



# 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, NOVEMBER 21, 2016

Call to Order and Closed Meeting

6:00 p.m.

Regular Open Meeting

7:00 p.m.

## AGENDA

### CALL TO ORDER (6:00 P.M.)

#### 1. CLOSED SESSION

In accordance with section 90(1) of the *Community Charter*, this section of the meeting will be held *In Camera* to consider matters related to the following:

- Provision of a municipal service
- Legal advice
- Litigation

### REGULAR MEETING (7:00 P.M.)

#### 2. AGENDA APPROVAL

#### 3. RISE AND REPORT – Items from Closed Meeting

#### 4. MINUTES

- 4.1. Minutes of the Regular Meeting of Council held November 7, 2016..... 1 – 4  
4.2. Minutes of the Special Meeting of Council held November 14, 2016 .....5 - 6

#### 5. DELEGATIONS

- 5.1. Nanaimo Pride Society  
Lauren Semple  
Diversity, Inclusion and Support for All Citizens
- 5.2. Our Cowichan – Communities Health Network  
Cindy Lise  
Smoking Bylaws

#### 6. PROCLAMATIONS - None

#### 7. DEVELOPMENT APPLICATIONS - None

**8. BYLAWS (OFFICIAL COMMUNITY PLAN AND ZONING) – None**

**9. REPORTS**

**9.1. Recommendations from the Municipal Services Committee Meeting of November 14, 2016..... 7**

Staff Recommendation:

That Council:

1. Direct staff to publish the amended Grants-in-Aid policy as presented ..... **8 - 9**
2. Enter into a Service Agreement with the Ladysmith and District Historical Society for the operation of the Ladysmith Archives and Ladysmith Museum.
3. Continue to consider providing annual financial assistance to the Ladysmith Resources Centre Association under the Grants-in-Aid program.
4. Adopt the Terms of Reference for the Parks, Recreation & Culture Advisory Committee as presented..... **10 - 12**
5. Adopt the Terms of Reference for the Invasive Species Advisory Committee as presented..... **13 - 15**
6. Extend a personal invitation to the Directors of Cowichan Valley Regional District Areas G and H as well as Stz'uminus First Nation Council requesting participation on the Town of Ladysmith Parks, Recreation & Culture and Invasive Species Advisory Committees.
7. Direct staff to commence the membership recruitment process for Town of Ladysmith citizen representatives for the Parks, Recreation & Culture and Invasive Species Advisory Committees.
8. Direct staff to prepare a bylaw repealing Town of Ladysmith Parks and Recreation Commission Bylaw 1278 and Amendment Bylaws 1311 and 1528.
9. Direct staff to work with the Ladysmith Maritime Society and Ladysmith and District Arts Council on their request to install security cameras in the vicinity of the Machine Shop and parking lot stairs.

**9.2. Agreement for Visitor and Business Information Services with Ladysmith Chamber of Commerce ..... 16 - 19**

Staff Recommendation:

That Council authorize an extension to the operating agreement between the Town and the Ladysmith Chamber of Commerce for a one year term commencing January 1, 2017 and expiring on December 31, 2017 and authorize the Mayor and Corporate Officer to sign the agreement.

**9.3. Water Filtration Plant..... 20 - 36**

Staff Recommendation:

That Council:

1. Direct staff to proceed with the construction of the Arbutus Water Treatment Plant, consisting of coagulation, flocculation, DAF and membrane filtration, consistent with the recommendations of the *“Town of Ladysmith Arbutus Water Treatment Plant Phase 2 Pilot-scale Treatability Study – September 2015.”*
2. Waive the Town’s purchasing policy and direct-award the Design and Construction Services for the Arbutus Water Treatment Plant to Associated Engineering (BC) Ltd. as outlined in the proposal of services dated October 2016.
3. Direct staff to notify Island Health that Council desires to amend the completion date for the Filtration Plant project in the Town’s water system operating permit to March 31, 2019 and that the detailed work plan developed in the engineering proposal from Associated Engineering and Koers and Associates Ltd. be used to support the request.
4. Direct staff to notify the Director, Local Government Infrastructure and Engineering, (Ministry of Community, Sport and Cultural Development) that Council wishes to request an extension of one year to the approved grant for the Water Filtration Project.
5. Direct staff to prepare a communication plan for the Water Treatment Plant project and if necessary retain the services of a communication consultant for this process.

**9.4. Infrastructure Planning Grant Application**

Council may recall that authority was given for staff to apply to the BC Rural Dividend Program to fund a feasibility study of the extension of the services to south Ladysmith. That application was denied. Staff have found another grant program to assist in analysing the feasibility of extending water and sewer services and require a Council resolution in support of this new application. This new program provides funding for projects up to \$10,000.00.

Staff Recommendation:

That Council direct staff to apply to the Infrastructure Planning Grant Program for a grant in the amount of \$10,000 to support a feasibility study for the extension of services to south Ladysmith.

**10. CORRESPONDENCE**

**10.1. Mayor Terry Murdock, Municipality of Thorne, Ladysmith, Quebec.....37  
Request to Become Twin Municipalities for Canada’s 150<sup>th</sup> anniversary**

Staff Recommendation:  
That Council

1. Accept the invitation from the Municipality of Thorne that Ladysmith, Quebec and Ladysmith, British Columbia become twin municipalities in celebration of Canada's 150<sup>th</sup> anniversary
2. Direct staff to send a Ladysmith flag and other items that represent our community to the Municipality of Thorne and to work with staff at the Municipality of Thorne to jointly promote this arrangement.

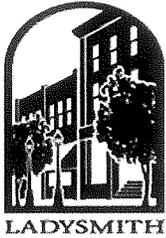
**11. NEW BUSINESS**

**12. UNFINISHED BUSINESS**

**13. QUESTION PERIOD**

- A maximum of 15 minutes is allotted for questions.
- Persons wishing to address Council during "Question Period" must be Town of Ladysmith residents, non-resident property owners, or operators of a business.
- Individuals must state their name and address for identification purposes.
- 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.

**ADJOURNMENT**



**TOWN OF LADYSMITH**  
**MINUTES OF A REGULAR MEETING OF COUNCIL**  
**MONDAY, NOVEMBER 7, 2016**  
**CALL TO ORDER 5:03 P.M.**  
**COUNCIL CHAMBERS, CITY HALL**

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**COUNCIL MEMBERS PRESENT:**

Mayor Aaron Stone  
Councillor Joe Friesenhan  
Councillor Duck Paterson

Councillor Steve Arnett  
Councillor Carol Henderson

Councillor Cal Fradin  
Councillor Rob Hutchins

**STAFF PRESENT:**

Guillermo Ferrero  
Joanna Winter

Felicity Adams  
Sue Bouma

Clayton Postings

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**CALL TO ORDER**

Mayor Stone called this Meeting of Council to order at 5:03 p.m.

**CLOSED SESSION**

**CS 2016-353**

*Moved and seconded:*

That, in accordance with section 90(1) of the *Community Charter*, Council retire into closed session at 5:04 p.m. in order to consider items related to the following:

- Appointments to advisory committees
- Status of sale of Town-owned properties and proposed property acquisitions
- Human Resources matter

*Motion carried.*

**REGULAR OPEN MEETING**

Mayor Stone called this Regular Open Meeting to order at 7:00 p.m., recognizing the traditional territory of the Stz'uminus First Nation, acknowledging 5,500 years of history and stewardship and expressing gratitude to be here.

**AGENDA APPROVAL**

**CS 2016-354**

*Moved and seconded:*

That Council approve the agenda for this Regular Meeting of Council.

*Motion carried.*

**RISE AND REPORT**

Council rose from Closed Session at 6:14 p.m. without report.

**MINUTES**

**CS 2016-355**

*Moved and seconded:*

That Council approve the minutes of the Regular Meeting of Council held October 17, 2016.

