



HARRISON HOT SPRINGS

Naturally Refreshed

VILLAGE OF HARRISON HOT SPRINGS NOTICE OF MEETING AND AGENDA

REGULAR COUNCIL MEETING

Date: Tuesday, October 11, 2011
Time: After Public Hearing
Location: Council Chambers, Village Office, 495 Hot Springs Road,
Harrison Hot Springs, British Columbia

1. CALL TO ORDER		
	(a)	Meeting called to order by Mayor Becotte
2. INTRODUCTION OF LATE ITEMS		
3. APPROVAL OF AGENDA		
4. ADOPTION OF COUNCIL MINUTES		
<input type="checkbox"/> Regular Council Meeting Minutes – September 12, 2011		Item 4.1 Page 1
<input type="checkbox"/> Special Council Meeting Minutes – September 19, 2011	THAT the minutes of the Regular Council Meeting of September 12, 2011 be adopted.	
	THAT the minutes of the Special Council Meeting of September 19, 2011 be adopted.	Item 4.2 Page 9
5. BUSINESS ARISING FROM THE MINUTES		
		Item 5.1
6. CONSENT AGENDA		
i. Bylaws		Item 6.i
ii. Agreements None		Item 6.ii
iii. Committee/ Commission Minutes Communities in Bloom of August 11, 2011		Item 6.iii Page 13

Parks and Recreation of June 28, 2011		Page 17
iv. Correspondence		Item 6 iv
<p>Recommendation:</p> <p>THAT the Committee/Commission Minutes be received.</p>		
7. DELEGATIONS AND PETITIONS		
<input type="checkbox"/> Agassiz Healthy Communities	Agassiz Healthy Communities – Elma Pauls & Arlana Kuzyk	Item 7.1 Page 21
<input type="checkbox"/> Bunt & Associates	Bunt and Associates – Tim Barton	Page 43
8. CORRESPONDENCE		
		Item 8.1
9. BUSINESS ARISING FROM CORRESPONDENCE		
10. REPORTS OF COMMITTEES, COMMITTEE OF THE WHOLE AND COMMISSIONS		
11. REPORTS FROM MAYOR		
K. Becotte – verbal		
12. REPORTS FROM COUNCILLORS		
D. Harris - verbal D. Kenyon - verbal A. Jackson - verbal B. Perry – verbal		
13. REPORTS FROM STAFF		
<input type="checkbox"/> Traffic Calming Plan	Report of Community and Economic Development Officer – September 29, 2011 Re: Traffic Calming Plan Recommendation: THAT Council receive the report and authorize staff to develop an implementation strategy	Item 13.1 Page 165
<input type="checkbox"/> Parks and Trail Master Plan Status Report	Report of Community and Economic Development Officer – September 29, 2011 Re: Parks and Trail Master Plan Status Report Recommendation: THAT Council receive for information.	Item 13.2 Page 167

<input type="checkbox"/> Integrated Community Sustainability Plan (Sustainable Harrison)	Report of Community and Economic Development Officer – October 3, 2011 Re: Integrated Community Sustainability Plan (Sustainable Harrison) Recommendation: THAT Council receive the Sustainable Harrison ICSP and authorize staff to develop an implementation strategy.	Item 13.3 Page 169 Item 13.4 Page 275
<input type="checkbox"/> Approval for Credit Card Additions and Changes	Report of Manager of Revenue Services – October 3, 2011 Re: Approval for Credit Card Additions and Changes Recommendation: THAT Council appoint the CAO and the Director of Finance as signatories for approval of any additions or changes to the Village Business Account with Visa Desjardins.	Item 13.5 Page 277
<input type="checkbox"/> Special Occasion Licence Application – Harrison Festival of the Arts	Report of Deputy Chief Administrative Officer/ Corporate Officer – October 11, 2011 Re: Special Occasion Licence Application – Harrison Festival of the Arts Recommendation: THAT Council approve the endorsement of the Harrison Festival of the Arts Special Occasion Licence Applications.	

14. BYLAWS

<input type="checkbox"/> OCP Amendment Bylaw No. 988, 2011	Recommendation: THAT OCP Amendment Bylaw No. 988 receive third reading; and THAT OCP Amendment Bylaw No. 988 be adopted.	Item 14.1 Page 279
<input type="checkbox"/> Zoning Amendment Bylaw No. 989, 2011	Recommendation: THAT Zoning Amendment Bylaw No. 989 receive third reading; and THAT Zoning Amendment Bylaw No. 989 be adopted.	Item 14.2 Page 293
<input type="checkbox"/> Zoning Amendment Bylaw No. 990, 2011	Recommendation: THAT Zoning Amendment Bylaw No. 990 receive third reading; and THAT Zoning Amendment Bylaw No. 990 be adopted.	Item 14.3 Page 295

15. QUESTIONS FROM THE PUBLIC (PERTAINING TO AGENDA ONLY)

16. ADJOURNMENT

**VILLAGE OF HARRISON HOT SPRINGS
NOTICE OF MEETING
AND AGENDA**

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15. QUESTIONS FROM THE PUBLIC (PERTAINING TO AGENDA ONLY)

16. ADJOURNMENT

VILLAGE OF HARRISON HOT SPRINGS
MINUTES OF THE REGULAR MEETING OF COUNCIL

DATE: September 12, 2011
TIME: 7:00 p.m.
PLACE: Council Chambers, 495 Hot Springs Road

IN ATTENDANCE: Mayor Ken Becotte
Councillor Bob Perry
Councillor Dave Harris
Councillor Allan Jackson
Councillor Dave Kenyon

CAO, Ted Tisdale
CEDO, Andre Isakov
Operations Manager, Ian Gardner

Recording Secretary, Krystal Sobie

ABSENT: DCAO/Corporate Officer, Debra Key
Manager of Revenue Services, Peggy Parberry

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1. **CALL TO ORDER**

The Mayor called the meeting to order at 7:00 p.m.

2. **INTRODUCTION OF LATE ITEMS**

3. **APPROVAL OF AGENDA**

Moved by Councillor Perry
Seconded by Councillor Harris

THAT the agenda be approved.

**CARRIED
UNANIMOUSLY**

4. **ADOPTION AND RECEIPT OF MINUTES**

Moved by Councillor Jackson
Seconded by Councillor Kenyon

Regular Council Meeting
Minutes – August 8, 2011

THAT the minutes of the Regular Council Meeting of August 8, 2011
be adopted;

**CARRIED
UNANIMOUSLY**

1.A

Village of Harrison Hot Springs
Minutes of the Regular Council Meeting
September 12, 2011

5. **BUSINESS ARISING FROM THE MINUTES**

None

CONSENT AGENDA

i. **Bylaws** THAT Bylaw No. 960 Development Cost Charge Bylaw be adopted; and
THAT Bylaw No. 983 Parking Repeal Bylaw be adopted.

ii. **Agreements** None

iii. **Committee/
Commission
Minutes** Advisory Planning Commission of June 21, 2011
Communities in Bloom of June 9, 2011
Community Sustainability Action Committee of July 20, 2011

iv. **Correspondence**

Letter from BC Hydro – Funding Available for Electric Beautification
Projects – September 2, 2011

Letter from British Columbia Achievement Foundation – August 25,
2011

Moved by Councillor Kenyon
Seconded by Councillor Perry

THAT the Bylaws be adopted and Committee/Commission Minutes and
correspondence be received.

**CARRIED
UNANIMOUSLY**

DELEGATIONS

None

8. **CORRESPONDENCE**

None

9. **BUSINESS ARISING OUT OF CORRESPONDENCE**

None

**REPORTS OF COMMITTEES, COMMITTEE OF THE WHOLE
AND COMMISSIONS**

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None

10.

REPORTS FROM MAYOR

The band stand opening was a great success.

Attended the summer reading awards with the Agassiz library.

He will be participating in the goat milking contest in the Agassiz Fall Fair.

UBCM is taking place at the end of this month. He will be receiving a Level One Certificate in Local Leadership.

A letter was sent to Council requesting support from the Village to purchase a new scooter for a resident of Harrison who cleans up garbage on Hot Springs Road. It was noted that under the legislative the Village is restricted and unable to provide financial contribution.

11.

REPORTS FROM COUNCILLORS

Councillor Harris

It was the last story time of the park for Kyle Kimis and Dustin Martin as they are graduating. He requested that a letter be sent from Council to acknowledging their hard work.

Communities in Bloom conference is coming up soon. Submission was made for outstanding achievement for landscaping and environment

Councillor Kenyon

All of his committees have been on hold for the summer and are reactivating in September.

Councillor Jackson

Attended 8 meetings since the last meeting.

Wanted to thank Andre Isakov for his hard work on the Community Sustainable and Action Team.

Councillor Perry

August 13, 2011 attended an ICBC/RCMP Speed Watch Training

August 15, 2011 attended the Ruth Altendorf bridge naming ceremony

August 27, 2011 attended the Summer reading awards at the Agassiz Library

September 3, 2011 attended the band stand opening

September 6/7, 2011 conducted speed watch

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September 6 attended Sergeant McCarthy's farewell open house.

September 8, 2011 attended the Fraser Valley Regional Library Employee Recognition at the Ramada Inn

12.

Appointment of Deputy Fire Chief

REPORTS OF STAFF

Moved by Councillor Jackson
Seconded by Councillor Harris

Report of Fire Chief – September 2, 2011
Re: Appointment of Deputy Fire Chief

THAT Mayor and Council ratify the appointment of Don Driedger to the position of Deputy Fire Chief for the Village of Harrison Hot Springs until the next scheduled fire department election in January 2012.

**CARRIED
UNANIMOUSLY**

Social Media Policy 2.13

Moved by Councillor Kenyon
Seconded by Councillor Jackson

**Report of Deputy Chief Administrative Officer/Corporate Officer –
September 8, 2011**
Re: Social Media Policy 2.13

THAT Social Media Policy 2.13 be adopted.

**CARRIED
UNANIMOUSLY**

Water System Supply and Treatment

Moved by Councillor Kenyon
Seconded by Councillor Harris

Report of Operations Manager – September 12, 2011
Re: Water System Supply and Treatment

THAT Council approves proceeding with the Ground Water Supply and Treatment option.

Councillor Harris withdrew his second

Councillor Harris excused himself from the meeting at 7:24 p.m. due

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Councillor Harris excused himself from the meeting at 7:24 p.m. due to a potential conflict of interest as he is employed with Civic Consultants.

**Moved by Councillor Perry
Seconded by Councillor Jackson**

THAT the report of Operations Manager re: Water System Supply and Treatment be referred back to staff to obtain a report from an independent company.

**CARRIED
UNANIMOUSLY**

Councillor Harris re-entered chambers at 8:00 p.m.

**Moved by Councillor Perry
Seconded by Councillor Jackson**

Draft Integrated Community Sustainability Plan (Sustainable Harrison)

**Report Community and Economic Development Officer –
September 12, 2011**

Re: Draft Integrated Community Sustainability Plan (Sustainable Harrison)

THAT Council receive the Draft Report and authorize staff to host a Public Open House to have further community dialogue on the Sustainability Harrison ICSP.

**CARRIED
UNANIMOUSLY**

13.

BYLAWS

Bylaw 982, 2011 – Waste Collection and Disposal Amendment

**Moved by Councillor Kenyon
Seconded by Councillor Perry**

**Report of Deputy Chief Administrative Officer/ Corporate Officer –
August 30, 2011**

Re: Waste Collection and Disposal Amendment Bylaw No. 982, 2011

THAT third reading of Waste Collection and Disposal Amendment Bylaw No, 982 be rescinded; and

THAT Waste Collection and Disposal Amendment Bylaw No. 982 be

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Bylaw No, 982 be rescinded; and

THAT Waste Collection and Disposal Amendment Bylaw No. 982 be given third reading as amended.

**CARRIED
UNANIMOUSLY**

Bylaw No. 984, 2011 – Water Regulation Amendment Bylaw

Moved by Councillor Kenyon
Secinded by Councillor Harris

**Report of Deputy Chief Administrative Officer/Corporate Officer –
August 30, 2011**

Re: Water Regulation Amendment Bylaw No. 984, 2011

THAT Water Regulation Amendment Bylaw No. 984 receive first, second and third reading

**CARRIED
UNANIMOUSLY**

bylaw 985, 2011 – Sewer Regulation Amendment Bylaw

Moved by Councillor Kenyon
Secinded by Councillor Harris

**Report of Deputy Chief Administrative Officer/Corporate Officer –
August 30, 2011**

THAT Sewer Regulation Amendment Bylaw No. 985, 2011 receive first, second and third reading.

**CARRIED
UNANIMOUSLY**

Bylaw 987, 2011 – Sign Bylaw

Moved by Councillor Kenyon
Secinded by Councillor Jackson

Report of Chief Administrative Officer – September 8, 2011

THAT Council gives Sign Bylaw No. 987, 2011 first reading.

**CARRIED
UNANIMOUSLY**

*Village of Harrison Hot Springs
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Moved by Councillor Jackson
Seconded by Councillor Kenyon

THAT section 9.8 a(i) be deleted from the Sign Bylaw and Schedule A be amended to add election signs.

**CARRIED
UNANIMOUSLY**

Moved by Councillor Harris
Seconded by Councillor Jackson

THAT Council gives Sign Bylaw No. 987, 2011 second and third reading as amended.

**CARRIED
UNANIMOUSLY**

Bylaw 988, 2011 – OCP
Amendment Bylaw

Moved by Councillor Perry
Seconded by Councillor Jackson

**Report of Community and Economic Development Officer –
September 8, 2011**

THAT OCP Amendment Bylaw No. 988, 2011 be read a first and second time; and

THAT Council authorize a Public Hearing; and

THAT OCP Amendment Bylaw No. 988, 2011 be referred to the Advisory Planning Commission for review and comment.

**CARRIED
UNANIMOUSLY**

Bylaw 989, 2011 – Zoning
Amendment Bylaw

Moved by Councillor Perry
Seconded by Councillor Harris

THAT Zoning Amendment Bylaw No. 989, 2011 be read for a first and second time; and

THAT Council authorize a Public Hearing; and

THAT OCP Amendment Bylaw No. 989, 2011 be referred to the Advisory Planning Commission for review and comment.

**CARRIED
UNANIMOUSLY**

*Village of Harrison Hot Springs
Minutes of the Regular Council Meeting
September 12, 2011*

THAT Zoning Amendment Bylaw No. 990, 2011 be read for a first and second time and authorize the holding of a public hearing; and

THAT the Zoning Bylaw Amendment No. 990 be referred to the Advisory Planning Commission for review and comment.

**CARRIED
UNANIMOUSLY**

14. QUESTIONS FROM THE PUBLIC

A member of the public commented that there are a lot of reports to support why the Council of the past decided to go to lake water.

15. ADJOURNMENT

**Moved by Councillor Jackson
Seconded by Councillor Perry**

THAT the meeting be adjourned.

The meeting adjourned at 8:24 p.m.

**CARRIED
UNANIMOUSLY**

**Ken Becotte
Mayor**

**Debra Key
Corporate Officer**

VILLAGE OF HARRISON HOT SPRINGS
MINUTES OF THE SPECIAL MEETING OF COUNCIL

DATE: September 19, 2011
TIME: 4:30 p.m.
PLACE: Council Chambers, 495 Hot Springs Road

IN ATTENDANCE: Mayor Ken Becotte
Councillor Bob Perry
Councillor Dave Harris
Councillor Dave Kenyon

CAO, Ted Tisdale
DCAO/Corporate Officer, Debra Key
Director of Finance, Dale Courtice
CEDO, Andre Isakov
Manager of Revenue Services, Peggy Parberry

ABSENT: Councillor Allan Jackson
Operations Manager, Ian Gardner

+

1. **CALL TO ORDER**

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

2. **INTRODUCTION OF LATE ITEMS**

Funding Agreement under the Agreement on Transfer of Federal Gas Tax Revenues – Waste Water Treatment Plant Upgrade Project.

3. **APPROVAL OF AGENDA**

Moved by Councillor Kenyon
Seconded by Councillor Perry

THAT the agenda be approved as amended.

**CARRIED
UNANIMOUSLY**

4. **ADOPTION AND RECEIPT OF MINUTES**

None

5. **BUSINESS ARISING FROM THE MINUTES**

None

S.H

*Village of Harrison Hot Springs
Minutes of the Special Council Meeting
September 19, 2011*

CONSENT AGENDA

i. Bylaws

Waste Collection and Disposal Amendment Bylaw No. 982, 2011

THAT Waste Collection and Disposal Amendment Bylaw No. 982 be adopted.

Water Regulation Amendment Bylaw No. 984, 2011

THAT Water Regulation Amendment Bylaw No. 984, 2011 be adopted.

Sewer Regulation Amendment Bylaw No. 985, 2011

THAT Sewer Regulation Amendment Bylaw No. 985, 2011 be adopted.

Sign Bylaw 987, 2011

THAT Sign Bylaw No. 987, 2011 be adopted.

Moved by Councillor Kenyon
Seconded by Councillor Perry

ii. Agreements

THAT the Bylaws be adopted.

**iii. Committee/
Commission
Minutes**

**CARRIED
UNANIMOUSLY**

iv. Correspondence

DELEGATIONS

None

8. CORRESPONDENCE

None

9. BUSINESS ARISING OUT OF CORRESPONDENCE

None

**REPORTS OF COMMITTEES, COMMITTEE OF THE WHOLE
AND COMMISSIONS**

None

10. REPORTS FROM MAYOR

None

11. REPORTS FROM COUNCILLORS

None

Councillor Harris

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Councillor Kenyon

Councillor Jackson

Councillor Perry

12. **REPORTS OF STAFF**

Moved by Councillor Harris
Seconded by Councillor Kenyon

**Report of Deputy Chief Administrative Officer/Corporate Officer –
September 19, 2011 (Verbal)**

Re: Funding Agreement under the Agreement on Transfer of Federal
Gas Tax Revenues – Waste Water Treatment Plant

THAT Council approve entering into a Funding Agreement with the
Union of British Columbia Municipalities for the Regionally Significant
Projects for the Waste Water Treatment Plant Upgrade Project; and

THAT the Mayor and Corporate Officer be authorized to execute the
Agreement.

**CARRIED
UNANIMOUSLY**

13. **BYLAWS**

None

14. **QUESTIONS FROM THE PUBLIC**

None

15. **ADJOURNMENT**

Moved by Councillor Perry
Seconded by Councillor Harris

THAT the meeting be closed to the public pursuant to Section 90 (1) (a)
of the *Community Charter*.

The meeting adjourned at 4:37p.m.

**CARRIED
UNANIMOUSLY**

Ken Becotte
Mayor

Debra Key
Corporate Officer

VILLAGE OF HARRISON HOT SPRINGS
MINUTES OF THE COMMUNITIES IN BLOOM COMMITTEE

DATE: August 11, 2011
TIME: 2:30 p.m.
PLACE: Council Chambers, Harrison Hot Springs, BC

IN ATTENDANCE: Dave Harris, Chair
Allan Jackson, Co-Chair
Jane Kivett
Maureen Wendt
Heather Coxon
Carol Hepnar

C. Richardson, Recording Secretary

ABSENT:

1. CALL TO ORDER

The Chair called the meeting to order at 2:30 p.m.

2. INTRODUCTION OF LATE ITEMS

i) Outstanding achievement award registration

2. RECEIPT OF MINUTES

Adoption of Minutes
May 19, 2011

Moved by Councillor Jackson
Seconded by Jane Kivett

THAT the minutes of the June 9, 2011 Communities in Bloom meeting be adopted.

CARRIED

3. CHAIRPERSON'S REPORT

The chair stated that he would like to adjourn 15 minutes early and then meet with the Accounts Clerk to review pertinent information for the Quebec City trip.

COMMITTEE MEMBERS REPORT

4. ITEMS FOR DISCUSSION

Review of Judges Visit

The Chair noted that the visit with the Judges went very well. The judges were very impressed overall. The Chair discussed various stops he made with the judges on the way to Ashcroft such as Hope, Hell's Gate, Boston Bar, etc. He felt that the judge's

**VILLAGE OF HARRISON HOT SPRINGS
MINUTES OF COMMUNITIES IN BLOOM COMMITTEE MEETING
August 11, 2011
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approval was noticeable and that the Village should score quite well. A review of the scores from last year was provided. The need to improve on tidiness of the Village and Hot Springs Road was discussed. Tidiness will be discussed further at the next CiB meeting. The garden beds on Lillooet, damage made from people and alternative ideas were also discussed.

CiB Convention

The Chair reviewed the handout information packages. Staff will fill out the Outstanding Achievement Award application and will review with CiB before it is submitted in September.

The chair requested that staff prepare an application for Communities in Bloom awards and make application for environmental action, forest and landscape awards.

The Chair noted that the CiB trip to Quebec City is the most expensive project ever undertaken by the CiB. Councillor Jackson noted that there is a lot of support for this initiative. Expenses such as taxi fares and meals were discussed.

**Ruth Altendorf Bridge
Ribbon Cutting**

The ribbon cutting ceremony is scheduled for Monday, August 15, 2011 at 10:00 a.m. The Chair will speak with the Operations Manager to have the bridge cleaned.

Heritage Buildings

The Chair noted that there is a lengthy process in deeming heritage buildings and the requirements to complete this process. A list will need to be established in the future and the list of requirements will be emailed to the CiB members to report back with a list of buildings that could possibly qualify.

Heritage Trees

The Chair noted that there are no established criteria for heritage trees and it is not legislated by the province. It was requested that members research criteria used by other communities regarding this issue and report back.

Winter Banners

It was noted that sponsor may be required for this project. This item will be discussed further after the convention.

**Volunteer Appreciation
BBQ**

The issue of budget for this event was discussed. There was discussion about the Volunteer Appreciation event involving Kent/Harrison last year. Previous similar events and turnouts were discussed. Councillor Jackson requested the joint event with Agassiz/Harrison include all the Harrison volunteers. The members were in agreement.

VILLAGE OF HARRISON HOT SPRINGS
MINUTES OF COMMUNITIES IN BLOOM COMMITTEE MEETING
August 11, 2011
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Outstanding Achievement
Award registration

Staff will be preparing this document. CiB members will be able to discuss this item and contribute information. A meeting between the staff member preparing the document and CiB members will be scheduled.


4.

ADJOURNMENT

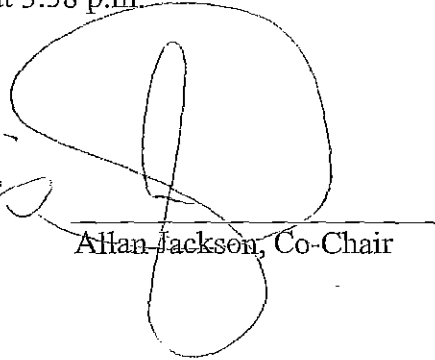
Moved by Councillor Jackson

Seconded by Maureen Wendt

The meeting adjourned at 3:38 p.m.



Dave Harris, Chair



Allan Jackson, Co-Chair

**VILLAGE OF HARRISON HOT SPRINGS
PARKS AND RECREATION COMMISSION MEETING**

DATE: Tuesday, June 28, 2011
TIME: 10:30 a.m.
PLACE: Council Chambers

IN ATTENDANCE:

Ed Stenson, Chair
Janne Perrin
Ken Becotte, Mayor
Ken Burningham
Andre Isakov, CEDO
Donna Cooney

Recording Secretary, K. Burr

ABSENT:

Teresa Baxter
Dave Harris, Councillor
Ruth Altendorf
Delphine Gornall
Todd Kabaluk
Ted Tisdalé, CAO

1. CALL TO ORDER

The Chair called the meeting to order at 10:32 a.m.

2. LATE ITEMS

- a) Campbell Lake Trail
- b) Bioblitz
- c) Weed Tour
- d) Footpaths

Moved by Janne Perrin

Seconded by Donna Cooney

THAT the agenda be adopted as amended.

CARRIED

3. ADOPTION OF MINUTES

Adoption of May
31, 2011 Minutes

Moved by Ken Burningham

Seconded by Janne Perrin

THAT the minutes of the May 31, 2011, Parks and Recreation
Commission meeting be adopted.

CARRIED

VILLAGE OF HARRISON HOT SPRINGS
MINUTES OF THE PARKS AND RECREATION COMMISSION MEETING
June 28, 2011
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Errors and Omission

Under Item 7 – Invasive Weeds should read “Miami River Streamkeepers” instead of “Miami River Committee”

Under Item 7 – Bioblitz should read www.gettoknow.ca is the website to find out about bioblitz’s around Canada

4. BUSINESS ARISING FROM THE MINUTES

Staff is still currently looking into the floodgates.

Invasive plants will be addressed with the Operations Manager on Thursday June 30, 2011

5. DELEGATIONS/PETITIONS

6. CORRESPONDENCE

ITEMS FOR DISCUSSION

7.

Letter from
Elizabeth
Mueller

It was noted that Elizabeth is looking at doing this activity as part of her business. Currently the groups that are using the hall are individuals who organize themselves. This item will be looked at further next meeting.

Report of Planning
Consultant –
Michael Rosen

An overview of the Kingma proposal went around the table. Discussion of making the development “green” was brought up.

Community and
Economic
Development Officer

It was noted that the Parks and Trail Master Plan will be looked at in the near future.

Campbell Lake
Trail

Discussion of renaming the trail to “Sasquatch Trail” went around the table. It was noted that the trail is in need of a good clean up.

Bioblitz

The funding came through, Bioblitz will take place Friday the 15th and Saturday the 16th. A barbeque will be organized to start it off on the 15th. Anyone wishing to attend the barbeque is asked to sign up in advance.

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MINUTES OF THE PARKS AND RECREATION COMMISSION MEETING
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Weed Tour The Second Annual Fraser Valley Invasive Plant Tour will be held on July 12, between 8:30 and 12:30. They will be making an appearance in Harrison Hot Springs.

Footpaths This item will be tabled to the next meeting.

The next meeting will be held on September 27, 2011.

8.
 Adjournment

ADJOURNMENT

Moved by Donna Cooney
Seconded by Janne Perrin

THAT the meeting be adjourned at 11:56 a.m.

CARRIED

Ed Stenson (Chair)

Krystal Sobie (Recording Secretary)



VILLAGE OF HARRISON HOT SPRINGS

Request to Appear as a Delegation

In order to make a presentation to Council at a Council Meeting, you are required to submit a written request to the Corporate Officer no later than 4:30 p.m. on the Wednesday before the regular meeting. The request can either be a copy of this completed form or a separate letter that you have written which contains the information requested on this form. Any background materials are appreciated and will be circulated to the Mayor and Council with the agenda. You can submit your request in person, by mail at PO Box 160 Harrison Hot Springs, BC V0M 1K0, fax at 604-796-2192 or e-mail at dkey@harrisonhotsprings.ca.

The Administration Department will advise you when you are scheduled to appear before Council. Council meetings commence at 7:00 p.m. in the Village's Council Chambers at 495 Hot Springs Road, Harrison Hot Springs, BC.

You are limited to a maximum of 10 minutes to present your material, regardless of the number of presenters in your delegation.

Date: July 13, 2011 Requested Meeting Date: October 11, 2011

Organization Name (if applicable): Agassiz Healthy Communities

Name of Presenter: Wendy Colman, Chair & group.

Name of Applicant if Other than Above: _____

Contact Phone Number & E-Mail: tracey.kirkness@fraserhealth.ca
604-795-4447 Ext. 614198

Mailing Address with Postal Code: c/o Chilliwack General Hospital
45600 Menholm Rd, Chwk V2P 1P7

Audio/Visual requirements: DVD

Topic: Healthier Communities Strategy -
Healthy Living

Action you wish Council to take: Review of relevant recommendations
to support healthier living for community residents
Endorsement of plan.



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Better health.
Best in health care.

The Healthier Community initiative is a partnership between Fraser Health and its municipalities, which directly impacts the health of the citizens in each community. This partnership is an opportunity to move the focus of “health” from treatment and remediation to promotion and prevention through immediate action.

This document begins with a “snapshot” of the health status of Agassiz/Harrison Local Health Area (LHA) which includes Agassiz, Harrison, Kent and several First Nations communities. This health profile includes demographics of the population, incidence of chronic disease, leading causes of death, and the health practices of its citizens.

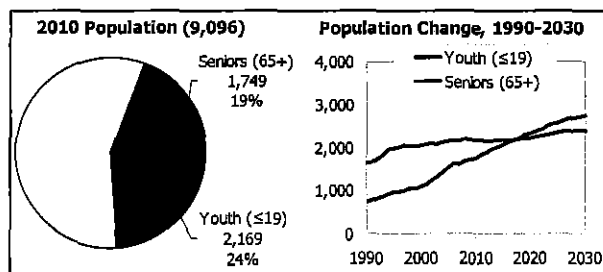
An *Action Checklist* outlines a list of priority actions that lead to a healthier community. These activities have been selected from best practices identified in the Fraser Health Medical Health Officers’ Annual Report, as well as other national and international initiatives.

Municipalities along with other community partners create their “Community Action Plan” from priorities identified and tailored to the needs of their communities. To assist them, Fraser Health has dedicated a portion of the role of the Region’s “Community Health Specialists”. The role of these specialists is to bring best practice expertise and knowledge to the community partners in the development, implementation and evaluation of their Community Action Plans.

With this input, each municipality can create measureable behaviour change and promote citizens’ involvement in personal and community responsibility for better health.

Population

It is estimated that approximately 9,096 people currently reside in Agassiz/Harrison LHA. It has the second smallest population size of all local health areas in Fraser Health. The median age of the population is 44, which is older than the overall Fraser Health median of 39. Approximately 1,606, or 17.8% of all persons, in Agassiz/Harrison LHA are under the age of 15. Just under a quarter of the population is age 19 years and under and this proportion continues to decline, mirroring the trend across Fraser Health and the province as a whole. In contrast, about 19% of the population is seniors age 65 and older and the proportion of this age group is expected to grow to 26% by 2030.



Ethnic and Aboriginal Identity

The ethnic and Aboriginal populations are an important component of population in the context of health status and service planning. In Agassiz/Harrison LHA, nearly 22% of the population are Aboriginal, while the rest of the population is mostly of European or Canadian origin. Overall, residents born outside of Canada composed about 3% (215) of the total population of Agassiz/Harrison LHA in 2006.

Ethnic and Aboriginal Identity	2006 Population	% Population
Total LHA population	7,945	
Top three ethnic origins:		
English	2,455	30.9%
Aboriginal identity	1,715	21.6%
Scottish	1,690	21.3%

Source: Statistics Canada, Census, 2006.

Health Status

Compared to the BC and Fraser Health averages, the population of Agassiz/Harrison LHA has higher rates of asthma, COPD, heart disease and stroke.

Cancer and heart disease are the leading causes of death in Agassiz/Harrison LHA, and account for half the deaths in 2008.

Risk factors common to many chronic diseases include tobacco use, an inactive lifestyle, an unhealthy diet and being overweight or obese. These risk factors are preventable.

Top 5 Leading causes of death, Agassiz/Harrison LHA, 2008

Cause of Death	Deaths	% of All Deaths
Cancer	19	27.1%
Heart disease	16	22.9%
Cause of death unknown/under investigation	9	12.9%
Infectious and parasitic diseases	≤5	≤7.1%
Pneumonia/influenza	≤5	≤7.1%
Diseases of the digestive system	≤5	≤7.1%
All deaths	70	100.0%

Source: VISTA Database, BC Vital Statistics Agency, Victoria, BC

People Living with Select Chronic Diseases, 2008/09

Condition	# People	% of Population
Asthma (Ages 5-54)	690	10.4%
Diabetes	660	6.4%
Heart disease	576	5.2%
Chronic obstructive pulmonary disease (COPD)	227	2.0%
History of stroke	143	1.3%

Source: Ministry of Health Services, PHC Registry as of November 2009

Health Practices

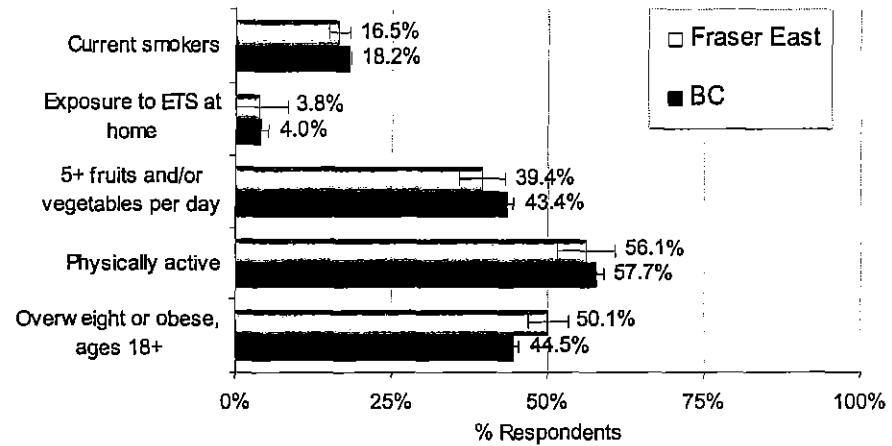
Residents of Fraser East, which includes Agassiz/Harrison LHA, are less physically active than the province overall. Only 39.4% of residents eat five or more servings of fruits and vegetables per day, which is lower than the BC average and of great concern. It is reported that 16.5% of residents in Fraser East smoke. Although this rate is slightly lower than the BC average, it is still significant because smokers are at increased risk for heart disease, a number of different types of cancer and COPD. Levels of exposure to second-hand smoke are similar to the provincial rate.

If these health practices continue, the rate of chronic disease in Agassiz/Harrison LHA is expected to rise significantly over the next few years.

Communities have the power to take action on combating these trends.

- Municipalities can create public policy (e.g. smoking bylaws), built environments (e.g. planning for active transportation) and internal corporate policies (e.g. guidelines for healthy food at meetings) that foster better health practices.
- Organizations and businesses can challenge and support their staff and clients to lead healthier lives.
- Finally, with the support of municipalities, businesses, and other organizations, citizens themselves can take individual and collective action to improve their health by exercising 30 minutes per day, eating more fruits and vegetables and quitting smoking.

Health Practices, Fraser East & BC, Ages 12+, 2007-2008



Note: ETS = environmental tobacco smoke

Source: Statistics Canada, Canadian Community Health Survey, 2007/08.



Gold Standard: Actions Checklist

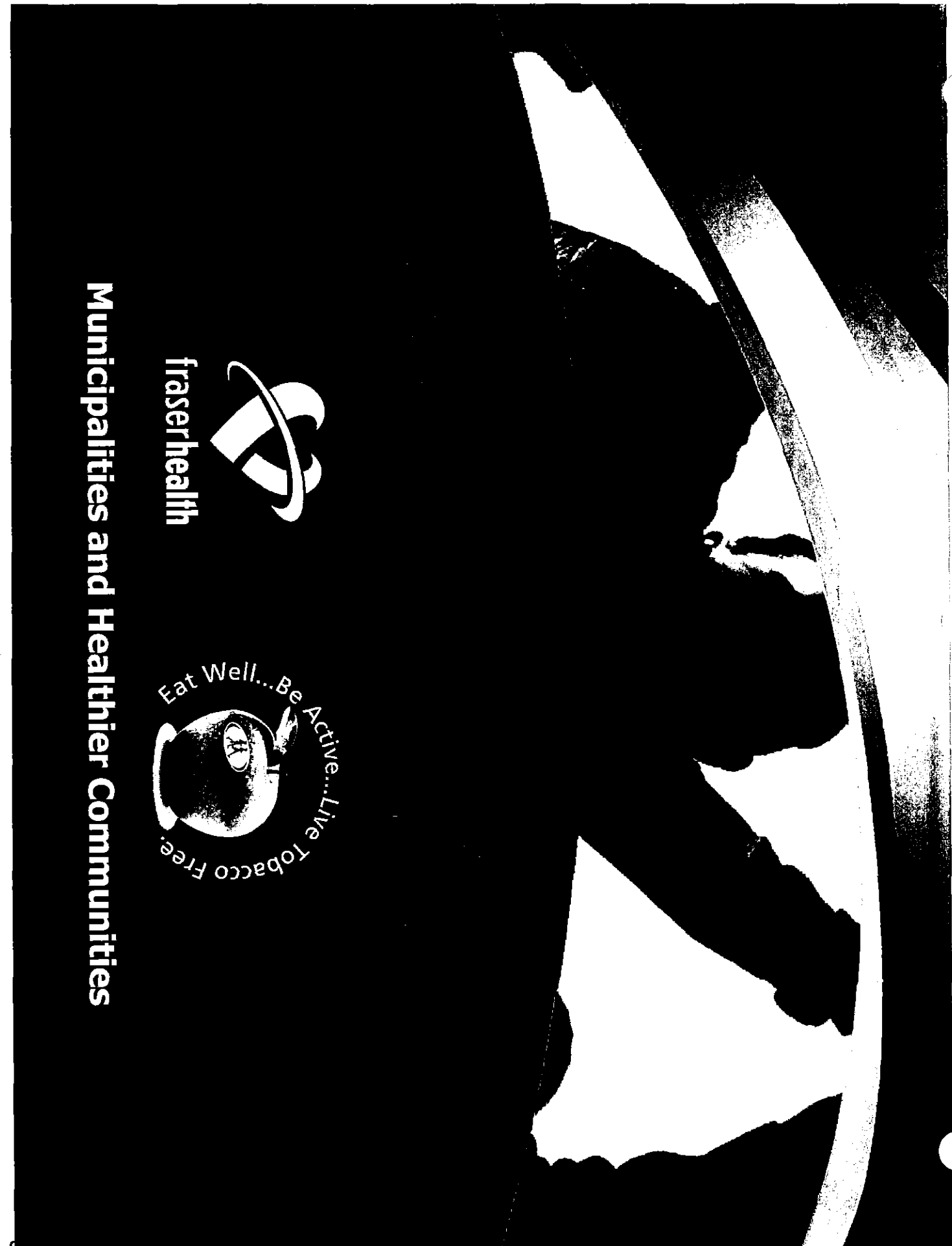
<p>1. Implement healthy food policies that make the healthy choice the easy choice in schools, recreation centres, sports settings, post-secondary institutions, restaurants and supermarkets.</p>	<p>25% 1 - 3 actions from the checklist are complete. 50% 4 - 6 actions from the checklist are complete.</p>	<p>75% 7 - 9 actions from the checklist are complete (must include actions 1 - 3). 100% 10 or more actions from the checklist are complete (must include actions 1 - 6).</p>	
<p>2. Develop bylaws and/or other strategies that restrict new fast food outlets from opening near schools.</p>		<p>100% Bylaws and/or other strategies are in place to restrict fast food outlets from opening within a prescribed zone (minimum of 600 meters) around middle schools and secondary schools.</p>	
<p>3. Create a Healthy Food Zone around schools: Coordinate with convenience stores to increase access to healthy food choices around schools.</p>	<p>25% Convenience stores within a minimum 600 metre radius of middle and secondary schools are designated "Healthy Food Zones" 50% Convenience stores within a minimum 600 metre radius of middle and secondary schools are designated "Healthy Food Zones"</p>	<p>75% Convenience stores within minimum 600 metre radius of 75% of middle and secondary school are designated "Healthy Food Zones" 100% Convenience stores within a minimum 600 metre radius of 100% of middle and secondary schools are designated "Healthy Food Zones"</p>	
<p>4. Develop partnerships to promote active living and healthy eating messaging on an ongoing basis in municipalities.</p>	<p>25% Healthy eating and physical activity messages are being routinely promoted internally and externally by the municipality. 50% Healthy eating and physical activity messages are being routinely promoted internally and externally by the municipality and one stakeholder group.</p>	<p>75% Healthy eating and physical activity messages are being routinely promoted internally and externally by the municipality and two or three stakeholder groups. 100% Healthy eating and physical activity messages are being routinely promoted internally and externally by the municipality and four stakeholder groups.</p>	

<p>1. ☉ Implement community active living challenges or walk, run or play events.</p>	<p>25% Annually, the municipality coordinates at least one active living challenge or walk, run or play event that is widely promoted in the community. 50% The annual active living challenge or walk, run or play event is conducted with one stakeholder group.</p>	<p>75% The annual active living challenge or walk, run or play event, is conducted with two or three stakeholder groups. 100% Two or more annual active living challenges or walk, run or play events, are conducted with four stakeholder groups.</p>	
<p>2. ☉ Implement workplace initiatives that promote and support physical activity.</p>	<p>25% All municipal workplaces have one annual workplace wellness event established with employee participation. 50% All municipal workplaces have four annual workplace wellness events established with employee participation.</p>	<p>75% A municipal workplace wellness policy is established. 100% Four annual workplace wellness events are promoted community-wide with municipal leadership and by four stakeholder groups.</p>	
<p>3. ☉ Support active living initiatives to prevent childhood overweight and obesity.</p>	<p>25% One initiative is completed. 50% Two initiatives are completed.</p>	<p>75% Three initiatives are completed. 100% Four initiatives are completed.</p>	

<p>1. ☉ Adopt non-smoking bylaws that exceed provincial regulations; prohibiting smoking within 7.5 metres of doors, windows and air intakes, on restaurant or pub patios, in public places where people gather, in parks, on beaches and on trails.</p>	<p>25% One of the bylaw amendments as outlined in the strategy has been passed. 50% Two of the bylaw amendments as outlined in the strategy have been passed.</p>	<p>75% Three of the bylaw amendments as outlined in the strategy have been passed. 100% All of the bylaw amendments as outlined in the strategy have been passed.</p>	
<p>2. ☉ Implement a campaign to support and promote staff smoking cessation and smoke-free workplace policy.</p>	<p>25% Municipality has cessation support available to staff, including a quit and win contest. 50% Municipality is engaged in a Smoke-free Workplace Initiative and is supporting staff cessation, including provision of coverage for cessation medications on health benefits.</p>	<p>75% Municipality has smoke-free policy prohibiting smoking in all structures, on grounds and in municipal vehicles. 100% Municipality is promoting the Smoke-Free Workplace Initiative externally and stakeholder groups are implementing the initiative.</p>	
<p>3. ☉ Support and promote post secondary smoke-free campus initiatives and student smoking cessation.</p>	<p>25% Post-secondary institutions are promoting smoking cessation. Support is available to staff and students, including a quit and win contest. 50% Post-secondary institutions are supporting staff and student cessation, including provision of coverage for cessation medications on health benefits.</p>	<p>75% Post-secondary institutions have smoke-free policy that exceeds provincial regulations. Signage is posted. 100% Smoke-free campus initiatives and policy are promoted campus-wide and are monitored and enforced.</p>	

