



TOWN OF LADYSMITH

A Regular Meeting of the
Council of the Town of Ladysmith
will be held in Council Chambers at City Hall on

MONDAY, JANUARY 10, 2011
at 7:00 p.m.

AGENDA

Page

CALL TO ORDER

1. EXECUTIVE SESSION (6:00 p.m.)

In accordance with Section 90(1) of the *Community Charter*, the first section of the meeting will be held *In Camera* to consider the following items:

- personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality
- labour relations or other employee relations
- the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality
- information that is prohibited, or information that if it were presented in a document would be prohibited, from disclosure under section 21 of the *Freedom of Information and Protection of Privacy Act*;

2. RISE AND REPORT

3. AGENDA APPROVAL

4. MINUTES

Adoption of following minutes:

- 4.1. Regular Meeting – December 20, 2010
- 4.2. Special Meeting – December 22, 2010

1 - 5
6 - 7

5. PUBLIC HEARING

None

6. BYLAWS (OCP / ZONING)

- 6.1. Official Community Plan Amendment and Rezoning Application
Lot 1, DL 146, Oyster District, Plan VIP79719 (Oak Development Ltd.)

8 - 10

7. DELEGATIONS

- 7.1. Gerry Yellowlees, Hahlay Buck, Duke of Edinburgh's Award**
Presentation of Bronze Award Certificate to Hahlay Buck

8. PROCLAMATIONS

Mayor Hutchins has proclaimed:

- 8.1. The month of February 2011 as "Heart Month" in the Town of Ladysmith**
- 8.2. March 21st to 25th, 2011, as "Co-operative Education Week" in the Town of Ladysmith**

9. DEVELOPMENT PERMITS / DEVELOPMENT VARIANCE PERMITS

- 9.1. Hazard Lands Development Permit – 325 Chemainus Road**
Lot 5, District Lot 42, Oyster District, Plan 4853 **11 - 21**

10. COUNCIL COMMITTEE REPORTS

- 10.1. Mayor R. Hutchins**
CVRD; Heritage Revitalization Advisory Commission; Trolley Committee
- 10.2. Councillor S. Arnett**
Advisory Planning Commission; Environment & Economic Development Commission
- 10.2.1. Government Services Committee Recommendations** **22 - 27**
10.2.1.1 Question Period Guidelines (and related correspondence from P. Fraser and C. Gilroy)
- 10.3. Councillor S. Bastian**
Parks, Recreation and Culture Commission; Community Health Advisory Committee; Youth Advisory Committee
- 10.4. Councillor J. Dashwood**
Liquid Waste Management Committee; Chamber of Commerce; Ladysmith Early Years Partnership
- 10.5. Councillor L. Evans**
Social Planning Cowichan Affordable Housing Directorate
- 10.6. Councillor D. Paterson**
Protective Services Committee; Celebrations Committee; Festival of Lights
- 10.7. Councillor B. Whittington**
Vancouver Island Regional Library Board; Advisory Design Panel; Ladysmith Downtown Business Association

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11.1. Potential ‘Towns for Tomorrow’ Grant Application – Hydraulic Energy Recovery	28 – 57
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11.3. Potential ‘Towns for Tomorrow’ Grant Application – Ladysmith Playfields Phase II	61 – 62
11.4. Ladysmith Golf Club Request for Low Interest Loan	63 – 65
12. CORRESPONDENCE	
12.1. Isabelle Ouelette, Ladysmith and District Historical Society Request to consider funding the Ladysmith and District Historical Society (for operating the Ladysmith Archives) as a line item within the Town’s budget	66 – 67
<p style="margin-left: 40px;"><u>Staff Recommendation</u> That Council consider whether it wishes to request staff to prepare a report for the January 17 Council meeting on the request for funding from the Ladysmith Historical Society for the operation of the Ladysmith Archives.</p>	
12.2. J.E. Barry, Cowichan Valley Regional District Cowichan Sportsplex annual financial contribution	68 – 69
<p style="margin-left: 40px;"><u>Staff Recommendation:</u> That Council consider whether it wishes to request staff to prepare a report for the January 17 Council meeting on the proposed funding formula for the Cowichan Sportsplex as outlined in the correspondence from J.E. Barry dated December 23, 2010.</p>	
12.3. Doug Bell, Ladysmith Maritime Society Request for Town consideration of cost-sharing	70 – 72
<p style="margin-left: 40px;"><u>Staff Recommendation:</u> That Council consider whether it wishes to request staff to prepare a report for the January 17 Council meeting on the request for cost-sharing outlined in the correspondence from the Ladysmith Maritime Society dated October 12, 2010.</p>	
13. NEW BUSINESS	
14. UNFINISHED BUSINESS	
15. QUESTION PERIOD	
ADJOURNMENT	



LADYSMITH

TOWN OF LADYSMITH
MINUTES OF A REGULAR MEETING OF COUNCIL
MONDAY, DECEMBER 20, 2010 - 7:00 P.M.
COUNCIL CHAMBERS, CITY HALL

COUNCIL MEMBERS PRESENT:

Mayor Rob Hutchins
Councillor Jillian Dashwood
Councillor Bruce Whittington

Councillor Steve Arnett
Councillor Lori Evans

Councillor Scott Bastian
Councillor Duck Paterson

STAFF PRESENT:

Ruth Malli
Erin Anderson

Sandy Bowden
Patrick Durban

Felicity Adams
Joanna Winter

CALL TO ORDER

Mayor Hutchins called the meeting to order at 4:30 p.m.

EXECUTIVE SESSION

2010-533

It was moved, seconded and carried that this meeting retire into executive session at 4:31 p.m. pursuant to Section 90(1) of the Community Charter, to consider the following items:

- discussions with municipal officers and employees respecting municipal objectives, measures and progress reports for the purposes of preparing an annual report under section 98 [annual municipal report]

RISE AND REPORT

The Executive Session of Council arose at 5:45 p.m. and reported on the following:

- Executive Session resolution no. CE 2010-176 authorizing the Town to enter into a partnering agreement, a license agreement, a community marina sub-lease and a memorandum of understanding with DL 2016 Holdings Corporation at the Regular Council meeting on December 20, 2010, and authorizing that copies of the subject agreements be forwarded to the Ladysmith Maritime Society and the Provincial Government for processing.

AGENDA APPROVAL

Mayor Hutchins called the regular session of Council to order at 7:00 pm

2010-534

Mayor Hutchins requested Council's consideration of the following additions to the agenda:

- Recommendation from Government Services Committee

regarding work to be carried out at Gourlay Janes Park under New Business .

It was moved, seconded and carried that the agenda be adopted as amended.

MINUTES

2010-535 It was moved, seconded and carried that the minutes of the Regular Council Meeting of December 6, 2010 be adopted as circulated.

DELEGATION

Carol Nicol Dowe, B.C. Seniors Games

Carol Nicol-Dowe postponed her attendance to a future Council meeting.

STAFF ADVISORY / COMMITTEE REPORTS

Councillor Dashwood excused herself from the meeting, citing a possible conflict of interest.

Development Cost Charge Review

2010-536 It was moved, seconded and carried that Development Cost Charges be waived for eligible projects in the downtown area.

2010-537 It was moved, seconded and carried that Development Cost Charges be reduced for eligible developments with a low environmental impact.

2010-538 It was moved, seconded and carried that staff be requested to investigate whether offsets for affordable housing are permissible under provincial legislation governing Development Cost Charges.

2010-539 It was moved, seconded and carried that staff be requested to report back to Council with further options for new Development Cost Charges rates based on maintaining the parks and roads fees at current levels, with specific reference to which projects could be removed from the list, or where the project scope might have to be reduced.

Secondary Suite Bylaw: Strategy and Process

It was stated that for the purposes of this discussion, 'secondary suites' is used in the broadest sense, and not constrained to the definition currently contained in the Official Community Plan.

2010-540 It was moved and seconded that Council fund the development of a secondary suite policy and regulations, including community-wide and neighbourhood-level consultations, for up to \$40,000 with a \$20,000 carry-forward from the 2010 budget and an additional \$20,000 included in the 2011 Financial Plan, and that staff be

directed to issue a Request for Proposals.

Amendment

2010-541 It was moved, seconded and carried that resolution No. 2010-540 be amended to add the words "and that the Financial Plan be amended accordingly."

Resolution No. 2010-540 was carried as amended.

Parks, Recreation and Culture Fees and Charges for 2011

2010-542 It was moved, seconded and carried that the report from the Director of Parks, Recreation and Culture regarding proposed fees and charges for 2011 be received.

2010-543 It was moved, seconded and carried that staff be requested to investigate the addition of 30-visit family punch cards as well as one, three, six and 12 month family passes to the Parks, Recreation and Culture fees.

BYLAWS

Town of Ladysmith Garbage, Recyclables and Organics Collection Bylaw, 2005, No. 1588, Amendment Bylaw 2010, No. 1746

2010-544 It was moved, seconded and carried that Town of Ladysmith Garbage, Recyclables and Organics Collection Bylaw, 2005, No. 1588, Amendment Bylaw 2010, No. 1746 be adopted.

Town of Ladysmith Revenue Anticipation Bylaw 2010, No. 1747

2010-545 It was moved, seconded and carried that Town of Ladysmith Revenue Anticipation Bylaw 2010, No. 1747 be adopted.

Town of Ladysmith Streets and Traffic Bylaw 1998, No. 1309, Amendment Bylaw 2010, No. 1748

2010-546 It was moved, seconded and carried that Town of Ladysmith Streets and Traffic Bylaw 1998, No. 1309, Amendment Bylaw 2010, No. 1748 be adopted.

Town of Ladysmith Community Centre Fees and Charges Bylaw 2010, No. 1749

2010-547 It was moved, seconded and carried that Town of Ladysmith Community Centre Fees and Charges Bylaw 2010, No. 1749 be read a first, second and third time.

NEW BUSINESS

**Removal of Dangerous Trees - Gourlay Janes Park
Recommendation from Government Services Committee**

It was moved, seconded and carried that the expenditure of up to \$20,000 for the removal, limbing, or topping of the dead trees in Gourlay Janes Park in 2010 be authorized, with the funds to come from unallocated surplus, and that the Financial Plan be amended

accordingly.

UNFINISHED BUSINESS

2010-548 **Appointment to Cowichan Valley Regional District Community Safety Advisory Committee**
It was moved, seconded and carried that Councillor Jill Dashwood be appointed as Town of Ladysmith representative on the Cowichan Valley Regional District Community Safety Advisory Committee for 2011, and that Councillor Lori Evans be appointed as the alternate representative.

2010-549 **Wood First Resolution**
It was moved and seconded that Council adopt the following Wood First Resolution, and that the Minister of Forests, Mines and Lands be advised.

WHEREAS BC's forest industry has been and will continue to be an integral part of the economic, social and business life of the Town of Ladysmith;

AND WHEREAS the BC Government has passed a Wood First Act to facilitate a culture of wood by requiring the use of wood as the primary material in all new provincially funded buildings, in a manner consistent with the British Columbia Building Code;

AND WHEREAS the Council of the Town of Ladysmith deems that building with wood is consistent with natural resource, economic and social stability;

BE IT RESOLVED that the Town of Ladysmith will continue to support the development of its wood culture by:

- being a wood champion and supporting the BC government's Wood First Act by adopting this Wood First resolution;
- ensuring that the performance of wood systems and products are considered whenever appropriate in all municipal building projects to maximize the achievement of Ladysmith's Civic Green Building Policy;
- ensuring that all municipal infrastructure projects in Ladysmith receiving provincial or wood industry financial support employ the appropriate structural or architectural use of wood

2010-550 **Amendment**
It was moved, seconded and carried that Resolution No. 2010-549 be amended to include the following:

- ensuring that where possible, preference is given to the use of

domestic wood products.

Resolution No. 2010-549 was carried as amended.

QUESTION PERIOD

A member of the audience enquired about bylaw enforcement responsibilities.

ADJOURNMENT

2010-551

It was moved, seconded and carried that this meeting of Council be adjourned at 9:00 p.m.

CERTIFIED CORRECT

Mayor (R. Hutchins)

Corporate Officer (S. Bowden)

Subject to Adoption



LADYSMITH

TOWN OF LADYSMITH
MINUTES OF A SPECIAL SESSION OF COUNCIL
WEDNESDAY, DECEMBER 22, 2010 - 4:00 P.M.
COUNCIL CHAMBERS, CITY HALL

COUNCIL MEMBERS PRESENT:

Mayor Rob Hutchins Councillor Steve Arnett Councillor Jillian Dashwood
Councillor Lori Evans Councillor Bruce Whittington

COUNCIL MEMBERS ABSENT:

Councillor Duck Paterson Councillor Scott Bastian

STAFF PRESENT:

Sandy Bowden Pat Durban Joanna Winter

CALL TO ORDER

Mayor Hutchins called the meeting to order at 4:16 p.m.

AGENDA APPROVAL

2010-552

It was moved, seconded and carried that the agenda be adopted as circulated.

**STAFF / ADVISORY
COMMITTEE REPORTS**

2010-553

Request for Removal of Covenant - Strata Lot 3, L 67, Oyster District, Strata Plan VIS 6498 (Craig Road)

It was moved, seconded and carried that Council waive the condition with covenant number FB147033 on Lot 3, District Lot 67, Oyster District, Strata Plan VIS6498 sufficiently to permit construction of a residence on the building envelope as outlined in a sketch attached to the staff report prepared by P. Durban, dated December 22, 2010, and that the purchaser work with staff to minimize the number of trees to be cut down for building purposes.

EXECUTIVE SESSION

2010-554

It was moved, seconded and carried that this meeting retire into Executive Session at 4:16 p.m., pursuant to Section 90(1) of the Community Charter, to consider the following items:

- personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality;

RISE AND REPORT

The Executive Session of Council arose at 4:18 p.m. without report.

ADJOURNMENT

2010-555

It was moved, seconded and carried that this meeting of Council be adjourned at 4:18 p.m.

CERTIFIED CORRECT

Mayor (R. Hutchins)

Corporate Officer (S. Bowden)

Subject to Adoption



LADYSMITH

Town of Ladysmith

STAFF REPORT

To: Ruth Malli, City Manager
From: Felicity Adams, Director of Development Services
Date: January 5, 2011
File No: 3360-10-05

Re: OFFICIAL COMMUNITY PLAN (OCP) AMENDMENT & REZONING APPLICATION
Subject Property: Lot 1, DL 146, Oyster District, Plan VIP79719 (Oak Development Ltd.)

RECOMMENDATION(S):

Option 1

That Council proceed no further with OCP and Zoning Bylaw Amendment application 3360-10-05.

Option 2

That Council request that the applicant revise the proposed lot layout for OCP and Zoning Bylaw amendment application 3360-10-05 such that the frontage of the lots and the average lot size is similar to the requirements of the existing small lot zone (MP-1).

Option 3

That Council direct staff to proceed with OCP and Zoning Bylaw Amendment application 3360-10-05 as presented by the applicant, with no revisions to the lot layout.

PURPOSE:

The purpose of this report is to seek Council direction regarding an application from Oak Developments Ltd. to rezone the subject property to permit 13 strata lots.