*Motion carried.*

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**DELEGATIONS**

**Special Presentation to John Wilson, Retiring Chair of the Liquid Waste Management Committee**  
Mayor Stone introduced John Wilson, retiring chair of the Liquid Waste Management Committee, summarizing his past contributions and service to the Town and recognizing the dedication and stewardship he demonstrated in his most recent role as chair of the largest capital project in the Town's history, the Waste Water Treatment Plant.

Council thanked Mr. Wilson for his years of service and commitment to the committee, and expressed their appreciation with a plaque.

**DEVELOPMENT APPLICATIONS**

**Development Permit Application - 1201 & 1251 Christie Rd (Front Forty Ventures Ltd.)**

**Subject Property: Lots 7 & 8, District Lot 147, Oyster District, Plan 85271**

*Moved and seconded:*

CS 2016-356

That Council:

1. Issue Development Permit (DP) 3060-16-03 for Lots 7 & 8, District Lot 147, Oyster District, Plan 85271 (1201 & 1251 Christie Rd.) to permit a 66 unit townhouse development, subject to the applicant submitting a bond in the amount of 100 per cent of the onsite landscaping; and

2. Authorize the Mayor and Corporate Officer to sign the permit.

*Motion carried.*

**Development Variance Permit Application - 515 Walkem Rd (Toole)**

**Subject Property: Lot 2, District Lot 41, Oyster District, Plan VIP79202**

*Moved and seconded:*

CS 2016-357

1. That Council issue Development Variance Permit 3090-16-07 to vary the maximum height of a single unit dwelling from 9.0 metres to 9.24 metres to legalize the height of a dwelling being constructed on Lot A, District Lot 129, Oyster District, Plan VIP6533 (515 Walkem Rd.); and

2. Authorize the Mayor and Corporate Officer to sign the permit.

*Motion carried.*

Councillor Hutchins left the meeting at 7:10 p.m.

**COUNCIL REPORTS**

*Moved and seconded:*

That Council provide its support for the Heritage BC Awards nomination of the Transfer Beach Pictorial Project for the Heritage Education and Awareness Award, and Shirley Blackstaff for the Distinguished Service Award.

CS 2016-358

*Motion carried.*

Councillor Fradin circulated documents from the Community Safety Advisory Committee and requested that they be linked on the Town's

website and social media.

Councillor Hutchins returned to the meeting at 7:45 p.m.

#### STAFF REPORTS

**Collaboration Agreement between the Town of Ladysmith and the Board of Education of School District 68 (Nanaimo-Ladysmith)**

*Moved and seconded:*

CS 2016-359

That Council:

1. Enter into a Collaboration Agreement between the Town of Ladysmith and School District 68 (Nanaimo – Ladysmith); and
2. Authorize the Mayor and Corporate Officer to sign the agreement.

*Motion carried.*

**Parks, Recreation & Culture and Invasive Species Advisory Committees Implementation Plan**

*Moved and seconded:*

CS 2016-360

That Council refer the Parks, Recreation & Culture and Invasive Species Advisory Committee Plan to the next Municipal Services Committee meeting, and direct staff to make amendments as discussed.

*Motion carried.*

#### CORRESPONDENCE

**Ladysmith Downtown Business Association**

**Request to Waive Trolley and Driver Fee for the Annual Old Tyme Christmas Event**

*Moved and seconded:*

CS 2016-361

That Council waive the trolley rental fee for the December 2, 2016 Annual Old Tyme Christmas Event as requested by the Ladysmith Downtown Business Association.

*Motion carried.*

**The Jessie's Legacy Eating Disorders Prevention and Awareness Program**

**Request to Light up Purple on Friday, February 3, 2017**

*Moved and seconded:*

CS 2016-362

That Council direct staff to consult with the Festival of Lights regarding the feasibility of lighting up the Town's dedicated purple tree on Friday, February 3, 2017 in support of the Eating Disorders Prevention and Awareness Program.

*Motion carried.*

#### QUESTION PERIOD

Members of the public enquired about the possibility of revisiting the requirements for the average finished grade for construction,, the new Communications Officer position, the possibility of waiving building permit fees for building improvements geared to enable accessibility, mini parks, and the possibility of reinstating a Town Tourism Advisory

Committee. Members of the public also complimented the Town on the improvements made to the website.

**ADJOURNMENT**

**CS 2016-363**

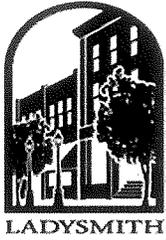
*Moved and seconded:*  
That this meeting of Council adjourn at 8:42 p.m.  
*Motion carried.*

CERTIFIED CORRECT:

\_\_\_\_\_  
Mayor (A. Stone)

\_\_\_\_\_  
Corporate Officer (J. Winter)

Subject to Adoption



**TOWN OF LADYSMITH  
MINUTES OF A SPECIAL MEETING OF COUNCIL  
MONDAY, NOVEMBER 14, 2016  
CALL TO ORDER 5:33 P.M.  
COUNCIL CHAMBERS, CITY HALL**

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**COUNCIL MEMBERS PRESENT:**

Mayor Aaron Stone	Councillor Steve Arnett	Councillor Cal Fradin
Councillor Joe Friesenhan	Councillor Carol Henderson	Councillor Rob Hutchins
Councillor Duck Paterson		

**STAFF PRESENT:**

Guillermo Ferrero	Erin Anderson	Geoff Goodall
Joanna Winter		

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**CALL TO ORDER**

Mayor Stone called this Special Meeting of Council to order at 5:33 p.m., acknowledging the traditional territory of Stz'uminus First Nation, acknowledging 5,500 years of history and stewardship and expressing gratitude to be here.

**CLOSED SESSION**

CS 2016-264

*Moved and seconded:*

That Council waive notice and add the following item to the agenda for the Closed Session of Monday, November 14, 2016:

- Waterfront Design Charrette Team

*Motion carried unanimously.*

*Moved and seconded:*

That Council retire into closed session at 5:35 p.m. in order to consider matters related to the following:

- Provision of a municipal service
- Waterfront Design Charrette Team

*Motion carried.*

*Moved and seconded:*

That this Special Meeting of Council recess at 6:24 p.m. and that it reconvene in Closed Session following the Municipal Services Committee Meeting.

*Motion carried.*

This Special Meeting of Council reconvened at 7:55 p.m. in order to resume the Closed Session.

**RISE AND REPORT**

Council rose from Closed Session at 8:42 p.m. without report.

**ADJOURNMENT**

*Moved and seconded:*

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CS 2016-265

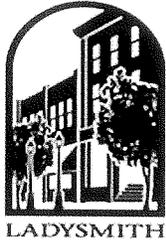
That this Special Meeting of Council adjourn at 8:43 p.m.  
*Motion carried.*

CERTIFIED CORRECT:

\_\_\_\_\_  
Mayor (A. Stone)

\_\_\_\_\_  
Corporate Officer (J. Winter)

Subject to Adoption



## Town of Ladysmith

### **COMMITTEE REPORT**

To: Mayor and Council  
From: Councillor Steve Arnett  
Chair, Municipal Services Committee  
Date: November 15, 2016  
File No: 0540-20

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#### Re: **MUNICIPAL SERVICES COMMITTEE RECOMMENDATIONS**

At its meeting held November 14, 2016, the Municipal Services Committee recommended that Council:

1. Direct staff to publish the amended Grants-in-Aid policy as presented
2. Enter into a Service Agreement with the Ladysmith and District Historical Society for the operation of the Ladysmith Archives and Ladysmith Museum.
3. Continue to consider providing annual financial assistance to the Ladysmith Resources Centre Association under the Grants-in-Aid program.
4. Adopt the Terms of Reference for the Parks, Recreation & Culture Advisory Committee as presented.
5. Adopt the Terms of Reference for the Invasive Species Advisory Committee as presented.
6. Extend a personal invitation to the Directors of Cowichan Valley Regional District Areas G and H as well as Stz'uminus First Nation Council requesting participation on the Town of Ladysmith Parks, Recreation & Culture and Invasive Species Advisory Committees.
7. Direct staff to commence the membership recruitment process for Town of Ladysmith citizen representatives for the Parks, Recreation & Culture and Invasive Species Advisory Committees.
8. Direct staff to prepare a bylaw repealing Town of Ladysmith Parks and Recreation Commission Bylaw 1278 and Amendment Bylaws 1311 and 1528.
9. Direct staff to work with the Ladysmith Maritime Society and Ladysmith District Arts Council on their request to install security cameras in the vicinity of the Machine Shop and parking lot stairs.