<p>1. ☉ Include healthy built environment principles and strategies into Official Community Plans (OCPs) and in land use planning to increase the density, inclusiveness and walkability of neighbourhoods.</p>	<p>25% OCP includes three principles. 50% OCP includes four principles.</p>	<p>75% OCP includes five principles. 100% OCP includes all six principles.</p>	
<p>2. ☉ Increase children's access to parks, green spaces and recreation facilities.</p>	<p>25% 1 - 3 provisions are developed and implemented. 50% 4 - 7 provisions are developed and implemented.</p>	<p>75% 8 - 11 provisions are developed and implemented. 100% 12 or more provisions are developed and implemented.</p>	
<p>3. ☉ Partner with business and non-profit organizations to conduct education campaigns for community residents about healthy built environments.</p>	<p>25% Healthy Built Environment messages are being routinely promoted internally and externally by the municipality. 50% Healthy Built Environment messages are being routinely promoted internally and externally by the municipality and one stakeholder group.</p>	<p>75% Healthy Built Environment messages are being routinely promoted internally and externally by the municipality and two or three stakeholder groups. 100% Healthy Built Environment messages are being routinely promoted internally and externally by the municipality and four stakeholder groups.</p>	
<p>4. ☉ Develop community "Hubs" for integrating community programs focussed on chronic disease prevention and healthy living to improve accessibility and shared funds.</p>	<p>25% 25% of recreation facilities or "Hubs" are incorporating healthy living programs. 50% 50% of recreation facilities or "Hubs" are incorporating healthy living programs.</p>	<p>75% 75% of recreation facilities or "Hubs" are incorporating healthy living programs. 100% 100% of recreation facilities or "Hubs" are incorporating healthy living programs.</p>	

<p>1. ☉ Implement healthy living programs (healthy eating, physical activity and tobacco-free living) targeting seniors.</p>	<p>25% Healthy living programs are being routinely promoted and implemented by the municipality. 50% The municipality and one stakeholder group are incorporating healthy living programs.</p>	<p>75% The municipality and two or three stakeholder groups are incorporating healthy living programs. 100% The municipality and four stakeholder groups are incorporating healthy living programs.</p>	
<p>2. ☉ Initiate healthy living challenges and healthy living programs (includes: physical activity, healthy eating and living tobacco free) within Mental Health and Substance Use Services community programs.</p>	<p>25% Healthy living programs are being routinely promoted internally. 50% One Mental Health and Substance Use Services community program is incorporating healthy living programs.</p>	<p>75% Two or more Mental Health and Substance Use Services community programs are incorporating healthy living programs. 100% All Mental Health and Substance Use Services community programs are incorporating healthy living programs.</p>	
<p>3. ☉ Implement healthy living programs (healthy eating, physical activity, and living tobacco-free) for youth at risk.</p>	<p>25% Healthy living programs are being routinely implemented and promoted by the municipality. 50% The municipality and one stakeholder group are incorporating healthy living programs.</p>	<p>75% The municipality and two or three stakeholder groups are incorporating healthy living programs. 100% The municipality and four stakeholder groups are incorporating healthy living programs.</p>	



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Municipalities and Healthier Communities

APPLIED PSYCHOLOGY
COURSE 101
Lecture 10
The Impact of Stress

Personal and economic costs:

- Decreased productivity**
- Increased absenteeism**
- Increased disability**
- Lowered self-esteem**
- Decreased quality of life**



**More money to
health care means
less money
for other budgets**

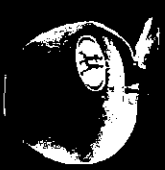


**Collaborate to address
preventable risk factors**

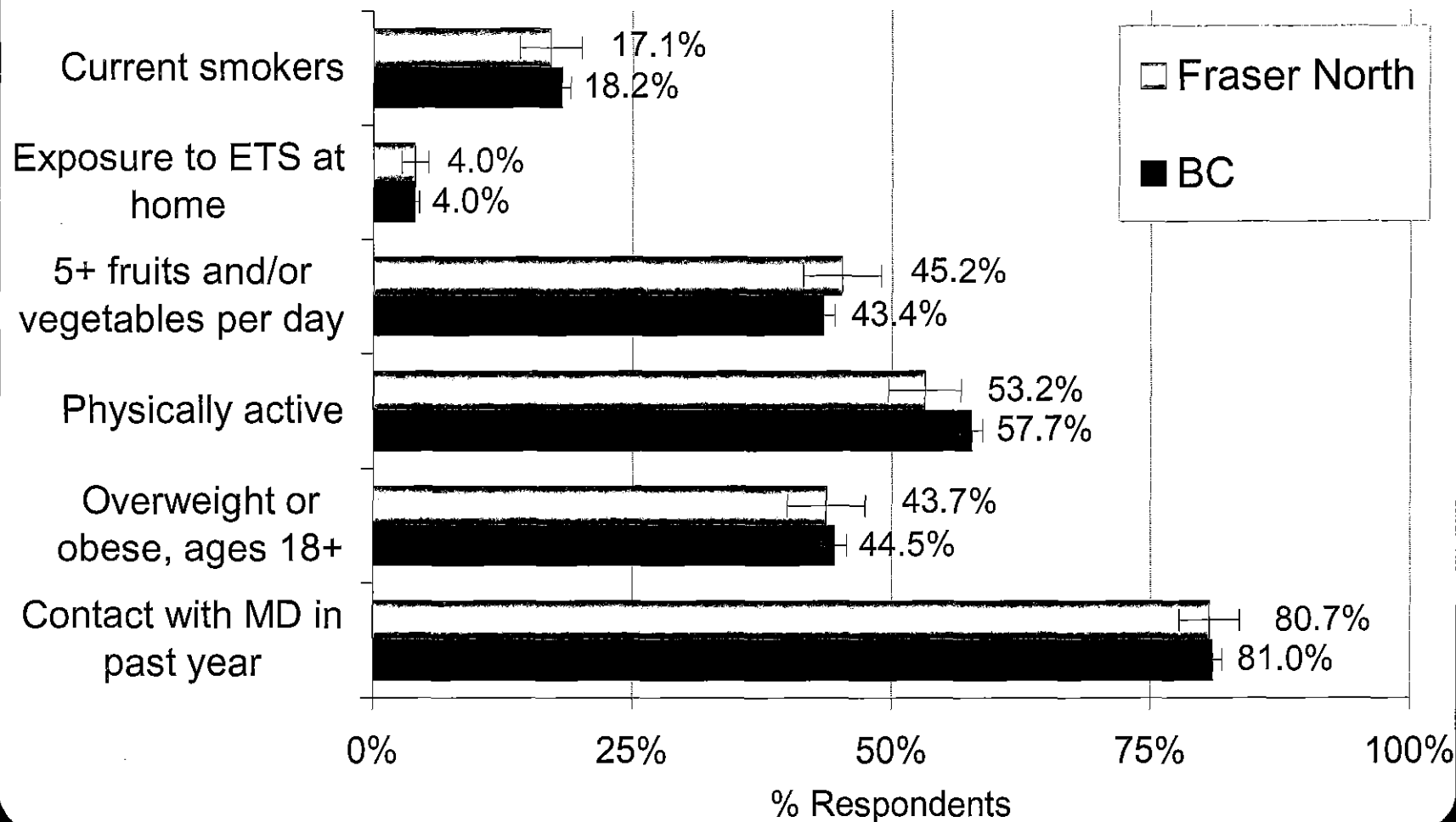
Healthy eating

Physical activity

Tobacco free living

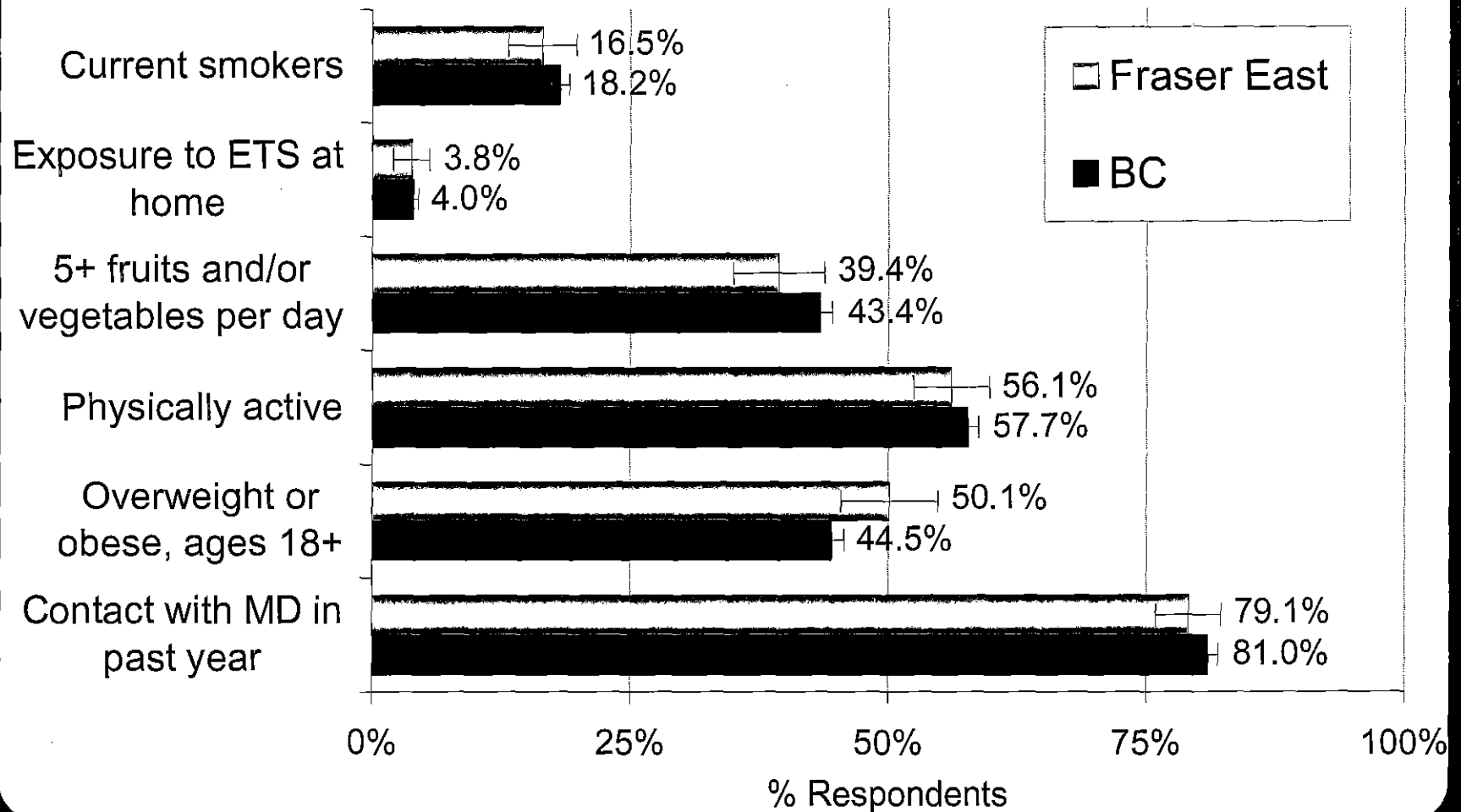


Health Practices, Fraser North & BC, Ages 12+ 2007-2008[‡]



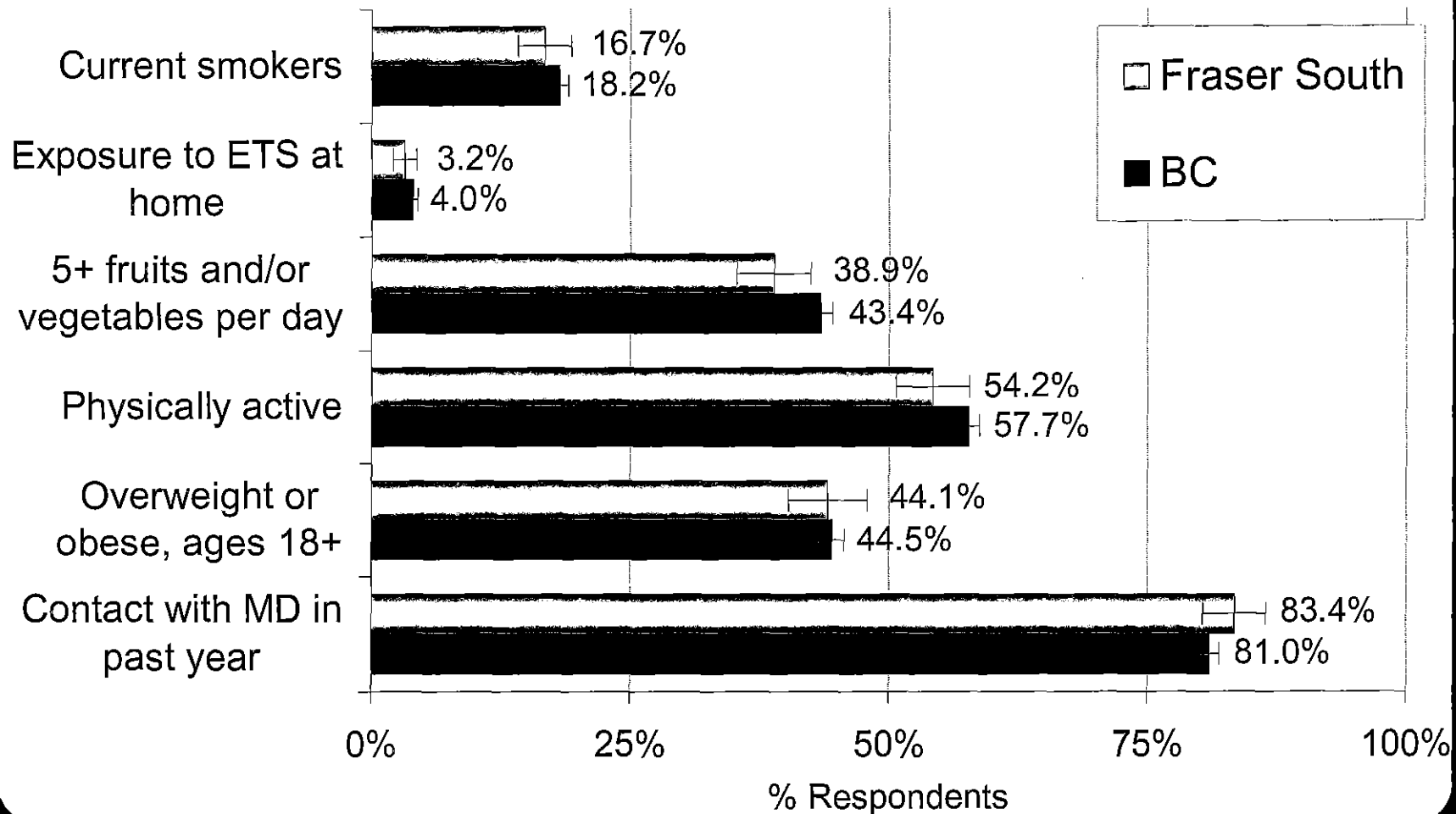
Fraser North

Health Practices, Fraser East & BC, Ages 12+ 2007-2008[‡]



Fraser East

Health Practices, Fraser South & BC, Ages 12+ 2007-2008[‡]



Fraser South

Partnership between Fraser Health,
municipalities and community
stakeholders

Focus on health promotion by creating a
healthier environment

Executive Director, Medical Health Officer
and Community Health Specialist



MULTI-PARTISAN
HEALTHY COMMUNITIES

**To provide *leadership* in the
community**

partner with Fraser Health
partner with community
organizations





In Fraser Health communities...

Cardiovascular disease, lung cancer, and cerebrovascular disease (including stroke) are the leading causes of death

37% of our population lives with multiple chronic conditions, using 80% of health resources

14.9% of residents smoke, and of those 50% will die of smoking related disease

30.2% of residents aged 15+ are exposed to second-hand-smoke.

59% of residents eat less than 5 servings of fruits and vegetables daily

46% of residents are physically inactive

45% of residents are overweight or obese

We can reduce or even reverse disease statistics by making choices to create healthier environments that support healthier lifestyles.

The risk for disease can be reduced through healthy community design that supports better lifestyle behaviours, including living tobacco free, eating healthy and being physically active.



Healthy Living for Healthier Communities



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Good health: more than health care services

Choices made by a community can impact health as much as choices made by an individual.



Collective action that promotes better health

- Healthy Built Environment
- Healthy Eating and Food Security
- Physical Activity
- Tobacco Reduction
- Vulnerable Citizens and Neighbourhoods

Fraser Health is committed to working together with communities in our region to support the health of citizens including those living with chronic disease. The Fraser Health team, guided by Executive Directors, Medical Health Officers and Community Health Specialists, supports health promotion efforts through shared leadership and action with our communities.

Who we are

Community Health Specialists (CHS) are a diverse group of health professionals with expertise in healthy living. Each community in Fraser Health has a dedicated Community Health Specialist, Medical Health Officer and Executive Director who work together as a team.

What we do

The Healthy Living team works with the health care community as well as municipalities and community stakeholders to improve community health, and reduce the rates of chronic disease.

How we do our work

- Educate and inform citizens about the importance of creating communities that support health and wellness
- Share best practice approaches to healthy living with our partners, to incorporate healthy living strategies into all aspects of business, and share that vision with the community
- Build on existing strategies rather than re-inventing the wheel
- Create benchmarks that lead to action-oriented approaches and targeted improvements
- Identify appropriate self management information that helps individuals remain healthy



Harrison Hot Springs Traffic Calming Plan

Harrison Hot Springs, BC

Final Report

Prepared for
Village of Harrison Hot Springs

Date
October 6th, 2011

Prepared by
Bunt & Associates

Project No.
4801.01

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EXECUTIVE SUMMARY

- i. This report aims to develop a traffic calming plan for the Village of Harrison Hot Springs.
- ii. The Village has been installing traffic calming devices for a number of years in response to residents concerns over speeding vehicles. The Village now wishes to look at this issue in a more holistic way.

Existing Conditions

- iii. Existing conditions in terms of speed and volume of vehicles was collected, as well as a resident questionnaire survey to determine people's opinions of existing and potential future traffic calming.
- iv. Speeding is a major issue for residents. Although they feel speeding on McCombs has been reduced as a result of the currently installed measures, speeding on Hot Springs Road continues to be a significant concern. This is reinforced by the speed data collected by Bunt & Associates on this road showing 85th percentile speeds well in excess of the posted speed limit.
- v. The lack of sidewalks in the Village was also noted as a concern in regards pedestrian safety.

Traffic Calming Policy

- vi. The aim of the traffic calming policy is to help the Village effectively address future requests for traffic calming measures. As such it is intended to provide the village with a range of options when it comes to implementing a new traffic calming measure and give them confidence in their applicability in different situations.
- vii. Many different organisations and guides were used in putting together this section including material from the Transportation Association of Canada (TAC), the Institute of Transportation Engineers and the US Department of Transportation.
- viii. Traffic calming is '*The combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve conditions for non-motorized street users.*'
- ix. Although much literature exists on traffic calming, there has been less research carried out on appropriate traffic calming measures in more rural areas.
- x. If the Village were to establish warrants for the installation of traffic calming measures then the excessive speeds on Hot Springs Road would likely qualify that street for some type of traffic management measures to reduce speeds. However, due to its role and function, physical and horizontal traffic calming measures are not appropriate for this arterial road.

- x. Some of the traffic calming measures that would potentially be appropriate in the Village have already been installed, at least, one location. These measures are: traffic circles; raised intersections; speed humps (not currently present); textured crosswalks (not currently installed).
- xii. Other measure more suited to Hot Springs Road include: traverse markings; speed feedback signs; having the speed limit painted on the road; narrow lane markings.
- xiii. One point to make is that three-way stops are not technically traffic calming devices. They should technically only be installed to assist minor street traffic exiting onto the main road. However, they are effective in calming speeds in the Village and many are used together with raised intersections. Compliance appears to be fairly good, based on our surveys.
- xiv. Some measures help to give pedestrians and cyclists more comfort, which do not have an effect on vehicles. These measures include bicycle lanes, sidewalks and multi-use pathways.

Traffic Calming Plan

- xv. Three options were initially developed, based on different road hierarchy approaches.
- xvi. **The arterial approach** attempted to focus all through traffic on Hot Springs Road, with all other roads, including McCombs Drive, designated as local roads. As such, vertical and horizontal measures are acceptable on any of the 'local' roads. This includes speed humps, traffic circles, raised intersections, textured crosswalks, centre medians etc. This approach used the most traffic calming devices. Traffic management measures on Hot Springs Road were also included in all the options.
- xvii. **The cross cut approach** saw Eagle Street/ McCombs Drive as a collector road as far south as Alder Avenue. Alder Avenue would also be a Collector Road. These collector roads would have less traffic calming on (no vertical measures) and as a result higher volumes (and possibly speeds) would be expected as the idea would be to focus traffic onto these roads, in part by designating a preferred east-west connection.
- xviii. **The balanced approach** is similar to the cross cut approach but McCombs Drive would continue as a collector all the way south, and include McPherson Road. Alder Avenue would not be a collector Road. Thus equal preference is given to the two north - south roads and through traffic could choose either route. McCombs would have less traffic calming on it and no vertical measures.
- xix. These three options were presented to the public as part of an Open House. Based on feedback from the Open House, as well as reference to the traffic calming policy research, a 'preferred option' was developed.
- xx. The measures included have been put into three phases based on priority. Highlights of the preferred option are:

- Rebuild the raised intersections and traffic circle to Transportation Association of Canada (TAC) standards, which will retain their effectiveness while making them more comfortable to navigate;
 - Replace the existing speed bumps with more comfortable sinusoidal speed humps.
 - Install a speed hump and textured crosswalks on Walnut Avenue, outside the school;
 - Add additional speed humps on other east – west streets if required;
 - Construct a new multi-use pathway along the east side of McCombs Drive to provide a safe, off-street, north – south route for pedestrians and cyclists.
- xxi. Some options require consultation and discussion with the Ministry of Transportation and Infrastructure (MoTI). Highlights of these measures include:
- Painted speed limit signs;
 - Mobile speed feedback signs;
 - Shared use asphalt path on east side of road;
 - Painted bike lane on west side;
 - Traverse pavement markings;
 - Enhanced gateway feature.
- xxii. These measures, in total, are expected to cost in the range of \$1,900,000 to \$2,265,000 (including additional 20% for contingency). However, the asphalt shared path on Hot Springs Road costs about \$1,500,000. Without this element, the cost is in the region of \$500,000.

1. INTRODUCTION

1.1 Aim of Report

The aim of this report is to develop a traffic calming plan and policy for the Village of Harrison Hot Springs that considers the issues of traffic safety and traffic calming in a holistic way and delivers a plan which contributes towards the enhancement of the Village in terms of connectivity, social and economic vitality, attractiveness and safety.

1.2 Components of the Report

The report is divided into three main components:

- **Existing Conditions.** This section consists of: a review of existing traffic conditions within the Village in terms of speed and volume on different streets; a review of the effectiveness and appropriateness of existing traffic calming measures; and, questionnaire survey results outlining the views and priorities of Village residents when it comes to traffic calming and safety in the Village.
- **Traffic Calming Policy.** This section aims to provide relevant research and advice as to appropriate traffic calming measures that could be applied in the Village. It outlines the costs and benefits of various traffic calming devices, what they should be used for and what they should not be used for. This section provides useful context for both analyzing the existing conditions, as well as choosing appropriate measures moving forward.
- **Traffic Calming Plan Development.** This section of the report outlines both the process and outcome in developing a preferred traffic calming plan for the Village. It outlines the process of developing three possible options and then consulting on these options through a public open house. Feedback from the Open House led to the development of the Preferred Option, which has then been costed and a phasing strategy suggested.
- **Conclusions.** This section of the report summarises the work undertaken, focusing on the main conclusions of the report and actions to be taken to implement the preferred plan.

1.3 Background

The Village of Harrison Hot Springs (the Village) has been installing various traffic calming devices in recent years to alleviate neighbourhood concerns regarding speed and volume of vehicles. The existing traffic calming devices were installed to respond to residents' requests and as the result of a tragic accident. The decision by the Village to install these devices did not necessarily go through a thorough evaluation process. More recently, additional traffic calming devices have been requested and the Village has decided the time is right to review existing and future traffic calming in a more holistic way.

Harrison Hot Springs is located at the eastern end of the Fraser Valley, north of the Fraser River and north of Agassiz. The Village is relatively small and relatively isolated in that there is only one principal road in and out. Its lakeside setting and the presence of the Hot Springs means that it is also a tourist destination for much of year. **Exhibit 1.1** indicates the location of the Village within the context of the eastern end of the Fraser Valley.



Exhibit 1.1
Site Context

Harrison Hot Springs Traffic Calming Plan
4801-01 October, 2011 Scale NTS

2. EXISTING CONDITIONS

2.1 Introduction

In order to effectively review the existing traffic calming devices and develop a new traffic calming plan, it is necessary to understand existing operations within the Village, and assess the effectiveness of the existing measures.

Bunt & Associates (Bunt) conducted a series of traffic surveys including traffic volume (intersection counts), spot-speed, and multi-way stop-compliance surveys at several key locations throughout the village to develop an understanding of the existing traffic conditions and operational issues within the study area. Additionally, pneumatic road tube counters were installed along Balsam Avenue and Pine Avenue (streets with temporary speed humps) in April, and May/June, 2011 for one-week periods to capture traffic volumes and vehicle speeds both with and without speed humps on the roadway.

Bunt developed an online questionnaire launched via the Village's website to facilitate resident feedback regarding existing traffic calming features, local driving routes/patterns, walking and cycling habits within the study area, and general overall opinions of these topics. The following sections summarize the existing road network and traffic calming features in the study area as well as the results of the traffic surveys and online questionnaire.

2.2 Existing Road Network & Traffic Calming Features

The Village of Harrison Hot Springs is accessed via Highway 9 which provides a connection to Lougheed Highway at Agassiz and further south to Highway 1 at Rosedale. There are two main north-south routes within the Village, Hot Springs Road (Hwy 9) on the west side which carries the bulk of the traffic to and from the Village, and McCombs Drive on the east side which acts as a local service road primarily used by residents.

Esplanade Avenue and Lillooet Avenue are the two main east-west routes in town (both on the north side of town near Harrison Lake). They are located outside of the main geographical focus of this study. Due to the elongated form of the Village there are several east-west connections which provide local access to residential areas. **Exhibit 2.1** highlights the study area considered for the Traffic Calming Plan. Below are descriptions of key roads considered for this study.

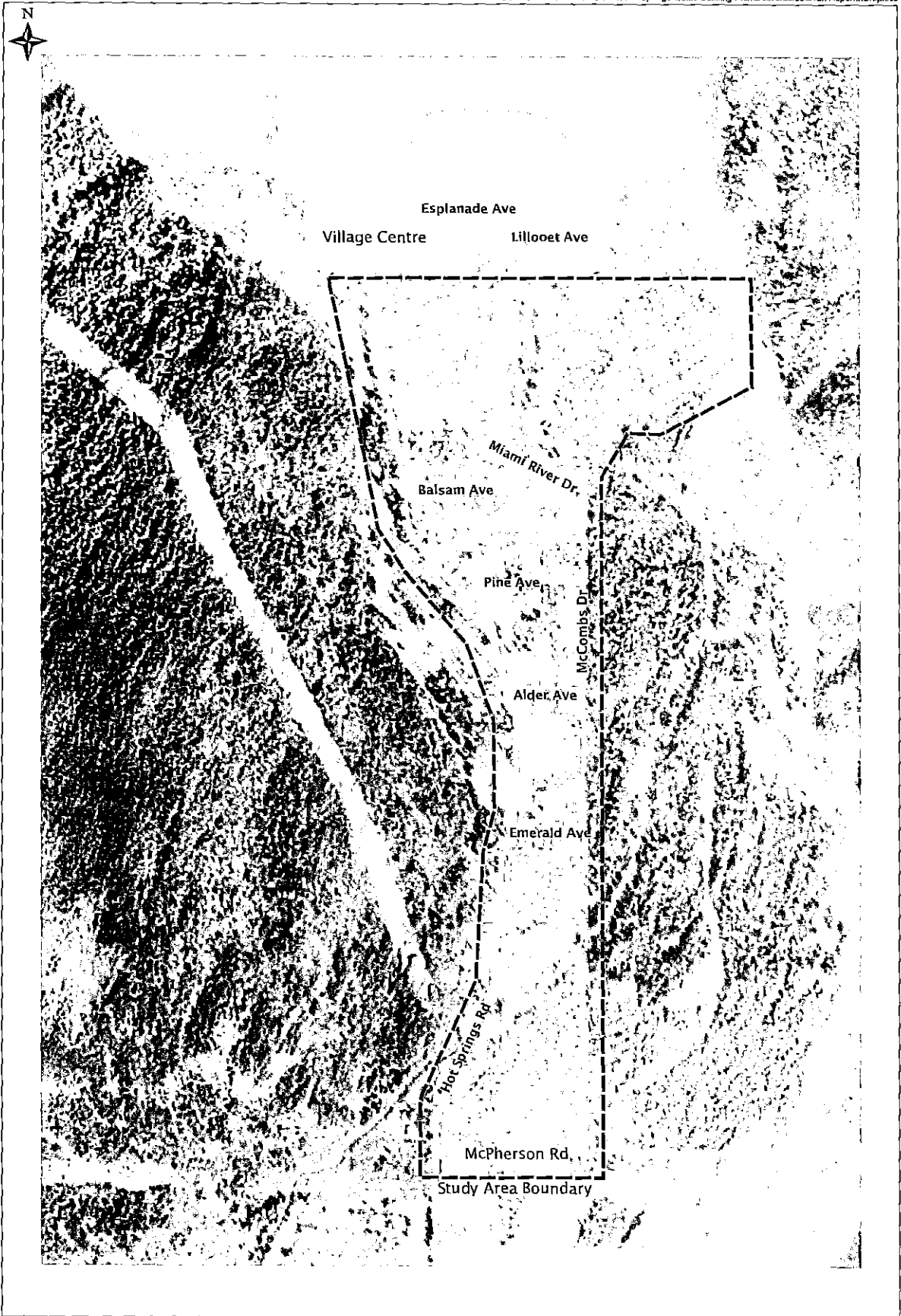


Exhibit 2.1
Study Area

Hot Springs Road

Hot Springs Road (Highway 9) is the main north-south route through the Village of Harrison Hot Springs and to the south it provides connections west and east via Lougheed Highway (route 7) and Highway 1. It is operated by the Ministry of Transportation. It has a two-lane cross-section throughout the Village with a gravel shoulder on the west side and a paved shoulder on the east side, as well as a sidewalk along most of the east side of the street. South of McPherson Road, Hot Springs Road has a posted speed limit of 80km/h as a rural highway, while north of McPherson Road the posted speed limit is 60km/h, and north of Balsam Avenue it has a 50km/h posted speed limit. Currently, there are no traffic calming or traffic management features located on Hot Springs Road.

McCombs Drive/Eagle Street

McCombs Drive/Eagle Street is a local street running north-south for the entire length of the Village, beginning at McPherson Drive to the south and continuing north to Lillooet Avenue (changing from McCombs Drive to Eagle Street north of Miami Creek). It provides local connections to residential areas throughout the Village for residents. McCombs Drive/Eagle Street has a two-lane cross-section for its entirety with narrow single-lane sections at two bridge crossings. In addition there are very limited sidewalks or shoulders. It has a posted speed limit of 50km/h, and traffic calming features such as raised intersections and a traffic circle have recently been installed. Speed humps which were installed at the south end have recently been removed.

Other Local Streets

There are several other local streets within the study area which provide east-west connections between Hot Springs Road and McCombs Drive and access to residential areas for residents. Some of the key local streets considered in this study include:

- Miami River Drive;
- Walnut Avenue;
- Balsam Avenue;
- Chestnut Avenue;
- Pine Avenue;
- Alder Avenue; and
- Emerald Avenue.

The Village of Harrison Hot Springs employs a 'blanket speed limit' of 50km/h within the village unless otherwise posted and therefore these streets generally have a speed limit of 50km/h. One exception is adjacent to the Village elementary school where Walnut Avenue is 30km/h. They all have two-lane cross-

sections with, generally, room for on-street parking. Sidewalks are very limited on these local streets. Temporary speed bumps were installed on both Balsam Avenue and Pine Avenue, which are removed during the winter for snow-removal purposes.

Existing Traffic Calming Features

The Village of Harrison Hot Springs has installed a number of traffic calming features throughout the Village in response to residents' complaints about speeding and "rat-running" (i.e. cutting-through of residential neighbourhoods) within the Village. Existing traffic calming and related traffic features are shown at **Exhibit 2.2**.

Existing traffic calming features that have been installed include speed bumps, and raised intersections (vertical deflections), as well as a traffic circle (horizontal deflection). As shown in Exhibit 2.2, most of these devices were installed along McCombs Drive which had received a number of complaints regarding speeding and where a tragic accident had taken place. More specifically, there are raised intersections at McCombs Drive / Chestnut Avenue, and McCombs Drive / Emerald Avenue, and a traffic circle at McCombs Drive / Alder Avenue.

As a result of the installation of these traffic calming devices it is reported that residents began to "cut-through" on residential streets between McCombs Drive and Hot Springs Road in order to avoid the traffic calming efforts. Consequently, this increased traffic volumes and speeds on some local streets, particularly, Balsam Avenue and Pine Avenue, to which residents of these streets complained to the City and asked for the installation of speed bumps to remedy the situation. Therefore, temporary (screw-down) speed bumps were installed on Balsam Avenue and Pine Avenue.

A review of these existing traffic calming features is considered later in the report, as well as resident feedback on the devices and field observations which helped to develop the Traffic Calming Plan.

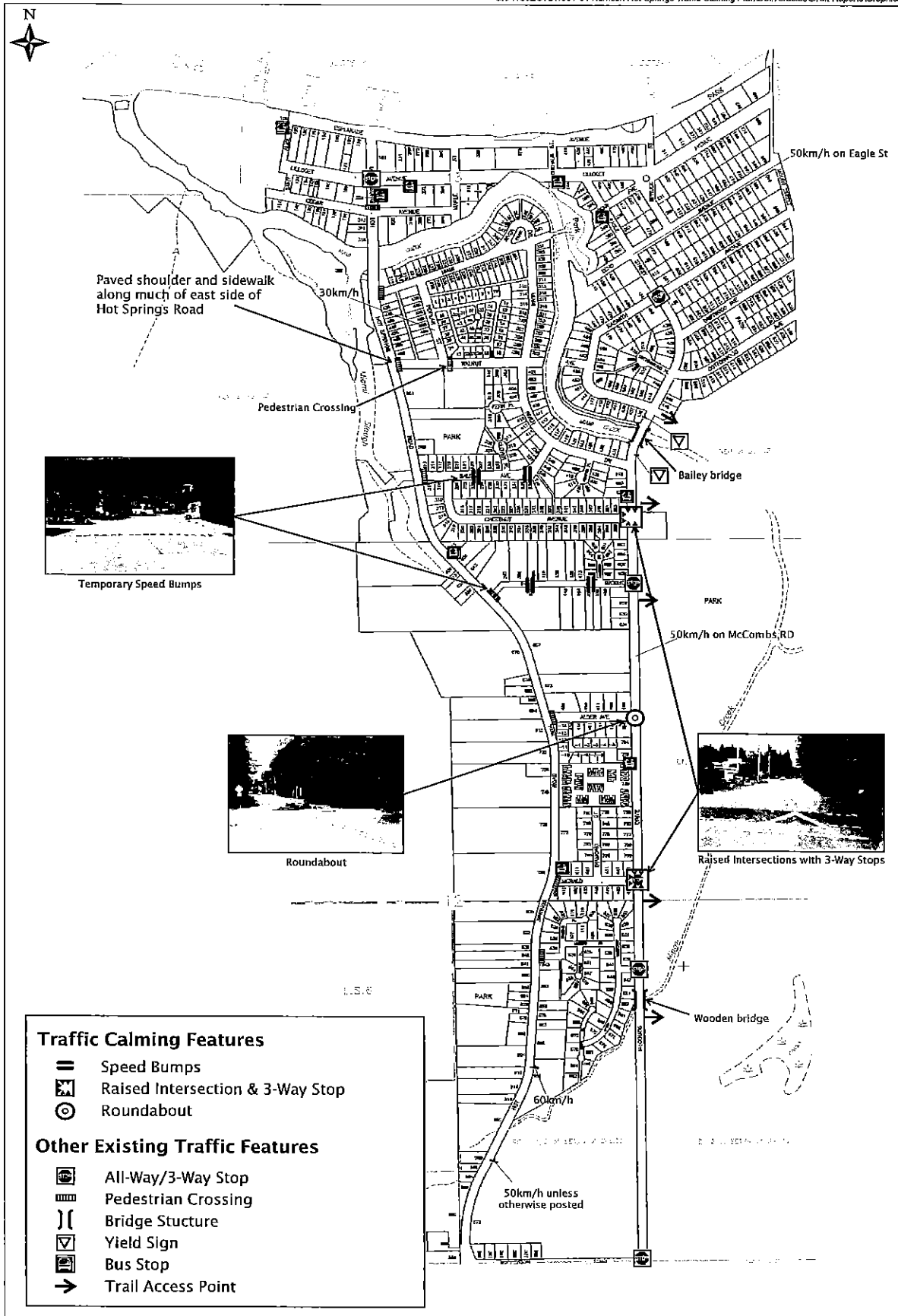


Exhibit 2.2
Existing Traffic Calming Features

2.3 Traffic Survey Results

Traffic surveys including intersection counts, spot speed surveys, and stop-compliance surveys were conducted on Saturday May 28th, 2011 and Thursday June 2nd, 2011 at several key locations within the study area. Intersection counts occurred during the mid-day peak on Saturday (11:00am - 3:00pm) and during the AM (6:30am - 9:00am) and PM (3:00pm - 6:00pm) peak periods on Thursday, while spot-speed and stop-compliance surveys took place prior to and between the intersection counts.

As mentioned previously, pneumatic road tube counters were installed on Balsam Avenue and Pine Avenue for two one-week periods (24-hours a day) between April 14 - 20, 2011 (i.e. without temporary speed bumps), and May 29 - June 4, 2011 (i.e. with temporary speed bumps). This was done in order to capture weekly traffic volume profiles as well as vehicle speed data both with and without speed bumps for comparison purposes. Study survey locations are shown at **Exhibit 2.3**.



Exhibit 2.3
Study Survey Locations

2.3.1 Existing Traffic Volumes

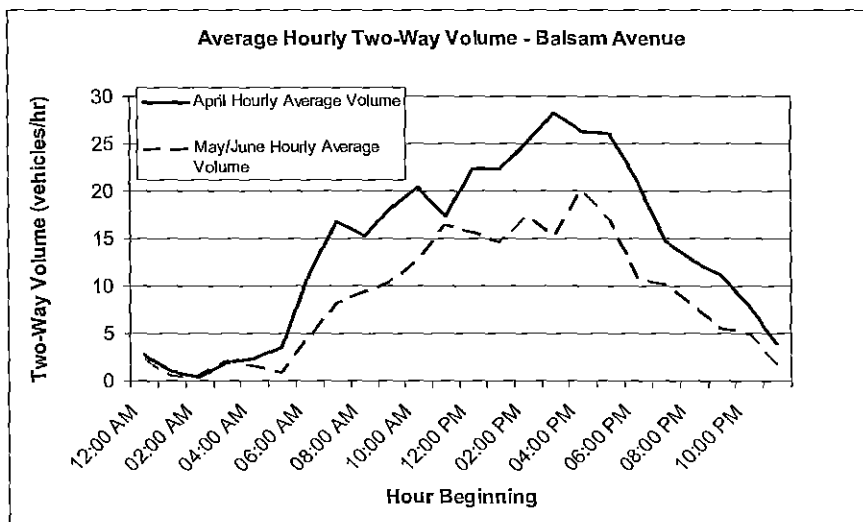
Existing weekday AM and PM and Saturday Mid-day peak hour volumes along with spot-speed data are summarized at Exhibits 2.4 and 2.5.

Two-way vehicle volumes on Hot Springs Road were around 225 and 350 vehicles during the weekday AM and PM peak hours respectively, and were approximately 450 vehicles during the Saturday peak hour. This equates to approximately four and six vehicles per minute (two-way) during the weekday AM and PM peak hours and seven vehicles per minute (two-way) during the Saturday peak hour which is low for an arterial road. Turning movements onto and off of Hot Springs Road via local streets averaged around 25 and 30 vehicles per hour per intersection during the weekday AM and PM peak hours and 25 vehicles during the Saturday peak hour which is negligible.

Two-way vehicle volumes on McCombs Drive were around 35 and 40 vehicles during the weekday AM and PM peak hours respectively, and were approximately 50 vehicles during the Saturday peak hour. This equates to less than one vehicle per minute in all three peak hours. Turning movements onto and off of McCombs Drive via local streets were very low averaging around 15 and 12 vehicles per hour during the weekday AM and PM peak hours and 15 vehicles during the Saturday peak.