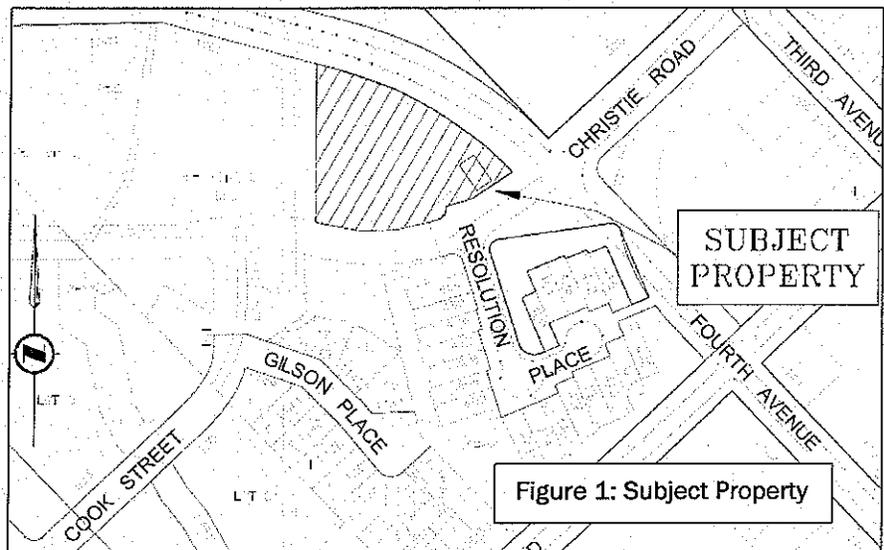
INTRODUCTION/BACKGROUND:

The Official Community Plan (OCP) designates the property as 'Multi-Family Residential' and the applicant is requesting to designate the property as 'Single Family Residential'. The property is zoned 'Medium Density Residential' (R-3-A) and the applicant is requesting a small lot single family residential zone.

The property is zoned 'Medium Density Residential' (R-3-A) and the applicant is requesting a small lot single family residential zone.

The property was previously re-zoned to multi-family residential use in 2000 as part of a larger comprehensive planning study for the Rocky Creek area when the lands were still owned by the Crown.

The subject property is located at the corner of Fourth Avenue and Christie Road and is 0.5 hectares in size. The highest point of the land is along Fourth Avenue and it



slopes down towards Christie Road. Vehicle access to the site would be from a new road and would be across from the Resolution Place access.

The applicant is proposing 13 single family bare land strata lots as shown in Figure 2. The proposed lots are narrow in character and range in size from 300m² to 400m² (with frontages 4.5 metres to 10.5 metres in width). The internal cul-de-sac would be a strata road.

Council previously referred the application to the Advisory Planning Commission (APC).

SCOPE OF WORK:

The applicant has requested that the OCP amendment and rezoning application be considered by Council as proposed, see Figure 2.

The recommendation of the APC is that if the subject property is rezoned for single family residential use, the lot areas should meet the current MP-1 small lot zone. The MP-1 zone minimum lot area is 372m² (4004ft²). Staff has also recommended to the applicant similar improvements to the site layout.

To facilitate the development as proposed by the applicant, the OCP would need to be amended by designating the subject property as single family residential. Amendments to the Zoning Bylaw would also be required to permit a lot size smaller than the current small lot zone (MP-1) and a narrower lot frontage.

When the property was zoned for multi-family residential use in 2000, consideration would have been given to the best use of the land. Given the lot configuration, topography, road layout, and traffic analysis undertaken as part of the earlier planning study, not changing the zoning is an option that Council may wish to consider.

The development as proposed may result in parking issues if new residents have more than one vehicle, as the road width and lot frontages will be narrower than other existing small lot subdivisions. Smaller lots and narrower frontages are most effective where rear lane access provides for off-street parking or shared parking facilities can be provided. The recommended improvements to the site layout are a means to address this potential issue.

ALTERNATIVES: Three options have been provided.

FINANCIAL IMPLICATIONS: n/a

LEGAL IMPLICATIONS:

There are two covenants on the title of the subject property registered with the Town of Ladysmith in 2000. One covenant deals with amenity contributions. The other covenant limits the development of the subject property to 12 townhouse units. Both covenants would need to be respected and/or amended as part of the OCP amendment and rezoning process. Also, if the application proceeds a public hearing would be required.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

At its October 12th, 2010 meeting the Advisory Planning Commission passed the following motion:

It was moved, seconded and carried that the Advisory Planning Commission recommends that Council support the application to designate Lot 1, D.L. 146, Oyster District, Plan VIP79719 as 'Single Family Residential' in the Official Community Plan; but the Commission recommends a minimum lot



Town of Ladysmith
STAFF REPORT

To: Ruth Malli, City Manager
From: Felicity Adams, Director of Development Services
Date: January 5, 2011
File No: 3060-10-14

Re: Hazard Lands Development Permit - 325 Chemainus Road
Lot 5, District Lot 42, Oyster District, Plan 4853

RECOMMENDATION(S):

That Council issue Development Permit 3060-10-14 for the construction of a garage at 325 Chemainus Road (Lot 5, District Lot 42, Oyster District, Plan 4853).

AND THAT the Mayor and Corporate Officer be authorized to sign the Development Permit.

PURPOSE:

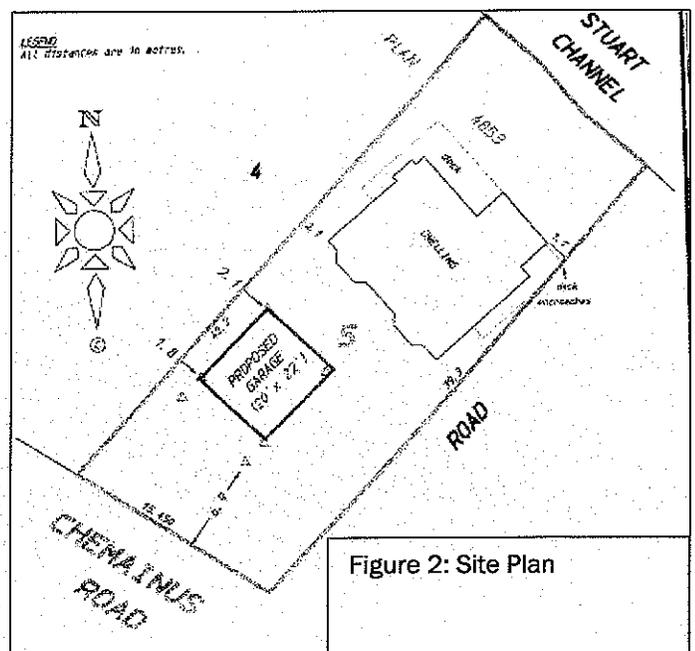
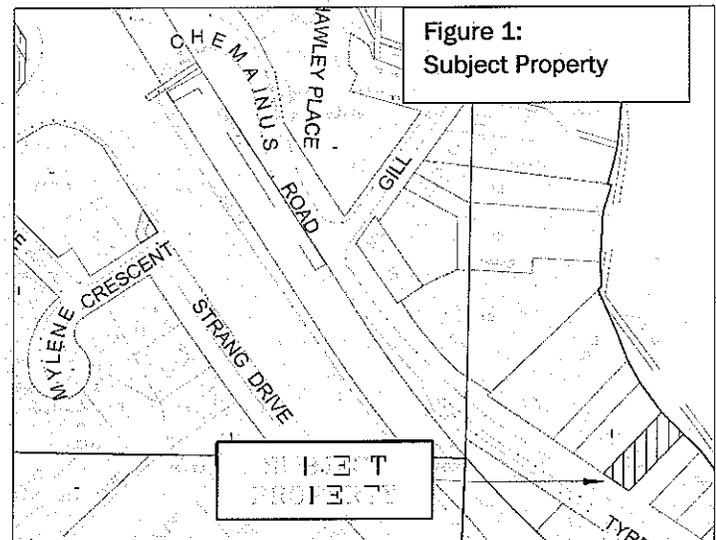
To present an application for a Hazard Lands Development Permit for a proposed garage at 325 Chemainus Road (see Figure 1).

INTRODUCTION/BACKGROUND:

The subject property at 325 Chemainus Road falls within 'Development Permit Area 7 - Hazard Lands' due to the slope of the land. The owners of the property are proposing to construct a 45m² garage. A dwelling currently exists on the land (see Figure 2)

SCOPE OF WORK:

A geotechnical stability assessment was completed for the proposed garage at 325 Chemainus Road. The report provides recommendations regarding earthworks, drainage, retaining walls, and footings as shown in the attached Schedule A of Development Permit 3060-10-14. In general the report concludes that the site of the garage is safe for its intended use provided that the recommendations are adopted. The proposal meets the applicable zoning regulations.



ALTERNATIVES: n/a

FINANCIAL IMPLICATIONS: n/a

LEGAL IMPLICATIONS:

A development permit is required prior to construction occurring.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS: n/a

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

The Town of Ladysmith Building Inspector and Engineering Technician have reviewed the proposed plans and have visited the site and they have no objections or concerns regarding the proposed garage.

RESOURCE IMPLICATIONS:

Processing Development Permit applications is within available staff resources.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

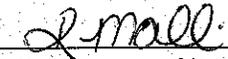
Careful consideration of development in steep slope areas contributes to environmental and property protection.

ALIGNMENT WITH STRATEGIC PRIORITIES: n/a

SUMMARY:

It is recommended to support the Hazard Lands Development Permit for the proposed garage at 325 Chemainus Road.

I concur with the recommendation.



Ruth Malli, City Manager

ATTACHMENTS:

DP Form 3060-10-14

TOWN OF LADYSMITH
DEVELOPMENT PERMIT 3060-10-14
(Section 920 *Local Government Act*)

DATE: January 10, 2011

TO: Susan Lucille Dobson
Address: 1896 Martin Place
Duncan B.C. V9L 5W1

1. This Development Permit is subject to compliance with all of the bylaws of the Town of Ladysmith applicable thereto, except as specifically varied by this Permit.
2. This Permit applies to and only to those lands within the Town of Ladysmith described below, and any and all buildings structures and other development thereon:

Lot	5
District Lot	42
District	Oyster
Plan	4853
PID#	006-029-655
CIVIC ADDRESS	325 Chemainus Road (referred to as the "Land")

3. This Permit has the effect of authorizing the issuance of a building permit for the construction of an accessory building on the Land in accordance with the plans and specifications attached to this Permit, and subject to all applicable laws, except as varied by this Permit.

Subject to the conditions, requirements and standards imposed and agreed to in section 5 of this Permit.

4. This Permit does not have the effect of varying the use or density of the Land specified in Zoning Bylaw No. 1160.
5. The Permittee, as a condition of the issuance of this Permit, agrees to construct an accessory building following the geotechnical requirements stated in:
 - a) **Schedule A: Geotechnical Stability Assessment for Proposed Garage - Madrone Environmental Services Ltd. - December 9, 2010**
6. Notice of this Permit shall be filed in the Land Title Office at Victoria under s.927 of the *Local Government Act*, and upon such filing, the terms of this Permit 3060-10-14 or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.

7. If the Permittee does not substantially start any construction permitted by this Permit within **two years** of the date of this Permit as established by the authorizing resolution date, this Permit shall lapse.
8. The plans and specifications attached to this Permit are an integral part of this Permit.
9. This Permit prevails over the provisions of the Bylaw in the event of conflict.
10. Despite issuance of this permit, construction may not start without a Building Permit or other necessary permits.

AUTHORIZING RESOLUTION PASSED BY THE COUNCIL OF THE TOWN OF LADYSMITH
ON THE ____ DAY OF _____ 201__.

MAYOR

CORPORATE OFFICER

OWNER

OWNER

PLEASE PRINT NAME

PLEASE PRINT NAME



1081 Canada Avenue
Duncan, BC V9L 1V2
P: 250.746.5545
F: 250.746.5850
www.madrone.ca
info@madrone.co

December 9, 2010

JPL Custom Homes/Desine Developments Ltd.
P.O. Box 963
Duncan, BC, V9L 3Y2

**Geotechnical Stability Assessment for Proposed Garage –
325 Chemainus Road, Ladysmith, BC**

Dear Mr. Neefs:

Introduction

At your request, Madrone Environmental Services Ltd. (Madrone) has completed a Geotechnical Stability Assessment for a proposed garage at 325 Chemainus Road, Ladysmith, BC.

I understand that you would like this assessment to support a building permit application to the Town of Ladysmith (ToL).

The ToL's Official Community Plan (OCP) 1488 (2003) provides guidelines for site development. Map 2 on the OCP shows Development Permit Areas designated as DPA 7 that have "hazardous conditions" and within which a geotechnical engineer is required to determine appropriate development recommendations including building setbacks.

Madrone carried out this work generally in accordance with the Letter of Engagement dated November 15th, 2010. Madrone observed an excavation within the proposed garage area (by a hydraulic excavator), which comprised the extent of subsurface investigation. Additional engineering analyses and design was requested regarding the design of a loc-block type retaining wall to support 0.75 m depth of fill for the proposed driveway, and an existing 1.5 m high concrete retaining wall.

You supplied, for the purpose of this work, a site plan (by email) of the proposed garage location prepared by Bowers & Associates (Surveyors), (File name: 4280 – 15nov10.pdf, titled “Sketch Plan of Proposed Garage Location, Lot 5, District Lot 42, Oyster District, Plan 4953”), and verbal advice regarding the proposed dimensions of the retaining wall. This verbal advice was as follows:

The wall is to be located about 1.5 m downslope of the existing wall, and is to be constructed with a vertical face, and for a length of about 5 m. The proposed construction is to be “loc-block” type, and the upper row of blocks will be turned at 90° to rest on the existing retaining wall.

Details of the assessment are presented herein, together with general notes and design and construction advice.

Site Description

Madrone obtained stereoscopic pairs of aerial photographs of the site dating from 1950, 1957, 1968, 1975, 1984, 1993, 1998, and 2007 from the University of British Columbia. I viewed these under a stereoscope, and observed no evidence of instability at the site. There is, however, a characteristic steep slope adjacent to the shoreline.

A senior geotechnical engineer and a geoscientist from Madrone visited the site on November 30th, 2010. The following salient features were observed during the site visit, and / or obtained by desktop review:

I referenced the BC Ministry of Energy to assess the geology underlying the site. I found that the site is underlain by Quaternary Geology (Recent sediments) which includes the soils produced by glacial action (till). Very dense sandy gravel (till) was encountered at 0.6 m depth in the garage area, confirming the mapped Quaternary Geology.

Undivided sedimentary rocks of the Late Cretaceous-Aged Nanaimo Group are shown to be underlying the recent sediments. Weathered sandstone was found beneath the footing of the lower retaining wall downslope of the proposed garage. This would be consistent with the mapped geology.

The structural geology map shows no faults in close proximity to the site.

The natural ground surface of the site has been altered by development, including cutting, filling and retaining wall construction.

The ground surface slopes generally down from Chemainus Road towards Stuart channel at 14°, with a steep degraded “cliff” at about 60° over a height of about 2.5 m near the high-tide shoreline.

The vegetation on the site comprised lawns and gardens. Much of the steep slope at the toe was hidden by the vegetation.

At the time of the site visit, the ground slope was broken by a retaining wall of 2.1 m height adjacent to the rear of a (now-demolished) garage, and a 1.5 m high retaining wall downslope of the proposed garage. Both of these existing retaining walls are of concrete construction. No drainage was noticed in either retaining wall. No damage to either wall was observed.