**TOWN OF LADYSMITH**  
**POLICIES AND PROCEDURE MANUAL**

**TOPIC: Grants-in-Aid**

**APPROVED BY: Council**

**DATE: Aug 6, 2013**

**RESOLUTION #: 2013-266**

*(Amended)*

**Purpose:**

To establish a policy for Council of the Town of Ladysmith that is designed to assist organizations with projects or special activities, or to allow them to take advantage of development opportunities and events.

**Policy:**

In granting financial assistance to an organization for a discretionary Grant-in-Aid, the Council of the Town of Ladysmith will take into account the following objectives:

1. The primary purpose of a grant in aid is to provide financial assistance to an organization for a specific project or event or service that benefits the residents of the Town of Ladysmith. The organization should be registered as, or belong to a parent Society under the laws of British Columbia and/or Canada.
2. Preference will be given to organizations that are locally based and whose efforts are community based in nature.
3. The Council of the Town of Ladysmith will not grant monies for a 'for profit' organization.

**Procedure:**

1. An organization applying for a grant in aid must provide the following information in order to have its application considered by Council:
  - Name of the organization
  - Name of the individual making the application
  - Description of the project or event for which funding is requested
  - Indicate whether or not the project or event or service is already provided in the community
  - Identify the beneficiaries of the project or event or service
  - Indicate the total cost of the project or event or service
  - Indicate other sources of funding for the project or event or service
  - Indicate whether the application to other local governments has been made
  - Indicate the volunteer labor and in-kind donations to be contributed towards the project or event or service by the members of the organization
  - Specify the amount of financial assistance required; and
  - Provide the organization's current annual budget and previous year's financial statements as presented at the last Annual General Meeting.
2. All Grant in Aid applications must be submitted, in writing, to the Finance Department by February 28<sup>th</sup> in order to be considered by the Council of the Town of Ladysmith for funding in the current year.
3. Grant in Aid applications received after February 28<sup>th</sup> may not be considered for funding in the current year. Further, the organization applying for the Grant in Aid must re-submit their application should they still be requesting financial assistance for the following year.

**TOPIC: Grants-in-Aid**

**APPROVED BY: Council**

**DATE: Aug 6, 2013**

**RESOLUTION #: 2013-266**

*(Amended)*

4. Organizations submitting an application for a Grant in Aid must complete the prescribed application.
5. Applications for funding will be considered at an open Council Meeting during the budget process. All decisions are final following ratification at the next Regular Meeting of Council.
6. An organization must, using the form provided, report back to Council by December 31<sup>st</sup> of the same year funding was received regarding how the monies were spent, including a budget sheet and pictures, if available. If a report is not received by the Town on or before December 31<sup>st</sup>, the organization shall be notified that they may be ineligible for further grant funding for a 3 year period from the year the grant was received.

**Conditions of Funding:**

1. If applicable, the applicant must acknowledge the support of the Town of Ladysmith in all print and publicity material related to the project including banners and signs on site during the event.
2. Funds must be used for the purpose for which they were requested.
3. In the event that the project is not completed, the Town of Ladysmith reserves the right to request the return of the grant.
4. An organization must prepare, using the form provided, a report regarding how the monies were spent, including a budget sheet and pictures, if available. If a report is not received by the Town on or before December 31<sup>st</sup>, the organization shall be notified that they may be ineligible for further grant funding for a period of 3 years from the year the grant was received.

Applications may be mailed to the following address:

**Town of Ladysmith  
PO Box 220  
Ladysmith, BC V9G 1A2**

Or picked up at City Hall at:

**410 Esplanade  
Ladysmith, BC**

**05 – 1850 - A**



## PARKS, RECREATION AND CULTURE ADVISORY COMMITTEE

### TERMS OF REFERENCE

#### APPROVED BY COUNCIL ON:

#### 1. Purpose

The Parks, Recreation and Culture Advisory Committee (PRCAC) is a select advisory committee of Council pursuant to section 142 of the *Community Charter*.

The purpose of the PRCAC is to assist the Town of Ladysmith Council by:

- Providing advice and recommendations to Council on any matters referred to the Committee by Council;
- Providing input consistent with the Parks, Recreation and Culture (PRC) Master Plan;
- Working cooperatively toward securing funds for implementation of the plan; and,
- Recommending activities, project, or work that the Committee thinks would assist Council to achieve the PRC Master Plan or other matters for which Council requests input.

#### 2. Goals / Outcomes

The goal of the PRCAC is to provide advice and recommendations to Council regarding the establishment and implementation of PRC priorities in the Town of Ladysmith.

#### 3. Operating Principles

The PRCAC will consider these operating principles when deliberating/reviewing matters related to PRC in Ladysmith:

- Budgetary restrictions/implications;
- Public spaces significance;
- Public assembly/usage;
- Staffing/resource implications;
- Public consultation.

Process Principles:

- Staff will provide information regarding ongoing issues including maintenance, budget, process, procedures, comments from Council, and other matters as requested.
- The PRCAC will provide its advice and recommendations to Council in a prompt manner once it has completed its consideration/review of specific matters.
- The Procedure Bylaw of the Town applies to meetings of the PRCAC.

#### 4. Administrative Matters

i. Membership

The PRCAC consists of eight members, including:

- Five citizen representatives appointed by Council through a public recruitment process ensuring a diverse cross-section of the community, including but not limited to Arts and Culture, Sports, youth, etc.;
- One representative from CVRD Area H;
- One representative from CVRD Area G;
- One representative from the Stz'uminus First Nation;
- Representatives from Select Committees of Council such as the Invasive Species Advisory Committee or others as required for the purpose of reporting and consultation (ex officio);
- One staff member (ex officio); and
- One Council member (ex officio).

ii. Term

The term of the members of the PRCAC is:

- Select Committee representatives – for the duration of their Select Committee terms or as required for appropriate reporting to PRCAC;
- Citizen representatives – For the first appointments: 2 members: one-year term; 3 members: two-year terms, ending June 30 or until the representative is replaced by Council. All subsequent terms are for 2 years;
- CVRD representatives 2 years;
- Stz'uminus First Nation representative 2 years;
- Staff member no expiry;
- Council member 1 year.

Citizen representatives may serve up to a maximum of three consecutive terms unless authorized by Council to serve additional consecutive terms.

iii. Chair

The members of the Committee with voting privileges will elect a Chair of the Committee from one of the eight members.

The term of the Chair will be up to two years.

If the Chair is unable to attend a meeting, the members present will select an acting Chair for that meeting.

iii. Meeting Times and Location

The PRCAC will meet monthly September to June, or at the call of the Chair.

Meetings of the PRCAC will be open meetings pursuant to section 93 of the *Community Charter*.

iv. Agendas and Minutes

- The Parks, Recreation and Culture Department, in consultation with the Chair, will prepare the meeting agenda and distribute it to the members of the PRCAC prior to the meeting.
- A member of the Parks, Recreation and Culture Department will serve as Recorder for the PRCAC.
- Draft minutes will be distributed with the meeting agenda package.
- The date of the next meeting of the PRCAC will be considered at the end of each meeting.