Average two-way hourly vehicle volume profiles on Balsam Avenue from April, 2011 and May/June, 2011 obtained from pneumatic road tube counts are summarized in Figure 2.1 and similarly in Figure 2.2 for Pine Avenue. No temporary speed bumps were present during the April counts, while they were present during the May/June counts.

Figure 2.1: Average Hourly Two-Way Volume Profile – Balsam Avenue



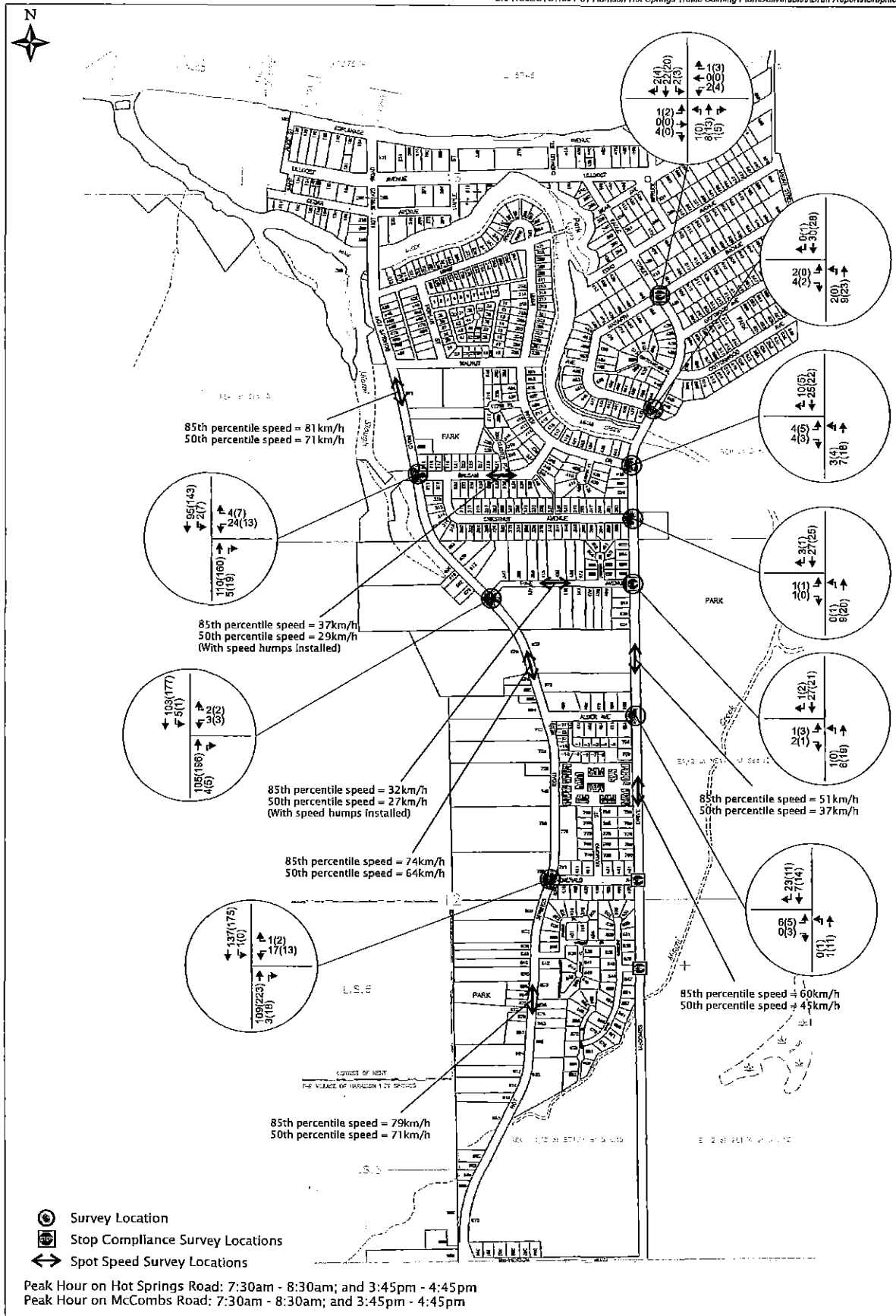


Exhibit 2.4
Existing Weekday Traffic Conditions (Thursday June 2, 2011)

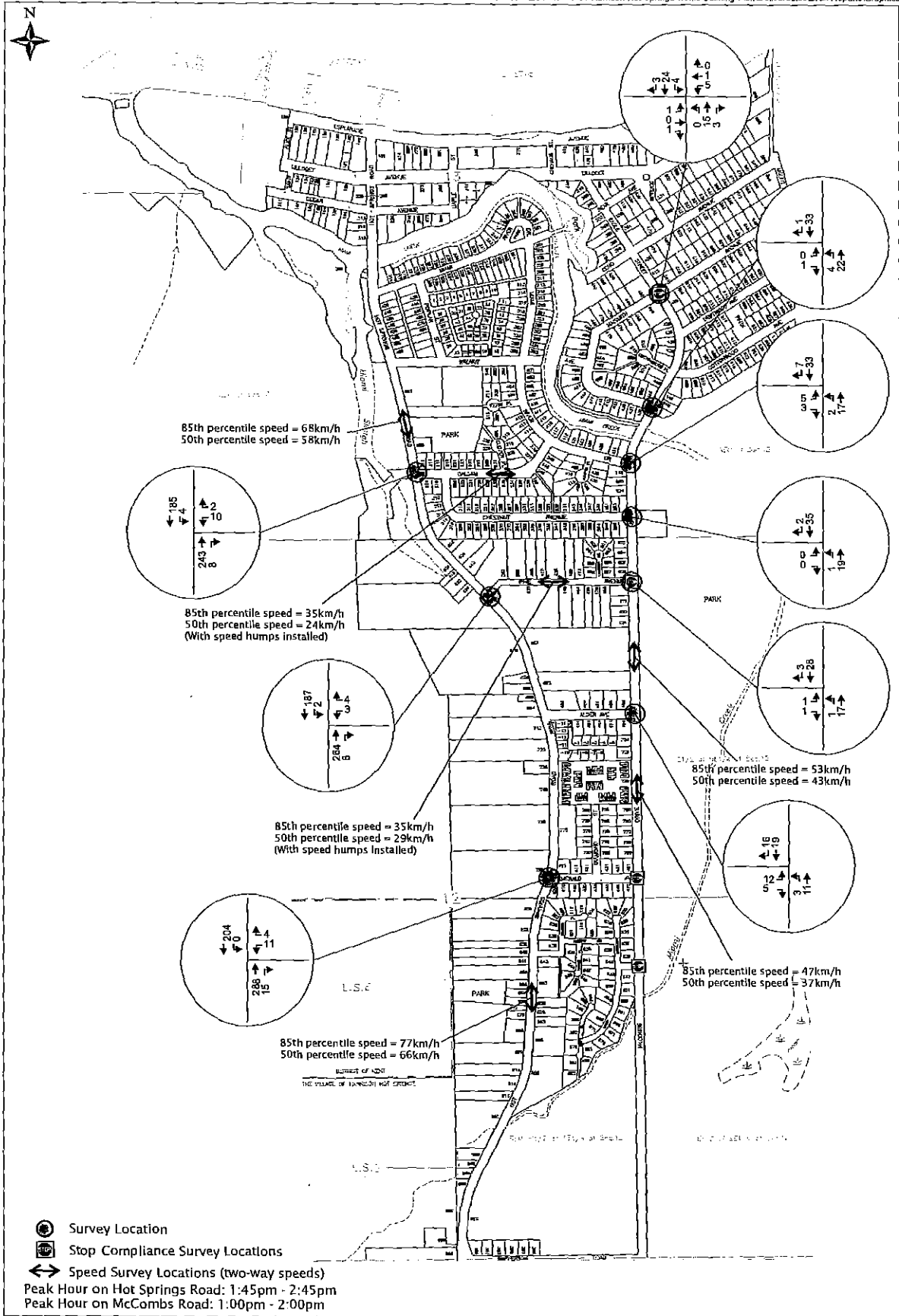
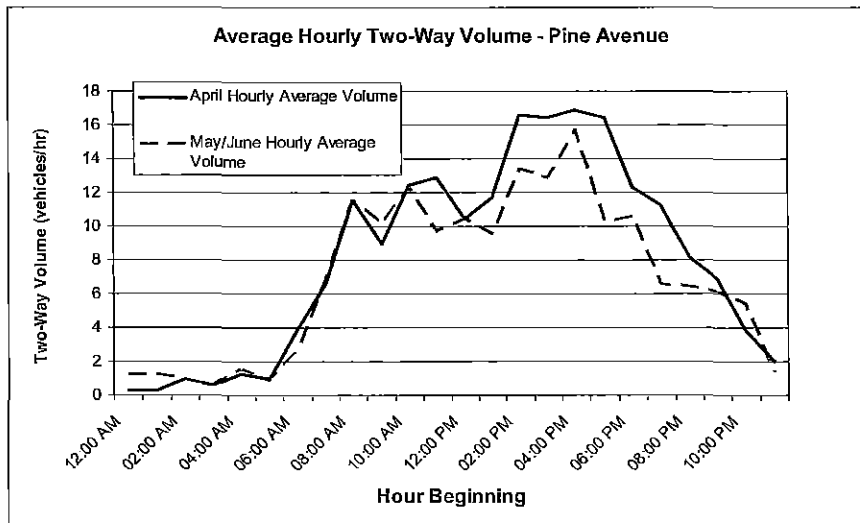


Exhibit 2.5
Existing Traffic Conditions (Saturday May 28, 2011)

Figure 2.2: Average Hourly Two-Way Volume Profile – Pine Avenue



As shown in the above figures average two-way daily volumes were approximately 335 and 195 vehicles on Balsam Avenue and Pine Avenue respectively in April, and 210 and 170 vehicles respectively in May. These volumes are typical of volumes experienced on suburban local roads in residential neighbourhoods.

This represents a decrease in average two-way daily traffic of approximately 125 vehicles on Balsam Avenue and 25 vehicles on Pine Avenue once the temporary speed bumps are in place. Evidently, speed bumps have in effect calmed traffic on these streets, particularly on Pine Avenue, with a reduction in average daily two-way vehicle volumes observed. It is likely that these vehicles have shifted onto a parallel road, rather than overall vehicle volumes decreasing.

Overall, traffic volumes in the Village are relatively modest with the highest volumes experienced on Hot Springs Road and considerably lower volumes on McCombs Drive. Other local streets tended to experience very low volumes and turning movements from these streets onto Hot Springs Road and McCombs Drive were also low. During the course of Bunt’s observations there were no significant operational or delay-based traffic issues to note at the studied intersections. The above summary indicates that existing traffic volumes are well within acceptable capacity levels for all scenarios.¹

¹ It is accepted that during peak summer tourist season, some delays may be experienced at particular intersections in the Village. However, this report is not focused on these temporary volume changes but rather regular volumes on the mainly residential streets.

2.3.2 Vehicle Speeds

The Village of Harrison Hot Springs has a “blanket speed” of 50km/h within the Village unless otherwise posted. McCombs Drive / Eagle Street has a posted speed of 50km/h along its entirety, while Hot Springs Road has a posted speed of 80km/h south of McPherson Road, and 60km/h from McPherson Road to just north of Balsam Avenue where it becomes 50km/h. Speed limits on the majority of local roads are therefore 50km/h.

Speeding had been raised by many residents as a main traffic concern in the Village, particularly on Hot Springs Road and McCombs Drive, as well as on streets which connect between Hot Springs Road and McCombs Drive. This caused the Village to implement a series of traffic calming measures on McCombs Drive which consequently caused drivers to divert away from McCombs Drive to Hot Springs Road via a number of east-west connecting streets such as Balsam Avenue and Pine Avenue.

As a result, speeding and volume on these side streets became a major concern of residents who then lobbied to have temporary speed bumps installed on Balsam Avenue and Pine Avenue in an effort to reduce vehicle speeds on their streets and to lower the number of “cut-through’s”. In order to measure the effectiveness and necessity of these speed bumps, Bunt & Associates conducted speed studies (using pneumatic road tube counters) both while speed bumps were temporarily removed for snow removal purposes and again once they had been reinstalled. Further, spot speed studies were carried out at various locations along Hot Springs Road and McCombs Drive to determine the degree of speeding taking place to aid in the decision-making process for the traffic calming plan. Our findings are summarised below:

- Speed studies conducted by Bunt & Associates in April, 2011 (that is, when speed bumps had been removed for snow removal purposes) showed actual operating 85th percentile speeds on Balsam Avenue and Pine Avenue were in the order of 48km/h, and 45km/h respectively, which is slightly below the 50km/h speed limit.
- Speed studies in May, 2011 (that is, when speed bumps had been reinstalled) showed actual operating 85th percentile speeds on Balsam Avenue and Pine Avenue had dropped significantly to 35km/h on both streets.
- This is a decrease in speeds of approximately 10-15km/h.

Therefore, vehicle speeds on Balsam and Pine were greatly affected by the presence of speed bumps. This suggests that although vehicles were not technically speeding in general without speed bumps, they may have been perceived to be speeding due to the nature of the street as a quiet, local street. Nevertheless, it is evident that vehicle speeds have been reduced to more reasonable levels for these local streets with the installation of speed bumps indicating they are an effective means of reducing vehicle speeds.

Spot speed studies were conducted on the same dates as the intersection counts (Saturday, May 28, and Thursday June 2, 2011) at several points along Hot Springs Road and McCombs Drive. Spot speed studies on Hot Springs Road revealed that actual operating 85th percentile speeds ranged between 74km/h and

81km/h on the Thursday and 68km/h and 77km/h on the Saturday. Exhibit's 2.4 and 2.5 shows the location of the spot counts, which were located south of Ramona Place and north of Alder Avenue. This is significantly above the posted speed limit, particularly on the weekday at up to 21km/h over the posted speed limit. This reaffirms that speeding on Hot Springs Road is indeed an issue and should be addressed by some form of traffic calming or traffic management measures.

Spot speed studies on McCombs Drive (one north of Alder Avenue and one south of Alder Avenue) revealed that actual operating 85th percentile speeds ranged between 51km/h and 60km/h on the Thursday, and between 37km/h and 45km/h on the Saturday. Vehicle speeds were higher than the posted speed limit on the Thursday and lower than the posted speed limit on the Saturday, which indicates that vehicle speeds overall on McCombs Drive tend to average near the posted speed limit. Therefore, in the case of McCombs Drive, it would appear that traffic calming measures have reduced the prevalence of speeding, although some drivers still exceed the 50km/h limit.

2.3.3 Traffic Control & Compliance

There are three three-way stops on McCombs Drive located at Hadway Drive, Emerald Avenue and Pine Avenue, and a four-way stop at Eagle Street (north extension of McCombs Drive) and Naismith Avenue. In order to understand the potential traffic safety issues on McCombs Drive and to help develop the traffic calming plan, Bunt & Associates conducted stop-compliance observations at the above intersections. Again, surveys were carried out on Saturday May 28th, 2011 and Thursday June 2nd, 2011. Observations of drivers' response to the stop signs were recorded. The results are summarized at Exhibits 2.6 and 2.7.

Stop compliance surveys were conducted for a one-hour period at each intersection, and due to the low volumes, sample sizes tended to be quite small. In general, the majority of drivers (72%) at all intersections combined were observed to be either coming to a full stop, or conducting momentary/rolling stops on both Saturday and Thursday, while the remaining 28% of drivers were observed as either slowing to less than 10km/h with no stop (approximately 25%), or no slowing, no stopping (approximately 3.5%). There does not appear to be any differences in compliance based on direction of travel with roughly equal compliance levels on all approaches at each intersection.

While momentary/rolling stops are not strictly compliant to legislation which requires a full stop, in general they are considered acceptable in terms of safety and certainly the vast majority of drivers at other stop-controlled intersections in the Lower Mainland would fall under the "rolling" or "full" stop categories. It is the "non-stop" categories which are, in our view, generally of primary concern in terms of safety.

Overall, the majority of drivers at the three three-way stops on McCombs Drive and at the four-way stop at Eagle Street and Naismith Avenue in our opinion were observed to be mostly compliant with the stop signs (either coming to a full stop or performing a momentary/rolling stop) and there were no major safety issues to report. Further, with such low vehicle and pedestrian volumes this creates fewer opportunities for safety conflicts.

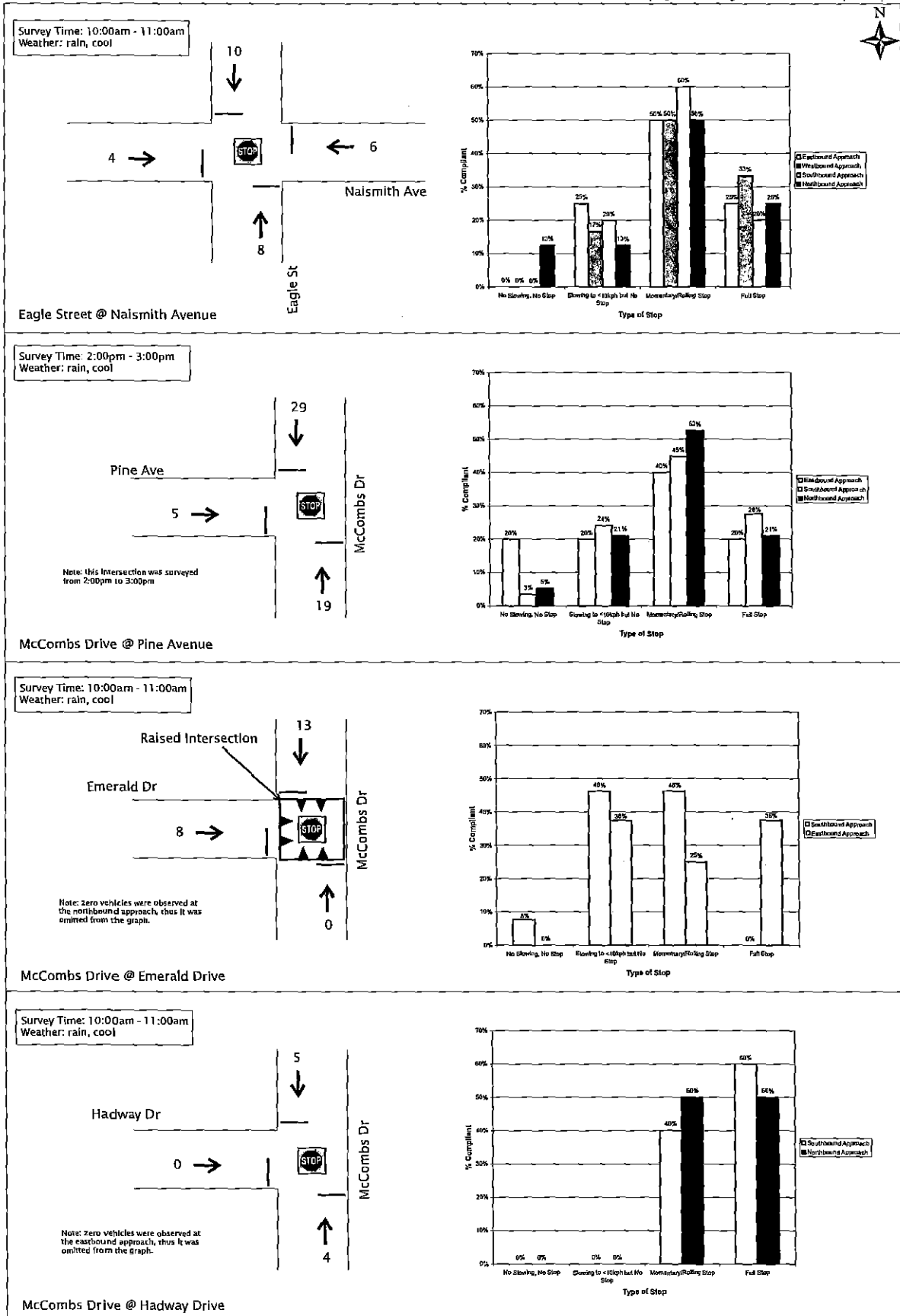


Exhibit 2.6
 Stop Compliance Results (Thursday June 2, 2011)

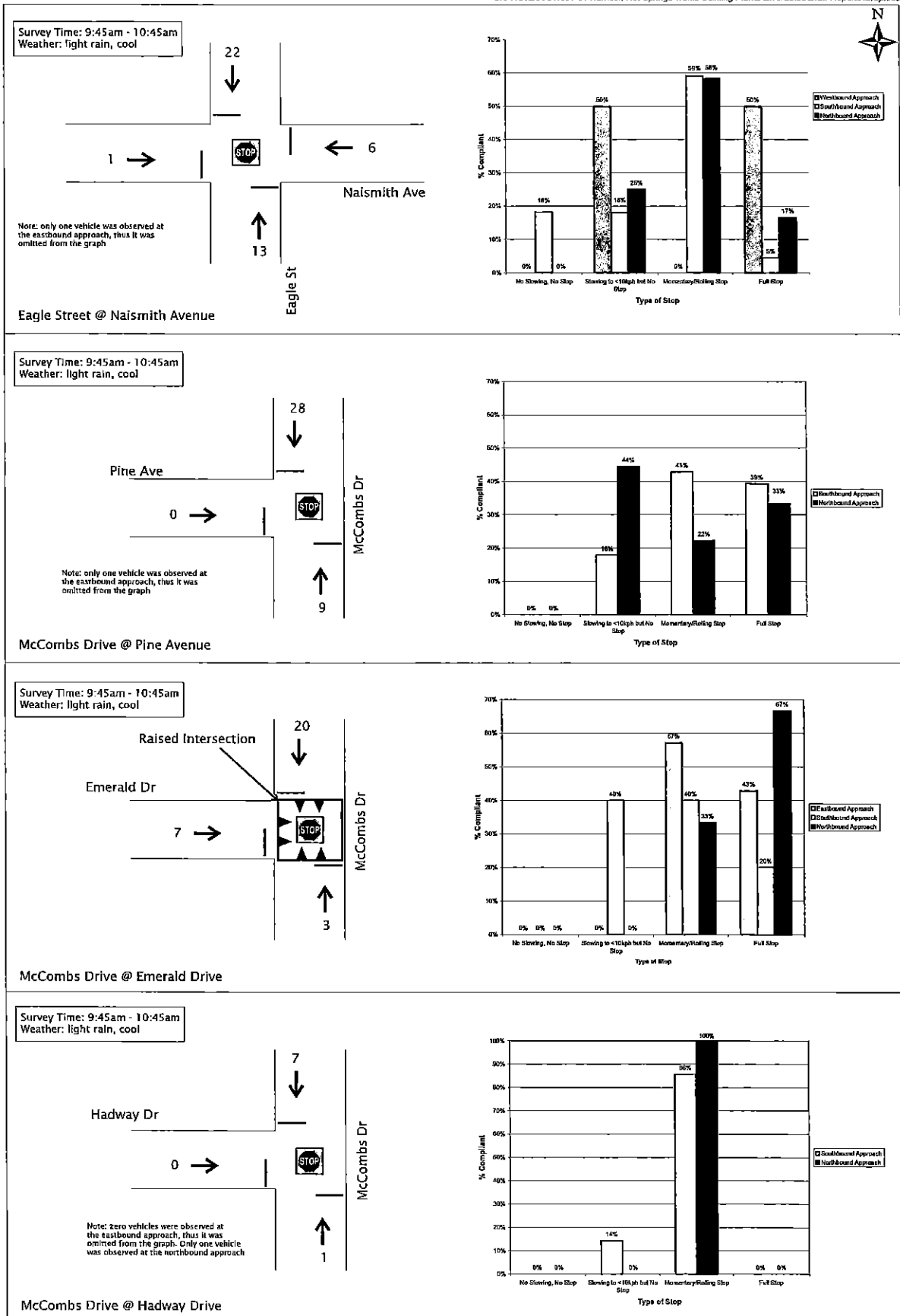


Exhibit 2.7
 Stop Compliance Results (Saturday May 28, 2011)

Interestingly, compliance observations were conducted on a weekday and a Saturday and both compliance and non-compliance levels were the same on each day. Additional discussion on the non-compliance issues and warrants for stop sign installation is provided in the following section.

2.3.4 Multi-Way Stop Review

When traffic calming measures were installed along McCombs Drive the Village chose to also install 3-Way Stops at three locations in the middle of the study area, at Hadway Drive, Emerald Avenue (in conjunction with a raised intersection), and Pine Avenue, and a four-way stop at Eagle Street and Naismith Avenue in hopes that this would contribute towards calming traffic. With observations of traffic on McCombs Drive showing considerably modest vehicle volumes, analysis into whether stop signs are warranted or even necessary has been carried out.

Stop signs are not strictly traffic calming measures, although they can have speed reduction benefits. Stop signs are traffic control measures, intended to legally allocate right of way. The Transportation Association of Canada (TAC) Manual of Uniform Traffic Control Devices for Canada states:

Stop sign control results in delay to drivers and may increase fuel consumption, vehicle emissions and frequency of collisions. Therefore, Stop signs should not be used indiscriminately. Stop signs are not intended as speed control devices and their usage should therefore be limited to the control of right-of-way conflicts...Stop signs should only be used where traffic engineering studies indicate that the usage of Stop signs is warranted. These studies should consider such aspects as traffic speeds, traffic volumes, sight lines and collision experience.

Multi-way stops signs may be warranted under one or more of the following conditions:

- a) where the traffic volumes on the intersecting roads are approximately equal and the combined pedestrian and vehicle volumes on the minor road average 200 per hour for an eight hour period;
- b) where the average delay to the minor road vehicular traffic entering the intersection exceeds 30 seconds per vehicle during the peak hour;
- c) where traffic signals are not warranted, and a collision problem exists, as indicated by five or more reported collisions per year of a type which may be prevented by a Multi-way Stop sign installation. Such collisions include right and left turn collisions as well as right angle collisions;
- d) as an interim measure prior to the installation of traffic signals; or
- e) as an interim measure, for a period of approximately one month prior to switching the stop control from one road to an intersecting road and the subsequent removal of existing Stop signs on the first road.

Based on the TAC warrant described above and the traffic volumes recorded on McCombs Drive (shown previously in Exhibits 2.4 and 2.5), it is unlikely that the multi-way Stop signs located at McCombs Drive

intersecting with Pine Avenue, Emerald Avenue and Hadway Drive, and at Eagle Street and Naismith Avenue would be warranted for traffic control purposes. (Please note that volumes were not recorded at McCombs/Emerald or at McCombs/Hadway as volumes were negligible at these locations)

It is concluded that the low side street volumes at these locations would not warrant Multi-way stop controls. Further, due to the fact that driver stop compliance was observed to be acceptable at these intersections, and speeds along McCombs Drive are also acceptable, Multi-way stop controls are also not necessary along McCombs. However, although they are not traffic calming devices, they can be effective at reducing vehicle speeds when used in conjunction with other traffic calming measures. Therefore, it is possible that their presence has helped contribute to neutralizing speeds on McCombs Drive.

Based on the above, as well as our observations, it is suggested that, while not strictly compliant with TAC, the multi-way stops appear to be effective in helping contribute to controlling speeds, and no safety issues associated with their use has been observed.

The next sections will briefly highlight accident data obtained from ICBC for the Village of Harrison Hot Springs before focusing on assessing opinions of local residents on traffic calming, driving habits, and cycling and walking habits within the study area.

2.4 ICBC Crash Data

To assist with the assessment of existing traffic conditions in the Village, Bunt conducted a brief review of accident report data from ICBC for the Village. Bunt obtained crash data for a five-year period (2006-2010) from ICBC to determine the highest frequency crash locations in the Village. **Table 2.1** highlights the top five crash locations from 2006-2010.

Table 2.1: Top Five Crash Locations in Harrison Hot Springs (2006-2010)

Location	Crashes Involving Casualty*	Crashes with Property Damage Only	Total Crashes
Hot Springs Rd & Lillooet Avenue	4	8	12
100 Block Esplanade Avenue	0	12	12
670 Hot Springs Road	0	7	7
Hot Springs Road & McPherson Road	1	5	6
160 Esplanade Avenue	0	5	5

* Casualty indicates a crash incident resulting in an injury or fatality

As shown in the above table, approximately 42 crashes occurred at the top-five crash locations in a five-year period. Not surprisingly, the majority of these crashes (29) occurred within the Village Centre near areas with high pedestrian and vehicle volumes.

Interestingly, 670 Hot Springs Road (the intersection of Hot Springs Road and Pine Avenue) had 7 crashes from 2006-2010. This is notable due to the fact that it is located just north of a blind curve in Hot Springs Road, and because the sightlines for vehicles exiting Pine Avenue are obscured by hedges on both sides of the street. This suggests that speeds on Hot Springs Road are too high at this location (60 km/h posted speed limit) and that sightlines from Pine Avenue need to be improved reducing or removing hedges at this location.

Lastly, Hot Springs Road and McPherson Road also experienced 6 crashes over that time period. This again is likely attributable to high speeds, as the speed limit changes from 80 to 60 just north of McPherson and sightlines are not great for exiting vehicles. The next section details the findings from the online resident traffic calming questionnaire.

2.5 Resident Traffic Calming Questionnaire

Bunt developed an online questionnaire launched via the Village's website to facilitate resident feedback regarding existing traffic calming features, local driving routes/patterns, walking and cycling habits within the study area, and general overall opinions of these topics. The online questionnaire ran for approximately one month during May/June in order to collect a large enough sample of responses. Assessments of the traffic survey and online questionnaire have aided in the development of the Traffic Calming Plan options.

2.5.1 Methodology & Purpose

The traffic calming questionnaire was accessible via the Village of Harrison Hot Spring's website and was open to all residents of the Village, but would have been of particular interest to those residents who have been affected by current traffic calming measures in the Village or who had an interest in the traffic calming plans.

It was intended to develop an understanding of how residents felt about existing traffic measures, whether they felt they were working or if they were even necessary, as well as to try and identify which traffic calming measures were most preferable to residents and why. Further, it aimed to identify which streets residents typically used for driving, and whether they also walked, or cycled on the local streets (and if so, which ones). Also, respondents were asked to give their general impressions of traffic safety and operations in the Village. A copy of the questionnaire and the results is included at **Appendix A**.

There were a total of 56 respondents to the online survey which was considered reasonable given the population of Harrison Hot Springs and the typically low response rate that such initiatives usually produce.

2.5.2 Results/Findings

Some of the key results/findings are presented below providing a picture of residents' feelings towards traffic calming.

Driving Routes

The online questionnaire revealed that:

- More than 50% of residents surveyed primarily use Hot Springs Road when travelling between home and the Village Centre (i.e. Esplanade Avenue);
- Only 10% primarily use McCombs Drive;
- Approximately 34% use both equally.

This is reflective of the traffic survey data which also showed significantly higher vehicle volumes on Hot Springs Road. This could also be due to the introduction of traffic calming features onto McCombs Drive which may have caused some residents to switch their routes.

Other roads used most regularly by residents when travelling by car within the study area include Miami River Drive (46%), Balsam Avenue (44%), Walnut Avenue (24%), and Pine Avenue (24%).

Walking

The main results were:

- The vast majority of respondents (91%) stated that they regularly walk along the local streets in the Village;
- Miami River Drive (71%), McCombs Drive/Eagle Street (55%), and Walnut Avenue (41%) were among the most popular within the study area;
- Approximately 61% of respondents felt that the roads were either safe or very safe for walking on while an additional 24% felt that they were at least somewhat safe for walking.

Cycling

The main results were:

- Approximately 60% of respondents said that they regularly cycle along the local streets;
- Miami River Drive (77%), McCombs Drive/Eagle Street (68%), Walnut Avenue (55%), and Balsam Avenue (52%) were the most regularly used by respondents;
- When asked how safe the roads were perceived to be, just over half (51%) felt they were safe or very safe, while an additional 30% said they were somewhat safe for cycling.

Trail Access

The main results were:

- At least 80% of respondents said that they at least occasionally (ranging from occasionally to daily) use the hiking/walking trails east of McCombs Drive/Eagle Street;
- Cottonwood Avenue, Miami River Drive, Chestnut Avenue, Naismith Avenue and McPherson Road were cited as the common crossing points across McCombs Drive/Eagle Street;
- Access points most commonly cited by respondents include Cottonwood Avenue, Chestnut Avenue, and Naismith Avenue.

Existing Traffic Calming Measures

Respondents were asked rate the effectiveness of existing traffic calming measures within the study area with regards to reducing vehicle speeds:

- The raised intersections appeared to be the most favourable measure with 71% of respondents indicating that the raised intersection at McCombs Drive / Chestnut Avenue was effective or very effective, although a significant minority of 20% thought that it was ineffective or very ineffective;
- 68% said that the raised intersection (combined with 3-way stop) at McCombs Drive / Emerald Avenue was effective or very effective and 23% indicated that it was ineffective or very ineffective.
- The traffic circle at McCombs Drive / Alder Avenue split opinions with 58% of respondents indicating that it was effective or very effective, while 33% thought it was ineffective or very ineffective.
- The temporary speed bumps were viewed least favourably by respondents with just over half of respondents (52%) indicating the speed bumps on Balsam Avenue were effective or very effective, and 28% saying they were ineffective or very ineffective;
- Only 44% of respondents thought that the speed bumps on Pine Avenue were effective or very effective, although interestingly, only 18% thought that they were ineffective or very ineffective and 24% said they don't know which indicates that perhaps many of the respondents were either unaware of them or do not drive on Pine Avenue.

Overall, the majority of respondents have indicated that all of the traffic calming measures that have been implemented are effective or very effective at reducing vehicle speeds with raised intersections being perceived the most favourable, and speed bumps being the least favourable. The single most mentioned traffic issue by respondents within the Village has been speeding on various streets. These traffic calming measures have helped mitigate speeding in the areas they are located but speeding is still identified as an issue on other routes, notably Hot Springs Road.

Other Traffic Concerns

In general, many residents noted that speeding was and still is a major traffic issue in the Village, particularly on Hot Springs Road and a number of the side streets. Speeding was also a major concern

noted on McCombs Drive. However, as mentioned; the traffic calming measures installed appear to have helped considerably. Many residents have also noted that a lack of sidewalks and bike lanes (or lack of maintenance of the bike lanes on Hot Springs Road) throughout the Village have been major safety concerns.

Respondents were asked what they would do if they could make only one change in the Village concerning traffic calming. In response to this, respondents mentioned enforcing speed limits and using signage (i.e. lowering speed limits) to reduce vehicle speeds, and more and wider sidewalks to improve pedestrian safety. Many expressed that the combination of excessive vehicle speeds and the lack of sidewalks on many streets throughout the Village were the cause for the main traffic safety issues. These were the common themes expressed by residents in order to improve traffic safety in the Village.

2.5.3 Summary

In summary, the questionnaire was a useful tool in assessing residents' thoughts and concerns with regards to traffic calming in the Village. It yielded important information regarding driving routes, walking and cycling levels, trail access and key pedestrian crossing locations, as well as feelings regarding the effectiveness of existing traffic calming measures in reducing vehicle speeds. It also helped to pinpoint remaining key traffic concerns in the Village as well as residents' opinions on how to mitigate these issues.

Generally, residents appear to think favourably of all existing traffic calming measures to varying levels of effectiveness. However, as noted, raised intersections were viewed as the most effective and there were few comments that people did not like them, while the traffic circle and speed bumps were generally seen as effective there were various comments about them not being liked which in most cases was due to their design (i.e. speed bumps being too abrupt, and the radius of the traffic circle being too tight). Some respondents on the contrary felt that there were no traffic issues at all and that traffic calming measures were not necessary. This feedback is important and will be taken into consideration in the traffic calming policy review and plan options.

2.6 Overall Observations

Based on the factual information collected from the various traffic surveys conducted by Bunt and from questionnaire responses gathered from the online traffic calming survey, some central themes have been revealed regarding remaining traffic issues in the Village of Harrison Hot Springs. This allows the study to focus its goals and objectives for creating an effective traffic calming plan. Traffic surveys provide statistical representation of traffic issues in the Village and provide evidence of what these issues are and where they are occurring which confirms in some cases the opinions of residents.

Speeding has been identified as the central traffic issue within the Village. It was the main reason for implementing traffic calming measures on McCombs Drive and was a contributing factor for installing speed bumps on Balsam Avenue and Pine Avenue. Speed surveys revealed that vehicle speeds on McCombs Drive are now close to the posted limit (i.e. near the posted speed limit) compared to before

traffic calming measures were installed. Speeds were observed to have decreased on both Balsam Avenue and Pine Avenue with the installation of temporary speed bumps. Vehicle speeds on Hot Springs Road, however, were observed to be considerably higher than the posted speed limit creating traffic safety issues, a sentiment which was also noted by several respondents in the online survey and evidenced to some degree in the ICBC crash data.

Additionally, the lack of sidewalks on most streets within the Village was revealed to be a major traffic safety concern of residents, and when combined with vehicle speeds even within the 50km/h range leads to further traffic safety issues for pedestrians (and cyclists). It may be the case that through addressing vehicle speeds in the Village pedestrian safety will therefore improve and then perhaps sidewalks aren't needed. Similarly, if sidewalks are added and speeds remain the same, pedestrian safety would still be improved. However, in order to remedy both issues effectively and thoroughly, it is likely that a combination of speeding enforcement/traffic calming along with sidewalk improvements would be required.

Overall, traffic safety seems to have improved in some parts of the Village with the implementation of traffic calming measures to a point there is a net benefit for the village. However, traffic safety issues remain which need to be addressed as noted above. Further, upon review of traffic survey data and questionnaire responses and taking into consideration recommended traffic calming practices it is possible to optimize existing and potential future traffic calming measures in order to create a more equitable balance of traffic safety and traffic distribution throughout the Village. Section 3 presents a review of current traffic calming best practice, and reviews the applicability of measures to this project. This review feeds into the traffic calming plan, outlined in Section 4.

3. TRAFFIC CALMING POLICY

3.1 Introduction

The Village of Harrison Hot Springs, as part of this traffic calming review, have requested that a traffic calming policy be established for the Village in order to effectively address future requests for traffic calming measures by residents. This policy will inform the Village of the appropriateness of various traffic calming measures to address different traffic issues taking into account context within the Village. It is not the aim of this policy to provide prescribed measures for each and every situation. However, it is intended to provide the village with a range of options when it comes to implementing a new traffic calming measure and give them confidence in their applicability in different situations based on best practice research and guidelines in traffic calming.

The following sections provide an introduction regarding the necessity of this traffic calming policy for the Village and then present context and research behind various recommended traffic calming measures and practices. It then describes some the main traffic calming measures considered and their appropriateness for the Village while also reviewing the applicability of different traffic calming measures within the Village context.

3.2 Background

The Village of Harrison Hot Springs requires a traffic calming policy in order to properly guide future traffic calming requests from residents. This Traffic Calming Policy will help the village and its residents to comprehend the role of traffic calming on the local road network and the potential applicability of different types of traffic calming measures. The policy is based on research conducted by Bunt on best practice traffic calming guidelines in Canada and the United States tailored to the needs and requirements of the Harrison Hot Springs rural village setting, while also taking into account Bunt's previous studies on traffic calming for similar Towns and Municipalities in the Lower Mainland.

This type of policy guide is important to the Village both as a framework for understanding the purposes of traffic calming more generally as well as a resource document to help make informed decisions when addressing traffic issues in the Village. Harrison Hot Springs occupies a unique setting and has developed with a unique layout of its streets. As such, not all types of traffic calming measures will be appropriate. The following therefore provides details on measures which are appropriate for the Village now and in the future.

3.3 Context & Research

Contextual research for this traffic calming policy section is based on best practice documentation including:

- Canadian Guide to Neighbourhood Traffic Calming (Transportation Association of Canada – 1998);
- Traffic Calming State of the Practice (Institute of Transportation Engineers – 1999);
- Community Traffic Calming Program – City of North Vancouver (Urban Systems – 2001);
- Guidelines for the Design and Application of Speed Humps (Institute of Transportation Engineers – 2007); and
- Traffic Calming on Main Roads Through Rural Communities – Technical Brief (U.S. Department of Transportation, Federal Highway Administration – 2009).

These resources have been combined with previous studies conducted by Bunt & Associates to inform and shape this Traffic Calming Policy and the Traffic Calming Plan options in Section 4. Section 3 continues by defining traffic calming and by providing an explanation of general considerations when applying traffic calming.

3.3.1 What is Traffic Calming?

The main purpose of traffic calming is to have drivers behave appropriately to the functional classification of the road and its surrounding land uses. The Institute of Transportation Engineers (ITE) defines traffic calming as:

The combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve conditions for non-motorized street users.

The *Canadian Guide to Neighbourhood Traffic Calming* published by the Transportation Association of Canada (TAC) acknowledges the above ITE definition of traffic calming. In addition, it recommends that traffic calming be applied only to local and collector residential streets. Many of the physical traffic calming measures applied to local and collector streets are inappropriate for the objectives of arterials and higher order roads in safely and efficiently moving traffic. It is also noted that traffic calming should not be a substitute for good engineering design and can not be used solely to resolve traffic and safety problems on all streets. This however, should be taken within the context of the local area which traffic calming is planned for.

3.3.2 Application of Traffic Calming

Currently, standardized practice related to the development and design of traffic calming measures has focused on urban rather than rural conditions, where the demand by residents is the greatest and curbs,

sidewalks and roadway lighting are present. The Canadian Guide to Neighbourhood Traffic Calming does not even address potential traffic calming measures on Arterial roads or in rural areas.

The Village of Harrison Hot Springs does not have established warrants for the installation of traffic calming measures on a roadway or network of roadways. Most communities have warrants for installation of traffic calming measures; such warrants are usually based on one or more of the following:

- Average or 85th percentile operating speeds at some prescribed level over the posted or desired speed;
- Total daily or peak hour volumes in excess of suitable volumes for the road's function; and
- Total or percentage of "cut through" traffic.