No evidence of past or incipient land instability was observed. However, there was a crack in the path adjacent to the house that could be attributed to ground movement.

Reference to Natural Resources Canada indicates that the site has a peak ground acceleration of 5.3g for the earthquake event prescribed by the 2006 British Columbia Building Code (1 in 2475 year recurrence interval, which has a 2% probability of occurrence in any 50 year period).

Further features of the site may be seen in the following photographs:

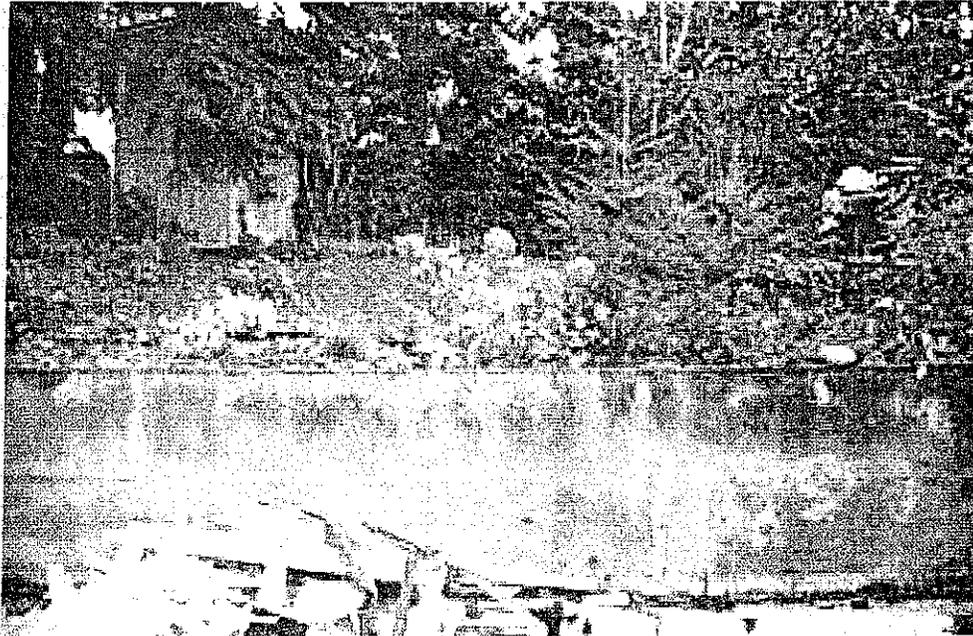


Photo 1. View to the south-west from the rear of the house (downslope of the lower retaining wall). The proposed garage is to be constructed in this area.



Photo 2. View to the north from near the southern corner of the site. The residence at 325 Chemainus Road is on the right. The proposed garage site is in the centre of the photograph.

Discussion

General

The recommendations of this report are based on the limited data described within this letter. Should conditions be encountered during construction which are at variance with those described, then these should be reported to Madrone for review.

Slope Stability

In my opinion, not to be construed as a guarantee, the site of the garage is safe for its intended use provided that the recommendations of this report are adopted.

Earthworks

Cuts deeper than 1 m and fills greater than 1 m in height are to be supported by engineer-designed retaining walls. Cuts may be sloped at 1V:1H in till and 2V:1H in rock. Fills may be sloped at 1V:3H. Where structures are to be founded on fill, then the fill will be required to be constructed of approved material, compacted to an appropriate standard (to be specified).

Drainage

Adequate drainage should be provided to prevent the soils from becoming saturated.

Retaining Walls

All retaining walls should be provided with subsurface drainage or else be designed to withstand hydrostatic pressures.

I have analyzed the proposed “loc-block” type retaining wall to be constructed adjacent to the existing concrete retaining wall downslope of the garage, using estimated lateral earth pressures (below), based on assumptions of the mechanical properties of the till and backfill (e.g. angle of internal friction and density).

The at-rest condition is appropriate for the wall if the wall is not permitted to move. The coefficient of at-rest earth pressure would be 0.36, which leads to a force of about 20kN/m (not factored) acting at a height of 0.8 m.

Active (non-dynamic case) earth pressures provide less lateral load, but some rotation of the wall is required for the soils to reach the active state. In the event of the design earthquake, the active earth pressure will exceed the at-rest earth pressure.

Active Earth Pressure Summary		Static		Seismic	
		Coulomb	Rankine	Mononobe-Okabe	
Coefficient of Active Earth Pressure	k_a	0.19	0.22	1.22	(K_{AE})
Active Thrust	P_a (kN/m)	10.4	12.1	53	(P_{AE})
Total Active Thrust acts at Height	h (m)	0.8	0.8	1.2	
Angle of Critical Failure Surface	θ (°)	57	57	24	(θ_{AE})

The wall requires the following characteristics:

Resistance to sliding at the base (in addition to the friction between the block and the soil) of 45kN (based on seismic load and Factor of Safety of 1.2). This should be designed by a structural engineer, but may comprise, for instance, a 40 mm diameter steel dowel (450 mm long), at maximum 330 mm centres (in rock).

Resistance to overturning (in addition to the weight of the wall) of 49kN-m per m length during a design earthquake event. If the top block of the wall is tied to the driveway, then the driveway slab (100 mm thick, 6 m wide) could be relied on to provide a resistance of 6kN-m per m length (3kN/m acting about 2 m above the toe). Additional resistance can be provided by dowels into the ground at the upslope side of the driveway slab. The required resistance could be satisfied by 40 mm diameter bars (450 mm long) at 250 mm centres (in till).

The dowels between the blocks and the driveway slab should be designed to resist the calculated force of 49kN. Structural factors can be expected to apply to that load.

All dowels should be of appropriate materials to withstand corrosion (to be specified by a structural engineer).

Drainage should be installed behind the loc-block wall, including drain rock or free-draining material placed as backfill between the new and existing walls, and a subsurface drain.

Footings

Footings founded on the dense sandy gravel till may be proportioned for maximum allowable bearing pressure of 150kPa (working stress design). Footings founded at 600 mm depth would be below the expected frost penetration depth for this area.

Construction Observations

Footing trenches should be clean and free of water.

A geotechnical engineer should confirm the foundation conditions during construction.

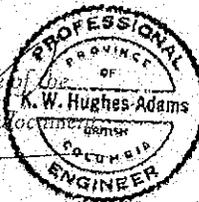
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Madrone has prepared this report for your use for the purposes for which it was commissioned. It will not be reasonable for other parties to rely on the observations or conclusions the report and you may not give, lend, sell, or otherwise make available the report or any portion to any other party without Madrone's express written consent.

We trust that this meets with your requirements. Should you have any further questions, please contact the undersigned at your earliest convenience.

Yours truly,

**This is a digitally signed duplicate of the official manually signed and sealed document.*



Ken Hughes-Adams, M. Eng., P. Eng.
Principal / Engineer

MADRONE ENVIRONMENTAL SERVICES LTD.

Town of Ladysmith

COMMITTEE REPORT



LADYSMITH

To: Mayor and Council
From: Councillor S. Arnett, Chair
Date: December 21, 2010
File No: 0550-20

Re: GOVERNMENT SERVICES COMMITTEE - December 20, 2010

At its meeting on December 20, 2010 the Government Services Committee recommended to Council the following:

1. That Council support the implementation of the Sustainable Development Checklist, and that Council direct staff to prepare a bylaw to amend the Development Procedures Bylaw (No. 1667) to include the 'Sustainable Development Checklist' in the application procedure process.
2. That Council amend the Sustainable Development Checklist to incorporate 'natural areas' in item 1.
3. That Council authorize the expenditure of up to \$20,000 for the removal, limbing, or topping of the dead trees in Gourlay Janes Park in 2010, with the funds to come from unallocated surplus, and that the Financial Plan be amended accordingly.
4. That Council authorize the expenditure of up to \$20,000 for improving the Ladysmith Cowichan Valley Trail, with the funds to come from the Cowichan Valley Regional District, and that the Financial Plan be amended accordingly, and that as appropriate, the signage include directions to Ladysmith attractions such as the waterfront, community marina and downtown.
5. That Council authorize the establishment of an additional full-time permanent Utility Operator position in the Water and Sewer Department.
6. That Council direct staff to conduct a trolley ridership study during the months of January and February, and July and August 2011, and that the trolley driver be requested to record the number of riders collected at each stop and for each scheduled route.
7. That Council authorize the investigation of the feasibility of establishing a Transit Authority, or partner with the Cowichan Valley Regional District Transit Authority, in order that the Town may charge a fare for trolley passengers.
8. That Council request staff to draft a policy regarding trolley rentals.
9. That Council deny the request for a trolley stop at Campers' Corner for safety reasons, and that Council direct that a new stop be installed on Thicke Road.
10. That Council maintain the trolley stop on Cloke Road in order to serve the residents of La Rosa Gardens, until a through route is established on Cook Street.
11. That Council send a letter of thanks and appreciation to the Ladysmith Fire Rescue for their efforts regarding the annual Christmas Parade.

12. That Council receive the correspondence from Barbara Steele regarding the Gas Tax Agreement Regionally Significant Projects.
13. That Council request that Councillors Evans and Dashwood meet with the Ladysmith Seniors Centre Society to determine if there are recommendations contained in the City of Duncan Age Friendly Seniors Safety Project Report that are applicable to Ladysmith, and to report back to Council.
14. That Council provide a copy of the City of Duncan Age Friendly Seniors Safety Project Report to the Community Health Advisory Committee and that Councillor Bastian be requested to discuss the report's recommendations with the Committee.
15. That Council receive the correspondence from the Union of B.C. Municipalities regarding the Canadian Federation of Independent Business Municipal Spending Report for information.
16. That Council request staff to develop a public awareness campaign to discourage the public from smoking outdoors at Light Up and other public events at which large numbers of people are present.
17. That Council appoint Councillors Dashwood and Evans to represent Council at the Regional Affordable Housing Workshop.
18. That Council request organizers of major public events to provide more extensive information in all publicity and promotional materials regarding the prohibition of dogs on First Avenue during such events, and that signs be posted at the perimeter of the 'no dogs zone' during public events.
19. That Council request staff to schedule a neighbourhood meeting for area residents regarding the proposed Bicycle Plan and improvements for the Bayview Connector.
20. That Council adopt the following guidelines for Question Period during Council meetings:
 - Persons wishing to address Council during "Question Period" must be either Town of Ladysmith residents or non-resident property owners.
 - Individuals must state their name and address for identification purposes.
 - Questions must relate strictly to matters which appear on the Council agenda at which the individual is speaking.
 - Questions put forth must be on topics which are not normally dealt with by Town staff as a matter of routine.
 - Questions must be brief and to the point.
 - Questions shall be addressed through the Chair and answers given likewise.
 - Debates with or by individual Council members or staff members are not allowed.
 - No commitments shall be made by the Chair in replying to a question. Matters which may require action of the Council shall be referred to a future meeting of the Council.
21. That Council endorse the recommendation of the Public Washroom Task Force that Town visitor maps include a 'WC' logo to mark locations of washrooms that are available for use by the public in the Downtown area.
22. That Council send a letter of thanks to the members of the Downtown Ladysmith Public Washroom Task Force.



TOWN OF LADYSMITH QUESTION PERIOD GUIDELINES

- Persons wishing to address Council during “Question Period” must be either Town of Ladysmith residents or non-resident property owners.
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- 7. No commitments shall be made by the Chair in replying to a question. Matters which may require action of the Council shall be referred to a future meeting of the Council.

Sandy Bowden

To: Rob Hutchins

Subject: RE: Question period guidelines

From: The Gilroys [mailto:thegilroys@shaw.ca]

Sent: Thu 2010-12-30 11:42 AM

To: Rob Hutchins

Cc: Bruce Whittington; Duck Paterson; Jillian Dashwood; Lori Evans; Steve Arnett; Scott Bastian

Subject: Question period guidelines

Hello, Rob. I hope you can clarify the "Town of Ladysmith Question Period Guidelines" for me.

I recall at a November Regular Council meeting that you announced at the conclusion of the meeting (just prior to the opening of Question Period) that council would not entertain questions from the public unless they directly related to the evening's business. This was disturbing because I took the time to attend the council meeting with hopes of making an inquiry, only to be told that it would not be permitted. I was hopeful that this was a "one off" as the evening was getting very late. However in reading the Guidelines as presented at the last Government Services Committee meeting, these restrictions are now policy.

Can you tell me what prompted the implementation of this policy?

Is this a "done deal" and if so, then how is a citizen expected to express a concern, make an inquiry or offer ideas to the Mayor and Council in an open public venue?

For the record, if this policy has been formally adopted, I am appalled and deeply insulted. Do you not wish to engage the public in matters of common interest? If you do, then restricting open and respectful dialogue at a public venue is anti democratic and violates my rights to freedom of speech.

I look forward to your thoughts.

Best Regards, Cathy Gilroy

E-Mail received from Pam Fraser

From: Pam Fraser [mailto:pfraserpg@shaw.ca]

Sent: Fri 2010-12-31 1:11 PM

To: Rob Hutchins; Bruce Whittington; Duck Paterson; Jillian Dashwood; Lori Evans; Steve Arnett; Scott Bastian

Cc: Cathy Gilroy; ladysmithbc@gmail.com

Subject: Guidelines for question period

Dear Mayor and council,

I have recently read the Question Period Guidelines approved at the last Government Services Meeting of December 20, 2010. I would urge council not to adopt these guidelines. Judging from the meagre numbers of the public at council meetings I have attended, I think it is fair to say that most people get their information about council decisions from the newspaper or by word of mouth, after the fact. The proposed question period guidelines would prevent citizens from asking questions about issues from past council meetings or about progress towards the implementation of past decisions. Also the public would be prevented from asking council members directly about their positions on issues. I hope you would agree that it is desirable to increase public participation in civic politics. These guidelines would have the effect of discouraging public participation. At the meetings I have attended there have only been a few questions. The guidelines seem to be a case of creating a "solution" where there wasn't a problem. Adopting these guidelines would also give the impression that council seeks to avoid accountability for its decisions. I would therefore ask council to continue the Ladysmith tradition of an open question period at council meetings.

sincerely, Pam Fraser



Town of Ladysmith

STAFF REPORT

To: Ruth Malli, City Manager
From: Joe Friesenhan, Director of Public Works, Chris Trumpy,
Manager – Special Projects
Date: January 10, 2011
File No:

RE: HYDRAULIC ENERGY RECOVERY – TOWNS FOR TOMORROW GRANT PROGRAM

RECOMMENDATION(S):

That Council consider submitting a grant application for hydraulic energy recovery under the Towns for Tomorrow grant program.

PURPOSE :

The purpose of this report is to present a business case analysis and rationale for the development of hydraulic energy recovery on a Town water supply line. Hydraulic energy recovery was supported in the *Ladysmith Community Vision for a Sustainable West Coast Town* (Visioning Report) and the *Town of Ladysmith Community Energy Plan* (Energy Plan).

The Towns for Tomorrow Program provides an excellent opportunity to strengthen the business case of the project by lowering the capital cost and providing a long-term diversified revenue source to the Town.

INTRODUCTION/BACKGROUND:

In March 2010, Council authorized staff to carry out a detailed design of Phase One of the centralized water treatment facility, the dual pipeline from the South End Chlorinator to the Arbutus Reservoir and a new power supply to the reservoir. As part of the design, Council requested that staff investigate any opportunities for energy recovery throughout the process. Koers & Associates Engineering Ltd. were engaged to complete the detailed design. Associated Engineering was engaged as a sub-consultant to identify any opportunities for energy recovery. This report was reviewed by Council at its October 13, 2010 meeting (attached).