## INVASIVE SPECIES ADVISORY COMMITTEE

### TERMS OF REFERENCE

#### APPROVED BY COUNCIL ON:

#### 1. Purpose

The Invasive Species Advisory Committee (ISAC) is a select committee of Council pursuant to section 142 of the *Community Charter*.

The purpose of the ISAC is to assist the Town of Ladysmith Council with:

- developing a strategy and implementation plan(s) for control of invasive plant species in Ladysmith through a cooperative process, considering staff and volunteer capacity, human and financial resources, and current evidence regarding invasive plant species;
- determining how to proceed with the strategy and implementation;
- establishing an annual schedule and priority control measures to be undertaken;
- ensuring plans align with the CVRD Invasive Plant Species Strategy and the Coastal Invasive Species Committee; and,
- working cooperatively toward securing funds for implementation of the plan.

#### 2. Goals / Outcomes

The goal of the ISAC is to provide advice to Ladysmith Council, and as requested the Parks, Recreation & Culture Advisory Committee, regarding the establishment and implementation of control of invasive plant species and reestablishing native plant species in Ladysmith. The ISAC will also assist the Town of Ladysmith in developing and implementing a public consultation process for control of invasive plant species and reestablishing native plant species in Ladysmith.

#### 3. Operating Principles

The ISAC will consider these operating principles when deliberating/reviewing matters related to control of invasive plant species and reestablishing native plant species:

- Budgetary restrictions/implications;

- Public spaces significance;
- Public assembly/usage;
- Staffing/resource implications;
- Public consultation.

#### Process Principles:

- Staff will provide information regarding ongoing issues including maintenance, budget, process, procedures, comments from Council, and other matters as required.
- The ISAC will provide its advice to Ladysmith Council, and as requested the Parks, Recreation & Culture Advisory Committee, and/or seek authorization from Council in a prompt manner once it has completed its consideration/review of specific matters.
- Advice from the ISAC to Ladysmith Council, and as requested the Parks, Recreation & Culture Advisory Committee, will be included in Staff Reports.
- The Procedure Bylaw of the Town applies to meetings of the ISAC.

## 4. Administrative Matters

### i. Membership

The ISAC consists of six members, including:

- Three citizen representatives appointed by Council through a public recruitment process;
- One representative from the Stz'uminus First Nation;
- One representative from CVRD Area G;
- One representative from CVRD Area H;
- One staff member (ex officio); and
- One Council member (ex officio).

### ii. Term

The term of the members of the ISAC is:

- Citizen representatives – For the first appointments: 1 members: one-year term; 2 members: two-year terms, ending June 30 or until the representative is replaced by Council. All subsequent terms are for 2 years;
- CVRD representatives 2 years;
- Stz'uminus First Nation representative 2 years;
- Staff members no expiry;
- Council member 1 year.

Citizen representatives may serve up to a maximum of three consecutive terms unless authorized by Council to serve additional consecutive terms.

iii. Chair

The members of the Committee with voting privileges will elect a Chair of the Committee from one of the six members..

The term of the Chair will be up to two years.

If the Chair is unable to attend a meeting, the members present will select an acting Chair for that meeting.

iii. Meeting Times and Location

The ISAC will meet quarterly, or at the call of the Chair.

Meetings of the ISAC will be open meetings pursuant to section 93 of the *Community Charter*.

iv. Agendas and Minutes

- The Parks, Recreation and Culture Department, in consultation with the Chair, will prepare the meeting agenda and distribute it to the members of the ISAC prior to the meeting.
- A member of the Parks, Recreation and Culture Department will serve as Recorder for the ISAC.
- Draft minutes will be distributed with the meeting agenda package.
- The date of the next meeting of the ISAC will be considered at the end of each meeting.

## Town of Ladysmith



### **STAFF REPORT TO COUNCIL**

From: Joanna Winter, Manager of Legislative Services  
Date: November 14, 2016  
File No:

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**Re: Extension to Ladysmith Chamber of Commerce Operating Agreement**

**RECOMMENDATION(S):**

That Council authorize an extension to the operating agreement between the Town and the Ladysmith Chamber of Commerce for a one year term commencing January 1, 2017 and expiring on December 31, 2017 and authorize the Mayor and Corporate Officer to sign the agreement.

**PURPOSE:**

The purpose of this staff report is to seek Council's authorization to enter into a one-year extension to the operating agreement with the Ladysmith Chamber of Commerce effective January 1, 2017, as provided for in the terms of the existing agreement.

**INTRODUCTION/BACKGROUND:**

The Town has entered into an operating agreement with the Ladysmith Chamber of Commerce for the operation of the Visitor Information Centre for several years. It is anticipated that the Town and the Chamber will work closely together over the coming year to review the terms or the operating agreement in anticipation of a new agreement to commence in 2018.

**SCOPE OF WORK:**

Upon Council direction staff will process the operating agreement extension accordingly.

**ALTERNATIVES:**

Council could direct staff to amend the operating agreement as deemed appropriate.

**FINANCIAL IMPLICATIONS:**

As this is an extension to an existing agreement, there are no proposed changes to the Town's financial commitment with the Chamber of Commerce.

**LEGAL IMPLICATIONS:**

n/a

**CITIZEN/PUBLIC RELATIONS IMPLICATIONS:**

The Visitor Information Centre operated by the Ladysmith Chamber of Commerce contributes significantly to the Town's tourism industry. The Visitor Information Centre is a popular destination for residents and visitors alike.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

Once the agreement is ratified, the Financial Services Department will process payments to the Chamber of Commerce as in previous years.

RESOURCE IMPLICATIONS:

n/a

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

This initiative aligns with Sustainability Goal No. 7 – Provide stable, diverse and prosperous local economic opportunities.

ALIGNMENT WITH STRATEGIC PRIORITIES:

This initiative aligns with two strategic priorities – “Partnerships” and “Employment and Tax Diversity”.

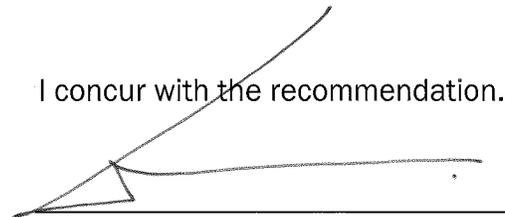
SUMMARY:

The current operating agreement for business and visitor information services between the Town and the Ladysmith Chamber of Commerce Operating Agreement contains a provision for a one-year extension commencing January 1, 2017. Staff is seeking Council’s approval to extend the agreement accordingly.



Joanna Winter, Manager of Legislative Services

I concur with the recommendation.



Guillermo Ferrero, City Manager

ATTACHMENTS:

Ladysmith Chamber of Commerce Operating Agreement

THIS AGREEMENT made the 21<sup>st</sup> day of December, 2015

**BETWEEN:** TOWN OF LADYSMITH  
Box 220, 410 Esplanade, Ladysmith, British Columbia, V9G 1A2  
(hereinafter called the "Town")

**AND:** LADYSMITH CHAMBER OF COMMERCE  
Box 598 Ladysmith, British Columbia, V9G 1A4  
(hereinafter called the "Chamber")

In consideration of the mutual promises hereinafter appearing, the parties hereto covenant and agree each with the other as follows:

1. The Chamber shall during all business hours, including weekends as appropriate, from January 1, 2016 to December 31, 2016 (the "Term") operate and maintain a Visitor Information Centre at 33 Roberts Street, Ladysmith, B.C., and provide therein visitor information on Ladysmith including without limitation:
  - a) Responding to drop-in, telephone and website inquiries as well as mailing out information as appropriate;
  - b) Maintaining an adequate supply of current, relevant information and publications for visitor information;
  - c) Ensuring that a community calendar of events is kept current on the Chamber's website, is easily linked to other community websites and is available for use by all groups in the community;
  - d) Reporting to the Town Council on a semi-annual basis, and from time to time as required by Town Council and staff;
  - e) Maintaining and cleaning the visitor information office, including a public washroom, to a standard reasonably required by the Town;
  
2. The Chamber shall, during the term of the contract, operate and maintain information and support services for local businesses including without limitation:
  - a) Hosting speakers at monthly meetings that will support small business capacity building in Ladysmith;
  - b) Provision of a Business Centre to support new and existing businesses in Ladysmith;
  - c) Working collaboratively with the Town and the Ladysmith Downtown Business Association to support existing and new businesses in Ladysmith. For 2016, there is agreement that there will be additional emphasis on this provision;
  - d) Liaising with the Town during filming to manage communications with the local business community;
  - e) Assisting, as and when requested, with the collection of business licences in Ladysmith and;
  - f) Co-ordinating workshops to support local business in Ladysmith.

