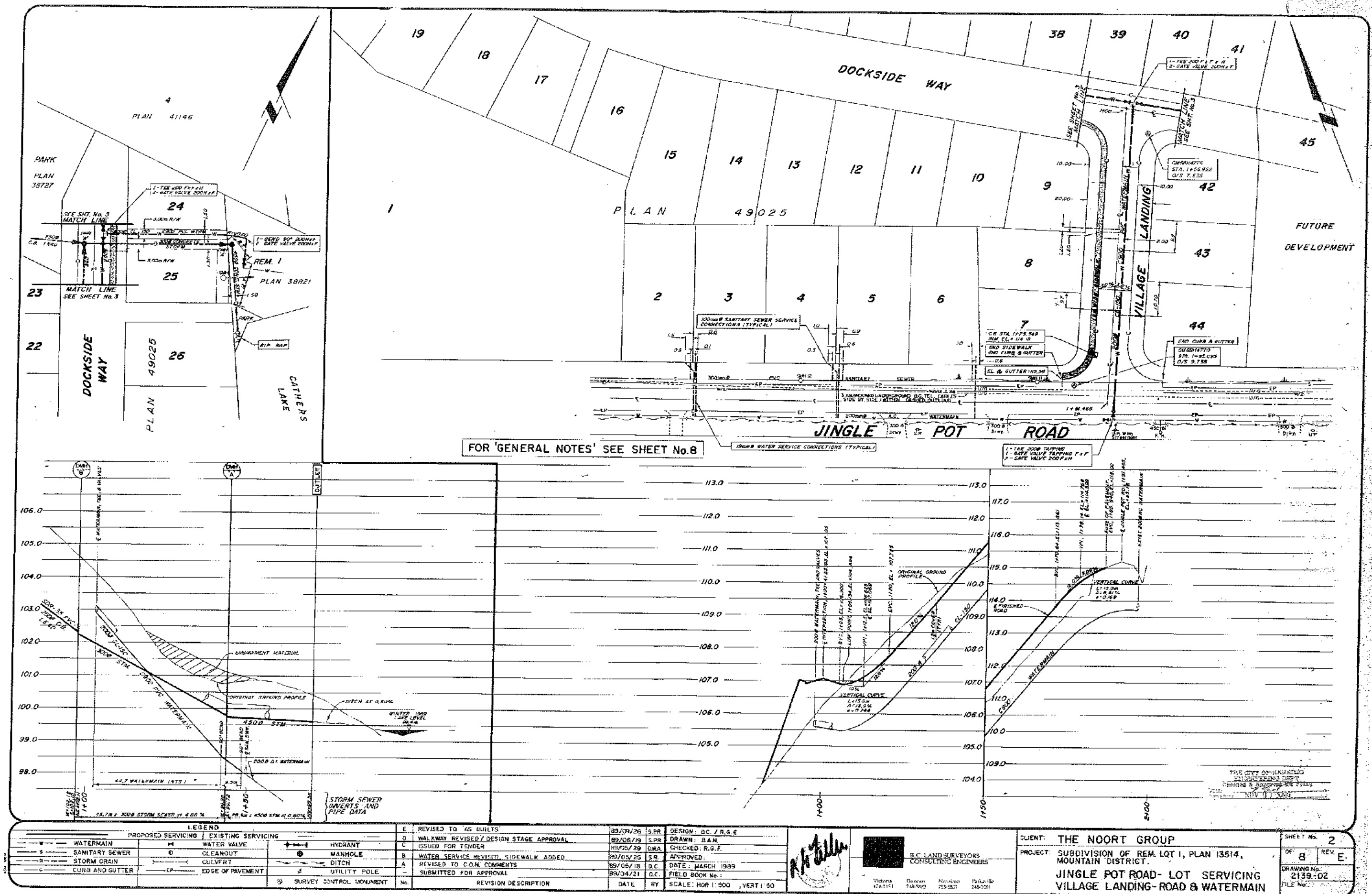
McElhanney Surveying & Engineering Ltd.
 13160 - 88 Ave., Surrey, B.C., Canada V3W 3K3 Telephone (604) 596-0391