Hydraulic energy recovery projects take advantage of situations where excess hydraulic pressure must be removed at a specific location in a water system. Eight scenarios were evaluated against a number of criteria in the initial engineering study with the South End Pressure Reducing Valve (PRV) being identified as an attractive opportunity due to estimated annual energy generation and the payback period compared to other scenarios.

Utilizing the South End PRV site for electricity generation will result in an annual generation of 657,000 kilowatt hours, generating \$48,000 annually in net revenue and displacing approximately 17 tonnes of greenhouse gas (GHG) per year.

SCOPE OF WORK:

The proposed scope of work would involve submitting the Hydraulic Energy Recovery project to the Towns for Tomorrow Grant Program for approval. Upon approval, the Town would then commence work with BC Hydro and an engineering firm to refine the proposal and move towards receiving the necessary approvals for construction.

ALTERNATIVES:

Council could direct staff not to proceed with the hydraulic energy proposal and choose one of the other projects considered for the funding (sportsfields and fire hall.)

FINANCIAL IMPLICATIONS:

This project would generate approximately \$48,000 per year in net revenue for the Town. By leveraging a Towns for Tomorrow grant of \$375,000 to construct the project the business case is made even stronger. The capital cost estimate to the Town of \$335,000 is considered a Class D estimate and may be subject to change following more refined design estimates.

Business Case¹ – Hydraulic Energy Recovery

	No Grant	With Grant
Capital Cost (to Town)	\$710,000	\$335,000
Internal Rate of Return	4%	14%
Net Present Value	\$21,013.68	\$381,590.61
Simple Payback (Years)	14.79	6.98

LEGAL IMPLICATIONS:

There are no legal implications involved with making this decision.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

The Visioning Report and Energy Plan provide clear direction to guide the Town's actions towards the development of renewable energy sources. An energy recovery option is anticipated to be received positively by the citizens because:

1. It supports the Community Energy Plan and Visioning Report.
2. The project diversifies the Town of Ladysmith's revenue streams and provides long-term value to the taxpayer.
3. It demonstrates leadership and highlights Ladysmith's role as a leader in sustainability.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

Staff involvement from Public Works, Financial Services and the City Manager would be required to move this proposal forward.

¹ This business case does not include potential borrowing costs.

RESOURCE IMPLICATIONS:

The Town would need to invest approximately \$335, 000 (this cost is subject to final engineering design) in the project to ensure this project is completed. Next steps would include working with BC Hydro and an engineering firm to finalize the project proposal including engineering design, develop an electricity purchasing agreement and complete necessary applications to begin construction.

ALIGNMENT WITH STRATEGIC PRIORITIES:

The 2010 strategic directions include implementing the Visioning Report along with the Energy Plan; both identify the development of clean and renewable energy sources as a priority.

Wise financial management is one of the Town's first strategic priorities. This project will demonstrate wise financial management by providing value to the taxpayer through the diversification and strengthening of Town revenue sources.

SUMMARY:

It is recommended that Council consider the hydraulic energy recovery proposal for an application under the Towns for Tomorrow funding program.

I concur with the recommendation.



Ruth Malli, City Manager

ATTACHMENTS:

Previous Council Report with Technical Memorandum No. 1



Town of Ladysmith
STAFF REPORT

To: Ruth Malli, City Manager
From: Joe Friesenhan, Director of Public Works
Date: October 13, 2010
File No:

Re: HYDRAULIC ENERGY RECOVERY OPTIONS

RECOMMENDATION(S):

That Council include consideration of hydraulic energy recovery in the 2011 Financial Plan process.

PURPOSE:

To provide Council with energy recovery options associated with the water supply lines as requested.

INTRODUCTION/BACKGROUND:

In March of 2010, Council authorized administration to do a detailed design of Phase I of the centralized treatment facility, the dual pipeline from the South end Chlorinator to the Arbutus Reservoir and a new power supply to the reservoir. As part of the design, Council requested that we investigate any opportunities for energy recovery throughout the process. Koers & Associates Engineering Ltd. were engaged to complete the detailed design. Associated Engineering was engaged as a sub-consultant to identify any opportunities for energy recovery.

SCOPE OF WORK:

To determine if any energy recovery opportunities exist in the water supply lines for the Town.

ALTERNATIVES:

- Status quo – no action

FINANCIAL IMPLICATIONS:

The cost of the energy recovery options would be paid for over a period of years as per table 3-1 of the attached report. The initial cost would be paid for from the water utility reserve.

LEGAL IMPLICATIONS:

None

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

Any energy recovery option is anticipated to be received positively by the citizens, as it follows the direction supported in the visioning document.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

RESOURCE IMPLICATIONS:

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

Developing energy recovery is consistent with the Towns sustainability visioning report.

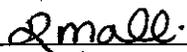
ALIGNMENT WITH STRATEGIC PRIORITIES:

Energy recovery is very high with the Towns strategic priorities.

SUMMARY:

As part of the detailed design for the centralized treatment of the Towns water supply, a number of hydraulic energy recovery options were investigated.

I concur with the recommendation.



Ruth Malli, City Manager

ATTACHMENTS:

Technical Memorandum No. 1

Technical Memorandum No. 1



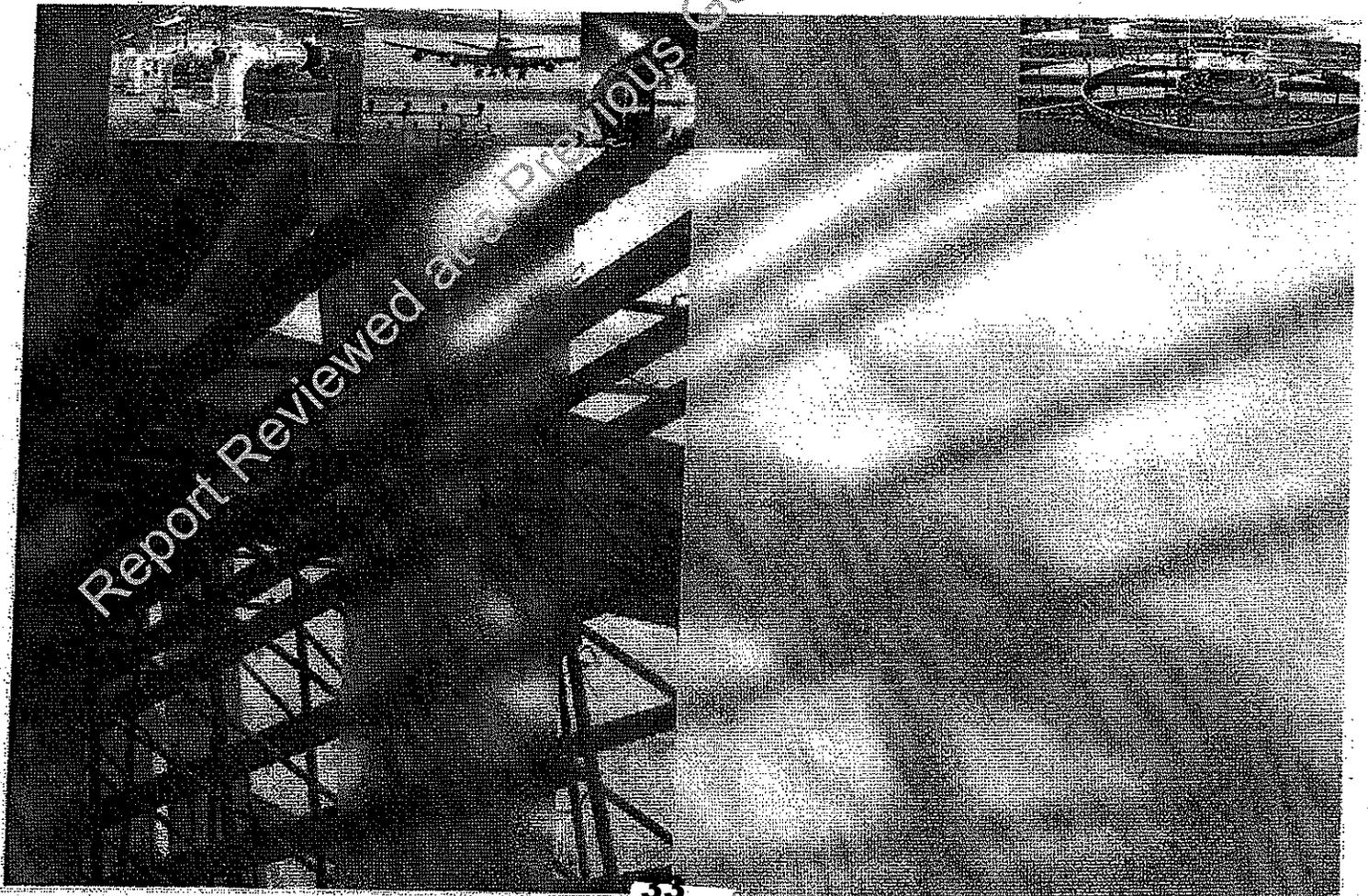
Associated
Engineering

GLOBAL PERSPECTIVE.
LOCAL FOCUS.

**Koers & Associates
Engineering Ltd.**

**Town of Ladysmith
Hydraulic Energy Recovery Site
Screening Assessment**

July 2010



ASSOCIATED ENGINEERING
QUALITY MANAGEMENT SIGN-OFF

Signature: *[Handwritten Signature]*

Date: 23 July 2010

#04-10-23

Report Reviewed at a Previous Governance Services Meeting

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TECHNICAL MEMORANDUM NO. 1

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Appendix B - Cost Estimate Definitions	
Appendix C - Site Identification Assessment Data	

Report Reviewed at a Previous Government Services Meeting



Associated
Engineering

GLOBAL PERSPECTIVE
LOCAL FOCUS

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TECHNICAL MEMORANDUM NO. 1

Koers & Associates Engineering Ltd.

Town of Ladysmith Hydraulic Energy Recovery Site Screening Assessment

Issued: July 23, 2010

Previous Issue: July 9, 2010

1 Introduction

The Town of Ladysmith (the Town) is investigating options to improve its drinking water treatment and distribution systems. The drinking water sources for the Town are Stocking Lake and Holland Lake. As part of the system improvements, the Town is interested in evaluating potential sites for the recovery of hydraulic energy.

Associated Engineering, working as a sub-consultant to Koers & Associates Engineering Ltd. (Koers), was retained to identify the most attractive opportunities for energy recovery. This screening assessment evaluated a number of energy recovery scenarios with respect to implementation costs, potential revenues and associated payback periods.

2 Hydraulic Energy Recovery Options

Hydraulic energy recovery projects take advantage of situations where excess hydraulic head must be removed at a specific location in a water system. Energy recovery systems can be retrofitted in parallel to existing pressure reducing valves (PRVs) and control valves at reservoir or treatment plant inlets. Similarly, energy recovery systems can be incorporated into the design of new water treatment plants (WTPs) and PRVs where hydraulic conditions are favourable.

An example hydraulic energy recovery installation is the Capital Regional District's Sooke River Road Distraction Facility. The energy recovery system was installed in parallel with the two primary PRVs and consists of a turbine and generator system. Depending on the time of year, the turbine generates from 3.6 kW to 10 kW. The system's annual energy output is approximately 72 MWh (2009) up to an expected 87 MWh in 2018. The installation was designed to meet BC Hydro's Net Metering Interconnection Requirements. A photograph of the energy recovery system is presented in Figure 2-1.



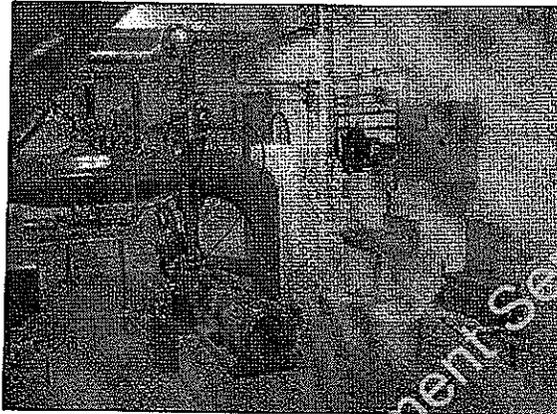
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Figure 2-1
Pump-as-Turbine Energy Recovery System at the
Sooke River Road Disinfection Facility



For the Town, two potential locations were identified for hydraulic energy recovery in the water system, including the following:

- The proposed PRV station at the inlet of the proposed Arbutus WTP.
- The proposed PRV station at the Southend section of the Ladysmith distribution system that will maintain a pressure of 120 psi at the lowest elevation point in the Stocking Lake supply main.

Six energy recovery scenarios were identified by Koers (May 26, 2010). Headloss for piping Scenarios 1 to 6 and the projected hydraulic conditions for energy recovery were also calculated by Koers. Schematic diagrams of these scenarios and the associated hydraulic conditions are presented in **Appendix A**. Two scenarios were evaluated in addition to the scenarios identified in **Appendix A**. Scenario 7 investigated the hydraulic energy recovery potential of installing a high pressure pipeline between Stocking Lake and the Arbutus WTP without the balancing reservoir and proposed PRV station at Southend. Scenario 8 investigated the hydraulic energy recovery potential of piping water from Holland Lake to the Stocking Lake supply main.

A summary of the details of the eight hydraulic energy recovery scenarios are presented in **Table 2-1**.

**Table 2-1
 Summary of Hydraulic Energy Recovery Scenarios**

Scenario	Description
1	<ul style="list-style-type: none"> Hydraulic energy recovery at PRV station at Arbutus WTP inlet Pump-as-Turbine (PAT), electrical equipment and controls Additional space in WTP building Proposed PRV station at Southend Balancing reservoir in service Section of existing piping and new HDPE piping between balancing reservoir and Arbutus WTP
2	<ul style="list-style-type: none"> Hydraulic energy recovery at PRV station at Arbutus WTP inlet PAT, electrical equipment and controls Additional space in WTP building No PRV station at Southend Balancing reservoir in service Section of existing piping and new PVC piping between balancing reservoir and Arbutus WTP
3	<ul style="list-style-type: none"> Hydraulic energy recovery at PRV station at Arbutus WTP inlet PAT, electrical equipment and controls Additional space in WTP building No PRV station at Southend Balancing reservoir in service New PVC piping between balancing reservoir and Arbutus WTP
4	<ul style="list-style-type: none"> Hydraulic energy recovery at proposed PRV station at Southend PAT, electrical equipment and controls Retrofit into existing Southend chlorination building Balancing reservoir in service Section of existing piping and new HDPE piping between balancing reservoir and Arbutus WTP
5	<ul style="list-style-type: none"> Hydraulic energy recovery at proposed PRV station at Southend PAT, electrical equipment and controls Retrofit into existing Southend chlorination building Balancing reservoir in service Section of new PVC piping and new HDPE piping between balancing reservoir and Arbutus WTP
6	<ul style="list-style-type: none"> Hydraulic energy recovery at proposed PRV station at Southend PAT, electrical equipment and controls Retrofit into existing Southend chlorination building Balancing reservoir removed / out of service Section of new steel piping and new HDPE piping between Stocking Lake and Arbutus WTP



Scenario	Description
7	<ul style="list-style-type: none"> Hydraulic energy recovery at PRV station at Arbutus WTP inlet PAT, electrical equipment and controls Additional space in WTP building No balancing reservoir No PRV station at Southend Section of new steel piping between Stocking Lake and Arbutus WTP
8	<ul style="list-style-type: none"> Holland Lake pipeline to Stocking Lake supply main (new pipeline not included in cost estimate) Hydraulic energy recovery at new PRV station from Holland Lake inlet prior to Stocking Lake supply main PAT, electrical equipment and controls

3 Evaluation of Options

3.1 Basis of Evaluation

The screening assessment for each of the eight flow scenarios was based on the following criteria:

- Design Flow
- Pressure Available for Energy Recovery
- Installed Capacity
- Annual Generation
- Capital Costs, including incremental costs for pipeline upgrades
- Estimated Annual Revenues
- Payback Period
- Displaced Greenhouse Gas Emissions.