If the Village of Harrison Hot Springs were to establish a warrant for installation of traffic calming measures, Hot Springs Road may meet the excessive speed warrant with an 85th percentile speed which is more than 20 km/h over the posted speed but it likely would not meet the latter two criteria as it carries fairly low volumes for its overall network function and available capacity, and carries some "cut through" traffic from McCombs Drive (i.e. due to installation of traffic calming measures on McCombs) but probably not enough to affect its functionality.

Given the above, there is an argument that traffic calming measures are not appropriate for Hot Springs Road (or McCombs Drive for that matter) given its Arterial function, rural nature, designation as a provincial highway route and regional Major Road Network element and its lack of volume warrants.

Another important consideration is that Hot Springs Road is a key emergency response route, while McCombs Drive is the designated alternate diversion route to Hot Springs Road, and some types of traffic calming measures negatively influence response times. Extensive research using over 36 emergency vehicle drivers by the City of Portland² has indicated the following delays caused by selected traffic calming measures:

Vertical Measures:

- 14 ft. long parabolic, 3" tall speed humps = delay from 1.0 to 9.4 sec./hump
- 22 ft. long flat topped, 3" tall speed humps = delay from 0 to 9.2 sec./hump

Horizontal Measures:

- Traffic circles = 1.3 to 10.7 seconds per circle

² The Influence of Traffic Calming on Emergency Response Times, Atkins & Coleman, ITE Journal, August 1997, page 42

The low end of the range of delay was for smaller Rescue Vehicles about 21' (6.4m) long and the high end of delay was for the largest of City of Portland ladder trucks, about 57' (17m) long with a GVW of 53,960 lbs (24,475kg). In addition, the low range of delay was for "desired speeds" of 25 mph (35 km/h) and the high end of delay was for "desired speeds" of 40 mph (65 km/h).

The size of the largest SAFD vehicle is not known for the Village of Harrison Hot Springs, but it is expected to be less than the City of Portland's largest vehicle; delays in the order of 0 to 7 or 8 seconds are probable for SAFD vehicles. However, we note the highest end of delay is for "desired speeds" of 65 km/h, which may not be the "desired speed" of the SAFD on Hot Springs Road or McCombs Drive. If the "desired speed" of emergency response vehicles is matched to the posted speed of 50-60 km/h on Hot Springs Road and 50km/h on McCombs Drive, then average delays for measures that require a horizontal or vertical deflection are more likely in the range of 0 to 4 or 5 seconds, according to the Portland research.

However, in our view, there are some mitigating circumstances in the case of Hot Springs Road and McCombs Drive (as well as some local residential streets) supporting the application of traffic calming measures. For instance, there are a significant number of fronting residences that are impacted by speeding vehicles (particularly on McCombs Drive and on local residential streets), both Hot Springs Road and McCombs Drive are popular cycling routes and cyclists are clearly intimidated by prevailing speeds, volumes are much lower than typical Arterial roads and they (Hot Springs Road and McCombs Drive) lead to a small community where lower densities and growth rates will ensure it will likely not carry very high volumes typical of most Arterial roads.

3.4 Applicability of Different Traffic Calming Measures

The following is a summary of key traffic calming measures deemed to be applicable to the Village of Harrison Hot Springs currently and in the future. Design specifications for these measures are included at **Appendix B**.

3.4.1 Key Traffic Calming Measures

Traffic Circles

A traffic circle is a raised island located in the centre of an intersection, which requires vehicles to travel through the intersection in a counter-clockwise direction around the island. They have the following characteristics:

- Motorists yield to vehicles already in the intersection;
- Motorists need only consider traffic approaching in one direction, rather than two or more directions as at conventional intersections; and
- Landscaping placed in the centre of a traffic circle reduces visibility beyond the circle and thus encourages motorists to slow as they approach the circle.

Traffic circles are most appropriate for local or collector roads and can be applied to both urban and rural cross-sections with a maximum of two traffic lanes (both directions). Their effectiveness can be enhanced when used in conjunction with textured crosswalks, and they are most effective in reducing speeds when used in a series of two or more consecutive intersections. Locations to avoid include: transit routes, emergency access routes (unless acceptable to emergency services), intersections with high pedestrian volumes, intersections with high left turn volumes, and intersections with significantly higher volumes on the main street. Hot Springs Road does not generally meet these criteria, being an arterial road with many arterial characteristics.

McCombs Drive would potentially seem a more appropriate location for traffic circles and one is present at McCombs Drive/ Alder Avenue. This is illustrated in **Figure 3.1**.

Figure 3.1: Example of a Traffic Circle



Traffic calming benefits of traffic circles include: reductions in vehicle speeds of around 10-15km/h, reduction in vehicle volumes, reduced vehicle conflicts and collisions, improved aesthetic appearance of roadway, and reduced noise pollution resulting from vehicles having consistent acceleration through traffic circles. Some of the disbenefits of traffic circles include:

- Potential vehicle encroachment on pedestrian crossings;
- Potential removal of on-street parking in some areas;
- May divert traffic to parallel streets without traffic calming;
- Can restrict access and cause minor delays for some larger vehicles; and
- Potential increase in bicycle/vehicle conflicts.

Speed Humps

A speed hump is defined as a roadway geometric design feature whose primary purpose is to reduce the speed of vehicles travelling along that roadway. There might be certain secondary purposes of speed hump installations, such as traffic diversion, but that is not their primary intended purpose. Speed humps are a measure of vertical deflection which causes both the wheels and frame of a traversing vehicle to deflect upwards. With speed humps:

- The vertical deflection of vehicles produces an uncomfortable sensation for vehicle occupants travelling at speeds higher than the design speed;
- The design speed is determined by the dimensions of the speed hump, and the spacing between speed humps;
- The speed hump extends across the roadway, with gaps for drainage at the curbs; bicycles do not require special provisions; and
- Installation of a speed hump sign is considered mandatory.

Typical dimensions are:

- Local street speed humps – 4.0m in length and 80mm high, with a sinusoidal cross-section.
- Collector street speed humps – 7.0m in length and 80 mm high, with a flat centre section

Speed humps are used mainly on local and collector residential streets, are ideal with posted speed limits less than or equal to 50km/h, and are applicable to all traffic volume levels. They are best suited to a more urban cross-section with curb and gutter and for 2 traffic lanes. They are typically not effective on rural cross sections unless obstructions (such as posts or bollards) placed on roadside at speed hump location and may also not be effective on streets with rolled curbs. Speed humps are preferable in a series, close to street lighting to increase visibility, and on roads with reasonable grades away from catch basins.

Locations to avoid include: designated emergency access routes on local streets (unless acceptable to emergency vehicles), locations with limited sight distance, intersections, driveways, bus stops, grades greater than 8%, traffic signals, and at accesses to underground utilities. Effectiveness of speed humps can be increased when used in combination with pedestrian crossings or curb extensions. **Figure 4.2** is an example of a speed hump on a local residential street (Surrey, BC).

Figure 3.2: Example of a Speed Hump



Major benefits include vehicle speed reduction, particularly when used in succession (i.e. 50km/h = spaced every 125m), reducing vehicle volumes (by diversion to other parallel streets), reduction of conflicts and collisions, and in reducing traffic noise due to lower speeds. Some of the main disbenefits include possible diversion of traffic to parallel streets which do not have traffic calming measures, as well as minor delays to ambulances and fire trucks, reduction in maximum bus speeds, and increased time for snow removal.

Costs vary depending on width of roadway and labour and material costs. Maintenance costs are around \$100/year/speed hump for markings and asphalt repair.

Raised Intersections

A raised intersection is an intersection – including crosswalks – which is constructed at a higher elevation than the adjacent roadways and which has vertical deflectors to help vehicle traverse them. The main purposes of raised intersections are to: reduce vehicle speeds; better define crosswalk areas; and reduce pedestrian-vehicle conflicts. Similar to a speed hump, a raised intersection creates a vertical deflection of vehicles wheels producing an uncomfortable sensation for vehicle occupants travelling at higher speeds. Also, the raised roadway surface emphasizes pedestrian priority at intersections, with the raised centre section including crosswalks. Ramps are designed in consideration of vehicle types and desired speeds.

Raised intersections are appropriate for local and collector residential streets with a posted speed limit of less than or equal to 50km/h for all traffic volume levels. They are typically suited to an urban cross-section with curb and gutter but can be extended beyond the roadway edge in rural cross-sections (i.e. see **Figure 3.3**). They are to be used with a maximum of two traffic lanes and should be avoided on designated emergency access routes unless deemed acceptable by emergency services. Their effectiveness can be enhanced when used in conjunction with textured crosswalks or curb extensions.

Figure 3.3 is an example of a raised intersection in a semi-rural setting (McCombs Drive and Chestnut Avenue in Harrison Hot Springs).

Figure 3.3: Example of a Raised Intersection



The main traffic calming benefits of raised intersections are vehicle speed reductions and in providing better definition of pedestrian areas as vehicles are forced to slow through the intersection. Some disbenefits include:

- High construction costs;
- May divert traffic to parallel residential streets without traffic calming measures;
- Slows speeds of emergency vehicle to approximately 25km/h, and
- They may increase snow removal time.

Textured Crosswalks

A textured crosswalk is a crosswalk incorporating a textured and/or patterned surface which contrasts with the adjacent roadway. Their main purpose is to better define the crossing location for pedestrians, as well as to reduce pedestrian-vehicle conflicts. The enhanced visual and tactile identification of the crosswalk area emphasizes pedestrian priority, and texturing may extend beyond the crosswalk to provide greater visual identification of the area. Types of material typically used include interlocking paving stones, coloured reinforced stamped concrete, and asphalt. Also, the texturing may incorporate two or more colours or textures.

Textured crosswalks are intended for local and collector residential streets and for all levels of traffic volume. They are best suited to urban and suburban cross-sections, and are made more effective when used in conjunction with raised crosswalks, raised intersections, curb-extensions and curb radius reductions. Suitable locations include marked, unsignalized crosswalks; signalized crosswalks; intersection and mid-block crosswalks.

Figure 3.4 is an example of a textured crosswalk in a suburban setting (Kelowna, BC).

Figure 3.4: Example of a Textured Crosswalk



Textured crosswalks do not have an effect on vehicle speeds or volumes unless combined with other measures (traffic circles, raised intersections). The main benefits of textured crosswalks are improved visibility of the crosswalk which reduces vehicle-pedestrian conflicts, and they enhance appearance of the street particularly with other streetscaping and landscaping.

Some disbenefits may include maintenance issues due to uneven surface, and textured surface may create traction or stability issues for some users (seniors, the disabled, wheelchairs, bicycles and motorcycles). They have no effect on resident access, on-street parking, or snow removal.

3.4.2 Other Traffic Calming Measures

Some traffic calming measures have been developed more recently which are not included in the previously mentioned traffic calming policy guidebooks (i.e. Canadian Guide to Neighbourhood Traffic Calming - TAC), or which have been developed for more rural settings, such as Harrison Hot Springs and thus are not included in most policy guidebooks. Due to the unique semi-rural/suburban setting of Harrison Hot Springs, some of these other traffic calming measures may be considered appropriate given the different requirements and specifications of its road network. A few of these measures are briefly described and shown below.

Transverse Markings & Speed Feedback Signage

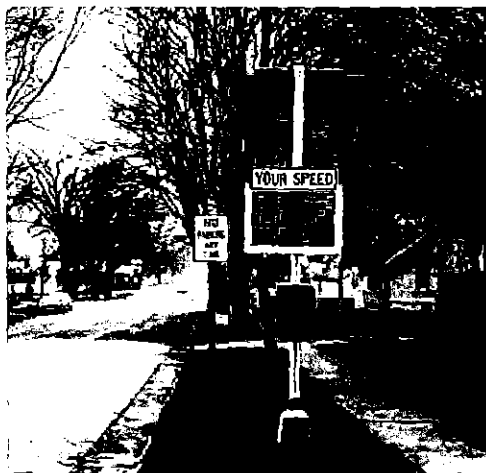
Transverse markings consist of a series of small parallel painted bars on the inside edges of the travel lane. They are typically used on rural arterial roads or highways to reduce vehicle speeds by giving the optical perception that the vehicle's speed is increasing which triggers driver awareness of the need to slow down. Markings are often spaced closer together when approaching a community or more densely populated areas which enhance this effect helping to lower speeds even further. **Figure 3.5** illustrates transverse markings on a rural arterial (Source: U.S. DOT, Federal Highway Administration - 2009).

Figure 3.5: Example of Transverse Markings



In some cases, transverse markings alone are not enough to reduce vehicle speeds and so they are used in conjunction with speed feedback signs in order to increase vehicle speed awareness of drivers causing them to be more cautious and reduce their speeds. These signs consist of a static message “your speed” sign combined with an electronic display of the speed of approaching vehicles which is measured by radar integrated with the sign. They can either be placed within a section of transverse markings (perhaps where they spaced more closely at the entrance to a community) or they can be placed immediately after a section of transverse markings to help remind drivers of their speeds. Also, they could be used independently of transverse markings; however the effect of both measures combined is greater in reducing vehicle speeds. **Figure 3.6** shows an example of a speed feedback sign (Source: U.S. DOT, Federal Highway Administration - 2009).

Figure 3.6: Example of Speed Feedback Signage



Narrow Lane Markings

Median and shoulder pavement markings can be used to reduce lane widths for a section of roadway with high observed speeds in order to reduce vehicle speeds. Similar to transverse markings, narrow lane markings can reduce vehicle speeds by creating the perception of drivers that the roadway is narrower than it actually is. This creates a feeling of being constrained which causes them to slow down as they are channelized into the narrowed lane. Narrow lane markings and painted medians can also be used with speed feedback signage. Figure 3.7 shows an example of narrow lane markings with the speed limit painted on the roadway (Source: U.S. DOT, Federal Highway Administration - 2009).

Figure 3.7: Example of Narrow Lane Markings



As shown in the above figure, another option to remind drivers of the speed limit is to stamp it on the roadway. This would typically be used on an arterial or collector road.

Other measures are often used in conjunction with traffic calming measures which are not necessarily considered traffic calming measures themselves. These are called supportive measures, and can either intentionally be used to augment traffic calming or do so by their natural placement, a few of which are presented below.

Possible Supportive Measures

Supporting measures are elements that do not specifically calm traffic or slow vehicle speeds, but that add to the pedestrian and bicycle realm, making an area more welcome for those on foot, bicycle or travelling by transit. These measures would include elements such as sidewalks and covered bus shelters.

Three-way/Multi-way Stops – As noted in Section 2, three-way or multi-way stop intersections are not a proper measure of traffic calming, but rather are intended for traffic control or operational purposes. They can however, have the effect of reducing vehicle speeds when they are used in conjunction with other traffic calming measures, such as speed humps, textured crosswalks or narrow lane markings. Therefore, it is common for municipalities, particularly in semi-rural/suburban settings, to use them as a supportive

measure to other traffic calming measures. They should not however, be used on their own as a traffic calming measure or when traffic conditions do not warrant their presence.

Sidewalks/Multi-use Paths – Sidewalks are generally used in urban and suburban landscapes to separate vehicle traffic from pedestrian traffic in order to enhance overall safety on a roadway. Multi-use paths can be used in urban, suburban, or semi-rural/rural settings to create a path for cyclists and pedestrians which is separated from vehicles and also serve to increase overall safety on a street for all users. These are not traffic calming measures, however, when used in conjunction with traffic calming measures they help enhance the safety of non-motorized users. Safety can particularly be increased when a sidewalk or a multi-use path is added to a street which did not previously have one. However, it is possible that vehicle speeds may be higher on streets with sidewalks and multi-use paths as drivers may feel they do not need to be as cautious with their speeds, unless there are other traffic calming measures to keep vehicle speeds in check.

On-street Bicycle Lanes – Bicycle lanes can have a similar effect to narrow lane markings in reducing vehicle speeds by making travel lanes appear narrower than they actually are which makes the driver feel constrained. This is not a traffic calming measure as it is intended to increase travel mode options and increase safety for cyclists on the streets.

The next section summarizes the appropriateness of traffic calming measures that could potentially be used by the Village of Harrison Hot Springs by reviewing applicable measures and what their implications are.

3.4.3 Appropriateness of Traffic Calming Measures for Harrison Hot Springs

There are several varieties of traffic calming measures ranging from vertical deflections (physically force vehicles to slow down and drive over them), to horizontal deflections (physically force vehicles to slow down by narrowing the roadway or causing them to drive around), to obstructions (divert or block vehicles, and signing (encourage driver awareness). **Tables 3.1** and **3.2** illustrate the applicability of different traffic calming measures and their implications for Harrison Hot Springs. Measures crossed out are not considered appropriate for Harrison Hot Springs.

Table 3.1: Applicability of Traffic Calming Measures in Harrison Hot Springs

	Measure	Potential Benefits			
		Speed Reduction	Volume Reduction	Conflict Reduction	Environment
Vertical Deflection	Raised-Crosswalk	☑	⊖	⊕	⊕
	Raised Intersection	⊙	○	⊙	⊙
	Rumble Strip	⊖	⊖	⊖	⊖
	Sidewalk Extension	⊕	⊖	⊕	⊖
	Speed hump	☑	⊙	☑	⊙
	Textured Crosswalk	○	○	⊙	⊙
	Chicane -- one-lane	☑	☑	⊕	⊕
Horizontal Deflection	Chicane -- Two-lane	⊕	⊖	⊕	⊕
	Curb-extension	⊕	⊖	⊖	☑
	Curb-radius-reduction	⊕	⊖	⊖	⊕
	On-Street Parking	⊕	⊖	⊖	⊕
	Raised median Island	⊕	⊖	⊕	⊖
	Traffic circle	☑	⊙	☑	☑
	Directional Closure	⊖	☑	⊕	⊕
Obstruction	Diverter	⊖	☑	⊕	⊕
	Full-Closure	⊖	☑	☑	⊕
	Intersection Channelization	⊖	⊕	⊕	⊕
	Raised median through intersection	⊖	☑	⊕	⊕
	Right-in/right-out island	⊖	☑	⊕	⊕
	Maximum Speed	⊙	○	○	○
	Right (Left) Turn Prohibited	⊖	⊕	⊕	⊕
Signing	One-Way	⊖	☑	⊕	⊕
	Through Traffic Prohibited	⊖	⊕	⊕	⊕
	Traffic-Calmed Neighbourhood	○	○	○	⊙

☑ = Substantial benefits ⊕ = Minor benefits ○ = No benefit

Source: Transportation Association of Canada – Canadian Guide to Neighbourhood Traffic Calming

Table 3.2: Implications of Traffic Calming Measures

Measure	Potential Disbenefits						
	Local Access	Emergency Response	Other Travel Modes	Enforcement	Maintenance	Cost	
Vertical Deflection	Raised Crosswalk	○	⊕	⊕	○	⊕	\$ to \$\$
	Raised Intersection	○	⊕	⊕	○	⊕	\$\$\$
	Rumble Strip	○	○	⊕	○	⊕	\$ to \$\$\$
	Sidewalk Extension	○	○	○	○	⊕	\$\$
	Speed hump	○	⊕	⊕	○	⊕	\$ to \$\$
	Textured Crosswalk	○	○	⊕	○	⊕	\$ to \$\$
Horizontal Deflection	Chicane – one-lane	○	⊕	⊕	○	⊕	\$\$ to \$\$\$
	Chicane – Two-lane	○	○	○	○	⊕	\$\$
	Curb extension	○	○	⊕	○	⊕	\$ to \$\$
	Curb radius reduction	○	○	○	○	⊕	\$ to \$\$
	On-Street Parking	○	⊕	⊕	○	⊕	\$ to \$\$
	Raised median island	⊕	○	○	○	⊕	\$ to \$\$
	Traffic circle	○	⊕	⊕	○	⊕	\$\$ to \$\$\$
	Directional Closure	⊕	○	⊕	⊕	⊕	\$\$
	Diverter	⊕	⊕	⊕	○	⊕	\$\$ to \$\$\$
	Full Closure	⊕	⊕	⊕	○	⊕	\$\$ to \$\$\$
Obstruction	Intersection Channelization	⊕	⊕	○	○	⊕	\$\$ to \$\$\$
	Raised median through intersection	⊕	⊕	⊕	○	⊕	\$ to \$\$
	Right-in/right-out island	⊕	⊕	⊕	⊕	⊕	\$\$
	Maximum Speed	○	○	○	⊕	○	\$
Signing	Right (Left) Turn Prohibited	⊕	○	○	⊕	○	\$
	One-Way	⊕	⊕	⊕	○	○	\$
	Through-Traffic Prohibited	⊕	○	○	⊕	○	\$
	Traffic-Calmed Neighbourhood	○	○	○	○	○	\$

⊕ = Substantial dis-benefits
\$ = Low cost

⊕ = Moderate dis-benefits
\$\$ = Moderate cost

○ = No dis-benefits
\$\$\$ = High Cost

Source: Transportation Association of Canada - Canadian Guide to Neighbourhood Traffic Calming

Tables 3.1 and 3.2 indicate that for vertical deflection measures, raised intersections, speed humps and possibly textured crosswalks are appropriate for the Village. Other measures are more urban in nature and require existing sidewalks. Table 3.1 shows that raised intersections have minor benefits in terms of speed reduction, conflict reduction and environmental benefits where as speed humps have major speed reduction and conflict reduction benefits. Emergency response and maintenance are the main disbenefits that Table 3.2 highlights for these measures.

The only horizontal measure considered appropriate for the Village is a traffic circle which offers significant speed reduction, conflict reduction and environmental benefits. Other horizontal measures are not considered appropriate within the Village's setting, as they are too urban in nature, with some requiring curbing and sidewalk to be in place. Its disbenefits are similar to the horizontal measures.

Obstruction measures such as diverters, right in/right out islands etc are not considered appropriate in this instance. Some signage measures are appropriate but these are mainly supporting measures to reinforce other elements of the plan.

4. TRAFFIC CALMING PLAN

A series of three Traffic Calming Plan options were developed for the Village for a public open house held on August 10th, 2011 which were based on a review of best practice standards and traffic calming guidelines, public feedback from online questionnaires, and consultation with the Village. These options were presented to the public at the open house and feedback was given regarding the various strengths and limitations of each option.

Upon review of feedback forms completed by the public, as well as taking into consideration conversations with the public and Village staff members at the open house a preferred option was developed. The following sections describe the original three Traffic Calming Plan options, before going on to detail the preferred option and its key features, as well as the proposed recommended phasing and cost estimates for the plan.

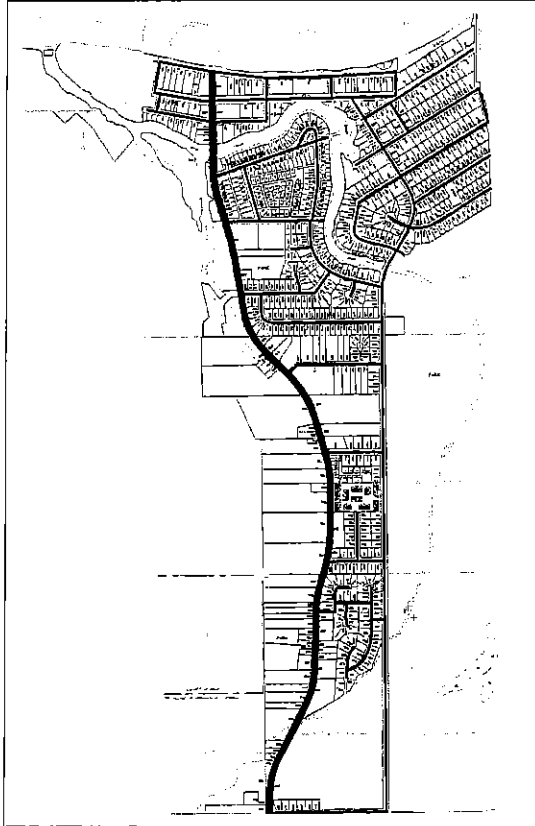
4.1 Traffic Calming Plan Options

As part of the Traffic Calming Plan Review three possible plan options were produced, each one reflecting a different road hierarchy ideology. These were developed based on our analysis and review of the traffic survey data, including the online questionnaire, as well as a review of relevant literature and previous traffic calming studies. The road hierarchy ideology approach stemmed from the need to address various traffic calming and traffic management issues in the Village in different ways. **Exhibit 4.1** highlights the road hierarchy traffic calming approaches.

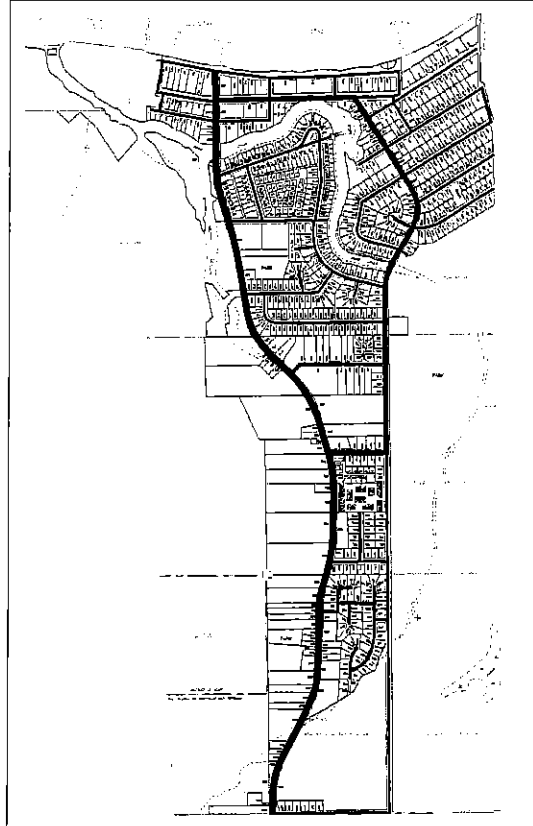
These three conceptual approaches address the traffic calming objectives of the Village based on issues identified by both the Village and its residents as well as issues identified by Bunt in the field. The options stem from a road network/hierarchy solutions approach whereby the traffic calming measures are applied to varying degrees, and on different road segments, depending on what type of road it is. Therefore, the solutions are based on a traffic management framework (i.e. traffic distribution) of getting residents to/from the north and northeast sections of town to enter/exit the Village effectively which consequently also addresses speeding and "cut-through" issues experienced in the Village. The three approaches are described in detail below.



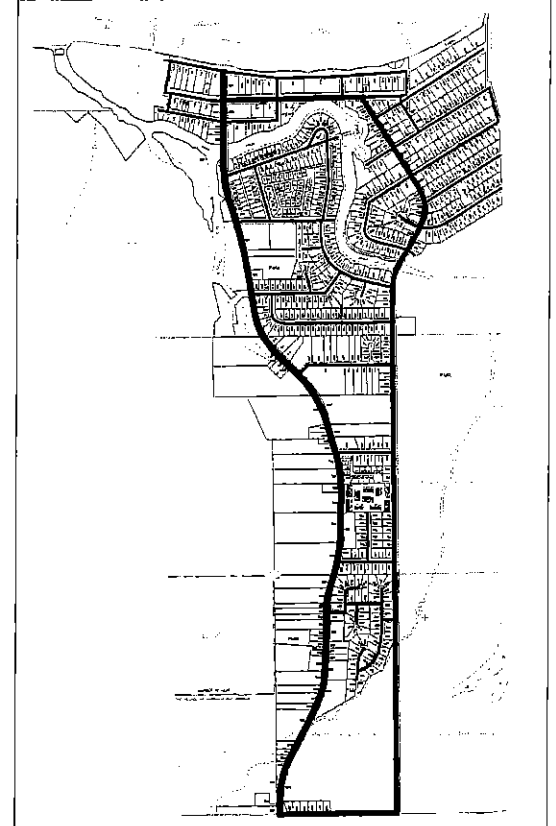
1. Arterial Approach



2. Cross-Cut Approach



3. Balanced Approach



Road Classifications
— Arterial Road
— Collector Road
— Local Road

Exhibit 4.1
Traffic Calming Plan Approaches

Harrison Hot Springs Traffic Calming Plan
4801.01 October, 2011 Scale NTS

4.1.1 Traffic Calming Plan Option 1 – Arterial Approach

The Arterial Approach assumes that Hot Springs Road will remain as the primary arterial route for vehicles to/from the Village. All other roads in the Village including McCombs Drive and McPherson Road would become designated as local roads. This approach focuses on keeping the bulk of traffic flowing to Hot Springs Road from all residential areas of town. **Exhibit 4.2** illustrates the Arterial Approach in detail.

In order to contain vehicle speeds, reduce cut-through traffic and improve general safety, traffic calming measures (both vertical and horizontal deflections, as well as signage) would need to be placed strategically throughout the Village on several local roads so that drivers would not try to evade these measures by traveling on other local roads (i.e. what has previously happened on Balsam Avenue and Pine Avenue).

Further, vehicle speeds are a key concern on Hot Springs Road and therefore traffic calming measures would likely be required here too. As Hot Springs Road is a Provincial Highway these measures would need to be supported by the BC Ministry of Transportation.

Traffic calming measures for the Arterial Approach could include:

- Speed humps;
- Traffic circles;
- Transverse pavement markings;
- Narrow lane markings and bike lanes,
- Centre medians (painted or concrete); and
- Speed feedback signage.

This approach requires the most traffic measures to be implemented and therefore would likely be the most costly as well. It puts some pressure onto Hot Springs Road to carry higher vehicle volumes; however, there is currently significant spare capacity to accommodate this. This approach is most similar to the existing operations of the road network.

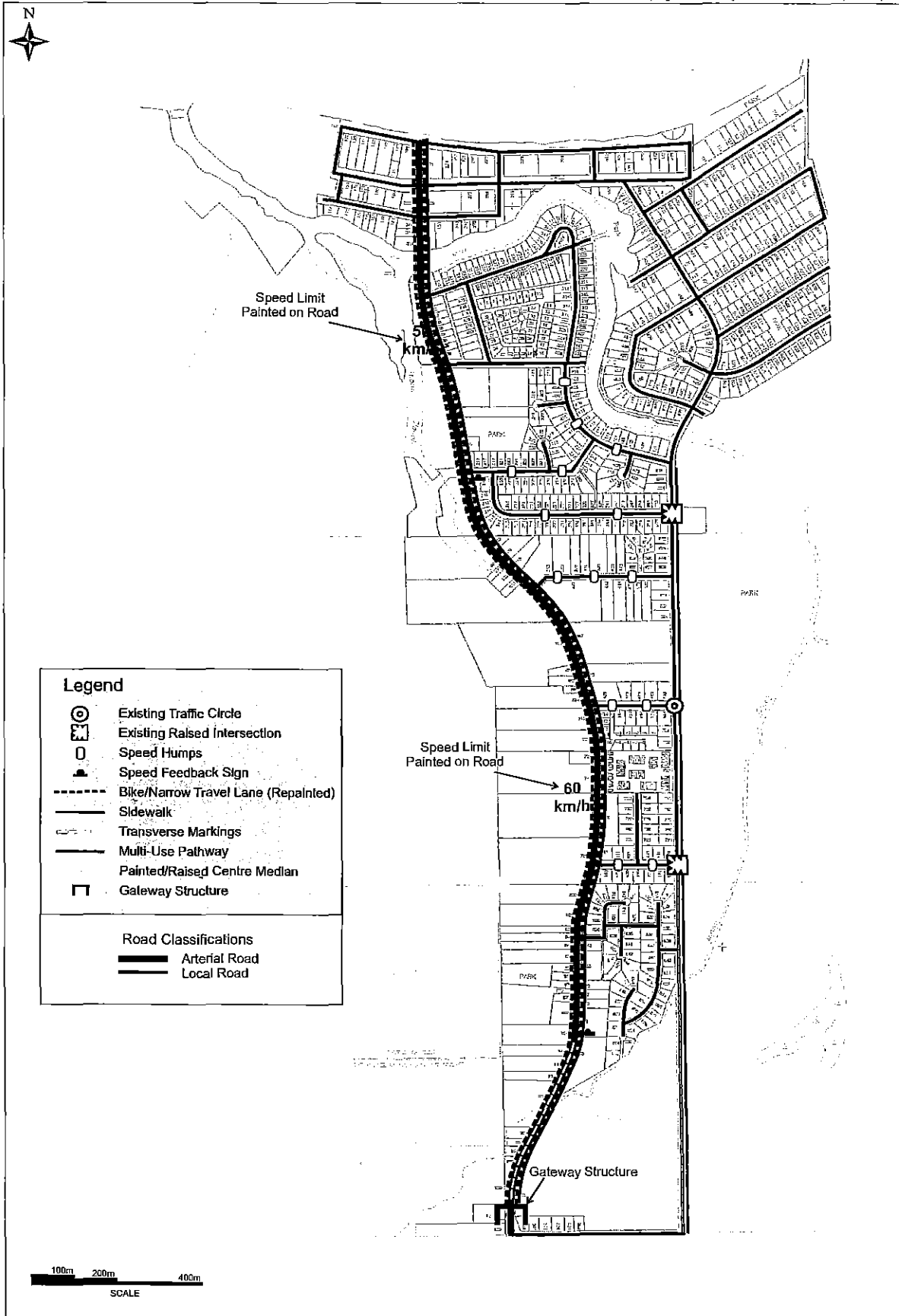


Exhibit 4.2
Traffic Calming Plan - Arterial Approach

4.1.2 Traffic Calming Plan Option 2 – Cross-Cut Approach

The Cross-Cut Approach also assumes that Hot Springs Road would remain as the primary arterial route through the Village. However, the main difference with this option is that it is supported by a collector route on the east side of the Village. Eagle Street/McCombs Drive would become a collector road from Lillooet Avenue south to Alder Avenue, and would continue as a local road south of Alder.

Alder Avenue would also become a collector route providing a designated alternative connection to Hot Springs Road (at the narrowest point in a central location) to serve the residents in the northeast area of the Village. Traffic calming measures would still be applied on local east-west streets north of Alder Avenue (i.e. that connect to Hot Springs Road) discouraging cross-cutting traffic from using them, thus shifting these vehicles to Alder Avenue as an alternative route to Hot Springs Road. **Exhibit 4.3** illustrates the Cross-Cut Approach in detail.

Traffic Calming measures on Eagle Street/McCombs Drive would likely be restricted to horizontal measures such as lane narrowing and speed feedback signs as well as centre medians (painted or concrete) which could reduce vehicle speeds without being a nuisance to drivers. Measures would also be required south of Alder on McCombs Drive to attract drivers to use Alder Avenue and not McCombs Drive beyond this point when exiting the Village.

Further, Lillooet Avenue would become a collector road which would attract some traffic in the north and northeast parts of the Village to go to Hot Springs Road via this route. Similar traffic calming measures would be applied to Hot Springs Road as per the Arterial Approach. This approach would likely require the least traffic calming measures and therefore would be the least expensive to implement.

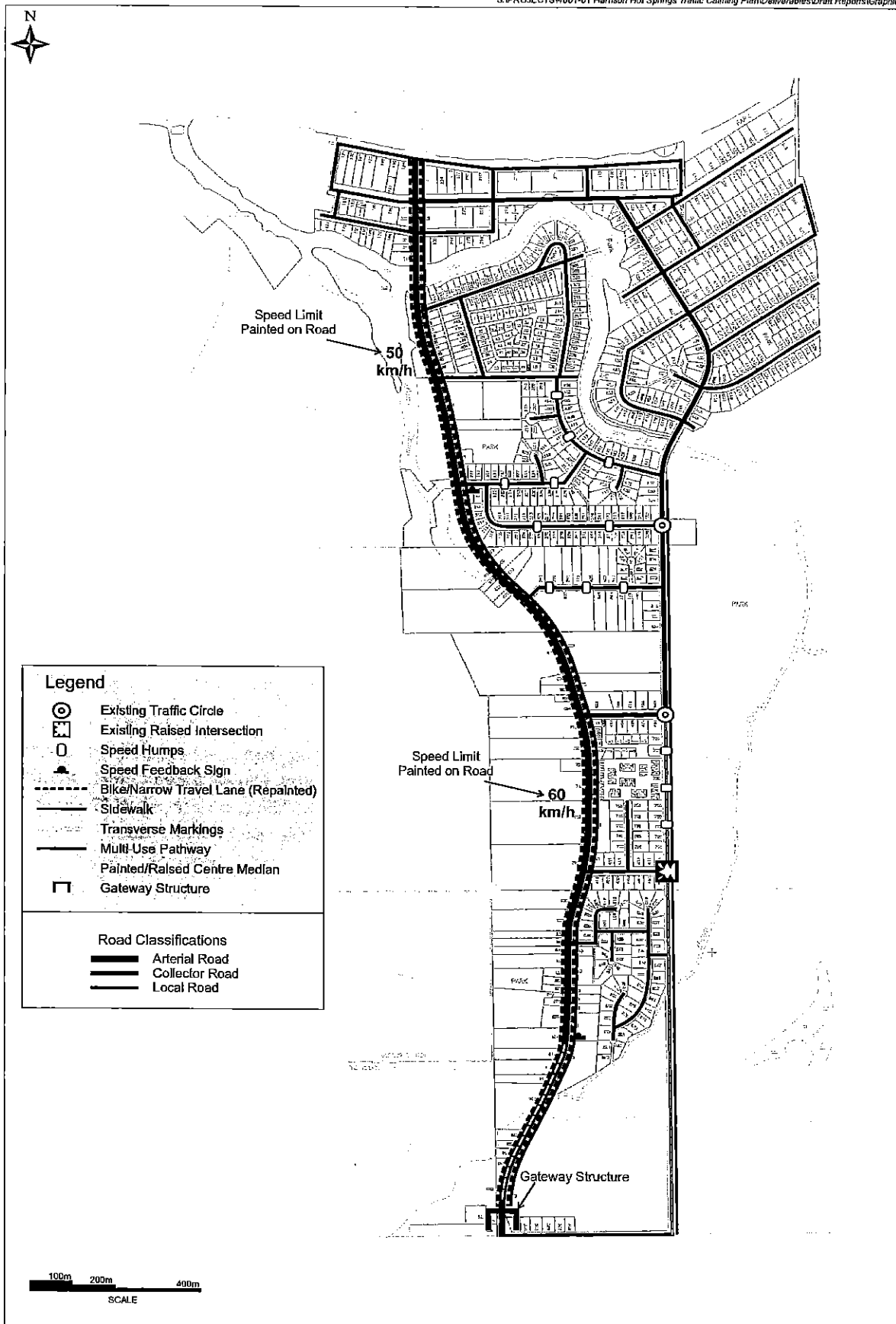


Exhibit 4.3
Traffic Calming Plan - Cross-Cut Approach

4.1.3 Traffic Calming Plan Option 3 – Balanced Approach

As with the previous two Traffic Calming Plan Options, the Balanced Approach again assumes Hot Springs Road remains as the main arterial route through the Village. Similar to Option 2, Lillooet Avenue would again become a collector route to encourage some traffic in the north and northeast to use Hot Springs Road to enter/exit the Village.

The key difference with this approach is that Eagle Street/McCombs Drive would become a collector road for its entirety and McPherson Road would also become a collector road to connect with Hot Springs Road. There would be no central collector roads connecting Eagle Street/McCombs Drive, only Lillooet Avenue (to the north) and McPherson Road (to the south). **Exhibit 4.4** illustrates the Balanced Approach in detail.

This approach attempts to encourage traffic to use both Hot Springs Road and Eagle Street/McCombs Drive making the local connecting streets less attractive to cross-cutting vehicles by placing traffic calming measures such as speed humps on them. Additional traffic calming measures such as transverse road markings, narrow lane markings and bike lanes, speed feedback signs and centre medians (painted or concrete) could be applied to both Hot Springs Road and Eagle Street/McCombs Drive to reduce vehicle speeds. Traffic becomes more balanced throughout the road network with this approach but still requires some substantial traffic calming on local roads to deter cut-through traffic.

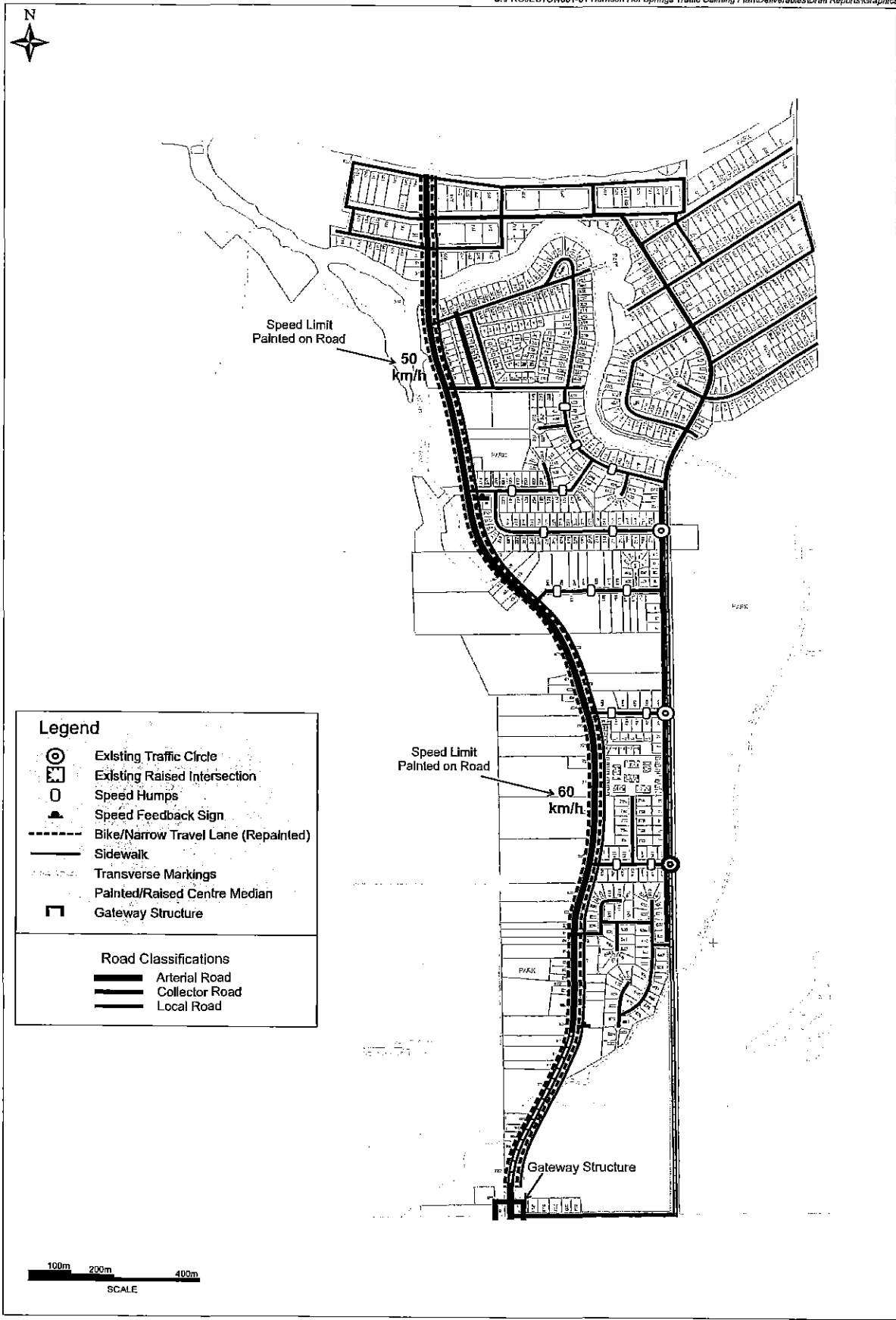


Exhibit 4.4
Traffic Calming Plan - Balanced Approach

4.2 Traffic Calming Plan – Preferred Option

A preferred option for the Traffic Calming Plan was developed based on consultation with the public at the open house in August, as well as from feedback forms provided by the public, and further deliberation regarding information presented in Sections 2 and 3. The following paragraphs illustrate how this option was arrived at and presents recommended phasing for this Traffic Calming Plan.