TYMAX DEVELOPMENT CORP.
 PLAN AND PROFILE
 STORM & SANITARY SEWERS
 ACCESS NO. 1 & R.O.W. NO. 12
 CATHER'S LAKE SUBDIVISION

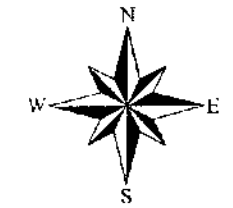
Drawn	34414-1	Drawn by
Scale	HORIZ 1"=50'	Scale
Checked	DATE DEC. 1991	Checked
Approved	2	Approved

31



8997-6x-89

WESTWOOD LAKE DAM REHAB EMERGENCY PREPAREDNESS INUNDATION ANALYSIS



Legend

- INUNDATION TIME (SEC)
- INUNDATION BOUNDARY
- LEGAL BOUNDARIES

INUNDATION ANALYSIS EMERGENCY PREPAREDNESS RELEASE MODEL

WESTWOOD LAKE DAM REHAB

Prepared for:
City of Nanaimo
Emergency Preparedness Coordination

Prepared By:
City of Nanaimo
Engineering Services - GIS

March 3, 2008

Data Sources:

Inundation Boundary and Timeline:
Water Management Consultants
Westwood Lake Dam Inundation Study
October 5, 2004

Parcels:
City of Nanaimo
Corporate Land Base



0 165 330 660 990 1,320 Meters

Bartle, Hardy T FLNR:E

From: Bartle, Hardy T FLNR:EX
Sent: Friday, March 21, 2014 2:57 PM
To: 'KSG'
Cc: Baldwin, John FLNR:EX
Subject: Cathers Lake Dam Audit

Hello Ken

As promised yesterday. My apologies for this long and complex email but there is a lot of information to present and digest.

The water licence is registered to Parwinder and yourself; all water collection and transportation works associated with the water licence are registered by an appurtenant (a legally binding connection) to your property at 2090 Skaha Drive as shown in:



Water
licence_title_appurtenant

Hence you are responsible for the dam and pipe line connected (appurtenant?) to your property. The water licence and BC/Canadian law requires you to inspect and maintain the dam in accordance with the BC Dam safety regulations and Canadian Dam Association Guidelines.

Your water licence and the appurtenant can be traced back to the owners of your property in the 1960 and 1980's who were granted authority to divert water from Sabiston Creek, build and maintain the dam in:



Licence1975_1981.
pdf

Our research confirms your understanding that the dam is located within a City of Nanaimo park. The land the dam sits upon was dedicated a city park somewhere within the subdivision/land development process(es) of 20+ years ago. It is the responsibility of the water licence holder- you- to obtain permission/agreement/rights of way or easements to access private or crown lands to exercise your rights and obligations associated with the water licence. Hence there is much correspondence in our file between past owners of the dam and the City. You need their permission to maintain the dam; they need your permission to maintain their park.

The City has repeatedly declined responsibility for the dam. However, the City and past dam owners agreed to regular maintenance- mowing the grass, removal of shrubs and weeds by the City- atop the dam/within the park about 11 years ago.

If you want to surrender the water licence the dam needs to be drained & breached or responsibility for the dam transferred to a third party- a lake front home owners association perhaps? People within John's office would need to be involved/notified if you decide to surrender your water licence and breach the dam or you transfer responsibility for the dam to the city or a lake front homeowners group etc.

I am still trying to track down a city rep to attend the audit. Graham Trimmer referred me to other officials within the city. So far the city is declining to send a rep to the dam audit; it appears they want no suggestion they are responsible for the dam. So... unless there is some agreement the provincial government and the City is not yet aware of you are responsible for the dam.

John and I are still looking to conduct the dam audit 10 AM April 2 or 3. Please let us know which of the two days is better for you, or your agent, to attend.

John is a wealth of knowledge; we would be pleased to help you understand the issues at play. Please call, or email, me if you have questions.