3. In consideration for the Chamber supplying the aforementioned services, the Town shall pay to the Chamber an annual sum of \$35,000.00 (plus applicable taxes) paid in equal quarterly installments on the first business day following: January 1, April 1, July 1, October 1, 2016.
4. The Town agrees to pay \$700 (plus applicable taxes) towards the monthly lease payments for the premises occupied by the Visitor Information Centre. The lease for the premises shall be in the name of the Chamber of Commerce (the lessee) and the Town (the lessor).
5. The Town may terminate this Agreement if the Chamber is in breach of any obligations herein and does not remedy such breach within 15 days written notice by the Town to the Chamber in respect of such breach.
6. Provided neither party is in breach of any of the terms or conditions of this agreement, this agreement may be extended at the end of its term for a further period of one year on terms acceptable to both parties.
7. Time is of the essence with this Agreement. This Agreement constitutes the entire agreement between the parties hereto in respect of the Visitor Information Centre and the services described herein. This Agreement may not be amended by the parties hereto other than by written agreement mutually agreed to by both parties.

IN WITNESS WHEREOF each of the parties hereto has executed this Agreement under the hands of their proper officers duly authorized in that behalf.

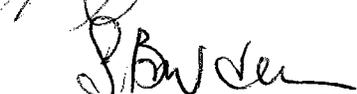
LADYSMITH AND DISTRICT )  
 CHAMBER OF COMMERCE )

  
 \_\_\_\_\_ )  
 Authorized Signatory )

  
 \_\_\_\_\_ )  
 Authorized Signatory )

THE TOWN OF LADYSMITH )  
 seal was affixed in the presence of: )

  
 \_\_\_\_\_ )  
 Mayor )

  
 \_\_\_\_\_ )  
 Director of Corporate Services )



## Town of Ladysmith

### **STAFF REPORT TO COUNCIL**

From: Geoff Goodall, Director of Infrastructure Services

Date: November 21, 2016

File No:

RE: Water Treatment Plant Design Consultant Award

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#### **RECOMMENDATION:**

That Council:

1. Direct staff to proceed with the construction of the Arbutus Water Treatment Plant, consisting of coagulation, flocculation, DAF and membrane filtration, consistent with the recommendations of the "Town Of Ladysmith Arbutus Water Treatment Plant Phase 2 Pilot-scale Treatability Study – September 2015".
2. Waive the Town's purchasing policy and direct-award the Design and Construction Services for the Arbutus Water Treatment Plant to Associated Engineering (BC) Ltd. as outlined in the proposal of services dated October 2016.
3. Direct staff to notify Island Health that Council desires to amend the completion date for the Filtration Plant project in the Town's water system operating permit to March 31, 2019 and that the detailed work plan developed in the engineering proposal from Associated Engineering and Koers and Associates Ltd. be used to support the request.
4. Direct staff to notify the Director, Local Government Infrastructure and Engineering, (Ministry of Community, Sport and Cultural Development) that Council wishes to request an extension of one year to the approved grant for the Water Filtration Project.
5. Direct staff to prepare a communication plan for the Water Treatment Plant project and if necessary retain the services of a communication consultant for this process.

#### **PURPOSE:**

To meet the Island Health requirement to construct a water Treatment Plant in accordance with the Town's operating permit, staff are seeking approval for the direct award of the design and construction services for the Arbutus water treatment plant.

#### **INTRODUCTION/BACKGROUND:**

Building a water filtration system is not an option for the Town of Ladysmith. It is a requirement in our Water System Operating Permit issued by Island Health.

Ladysmith's water supply system is what is known as surface water – it is drawn from the Holland and Stocking Lakes, rather than from an aquifer. The Town's Water Supply System Operating Permit is issued annually by Island Health. Based on recent trends observed in the Town's water data, Island Health modified the Town's operating permit to require that the Town implement filtration of its water supply by 2018. The Town must proceed with construction as soon as possible in order to meet Island Health's surface water treatment objectives (also known as 4-3-2-1) by 2018.

The benefits of this new filtration system are assurance of safe drinking water, and alleviation of emerging concerns related to occasional issues with bacterial quality and potentially harmful disinfection by-products.

The Town applied for grant funding to support the construction costs of this major project. On October 3, 2016 Council was notified that the Town had been awarded a grant of \$8,809,228 for the Ladysmith Drinking Water Filtration Project.

### *The Grant*

Originally the grant application had been submitted under the New Building Canada Fund, Small Communities Fund Program which had a maximum grant limit of 33% Federal, 33% Provincial and 33% Municipal. This was transferred by the government to the new Clean Water and Wastewater Fund that has grant limits of 50% Federal, 33% Provincial and 17% Municipal.

Prior to making application for the grant, Associated Engineering (AE) and Koers & Associates Engineering Ltd (Koers) completed a Pilot-scale Treatability Study which resulted in a recommended treatment process of coagulation, flocculation, DAF and membrane filtration. It was this option that the town applied for when it made its funding application on April 27, 2016.

A summary of the main points in the grant application are as follows:

Date of Application:	April 27, 2016
Date project was to commence:	May 1, 2016
Date project was to be complete:	December 31, 2017
Application Purpose:	Water treatment Facility, coagulation, flocculation, DAF and membrane filtration

### Funding Request:

Total Gross Project Cost	\$15,523,249 (Includes borrowing costs)
Total Ineligible Project Costs	\$ 4,151,612 (Borrowing costs and contractor mark-up)
Design/Engineering	\$ 1,137,164
Construction	\$ 7,581,091
Contingency	\$ 1,895,273
Total Eligible Project Costs	\$10,613,528
Total Grant Request	\$ 7,075,685

As part of the Pilot-scale Treatability Study, AE and Koers estimated the cost to complete the design and construction of the water filtration project at \$13,266,910 including contingency. Based on the grant application this would have resulted in the need for the Town to fund \$6,191,225 to complete the plant. Based on the grant approved and the same construction cost, the estimated Town funding requirement will be \$4,457,682.

The approved grant has an application deadline of March 31, 2018. Since the project did not commence in May of 2016, it is very unlikely that this project can be completed by March 31, 2018. Staff have spoken with the funding group and they indicate that an extension to March 31, 2019 may be possible.

## Next Steps

In order to meet the grant deadline a number of key steps will be required

1. Retain a Design/Construction Services Consultant.
2. Grant Contribution Agreement
3. Island Health – Operating Permit.
4. Land Procurement
5. Membrane Selection

### 1. Retain Design/Construction Services Consultant

In a previous report presented to Council, staff had recommended that a qualifications based selection process be utilized as the tool to select a design/construction services consultant for this project. This process is one that bases the decision of selection on the qualifications of the consultant rather than the cost of the service. This process is one that has demonstrated advantages in delivering value to the client.

Although staff feels this process is the best approach for retaining a design consultant on a project of this size and complexity, the time it takes to properly complete this process would be approximately 3-4 months, which given the short project timeline, may jeopardize the Town's ability to complete the project on time.

As an alternative to this approach staff are recommending that the design/construction services work be direct awarded to the team of Associated Engineering and Koers and Associates Ltd. This team is fully aware of all aspects of the project as they were the project team that delivered the Arbutus Water Treatment Plant Phase 2 Pilot-scale Treatability Study and also have extensive experience in designing water treatment facilities throughout Canada, including facilities of similar scale to the one being proposed for the Town.