Descriptions of each of the screening level assessment criteria are provided below.

Design Flow

Design flow is the flow used for selection of the energy recovery equipment. The equipment is selected such that peak efficiency coincides with the design flow. Typically, the design flow should be a value that could be expected to be equalled or exceeded at least 40% of the time. The projected future average day demand (ADD) for the Town is 100 L/s; the ADD value was used as the design flow for this evaluation.

Pressure Available for Energy Recovery

When a design flow is selected, the associated pressure available for power generation must be determined. In a distribution system, the available pressure takes into account the minimum

downstream pressure required to maintain acceptable service levels. The available static head was determined for each scenario in the hydraulic analysis completed by Koers.

Installed Capacity

The installed capacity refers to the maximum amount of electricity that could be produced by the system at a given time.

The installed capacity for each site was calculated using the following equation:

$$\text{Capacity (kW)} = 9.81 \text{ m/s}^2 \times Q \times H \times e$$

Where Q is the design flow in m³/s
 H is the available head (i.e., net head) in m
 e is the turbine/generator efficiency (assumed 80%)

Annual Generation

The annual generation of electricity refers to the amount of electricity that could be produced in one year. The annual generation for each site was calculated using the following equation:

$$\text{Annual Generation (kWh)} = \text{Capacity (kW)} \times 8,760 \text{ hours/year} \times \text{Capacity Factor}$$

Where Capacity Factor is 50% for the average design flow

The capacity factor is the percentage of time the design flow is expected to be equalled or exceeded. In practical terms, this is the percentage of time the energy recovery facility could be expected to generate the installed capacity power. For the purposes of this evaluation, it was assumed that design flow, i.e., future ADD, could be expected to be equalled or exceeded 50% of the time.

Capital Costs

Capital costs for Scenarios 1 to 8 were estimated on a Class D basis. Cost estimate class definitions are provided in **Appendix B**.

For some scenarios, the energy recovery systems could be housed in existing buildings, such as the new WTP or retrofit into the existing Southend chlorination facility.

Energy recovery system cost estimates were prepared including the following components:

- Pump-as-turbine (PAT) equipment,
- Piping and valving,
- Electrical installation and MCC,
- Instrumentation and controls, and
- Building and related civil costs.



The cost estimates also included incremental piping costs for transmission system piping upgrades. The incremental piping cost estimates were developed by Koers based on the first six hydraulic scenarios. Scenario 1 was used as the baseline for all pipeline cost comparisons because the pipeline upgrades will be necessary even in the absence of energy recovery. The incremental costs or the cost differential between each scenario and Scenario 1 were included in estimating the payback period.

The cost estimates do not include costs associated with new electrical transmission lines or transmission system upgrades to connect the energy recovery system to BC Hydro's grid.

Further details of the cost estimates for each scenario are presented in **Appendix C**.

Estimated Annual Revenues

Estimated annual revenues were based on the annual electricity generation rates using an electricity price of \$0.08/kWh. If the Town wishes to sell the electricity to BC Hydro's grid, the Town could be eligible for BC Hydro's Net Metering Tariff or BC Hydro's Standing Offer Program.

BC Hydro's Net Metering Tariff – rate schedule 1239 applies to the connection of small, clean electricity generating systems (with a capacity of 50 kW or less) to BC Hydro's distribution system. The net metering program includes small/micro hydro systems and is available for residential and commercial customers with their own generation systems. Under the tariff, customers that produce more electricity than they consume will receive a credit from BC Hydro that goes into their account. This electricity purchase rate is provided in the Net Metering Rate Schedule of \$0.0816/kWh. At the end of each billing year, BC Hydro will apply this credit to future electricity consumption bills or make a one-time pay-out to the customer.

BC Hydro's Standing Offer Program (SOP) is a process to purchase clean energy from small projects with capacities between 50 kW and 10 MW in BC. System developers apply for an Energy Purchase Agreement with BC Hydro, which outlines BC Hydro's purchase price of the electricity and the length of the agreement (between 20 years and 40 years). The SOP purchase price is developed using a base energy price, which is a function of location in the province and the time of day and year the energy is delivered, and an environmental attributes price.

The estimated annual revenues from generated energy for the Town will depend on the electricity purchase arrangement between the Town and BC Hydro and connection to BC Hydro's grid.

Payback Period

Payback period was calculated based on the estimated capital costs and the estimated annual revenues for each scenario. Capital cost estimates included the estimated costs of the energy recovery system equipment and related installation costs as well as the incremental costs associated with the pipeline system upgrades. The annual revenues were based on the sale of the generated electricity to BC Hydro's grid, using \$0.08/kWh.

Displaced Greenhouse Gas Emissions

The greenhouse gas (GHG) emissions (as tonnes of CO₂ equivalent) that could be displaced by each energy recovery scenario were estimated. Displaced annual GHG emissions were calculated using the annual power generation rate and a GHG intensity value of 26 tonnes of CO₂e/GWh. This value was based on BC Hydro's average GHG intensities for 2005 to 2008. Displaced GHG emissions could be eligible for sale as GHG offsets, which could provide an additional revenue stream for the energy recovery project. However, the sale of GHG offsets is not guaranteed. The revenue stream from sale of GHG offsets was not included for estimating the payback period.

3.2 Site Identification

The screening assessment was based on the criteria identified in Section 3.1. Sites were ranked by the estimated payback period. A summary of the site identification assessment results is presented in Table 3-1. The site identification assessment data for each scenario are presented in Appendix C.

The initial screening assessment suggested that a number of locations may present opportunities for energy recovery projects for the Town. Payback periods ranged between 12 years and 17 years for the first seven scenarios. Energy recovery based on the high pressure pipeline in Scenario 6 suggested the lowest payback period and high potential annual generation values compared to the other scenarios. The estimated incremental costs associated with the high pressure pipeline was significantly higher than the other scenarios, with potential annual generation values approximately two times higher than the annual generation values of the other scenarios.

Scenario 8 showed the highest potential annual generation value. This scenario requires a new pipeline from Holland Lake to Stocking Lake. The cost of the pipeline was not included in this assessment. The payback period for this new pipeline would likely not be feasible for energy recovery alone. However, should the Town consider piping source water from Holland Lake to the Stocking Lake supply main, the feasibility of the energy recovery concept for Scenario 8 should be explored in more detail at that time. Scenario 8 could be implemented in addition to Scenario 6 as an energy recovery opportunity. Later addition of Scenario 8 to scenarios that include hydro generation at Southend, i.e., Scenario 4, 5, or 6, would allow easier connection to BC Hydro's grid.

4 Recommendations

Based on the screening level assessment, the Town should consider the development of energy recovery as per Scenario 6. The scenario represents an attractive opportunity for energy recovery based on estimated annual generation and payback periods compared to the other scenarios. Scenario 8 is also an attractive opportunity for energy recovery based on estimated annual generation. Should the Town consider piping Holland Lake to Stocking Lake in the future, the feasibility of the energy recovery concept for Scenario 8 should be explored in more detail at that time.

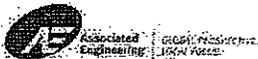


**Table 3-1
Summary of Hydraulic Energy Recovery Site Assessment
(Ranked by Payback Period)**

Rank	Location	Available Flow (GPM)	Generation (kW)	Annual Energy (kWh)	Capital Cost (\$)	Annual Revenue (\$)	Estimated Payback (Years)	Displaced Energy (kWh)	Payback (Years)
6	Southend PRV	190	150	657,000	\$360,000	\$300,000	\$25,000	12	17
3	Arbutus WTP	100	80	350,000	\$260,000	\$120,000	\$28,000	14	9
2	Arbutus WTP	90	70	307,000	\$260,000	\$120,000	\$25,000	15	8
4	Southend PRV	70	60	263,000	\$330,000	\$0	\$21,000	16	7
5	Southend PRV	70	60	263,000	\$330,000	\$0	\$21,000	16	7
1	Arbutus WTP	50	40	175,000	\$230,000	\$0	\$14,000	16	5
7	Arbutus WTP	200	160	701,000	\$300,000	\$650,000	\$56,000	17	18
8	Stocking Lake PRV	260	210	920,000	\$490,000	\$0	\$74,000	—	24

Notes:

- ¹Capital cost estimates for each scenario do not include costs associated with new electrical transmission lines or transmission system upgrades to connect to BC Hydro's grid.
- ²Payback period was based on the capital costs for the energy recovery system and incremental piping costs for distribution system piping upgrades.
- ³Scenario 8 requires a new pipeline from Holland to Stocking Lake supply main for energy recovery. The cost estimate of the new pipeline was not included in this analysis.

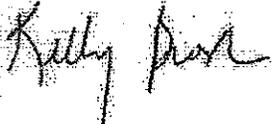


Report Reviewed at a Previous Governmental Public Meeting

To move forward with Scenario 6, the Town should consider the following:

- Develop a conceptual design of the preferred option to refine the capital cost estimate and the respective payback period.
- Investigate potential opportunities for uses of the generated electricity.
- Review BC Hydro's Net Metering and SOP programs to assess opportunities for revenues from sale of the generated electricity.

Prepared by:

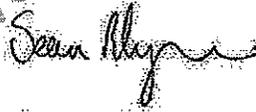


Kelly Bush, M.A.Sc., EIT, LEED® AP
Environmental Engineer

Reviewed by:



Lewis Macrae, P.Eng.
Civil Engineer



Sean Bolongaro, P.Eng.
Practice Leader – Renewable Energy

KB/LAM/SB/jf

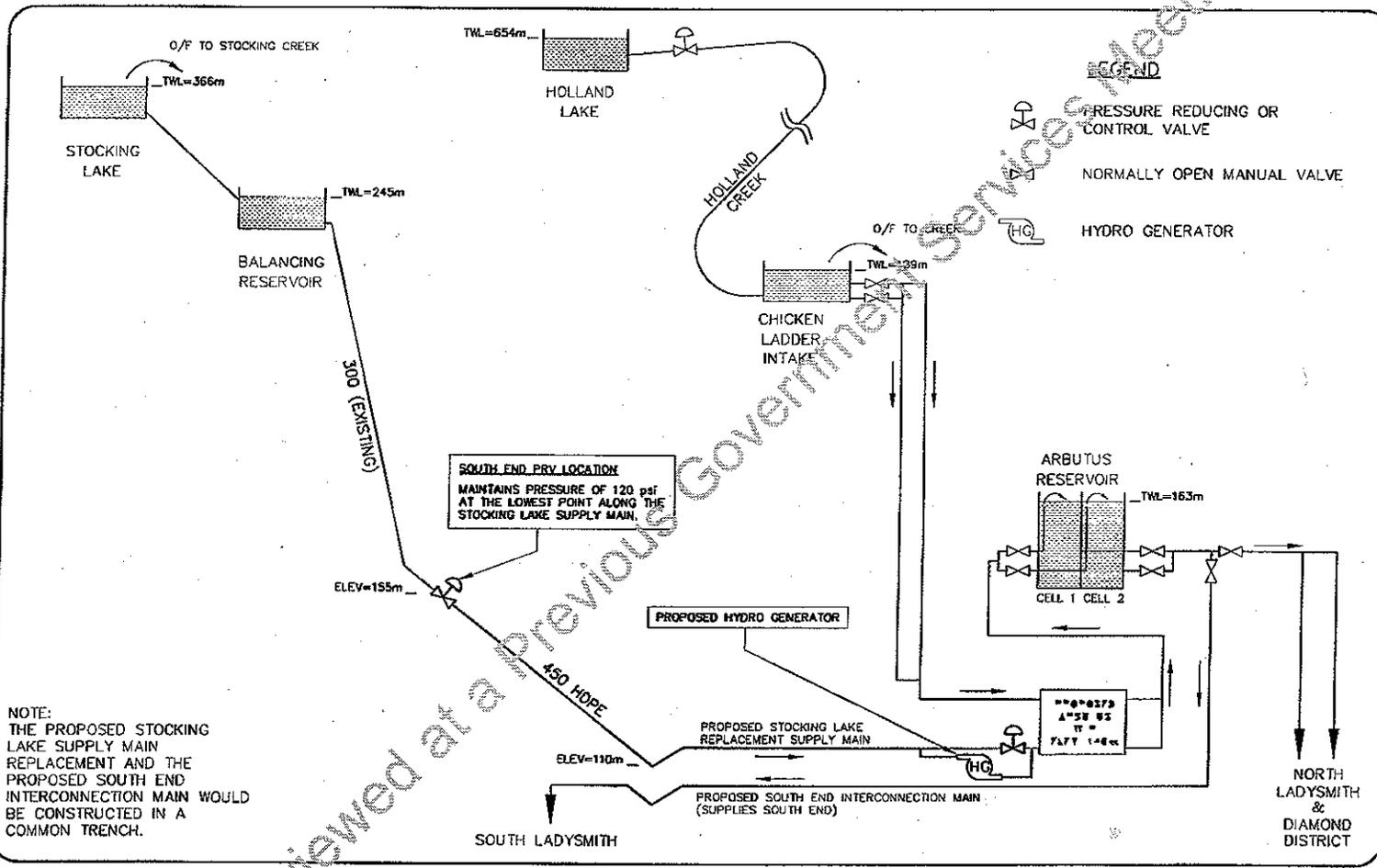
Appendix A - Hydraulic Energy Recovery Flow Scenarios

Report Reviewed at a Previous Government Services Meeting



Associated
Engineering

GLOBAL PERSPECTIVE
LOCAL FOCUS



NOTE:
 THE PROPOSED STOCKING
 LAKE SUPPLY MAIN
 REPLACEMENT AND THE
 PROPOSED SOUTH END
 INTERCONNECTION MAIN WOULD
 BE CONSTRUCTED IN A
 COMMON TRENCH.