Hardy T. Bartle, P.Eng.
Geotechnical Engineer
Coastal Engineering Group
Ministry of Natural Resources Operations
2100 Labieux Road
Nanaimo, B.C., V9T 6E9
ph: (250) 751-7073 s.17 **fax (250) 751-7190**
mailto:Hardy.Bartle@gov.bc.ca



File: D720123

April 11, 2014

Ken and Parwinder Grewal
s.22

Re: Cathers Lake Dam Safety

(DPAT)

Dear Ken and Parwinder Grewal:

This is a follow-up letter to our dam safety audit completed on April 8, 2014. Copy of the dam audit checklist was given to you after the audit.

Cathers Lake Dam has one main embankment off the North end of Michigan Way within the City of Nanaimo Cathers Lake Park. The dam includes a spillway and low level outlet. A city water main and sewer line run across the upstream face of the dam. Our file suggests there may also be a gas line buried within the dam. The reservoir once included a saddle dam at the South end of the Lake. The saddle dam embankment was incorporated into Westwood Road some 30 years ago.

You indicated that you are considering surrender of your water licence. As we discussed your options to deal with the water licence and dam are:

1. Continue to hold the water licence and implement a dam safety program in compliance with the dam safety regulations.
2. Abandon the water licence and decommission the dam.
3. Transfer the water licence and responsibility for the dam to a third party.

Under the BC *Water Act* the dam owner is responsible for any damages that may result from the failure of the dam. The dam owner is responsible for regular inspection of the dam and compliance with the BC Dam Safety regulations. As the dam is located within a City of Nanaimo Park we encourage you to continue working with the city to ensure the park and dam are suitably maintained and operated. Ideally you would have a joint works (formal) agreement with the city. An example of a joint works agreement is posted on the provincial government dam safety web site referred to below.

Cathers Lake dam has been noted with a significant downstream consequence rating and a small probability for failure. These ratings are reviewed on a regular basis. You are advised to prepare, implement and send copies to this office of an Operational, Maintenance and Surveillance plan (OMS) and Emergency Preparedness Plan (EPP) for the dam. Dam safety information can be obtained from the Ministry of Environment website at:

http://www.env.gov.bc.ca/wsd/public_safety/dam_safety/index.html. A copy of the current BC *Water Act* Dam Safety Regulations are available at the above website, and you have a copy of the Dam Safety Guidelines that include templates for the plans.

BC Provincial 24 hour 365 day emergency contact number is 1-800-663-3456.

Photocopies of the audit check sheet, dam inspection training checklist, notes of our field discussions and copy of the photographs we took during the site visit are attached for your records.

The following dam safety issues were noted:

1. Vegetation is cut to ground level from abutment to abutment and along most of the reservoir to the downstream toe of the embankment – extra cutting along the lake, both abutments and toe of the dam is recommended.
2. No log boom at the entrance to the spillway – a log boom should be installed to control debris from entering the spillway.
3. A beaver dam is partially obstructing the spillway. The beaver dam is about 300 mm high. The beaver dam should be removed.
4. The low level outlet has not been operated in two years. The upstream gate is inoperative. The slide gate has not been maintained. The valves and gates should be inspected, repaired and tested to ensure they are fully operational.
5. The emergency outlet of the low level drain pipe should be located and tested.
6. The low level outlet pipe has not been inspected for some years. The pipe should be inspected with a pipe camera.
7. Debris has partially obstructed the spillway's energy dissipater. The debris should be removed.
8. Water has scoured beneath the spillway's apron and a portion of the stream channel. The undermined portion of the apron and stream channel should be rock armoured.
9. There is seepage on the right abutment of the embankment. The source of the seepage should be found and monitored.
10. Grass clipping and yard waste have been dumped on the slope above the spillway apron and energy dissipater. The debris should be removed. The debris could slump down the hill slope and obstruct the spillway.
11. There is considerable seepage from the South end of the lake between Westwood road and Darrouh Creek. The slope below the old saddle dam appears to have been stable since the dam was built some 50 years ago but the seepage should be monitored periodically. Should the seepage ever become dirty- indicating internal erosion of the slope- or the slope begin to visibly erode or slough into Darrouh Creek further investigation, and potentially corrective action, may be required.