Direct awarding this project will require Council to waive the following provisions of its purchasing policy:

*The Town will utilize a competitive bidding process to secure goods and services wherever practical to obtain maximum value for its purchasing dollars. The level of competition required for Town purposes is based on the dollar value and nature of the purchase ensuring the cost associated with administering a competitive process is proportionate to the benefit received as a result of the competition.*

*Purchases valued at less than \$3,000 may use the informal methods of verbal or written quotations. Purchases valued between \$3,000 and \$25,000 must have a minimum of three (3) written quotations.*

*Purchases of goods and services with a value over \$25,000 must utilize a competitive process, which may be either a Request for Quotations, Request for Proposals, or Request for Tenders.*

Staff feel that the work plan proposed by Associated Engineering and Koers and Associates Ltd. is very comprehensive and should meet the needs of the Town for this

project. The project budget proposed by the project team is broken down into individual phases and is summarized as follows:

Project Initiation	\$ 54,000
Design Criteria Refinement	\$ 259,000
Detailed Design	\$ 653,000
Tender Services	\$ 51,000
Construction Services	\$ 582,000
Total	\$1,599,000

The project budget is approximately 14% of the overall construction budget including the contingency, which is not out of line for this type of project.

## 2. *Grant Contribution Agreement*

As with all Federal/Provincial grants a contribution agreement will need to be signed by the Town. The contribution agreement will outline the conditions that need to be met in order to receive the grant funding. As indicated above one of those conditions will be a completion date. The Town needs to be confident that it can meet the specified completion date prior to signing the agreement. To reduce the risk of not completing the project on time staff are recommending that an official request from Council for the extension of the completion timeline to March 31, 2019

## 3. *Island Health – Operating Permit*

The existing Town of Ladysmith Operating Permit has specific conditions related to the Filtration Plant as follows:

- **Future Treatment Specifications**  
On or before January 31, 2018 the Water System Owner shall provide two treatment processes acceptable to Island Health (Vancouver Island Health Authority), to achieve a 4-log removal/inactivation of viruses; a 3-log removal/inactivation of Giardia cysts and Cryptosporidium oocysts and produce finished water with less than 1 NTU turbidity.

In addition the Town was also required to meet the following implementation dates:

- **Pilot Testing Program and Selection of Treatment Process**  
By March 31, 2015 a final treatment process shall be determined and submitted to our office.
- **Final Selection of Filtration Plant**  
By May 31, 2016 the filtration process selected is to be completed.
- **Completion of the Filtration Plant Project**  
By January 31, 2018 the construction of the filtration plant is to be completed and in operation.

The pilot testing and final selection of the treatment plant have been completed although there has been some deviation from the schedule. Having a fully operational treatment facility by January 31, 2018 is not achievable and in order to stay compliant with our operating permit we will require a time extension.

Staff have spoken to IH and as indicated in previous correspondence (May 9, 2016) they are reluctant to issue any adjustments to the operating permit, although they indicated that if we request an extension accompanied by a detailed work plan as to how we will achieve a modified schedule they would consider the extension.

#### 4. Land Procurement

In 1987 the Town was granted a water licence for the diversion at Banon Creek, storage on Holland Lake and points of re-diversion on Holland Creek. Accompanying this licence was a permit under the Water Act authorizing the occupation of Crown land. The total area of occupation was 2.48 acres of land which included a 4,400' by 20' section for the pipeline and a 100' by 200' section for the balancing reservoir. The balancing reservoir has now been decommissioned and replaced with the new Arbutus Water treatment Plant Phase 1 – Chlorination facility that occupies a portion of the 100' by 200' parcel. The remaining land is not sufficient to contain the Phase 2 treatment plant and additional land will therefore be required through an authorization to occupy from the Crown. This process can be time consuming and will require support from Stz'uminus First Nation. Staff have not budgeted any cost for the actual licence on the lands.

#### 5. Membrane Selection

Although the pilot study was completed using GE membranes, there are other manufacturers that provide products that have similar performance characteristics. The plant could be designed so that any and all suitable membranes systems could be incorporated into the plant, but that would be over conservative and inefficient. Pre-purchasing the membrane equipment provides opportunities for significant savings in design time, engineering cost and capital cost to the project. The layout of the plant can then be accurately developed around the selected membrane. It is proposed that a procurement process will be developed and issued to pre-approved vendors early on in the engineering design process.

#### **SCOPE OF WORK:**

The scope of works is related of the procurement of services for the construction of the WTP.

#### **ALTERNATIVES:**

Council could decide not to direct award the project to Associated Engineering and Koers and Associates Engineering Ltd. and instead pursue consultant selection through a qualification based selection or other procurement process. This will likely delay the start of the project by 3 to 4 months and will require further project completion extensions.

Council could decide not to proceed with construction of the Water Treatment Plant, but this would violate the conditions of the Town's water system operating permit and likely result in some form of action from IH.

**FINANCIAL IMPLICATIONS:**

Staff have included budget estimates in the financial plan for construction of the WTP. The project may be financed utilizing long term borrowing and grant funding.

**LEGAL IMPLICATIONS:**

At this point staff do not anticipate any significant legal issues related to the construction of the treatment plant.

**CITIZEN/PUBLIC RELATIONS IMPLICATIONS:**

This is a significant project for the Town and citizens will expect clear information and transparent communications about the project both prior and during construction.

**INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:**

This is a complex project and may become increasingly complicated depending on the option chosen. It is anticipated that the Project Lead will come from Public Works but involvement from the Finance Department and the City Manager's Office will be required.

**RESOURCE IMPLICATIONS:**

Even with significant participation from consultants during this project it is anticipated that this project will consume a significant portion of the engineering resources for the town, this would be particularly true of the Director and other projects will need to be adjusted to meet timelines.

**ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:**

Considering the 8 Pillars of Sustainability for Ladysmith from the Sustainability Visioning Report this project supports Innovative Infrastructure and Healthy Communities.

**ALIGNMENT WITH STRATEGIC PRIORITIES:**

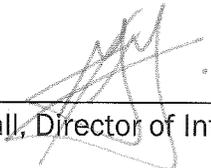
Aligns with Natural and Built Infrastructure, specifically "Ensure that an analysis of life cycle costs is included in decisions to acquire, build or rebuild infrastructure assets."

Aligns with Watershed Protection and Water Management, specifically "Start construction of a water filtration plant".

**SUMMARY:**

The Town of Ladysmith Water Operating Permit (issued by Island Health) requires a filtration treatment plant to be in operation by January 31, 2018. The Town has now received a significant grant of \$8,800,000 towards this project and there are a number of critical steps that must be implemented in order to move forward. Paramount to the success of the project will be obtaining an extension to the timelines for the completion of the project from both the grant funder and Island Health. In order to reduce time lines for the project Council could also direct award the engineering services to Associated Engineering and Koers and Associates Ltd.

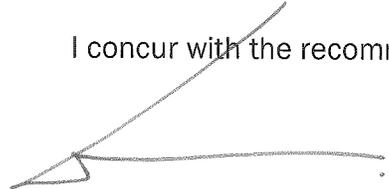
Benefits of water filtration are assurance of water quality and alleviation of potentially harmful by-products of the current chlorination treatment process. This is a significant investment by the Town in the long-term future of the community.



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Geoff Goodall, Director of Infrastructure Services

I concur with the recommendation.