KOERS & ASSOCIATES ENGINEERING LTD.
Consulting Engineers

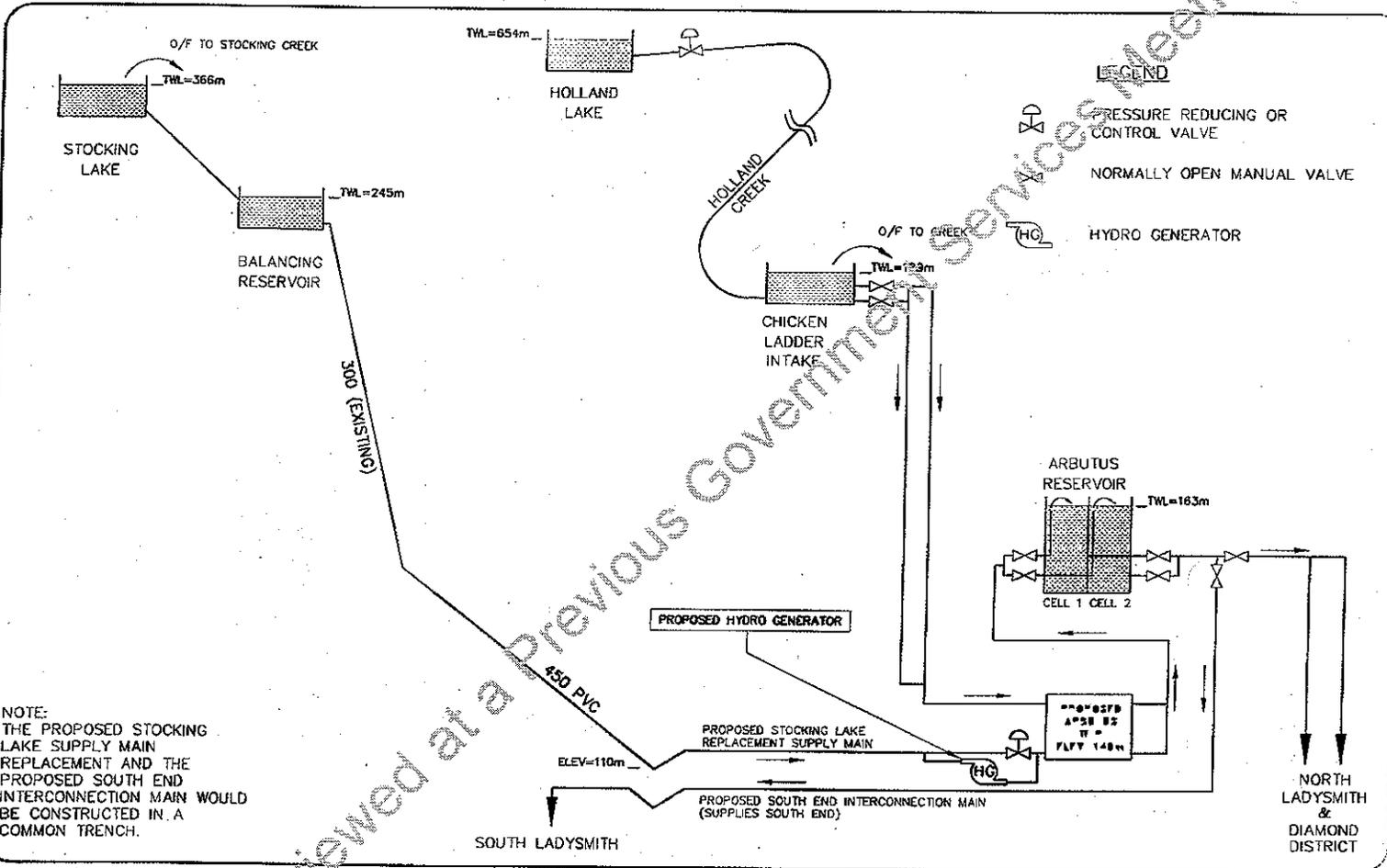
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CLIENT	TOWN OF LADYSMITH
PROJECT	STOCKING LAKE SUPPLY MAIN & INTERCONNECTION MAIN

SUBJECT		LADYSMITH WATER SUPPLY FLOW SCENARIO No. 1	
APPROVED	DATE	SCALE	N.T.S.
	MAY 2010	DWG No.	FIG. 1
JOB No.	0906		



LEGEND

- PRESSURE REDUCING OR CONTROL VALVE
- NORMALLY OPEN MANUAL VALVE
- HYDRO GENERATOR

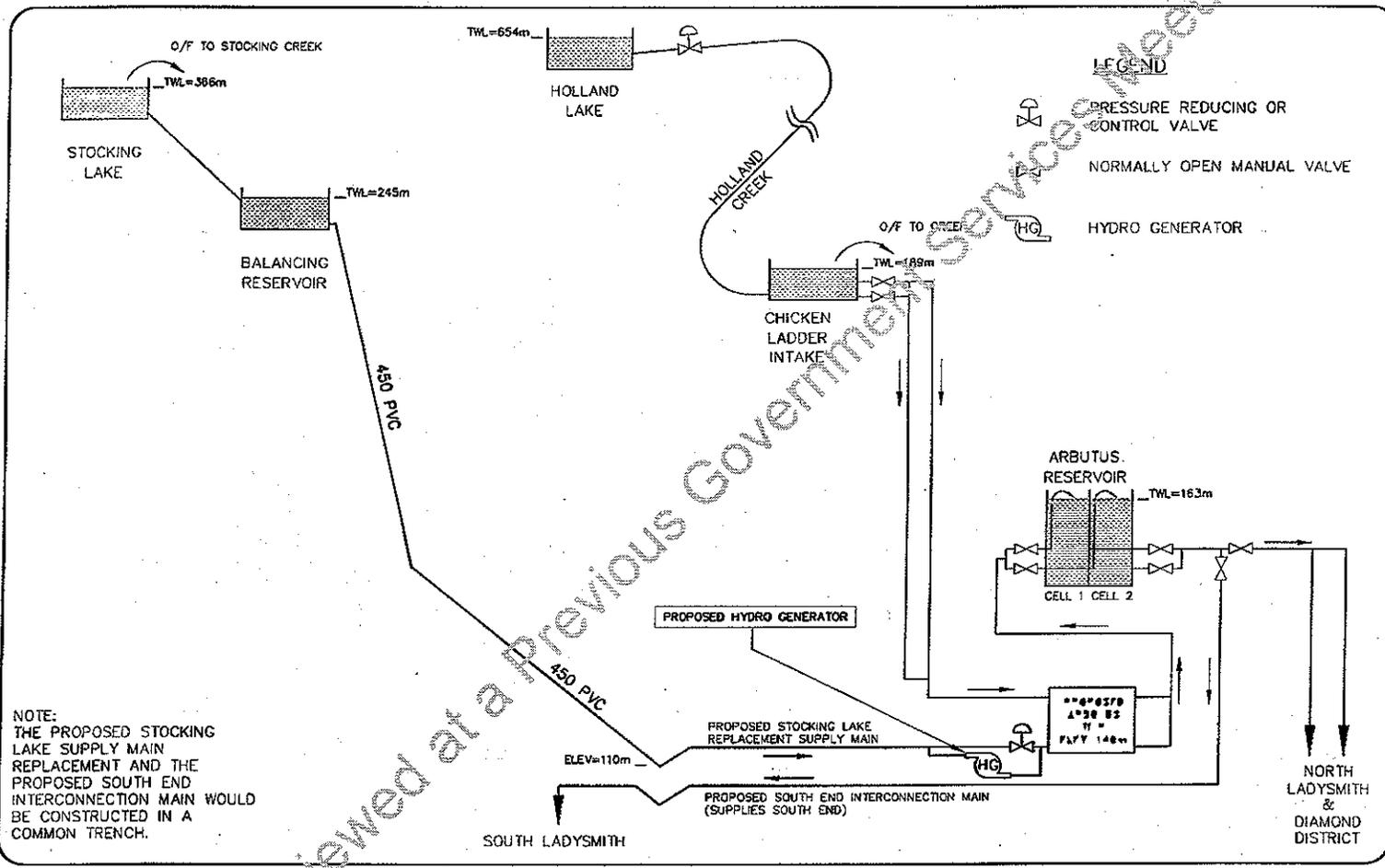
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Consulting Engineers

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Ph: 250-334-0390 Fax: 250-334-3381

CLIENT	TOWN OF LADYSMITH
PROJECT	STOCKING LAKE SUPPLY MAIN & INTERCONNECTION MAIN

SUBJECT		LADYSMITH WATER SUPPLY FLOW SCENARIO No. 2	
APPROVED		SCALE	N.T.S.
DATE	MAY 2010	DWG No.	FIG. 2
JOB No.	0906		



NOTE:
 THE PROPOSED STOCKING
 LAKE SUPPLY MAIN
 REPLACEMENT AND THE
 PROPOSED SOUTH END
 INTERCONNECTION MAIN WOULD
 BE CONSTRUCTED IN A
 COMMON TRENCH.

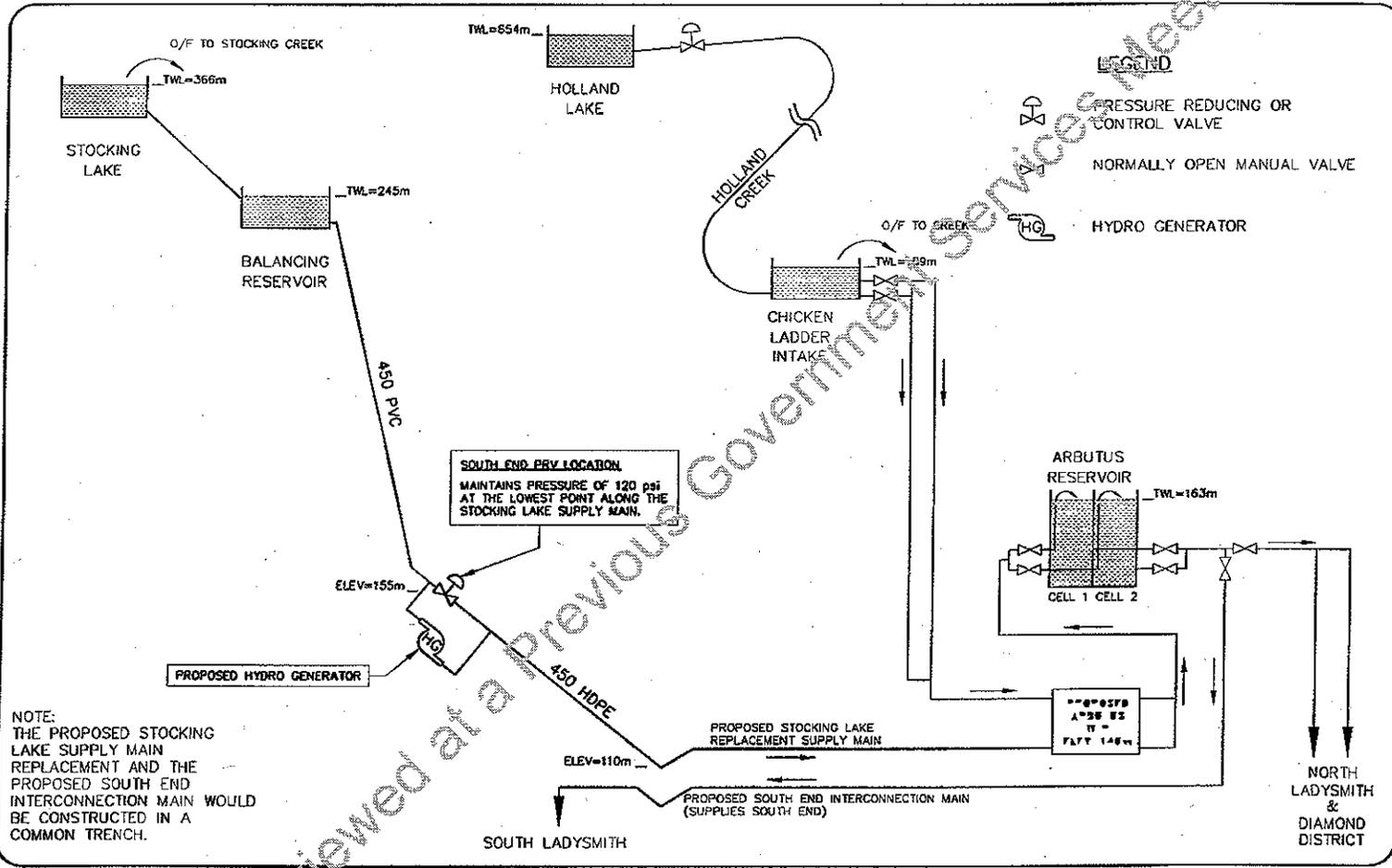
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 Fax: 250-334-8344

CLIENT	TOWN OF LADYSMITH
PROJECT	STOCKING LAKE SUPPLY MAIN & INTERCONNECTION MAIN

SUBJECT		LADYSMITH WATER SUPPLY FLOW SCENARIO No. 3	
APPROVED		SCALE	N.T.S.
DATE	MAY 2010	DWC No.	FIG. 3
JOB No.	0906		



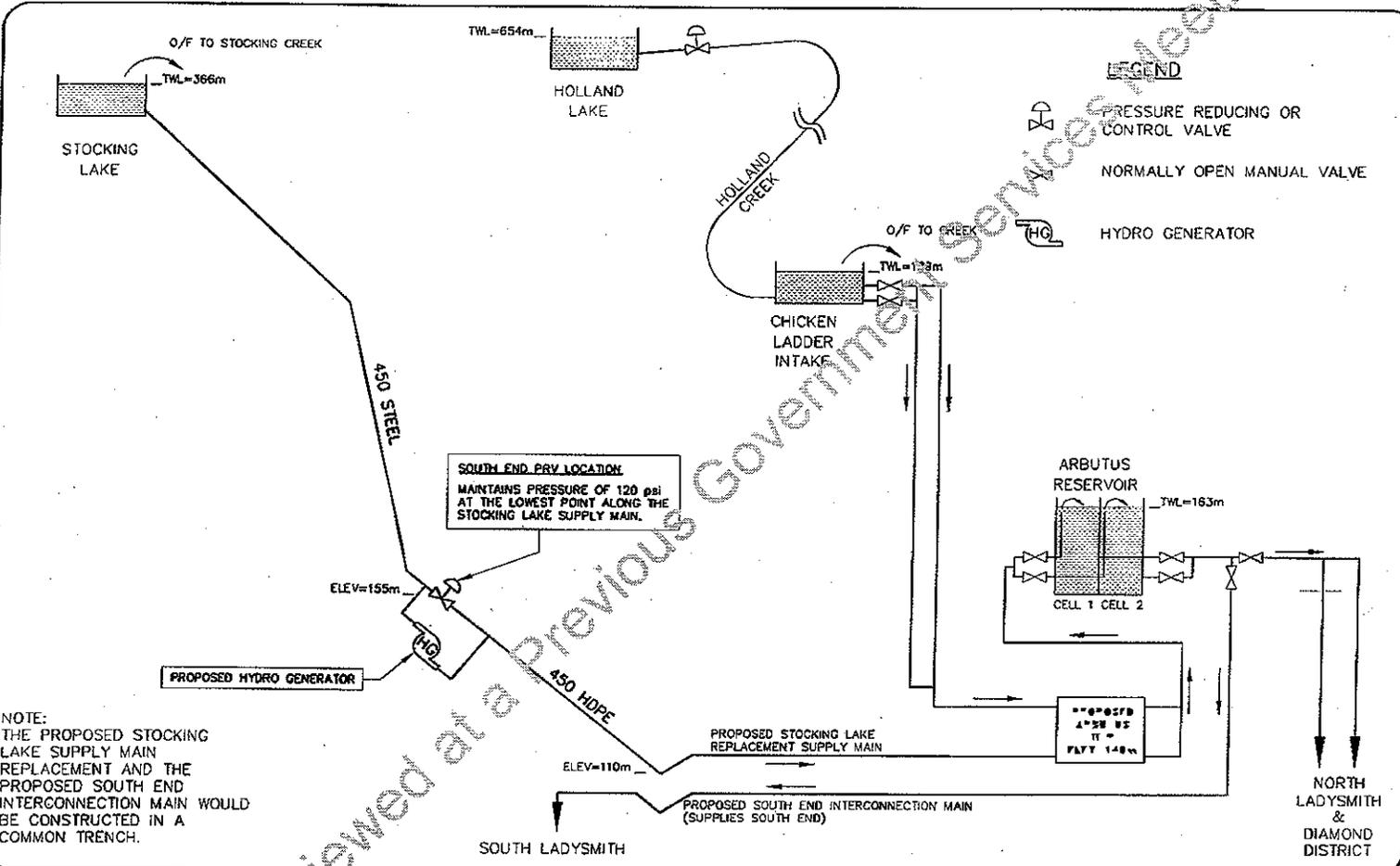
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Fax: 250-334-2391

CLIENT	TOWN OF LADYSMITH
PROJECT	STOCKING LAKE SUPPLY MAIN & INTERCONNECTION MAIN

SUBJECT		LADYSMITH WATER SUPPLY FLOW SCENARIO No. 5	
APPROVED		SCALE	N.T.S.
DATE	MAY 2010	DWG No.	FIG. 5
JOB No.	0906		



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 Consulting Engineers

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CLIENT	TOWN OF LADYSMITH
PROJECT	STOCKING LAKE SUPPLY MAIN & INTERCONNECTION MAIN

SUBJECT		LADYSMITH WATER SUPPLY FLOW SCENARIO No. 6	
APPROVED		SCALE	N.T.S.
DATE	MAY 2010	DWC No.	FIG. 6
JOB No.	0906		

Appendix B - Cost Estimate Definitions

Report Reviewed at a Previous Government Services Meeting



Cost Estimate Class Definitions

Class A Estimate

This is a detailed estimate based on quantity take-off from final drawings and specifications. It is used to evaluate tenders or as a basis of cost control during day-labour construction.