Although it is not a requirement of the dam safety regulations I recommend you, in cooperation with the city, install and maintain a dam advisory sign at the site. Posting a sign with the appropriate emergency contact information including the BC, city and your emergency contact information is an inexpensive and effective means to improve dam safety. A template for such a sign is available from http://www.env.gov.bc.ca/wsd/public_safety/dam_safety/cabinet/info_on_signage_for_owners-3-27-2012.pdf

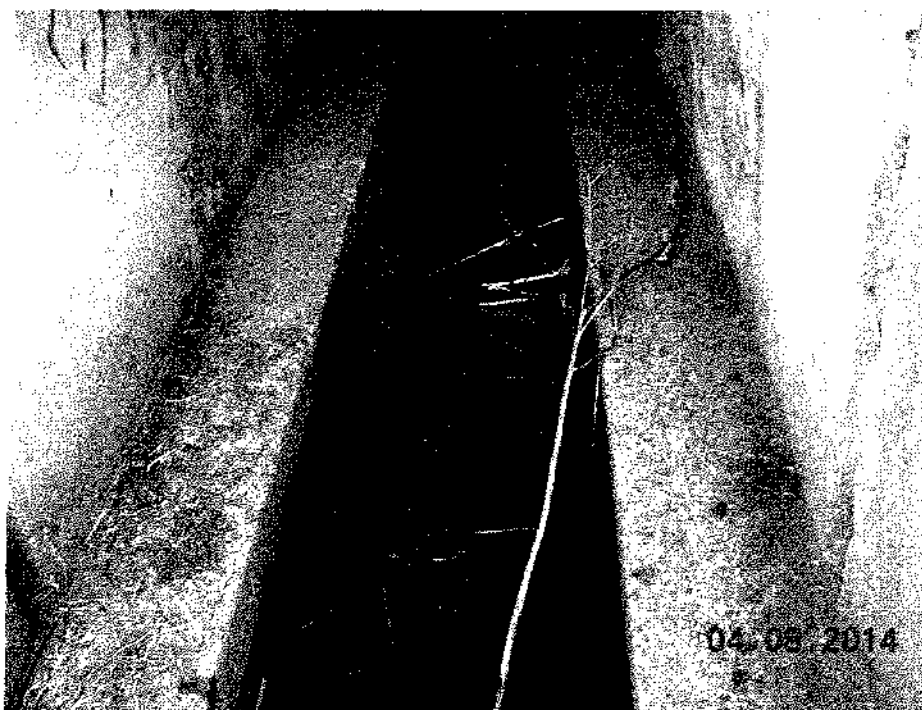
Please forward a copy of your 2014 annual dam safety inspection for this dam. Please give me a call at 250 751-3179 if you require clarification on the matter.