---

Guillermo Ferrero, City Manager

**ATTACHMENTS**

Arbutus Water Treatment Plant Phase 2 Pilot-scale Treatability Study  
Town of Ladysmith Arbutus Water Treatment Plant Phase II Work Plan  
Appendix A – Water System Operating Conditions



RE CLIMATE ACTION  
COMMUNITY 2014

cowichan  
26



# REPORT

## Town of Ladysmith

### Arbutus Water Treatment Plant Phase 2 Pilot-scale Treatability Study



September 2015

ASSOCIATED ENGINEERING	
QUALITY MANAGEMENT SIGN-OFF	
Signature	<i>[Handwritten Signature]</i>
Date	4/9/2015

#04-15-078

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## Executive Summary

The Township of Ladysmith relies on surface water drawn from two intakes: the Chicken Ladder intake and Stocking Lake intake, to provide drinking water to Ladysmith and the Diamond Improvement District. The Township also has a Memorandum of Understanding to provide water to the two Stz'uminus First Nation communities on I.R. 12 and I.R. 13. Water from the two intakes is treated at the Arbutus Water Treatment Plant (WTP). Phase I of the WTP's construction consisted of converging supply mains from the two intakes to a single point of treatment, and chlorine disinfection. Phase II will add pre-treatment and filtration to the WTP, to achieve the following treatment objectives:

- Consistently remove turbidity to drinking water levels as indicated in the Guidelines for Canadian Drinking Water Quality (GCDWQ) Turbidity Technical Document.
- Provide a multi-barrier against micro-biological contaminants and achieve a minimum 3-log (99.9%) removal of *Cryptosporidium parvum* and *Giardia*.
- Reduce true colour to meet the GCDWQ aesthetic objectives.
- Remove organic matter in the raw water and reduce the risk of disinfection byproduct (DBP) formation in the distribution system.

Associated Engineering and Koers & Associates Engineering were retained to evaluate different particulate removal processes for the WTP through bench-scale testing and piloting.

Bench-scale testing was conducted in December of 2014. A significant storm event occurred during this time, allowing for the bench-scale processes to be tested using the most difficult raw water conditions expected to be encountered at the WTP. Coagulation and flocculation followed by either sedimentation or dissolved air flotation (DAF) were tested, using several different combinations of pre-treatment chemicals and doses to create a 'short-list' of chemicals to test at the pilot scale. For the sedimentation clarification process, the three best performing options were polyaluminum chloride (PACl or ClearPAC), aluminum chlorohydrate (ACH or CTI4900) or alum followed by a flocculant aid. For the DAF process, the three best performing options were ACH, PACl, and powdered activated carbon (PAC) followed by alum. The DAF system struggled to lift all of the suspended material in the treated water to the surface for removal, resulting in poorer turbidity removal when compared to the sedimentation process. However, piloting of DAF was still considered for piloting because of its ability to remove organic material and because of the Township's familiarity of DAF that they use at their wastewater treatment plant.

Four different treatment configurations were then piloted:

- Conventional treatment using settling tubes (ST), consisting of coagulation, flocculation, sedimentation and dual-media filtration.
- DAF and media filtration, consisting of coagulation, flocculation, DAF and dual-media filtration.

- DAF and membrane filtration, consisting of coagulation, flocculation, DAF and membrane ultrafiltration.
- Direct membrane filtration, consisting of coagulation, flocculation, and membrane ultrafiltration.

Piloting was conducted from March 2015 to June. Piloting was primarily focused on treating water from Chicken Ladder, which traditionally has greater levels of turbidity and colour than Stocking Lake. Several weeks of piloting, using Stocking Lake, were conducted to verify whether treatment conditions suitable for Chicken Ladder were also effective for Stocking Lake. Pilot testing determined that both conventional treatment and DAF, when followed by dual-media filtration, could not consistently reduce turbidity to meet drinking water objectives and therefore would not be considered able to sufficiently provide protection against viruses and protozoa. Post-treatment aluminum concentrations, caused by the incomplete removal of the dosing chemicals during treatment, also exceeded the GCDWQ Operational Guidelines for drinking water.

Direct membrane filtration was able to consistently reduce turbidity to drinking water objectives and therefore would be awarded disinfection credits for the removal of *Cryptosporidium* and *Giardia*. However, the membranes would experience a rapid rate of fouling, requiring frequent membrane cleanings, unless only low levels of coagulant chemicals were added upstream. At these low doses, direct membrane filtration achieved a poor level of colour and organics removal.

DAF followed by membrane filtration was recommended. This option was able to successfully achieve all of the drinking water treatment objectives, including significantly reducing the potential for DBP formation in the distribution system. The DAF system also protected the membranes from fouling, allowing for much higher doses of pre-treatment chemicals to be added without compromising the membranes. DAF pre-treatment also allowed for a greater margin of error in dosing accuracy, so that if a chemical dose was accidentally increased, it was less likely to impact the membranes than when direct filtration was used.

A conceptual cost for a 125 L/s DAF and membrane filtration plant, with sufficient housing to allow for an expansion to 250 L/s, was developed. These costs were based on layouts prepared in the "Arbutus Water Treatment Plant Phase II – Filtration Pre-Design Report", dated January 2015, and show an increase in capital costs for the following reasons:

- Included redundant tanks and membranes to allow one component of the WTP to be brought off-line without compromising the WTP's ability to supply 125 L/s of potable water.
- The extra costs associated with adding DAF, complete with additional structural footprint and residuals management equipment to the original membrane layout.
- A significant change in the US dollar exchange rate since January, increasing the Canadian cost of all process equipment supplied from the US.

The option of building Phase II of the Arbutus WTP as a direct membrane plant first, then adding DAF at a later date was then considered. Cost estimates for these two scenarios are summarized below.

Process Description	DAF + Membrane Filtration	Direct Membrane Filtration	DAF (Built Afterwards)
Capital Cost	\$13,300,000	\$10,000,000	\$4,100,000
		\$14,100,000 total	
Annual Cost	\$343,000 /year	\$349,000 /year	\$343,000 /year

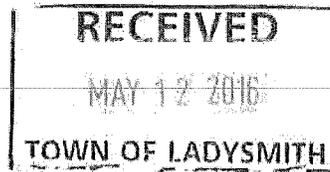
It is important to note that, if a direct membrane filtration plant is constructed, the following factors will need to be considered:

- The amount of colour removed by the direct filtration plant will be low and treated water may periodically exceed the GCDWQ aesthetic objective for this parameter.
- DBP precursor removal was not significantly impacted by direct membrane filtration. The level of DBPs currently observed in the Ladysmith distribution system will not lower after the membranes are installed.
- Close attention will need to be paid to pre-treatment chemical dosing to avoid rapid fouling of the membranes.
- The rate of chlorine residual decay, due to organics remaining in the treated water, should be considered when determining whether a rechlorination station will be needed at the tie-in location to the Stz'uminus communities.

Item	Task	Deliverables
<b>PHASE 5 – CONSTRUCTION SERVICES</b>		
5.1	Construction Administration	<ul style="list-style-type: none"> <li>• “Issued for Construction” Document sets</li> <li>• Meeting minutes, inspection reports</li> <li>• Progress payment certificates</li> <li>• Various information request responses and contract change documentation.</li> <li>• Shop drawing reviews</li> </ul>
5.2	Construction Site Reviews	<ul style="list-style-type: none"> <li>• Daily inspection reports, construction memoranda and site instructions</li> <li>• Deficiency list</li> </ul>
5.3	Operations Training	<ul style="list-style-type: none"> <li>• O&amp;M Manual</li> <li>• Training presentation slides and materials</li> </ul>
5.4	Start-Up and Commissioning Support Services	<ul style="list-style-type: none"> <li>• Pre-start-up and Start-up Reports</li> <li>• Commissioning Report</li> </ul>
5.5	Post-construction Services	<ul style="list-style-type: none"> <li>• Record drawings – (DWG and PDF).</li> <li>• Operations &amp; Maintenance manuals (2 hardcopies, PDF)</li> <li>• Warranty Inspection Report</li> </ul>