4.2.1 Preferred Option (Modified Arterial Approach)

The preferred option for the Harrison Hot Springs Traffic Calming Plan is primarily based on the Arterial Approach originally presented at the public open house and described in detail in section 4.1. This approach was determined to be the most favourable by the public based on our conversations with the public at the open house as well as from feedback forms completed by the public. **Exhibit 4.5** illustrates the preferred Traffic Calming Plan option in detail.

Generally, the feeling was that the public wanted to see the majority of vehicle traffic (particularly non-local) using Hot Springs Road while the rest of the residential streets should be considered local roads for local traffic and thus be suited to lower vehicle speeds (i.e. 30km/h). Therefore, the implementation of traffic calming measures (mainly speed humps) on these local "connecting" roads would: a) slow traffic down on these streets; and b) deter non-local traffic from using them.

Further, the public seemed that they were generally quite satisfied with the existing traffic calming measures on McCombs Drive with the exception of the fact that the raised intersections were perhaps a little too aggressive, and the traffic circle was not easily navigable with larger vehicles. Existing 3-way stops on McCombs Drive were also acceptable to most people except for the one at McPherson and McCombs, which some felt was unnecessary due to the low volumes experienced here and the lack of opposing volume from the east approach of the intersection.

Speed along Hot Springs Road continued to be an issue with the public which was consistent with our findings and so speed management measures are still proposed here on the Preferred Option although they have been slightly modified from the Arterial Approach. Safety for pedestrians and cyclists on Hot Springs Road and McCombs Drive also remained key concerns of the public and so this has been considered in the Preferred Option with shared-use/multi-use paths.

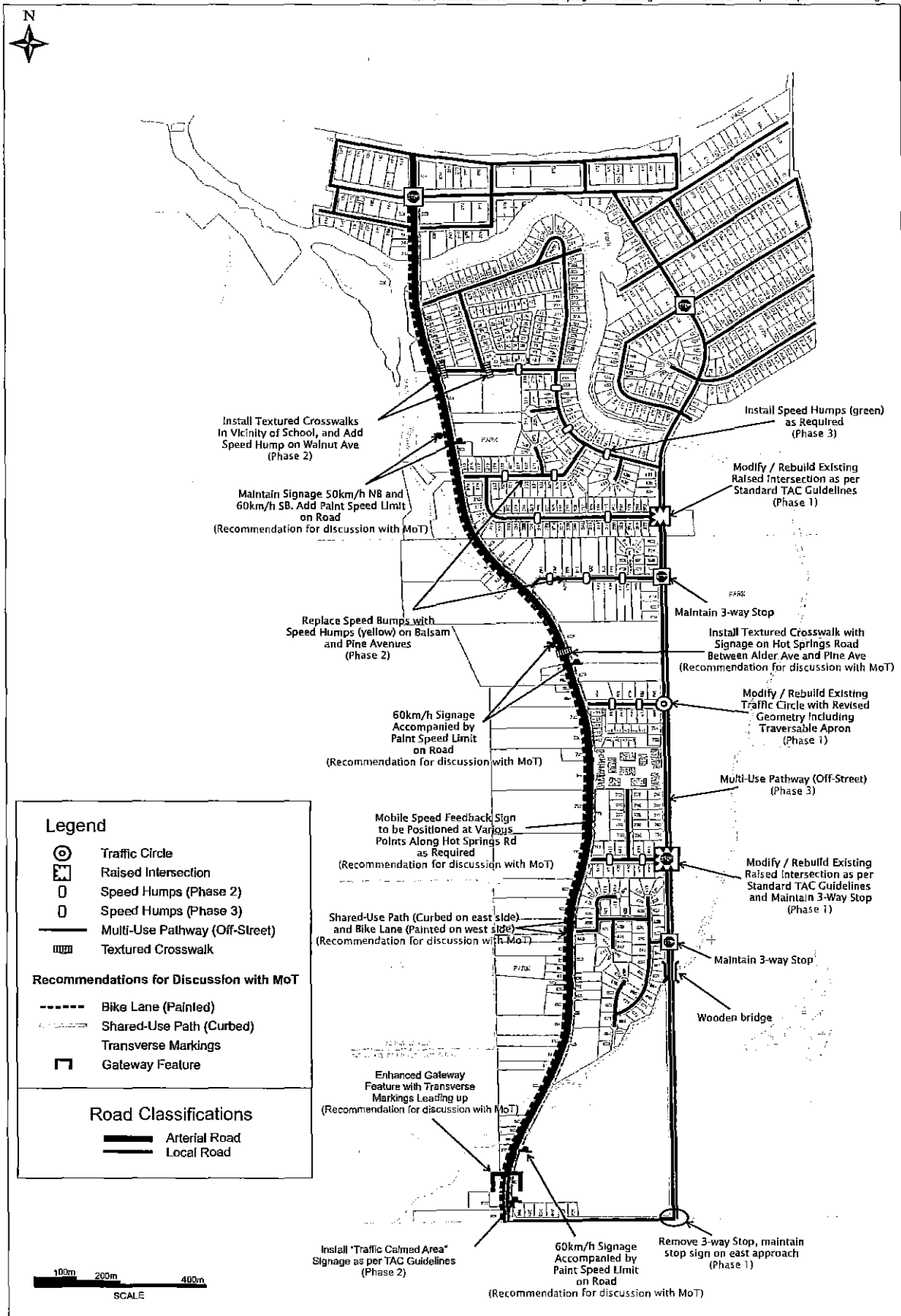


Exhibit 4.5
Traffic Calming Plan - Preferred Option (Modified Arterial Approach)

Key Modifications

Some of the key modifications made to the Arterial Approach Traffic Calming Plan to develop the Preferred Option include:

- Addition of traffic calming measures on Walnut Avenue in front of the school including a speed hump and textured crosswalks;
- Additional speed limit signage and painted speed limits on Hot Springs Road as per existing speed limits;
- Usage of a mobile speed feedback sign that can be placed at variable locations as required (which helps to avoid desensitization to signs for drivers who become too familiar with them);
- Limit transverse markings to the south of the gateway feature instead of extending northward into the Village (i.e. to create driver awareness prior to entering the Village to slow down vehicle speeds);
- Modify/rebuild existing raised intersections on McCombs Drive as per TAC standard detail to make them more comfortable to traverse;
- Modify/Rebuild existing traffic circle at McCombs Drive / Alder Avenue with revised geometry to make it traversable; and
- Remove bike lane and sidewalk from east side of Hot Springs Rd and combine as a shared-use path (curbed), and repaint and maintain bike lane on the west side.

4.3 Proposed Phasing

Recommended phasing for implementation of the Traffic Calming Plan Preferred Option is presented below. Phasing is based on a priority/as needed basis, as well as budget constraints and includes recommendations to discuss with the Ministry of Transportation for measures recommended on Hot Springs Rd.

Phase 1 (Retro-fit Existing Measures on McCombs Drive):

- Modify/rebuild existing raised intersections on McCombs Drive at Chestnut Avenue and Emerald Avenue according to the Transportation Association of Canada's design standards to make them more comfortable;
- Modify/rebuild existing traffic circle on McCombs Drive at Alder Avenue with revised geometry and traversable apron to allow larger vehicles to navigate more easily; and

- Remove 3-way stop at McPherson Rd and McCombs Drive, and maintain stop sign on east approach.

Phase 2 (Additional High Priority Traffic Calming Measures):

- Replace speed bumps with speed humps on Balsam Avenue and Pine Avenue;
- Install textured crosswalks on Walnut Avenue at Hot Springs Road and at Poplar Street in the vicinity of the school to create safe crossings to school and create awareness for drivers to slow down;
- Install speed hump on Walnut Avenue east of Poplar Street to slow vehicle speeds near school; and
- Install “Traffic Calmed Area” signage at entrance to Village.

Phase 3 (Additional Low Priority Traffic Calming Measures):

- Install additional speed humps as required on local east-west streets; and
- Install multi-use path (off-street) on east side of McCombs Drive.

Recommendations to Discuss with MoTI:

- Paint speed limits on Hot Springs Rd in vicinity of the 50km/h sign (north of Balsam Avenue) in both directions, and install new 60km/h speed limit signs with paint speed limits on Hot Springs Rd (as noted on Exhibit 4.5);
- Mobile speed feedback sign to be positioned at various locations along Hot Springs Rd for speed management as required;
- Install shared-use path (curbed on east side), and bike lane (painted on west side) on Hot Springs Road; and
- Install enhanced gateway feature at “entrance” to Village and paint transverse markings leading up to it.

4.4 Cost Estimates

Bunt has prepared some preliminary cost estimates for the Traffic Calming Plan Preferred Option, and included both a cost estimate plus a 20% contingency. The source of these unit costs is a mix of transportation engineering resource websites, manufacturer’s websites, municipal government websites and actual documented projects that were conducted in the United States or Canada. For Village budgeting purposes, the cost estimates have further been divided by phase (as noted above) and by measure. The summary of these estimates is provided in **Table 4.1**. These costs do not include detailed design considerations.

Table 4.1: Preferred Option Cost Estimate by Phase

Phase	Type of Measure	Quantity/ Area	Estimated Cost Per Item	Total Cost
1	Modify/Rebuild existing raised intersections as per TAC guidelines	2	\$30,000	\$60,000
	Modify/Rebuild existing traffic circle with revised geometry and traversable apron	1	\$50,000	\$50,000
	Remove 3-way stop signs and stop bars (McPherson/McCombs) but maintain east approach stop sign	2	\$200	\$400
	Phase 1 Total			\$110,400
Plus 20% Contingency			\$132,480	
2	Install textured crosswalks on Walnut Ave at school (Poplar St, and Hot Springs Rd)	2	\$6,000	\$12,000
	Install speed hump on Walnut	1	\$7,500	\$7,500
	Replace speed bumps with speed humps on Balsam and Pine	5	\$10,000	\$50,000
	Install "Traffic Calmed Area" signage at entrance to Village	1	\$200	\$200
	Phase 2 Total			\$69,700
Plus 20% Contingency			\$83,640	
3	Install additional speed humps as required on other local streets	9	\$12,000	\$108,000
	Multi-use pathway (compacted gravel off-street)	1.76km (1,760m) x 4m wide	\$40	\$70,400
	Phase 3 Total			\$178,400
Plus 20% Contingency			\$214,080	
MoTI	Paint speed limits on Hot Springs Road	5 (3 NB, and 2 SB)	\$130	\$650
	Acquire mobile speed feedback sign	1	\$7,500	\$7,500
	Shared-use path (asphalt) curbed on east side of Hot Springs Road	2.5km (2,500m) x 4m wide	\$600	\$1,500,000
	Painted bike lane on west side of Hot Springs Road	2.5km (2,500m) x 2m wide	\$5	\$12,500
	Install textured crosswalk with signage on Hot Springs Road between Alder and Pine	1	\$6,000	\$6,000
	Transverse pavement markings on Hot Springs Road	100 m	\$10	\$1,000

Enhanced gateway feature (depending on design)	1	(not included)	(not included)
		MoTI Total	\$1,527,650
		Plus 20% Contingency	\$1,833,180
<hr/>			
		Grand Total	\$1,886,150
		Grand Total Plus 20% Contingency	\$2,263,380

As shown, the preferred Traffic Calming Plan option (Modified Arterial Approach) is expected to cost in the range of \$1,900,000 to \$2,265,000 (including additional 20% for contingency). However, this is affected by the high cost of building an asphalt shared path on Hot Springs Road which itself costs about \$1,500,000. Without this element, the cost is in the region of \$500,000. These costs do not include detailed design considerations.

5. CONCLUSIONS

The Village of Harrison Hot Springs has experienced growing calls for traffic calming over the last few years and has installed many devices. In general, these devices have had a positive effect. However, this report meets the Village's wish to look at the issue of traffic calming in a holistic way by covering the following areas:

- **Reviewing the existing situation.** This found low volumes and relatively low speeds on many routes, although speeds were higher on Hot Springs Road, often in excess of the posted speed limit. Residents were largely happy with many of the traffic calming devices in place, although there was room for improvement. Speeding on Hot Springs Road continues to be an issue.
- **Traffic Calming Policy.** Using Industry standard literature, a review of appropriate traffic calming measures for Harrison Hot Springs was undertaken. This helped inform the eventual traffic calming plan.
- **Traffic Calming Plan.** Three options were developed based on different approaches to a road hierarchy, and presented to the public in an Open House format. Many comments were received, and based on this, a preferred option was developed.

The preferred option consists of the recommendations of the report and is detailed in the previous section, including the phasing. In summary, the highlights of the preferred option are:

- Rebuild the raised intersections and traffic circle to TAC standards, which will retain their effectiveness while making them more comfortable to navigate;
- Replace the existing speed bumps with more comfortable sinusoidal speed humps.
- Install a speed hump and textured crosswalks on Walnut Avenue, outside the school;
- Add additional speed humps on other east - west streets if required;
- Construct a new multi-use pathway along the east side of McCombs Drive to provide a safe, off-street, north - south route for pedestrians and cyclists.

Some options require consultation and discussion with MOT. Highlights of these measures include:

- Painted speed limit signs;
- Mobile speed feedback signs;
- Shared use asphalt path on east side of road;

- Painted bike lane on west side;
- Traverse pavement markings;
- Enhanced gateway feature.

These measures, in total, are expected to cost in the range of \$1,900,000 to \$2,265,000 (including additional 20% for contingency). However, the asphalt shared path on Hot Springs Road costs about \$1,500,000. Without this element, the cost is in the region of \$500,000.

By implementing a phased approach the Village can spread the cost of these measures over several years. In addition, several funding sources may be available to assist with costs.

APPENDIX A

Resident Traffic Calming Questionnaire

HARRISON HOT SPRINGS - TRAFFIC CALMING DRAFT SURVEY QUESTIONS

The following provides an outline of information to be collected and questions to be asked via the online survey which will be posted on the Village's website. Methods of publicizing the survey to be determined through consultation with the Village.

The Village of Harrison Hot Springs, with the help of transportation consultants Bunt & Associates, are undertaking a review of traffic calming in the Village. The traffic calming devices currently installed will be reviewed in terms of effectiveness and appropriateness. In addition, new traffic calming measures in terms of both type and location will be considered. In order to help us carry out this assessment, we would appreciate a few minutes of your time to fill in the following questionnaire. At the end of the questionnaire there will be an opportunity to register your email address in order to be kept informed of progress on the study.

We thank you for your time and your willingness to be involved in the study.

Driving/Walking/Cycling Routines

1. Which route do you use most often when coming into/out of the Village?

(Choose between Mainly Hot Springs Road; Mainly McComb's Drive; Both; n/a).

2. What other roads do you regularly use when travelling by car? (Please circle all that are applicable)

- Esplanade Avenue
- Lillooet Avenue
- Eagle Street
- Cedar Avenue
- Miami River Drive
- Walnut Avenue
- Balsam Avenue
- Chestnut Avenue
- Pine Avenue
- Alder Avenue
- Emerald Avenue
- Other - please state

3. a) Do you regularly walk along the local streets?

Yes/No

b) If so, which roads do you use? (Please circle all that are applicable)

- Esplanade Avenue
- Lillooet Avenue
- Eagle Street
- Cedar Avenue
- Miami River Drive
- Walnut Avenue
- Balsam Avenue
- Chestnut Avenue
- Pine Avenue
- Alder Avenue
- Emerald Avenue
- Other – please state

c) How safe do you perceive the roads to be for walking?

(Provide range of options to select. i.e. very safe; safe; somewhat safe; not very safe; dangerous; don't know)

4. a) Do you regularly cycle along the local streets?

Yes/No

b) If so, which roads do you use? (Please circle all that are applicable)

- Esplanade Avenue
- Lillooet Avenue
- Eagle Street
- Cedar Avenue
- Miami River Drive
- Walnut Avenue
- Balsam Avenue
- Chestnut Avenue
- Pine Avenue
- Alder Avenue
- Emerald Avenue
- Other – please state

c) How safe do you perceive the roads to be for cycling?

(Provide range of options to select. i.e. very safe; safe; somewhat safe; not very safe; dangerous; don't know)

5. How often do you use the trails on the east side of McComb's Drive (East Sector Lands/Park)?

(Provide range of options to select. i.e. never; occasionally; more than once a month; once a week; daily)

6. a) If you use the trails on the east side of McComb's Drive how/where do you access them?

(Text box to be included)

- b) This would require you to cross McComb's Drive. Where do you cross?

(Text box to be included)

Traffic Concerns

7. Prior to the installation of traffic calming measures on McComb's Drive, Pine Avenue, and Balsam Avenue, what, if any traffic related issues did you observe?

(Text box to be included)

8. How effective, in your opinion has each of the following traffic calming interventions been in slowing/reducing traffic volumes?

- a) Raised intersection/3-way stop at McComb's Drive / Emerald Avenue

(Provide range of options to select. i.e. very effective; effective; neither effective nor ineffective; ineffective; very ineffective; don't know)

- b) Traffic circle at the intersection of McComb's Drive/Alder Avenue

(Provide range of options to select. i.e. very effective; effective; neither effective nor ineffective; ineffective; very ineffective; don't know)

- c) Speed humps on Pine Avenue

(Provide range of options to select. i.e. very effective; effective; neither effective nor ineffective; ineffective; very ineffective; don't know)

- d) Raised intersection at McComb's Drive/Chestnut Avenue

(Provide range of options to select. i.e. very effective; effective; neither effective nor ineffective; ineffective; very ineffective; don't know)

- e) Speed humps on Balsam Avenue

(Provide range of options to select. i.e. very effective; effective; neither effective nor ineffective; ineffective; very ineffective; don't know)

9. Are there, or have there been any traffic-related issues on your road? If so, what are they?

(Text box to be included)

10. Do you have any other traffic concerns in the Village?

(Text box to be included)

11. If you could change one thing to improve traffic safety in the Village what would it be?

(Text box to be included)

12. Any other comments?

(Text box to be included)

Background Information

You do not have to fill out all or any of this information below. However, it is helpful in analyzing the responses. Please include an email address or phone number if you'd like to be informed of future developments concerning this study.

13. Name: *text box*

14. Address (if not willing to provide address, then postal code and or street/block number where they reside): *text box*

15. Contact email/phone if you would like to stay informed: *text box*

16. Age (please indicate): 0-18 19-35 35-50 51-65 >65 *would rather not say*

17. Gender (please indicate): *Male/ female/ would rather not say*

Once again, thank you for your time,

The Village of Harrison Hot Springs and Bunt & Associates.

1. Which route do you use most often when coming into/out of the Village?

		Response Percent	Response Count
Mainly Hot Springs Road	<input type="checkbox"/>	53.6%	30
Mainly McComb's Drive	<input type="checkbox"/>	10.7%	6
Both	<input type="checkbox"/>	33.9%	19
n/a	<input type="checkbox"/>	1.8%	1
answered question			56
skipped question			0

2. What other roads do you regularly use when traveling by car? (Please select all that are applicable)

		Response Percent	Response Count
Esplanade Avenue	<input type="checkbox"/>	29.6%	16
Lillooet Avenue	<input type="checkbox"/>	44.4%	24
Eagle Street	<input type="checkbox"/>	38.9%	21
Cedar Avenue	<input type="checkbox"/>	9.3%	5
Miami River Drive	<input type="checkbox"/>	46.3%	25
Walnut Avenue	<input type="checkbox"/>	24.1%	13
Balsam Avenue	<input type="checkbox"/>	44.4%	24
Chestnut Avenue	<input type="checkbox"/>	1.9%	1
Pine Avenue	<input type="checkbox"/>	24.1%	13
Alder Avenue	<input type="checkbox"/>	14.8%	8
Emerald Avenue	<input type="checkbox"/>	11.1%	6
	Other (please specify)		7
	answered question		54
	skipped question		2



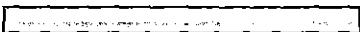

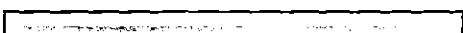
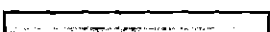


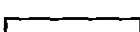



3. Other general comments for this section? (Please state in text box below)

	Response Count
	22
answered question	22
skipped question	34

4. Do you regularly walk along the local streets?

		Response Percent	Response Count
Yes	<input type="checkbox"/>	90.7%	49
No	<input type="checkbox"/>	9.3%	5
n/a		0.0%	0
answered question			54
skipped question			2

5. If you answered yes to the previous question, which roads do you use? (Please select all that are applicable)

		Response Percent	Response Count
Esplanade Avenue		83.7%	41
Lillooet Avenue		79.6%	39
Eagle Street		55.1%	27
Cedar Avenue		20.4%	10
Miami River Drive		71.4%	35
Walnut Avenue		40.8%	20
Balsam Avenue		30.6%	15
Chestnut Avenue		26.5%	13
Pine Avenue		20.4%	10
Alder Avenue		10.2%	5
Emerald Avenue		14.3%	7
Other (please specify)		53.1%	26
		answered question	49
		skipped question	7

6. How safe do you perceive the roads to be for walking? (Please select one)

	Very Safe	Safe	Somewhat safe	Not very safe	Dangerous	Don't know	Response Count	
Safety of roads for walking	25.9% (14)	35.2% (19)	24.1% (13)	13.0% (7)	1.9% (1)	0.0% (0)	54	
							answered question	54
							skipped question	2

7. Do you regularly cycle along the local streets?

		Response Percent	Response Count
Yes	<input type="checkbox"/>	60.4%	32
No	<input type="checkbox"/>	37.7%	20
n/a	<input type="checkbox"/>	1.9%	1
answered question			53
skipped question			3

8. If you answered yes to the previous question, which roads do you use? (Please select all that are applicable)

		Response Percent	Response Count
Esplanade Avenue	<input type="checkbox"/>	77.4%	24
Lillooet Avenue	<input type="checkbox"/>	80.6%	25
Eagle Street	<input type="checkbox"/>	67.7%	21
Cedar Avenue	<input type="checkbox"/>	25.8%	8
Miami River Drive	<input type="checkbox"/>	77.4%	24
Walnut Avenue	<input type="checkbox"/>	54.8%	17
Balsam Avenue	<input type="checkbox"/>	51.6%	16
Chestnut Avenue	<input type="checkbox"/>	35.5%	11
Pine Avenue	<input type="checkbox"/>	38.7%	12
Alder Avenue	<input type="checkbox"/>	22.6%	7
Emerald Avenue	<input type="checkbox"/>	29.0%	9
	Other (please specify)		12
	answered question		31
	skipped question		25

9. How safe do you perceive the roads to be for cycling? (Please select one)

	Very safe	Safe	Somewhat safe	Not very safe	Dangerous	Don't know	Response Count
Safety of roads for cycling	14.0% (6)	37.2% (16)	30.2% (13)	7.0% (3)	7.0% (3)	4.7% (2)	43
							answered question 43
							skipped question 13

10. Other general comments for this section? (Please state in text box below)

	Response Count
	17
answered question	17
skipped question	39

11. How often do you use the trails on the east side of McComb's Drive (East Sector Lands/Park)?

	Response Percent	Response Count
Never <input type="checkbox"/>	18.5%	10
Occasionally <input type="checkbox"/>	40.7%	22
More than once a month <input type="checkbox"/>	18.5%	10
Once a week <input type="checkbox"/>	18.5%	10
Daily <input type="checkbox"/>	3.7%	2
answered question		54
skipped question		2

12. If you use the trails on the east side of McComb's Drive (East Sector Lands/Park) how/where do you access them? (Please indicate in text box below)

	Response Count
	40
answered question	40
skipped question	16

13. This would require you to cross McComb's Drive. Where do you cross? (Please indicate in text box below)

	Response Count
	38
answered question	38
skipped question	18

14. Other general comments for this section? (Please state in text box below)

	Response Count
	13
answered question	13
skipped question	43

15. Prior to the installation of traffic calming measures on McComb's Drive, Pine Avenue, and Balsam Avenue, what, if any traffic related issues did you observe? (Please indicate in text box below)

	Response Count
	41
answered question	41
skipped question	15

16. How effective, in your opinion has each of the following traffic calming interventions been in slowing/reducing traffic volumes?

	Very effective	Effective	Neither effective nor ineffective	Ineffective	Very ineffective	Don't know	Response Count
Raised intersection at McComb's Drive / Emerald Avenue	28.3% (15)	39.6% (21)	7.5% (4)	7.5% (4)	15.1% (8)	1.9% (1)	53
Traffic circle at McComb's Drive/Alder Avenue	23.1% (12)	34.6% (18)	5.8% (3)	9.6% (5)	23.1% (12)	3.8% (2)	52
Speed humps on Pine Avenue	22.0% (11)	22.0% (11)	14.0% (7)	4.0% (2)	14.0% (7)	24.0% (12)	50
Raised intersection at McComb's Drive/Chestnut Avenue	31.4% (16)	39.2% (20)	7.8% (4)	5.9% (3)	13.7% (7)	2.0% (1)	51
Speed humps on Balsam Avenue	24.0% (12)	28.0% (14)	12.0% (6)	8.0% (4)	20.0% (10)	8.0% (4)	50
						answered question	53
						skipped question	3

17. Are there, or have there been any traffic-related issues on your road? If so, what are they? (Please indicate in text box below)

	Response Count
	36
answered question	36
skipped question	20

18. Do you have any other traffic concerns in the Village? Please indicate in text box below)

	Response Count
	41
answered question	41
skipped question	15

**19. If you could change one thing to improve traffic safety in the Village what would it be?
(Please indicate in text box below)**

	Response Count
	43
answered question	43
skipped question	13

20. Any other comments?

	Response Count
	25
answered question	25
skipped question	31

21. Name

	Response Count
	43
answered question	43
skipped question	13

22. Address (if not willing to provide address, then postal code and or street/block number where you reside):

	Response Count
	41
answered question	41
skipped question	15

23. Contact email/phone if you would like to stay informed:

	Response Count
	42
answered question	42
skipped question	14

24. Age (please indicate):

	Response Percent	Response Count
0-18	0.0%	0
19-35 <input type="checkbox"/>	3.7%	2
35-50 <input type="checkbox"/>	18.5%	10
51-65 <input type="checkbox"/>	35.2%	19
>65 <input type="checkbox"/>	42.6%	23
would rather not say	0.0%	0
		answered question 54
		skipped question 2

25. Gender (please indicate):

	Response Percent	Response Count
Male	54.7%	29
Female	45.3%	24
Would rather not say	0.0%	0
answered question		53
skipped question		3

Page 2, Q2. What other roads do you regularly use when traveling by car? (Please select all that are applicable)

1	McCombs Drive	Jun 5, 2011 9:22 PM
2	McComb's	May 30, 2011 12:39 PM
3	McComb	May 29, 2011 7:47 AM
4	Cottonwood Ave.	May 19, 2011 7:09 PM
5	Rockwell Drive	May 16, 2011 5:35 PM
6	Ramona Place	May 16, 2011 12:55 PM
7	McCombs Drive	May 12, 2011 10:38 AM

Page 2, Q3. Other general comments for this section?

(Please state in text box below)

- 1 The traffic calming in place at present is dangerous, some installed on 50kph road with no prior warning, poor lighting, out of specification, used to deter traffic only, warning marking on calming not reflective, placed in the wrong location, too far apart, increase in exhaust emission, diverting traffic past a school and no enforcement of other measures. May 31, 2011 10:35 AM
- 2 I would like to see the speed bumps stay in place as people like to speed on that back road because it's not patrolled as much as Hot Springs RD and one life has been lost. Do we want more? No, no, no. May 30, 2011 12:39 PM
- 3 Remove speed bumps and elevated intersections May 30, 2011 12:07 PM
- 4 Dislike the abundance of stop signs May 29, 2011 7:47 AM
- 5 round about on Mc Combs is not safe to drive around, not enough room and poor lighting. May 26, 2011 12:58 PM
- 6 With the traffic bumps back on Balsam I now use Walnut instead. Traffic bumps are very annoying! May 24, 2011 11:03 PM
- 7 In order to solve the excessive on-going speeding issues on Balsam, I'd like to suggest to the town of Harrison Hot Springs the addition of a round-about at the intersection of Clover Pl road and Balsam. This would result in a safer alternative year round. May 22, 2011 12:06 PM
- 8 The stop signs are rather ineffective. The speed humps at intersections or T intersections are excellent. Place one at Miami River Drive and McCombs after the bridge is completed. The speed bumps should be eliminated. May 20, 2011 12:26 PM
- 9 I travel Hot Springs Road instead of McCombs because the McCombs is too awful to use. May 19, 2011 8:47 PM
- 10 Of course, the route will vary depending where I need to travel so some streets are less travelled. May 19, 2011 7:09 PM
- 11 Remove the oversized speed bumps. Roundabouts and extra stop signs are good. Those bumps should go away far. Dumb idea! Knee action solution! May 19, 2011 1:49 PM
- 12 The traffic circle on Mc Combs does not have wide enough road surface and develops a pothole. The square intersection traffic calmers force you to slow down completely. The sharp bumps, like the one that were on Pineview were very annoying, thank goodness they are gone. May 19, 2011 10:29 AM
- 13 Miami River Dr., Eagle & Lillooet are all death traps for both kids & seniors alike. Crosswalks required at key points such as park & boat launch. All the other streets checked above require serious traffic calming measures. This is a tourist town, not Indy. Also lower speed limit to 35 on all subdivision roads May 16, 2011 10:54 PM
- 14 Why did you miss Rockwell Drive from the list? Why not ask what roads I used before this "traffic calming" nonsense drove me nuts? May 16, 2011 5:35 PM

Page 2, Q3. Other general comments for this section?

(Please state in text box below)

- | | | |
|----|---|-----------------------|
| 15 | The village does NOT end at Pine-Walnut etc!!There are taxpayers further south!There WILL be an accident on Ramona-caused by constant non observance of stop sign at Hadway--or speeders on Hot Springs road-it seems speed is only monitored north of Balsam! | May 16, 2011 12:55 PM |
| 16 | We are strongly apposed to speed bumps on Balsam Avenue. as my wife is handicapped and uses a scooter to get around the Village, it is awful for her going over them and bothers her back also when in our car I have to almost stop as the bumps are too severe for her. | May 15, 2011 7:01 PM |
| 17 | miami river, balsam are used to get to hot springs rd while avoiding traffic calming additions | May 15, 2011 5:27 PM |
| 18 | My bicycling route is mainly McCoombs/Eagle/Chestnut/ but only in the summer | May 14, 2011 11:15 AM |
| 19 | Above our the routes that I regularly use by car, but my children and I bike, rollerblade, and walk all around Harrison on a daily basis. | May 14, 2011 10:46 AM |
| 20 | The excess of traffic calming on McComb's Drive has caused traffic from the east part of town to almost stop using McComb's and access Hot Springs Rd. via Miami and then Balsam Avenue. | May 13, 2011 9:32 AM |
| 21 | THE WAY IT IS NOW IS GREAT | May 12, 2011 1:16 PM |
| 22 | Shortest routes to my destination | May 12, 2011 10:38 AM |

Page 3, Q2. If you answered yes to the previous question, which roads do you use? (Please select all that are applicable)

1	Hot Springs road	Jun 4, 2011 10:29 AM
2	McCombs	May 31, 2011 10:37 AM
3	Echo	May 30, 2011 12:41 PM
4	McComb & MacPherson	May 29, 2011 7:51 AM
5	Cottonwood, Driftwood, Naismith, Chehalis	May 27, 2011 8:34 PM
6	trails	May 24, 2011 11:04 PM
7	maple	May 24, 2011 11:37 AM
8	driftwood-cottonwood-Mccomb	May 23, 2011 10:59 PM
9	McCombe	May 23, 2011 9:40 AM
10	McCombs Drive	May 20, 2011 11:01 AM
11	McCombs Drive	May 20, 2011 6:57 AM
12	Hot Springs	May 19, 2011 7:10 PM
13	McCombs	May 19, 2011 1:51 PM
14	harrison hot springs road	May 19, 2011 12:30 PM
15	Rockwell Drive, Hot Springs Road.	May 16, 2011 5:39 PM
16	Miami River Dr.	May 16, 2011 3:21 PM
17	MCoombs	May 16, 2011 12:36 PM
18	mccoomb, hot springs	May 16, 2011 12:31 PM
19	McCoumb	May 16, 2011 10:38 AM
20	lack of sideways on some streets add to unsafe feeling	May 15, 2011 7:28 AM
21	McCombs, McPherson	May 14, 2011 5:36 PM
22	Hot Springs Rd	May 14, 2011 3:38 PM
23	Cottonwood, Driftwood	May 14, 2011 10:52 AM
24	Mccoombs	May 14, 2011 9:09 AM
25	Naismeth	May 12, 2011 7:14 PM
26	McCombs Drive	May 12, 2011 10:38 AM

Page 3, Q5. If you answered yes to the previous question, which roads do you use? (Please select all that are applicable)

- | | | |
|----|---|-----------------------|
| 1 | Hot Springs road | Jun 4, 2011 10:29 AM |
| 2 | Hot Springs Road, McCombs | Jun 4, 2011 8:59 AM |
| 3 | McCombs | May 31, 2011 10:37 AM |
| 4 | cottowood- Mc comb-Mc pearcen-harris rd- | May 23, 2011 10:59 PM |
| 5 | McCombe | May 23, 2011 9:40 AM |
| 6 | Hot Springs Road , Rockwell Drive | May 16, 2011 5:39 PM |
| 7 | Hot Springs Road and McCoombs | May 16, 2011 12:36 PM |
| 8 | McCombs, Hot Springs Road | May 14, 2011 5:36 PM |
| 9 | Hot Springs Road | May 14, 2011 3:38 PM |
| 10 | McCoombs, Cottonwood, Driftwood, Hot Springs Road | May 14, 2011 11:18 AM |
| 11 | McPherson, Hot Springs Rd. | May 14, 2011 10:52 AM |
| 12 | McComb Drive | May 12, 2011 10:38 AM |

Page 3, Q7. Other general comments for this section?

(Please state in text box below)

- | | | |
|----|---|-----------------------|
| 1 | Harrison roads are pretty safe for biking, hot springs road bike lane needs to be repaved and cleaned. | Jun 4, 2011 10:29 AM |
| 2 | Greatly desire a bike lane on Hot Springs Rd. heading to Agassiz!!! | May 29, 2011 7:51 AM |
| 3 | It has been observed by many neighbors that OFTEN motorists speed excessively on Balsam Ave therefore a permanent solution is needed. Reducing the speed limit from 50 to 30 would not control the issue at hand. An alternative solution as mentioned previously about a roundabout would be in the best interest to ALL neighbours. Thank you | May 22, 2011 12:12 PM |
| 4 | The biggest problem with the roads in Harrison is the lack of sidewalks on most. | May 19, 2011 8:49 PM |
| 5 | There is a bend on balsm and too many cars whip around this corner it is not safe | May 19, 2011 12:30 PM |
| 6 | safe because there is little traffic most of the time | May 19, 2011 10:41 AM |
| 7 | Why exclude Hot Springs Rd and Rockwell Drive from these lists. | May 16, 2011 5:39 PM |
| 8 | Hadway stop sign at Ramona rarely observed-ditto speed limits south of Pine-- exiting Ramona hazardous due to speeders on Hot Springs Rd | May 16, 2011 12:58 PM |
| 9 | No sidewalks means that while walking or cycling, we must be constantly cognizant of approaching traffic. Should be 30 kmh on residential streets | May 16, 2011 5:39 AM |
| 10 | many close calls with cars over the years, to be expected, I guess because cars are mixed in with bikes. Bike lanes would be great!! | May 15, 2011 7:28 AM |
| 11 | Hot Springs Road is very unsafe. Still no properly designated bicycle lane. | May 14, 2011 5:36 PM |
| 12 | Usually only cycle only in the summer months | May 14, 2011 11:18 AM |
| 13 | With only one route out of town with excess calming on McComb's traffic is now using Miami then Balsam to reach Hot Springs Rd. A speed limit of 50 km/hr and the absence of enforcement makes foot travel less than safe at times. | May 13, 2011 9:40 AM |
| 14 | Traffic travelling way past posted speed limits. Narrow shoulder a concern. | May 12, 2011 10:43 PM |
| 15 | Actually as long as we don't cycle on the main roads. | May 12, 2011 7:14 PM |
| 16 | WE LIKE IT THE WAY IT IS NOW DO NOT CHANGE ANYTHING. | May 12, 2011 1:18 PM |
| 17 | We need side walks and wider streets on all areas off of Lillooet | May 12, 2011 10:38 AM |

Page 4, Q2. If you use the trails on the east side of McComb's Drive (East Sector Lands/Park) how/where do you access them?

(Please indicate in text box below)

1	Emerald Ave	Jun 5, 2011 9:25 PM
2	use trails and roads through Harrison to get there	Jun 4, 2011 10:30 AM
3	Rockwell Drive & Lillooet	Jun 4, 2011 9:02 AM
4	From McCombs and Eagle	May 31, 2011 10:38 AM
5	mcCombs	May 30, 2011 12:09 PM
6	McCombs Drive	May 30, 2011 12:05 PM
7	McComb's Drive	May 30, 2011 11:32 AM
8	- several of the trail entrances off of McCombs drive, best one is toward the end of McCombs, near Mac Phearson.	May 29, 2011 8:15 AM
9	2 trails near the south bridge over Miami and from MacPherson	May 29, 2011 7:53 AM
10	Usually from Lillooet Rd. Also from Cottonwood or Driftwood, or higher up near Myng Cres for Faces Trail	May 27, 2011 8:38 PM
11	At Nasmith	May 26, 2011 1:03 PM
12	Cottonwood or Eagle or Ramona for masks trail	May 24, 2011 11:06 PM
13	Pine	May 23, 2011 9:41 AM
14	Corner of Miami Dr and McComb's Drive	May 22, 2011 12:13 PM
15	Myng Crescent area	May 21, 2011 2:38 PM
16	Off of Naismith / McCombs	May 20, 2011 12:28 PM
17	Chestnut Avenue	May 20, 2011 11:02 AM
18	At the end of Cottonwood Ave.	May 20, 2011 8:49 AM
19	Chestnut Avenue	May 20, 2011 6:59 AM
20	At the bridge and at the end of Echo	May 19, 2011 8:51 PM
21	Cottonwood Ave., Chestnut, South McCombs (Mask Park)	May 19, 2011 7:32 PM
22	by eagle st	May 19, 2011 12:31 PM
23	echo av	May 19, 2011 10:48 AM
24	Rockwell Drive , Driftwood & Cottonwood , McPherson. Eagle St.	May 16, 2011 5:44 PM
25	from McCoombs	May 16, 2011 3:22 PM
26	just over the one way bridge past Miami River drive	May 16, 2011 12:38 PM

Page 4, Q2. If you use the trails on the east side of McComb's Drive (East Sector Lands/Park) how/where do you access them?

(Please indicate in text box below)

27	mccombs	May 16, 2011 12:32 PM
28	Various points along McCombs and Eagle	May 16, 2011 5:42 AM
29	Access from Cottonwood Ave	May 15, 2011 8:40 PM
30	near emerald, and other spots	May 15, 2011 5:30 PM
31	Cottonwood/Driftwood	May 15, 2011 7:29 AM
32	Naismith, Cottonwood and Lillooet	May 14, 2011 5:39 PM
33	Off of McCombs/Eagle at Chestnut or Cottonwood or Driftwood	May 14, 2011 11:20 AM
34	At the end of Chestnut, the end of Naismith, or the end of Rockwell De.	May 14, 2011 11:00 AM
35	Foot of Naismith	May 13, 2011 4:34 PM
36	Via Eagle just north of the Miami R. bridge.	May 13, 2011 9:52 AM
37	On the main trail near the bridge.	May 12, 2011 7:15 PM
38	McComb & Naismith	May 12, 2011 1:50 PM
39	MCCOMBS	May 12, 2011 1:19 PM
40	Off Eagle and Naismith	May 12, 2011 10:38 AM

Page 4, Q3. This would require you to cross McComb's Drive. Where do you cross?