Yours truly,

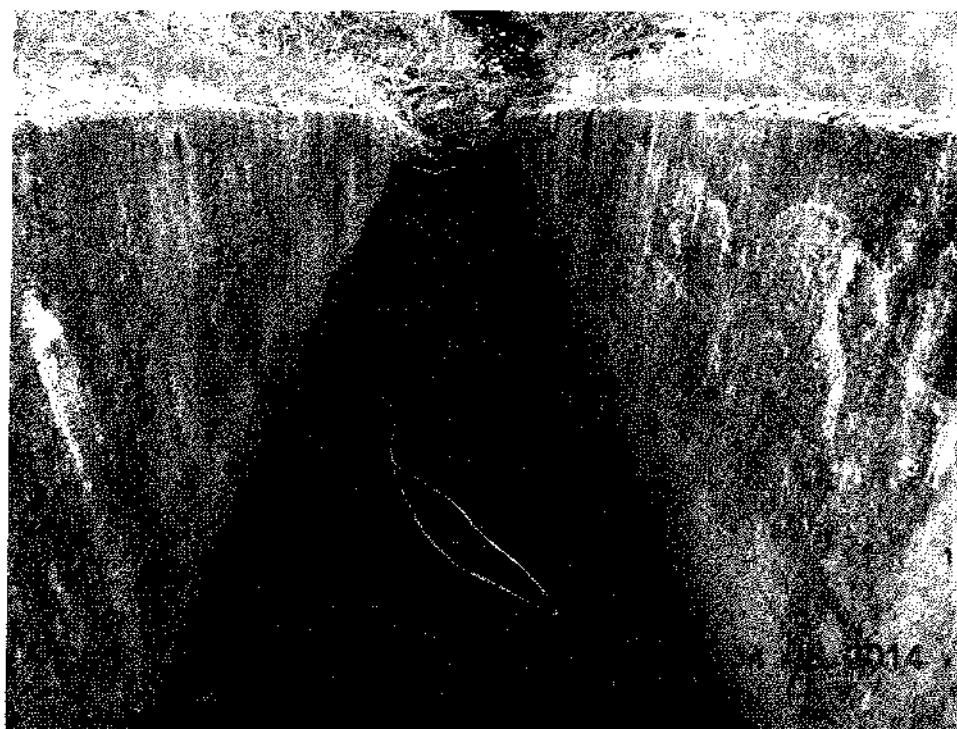
M John Baldwin
Dam Safety Office

Enclosures:

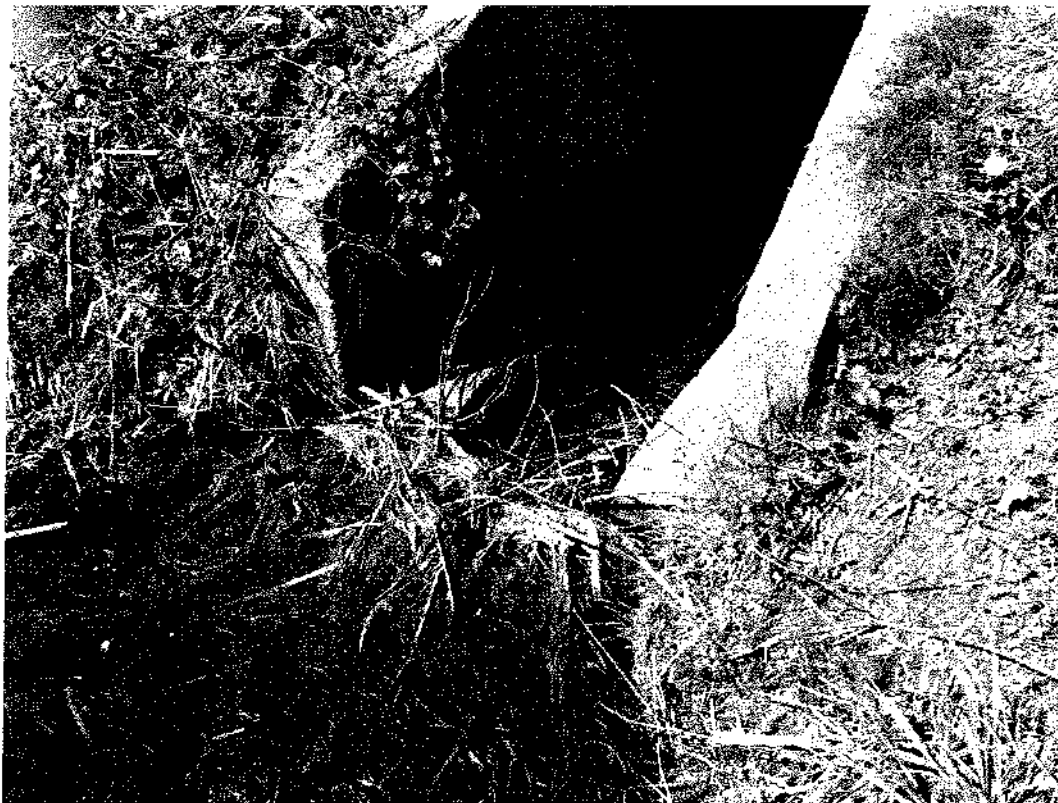
1. Copy of April 8, 2014 dam audit check sheet
2. Copy of April 8, 2014 Dam Inspection Checklist Training exercise
3. Copy of April 8, 2014 field notes
4. Copy of April 8, 2014 site photographs



Looking down spillway- debris in spillway



Looking down spillway- debris at toe of spillway



Beaver dam at entrance of spillway



Downstream toe of dam – note seepage approx 3m from toe of dam- may be associated with road drainage- inspect and monitor



DAM AUDIT PROGRAM

DAM AUDIT CHECK SHEET

Dam: Cuthers Lake Dam D720123

Date: April 8, 2014

Failure Consequence Rating: E VH H S L

Risk Level: (see over)

Failure Probability Rating: Lrg Mod Sm VSm

1 2 3 4 5

This Audit is not an Inspection of the dam. The dam owner is responsible for dam inspections.