Item	Task	Deliverables
<b>PHASE 1 – PROJECT INITIATION</b>		
1.1	Project Kick-off	<ul style="list-style-type: none"> <li>Meeting minutes</li> <li>Project Management Plan</li> </ul>
1.2	Options Budgetary Analysis	<ul style="list-style-type: none"> <li>TM 1-1: Options Budgetary Analysis</li> </ul>
1.3	Membrane Procurement	<ul style="list-style-type: none"> <li>Supply Contract Document</li> <li>Evaluation Summary and Recommendation for Supply Contract Award</li> </ul>
1.4	Facility Tours	<ul style="list-style-type: none"> <li>Facilities List</li> </ul>
<b>PHASE 2 – DESIGN CRITERIA REFINEMENT</b>		
2.1	Project Management and Quality Assurance	<ul style="list-style-type: none"> <li>Monthly Status Reports</li> </ul>
2.2	Site Investigations: Site Survey	<ul style="list-style-type: none"> <li>Base drawing in AutoCad, 2016 Civil3D</li> </ul>
2.3	Site Investigations: Geotechnical	<ul style="list-style-type: none"> <li>Geotechnical Investigation Report</li> </ul>
2.4	Site Investigations: Environmental Overview Assessment	<ul style="list-style-type: none"> <li>Environmental Overview Assessment Report</li> </ul>
2.5	Power Supply Upgrade	
2.6	Permits and Approvals	<ul style="list-style-type: none"> <li>Status Reports for Island Health</li> </ul>
2.7	Pre-design Refinement	<ul style="list-style-type: none"> <li>Pre-Design (15% design) drawings</li> <li>Preliminary Design Report</li> <li>Class "C" cost estimate</li> <li>Meeting minutes</li> </ul>
2.8	Transient (Surge) Analysis	<ul style="list-style-type: none"> <li>TM -1-Transient Analysis</li> </ul>
2.9	Residuals Disposal Analysis	<ul style="list-style-type: none"> <li>Preliminary Design Report</li> </ul>
2.10	Cost Estimate	<ul style="list-style-type: none"> <li>Class C cost estimate</li> </ul>
2.11	Value Engineering	<ul style="list-style-type: none"> <li>TM: Value Engineering Summary and Recommendations</li> </ul>
<b>PHASE 3 – DETAILED DESIGN</b>		
3.1	Project Management and Quality Assurance	<ul style="list-style-type: none"> <li>Monthly status reports</li> </ul>
3.2	Detailed Design Drawings and Specifications	<ul style="list-style-type: none"> <li>Drawing set at 60% design level (2 hardcopies, PDF)</li> <li>Drawing sets and technical specifications at 95% completion stage (2 hardcopies, PDF)</li> <li>Pre-tender cost estimate</li> <li>Meeting minutes</li> <li>Final control philosophy description</li> </ul>
3.3	Permits and Approvals	<ul style="list-style-type: none"> <li>Permit applications</li> </ul>
3.4	Cost Estimate	<ul style="list-style-type: none"> <li>Pre-tender cost estimate</li> </ul>
<b>PHASE 4 – TENDERING SERVICES</b>		
4.1	Tender Period Services	<ul style="list-style-type: none"> <li>Tender-ready documents (PDF format)</li> <li>Addenda</li> <li>Tender evaluation letter</li> <li>Recommendation of award</li> </ul>

Excellent care, for everyone,  
everywhere, every time



May 6, 2016

John Manson, P. Eng.,  
Director of Infrastructure Services  
Town of Ladysmith  
330 6<sup>th</sup> Avenue  
Ladysmith BC  
VOR 2E0

Dear Mr. Manson:

**RE: Amendment to the Terms and Conditions of the Town of Ladysmith Water System  
Operating Permit**

Further to your letter dated May 12, 2014, the amended terms and conditions are included in Appendix A. If you have any questions/objections, please respond in writing within 30 days.

If you have any questions, please contact me.

Sincerely,



Tim Bilyk, C.L.P.H.I.(C),  
Environmental Health Officer, Drinking Water Officer  
Public Health and Drinking Water Programs  
Vancouver Island Health Authority  
Nanaimo Health Unit  
6475 Metral Drive, 3<sup>rd</sup> Floor  
Nanaimo, BC, V9T 2L9  
Phone: 1 (250) 755-6215 Ext: 56279  
Fax: 1 (250) 755-3372  
TB/rw enc

**APPENDIX A**  
**Water System Operating Conditions**  
**for the Town of Ladysmith**  
**330 6<sup>th</sup> Avenue,**  
**Ladysmith , BC, VOR 2E0**

**Compliance with these Operating Terms and Conditions do not relieve the operator of other legislated responsibilities and obligations.**

**1. Existing Performance Standards**

**The NCID Water System shall ensure the disinfection systems are in good working order and provide the following:**

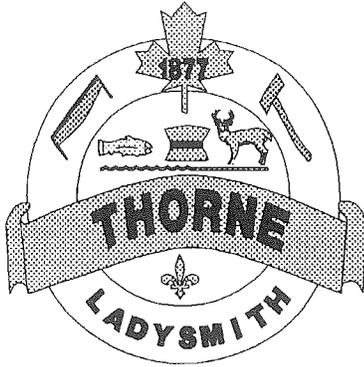
- **a 4-log removal/inactivation of viruses, and a 3-log removal/inactivation of Giardia cysts and Cryptosporidium oocysts, and produce finished water with less than 1 NTU turbidity.**
- **Raw water must be recorded on a continuous basis and the average daily turbidity levels are not to exceed 1 NTU.**
- **The Drinking Water Officer must be contacted immediately if the average daily turbidity level exceeds 1 NTU at the water treatment plant.**

**2. Future Treatment Specifications**

**On or before January 31, 2018, the Water System Owner shall provide two treatment processes acceptable to Island Health, to achieve a 4-log removal/inactivation of viruses; a 3-log removal/inactivation of Giardia cysts and Cryptosporidium oocysts, and produce finished water with less than 1 NTU turbidity.**

**The Water System Owner is required to meet the following implementation plan dates:**

- A. By March 31, 2015 a final treatment/disinfection process shall be determined and submitted to our office.**
- B. By May 31, 2016, the filtration process selected is to be completed.**
- C. By January 31, 2018, the construction of the facility is to be completed and in operation.**



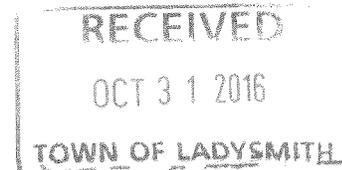
## Municipalité de Thorne Municipality of Thorne

775, Route 366  
Ladysmith, Québec  
J0X 2A0

Off: (819) 647-3206 Fax: (819) 647-2086

October 26, 2016

Mayor Aaron Stone  
Town of Ladysmith  
Main Office  
410 Esplanade, P.O. Box 220  
Ladysmith, B.C. V9G 1A2



Dear Mayor Stone,

There are many activities being planned at this point in time by members of this community of Ladysmith, Quebec in the Municipality of Thorne, in preparation for Canada's 150<sup>th</sup> anniversary.

My vision for this important milestone is to be able to provide something that will be long lasting. For instance I have contacted all of our premiers requesting a donation of their provincial/territorial flags so that we can fly all of them each year on Canada Day. We have to date received several with more on their way.

My request to you would be that of support for Ladysmith (Quebec) and Ladysmith (B.C.) becoming Twin Municipalities for this occasion. We could, if you agree, publish this announcement in our respective local newspapers with a picture of our Councils. You may also consider flying our flag in your municipal office for a time if that is something you think could be worthwhile.

I think the impact for our locals, cottagers and visitors would be that of pride and a sense of unity and belonging to this wonderful country from coast to coast.

You will find enclosed a few items that I hope give you a sense of what this small, but great, community is all about.

I thank you in advance for your consideration in this regard and look forward to hearing from you.

Yours sincerely,

Terry Murdock  
Mayor  
Thorne (Ladysmith) Quebec

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