(Please indicate in text box below)

1	Emerald Ave	Jun 5, 2011 9:25 PM
2	trail behind miami drive usually	Jun 4, 2011 10:30 AM
3	Does not require crossing McComb's Drive.	Jun 4, 2011 9:02 AM
4	any where	May 31, 2011 10:38 AM
5	pine	May 30, 2011 12:09 PM
6	Pine	May 30, 2011 12:05 PM
7	Emerald Street or Ming	May 30, 2011 11:32 AM
8	- I am usually already on the side of the park as i walk against traffic though I also i cross at the safety circles as well.	May 29, 2011 8:15 AM
9	anywhere	May 29, 2011 7:53 AM
10	Anywhere convenient.	May 27, 2011 8:38 PM
11	AT Nasmith	May 26, 2011 1:03 PM
12	Just over the bailey bridge or at Miami River Drive	May 24, 2011 11:06 PM
13	Naismith and Pine	May 23, 2011 9:41 AM
14	Miami Drive	May 22, 2011 12:13 PM
15	middle of road when no cars	May 21, 2011 3:20 PM
16	Miami River	May 21, 2011 2:38 PM
17	Naismith	May 20, 2011 12:28 PM
18	Chestnut Avenue	May 20, 2011 11:02 AM
19	Chestnut Avenue	May 20, 2011 6:59 AM
20	Where ever I feel like.	May 19, 2011 8:51 PM
21	anywhere that is near to "park" entrance	May 19, 2011 7:32 PM
22	miami drive	May 19, 2011 12:31 PM
23	I live on Echo,however if we cross to follow the trail allong miami river we cross at the bridge on Mc Combes	May 19, 2011 10:48 AM
24	Anywhere I like. Is there a problem with that. It's a very low-volume roadway. Crossing is no problem. We don't need any help with that , thank you.	May 16, 2011 5:44 PM
25	from Miami River Dr	May 16, 2011 3:22 PM
26	Haismith & Eagle	May 16, 2011 12:38 PM

Page 4, Q3. This would require you to cross McComb's Drive. Where do you cross?

(Please indicate in text box below)

27	pine	May 16, 2011 12:32 PM
28	Usually at Miami River Drive and McCombs and sometimes Naismith at Eagle	May 16, 2011 5:42 AM
29	Driftwood	May 15, 2011 7:29 AM
30	Naismith near the bridge	May 14, 2011 5:39 PM
31	Miami River Drive or Chestnut	May 14, 2011 11:20 AM
32	The East end of Miami River Drive or the end of Naismith	May 14, 2011 11:00 AM
33	Naismith	May 13, 2011 4:34 PM
34	Just north of where McComb's starts.	May 13, 2011 9:52 AM
35	The corner of Naismeth and Eagle	May 12, 2011 7:15 PM
36	End of Naismith	May 12, 2011 1:50 PM
37	MIAMI RIVER DRIVE	May 12, 2011 1:19 PM
38	Eagle and Naismith	May 12, 2011 10:38 AM

Page 4, Q4. Other general comments for this section?

(Please state in text box below)

- | | | |
|----|--|-----------------------|
| 1 | Trails on the East side can be accessed at numerous places. Lillooet, Echo, Naismith, Driftwood, Eagle, McCombs, McPherson | Jun 4, 2011 9:02 AM |
| 2 | no problem | May 29, 2011 7:53 AM |
| 3 | Oviously one checks for traffic when crossing McCombs Rd. This does not seem a problem. | May 27, 2011 8:38 PM |
| 4 | There is a lot of wet areas on the trails that need attention. | May 24, 2011 11:06 PM |
| 5 | I did not find the roads unsafe before the calming measures were put into effect | May 19, 2011 8:51 PM |
| 6 | Remove speed bumps!!!! | May 19, 2011 1:51 PM |
| 7 | Love the trails.They need some clearing and gravel on soft spots. | May 19, 2011 10:48 AM |
| 8 | please don't even think about any more traffic calming nonsense such as cross walks on McComb Drive. We're not idiots here. we don't need some busybody from Surrey or Vancouver telling us we are incapable of driving, walking and biking safely without multiple nanny-state rules. | May 16, 2011 5:44 PM |
| 9 | The trail access and improvements are great and regularly used. | May 14, 2011 5:39 PM |
| 10 | It's more difficult crossing at the end of Naismith because I know the visibility of oncoming cars is inhibited by the one lane bridge and the curve in Eagle St. between Driftwood and Cottonwood | May 14, 2011 11:00 AM |
| 11 | don't use them because of the possiblity of wildlife. | May 13, 2011 11:25 AM |
| 12 | The speed limit on residential streets should be lowered to 40Km/hr and 50Km/hr. on access streets as McComb's and Hot Springs Rd. However, witihout enforcement many drivers will ignore these changes as are many stop signs. | May 13, 2011 9:52 AM |
| 13 | Trails require more signage for more usage | May 12, 2011 10:38 AM |

Page 5, Q1. Prior to the installation of traffic calming measures on McComb's Drive, Pine Avenue, and Balsam Avenue, what, if any traffic related issues did you observe?

(Please indicate in text box below)

- | | | |
|----|---|-----------------------|
| 1 | There were very few traffic issues even before the traffic calming measures. The worst problem is probably the speeding traffic and logging trucks on lillooet | Jun 4, 2011 10:36 AM |
| 2 | People use McCombs Drive as a short cut and speed to prove to themselves it takes less time than using Hot Springs Road. | Jun 4, 2011 9:09 AM |
| 3 | Speeding. | May 30, 2011 12:43 PM |
| 4 | Remove single lane overpass | May 30, 2011 12:12 PM |
| 5 | Speeding down these streets. | May 30, 2011 12:11 PM |
| 6 | One way overpass | May 30, 2011 12:07 PM |
| 7 | Drivers going way too fast. | May 29, 2011 8:40 AM |
| 8 | Cars speeding down McComb | May 29, 2011 7:56 AM |
| 9 | I feel McCombs drive was a natural secondary access road to the village.....and a needed alternative road for emergency use. Drivers go too fast , but the calming measures are detrimental to village traffic.They would be a real problem in any emergency requiring immediate evacuation of residents. | May 27, 2011 8:51 PM |
| 10 | They are a joke people will just find other ways to get out of the subdivision,I do not know of anyone speeding on such a short distance. | May 26, 2011 1:09 PM |
| 11 | Speeding on McCombs prior to the death of the young cyclist otherwise none. | May 24, 2011 11:16 PM |
| 12 | speeding, including myself! | May 24, 2011 11:38 AM |
| 13 | Traffic was generally very good. No real speeding or reckless driving. | May 23, 2011 9:54 AM |
| 14 | - Excessive Speeding - Flow of traffic increased dramatically when calming measures were removed. - Noise pollution increase - It dissapoints me that no option for a traffic circle on Balsam and Clover is not added in questions 2 | May 22, 2011 12:27 PM |
| 15 | Vehicles were speeding When McComb's speed bumps went in, there was a high increase of traffic on Balsam Ave | May 21, 2011 2:54 PM |
| 16 | Speeding | May 20, 2011 12:33 PM |
| 17 | What part of Stop Signs do drivers not understand. Perhaps more law enforcement is required. | May 20, 2011 11:10 AM |
| 18 | none | May 20, 2011 9:02 AM |
| 19 | McCombs Drive was used as a drag strip | May 20, 2011 7:04 AM |
| 20 | none | May 19, 2011 8:59 PM |
| 21 | I do not live on these streets so it would not be fair to say. But can tell you that the speed bumps were very hard on the vehicle. | May 19, 2011 7:32 PM |

Page 5, Q1. Prior to the installation of traffic calming measures on McComb's Drive, Pine Avenue, and Balsam Avenue, what, if any traffic related issues did you observe?

(Please indicate in text box below)

- | | | |
|----|--|-----------------------|
| 22 | No stop signs | May 19, 2011 1:53 PM |
| 23 | cars do not stop at signs or yield at bridge and they speed in the summer monthes espl | May 19, 2011 12:34 PM |
| 24 | One way bridge over Miami River does not even slow down some of the idiots | May 16, 2011 11:08 PM |
| 25 | There was one problem. The Village of Harrison failed to maintain safe sightlines where Myng Crescent joins McComb. The roadside brush grew up and was not removed as required by bylaw. The intersection was unsafe because traffic on the arterial Rd, McComb, couldn't see emerging traffic from Myng. It was a hidden intersection. A small boy on a bicycle was killed there, having emerged onto McComb into the path of a speeding, drunk or drugged driver. The kid might have lived if the driver had seen him and taken evasive action or if the kid had seen the car. Next morning, the Village cleared the brush. Too late. the damage was done. Ever since, the Village has been trying furiously to cover up their own negligence by pretending that speed on McComb is a problem. We also made the mistake of electing a senior citizen who thinks McComb is his own private walking path and who is trying to drive all cars off it by putting in assorted impediments to traffic. You demonstrate your bias by posing your next question as if slowing or reducing volumes on McComb (a designated arterial street) is a good thing. It's not. You've simply driven through (arterial) traffic onto residential streets where it does not belong, thus creating conflicts which did not exist before. Npot only is McComb designated as an arterila Rd in Harrison`s OCP. It is also the official MoTH alternatediversion route to Hot Springs Rd (Hwy 9) which is often blocked by accidents , fires, roadworks etc. | May 16, 2011 6:10 PM |
| 26 | (1) non observance of stop sign on Hadway at Ramona (2)speed limit on Hot Springs Rd south of Pine ignored-esp after bars close-and during early morning commute (5 a.m.-9.am) | May 16, 2011 1:07 PM |
| 27 | speeding cars on McCooms | May 16, 2011 12:54 PM |
| 28 | speeding | May 16, 2011 12:40 PM |
| 29 | There was actually traffic on McComb. | May 16, 2011 10:50 AM |
| 30 | Cars speeding, near misses of pedestrians and children emerging from Clover Place onto Balsam | May 16, 2011 5:58 AM |
| 31 | None | May 15, 2011 5:37 PM |
| 32 | Speeders down McCombs | May 15, 2011 7:33 AM |
| 33 | Excessive speeding | May 14, 2011 5:47 PM |
| 34 | speeding, drag racing | May 14, 2011 3:41 PM |
| 35 | Lots of speeding cars on McCoombs, it was like a straight speedway for drivers who don't care about other people either walking or bicycling along the route. Prior to the traffic calming my husband was almost hit by a speeding driver on several occasions.. | May 14, 2011 11:31 AM |

Page 5, Q1. Prior to the installation of traffic calming measures on McComb's Drive, Pine Avenue, and Balsam Avenue, what, if any traffic related issues did you observe?

(Please indicate in text box below)

- | | | |
|----|---|-----------------------|
| 36 | Excessive speeding down McCombs and Eagle St. and near accidents and "road rage" at both ends of the one lane bridge on Eagle. | May 14, 2011 11:15 AM |
| 37 | traffic speeding on McCombs | May 14, 2011 9:16 AM |
| 38 | No problem. (Not as much traffic on Balsam Ave) | May 13, 2011 5:02 PM |
| 39 | As mentioned previously traffic calming on McComb's resulted in greatly increased traffic on Balsam and then with calming on Pine an even greater increase on Balsam. | May 13, 2011 10:13 AM |
| 40 | Speeding. Outright violation of the Traffic Act 1975, Fail to yield, Fail to stop. Fail to yield to pedestrians and cyclists. Speeding above posted speed limits. | May 12, 2011 10:50 PM |
| 41 | The speed bumps are too high and possible damage to vehicle and roundabout is far too small/tight | May 12, 2011 10:39 AM |

Page 5, Q3. Are there, or have there been any traffic-related issues on your road? If so, what are they?

(Please indicate in text box below)

- | | | |
|----|---|-----------------------|
| 1 | Lillooet avenue has many speeding cars at night, also road needs resurfacing so big trucks don't shake the entire neighbourhood | Jun 4, 2011 10:36 AM |
| 2 | I live on Lillooet and there is lots of traffic. For the most part there are no issues with the exception of the occasional speeder. | Jun 4, 2011 9:09 AM |
| 3 | Yes reckless drivers, both speeding and driving dangerously. The loss of my son's life as a result of these. McComb's Drive is a straight road way used by pedestrians and cyclist. These calming devices have slowed traffic down; making McComb's Drive safer for everyone. | May 30, 2011 12:11 PM |
| 4 | Yes, speeding motorcycles that come roaring into town on Sat. and Sunday with no mufflers. The sound is deafening and reverberates off the mountains that surround us. | May 29, 2011 8:40 AM |
| 5 | heavy trucks still use the south bridge; some cars ignore stop signs | May 29, 2011 7:56 AM |
| 6 | However people just avoid these routes and take others. For example there is much more traffic down Walnut beside the school. This is a very dangerous situation. Last week a dog was struck and killed there and the culprit did not even bother to stop! For trades people the traffic calming measures make it almost impossible to move around town with equipment. | May 24, 2011 11:16 PM |
| 7 | The temporary bridge on McCombs is a pain in the ass. Also the gravel on the bike path on Harrison rd. | May 23, 2011 11:08 PM |
| 8 | Traffic in general for the entire Village is good. There is the odd problem however that is were traffic law enforcement should come in, not impede the general traffic for the sake of a few problems. | May 23, 2011 9:54 AM |
| 9 | Improperly installed speed bumps. Vehicles travelling towards Hot Springs Ave can align their vehicles tires in order to not hit the speed bumps. How is this effective? | May 22, 2011 12:27 PM |
| 10 | poor side walks no proper bike lanes | May 21, 2011 3:24 PM |
| 11 | Near miss of a school child being hit by a car, increased traffic flow from people accessing Hot Springs Road as well as high speed of cars. | May 21, 2011 2:54 PM |
| 12 | Speeding is the main issue - locals driving unlicensed mini bikes , etc | May 20, 2011 12:33 PM |
| 13 | Excessive speed - Excessive noise - Failure to obey Stop Signs. | May 20, 2011 11:10 AM |
| 14 | none | May 20, 2011 9:02 AM |
| 15 | We live near the corner of McCombs Drive and Pine and on a continual basis I observe vehicles not observing the stop signs. I have witnessed kids trying to cross the road and vehicles not stopping for them. | May 20, 2011 7:04 AM |
| 16 | A few people tend to go rather fast considering there are young children on this street (Cottonwood Ave.) | May 19, 2011 7:32 PM |
| 17 | as stated above about Balsm street | May 19, 2011 12:34 PM |

Page 5, Q3. Are there, or have there been any traffic-related issues on your road? If so, what are they?

(Please indicate in text box below)

- | | | |
|----|--|-----------------------|
| 18 | Speeding | May 16, 2011 11:08 PM |
| 19 | This survey is just a lot of BS designed to justify the stupid decisions made by this council of idiots. | May 16, 2011 6:10 PM |
| 20 | traffic diverted from McCoombs to Balsam and since the raised areas have been removed from Balsam traffic has been increased | May 16, 2011 3:28 PM |
| 21 | (1)stop sign on Hadway at Ramona frequently ignored COMPLETELY--have almost been T-boned many times | May 16, 2011 1:07 PM |
| 22 | heavy traffic, speeding cars, no sidewalks | May 16, 2011 12:54 PM |
| 23 | cars dodge speed bumps and tear up boulevard grass around them. stop signs do not stop traffic at all, they just run through them. | May 16, 2011 12:40 PM |
| 24 | Please refer to an E-mail sent to Bunt on May 14th which contained a letter outlining the traffic concerns on Balsam | May 16, 2011 5:58 AM |
| 25 | Pertaining to the traffic circle at Alder & McComb. We find this circle not to be effective in controlling speed of the most traffic (ie cars and light trucks etc.) but is an unnessesary obstacle to larger traffic such as RV.s wishing to make the left turn onto or off from either Alder or McColmb. The circle is much to tight for most truck and trailer combinations. To compound this problem most truck and trailer combinations are required to use this intersection by the load limits imposed on the bridge at Miami Creek. | May 15, 2011 1:12 PM |
| 26 | Speeders on Miami River Drive | May 15, 2011 7:33 AM |
| 27 | Naismith Avenue is pretty good as it is not a through road. | May 14, 2011 5:47 PM |
| 28 | We live on Miami River Drive and for the most part people drive within the speed limit but I have witnessed at various times, young drivers who are speeding, driving irratically and squeeling their tires. | May 14, 2011 11:31 AM |
| 29 | We live right beside the one lane bridge and therefore have witnessed a lot of traffic-related issues because of it. When it was a two lane bridge, there were many cars who went over it at excessive speeds and I'm concerned about the speeds increasing again when the bridge is replaced. | May 14, 2011 11:15 AM |
| 30 | Too much speeding traffic on Balsam Avenue. | May 13, 2011 5:02 PM |
| 31 | I reside on Balsam Ave and am concerned with the increased traffic from the calming on McComb's. A 50 km/hr speed limit is too fast with the school children who cross just west of the curve on Balsam which impedes vision around the corner. | May 13, 2011 10:13 AM |
| 32 | Speed bumps are way to sharp. Very hard on suspension. Need to be made bigger and wider and well marked with yellow caution paint. | May 12, 2011 10:50 PM |
| 33 | We live in a cul de sac | May 12, 2011 7:20 PM |
| 34 | no! | May 12, 2011 1:53 PM |

Page 5, Q3. Are there, or have there been any traffic-related issues on your road? If so, what are they?

(Please indicate in text box below)

- | | | |
|----|--|-----------------------|
| 35 | BALSAM BUMPS WAY TO HIGH . HURT MOMS BACK NO MATTER HOW SLOW I WENT SAME FOR HUSBAND WITH BACK OPERATION . GLAD THEY ARE DOWN NOW ALSO HARD ON CAR TO. | May 12, 2011 1:22 PM |
| 36 | occasional failure to stop at Eagle and Naismith | May 12, 2011 10:39 AM |

Page 5, Q4. Do you have any other traffic concerns in the Village?

Please indicate in text box below)

- | | | |
|----|---|-----------------------|
| 1 | Build Sidewalks | Jun 5, 2011 9:27 PM |
| 2 | no | Jun 4, 2011 10:36 AM |
| 3 | Full public consultation before any more schemes are introduced and specification on road types (how many use that road + the 85% speed + pedestrian usage = type of claming) | May 31, 2011 10:58 AM |
| 4 | remove all speed bumps | May 30, 2011 12:12 PM |
| 5 | Often speeding drivers pass dangerously on the highway leading into town. Anything that slows people down in and near the village is good. | May 29, 2011 8:40 AM |
| 6 | question 2 stop signs at MacPherson and McComb | May 29, 2011 7:56 AM |
| 7 | I think the traffic calming measures are overdone , as a result of some unfortunate accidents and bad driving habits. | May 27, 2011 8:51 PM |
| 8 | People who have the audacity to stick no parking signs in front of there homes. There is no problem with visitors on busy weekends parking on residential streets. There is not a home in HHS that does not have ample parking within the confines of their lot to be so selfish. | May 24, 2011 11:16 PM |
| 9 | I do not see police traffic law enforcement in the Village. Does police ever come to Harrison to enforce traffic laws? | May 23, 2011 9:54 AM |
| 10 | If the Village is to have speed bumps installed, perhaps they can install them correctly and give vehicles the ability to drive between them. | May 22, 2011 12:27 PM |
| 11 | congestion no parking because of employees taking all parking 24 hrs a day | May 21, 2011 3:24 PM |
| 12 | Children and adults driving motorized pocket bikes, driveable lawn mowers going up the streets and Atv's on the roads as well. | May 21, 2011 2:54 PM |
| 13 | Implement pay parking on Esplanade and ease parking opportunities for those visitors wishing a short stay. | May 20, 2011 12:33 PM |
| 14 | Excessive noise with motorcyces. Lack of safety considerations for pedestrians. Failure to obey speed limits. | May 20, 2011 11:10 AM |
| 15 | the one way bridge on McCombs at the Miami River. The state of the Bridges on McCombs | May 20, 2011 9:02 AM |
| 16 | My main concern is McCombs drive and Pine intersection. Vehicles still drag race from Chestnut to Emerald without stopping for the stop signs on McCombs Drive and Pine | May 20, 2011 7:04 AM |
| 17 | I am sure the calming measures have been very effective. I do not want to drive on any of those roads any more. This seems to defeat the purpose of having a road there, if it does not get used.This means that Hot Springs Road carries much more traffic and as a result is less safe. I find crossing Hot Springs Road to be very difficult, especially with children. I did not find McCombs unsafe before the calming measures and I feel it was an over-reaction to the situation. | May 19, 2011 8:59 PM |

Page 5, Q4. Do you have any other traffic concerns in the Village?

Please indicate in text box below)

- | | | |
|----|--|-----------------------|
| 18 | Round About on McComb is not effective as people do not go around but cut back the wrong way before getting into the correct lane. Also, this circle will not accommodate pull trailers and even pickup trucks have difficulty as the circle it is too narrow. Could pose a hazard in the event of an emergency as there is limited exit possibilities for the village. | May 19, 2011 7:32 PM |
| 19 | Better signage for bus stops,with pickup time posted on them. | May 19, 2011 11:01 AM |
| 20 | Speed Limits, To high on Lillooet and in subdivision | May 16, 2011 11:08 PM |
| 21 | Yes. I'm concerned that this council refuses to acknowledge that Harrison has a traffic plan which was established many years ago and which has , until now, ensured rational, safe traffic patterns. | May 16, 2011 6:10 PM |
| 22 | my only concern is the speed of vehicles on Hot Springs Road NOTHING is done to control it..I have no concerns other than this | May 16, 2011 3:28 PM |
| 23 | Speed limit on Hot Springs road south of Pine not enforced-speeds of 80-100 kph not uncommon-especially after 1 am-when pubs close-and after 5 am when commuters arrive/depart--traffic hazard and annoyance-frequently woken up by hi speed traffic noise | May 16, 2011 1:07 PM |
| 24 | 1. crosswalks required along Lillooet especially one from Spring Park at Chehalis (I think it is....too small to read easily), on the corner where the church is (Spruce Street), one at Maple Street too 2. major traffic back up onto Hot Springs Road caused by the 4 way stop at Lillooet and Hot Springs Road 3. speed bumps along the 100-300 Miami River Drive | May 16, 2011 12:54 PM |
| 25 | kids play on pine ave and the cul de sac on pine ave and with pine ave being the shortest and only street without proper traffic calming measures, and soon to be the easiest route to hot springs road for the new kingma development, pine ave will see a fatality. i can't even have my dog off leash on my front lawn with the speeding traffic going down pine ave. | May 16, 2011 12:40 PM |
| 26 | Since all the traffic calming measures have been taken on McComb the traffic has been forced into more populated areas such as Balsam. Which makes it absolutely more dangerous. | May 16, 2011 10:50 AM |
| 27 | 1. The speeding on Hot Springs Rd. is so excessive at times. More enforcement required. 2. 30 kmh within Village residential core is essential. We have no sidewalks and pride ourselves on being pedestrian friendly. | May 16, 2011 5:58 AM |
| 28 | Would like to see more sidewalks to make walking safer | May 15, 2011 8:43 PM |
| 29 | Yes! That I streets will have "traffic calming" on them. If you don't want the streets connecting McCombs and Hot Springs road used, why not just block them all at Hot Springs road and reroute traffic on the streets of choice. | May 15, 2011 5:37 PM |
| 30 | Exit off Alder Ave. to the driveway into 434 Alder when travelling east was changed during some Village roadwork from a curved entrance to a right angle turn again making it necessary for larger vehicles to navigate the above mentioned traffic circle or run over the curb at the entrance to 434 Alder. | May 15, 2011 1:12 PM |
| 31 | Speeders on Hot Springs Road | May 15, 2011 7:33 AM |

Page 5, Q4. Do you have any other traffic concerns in the Village?

Please indicate in text box below)

- | | | |
|----|--|-----------------------|
| 32 | The short, sharp speed bumps on Balsam and Pine are dangerous. They work but are much too aggressive. The stop sign at McCombs and Pine is not observed as one can see clearly whether there is traffic BUT there could be a speed bump at that point on McCombs | May 14, 2011 5:47 PM |
| 33 | Speeding on Hot Springs Road, especially through the school zone between Balsam and Walnut Avenue. We walk on the new bridge daily and witness many drivers exceeding the speed limit. | May 14, 2011 11:31 AM |
| 34 | No crosswalk for people walking to the beach from Eagle Street. The speed with which people come around the curve in the road on Eagle between Cottonwood and Driftwood. | May 14, 2011 11:15 AM |
| 35 | Speed limit definitely not being enforced on Hot Springs Road. | May 13, 2011 5:02 PM |
| 36 | Why has the only other route in or out of the village besides Hot Springs Rd., McComb's Drive been calmed to a point where few drivers use it?? The number of residences on McComb's is very low compared to Balsam, Pine, Emerald and etc. | May 13, 2011 10:13 AM |
| 37 | Esplanade speed bumps during the summer really sucks. Again suspension issues. Prefer rumble strips. | May 12, 2011 10:50 PM |
| 38 | no, Harrison is extremely safe compared to other towns. | May 12, 2011 7:20 PM |
| 39 | Lack of Law enforcement! | May 12, 2011 1:53 PM |
| 40 | NO | May 12, 2011 1:22 PM |
| 41 | Pedestrian safety of concern | May 12, 2011 10:39 AM |

Page 5, Q5. If you could change one thing to improve traffic safety in the Village what would it be?

(Please indicate in text box below)

- | | | |
|----|---|-----------------------|
| 1 | Enforce speed limits | Jun 5, 2011 9:27 PM |
| 2 | crosswalk on Lillooet at maple and eagle with some flashing pedestrain lights to make drivers more aware of pedestrians and their speed | Jun 4, 2011 10:36 AM |
| 3 | Drivers need to be more responsible, and slow down when driving in the Village. | Jun 4, 2011 9:09 AM |
| 4 | Better enforcement and signage | May 31, 2011 10:58 AM |
| 5 | Maybe traffic light at the four way stop | May 30, 2011 12:43 PM |
| 6 | take out one way streets | May 30, 2011 12:12 PM |
| 7 | Yes speed bumps needed between Emerald Street and Ming and McPherson Street. | May 30, 2011 12:11 PM |
| 8 | - Have bylaw officers giving tickets to speeding motorcycle drivers that have no regard for the noise they create when they visit Harrison. | May 29, 2011 8:40 AM |
| 9 | More police presence on our local roads, to charge anyone speeding. | May 27, 2011 8:51 PM |
| 10 | Take out all these silly idea,s that it will stop people from speeding . | May 26, 2011 1:09 PM |
| 11 | Change the speed limits: in residential areas to 40 km and the Hot Springs Road limit to 50. | May 24, 2011 11:16 PM |
| 12 | find a way to decrease speed on the highway | May 24, 2011 11:38 AM |
| 13 | More sings indicating the speed. | May 23, 2011 11:08 PM |
| 14 | Remove the speed bumps and raised intersections and have police randomly enforce traffic laws on on main streets. | May 23, 2011 9:54 AM |
| 15 | Create roundabouts where needed to control flow of traffic.. A roundabout at Clover PI and Balsam needs to be created in order to solve this on-going issues with vehicles disobeying speed limits. | May 22, 2011 12:27 PM |
| 16 | wider side walks on all roads including highway from Agassiz | May 21, 2011 3:24 PM |
| 17 | Adjust the speed bumps on McCombs to longer flatter ones so motor homes and trailers are more likely to travel the route. | May 21, 2011 2:54 PM |
| 18 | Put more traffic humps on McCombs and less stop signs. | May 20, 2011 12:33 PM |
| 19 | More radar speed traps. Presence of police officers. | May 20, 2011 11:10 AM |
| 20 | More sidewalks,painting the parking spaces on Lillooet | May 20, 2011 9:02 AM |
| 21 | More Sidewalks. | May 19, 2011 8:59 PM |

Page 5, Q5. If you could change one thing to improve traffic safety in the Village what would it be?

(Please indicate in text box below)

- | | | |
|----|--|-----------------------|
| 22 | Generally, the traffic safety is satisfactory. The unfortunate death of a child has created some change but some of these changes have been quite significant (bumps on Pine and Balsam, traffic circle). The lines on the roads need to be upgraded so they could be seen (4 way stop on Eagle/Naismith). The sign indicating a bump in right at the table top calmers giving no warning that a bump is coming up. The paint on the table toppers is not that visible at night. | May 19, 2011 7:32 PM |
| 23 | Get rid of those petal bikes they rent of police them. People just ride out on to the street with no concern for cars. | May 19, 2011 1:53 PM |
| 24 | Enforce the speed limit more.not enough radar checks | May 19, 2011 12:34 PM |
| 25 | Lower Speed Limitws | May 16, 2011 11:08 PM |
| 26 | Get rid of this council of idiots. Stop wasting money of consultants who know nothing about Harrison. Get rid of all the crap on McComb Drive and establish it as a proper arterial route which it has been since I paved it. Get rid of the unnecessary stop signs, particularly at McPherson and McComb. | May 16, 2011 6:10 PM |
| 27 | speed on Hot Springs Rd particularly in the summer and also noise from the motorcycles | May 16, 2011 3:28 PM |
| 28 | crosswalks on Lilloet | May 16, 2011 12:54 PM |
| 29 | install table top at pine/mccombs, larger/permanent speed bumps along pine ave. | May 16, 2011 12:40 PM |
| 30 | Iwould remove all the traffic calming measures taken on McColm. | May 16, 2011 10:50 AM |
| 31 | Lower speed limit. Install landscaped traffic circles and where not feasible, table top speed calmers | May 16, 2011 5:58 AM |
| 32 | Remove the round about. too many people by pass it and instead of going around they go down the wrong side | May 15, 2011 8:43 PM |
| 33 | make the village safer by having a two way system, namely come in up hot springs road and leave on McCombs making a circular route. | May 15, 2011 7:13 PM |
| 34 | There are no concerns. Council reacted to an unfortunete accident to show they had done something. There is very little speeding and traffic calming will not bring the child back. Move On!!! | May 15, 2011 5:37 PM |
| 35 | Speed enforcement on Hot Springs Road | May 15, 2011 7:33 AM |
| 36 | Speeding on Hot Springs road is a major and uncontrolled problem.Install a permanent electronic feedback display showing the drivers speed. Also need more enforcement. | May 14, 2011 5:47 PM |
| 37 | More tickets handed out to speeding drivers | May 14, 2011 11:31 AM |
| 38 | Crosswalk over Lilloet Ave. at the end of Eagle and a raised intersection at Eagle/South Naismith Ave.. | May 14, 2011 11:15 AM |

Page 5, Q5. If you could change one thing to improve traffic safety in the Village what would it be?

(Please indicate in text box below)

- | | | |
|----|--|-----------------------|
| 39 | Remove speed bumps & stop signs at ALL intersections on McCombs Drive & replace with Traffic Circles. (Miami River Dr, Chestnut, Pine, Emerald, & Myng). Also install a Traffic Circle at intersection of Balsam Ave & Clover Place. | May 13, 2011 5:02 PM |
| 40 | Allow traffic to once again flow on McComb's by removing the so called calming devices. | May 13, 2011 10:13 AM |
| 41 | More aggressive moving infraction ticketing by RCMP/GRC. Yield, Stopping, Speeding, Handheld devices. | May 12, 2011 10:50 PM |
| 42 | HAVE A COP STANDING AT THE BRIDGE 24 7 | May 12, 2011 1:22 PM |
| 43 | More police presence with speed control (RADAR) more often. This would control locals but we would have to contend with visitors. | May 12, 2011 10:39 AM |

Page 5, Q6. Any other comments?

- | | | |
|----|--|-----------------------|
| 1 | The perceptions of a vocal minority seem to drive the issue. The reality is that even with the high volume of seasonal traffic, there are relatively few problems. | Jun 4, 2011 9:09 AM |
| 2 | I have over 34 years experience of designing and installing Traffic calming, parking schemes, street lighting and highway maintenance for a large London Municipal in London (UK) and know to introduce a scheme that work well and improves the streetscape of the roads you must have all the funds available to complete the schemes or it will have an adverse effect on the surrounding area causing more problems that it solves | May 31, 2011 10:58 AM |
| 3 | Anything that slows people down is a good thing. Thank you for looking after the residents of Harrison by creating these calming circles. | May 29, 2011 8:40 AM |
| 4 | If people want to speed they will do so in other area,s of the village. | May 26, 2011 1:09 PM |
| 5 | Keep all downtown parking free. The idea of meters is absurd if you want tourists to visit! | May 24, 2011 11:16 PM |
| 6 | I think that the numerous speed bumps and raised intersections was overkill to a relatively small problem. These measures should not be implemented as a result of a very few incidents. As we have seen speed bumps cause traffic to flow through residential streets which causes more speed bumps to be installed. It is never ending, | May 23, 2011 9:54 AM |
| 7 | pay parking yes | May 21, 2011 3:24 PM |
| 8 | The roundabout on McCombs is in an inappropriate place. The area is too small and accidents have almost occured from cars turning left trying to avoid going around it in the correct direction. | May 20, 2011 9:02 AM |
| 9 | I find the roundabout not a deterent for calming traffic on McCombs | May 20, 2011 7:04 AM |
| 10 | McCombs road used to be a road that allowed residents to bypass the main road and the tourists clogging them. Now everyone ends up on the same road. | May 19, 2011 8:59 PM |
| 11 | Right Lane Road surface leading up to stop sign by Lillooat dr needs repair and better road markings | May 19, 2011 11:01 AM |
| 12 | I'm pretty sure you have your orders to write a glowing report praising the crap on McComb and making this council look good in an election year . I don't think that anything I or others might say will change this one bit. I resent paying for this BS as a taxpayer. I'd like to know how much it is costing me. Please provide me with a copy of this survey response for my records. Box 201, VOM 1K0 | May 16, 2011 6:10 PM |
| 13 | ENFORCE SPEED LIMITS on Hot Springs Rd south of Pine St | May 16, 2011 1:07 PM |
| 14 | a police presence or other authority to direct traffic at the end of major tourist events especially at the 4 way stop in town AND at the 4 way stop at the Esso corner | May 16, 2011 12:54 PM |
| 15 | have some RCMP enforcement on the side streets in regards to these calming measures | May 16, 2011 12:40 PM |
| 16 | If we had an unlimited budget, we could put sidewalks in but as that is not possible, we must work within the parameters that exist | May 16, 2011 5:58 AM |

Page 5, Q6. Any other comments?

- | | | |
|----|---|-----------------------|
| 17 | If speed bumps go back in on Balsam, please leave room for bikes to pass safely | May 15, 2011 7:33 AM |
| 18 | The efforts so far have improved safety greatly for everyone in Harrison Hot Springs but there is more to be done. Thank you. | May 14, 2011 5:47 PM |
| 19 | We spend most summer at Harrison Holiday Park and our lot backs onto McComb - we have seen, and heard, a big difference since the speed humps, etc. Much less speeding traffic. | May 14, 2011 3:41 PM |
| 20 | I think the traffic calming measures are effective. The traffic on McCombs has been reduced to more local traffic, it feels safe to walk or bike on that road now. | May 14, 2011 9:16 AM |
| 21 | Residential streets are nice & wide but there is no sidewalk to separate Vehicle & Pedestrian traffic. Also there are no speed limit signs on residential streets. | May 13, 2011 5:02 PM |
| 22 | Speed limit reduction would make for a safer more people friendly community but will have little effect without enforcement. | May 13, 2011 10:13 AM |
| 23 | I think that the speed bumps are a nuisance, however the raise speed bumps are very effective. The speeding on McComb was horrendous before the bumps were put in. | May 12, 2011 7:20 PM |
| 24 | YES STOP WITH THE BUMPS | May 12, 2011 1:22 PM |
| 25 | Lets promote Harrison not discourage tourism. | May 12, 2011 10:39 AM |

Page 6, Q1. Name

1	Robert Reyerse	Jun 4, 2011 10:36 AM
2	K. Becotte	Jun 4, 2011 9:11 AM
3	Ray Hooper	May 31, 2011 11:00 AM
4	Beverly Sargent	May 30, 2011 12:44 PM
5	Jacki Meisner	May 30, 2011 12:14 PM
6	Ketti Goudey	May 29, 2011 7:57 AM
7	Jack Knight	May 26, 2011 1:11 PM
8	Gerry & Anke Smit	May 23, 2011 11:11 PM
9	Ron Hurt	May 23, 2011 9:56 AM
10	s. nOWAK	May 22, 2011 6:42 PM
11	Teresa Macpherson & Shawn Emond	May 22, 2011 12:28 PM
12	Andrea Schmid	May 21, 2011 2:56 PM
13	Terry Mitchell	May 20, 2011 12:34 PM
14	Diana Wheeler	May 20, 2011 11:11 AM
15	Jane M. Smith	May 20, 2011 9:04 AM
16	Uwe and Karen Skibbe	May 20, 2011 7:04 AM
17	Marg Doman	May 19, 2011 7:32 PM
18	Tom Bancroft	May 19, 2011 1:54 PM
19	Barbara Gunson	May 19, 2011 12:35 PM
20	bernhard van velze	May 19, 2011 11:01 AM
21	Capt. Peter & Linda Bugden	May 16, 2011 11:12 PM
22	John Allen	May 16, 2011 6:11 PM
23	Pat Derksen	May 16, 2011 3:29 PM
24	Lawrence Tilander	May 16, 2011 1:08 PM
25	Jayne Fleming	May 16, 2011 12:55 PM
26	Brian Hollaus	May 16, 2011 12:41 PM
27	Geoff Thomson	May 16, 2011 10:52 AM
28	Ray Bennie	May 16, 2011 6:01 AM
29	Gail Guimont	May 15, 2011 8:44 PM

Page 6, Q1. Name

30	Paul Fairley	May 15, 2011 7:13 PM
31	Don Smith	May 15, 2011 5:38 PM
32	Gale and Jean Lynn	May 15, 2011 1:15 PM
33	Merv Rose	May 15, 2011 7:34 AM
34	Brian Moore	May 14, 2011 5:48 PM
35	Barbara Grant	May 14, 2011 3:42 PM
36	Joanne Rose	May 14, 2011 11:32 AM
37	Michele Bugden	May 14, 2011 11:16 AM
38	Elaine Smith	May 14, 2011 9:17 AM
39	Ken Chrystall	May 13, 2011 5:05 PM
40	Keith Kivett	May 13, 2011 10:16 AM
41	Carolyn Janousek	May 12, 2011 7:21 PM
42	IRENE VENTRESS	May 12, 2011 1:23 PM
43	Gerald Hadway	May 12, 2011 10:40 AM

Page 6, Q2. Address (if not willing to provide address, then postal code and or street/block number where you reside):

1	312 Lillooet Avenue	Jun 4, 2011 10:36 AM
2	565 Lillooet, Harrison Hot Springs, V0M 1K0	Jun 4, 2011 9:11 AM
3	Box 467 404 Miami River Drive Harrison Hot Springs V0M 1K0	May 31, 2011 11:00 AM
4	Emerald Street and McCombs Drive. v0m 1k0	May 30, 2011 12:14 PM
5	857 Myng	May 29, 2011 7:57 AM
6	505 Cottonwood place	May 26, 2011 1:11 PM
7	522 cottonwood ave po box 192	May 23, 2011 11:11 PM
8	466 Naismith	May 23, 2011 9:56 AM
9	480 NAISMITH	May 22, 2011 6:42 PM
10	246 Balsam Avenue	May 22, 2011 12:28 PM
11	239 Balsam Ave	May 21, 2011 2:56 PM
12	433 Miami River Drive	May 20, 2011 12:34 PM
13	170 Cedar Avenue	May 20, 2011 11:11 AM
14	Cottonwood Ave.	May 20, 2011 9:04 AM
15	606 McCombs Drive	May 20, 2011 7:04 AM
16	Walnut Ave,	May 19, 2011 1:54 PM
17	315 Clover Place	May 19, 2011 12:35 PM
18	407 Miami River Drive	May 16, 2011 11:12 PM
19	PO Box 201 , HHS V0M 1K0	May 16, 2011 6:11 PM
20	215 Balsam	May 16, 2011 3:29 PM
21	830 Ramona Pl-Box 283	May 16, 2011 1:08 PM
22	244 Miami River Drive	May 16, 2011 12:55 PM
23	480 Pine Ave	May 16, 2011 12:41 PM
24	#29-349 Walnut Ave.	May 16, 2011 10:52 AM
25	300 Clover Place	May 16, 2011 6:01 AM
26	505 Cottonwood Ave, Box 877 Harrison Hot Springs V0M 1K0	May 15, 2011 8:44 PM
27	310 Chestnut Avenue.	May 15, 2011 7:13 PM
28	503 Driftwood ave.	May 15, 2011 5:38 PM

Page 6, Q2. Address (if not willing to provide address, then postal code and or street/block number where you reside):

29	#9 434 Alder Ave.	May 15, 2011 1:15 PM
30	403 Miami River Drive	May 15, 2011 7:34 AM
31	443 Naismith Avenue	May 14, 2011 5:48 PM
32	Harrison Holiday Park, Hot Springs Road	May 14, 2011 3:42 PM
33	403 Miami River Drive	May 14, 2011 11:32 AM
34	435 Naismith Ave. PO Box 655 VOM1K0	May 14, 2011 11:16 AM
35	822 Myng Crescent	May 14, 2011 9:17 AM
36	221 Balsam Avenue Box 445	May 13, 2011 5:05 PM
37	Box 427, 238 Balsam Ave. HHS VOM 1K0	May 13, 2011 10:16 AM
38	VOM 1K0	May 12, 2011 10:50 PM
39	440 Juniper Place	May 12, 2011 7:21 PM
40	429 MIAMI RIVER DRIVE	May 12, 2011 1:23 PM
41	405 Eagle St	May 12, 2011 10:40 AM

Page 6, Q3. Contact email/phone if you would like to stay informed:

1	604 796 9552	Jun 4, 2011 10:36 AM
2	hoopers404@shaw.ca 604-796-8846	May 31, 2011 11:00 AM
3	butterflygal1943@yahoo.ca	May 30, 2011 12:44 PM
4	jakiz@live.ca	May 30, 2011 12:14 PM
5	kgnut@shaw.ca	May 29, 2011 7:57 AM
6	lis2480@shaw.ca	May 27, 2011 8:52 PM
7	jack.knight@shaw.ca	May 26, 2011 1:11 PM
8	gerrysmit@shaw.ca 604 796 8670	May 23, 2011 11:11 PM
9	hurt.major@shaw.ca	May 23, 2011 9:56 AM
10	snowak@shaw.ca	May 22, 2011 6:42 PM
11	sonadordreamer@gmail.com	May 22, 2011 12:28 PM
12	aaschmid@shaw.ca	May 21, 2011 2:56 PM
13	mittchelltj@shaw.ca	May 20, 2011 12:34 PM
14	dianawheeler@shaw.ca 604-796-9331	May 20, 2011 11:11 AM
15	janeandhenk@shaw.ca	May 20, 2011 9:04 AM
16	ukskibbe@shaw.ca	May 20, 2011 7:04 AM
17	ted.margd@shaw.ca	May 19, 2011 7:32 PM
18	tdban@shaw.ca	May 19, 2011 1:54 PM
19	bgunson@shaw.ca	May 19, 2011 12:35 PM
20	captpete@shaw.ca 604-796-0767	May 16, 2011 11:12 PM
21	johnjallen at shaw.ca	May 16, 2011 6:11 PM
22	pat_derksen @hotmail.com	May 16, 2011 3:29 PM
23	tilanderl@shaw.ca	May 16, 2011 1:08 PM
24	jaynefleming@shaw.ca	May 16, 2011 12:55 PM
25	bskier@shaw.ca 604-220-5049	May 16, 2011 12:41 PM
26	kippert@shaw.ca	May 16, 2011 10:52 AM
27	rbennie@shaw.ca	May 16, 2011 6:01 AM
28	gguimont@shaw.ca	May 15, 2011 8:44 PM
29	pbfairley@shaw.ca	May 15, 2011 7:13 PM

Page 6, Q3. Contact email/phone if you would like to stay informed:

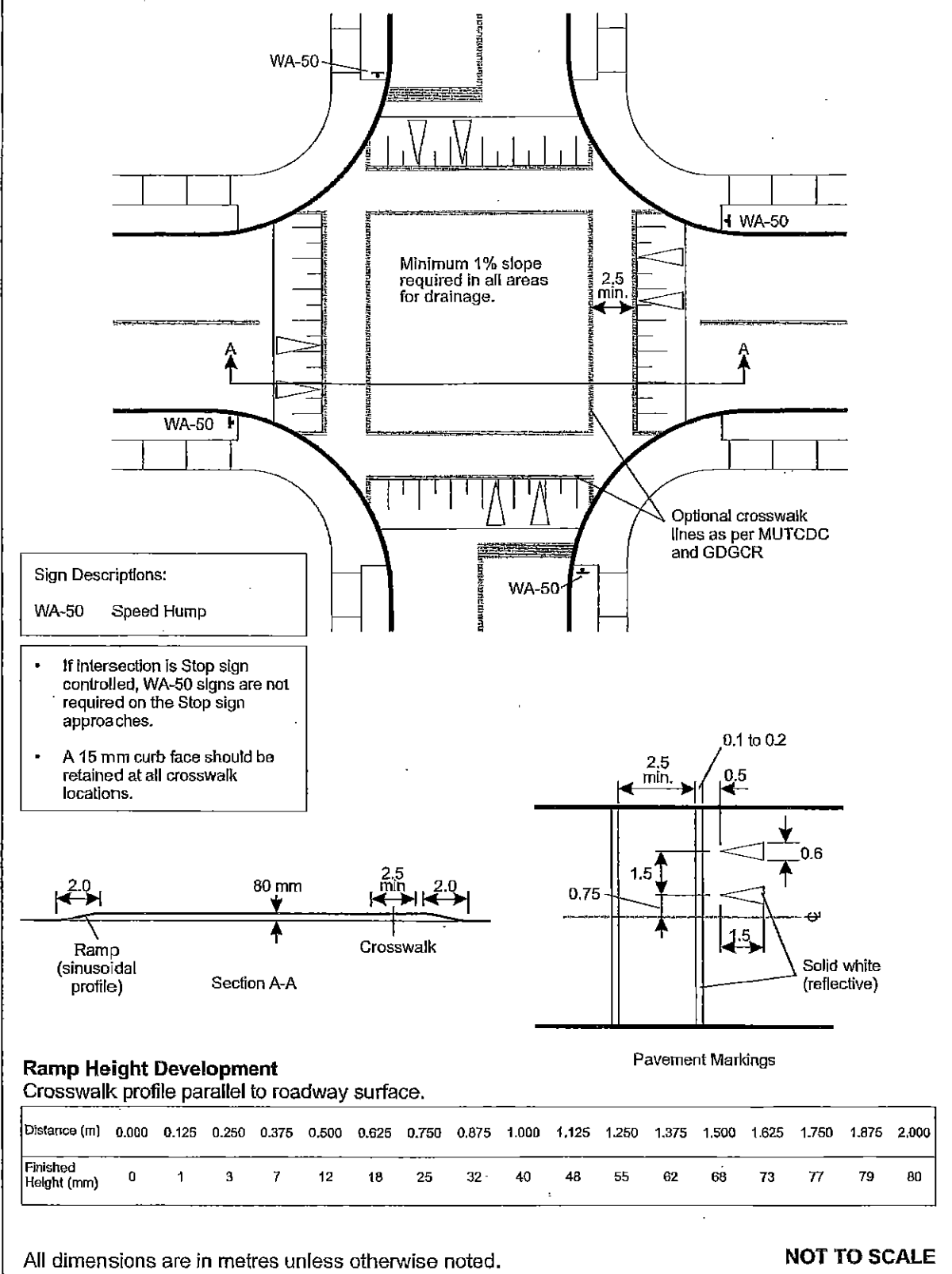
30	donandtraci@hotmail.com	May 15, 2011 5:38 PM
31	Email lynngj@shaw.ca	May 15, 2011 1:15 PM
32	mervrose@shaw.ca	May 15, 2011 7:34 AM
33	796-1201	May 14, 2011 5:48 PM
34	dbgrant1@shaw.ca	May 14, 2011 3:42 PM
35	joannerose@shaw.ca	May 14, 2011 11:32 AM
36	mdbugden@shaw.ca	May 14, 2011 11:16 AM
37	me_smith@shaw.ca	May 14, 2011 9:17 AM
38	chr5520@shaw.ca	May 13, 2011 5:05 PM
39	604-796-9273 Kivett@shaw.ca	May 13, 2011 10:16 AM
40	fjanousek@shaw.ca	May 12, 2011 7:21 PM
41	irenethebean@shaw.ca	May 12, 2011 1:23 PM
42	hugnhadi@shaw.ca/604-796-9975	May 12, 2011 10:40 AM



APPENDIX B

Sample Traffic Calming Measure Design Specifications

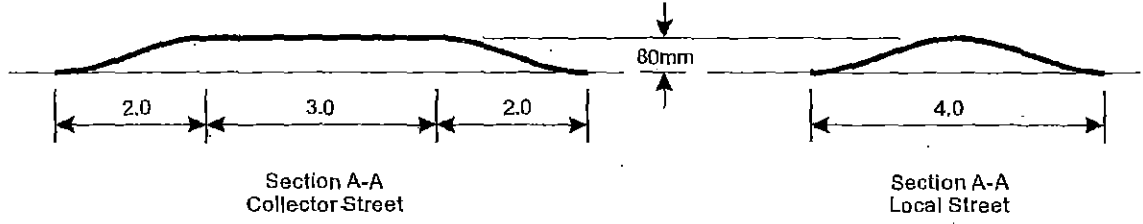
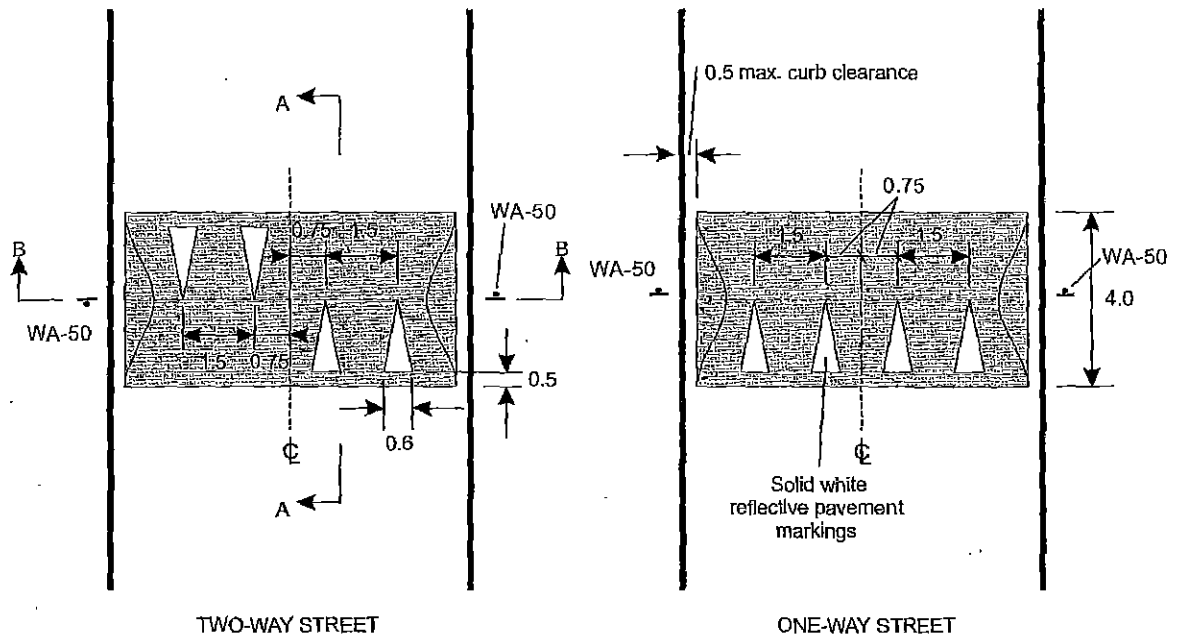
FIGURE 4.2 RAISED INTERSECTION



All dimensions are in metres unless otherwise noted.

NOT TO SCALE

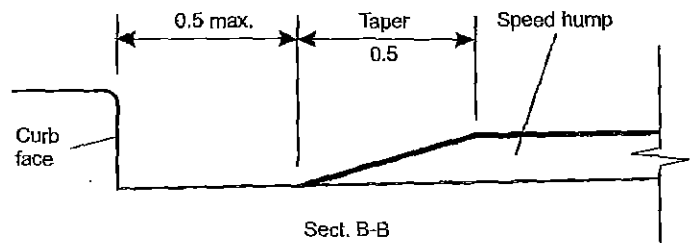
FIGURE 4.4 SPEED HUMP



Sinusoidal Speed Hump Development

Distance (m)	0.000	0.125	0.250	0.375	0.500	0.625	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.625	1.750	1.875	2.000
Finished Height (mm)	0	1	3	7	12	18	25	32	40	48	55	62	68	73	77	79	80

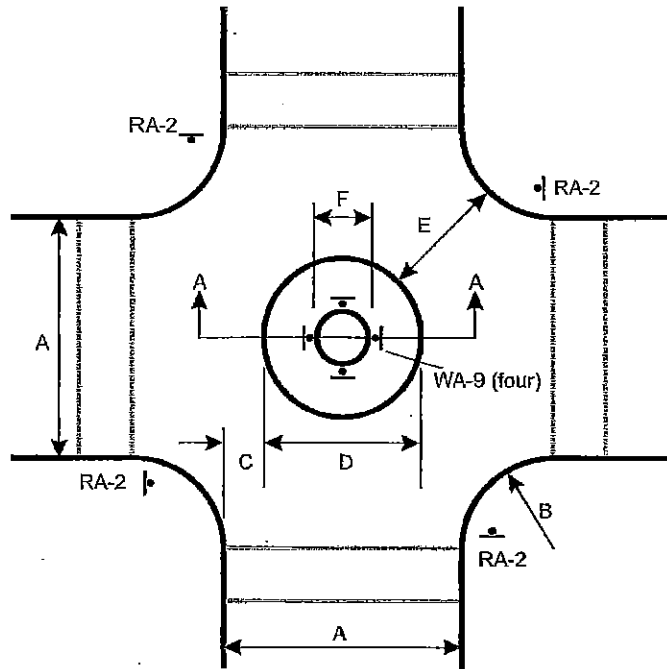
Sign Descriptions:
WA-50 Speed Hump



All dimensions are in metres unless otherwise noted.

NOT TO SCALE

FIGURE 4.10 TRAFFIC CIRCLE



Sign Descriptions:

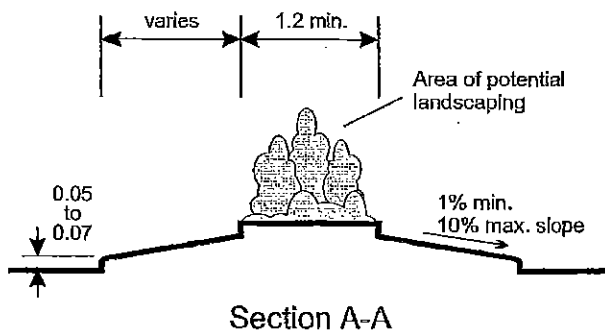
RA-2	Yield
WA-9	Chevron Alignment

Dimension Chart for Varying Roadway Widths

A Roadway Width	B Curb Return Radius	C Off-Set Distance	D Circle Diameter	E Minimum Opening Width
6.0	4.7	1.7	2.6	4.9
	5.3	1.6	2.8	5.0
	6.9	1.4	3.2	5.5
	8.1	1.2	3.6	5.8
7.0	4.2	1.7	3.6	4.9
	4.8	1.6	3.8	5.0
	6.4	1.4	4.2	5.5
	7.8	1.2	4.6	5.9
8.0	3.7	1.7	4.6	4.9
	4.3	1.6	4.8	5.0
	5.9	1.4	5.2	5.5
	7.3	1.2	5.6	5.9
9.0	3.2	1.7	5.6	4.9
	3.8	1.6	5.8	5.0
	5.4	1.4	6.2	5.5
	6.6	1.2	6.6	5.8
	7.6	1.0	7.0	6.0
10.0	3.0	1.7	6.6	5.0
	3.3	1.6	6.8	5.0
	4.9	1.4	7.2	5.5
	6.1	1.2	7.6	5.8
	6.9	1.0	8.0	5.9
11.0	3.4	1.5	8.0	5.2
	3.6	1.4	8.2	5.2
	5.6	1.2	8.6	5.8
	6.8	1.0	9.0	6.1
12.0	3.0	1.5	9.0	5.2
	3.9	1.4	9.2	5.5
	5.1	1.2	9.6	5.8
	6.3	1.0	10.0	6.1

Legend:

- A Roadway Width
- B Curb Return Radius (3.0 m min)
- C Off-Set Distance (1.7 m max.)
- D Circle Diameter
- E Opening Width (See table above)
- F Raised Island Diameter (1.2 m min.)



- Minimum opening width to be provided to all crosswalks.
- A deflection triangle painted on the pavement on each approach to the traffic circle may be appropriate.

All dimensions are in metres unless otherwise noted.

NOT TO SCALE

TRANSPORTATION PLANNERS AND ENGINEERS

bunt associates





APPENDIX C

Sample Traffic Calming Guidelines - District of Squamish

Guidelines to Traffic Calming for the District of Squamish

These guidelines are part of District Policy # 027-03 – Traffic Calming.

The objectives of Traffic Calming include, but are not limited to:

- Enhance Safety for All Users
- Reduce Vehicular Speeds
- Discourage Through Traffic on Local Streets
- Minimize Conflicts between Street Users
- Improve the Neighbourhood Environment

Prior to considering an engineered solution to traffic problems, education and enforcement options should be pursued. Education can be achieved, for example, through the use of the Speed Watch equipment from the RCMP. The District can assist volunteers from the affected area with borrowing the Speed Watch equipment, getting training in its use and coordinating with the RCMP. If the problem persists, as shown by the results from the Speed Watch equipment, the District will request that the RCMP target the area for speed enforcement.

If these strategies fail to resolve the problem, then residents may apply for an engineering solution, in the form of traffic calming.

Steps in the Traffic Calming process:

1. Identification

The need for a traffic calming study is identified. This may be by requests from residents, business owners or by District initiative. If the request comes from the public, they should provide the following:

- results of the Speed Watch program, showing that the Speed Watch equipment was used at least once a week over a three week period, with at least two hours of records each week. Alternatively, an engineering report detailing 85th percentile speeds and traffic volumes may be submitted.
- confirmation from the RCMP that enforcement was used after the three week period of education (use of the Speed Watch equipment).
- a list of at least 10 households or businesses that agree that the problem exists in the area. These households or businesses must be in the affected area.

Applications for engineered traffic calming measures must be received prior to June 1 to ensure that they will be considered in the following year's budget deliberations.

2. Preliminary Evaluation

The results from the Speed Watch program will be analyzed to estimate the 85th percentile speed in the affected area. Traffic volume will also be estimated at the affected area. The affected area will be rated on its quantity of pedestrian and cyclist activity. Areas that attract pedestrian and cyclist traffic (such as schools, community centers or other recreational facilities) will receive higher ratings. Scoring will be as shown in Table 1.

Table 1 – Preliminary Scoring

Criteria	Points	Basis for Point Assignment
Speed	10 to 50	85 th percentile traffic speed more than 5 km/h above the posted limit (2 points for every km/h over the posted limit)
Volume	0 to 20	Average daily traffic volumes (1 point for every 100 vehicles)
Education	10	Motorist education program used to no avail (Speed Watch records or similar data to be provided – 10 points)
Enforcement	10	Enforcement program used to no avail (confirmation from RCMP – 10 points)
Pedestrian / Cyclist	5 to 10	Facilities that generate pedestrian / cyclist traffic (5 points each for schools, recreation centers, parks, trails, etc)
Maximum	100	Total points possible

All requests will be placed on a list of preliminary projects. Requests with scores below 35 points will not be considered further but will be included on the list of preliminary projects as "not recommended". The Director of Community Development will review the list and make a recommendation to Council prior to the budget deliberations for the coming year suggesting funding levels for the coming year. The Director of Community Development will recommend that requests with scores of 60 points or greater be further evaluated and may recommend that requests with scores from 36 to 59 points be further evaluated. The Director of Community Development will give an indication of the costs to study the recommended projects.

3. First Council Review & Allocation of Funds

Council will review the report from the Director of Community Development and the associated recommendation(s) and may allocate funds in the budget deliberations for 1) studies and/or 2) implementation of approved projects.

4. Data Collection

Studies will proceed based on the funding allocated by Council. Detailed data will be collected and public input will be taken, either in the form of a resident survey or an open house. The data to be collected may include, but not be limited to the following:

- Traffic Speeds
- Traffic Volumes
- Through Traffic Percentage
- History of Vehicle Collisions
- Proximity of Schools
- Usage Patterns of Local Facilities (Parks, Community Centers, Trails)
- Age Distribution in Neighbourhood
- Public Perceptions of Traffic Related Impacts
- Road Dimensions, Accesses and Pedestrian / Cyclist Facilities
- Previous Measures Implemented

5. Quantification / Confirmation of Problem

Based on the data collected above, the problem is quantified and/or confirmed. A detailed score will be assigned to the problem according to Table 2.

Table 2 – Detailed Scoring

Criteria	Points	Basis for Point Assignment
Speed	1 to 5	85 th percentile traffic speed (1 point for every 2 km/h more than 5 km/h over the posted limit i.e. 1 point - up to 7 km/h over the limit, 5 points - more than 13 km/h over the limit)
Volume	1 to 5	Average daily traffic volumes (1 point for every 500 vehicles, 5 points – more than 2500 vehicles)
Through Traffic	1 to 5	Percent of traffic volume that is through traffic (1 point for every 20%, 1 point = 1 to 20%, 5 points = 81 to 100%)
Collision History	1 to 5	1 point – low collision history, 3 points – average collision history, 5 points – high collision history
Pedestrian / Cyclist	1 to 3	Facilities that generate pedestrian / cyclist traffic (1 point each for schools, recreation centers, parks, trails, etc)
Maximum	23	Total points possible

Projects will be prioritized according to their detailed score.

6. Review Traffic Calming Options

First, adjacent arterial and collector roads will be reviewed to ensure the problem is not caused by deficiencies in the arterial network. Deficiencies in adjacent arterial and collector roads will be rectified first. If the problem persists six months after such rectification, or if no deficiencies are identified in adjacent roads, various Traffic Calming measures will then be reviewed and options will be formalized. Acceptable Traffic Calming Measures will be taken from Table 3, depending on the road classification and other considerations as specified. Soft measures such as landscaping will also be considered for all classifications of road.

Table 3 – Acceptable Traffic Calming Measures

	Road Classification				Other		
	Local	Collector	Industrial	Arterial	SCH	ERR	TR
Vertical Deflection	√						
- Raised Crosswalk	√	√			√	√*	√
- Raised Intersection	√	√					
- Rumble Strip	√	√	√	√	√	√	√
- Sidewalk Extension (unraised)	√						
- Speed Hump	√						
- Textured Crosswalk	√	√	√	√	√	√	√
Horizontal Deflection							
- Chicane – One Lane							
- Chicane – Two Lane	√						
- Curb Extension	√	√	√		√	√	√
- Curb Radius Reduction	√						
- On Street Parking	√	√		√	√	√	√
- Raised Median Island		√		√	√	√	√
- Traffic Circle	√				√	√*	√
Obstruction							
- Directional Closure	√					√*	√
- Diverter	√						
- Full Closure							
- Intersection Channelization	√	√					√
- Raised Median thru Intersection		√		√	√	√*	√
- Right In / Right Out Island	√	√			√	√*	√
Signage							
- Maximum Speed	√	√	√	√	√	√	√
- Right (Left) Turn Prohibited	√	√	√	√	√	√	√
- One Way	√	√					
- Stop	√	√			√	√	√
- Through Traffic Prohibited	√						
- Traffic-Calmed Neighbourhood	√	√			√	√	√
- Yield	√	√	√		√	√	√

* in consultation with Fire Dept

SCH = School Zone ERR = Emergency Response Route TR = Transit Route

7. Measure Community Support for Options

The options will be presented to the public, through resident surveys to affected residents and may also be presented at an open house. The public will be asked to rate the options as satisfactory, unsatisfactory or neutral.

8. Evaluate Options

The options will be evaluated, including both technical and social aspects.

9. Final Council Review

The Director of Community Development will prepare a report for Council outlining the results of the studies and a prioritized list of projects to proceed to installation of measures.

10. Implementation of Traffic Calming Measures

Upon receiving approval from Council, District staff will implement the Traffic Calming measure(s) by priority until funding is exhausted. Funding of Traffic Calming measures is to come from General Revenues, developer contributions, Local Improvement Programs or alternative sources of funding, such as the ICBC Safer Cities program.

11. Monitoring of Traffic Calming Measures

All Traffic Calming measures are to be monitored for a period of at least six months after implementation. The level of satisfaction with the measures should then be reported by the Director of Community Development to Council.

The Director of Community Development, at his discretion, may remove any traffic calming measure that is deemed to be inappropriate at the end of the monitoring period.

Roles

1. Role of the Public

Local residents and business owners will be involved in the problem identification and decision making processes related to traffic calming in their neighbourhood. The key responsibilities are to:

- Participate in public meetings or surveys for traffic calming studies
- Identify traffic related issues in the neighbourhood
- Review options presented by staff and rank the options as satisfactory, unsatisfactory or neutral

2. Role of District Staff

District staff will present a report with recommended traffic calming projects to Council prior to budget deliberations for the coming year. On Council approval of a budget, staff will proceed to work on traffic calming projects in order of priority. The key responsibilities are to:

- Assist the public in setting up education and enforcement
- Do preliminary evaluation / scoring of traffic calming requests
- Prepare a prioritized list of traffic calming requests for presentation to Council and recommendation for funding of further study
- Schedule and manage the public participation process for approved studies
- Define and quantify the nature and extent of traffic issues through public participation and data collection (may use outside consultant)
- Generate possible solutions (may use outside consultant)
- Facilitate a consensus building exercise with the public to discern preferred solutions (may use outside consultant)
- Communicate the outcome of the study with Council
- Implement and monitor approved traffic calming projects

3. Role of Council

Council will direct the traffic calming program at a strategic level. The key responsibilities are to:

- Based on staff recommendations, approve funding and resource allocations in the annual budget to conduct traffic calming studies
- Review and consider the preferred traffic calming plan initiatives as indicated by the public
- Allocate funding for approved traffic calming measures to be installed
- Review performance of traffic calming measures after they are installed

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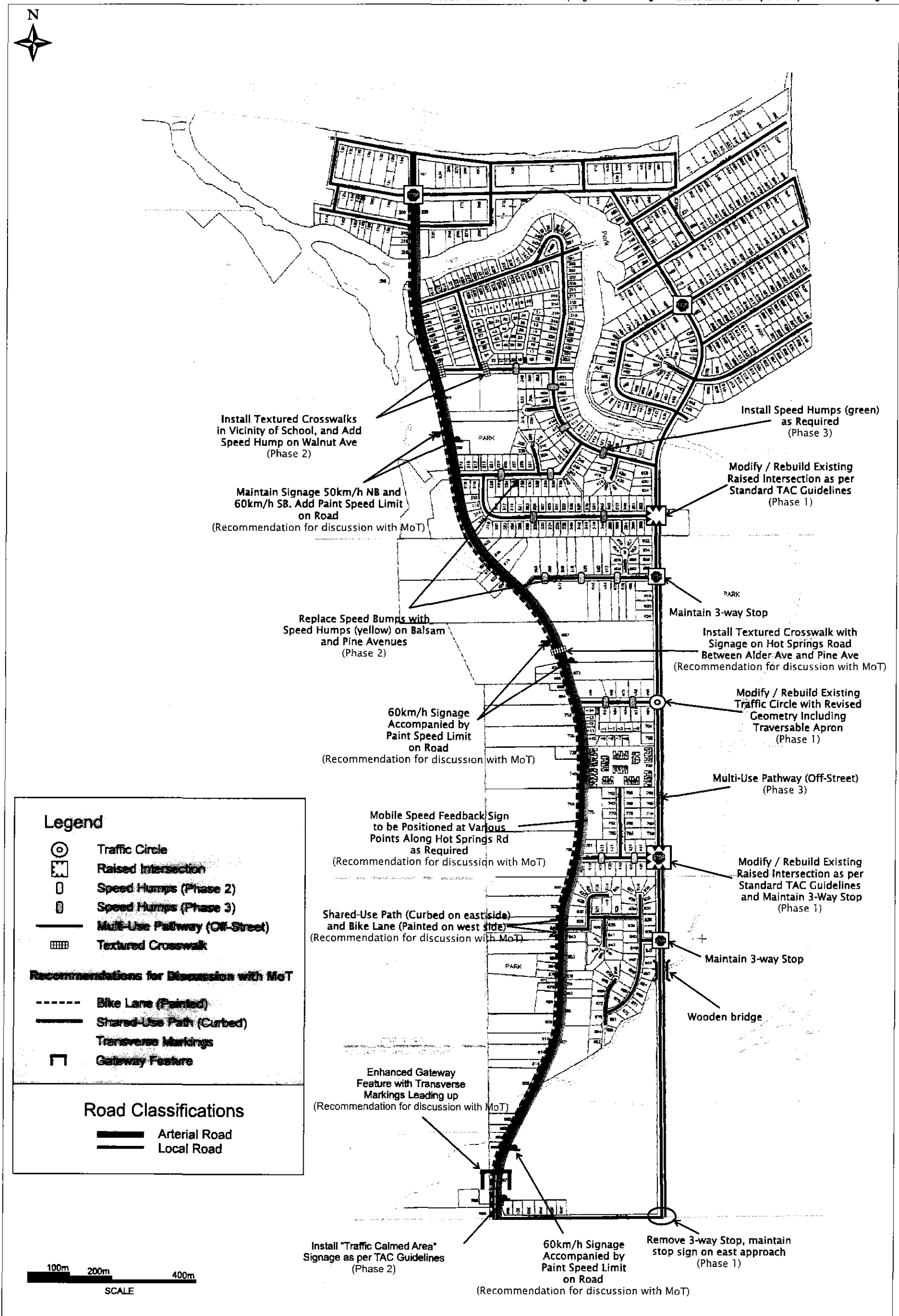



Exhibit 4.5
Traffic Calming Plan - Preferred Option (Modified Arterial Approach)

Respectfully submitted for your consideration;

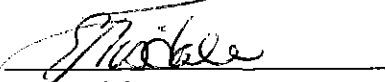
Andre Isakov
Community & Economic Development Officer

DIRECTOR OF FINANCE COMMENTS:



Dale Courtice
Director of Finance

CHIEF ADMINISTRATIVE OFFICER COMMENTS:



Ted Tisdale
Chief Administrative Officer

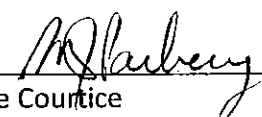
RECOMMENDATION:

THAT Council receive for information.

Respectfully submitted for your consideration;

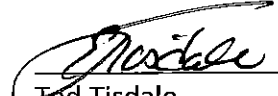
Andre Isakov
Community & Economic Development Officer

DIRECTOR OF FINANCE COMMENTS:

fr 

Dale Courtice
Director of Finance

CHIEF ADMINISTRATIVE OFFICER COMMENTS:



Ted Tisdale
Chief Administrative Officer

Why was Sustainable Harrison developed?

Communities undertaking sustainability planning engage their citizens in an inspiring and motivating dialogue that creates a shared vision for the future. Sustainability planning helps communities develop long-term goals for success; these goals then shape and inform investment and infrastructure decisions, reducing potential costly short-term mistakes. The process provides guidance for strengthening local economies; preparing for the long-term impacts of climate change; developing strategies for food security; improving affordability; enhancing arts, culture and heritage, etc. and help save significant money over time through reduced energy, infrastructure and waste management costs.

How was Sustainable Harrison developed?

Sustainable Harrison was developed with the assistance of the Whistler Centre for Sustainability, a non-profit consulting organization, 15 members of a Community Sustainability Action Team (CSAT), and input from the community at a visioning event, through on-line feedback, and the public open house. The process followed these steps:

- 1) Identifying community priorities and strategy areas for planning.
- 2) Creating a shared vision of what the community's desired future is in each strategy area ("descriptions of success").
- 3) Developing a 'current reality,' a description of where Harrison is currently at with regards to the vision in each strategy area.
- 4) Determining key actions that can be taken to move Harrison from its current reality to its descriptions of success.
- 5) Identifying a set of core indicators to measure performance.
- 6) Developing a basic monitoring and reporting system to measure and track progress towards the vision.

How will it be used?

Sustainable Harrison can be used as a guide for the community to move towards its vision of a successful and sustainable future. The year 2030 was chosen as the year for the community's vision, as it's about a generation away, and it's far enough away to spur creativity in thinking about a vision, yet close enough that it is conceivable. Sustainable Harrison is framed by the four sustainability objectives and four community priorities – what is important to achieve the vision.

Priorities

In Sustainable Harrison, the four priorities are:

- Ensuring Economic Viability
- Protecting the Environment
- Enriching Community Life
- Enhancing the Visitor Experience

Strategy Areas

Within the four priorities, eight strategy areas were identified. While it is important for an ICSP to address relevant community sustainability issues such as climate change, intergenerational demands, access to education, or economic diversity, the ICSP doesn't need to, and cannot, be structured by every issue to do that. Therefore, instead of looking at every potential issue facing the community, an ICSP identifies Strategy Areas that capture a number of community issues in an integrated manner. Each strategy area addresses a 'system' of inter-related issues and impacts. For example, a community's energy system is the way that various organizations, infrastructure, and people combine to meet the community's energy needs. The way in which a system functions well – or not – is often the root cause of multiple issues, so addressing the system as a whole will bring us one step closer to solutions. Further to the energy system example, our current energy systems have impacts on air quality, climate change, water ecology, etc. Working comprehensively on energy system solutions help in all three areas.

Sustainable Harrison comprises these eight strategy areas:

- Buildings and Sites
- Education, Health and Social Services
- Economy and Tourism
- Arts, Culture, Recreation and Leisure
- Food
- Land Use and Natural Areas
- Transportation and Mobility
- Energy, Water and Waste Systems

Descriptions of Success

Descriptions of success were identified for each strategy area; a total of 72 statements were articulated that together describe the desired future for Harrison.

Actions!

Once the descriptions of success were identified for each strategy area, ideas were generated for actions and initiatives that can be undertaken by community partners that would move Harrison from its current situation toward its vision. The actions were prioritized according to their impact, visibility, and return on investment, and will be undertaken by a number of community organizations.

Indicators

A set of 25 core indicators was identified for monitoring performance towards Harrison's sustainability vision. Indicators such as: low income prevalence, visitor satisfaction, education attainment, population, etc. These indicators will be monitored each year to measure progress toward Harrison's vision. More strategy-specific indicators may be developed over time to gather more information about the community's sustainability performance.

Ongoing implementation

To ensure that Sustainable Harrison is an effective and ongoing process, a committee or group of task forces will need to develop actions that can be implemented each year. Prior to annual action planning, the indicators will need to be monitored, reported on and reviewed, and then actions developed that focus on areas where there are the best opportunities. As more and more actions are undertaken and completed, the community will be able to see the on-the-ground results of the sustainability planning process. As Sustainable Harrison gains momentum, more and more community organizations will get involved in action planning and implementation, so that sustainability is truly incorporated throughout the community.

POLICY CONSIDERATIONS:

Sustainable Harrison assists with providing a community vision as such the ICSP will aid in the development of future corporate and community plans, strategies, policies, and actions.

RECOMMENDATION:

THAT Council receive the Sustainable Harrison ICSP and authorize staff to develop an implementation strategy.

Respectfully submitted for your consideration;


Andre Isakov
Community & Economic Development Officer

DIRECTOR OF FINANCE COMMENTS:

for / 

Dale Courtice
Director of Finance

CHIEF ADMINISTRATIVE OFFICER COMMENTS:



Ted Tisdale
Chief Administrative Officer

HARRISON HOT SPRINGS

Naturally Refreshed



Sustainable
Harrison

**Integrated Community
Sustainability Plan**

October, 2011

Prepared by:

CENTRE *for*
SUSTAINABILITY
WHISTLER

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The preparation of this Integrated Community Sustainability Plan was carried out with assistance from the Green Municipal Fund, a Fund financed by the Government of Canada and administered by the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them.

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Sustainable Harrison Integrated Community Sustainability Plan



1.0 Background and Process

The Village of Harrison Hot Springs (HHS) engaged the services of the Whistler Centre for Sustainability to assist them and the community to develop an integrated community sustainability plan (ICSP) using a Quick Start process. The HHS had undertaken a number of sustainability-related initiatives, and had some sustainability-related policies in the current Official Community Plan, but had not previously undertaken a comprehensive community sustainability planning process that would create a shared vision for the community and integrate existing policies.

The Village of Harrison Hot Springs is tucked against British Columbia's picturesque south-western mountains and the sandy beaches of Harrison Lake in the Fraser Valley. The Valley land base is predominantly made up of Agricultural Land Reserve and has become increasingly popular for retirees and visitors given its hospitable climate, natural beauty, high quality of life and recreational opportunities.

Harrison has committed to sustainability objectives and a shared community vision. In order to be successful in achieving its vision, Harrison must work closely and collaboratively with its neighbours in the Fraser Valley to collectively move towards that vision. Coordinated regional actions towards shared descriptions of success for transportation, economic development, environmental protection, health services, land use, and growth management are essential in order to become a more sustainable community and region.

1.1 Purpose of Community Sustainability Planning

Sustainability planning helps communities gain insight into their long-term goals for success – the goals then shape and inform investment and infrastructure decisions, reducing the likelihood of potentially costly short-term mistakes. Significant benefits accrue to communities moving in the direction of long-term success. As an energizing and motivating conversation for the community, sustainability planning helps to alleviate potential deadlock issues, attract new residents and niche businesses, as well as retain and motivate municipal talent. Local economies are prepared for the long-term impacts of climate change, shifting global priorities for goods and services and rising energy prices. Community members commit to maintaining their resilience, networks and quality of life through demographic shifts and other social challenges. Municipalities save significant money over time through reduced energy and waste management costs and are able to access funding through a variety of mechanisms through the sustainability plan.

1.2 What is an ICSP?

An Integrated Community Sustainability Plan (ICSP) is a document that is developed by the community to guide the community toward a desirable and sustainable future. The ICSP identifies

strategies and actions for implementation, monitors progress, and is reviewed and updated every year. An ICSP is the community's highest level policy document that integrates all existing plans and policies, gives direction to all future initiatives and provides a comprehensive framework for community decision-making.

An ICSP is as much a process as it is a plan; it is an on-going process of engaging the community in co-creating and updating a community vision and linking that to realistic planning and collaborative action today. ICSPs emphasize long-term thinking, collaboration between community residents and stakeholders, creating partnerships, and ongoing monitoring and evaluation to ensure success. Harrison's ICSP process is called Sustainable Harrison.

1.3 The Quick Start Integrated Community Sustainability Plan

Sustainable Harrison is being developed using a 'Quick Start' framework. This process is based on The Natural Step, as well as on Whistler2020, a multiple award-winning community sustainability plan and process, but is customized to Harrison's situation, needs, assets and visions. The Quick Start quickly and effectively provides Harrison with an ICSP and on-the-ground actions and implementation tools to get the community on its journey toward sustainability.

Sustainable Harrison is an integrated and comprehensive sustainability plan. What does this mean?

This integrated planning approach sets this ICSP apart from other traditional community plans. As issues are often complex and overlapping, they cannot be solved in isolation and are best addressed using a comprehensive integrated approach. For example, toxic effluent in rivers affects fish health (environmental), which affects people's health (social) and their financial prosperity (economic). All of these elements and their connections must be considered to arrive at optimal practices.

1.4 Quick Start ICSP - Outcomes

While a comprehensive Integrated Community Sustainability Plan (ICSP) with an Official Community Plan (OCP) update and multi-stakeholder task forces is the ideal mechanism for advancing sustainability, we understand that the resources required to undertake such an intensive process are beyond what many small to medium sized communities have available. The Quick Start version of an ICSP is designed to get the community moving forward on its sustainability journey immediately and meaningfully. The Quick Start ICSP comprises:

- A sustainability strategy outlining a vision (descriptions of success), sustainability objectives, community priorities and eight strategy areas.
- A description of the current situation with respect to each strategy area.
- A set of clear recommended actions for immediate implementation, directed to specific organizations.
- A set of core indicators based on the four priority areas.
- An effective and easy-to-use monitoring and reporting system.
- A 'Next Steps' document that will provide a guide for continuing to develop and implement Sustainable Harrison in the years to come.

Can we afford to think about sustainability issues? Should we not concentrate our efforts on more pressing economic challenges?

Sustainability planning and actions is not about choosing between economic, environmental and social issues. Rather, it is about making smart decisions today to achieve all three in the future. Sustainability includes short and long-term economic success, which is essential to achieve our social and environmental objectives.

We cannot afford to lose sight of environmental or social issues. Our futures are intricately tied to the ability of natural systems to function.

Attached as appendices to the ICSP are:

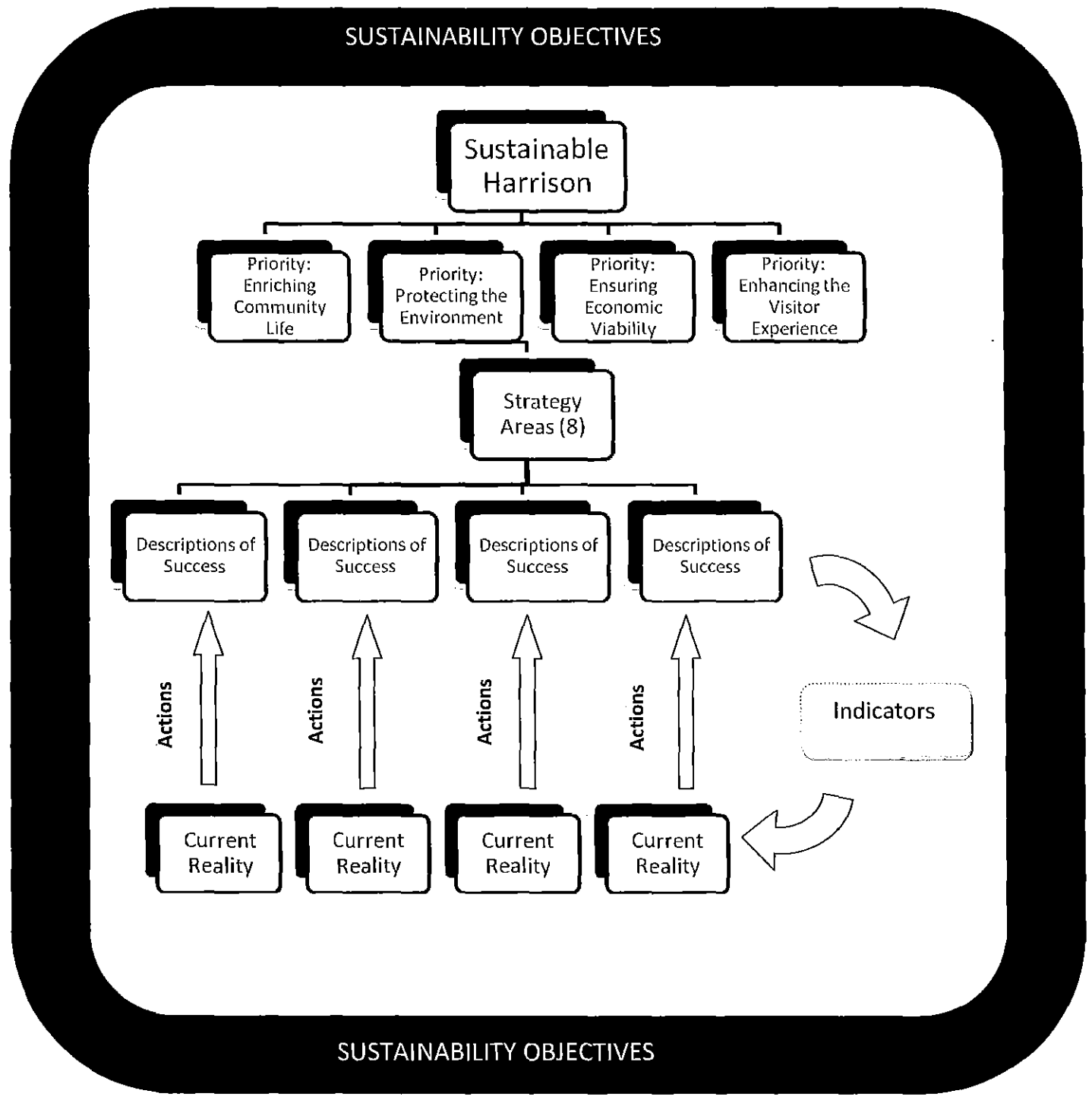
- All the proposed potential actions for future consideration.
- A number of other indicators that can be monitored in future years.
- An action monitoring table to keep track of the status of recommended actions.