DAM SAFETY REGULATION REQUIREMENTS

	Yes	No	N/A	Follow Up?
Consequence Rating Appropriate?				<input checked="" type="checkbox"/> ②
Alterations or Hazards occurred recently?		<input checked="" type="checkbox"/>		
Owner Reported any recent alterations or hazards?		<input checked="" type="checkbox"/>		
Emergency Plan Prepared?				<input checked="" type="checkbox"/> ③
Emergency Plan Submitted and Updated?				<input checked="" type="checkbox"/> ③
OMS Plan Prepared?				<input checked="" type="checkbox"/> ③
OMS Plan Submitted?				<input checked="" type="checkbox"/> ③
Reservoir Operation as per OMS Manual?			<input checked="" type="checkbox"/>	④
Maintenance Suitable?	<input checked="" type="checkbox"/>			①
Surveillance Suitable?		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> ③
Annual Inspection Suitable?		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> ③
Sign posted on dam? (Crown land only)			<input checked="" type="checkbox"/>	⑤
Dam Safety Review Status Acceptable?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	

Dam safety discussion
Comments & Site Observations: ① See training sheet Various works required.

② Government follow up

③ Dam owner to follow up

④ No manual and no operations in two years

⑤ Recommended

City controlling vegetation City infrastructure in dam. Dam owner and city discussing ownership.

Dam Owner / agent present for audit? Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		Copy given to Dam Owner / agent? Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Printed Name of Dam Safety Officer <u>Hardy Bartle</u>	Signature <u>Hardy Bartle</u>	Date <u>April 8, 2014</u>	
Printed Name of Dam Owner / agent <u>Ken Grewal</u>	Signature <u>Ken Grewal</u>	Date <u>April 8, 2014</u>	



BRITISH
COLUMBIA

Training exercise John leading/teaching Ker + J (Hagley) training DAM INSPECTION CHECKLIST 10 AM to 11:20

Dam Name: Cuthers Lake Inspection Date: April 8, 2014

Your Name: H. Bartle, K. Grewald Dam File No.:

Was the spillway flowing? (Y) N If yes, what was the approximate flow rate? $\frac{1}{2}$ " ~18" (1)
(circle one) If no, then how far was the reservoir drawn down below the spillway sill level? _____

Was the outlet open? (Y) N If yes, what was the approximate discharge rate? (2)

Are the following components of your dam in SATISFACTORY CONDITION? Yes or No?
(check one if applicable)

EMBANKMENT			OUTLET			SPILL WAY		
	Y	N		Y	N		Y	N
1. U/S Slope	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Outlet Pipe (8)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Debris Boom	<input type="checkbox"/>	<input checked="" type="checkbox"/> (4)
2. Crest	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Energy Dissipater (9)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Entrance	<input type="checkbox"/>	<input checked="" type="checkbox"/> (4)
3. D/S Slope (3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Stilling Basin NA	<input type="checkbox"/>	<input type="checkbox"/>	3. Sill	<input checked="" type="checkbox"/>	<input type="checkbox"/> (5)
4. D/S Toe (6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Toe Drains NA	<input type="checkbox"/>	<input type="checkbox"/>	4. Apron	<input checked="" type="checkbox"/>	<input type="checkbox"/> (5)
5. Drains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. Outlet Channel (10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Walls	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Grass/vegetation/leaching out lot (7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. Measuring Weir NA	<input type="checkbox"/>	<input type="checkbox"/>	6. Channel	<input type="checkbox"/>	<input checked="" type="checkbox"/> NA
			7. Outlet Controls (8) (11)	<input type="checkbox"/>	<input type="checkbox"/>	7. Channel Slopes	<input type="checkbox"/>	<input checked="" type="checkbox"/> NA
			8. Gates (2) (11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8. Gates	<input type="checkbox"/>	<input checked="" type="checkbox"/> NA

Were any of the following POTENTIAL PROBLEM INDICATORS found?