Class B Estimate

This estimate is prepared after site investigations and studies have been completed and the major systems defined. It is based on project brief and preliminary design. It is used for obtaining approvals, budgetary control and design cost control.

Class C Estimate

This estimate, which is prepared with limited site information, is based on probable conditions affecting the project. It represents the summation of all identifiable project component costs. It is used for program planning, to establish a more specific definition of client needs and to obtain approval-in-principle.

Class D Estimate

This is a preliminary estimate, which due to little or no site information, indicates the approximate magnitude of cost of the proposed project, based on the client's broad requirements. This overall cost estimate may be derived from a completed project of similar size, complexity and technology use. It is intended as a reference for discussion purposes.

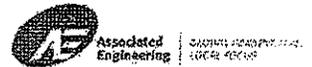
Report Reviewed at a Previous Government Services Meeting

Appendix C - Site Identification Assessment Data

Report Reviewed at a Previous Government Services Meeting



Hydraulic Energy Recovery
Town of Ladysmith - Arbutus WTP



Conceptual Design Cost Estimate (Class D Estimate)

Prepared by: K. Bush
Date: 8-Jul-10

Scenario 1						
		Generation Capacity:		40 kW		
		Location:		Inlet at Arbutus WTP		
Component	Unit	Unit Cost	Quantity	Cost	Comments	
Pump-as-Turbine Equipment	Lump Sum	\$ 35,000	0.7	\$ 24,500		
Energy Recovery Equipment Piping and Valving	Lump Sum	\$ 55,000	0.7	\$ 38,500		
Electrical (Installation and MCC)	Lump Sum	\$ 100,000	0.5	\$ 50,000		
Instrumentation and Controls	Lump Sum	\$ 50,000	1	\$ 50,000		
Building and Related Civil	Lump Sum	\$ 10,000	0	\$ -	- Located in new WTP building	
Contingency (40%)				\$ 65,200		
Total				\$ 228,200		

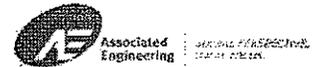
Scenario 2						
		Generation Capacity:		70 kW		
		Location:		Inlet at Arbutus WTP		
Component	Unit	Unit Cost	Quantity	Cost	Comments	
Pump-as-Turbine Equipment	Lump Sum	\$ 35,000	0.9	\$ 31,500		
Energy Recovery Equipment Piping and Valving	Lump Sum	\$ 55,000	0.9	\$ 49,500		
Electrical (Installation and MCC)	Lump Sum	\$ 100,000	0.5	\$ 50,000		
Instrumentation and Controls	Lump Sum	\$ 50,000	1	\$ 50,000		
Building and Related Civil	Lump Sum	\$ 10,000	0	\$ -	- Located in new WTP building	
Contingency (40%)				\$ 72,400		
Total				\$ 253,400		

Scenario 3						
		Generation Capacity:		70 kW		
		Location:		Inlet at Arbutus WTP		
Component	Unit	Unit Cost	Quantity	Cost	Comments	
Pump-as-Turbine Equipment	Lump Sum	\$ 35,000	0.9	\$ 31,500		
Energy Recovery Equipment Piping and Valving	Lump Sum	\$ 55,000	0.9	\$ 49,500		
Electrical (Installation and MCC)	Lump Sum	\$ 100,000	0.5	\$ 50,000		
Instrumentation and Controls	Lump Sum	\$ 50,000	1	\$ 50,000		
Building and Related Civil	Lump Sum	\$ 10,000	0	\$ -	- Located in new WTP building	
Contingency (40%)				\$ 72,400		
Total				\$ 253,400		

Scenario 4						
		Generation Capacity:		60 kW		
		Location:		Southend PRV Station		
Component	Unit	Unit Cost	Quantity	Cost	Comments	
Pump-as-Turbine Equipment	Lump Sum	\$ 35,000	0.8	\$ 28,000		
Energy Recovery Equipment Piping and Valving	Lump Sum	\$ 55,000	0.8	\$ 44,000		
Electrical (Installation and MCC)	Lump Sum	\$ 100,000	1	\$ 100,000		
Instrumentation and Controls	Lump Sum	\$ 50,000	1	\$ 50,000		
Building and Related Civil	Lump Sum	\$ 10,000	1	\$ 10,000	Retrofit into Southend chlorination building	
Contingency (40%)				\$ 92,800		
Total				\$ 324,800		

Report Reviewed at a Previous Government Services Meeting

Hydraulic Energy Recovery
Town of Ladysmith - Arbutus WTP



Conceptual Design Cost Estimate (Class D Estimate)

Prepared by: K. Bush
Date: 8-Jul-10

Scenario 5

Generation Capacity: 60 kW
Location: Southend PRV Station

Item	Unit	Unit Cost	Quantity	Total Cost	Comments
Pump-as-Turbine Equipment	Lump Sum	\$ 35,000	0.8	\$ 28,000	
Energy Recovery Equipment Piping and Valving	Lump Sum	\$ 55,000	0.8	\$ 44,000	
Electrical (Installation and MCC)	Lump Sum	\$ 100,000	1	\$ 100,000	
Instrumentation and Controls	Lump Sum	\$ 50,000	1	\$ 50,000	
Building and Related Civil	Lump Sum	\$ 10,000	1	\$ 10,000	Retrofit into Southend chlorination building
Contingency (40%)				\$ 92,800	
Total				\$ 324,800	

Scenario 6

Generation Capacity: 150 kW
Location: Southend PRV Station

Item	Unit	Unit Cost	Quantity	Total Cost	Comments
Pump-as-Turbine Equipment	Lump Sum	\$ 35,000	1.2	\$ 42,000	
Energy Recovery Equipment Piping and Valving	Lump Sum	\$ 55,000	1	\$ 55,000	
Electrical (Installation and MCC)	Lump Sum	\$ 100,000	1	\$ 100,000	
Instrumentation and Controls	Lump Sum	\$ 50,000	1	\$ 50,000	
Building and Related Civil	Lump Sum	\$ 10,000	1	\$ 10,000	Retrofit into Southend chlorination building
Contingency (40%)				\$ 102,800	
Total				\$ 359,800	

Scenario 7

Generation Capacity: 100 kW
Location: Inlet at Arbutus WTP

Item	Unit	Unit Cost	Quantity	Total Cost	Comments
Pump-as-Turbine Equipment	Lump Sum	\$ 35,000	1.5	\$ 52,500	
Energy Recovery Equipment Piping and Valving	Lump Sum	\$ 55,000	1	\$ 55,000	
Electrical (Installation and MCC)	Lump Sum	\$ 100,000	0.5	\$ 50,000	
Instrumentation and Controls	Lump Sum	\$ 50,000	1	\$ 50,000	
Building and Related Civil	Lump Sum	\$ 10,000	0	\$ -	Located in new WTP building
Contingency (40%)				\$ 83,000	
Total				\$ 290,500	

Scenario 8

Generation Capacity: 210 kW
Location: Stocking Lake PRV

Item	Unit	Unit Cost	Quantity	Total Cost	Comments
Pump-as-Turbine Equipment	Lump Sum	\$ 35,000	2	\$ 70,000	
Energy Recovery Equipment Piping and Valving	Lump Sum	\$ 55,000	1	\$ 55,000	
Electrical (Installation and MCC)	Lump Sum	\$ 100,000	1	\$ 100,000	
Instrumentation and Controls	Lump Sum	\$ 50,000	1	\$ 50,000	
Building and Related Civil PRV Station	Lump Sum	\$ 10,000	2	\$ 20,000	New building required
Contingency (40%)			1	\$ 75,000	Cost estimate based on data from Koers
Total				\$ 488,000	



Town of Ladysmith
STAFF REPORT

To: Ruth Malli, City Manager
From: Ray Delcourt, Fire Chief
Date:
File No:

RE: TOWNS FOR TOMORROW GRANT APPLICATION – LADYSMITH FIRE HALL
UPGRADE PROJECT

RECOMMENDATION(S):

That Council support the proposed Fire Hall upgrade project and authorize the submission of a Towns for Tomorrow grant application for the full contribution amount of \$375,000.

PURPOSE:

The purpose of this staff report is to seek Council's authorization to proceed with an application to the Towns for Tomorrow grant program to assist with the funding of the Ladysmith Fire Hall upgrade project.

INTRODUCTION/BACKGROUND:

The proposed upgrades to the Ladysmith Fire Hall will result in improvements to emergency response times, allow the Town to meet current standards, consolidation of all fire department resources into a central facility, and provide an improved facility for paid on call Firefighters. The Ladysmith Fire Hall is 39 years old and accommodates 35 firefighters as well as all fire apparatus, equipment, administration, education, inspection and fire training facilities. The Ladysmith Fire Department serves the Town of Ladysmith, the "Diamond" Improvement District, the Saltair Improvement District and on occasion the CVRD. The following issues are presented for Council's consideration:

- Since construction of the building 1972 the number of emergency calls has increased significantly.
- In order to meet capacity as defined by the fire underwriter and the Town's Emergency Vehicle Replacement Plan, a new rescue truck is required in 2011 however there is no space in the existing Fire Hall for the new vehicle.
- There have been no significant upgrades to the Fire Hall since it was built. The current facility requires upgrades to meet current standards.
- The Fire Hall serves as a base for emergency operations in the event of a large-scale disaster.
- The Fire Hall does not provide dedicated training or classroom space.
- There are no shower/locker facilities.

SCOPE OF WORK:

The proposed upgrade includes:

- Three extra fire apparatus bays (for existing and replacement vehicles)
- Increased storage capacity for firefighting equipment, turn-out gear and other personal protection equipment, fire hose, and spare equipment.
- SCBA (Self Contained Breathing Apparatus) refilling, cleaning, and testing room.
- Workshop.
- Turn-out gear change room.
- Improvements to administration area to accommodate the daily public needs, office space for staff and on-call firefighters.
- Improvements to the shower/washroom/change room facilities.
- More space between apparatus for safer movement throughout the Fire Hall.
- Improvements to kitchen and lounge areas.
- Training room (classroom) will be increased in size to provide for larger groups to be trained at one time. Also for proper storage of essential training materials and equipment. Currently using the portable located behind the Fire Hall.
- Training (hose) tower to aid in the training for confined space rescue, rope rescue and ladder rescue. Also to hang dry fire hose after use.
- Accommodations for firefighters.

ALTERNATIVES:

The fire hall upgrade project is proposed for consideration for the Towns for Tomorrow grant funding program. Council could choose another project.

FINANCIAL IMPLICATIONS:

If the Council approves this grant application and the Town Of Ladysmith's grant application is successful, the cost of the fire hall upgrade will be reduced by the grant amount.

At this time, Council has not approved the upgrade to the Fire Hall. Staff is unable to provide cost estimates, though it is expect the costs to be significant. It is anticipated that upgrading the fire hall will require borrowing through the Municipal Finance Authority. This borrowing may require the Town of Ladysmith to obtain electoral ascent (referendum).

If Council approves this application, there is the potential to receive the grant money but not receive approval from the voters. This scenario would require the grant monies to be refunded back to the Province.

LEGAL IMPLICATIONS: N/A

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

Over the past few years many local governments throughout BC have made significant improvements to their Fire Department facilities. Staff are confident that the citizens of Ladysmith support the Ladysmith Fire Department and support steps towards improving its response to emergencies affecting the community.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

All departments will be involved in this project as it proceeds.

RESOURCE IMPLICATIONS:

No additional staffing resources are anticipated at this time.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

This project aligns with the 7th Pillar of Sustainability for Ladysmith – “A Healthy Community”. It will also incorporate the 3rd Pillar of Sustainability – “Green Buildings”.

ALIGNMENT WITH STRATEGIC PRIORITIES:

The Fire Hall upgrade project aligns with Strategic Direction F – “A Safe and Healthy Community”.

SUMMARY:

The Towns for Tomorrow grant program provides funding for infrastructure projects that address climate change and contribute to the overall health, sustainability and liveability of communities. The program provides up to 80% of the funding for Municipalities and Regional Districts for approved projects. Staff requests Council's consideration of supporting the submission of a Towns for Tomorrow grant application for the Fire Hall upgrade project.

I concur with the recommendation.



Ruth Malli, City Manager

ATTACHMENTS:

None



Town of Ladysmith

STAFF REPORT

To: Ruth Malli, City Manager
From: Patrick Durban, Director of Parks, Recreation & Culture
Date: January 7, 2011
File No:

RE: TOWNS FOR TOMORROW GRANT APPLICATION FOR THE DL108 PLAYFIELD

RECOMMENDATION:

That Council not consider applying for a Towns for Tomorrow Grant for construction of softball fields at the DL108 Playfield unless additional funding sources are identified.

PURPOSE:

To determine if sufficient funding is available under the Towns for Tomorrow grant to construct softball fields at the Lot 108 Playfield.

INTRODUCTION / BACKGROUND:

Phase I of the DL108 Playfield is nearing completion and further phases are contemplated, which include the construction of two regulation sized softball fields. This project would qualify under a Towns for Tomorrow Grant with the maximum contribution from the province being \$375,000, together with a matching contribution from the Town of 25-percent or \$125,000, bringing the total for this proposed initiative total to \$500,000. Preliminary estimates have the budget for one of the fields being in excess of \$600,000; therefore, additional funding sources over and above the Towns for Tomorrow grant will be required to carry out this phase.