INDICATOR	EMBANKMENT		OUTLET		SPILL WAY	
	YES	NO	YES	NO	YES	NO
a) Seepage	<input checked="" type="checkbox"/> (6)	<input type="checkbox"/>	<input type="checkbox"/> unknown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) External Erosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (9)	<input checked="" type="checkbox"/>
c) Cracks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Settlement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Sloughing / Slides	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Animal Activity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (1)	<input type="checkbox"/>
g) Excessive Growth	<input type="checkbox"/> (3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Excessive Debris	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (1)	<input type="checkbox"/>

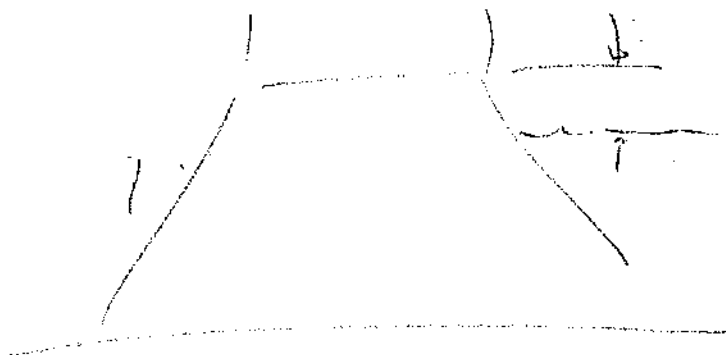
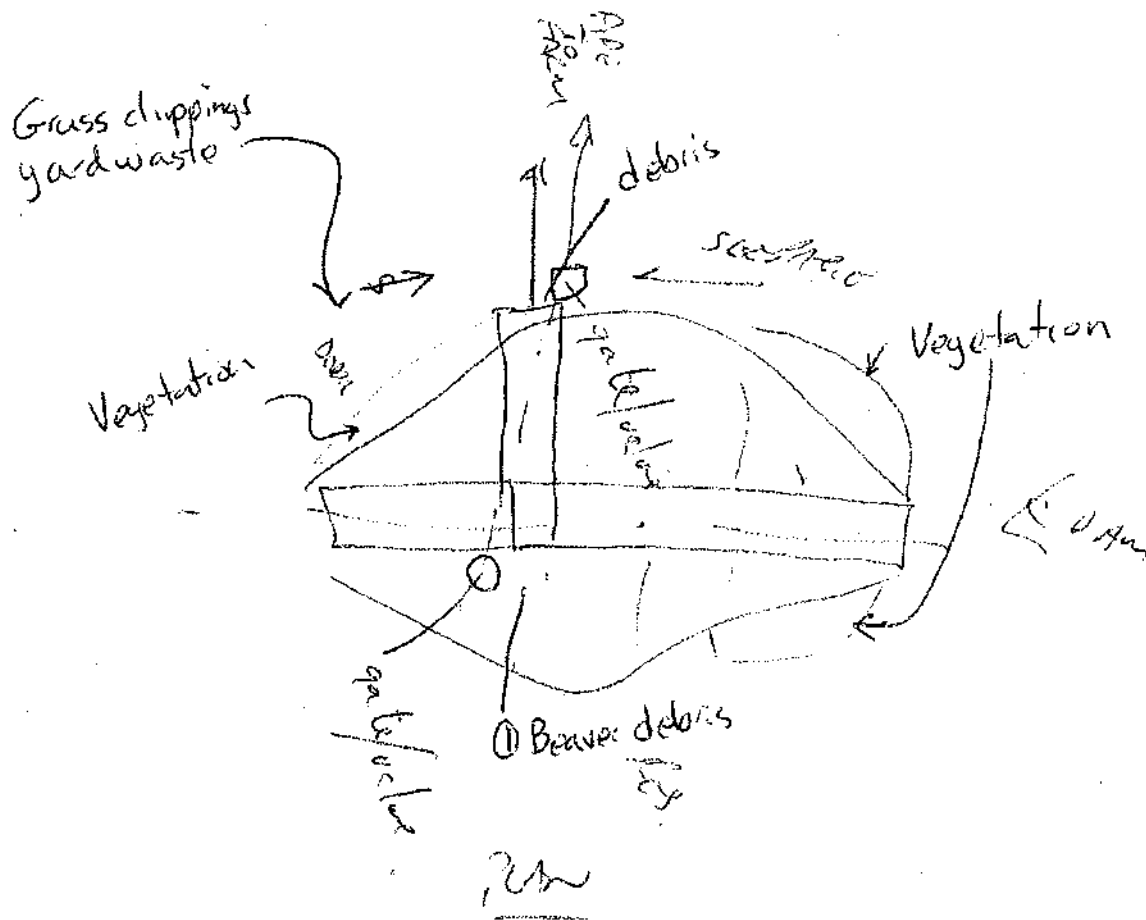
COMMENT on DEFICIENCY FOUND:

- (1) Beaver dam at inlet = 6' height above spillway
- (2) Has not opened in two years
- (3) Vegetation creeping in
- (4) Lacking debris boom
- (5) Remove mass - check for cracks
- (6) Monitor, check for source of seepage on right abutment
- (7) Left abutment garbage, city property, home owner to remove
- (8) Emergency outlet - location not known

Note: Please complete this report form annually and send a copy to the Provincial Dam Safety Officer in your Region.

Revision Date: March, 2011

- (9) Energy dissipater needs improvement
- (10) Debris needs to be removed
- (11) Gate is inoperative needs repair
- (12) Slide gate has not been maintained
- (13) condition of outlet pipe not inspected

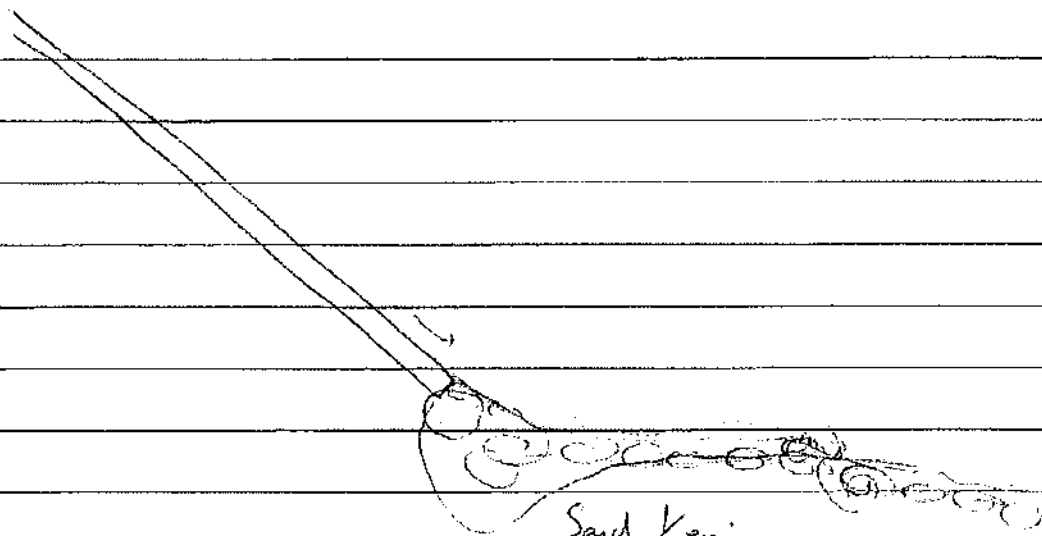


April 8, 2014

Ken Grewal, John Baldwin + H Bartle ~ 10 AM to Noon.

City - To by Seaward working w ken
Ken looking to have the city assume the dam
Ken not interested in long term ownership of
dam.

- Low level outlet plugged.
- unclear if there is a low level emergency outlet
- Spillway outlet needs to be cleaned Rock fill placed



Said Ken:

- 1) Audit
- 2) Training exercise
- 3) Photos
- 4) letter to follow