SCOPE OF WORK:

There will be additional site preparation, as well as drainage, irrigation, growing medium, seeding, backstops and dugouts required.

ALTERNATIVES:

Council could decide to wait until the next round of grant opportunities and work on identifying and securing other funding sources in the meantime.

FINANCIAL IMPLICATIONS:

In order to apply for this grant, Council would need to confirm all funding sources.

LEGAL IMPLICATIONS:

N/A

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

N/A

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

This project would require assistance from the Public Works and Parks departments.

RESOURCE IMPLICATIONS:

The additional funding required would necessitate funds being reallocated from other capital projects.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT

Aligns with Healthy and Liveable Community strategy of the Sustainability Report.

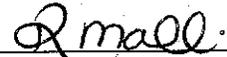
ALIGNMENT WITH STRATEGIC PRIORITIES:

This aligns with the strategic priorities of Dynamic Economic Development and a Safe and Healthy Community.

SUMMARY:

The Town is not in a position to proceed with this project unless additional funding sources are identified and confirmed.

I concur with the recommendation



Ruth Malli, City Manager

ATTACHMENTS:

none



Town of Ladysmith
STAFF REPORT

To: Ruth Malli, City Manager
From: Erin Anderson, Director of Financial Services
Date: December 28, 2010
File No:

RE: LADYSMITH GOLF CLUB REQUEST FOR LOAN

RECOMMENDATION(S):

That Council not provide a low-interest loan to the Ladysmith Golf Club.

PURPOSE:

To inform Council of the risks and financial implications of lending money and to provide a response to a request from the Ladysmith Golf Club that the Town consider providing the Club with a low interest loan for construction of a new club house.

INTRODUCTION/BACKGROUND:

In October 2010, the Ladysmith Golf Club sent a letter to Town Council requesting a \$50,000.00 low interest loan to aid in the construction of a new building on the Golf Course (letter attached).

Currently, the Ladysmith Golf Course is exempted, by Council bylaw, from paying property taxes. There is no current agreement requiring the Golf Club to pay for maintenance of the fairways or for water usage.

In 2010, the approximate value of services or grants received by the Golf Course from the Town was:

Property Taxes (municipal only)	\$ 2,534
Water Fess (up to 3000 m3)	\$ 2,136
Sewer Fees	\$ 39
Lawn Mowing Services (including wages)	\$ 7,686
Total Value of services currently received	\$12,395

SCOPE OF WORK:

If Council approved the loan authorization, permits and other site analysis would be required to ensure the new building meets the Town's building standards.

ALTERNATIVES:

The Golf Course Society could negotiate with local financial institutions that are in the business of offering loans.

FINANCIAL IMPLICATIONS:

There have been numerous projects over the last few years that have depleted the Town's reserves. Council is slowly rebuilding these reserves while attempting to keep property tax increases minimal.

In order to grant this loan, additional property taxes would be levied in order to cover the debt. Providing that there is payback, this debt would be a one-time cost and the debt would be serviced over a set time period.

It is anticipated that the Society contributes their own funds as well as partner with a community group for the actual construction. In the end, the asset would be owned by the Ladysmith Golf Club. The debt would be the responsibility of the Society. If the Society disbanded, the responsibility for debt repayments would be questionable.

LEGAL IMPLICATIONS:

An updated lease agreement is required.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

Communication of Council's direction is required to the Ladysmith Golf Club.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

RESOURCE IMPLICATIONS:

n/a

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

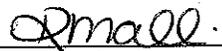
ALIGNMENT WITH STRATEGIC PRIORITIES:

This is consistent with the Council priority of Wise Financial Management.

SUMMARY:

It is recommended that Council not approve a request for a \$50,000 low interest loan to the Ladysmith Golf Club.

I concur with the recommendation.



Ruth Malli, City Manager

ATTACHMENTS:

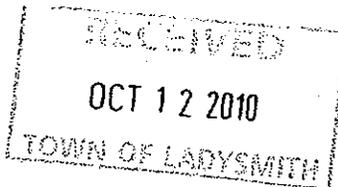
Correspondence from Mr Robert Heyes, President of Ladysmith Golf Club, received October 12, 2010.

Ladysmith Golf Club

380 Davis Road
Ladysmith, B.C. V9G 1
Telephone (250) 245-7

October 8, 2010

Town of Ladysmith
410 Esplanade, PO Box 220
Ladysmith, BC
V9G 1A2



To the Honourable Rob Hutchins and Ladysmith Town Council:

This past July, the Ladysmith Golf Club Society celebrated its 30th Anniversary. Through the years, with the help of countless volunteers and organizations, the club has provided a fundamental benefit to both young and old in our community. Our directors and adult members are a core group of committed golfers who support special events and encourage interaction among community groups. It is their goal to continue to promote and foster participation in a lifelong sport.

In recent years, however, the original clubhouse has deteriorated to the point where it is no longer economical to repair. The Board of Directors feels this is an opportunity to invest in a new clubhouse that would better suit the needs of its membership and the community.

With proper management and control of operating expenses, the Ladysmith Golf Club Society has accumulated a capital building fund of \$31,000, and has invested \$700/month towards this fund for the past two years. Recurring revenues from annual memberships and green fees will make it possible to continue this investment. We are seeking a low interest loan of \$50,000 from the Town of Ladysmith to help facilitate the construction of a new building. This loan, plus our own funds, would be used in a possible partnership with a willing service club (i.e. Rotary or Kinsmen) to build the clubhouse.

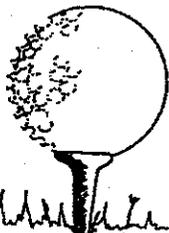
Your endorsement of our request would enable the club to move forward. Please do not hesitate to call should you have any questions regarding this matter. On behalf of the Board of Directors, I look forward to hearing from you soon.

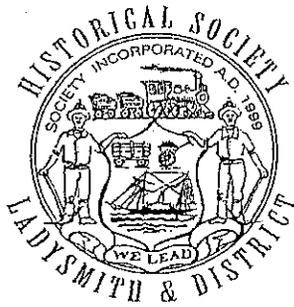
Sincerely,

A handwritten signature in cursive script that reads "Robert Heyes".

Mr. Robert Heyes
President

/lc





Ladysmith and District Historical Society
"To Research, Record and Preserve"
www.ladysmithhistoricalsociety.org

#B-1115-1st Avenue, PO Box 813, Ladysmith BC
V9G 1A6

Telephone & Fax (250) 245-0100

RECEIVED
DEC 20 2010
TOWN OF LADYSMITH

December 14, 2010

Mayor and Council
Town of Ladysmith

The members of the Ladysmith & District Historical Society would like to extend our best wishes for the New Year. We also wish to thank you for your continuing support of our efforts to maintain and run the Community Archives.

With the New Year upon us, our minds turn to the need to plan for our upcoming budgetary year. In recent years the Town has supported us through the 'grant in aid' process. While we are very grateful for this support, the chronic uncertainty surrounding the amount of funding we may receive makes it very difficult for us to plan any meaningful archival programs on an ongoing basis.

We would therefore like to request that you **consider funding the LDHS Archives as a line item within the Town's budget**. This would enable us to undertake long term (5 year) planning and thus to ensure the integrity and continuity of the Archives.

The volunteer-run LDHS functions as the primary custodian of the archives and artefacts of the Town, administering and protecting them, and making them available to the public. For example, up to 10 November 2010 volunteers had logged 58 written requests for information about Ladysmith's history. Open on average five days/week, we also regularly assist walk-ins and tourists who would like to know more about Ladysmith's past, provide information to building and homeowners who are interested in preserving and/or restoring their homes, and promote and publicize Ladysmith's rich history and heritage at many public events, through publications and via our online presence throughout the year.

Ladysmith is a community that clearly values its heritage and we try our best to maintain the Archives to the highest professional standards in order to preserve this history and keep it accessible, for now and for future generations.

Making us part of the Town's own financial planning process would ensure that we can continue to sustain and improve our operations on a long term basis and thus better fulfil our mandate to "research, record and preserve" our community's history. We would welcome the opportunity, with the assistance of Town staff, to create a financial plan that would comply with Town budgetary practices and would allow us to better manage our funding expectations.

Thank you very much for your consideration of this request.

Kind regards,



Isabelle Ouelette



December 23, 2010

Sandy Bowden
Director of Corporate Services
Town of Ladysmith
PO Box 220
LADYSMITH BC V9G 1A2

RECEIVED
DEC 29 2010

Dear Ms. Bowden:

Re: Chesterfield Sports Society (Cowichan Sportsplex) – Annual Financial Contribution

In the Spring of 2010, the Board of Directors for the Cowichan Valley Regional District passed the following resolution:

“That an Annual Financial Contribution Service be created for the Chesterfield Sports Society with a maximum annual requisition limit of \$100,000”.

In the Summer of 2010, discussion regarding which electoral areas and municipalities would be partners in this new service occurred at a Regional Services Committee meeting. The Regional Services Committee subsequently passed the following resolution:

“That a poll be conducted to determine which CVRD member municipalities and electoral areas are interested in participating in a new service to requisition a maximum \$100,000 per annum to assist with funding the Cowichan Sportsplex”.

The results of the poll were:

<i>Are you interested in participating in a new service to requisition a maximum \$100,000 per annum to assist with funding the Cowichan Sportsplex?</i>		
Yes	Yes, (conditional on 100% participation)	No
Area C	Area A	Area F
Area D	Area B	Area H
Area E	Area G	Area I
City of Duncan	Town of Ladysmith	Town of Lake Cowichan
District of North Cowichan		

Based on the results of the poll, there was not enough support to move forward with the creation of a new service requisitioning \$100,000 to fund the Cowichan Sportsplex and the Board subsequently rescinded the original resolution.

.../2

However, staff was asked to determine the cost per \$100,000 of assessed value for a requisition of \$100,000 based on creating a new service consisting solely of the partners who wished to participate. In the Autumn of 2010, the CVRD's Treasurer provided a report to the Regional Services Committee with the cost implications of a new Cowichan Sportsplex annual financial contribution service based on a partnership of 9 jurisdictions (instead of 13 jurisdictions).

The financial implications of the proposed new service would be as follows:

Proposed Cowichan Sportsplex Annual Financial Contribution Service		
Participants	Annual Requisition	Cost per \$100,000 of Assessed Value
Area A – Mill Bay/Malahat Area B – Shawnigan Lake Area C – Cobble Hill Area D – Cowichan Bay Area E – Cowichan Station/Sahtlam/Glenora Area G – Saltair/Gulf Islands City of Duncan Town of Ladysmith District of North Cowichan	\$100,000	\$0.80

If all 13 jurisdictions participated, the cost per \$100,000 would be \$0.68. Without the participation of Area F – Cowichan Lake South/Skutz Falls, Area H – North Oyster Diamond, Area I – Youbou/Meade Creek, and the Town of Lake Cowichan, there will be an increase of \$0.12 to \$0.80.

The Board has directed that letters be sent to the City of Duncan, the Town of Ladysmith and the District of North Cowichan requesting an expression of interest in participating in this proposed new service.

Please advise whether or not your municipality is interested in participating in this proposed new service. Your response would be appreciated by February 28, 2011.

Sincerely,



J.E. Barry
Corporate Secretary

JB:rj
pc: CVRD Board of Directors
rosa/motions/Sportsplex 2010 Expression of Interest



Ladysmith Maritime Society

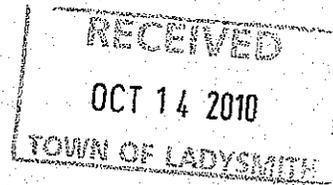
www.ladysmithmaritimesociety.ca

P.O. Box 1030, Ladysmith, B.C., V9G 1A7

Tel: 250-245-0109 Fax: 250-245-0108

October 12, 2010

Mayor Rob Hutchins
Town Of Ladysmith
Main Office
410 Esplanade, P. O. Box 220
Ladysmith, B.C. V9G 1A2



Dear Mayor Hutchins:

Re: Town share of costs incurred at LMS Community Marina

The purpose of this letter is to present certain costs incurred by LMS during the Town of Ladysmith's current fiscal year and costs expected during the 2011 fiscal year as a basis for discussion regarding a sharing of these costs and, in the case of 2011, provision for them in the Town's budget. The subject costs and projects are summarized on the attached page.

A discussion of the benefits places these costs in perspective. In 2010 LMS had 794 visitor-boat nights. At the well established average spending in the community of \$200-250/boat/day, we can confidently estimate that an incremental \$180,000 of direct spending in the Town's businesses resulted from this program, with an estimated total of \$325,000 total economic impact in the region. LMS expects these benefits to be 25% greater in 2011 due to continued marketing and to improved facilities and a cleaner site offered to visitors.

As further background, LMS pays the annual lease payment owed by the Town to the Province, an amount that was \$15,900 in 2010 and is forecast to be \$18,100 in 2011. Furthermore, in a cost burden not shared by other marinas, LMS pays the Town an additional annual rental for the water lot - \$16,100 in 2010 and a forecast \$18,800 in 2011. LMS also paid \$13,500 in property taxes in 2010 and forecasts \$15,000 in 2011.

The Town and the Ladysmith Maritime Society (LMS) entered into a Memorandum of Understanding on October 15, 2008. This Memorandum, based on a shared vision and a spirit of partnership, set out a principled relationship that would govern the parties relative to the development and functioning of the Community Marina. These principles were embedded in subsequent agreements entered into by the Town, DL 2016 Holdings Corp., and LMS. One of these principles is that "the parties will have joint responsibility for marketing the community marina for the purposes of enhancing and expanding marine tourism." The rationale for this principle is that a successful marine tourism program benefits the entire community. Advertising and marketing costs for 2010 and 2011, together with a proposal for cost-sharing, are summarized in the attached chart.

Significant costs were also incurred in 2010 in cleaning up marine junk and unused and rotting pilings that came with the lot. While all of this junk was on DL 2016, under lease to the Town, not all of it was on the portion licensed by the Town, as landlord, to LMS. Because ridding the location of this unsightly material was important to attracting marine tourists, we propose that the Town share in the cost of this one-time clean-up.

LMS paid the substantial costs of fitting up the washroom at the end of the Expo building and has placed a portable facility in the parking area down at the marina. The full cost of maintaining and cleaning these facilities is being borne by LMS. Our intent in upgrading these facilities was to provide a very basic level of amenities for marine tourists. These facilities are now used extensively by members of the public, who are actively encouraged to come down to their water front, and by the other tenants in the Expo building. The tenants have declined to share the maintenance and cleaning costs on the basis that access to a washroom was a provision of their lease from the Town. New washrooms will be part of the new Visitor Reception Centre and be a cost to LMS, but we propose that maintenance and cleaning costs of the Expo washroom and portable be shared by the Town.

Finally, I would like to draw to your attention to two projects in 2011 that will require 100% Town expenditure. Both of these projects have been discussed with you and Town staff:

1. LMS expects to install a marine sewage pump-out station in the marina in 2011. Sewage will be pumped to shore, but it needs to connect to the Town infrastructure there. Expense will be incurred by the Town in making this extension and connecting to the shore flange; and
2. The marina parking area becomes very congested and very difficult for emergency vehicles to access and turn around. A second road egress is required from the area for safety reasons.

I would be pleased to discuss the above proposals with you at any time.

Yours sincerely,



Doug Bell
President

cc. Ruth Malli, President, DL 2016 Holdings Corp.

Attachment