1.5 The Quick Start ICSP Process

Sustainable Harrison followed this process to create the ICSP:

1. Community priorities and strategy areas were identified and confirmed by HHS staff for Harrison.
2. A Community Sustainability Action Team (CSAT) was created to work closely with the consultant on developing the process and content for the ICSP.
3. The CSAT members participated in a workshop to learn about the Natural Step and to develop a shared understanding of sustainability.
4. A shared vision of the community's desired future (Descriptions of Success) in the strategy areas was developed by the CSAT and members of the community.
5. Descriptions of where the community is currently at with regards to the vision (i.e., "current reality") were researched and written.
6. A set of indicators based on the four priorities were developed. These indicators were recommended based on ease and availability of data.
7. The CSAT came up with ideas for actions that could be taken to move Harrison from its current reality to its articulated desired future.
8. Community partners were asked to take on actions for implementation.
9. A basic monitoring and reporting system for tracking and communicating progress was developed.
10. Implementation tools, including a sustainability decision-making tool based on the directions of the ICSP, were developed.





1.6 The Community Sustainability Action Team

The Community Sustainability Action Team (CSAT) worked closely with the consultant team and municipality on the project. The CSAT was the “advisory committee” for the project, and its members represented the community’s interest in the project, as well as partner organizations that would implement actions. The CSAT provided input on public engagement opportunities, assisted in the development of the community’s descriptions of success, provided input on current reality and indicators, and developed recommended actions. Individual organizations represented on the CSAT will work with the municipality to lead on implementing actions that will move the community towards its vision of success and sustainability.

The CSAT members were:

Mayor Ken Becotte	Veronique Astles
Councillor Allan Jackson	Ray Hooper
Councillor Dave Harris	Barbara Smith
Gail Guimont	Niek De Brouwer
Robert Reyerse	Andy Strothotte
Ed Stenson	Bill Dietrich
Leo Facio	Andre Isakov (non-voting staff liaison)
Donna Cooney	

1.7 Shared Understanding of Sustainability

The Village of Harrison and the CSAT use the Brundtland definition of sustainability “...meeting the needs of the present without compromising the ability of future generations to meet their own needs.” In order to ‘operationalize’ sustainability, Harrison has adopted specific sustainability objectives that will guide all decisions and actions.



2.0 Sustainability Objectives

Harrison has adopted the following sustainability objectives, derived from the Natural Step, as the overarching objectives that will guide Harrison on its journey towards sustainability. These objectives are the 'lighthouse' for the community, which provide clear direction towards a final destination. The four sustainability objectives are:



To reduce and eventually eliminate our contribution to the ongoing build-up of materials from the Earth's Crust (e.g. heavy metals, fossil fuels).



To reduce and eventually eliminate our contribution to the ongoing build-up of synthetic materials produced by society (e.g. dioxins, PCB, DDT etc.).



To reduce and eventually eliminate our contribution to the ongoing physical degradation of nature (e.g. over harvesting fish stocks and paving over critical wildlife habitat etc.).



To reduce and eventually eliminate our contribution to conditions that undermine people's ability to meet their basic needs (e.g. unsafe working conditions, not enough income/profit to live on, restricting freedom of expression, using resources inefficiently, hoarding resources etc.).

3.0 Harrison's Four Community Priorities

Four priorities were identified that provide a high level description of what is important to Harrison in order to achieve its vision in becoming a successful and sustainable community. These priorities represent the important overarching values of the community, under which the eight strategy areas align. Each priority is equally important and supportive of the other, and all actions and planning need to support the values upheld in these four priorities. The narrative text below each priority describes the general sense of the vision for Harrison in the year 2030. For the specific articulation of the community's vision for the future, please see the Description of Success within each strategy area (Section 5.0). Harrison's four community priorities are:

- Protecting the Environment
- Ensuring Economic Viability
- Enriching Community Life
- Enhancing the Visitor Experience

A set of recommended core indicators based on the priorities was developed to monitor sustainability performance and progress. See Section 10.0 – Indicators and Monitoring for more information.

PROTECTING THE ENVIRONMENT

In 2030, Harrison Hot Springs continues to prioritize and protect the beautiful natural surroundings in which they are situated, in particular Harrison Lake, scenic assets and environmentally sensitive areas. Buildings compliment Harrison's natural surroundings; there is a commitment to, and numerous learning opportunities for, environmental protection; recreational and leisure activities respect the environment and natural ecosystems; and business practices have transitioned towards renewables and sustainable practices. Development strategies and practices encourage the use of existing developed land and minimizing the encroachment on nature. Activity-based recreation offerings are promoted that are low-impact, non-motorized and serviced by preferred low-impact forms of transportation. The community has successfully transitioned to a 'conservation' culture where material inputs chosen are durable, natural, recyclable, and the outputs are minimized and managed to avoid negative impacts to land, air and water systems. The Village of Harrison Hot Springs has proactively influenced environmental and land use practices in the Valley, and as a result, the region collaboratively implements efforts to protect the environment.

The recommended core indicators related to the priority of 'protecting the environment' are:

- Low impact recreation activities
- Energy use
- Water use
- Waste Water Effluent Quality
- Stream and Lake Health
- Village Core Traffic
- Average Density
- Materials Used
- Greenhouse gas emissions

ENSURING ECONOMIC VIABILITY

By 2030, Harrison's economy is diverse and supported by local residents and visitors alike. Harrison Hot Springs is a business leader committed to sustainability practices. The municipality has collaborative partnerships and agreements within the community, with regional partners and with other levels of government, helping to ensure a strong local economy and the best use of resources. Because the community has done such a good job at protecting the environment, recreational and leisure opportunities are a big tourism driver. A strong year-round tourism industry complements and supports the local economy, enhances the community's assets, and includes a vibrant cultural component. Harrison is easily accessible with affordable public transit between Harrison and neighbouring communities. A larger proportion of the community's wealth is kept in the community through local resident and tourist attractions, supporting local businesses, and reducing the need to travel outside the community for activities and entertainment. Harrison has a vibrant village core, with natural surroundings, hosting a range of amenities and services that meet the needs of residents, visitors and the businesses themselves.

The recommended core indicators related to the priority of 'protecting the environment' are:

- Local workforce
- Economic Dependency Ratio
- Median income

- Business Licenses
- Low income prevalence
- Education Attainment

ENRICHING COMMUNITY LIFE

By 2030, the community of Harrison Hot Springs is healthy, vibrant, and diverse, with a strong sense of place and high quality of life. The built form is attractive, safe and accessible, and residents and visitors interact in the thriving village core and throughout the natural surroundings. All residents have access to affordable and comfortable housing, and enjoy leisure time and local activities year-round. Healthy, regional food choices are readily available, and there is a strong sustainable food culture. Harrison is a healing place for both residents and visitors, and a place where community members maintain healthy lifestyles and are supported holistically to prevent illness. Diverse educational and informal learning opportunities allow lifelong learning in Harrison. The community embraces sustainability as a lens through which all planning and decisions are made. A culture of reducing waste and consumption is contributing to a clean and healthy community. Permanent and seasonal residents are engaged in community life, collaborate respectfully in decision-making and their views are meaningfully considered. Residents and visitors can easily get around the community and region using public transit, cleaner vehicles, and a variety of non-motorized means.

The recommended core indicators related to the priority of 'protecting the environment' are:

- Housing diversity
- Population
- Arts, culture, recreation and leisure participation
- Volunteer rates
- Drinking water quality
- Length of like-friendly commuting routes
- Local transportation satisfaction

ENHANCING THE VISITOR EXPERIENCE

By 2030, the success of Harrison Hot Springs as a community has become intertwined with the success of its tourism offerings and experiences within the community and the region. Being memorable and authentic are key attributes setting the Harrison experience apart as the destination of choice for thousands of visitors each year. The arts and cultural scene enhances the vibrancy of the village core while the surrounding nature and recreational activities remain a key attraction for visitors from the region and abroad. Harrison continues to be successful at providing exceptional experiences, service and value to visitors. Diverse experiences integrate opportunities for residents and visitors to learn about local culture, history, First Nations and the natural environment. Community members welcome visitors and are enthusiastic to contribute to the transformational experience Harrison Hot Springs has become known for.

The recommended core indicators related to the priority of 'protecting the environment' are:

- Usage of Lake and beachfront
- Visitor satisfaction
- Community Parks Satisfaction

4.0 Sustainability Strategy Areas

There are a number of ways to understand and conceptualize community and community issues. While it is important for an ICSP to address relevant community sustainability issues such as climate change, intergenerational demands, affordability, and economic challenges, the ICSP need not be structured by every issue to do that. In fact, a plan structured by issues would likely be unruly and resource intensive to manage due to the sheer number and variety of issues!

While we don't always think of a community as made up of an energy system, leisure system, health system, etc., we can all intuitively understand that they exist and will exist. For example, a community's energy system is the way that various organizations, infrastructure, and people combine to meet the community's energy needs. The way in which a system functions well – or not – is often the root cause of multiple issues, so addressing the system as a whole will bring us one step closer to solutions. To further to the energy system example, our current energy systems have impacts on air quality, climate change, water ecology, etc. Working comprehensively on energy system solutions help in all three areas.

For Harrison, eight strategy areas were identified that broadly address all the community systems and the broad range of issues within them. As the ICSP continues to be developed over the next number of years, these strategy areas may be combined, separated, or revised – that is all part of an ongoing community sustainability planning process. For the first year of Harrison's ICSP, these eight strategy areas were selected:

- ✦ Buildings and Sites
- ✦ Education, Health and Social Services
- ✦ Economy and Tourism
- ✦ Arts, Culture, Recreation and Leisure
- ✦ Food
- ✦ Land Use and Natural Areas
- ✦ Transportation and Mobility
- ✦ Energy, Water and Waste Systems

The scope of what is covered within each of the above strategy areas is contained within the Description of Success section (5.0) below.

5.0 Descriptions of Success

A sustainability plan includes a shared vision of what a successful and sustainable future for the community looks like in each of the community systems in a specified year in the future. The detailed articulation of this vision for Harrison in the year 2030 is contained within the Description of Success (DoS) statements within each of the eight strategy areas. Collectively, the DoS statements:

- describe what success will look like in a sustainable future in each strategy area framed by the sustainability objectives
- are statements of the highest aspirations and purpose for each strategy area
- are used for determining actions and decisions that need to be taken in order to move the community from where it is today to where it wants to be in a sustainable and successful future

DoS statements guide action planning so that all actions and initiatives that are developed aim to move the community towards the vision described by the DoS. DoS statements also guide the development of community indicators for measuring progress toward the vision and sustainability.

5.1 BUILDINGS AND SITES

The Building and Sites strategy area addresses how the physical characteristics of buildings and sites keep the community inclusive, affordable, liveable and sustainable. It includes residential dwellings, commercial, institutional and industrial buildings as well as their surrounding natural landscape, manicured landscape and hard surfaces. It deals with infrastructure, materials and practices related directly to the building or site, but generally excludes community infrastructure such as roads, energy supply systems, water and sewer lines.

Buildings and Sites Descriptions of Success

1. A diverse mix and adequate supply of housing provides livable options for residents of all ages, incomes and needs.
2. Buildings are good quality, safe and accessible for people with all abilities, and they enable personal interactions that contribute to the social health of the community.
3. Buildings and sites enhance the village experience, protect views, are compatible with the small serene village atmosphere, and compliment Harrison's natural surroundings.
4. Buildings and sites are pedestrian-oriented and provide convenient access to preferred transportation modes.
5. During development, sites are maintained to reduce the negative impact on the village experience as much as possible.
6. Buildings are using energy, materials and water more efficiently, and transitioning to the use of renewable energy and more sustainable materials.
7. Sites are being managed to reduce and eventually eliminate the need for chemicals and excessive watering.
8. Buildings and sites avoid continuous encroachment on nature and protect natural areas within and around them as much as possible.



5.2 EDUCATION, HEALTH AND SOCIAL SERVICES

This strategy area is concerned with meeting residents' education, health and other social needs. Health needs include physical, mental, emotional, and spiritual health needs through services, infrastructure, interactions, relationships and a strong community fabric. It also includes community safety. From an individual perspective it addresses access to local and regional care services and health promotion. The education component addresses education-related participation, including formal and informal opportunities. It

also addresses conditions required to make these services accessible and inclusive with minimized environmental impact. This strategy area is connected with the Arts, Culture, Recreation and Leisure strategy area since the illness prevention aspects of leisure pursuits are linked with health services.

Education, Health and Social Services

Descriptions of Success

1. The learning, health, safety and social needs of all residents and visitors are met as locally as possible, and convenient connections to services outside of Harrison are facilitated.
2. Harrison is a healing place, where community members maintain healthy lifestyles and are supported holistically to prevent illness and achieve a high quality of life.
3. Learning and wellness offerings contribute to the local economy and attract visitors to the community.
4. Opportunities exist for people to learn about local culture, history and the natural environment.
5. Services are delivered in a manner that use land, energy, materials, and water efficiently, and that are transitioning to the use of renewable energy and more sustainable materials.
6. Harrison is an inclusive community: accessible to people of all abilities and ages, and respectful of diverse views.
7. Permanent and seasonal residents are engaged in community life, collaborate respectfully in decision-making and their views are meaningfully and transparently considered.
8. A diversity of lifelong learning opportunities exist, and are often facilitated by creatively sharing the skills and knowledge found locally.

5.3 ECONOMY AND TOURISM

The Economy and Tourism strategy area focuses on bringing in sufficient dollars into the community and optimizing the impact of dollars within in order strengthen the local economy. For Harrison, this means a focus on the tourism aspects of the economy, while not excluding other aspects. This strategy area also addresses opportunities for meaningful work, sustainable businesses and creating a positive climate for local businesses. This strategy also focuses on providing exceptional experiences and excellent value to visitors with the intent being to increase repeat visitation and recommendations. It includes the welcoming and servicing of visitors: (1) before their visit; (2) upon their arrival and for the duration of the stay; and (3) upon leaving.

Economy and Tourism Descriptions of Success

1. Harrison has a healthy, diversified year-round tourism-based economy that contributes to the economic, social, cultural and environmental well-being of the community.
2. Harrison's tourism experience is memorable and authentic, and it enables personal transformational change to occur.
3. Continuous encroachment on natural areas, parks and scenic assets within and beyond Harrison's borders is minimized, as their importance to the success of the tourism economy is well understood.
4. Harrison's economic and tourism activities contribute to the wellbeing of residents, exist in harmony with the residential community, and are planned using a participative approach with stakeholders.
5. Community members understand the value of tourism to the local economy, they contribute to the visitor experience and support local businesses.
6. Infrastructure is developed and maintained to ensure the economic, social, cultural and environmental well-being of the community.
7. Collaborative partnerships and agreements within the community, with regional partners and with other levels of government help to ensure a strong local economy, the best use of resources, and appropriate uses of areas surrounding Harrison.
8. Local independent businesses thrive, and they work collaboratively to position Harrison in the destination resort market and contribute to the community's vision.
9. Harrison's economic system is using energy, materials and water more efficiently, and transitioning to the use of renewable energy and more sustainable materials.
10. The value of diversified business to the community is recognized through on-going support and encouragement from local residents, government and visitors.

5.4 ARTS, CULTURE, RECREATION AND LEISURE

This strategy area addresses the key leisure pursuits of residents and visitors alike. It includes active and passive recreation and all forms of arts, culture and heritage, including performing, literary, visual arts, heritage buildings, biographies and the supporting built and natural infrastructure, resources, and delivery agents. This strategy addresses all expressions of culture and explores opportunities for building a flourishing and sustainable arts, culture, recreation and leisure scene in Harrison Hot Springs. It also addresses conditions required to make leisure pursuits accessible and inclusive with a minimized environmental impact. There is a connection to the economic and tourism strategy since Harrison is primarily a tourism-based economy and the main product is recreation and leisure. There is a connection to the Education, Health and Social Services strategy area since these leisure pursuits play a role in health and illness prevention.



Arts, Culture, Recreation and Leisure

Descriptions of Success

1. Diverse, year-round arts, culture, recreation and leisure activities enhance the quality of life for all residents and the visitor experience.
2. Collaborative partnerships exist within and beyond the community to deliver a full range of experiences to meet resident and visitor needs as locally as possible, with the most efficient use of limited resources.
3. Arts, culture, recreation and leisure experiences integrate opportunities for residents and visitors to learn about local culture, history, First Nations and the natural environment.
4. Harrison's offerings authentically reflect and respect the scale, nature and vibrant yet serene character of the community allowing pride of community.
5. Harrison's offerings provide good value and attract new and repeat visitors to the community.
6. Appropriate, multi-purpose and economically viable venues and infrastructure are in place to support, foster and celebrate arts, culture and heritage.
7. Local culture, history and natural assets are protected, shared and celebrated as part of the Harrison experience.
8. Harrison's arts, culture, recreation and leisure sectors are using energy, materials and water more efficiently, and transitioning to the use of renewable energy and more sustainable materials.
9. Harrison continues to encourage activity-based recreation offerings that are low-impact, non-motorized and serviced by preferred forms of transportation.
10. The arts, culture, recreation and leisure sectors protect Harrison's natural and recreational areas as essential community assets, monitoring and managing carrying capacities to enable ongoing use.
11. The community supports all aspects of local arts, culture, recreation and leisure, understanding the important role these sectors play in the local tourism economy and community life.

5.5 ENERGY, WASTE AND WATER SYSTEMS

The Energy, Waste and Water strategy area is concerned with supplying high quality water and energy and materials/waste services in an affordable, reliable and sustainable way. It focuses on provincial, regional and small district energy generation and delivery systems and management practices and appropriate sourcing of water and materials, delivery, use and end of life management related to the municipality's operations and community as a whole. The energy, materials and water demand from buildings, commercial activity, transportation and land use patterns is primarily covered by those respective strategies. The scope of this strategy also extends to flood control and stormwater management.



Energy, Waste and Water Systems

Descriptions of Success

1. All systems are managed to protect air and water quality, biodiversity, and natural and scenic areas.
2. Local economic benefits are realized wherever possible from energy, water and materials supply, conservation and education activities.
3. The majority of Harrison's energy needs are met by conservation, efficiency and use local and regional renewable energy sources with minimal physical impact on natural systems.
4. Community members and visitors have reliable, affordable and convenient access to high quality drinking water, energy and waste management services to meet their needs.
5. Harrison has successfully transitioned from a 'disposable' culture to a 'conservation' culture where material inputs chosen are durable, natural, recyclable, and the outputs are minimized and managed to avoid negative impacts to land, air and water systems.
6. Stormwater management and flood control protects lives and property, mimics natural systems and is resilient to a changing climate and unusual storm events.
7. Wastewater discharge is minimized through water re-use and receiving water quality is not adversely impacted.
8. Harrison's water capture and delivery systems are reliable, high quality, resilient to a changing climate, and extremely resource efficient through a variety of technologies and management practices.
9. Harrison's water source is protected as the community's water source through the careful management of access, activities, and other potential impacts.
10. Businesses are leading by example when it comes to more sustainable use of energy, materials, water and waste disposal.
11. Collaborative partnerships exist within and outside the community to deliver a full range of services to meet needs as locally as possible, with the most efficient use of

5.6 FOOD

The Food strategy area addresses how the community supports an affordable and reliable food system within and beyond its boundaries that nourishes resident's appetite, celebrations and culture. The strategy maintains the integrity of the land and people providing the food while moving toward a more sustainable system. It deals with food systems from farm to fork to disposal.



Food

Descriptions of Success

1. Local and regional food is part of the cultural and wellness experience integrated throughout food offerings and contributes to the local and regional economy.
2. Community members have access to an equitable, sufficient, affordable, nutritious and reliable supply of food.
3. Harrison and regional producers work together to offer healthy, good quality, sustainable food in Harrison.
4. Community members support small-scale local and regional food producers because they understand its importance to their health and the health of the local economy.
5. Opportunities exist for community members and businesses to grow food in Harrison.
6. Community members and businesses support and purchase food from producers who have eliminated harmful chemical use ensuring human and ecosystem health is protected.
7. Waste from Harrison's food system is decreasing and being increasingly diverted from landfills.
8. Harrison's local food system uses water and energy efficiently, and natural water systems and biodiversity are protected.

5.7 LAND USE AND NATURAL AREAS

The Land Use and Natural Areas Strategy seeks to manage development in a way that maintains livability, natural areas, and economic development. The strategy addresses the locations, patterns and types of all physical development as well as the amount and timing of these developments. It also addresses how the community will protect, and attempt to restore ecosystem integrity and biodiversity throughout the area and region.



Land Use and Natural Areas

Descriptions of Success

1. Parks, green spaces, recreational areas and scenic assets are protected, used appropriately, connected by trails, restored where necessary, and designed to protect natural areas within and around them as much as possible.
2. The lakeshore has been restored to a more natural state, while maintaining recreational areas and features with easy access to and from the village.
3. Harrison's central village area is pedestrian-oriented, inviting and vibrant, with natural surroundings, providing services for residents and visitors alike.
4. Compact, liveable and mixed-use development is promoted and supported.
5. Development facilitates personal interactions, local food production, and enabling convenient access to green space, transit, trails and amenities.
6. Respecting limits to growth, development in Harrison has reached an optimal state that supports local economic viability, enhances the visitor experience and community life, and has protected natural areas and ecosystem health.
7. Harrison's land use patterns facilitate the efficient use of energy, materials and water, and the transition to the use of renewable energy and more sustainable materials.
8. Critical natural areas are protected, managed, connected and, where possible, restored to ensure ecological health and biological diversity.

5.8 TRANSPORTATION AND MOBILITY

The Transportation and Mobility strategy area is concerned with the movement of residents and materials to, from and within a community in a more efficient and sustainable manner that is consistent with the community's rural nature. It includes all modes of local and regional transportation and focuses on vehicles, roads, trails, lighting, mass transit and supportive technologies.

Transportation and Mobility Descriptions of Success

1. Harrison's policies and planning and development decisions promote and support preferred transportation options such as: non-motorized modes; public transit; high-occupancy and low-impact technology vehicles.
2. Harrison's transportation system utilizes renewable energy sources, improving air quality and maintaining ecosystem integrity.
3. A connected system of trails offers residents and visitors transportation alternatives within and beyond Harrison that are year-round, human-powered and safe.
4. Affordable public transit exists within Harrison and between neighbouring communities.
5. Transportation options moving people to, from and within Harrison are convenient, comfortable, universally accessible and safe.
6. The local and regional transportation system and infrastructure avoids continuous encroachment into natural areas.
7. Lake-based transportation options avoid negative impacts on the aquatic system and are easily accessed from the core village area, seamlessly connecting the lake to the Harrison experience.
8. The village core and waterfront areas are managed to create vibrant yet serene, people-friendly zones that are walkable and, seamlessly connect the village to the waterfront and beach.

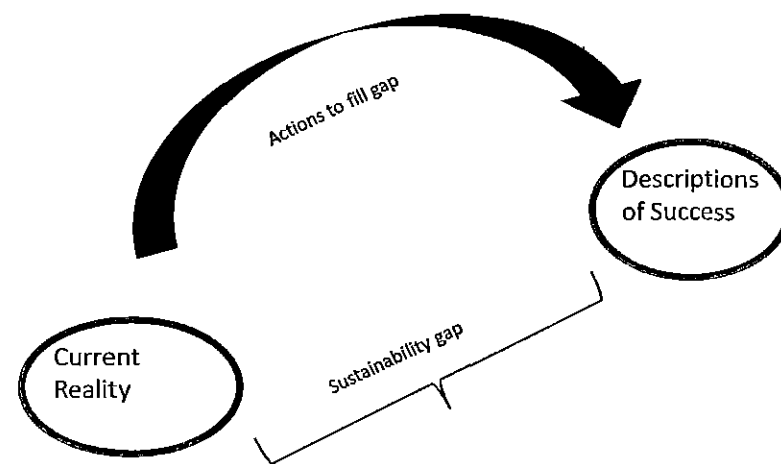
6.0 Current Reality

For each of the strategy areas, the current reality is a high-level scan of what Harrison looks like in 2011 relative to the Description of Success in 2030, identifying the gaps that exist and potential areas of focus for the action planning. The current reality provides a list of the key challenges and gaps within the community, and the opportunities and assets (e.g., current initiatives, programs, policies, actions) that can be leveraged to move Harrison toward the vision.

Once the current reality was identified in each strategy area, actions and initiatives were developed that would move the community from its current situation to its articulated desired future in each strategy area. Appendix A - Current Reality, contains the high-level scan of Harrison in 2011 for each strategy area.

7.0 Action Planning

Once the community developed its vision, i.e. the descriptions of success, and its current situation relative to its strategy areas, actions were then determined that would help the community move from its current position to where it wants to be in order to be more sustainable. The CSAT was tasked with reviewing Harrison's current reality and descriptions of success, and considering the 'sustainability gap,' came up with ideas for actions that could be undertaken by the Village of Harrison and community partners.



While a considerable number of actions were identified as potential ones to be undertaken, a set of 2-4 actions were prioritized for each strategy area to be undertaken in the first year. These priority actions were based on the following criteria:

1. Move toward one or more Descriptions of Success (meeting more DoS is better).
2. Moves toward multiple strategies and priorities.
3. Move toward all four sustainability principles (stronger sets of actions meet all four).
4. Contain at least one action of high impact, even if high level of implementation difficulty.

5. Have at least one action that is highly visible.
6. Mainly be low or moderate in difficulty of implementation.
7. Result in no decrease of resources or a surplus of resources to invest in future actions.
8. Be mostly started in the immediate/short-term.
9. Consist of a range of timeframes for the end effect of the actions, with at least one action per strategy having immediate on-the-ground results.
10. Present a flexible platform for further movement toward sustainability.

Each action statement:

- Starts with an action verb so that the action is clear (e.g. 'develop,' 'inventory,' 'build')
- Is specific enough to be linked to one lead organization
- It is clear what the outcome will be

Each action will be proposed to the lead partner organization, which will then decide whether it can take on the action this year (accept), postpone taking it on to the following year, or decline taking it on, in which case the organization needs to provide an explanation. About three-quarters of the actions were assigned to the Village of Harrison, and the others were assigned to organizations that were represented by other CSAT members.

While action planning was done by CSAT members who addressed all eight Sustainable Harrison strategies, in future years, the community will determine the most effective model and process for action planning, e.g. to develop separate task forces to address each strategy area. A recommended process to move forward is included as an appendix to this ICSP document.

Appendix B - Proposed Initial Actions, is the list of the proposed initial actions recommended by the CSAT for consideration. Appendix C - All Actions, is the list of all the action ideas that were generated in the process.

As actions are undertaken and completed, they need to be tracked and communicated. An action monitoring tool is included in Appendix D - Action Monitoring Tool.

8.0 Indicators and Monitoring

Indicators are essential for measuring performance toward a goal and toward the descriptions of success as well as for communicating progress. Indicators should show trends over time and provide information as to where progress is being made, and if not being made, which areas actions should be directed. Monitoring and reporting should be done annually, and comprise the following steps:



For Sustainable Harrison, a set of core indicators based on the four priorities were developed. These indicators were selected based on representation of the priorities, and availability and accessibility of existing data. The core indicators are identified in relation to the Harrison's four priorities in Section 3.0 Community Priorities. Appendix E - Core Indicators, provides a list of the core indicators along with a description and data sources. Appendix F - All Potential Indicators, is the list of other potential indicators that can be measured over time. A spreadsheet for monitoring and reporting on the indicators is attached separately; a sample indicator reporting sheet is in Appendix G - Monitoring and Reporting Spreadsheet.

9.0 Targets

Sustainable Harrison strives towards continuous measurable improvement in all of its performance indicators. As such, there were no specific numeric targets developed in this process. However, the following targets have been set for GHG emissions reductions; these targets are incorporated into the ICSP:

the Village will strive to reduce community greenhouse gas emissions 16% below 2007 levels by 2020;
the FVRD has a target of 25% reduction in the residential residual waste deposited at the curb-side by the year 2016, and a secondary target of an overall 70% diversion rate, encompassing all waste sectors, by the year 2016 (FVRD Solid Waste Management Plan).

10.0 Sustainability Decision-Making Tools

The ICSP is the community's highest level policy and as such, provides guidance and tools for all decision-making. The sustainability objectives and DoS statements can provide a framework for assessing all decisions and actions.

Appendix H - Decision Making Framework, is a decision-making framework based on the four sustainability principles, Harrison's four priorities and the descriptions of success. This tool can guide decision-making on purchasing, policies, plans, etc., and can be included in any report where a decision or assessment is required.

11.0 Continuing along the Sustainability Journey

The Quick Start process was a time- and cost-effective way to develop an Integrated Community Sustainability Plan for a community to create a shared vision and then immediately begin to implement actions on the ground. However, creation of the ICSP is just the first step of many in a community's journey toward sustainability. Ensuring continued progress towards the shared vision requires annual monitoring of performance, ongoing action planning and implementation, and building increased awareness, participation and community partnerships.

Community partners are essential in realizing the vision in Sustainable Harrison. Community partners participate in annual action planning and implementation of those actions, as well as incorporate the directions of Sustainable Harrison into their own operations and practices. A sample Partnership Agreement is attached as Appendix J - Sample Partnership Agreement.

Recommendations for moving forward to continue to advance and implement Sustainable Harrison are attached as Appendix I - Next Steps.

Appendices

Glossary of Terms

Appendix A - Current Reality

Appendix B - Proposed Initial Actions

Appendix C - All Actions

Appendix D - Action Monitoring Tool

Appendix E - Core Indicators

Appendix F - All Potential Indicators

Appendix G - Monitoring and Reporting Spreadsheet

Appendix H - Decision Making Framework

Appendix I - Next Steps

Appendix J - Sample Partnership Agreement

Glossary of Terms

Backcasting: A basic planning approach where one begins with a vision of success in the future (in this case, a sustainable society) and then uses the question “what do we need to do to move from where we are today toward our vision?” to identify strategic actions.

Biodiversity: The diversity of plants, animals, and other living organisms in all their forms and levels of organization, including genes, species, ecosystems, and the evolutionary and functional processes that link them.

Carrying capacity: The maximum amount that the environment can sustain indefinitely.

Chemicals: Those substances which are known to be harmful or toxic if in contact with or ingested by humans.

Clean energy: Clean energy, also referred to as green energy, is defined here as non-polluting energy from renewable sources.

Climate change: Warming of the Earth’s climate resulting from the buildup of greenhouse gases (e.g., carbon dioxide, methane) in our atmosphere due to human activities (primarily the combustion of fossil fuels).

District energy: A locally-based energy system from renewable sources that supplies a group of buildings that are located in close proximity to share infrastructure.

Economic diversification: The characteristic of business variety in the economy both across and within individual business sectors.

Ecosystem: A functional unit of any size consisting of all the living organisms (i.e., plants, animals, and microbes) in a given area, and all the non-living physical and chemical factors of their environment, linked together through nutrient cycling and energy flow.

Ecosystem management: A holistic approach to managing our environment and making land-use decisions. It meshes human purposes with natural systems, always asserting the protection of ecological integrity as its foremost environmental priority.

Efficient: Performing or functioning in the best possible manner with the least waste possible.

Environmentally Sensitive Areas: These areas incorporate unique and sensitive habitats such as streams, lakes, wetlands, old growth forests, alluvial forests, riparian areas, and the corridors connecting them. These areas are the focus for protection from development due to their fragile and rare nature.

Food security: A community enjoys food security when all people, at all times, have access to nutritious, safe, personally acceptable and culturally appropriate foods, produced in ways that are environmentally sound and socially just.

Lifelong learning: All learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment-related perspective.

Locally-generated energy sources: Energy generated within the community, generally from renewable sources, for example, geothermal, wind or solar.

Low- impact: Technologies, supplies, fuels, etc., that produce little pollution (air, water, waste) or environmental impact (e.g. climate change).

Mixed-use: Developments that combine residential and commercial space in the same building or development. Residences above shops and live-work residences are examples of mixed-use developments. Mixed-use developments enable people to live close to work and amenities.

Official Community Plan (OCP): A bylaw adopted by Council that “a statement of objectives and policies to guide decisions on planning and land use management, within the area covered by the plan, respecting the purposes of local government.” (Local Government Act)

Renewable energy: Energy from sources that produce electricity or thermal energy without depleting resources. Renewable energy includes solar, wind, water, earth and biomass power, and energy from waste.

Stakeholder: All individuals, groups, and interests that are affected by and/or affect Harrison and its activities. This includes the natural environment and future generations.

Sustainable: In compliance with the four Sustainability Principles based on the Natural Step.

Sustainability Principles: The Village of Harrison has adopted the four sustainability principles based on the Natural Step. The Sustainability Principles:

- To reduce and eventually prevent stuff from the earth’s crust from building up in nature
- To reduce and eventually prevent manmade/unnatural stuff from building up in nature
- To reduce and eventually eliminate the degradation of natural areas and their life-supporting functions
- To allow all people to enjoy a high quality of life (through supportive and fair socio-cultural and economic conditions)

The Natural Step framework: A definition of sustainability and a long-term planning approach. See www.thenaturalstep.org/canada

Transportation alternatives: Commonly referred to as modes of transportation other than single-occupant gas or diesel powered vehicles.

Transformative or Transformational: A beneficial personal change that is sustained through time.

Appendix A: Current Reality

Arts, Culture, Recreation and Leisure

This strategy area addresses the key leisure pursuits of residents and visitors alike. It includes active and passive recreation and all forms of arts, culture and heritage, including performing, literary, visual arts, heritage buildings, biographies and the supporting built and natural infrastructure, resources, and delivery agents. This strategy addresses all expressions of culture and explores opportunities for building a flourishing and sustainable arts, culture, recreation and leisure scene in Harrison Hot Springs. It also addresses conditions required to make leisure pursuits accessible and inclusive with a minimized environmental impact. There is a connection to the economic and tourism strategy since Harrison is primarily a tourism-based economy and the main product is recreation and leisure. There is a connection to the Education, Health and Social Services strategy area since these leisure pursuits play a role in health and illness prevention.

Programs, products and services

Key Challenges and Gaps:

- Access: Lack of diversity in offerings and price points
- For youth/children: Younger age groups less satisfied with the diversity of arts and culture offerings and participate less.
- Diversification: Need to diversify beyond summer season and long weekends; Need for a night-time economy (particularly restaurants)
- Harrison Hot Springs residents noted film and literary needs as the only gaps in addition to child focussed needs.
- Sport culture needs to change, or be integrated with those happening in surrounding communities, to encourage non travel sports, local team interplay.

Opportunities and Assets:

- The four season climate and the geographic location provide the Mountain-Valley Community with a full range of recreational activities. Residents and visitors alike enjoy a variety of outdoor activities such as golf, backcountry camping, fishing, skiing (water, downhill and cross-country), snowshoeing, canoeing, hiking, cycling, and swimming.
- Communities in Bloom, Harrison Hot Springs Multicultural Choir, Social Club, Line Dancers, Harrison Festival of the Arts, Tulips of the Valley Festival, Kent Harrison Art Council
- Local government support arts and culture through project and operational grants, in-kind support, venues and infrastructure

Infrastructure and Sites

Key Challenges and Gaps:

- Arts/Culture space: Lack of exhibition opportunities to display art; Lack of associated programming e.g. live theatre. (Harrison gospel chapel as well as conference areas in the hotel sometimes work as venues to display artwork)

- Local transportation: The need for transit; lack of transportation options (public or private, i.e. taxi service) within the region to connect arts and culture events
- National/International transportation: There is no easy public transportation to or from the nearest airports. The closest airport with commercial flights is a 1.5 hr drive to the Vancouver or 45 minute to the Abbotsford airport. Harrison Hot Springs Resort & Spa has a bus plus there is a private company that provide airport service - both will pick you up at your house.
- Climate change indicators show an increase to wildfires, pests, air quality issues, evacuations and emergency preparedness, reduced recreation/backcountry access resulting in current infrastructure at many levels unable to adapt to these changes.

Opportunities and Assets:

- The Village core area is a very important business and service centre for the community.
- The beauty of the natural environment and the recreational opportunities have strengthened the attraction of the Harrison and Fraser Valley area.
- Harrison Lake, Harrison River, the mountains, and valley floor are the focus for recreational activities with summer activities for both.
- Harrison Lake has many uses and values including: cultural values for First Nations, currently a source of potable water for surrounding residents, fish and wildlife habitat, and high value recreational opportunities. The Village is currently working with Recreational Sites and Trails BC to protect Crown Land within the Bear Mountain flats area of the Village.
- Memorial Hall
- Parks and playgrounds
- Beach
- Boat launch facility
- Float plane dock and public wharf
- Ranger Station Public Art Gallery
- Proximity to Sasquatch Provincial Park
- Miami River

Communications/Education

Key challenges and gaps:

- The lack of communication strategies including networking systems
- Need for a central information directory or base to hold and dispense cultural information
- The understanding of various cultures is very limited
- Lack of trail networks and walking paths maps

Opportunities and assets:

- Village of Harrison and Tourism Harrison websites

Resources

Key challenges and gaps:

- Challenging to balance resources with the relatively large influx of weekend visitors and summer residents.

- Local and regional arts/culture organizations need to develop further to effectively support and grow arts and culture in the community and the region.
- As no staff currently exists to focus on Arts, Culture, Recreation and Leisure, new and creative ways to support activities are necessary.
- Lack of seasonal staff and staff accommodation is a concern.
- More supportive and closer connections between local culture and local business.
- Lack of partnerships in arts and culture education and workshops.

Opportunities and assets:

- Organizations: Village of Harrison, Harrison Festival Society, Parks & Recreation Commission, Kent-Harrison Arts Council

Research and Studies

Key challenges and gaps:

- Lack of data on arts, culture, recreation and leisure activities

Opportunities and assets:

- Cultural Scan Report (2008)

Plans, Policies, Regulations

Key challenges and gaps:

- Motorized vehicle recreation on the lake sometimes creates conflicts with non-motorized interests generally on peak usage days.

Opportunities and assets:

- Relevant OCP Policies:
 - 4.3.1 Improvements of Lakeshore Beach and Public Use Area for the use and enjoyment of residents and visitors.
 - 4.3.2 Village Centre Area - work toward establishing an attractive and appealing streetscape.
 - 4.3.3 Waterfront Commercial Area - Within this area, the preferred form of development is tourist-oriented commercial uses such as hotels, motels, resorts, restaurants and specialty retail stores.
 - 4.3.4 Lakeshore Marine Tourist Commercial Area - Within this area, a range of marine-oriented tourism uses such as restaurants, marinas, small hotels and related retail services are permitted. This designation provides for 'marina accommodation' that caters to the boating tourist and tourism development.
 - 4.3.6 Parking and Traffic in the Lakeshore Area - Council intends to address the issue of parking shortages and traffic congestion in the Lakeshore area during peak demand periods, including special events and the peak tourism period.
 - 4.3.7 The Hot Springs - Residents of Harrison Hot Springs want to further develop and strengthen the hot springs identity of the community.
 - 13.3.1 Public lands used as parks and open space, both developed and undeveloped are designated as Park on the Land Use Map (ref. Schedule 1-B OCP).

13.3.2 Council intends to prepare a Parks and Trails Master Plan to provide long-term direction for developing the overall parks and trail system for the use and enjoyment of residents and tourists. The Parks and Trails Master Plan will address and provide direction on many issues, including:

- Determining the most appropriate locations size, and nature of future park land acquisitions.
- Further development and directions on the Miami River Greenway Trail
- Preservation and enhancement of the network of trails throughout the community, including the implementation of a Hot Springs Road Improvement Plan (ref. Section 10 OCP)

13.3.3 Council may request cash in lieu of land dedication during subdivision. New development will contribute toward the acquisition of parkland.

13.3.4 Council intends to work co-operatively with the District of Kent and the Fraser Valley Regional District on a number of initiatives of mutual benefit, such as:

- Development of a bicycle path between Agassiz and Kent; and
- Location acquisition and development of a regional park in the area
- Plans:
 - Parks and Trails Master Plan: Staff has begun developing a parks and recreation master plan including addressing the trail network system to ensure connectivity throughout the community.
 - Parks and Trails Report (2008)

Economy and Tourism

The Economy and Tourism strategy area focuses on bringing in sufficient dollars into the community and optimizing the impact of dollars within in order strengthen the local economy. For Harrison, this means a focus on the tourism aspects of the economy, while not excluding other aspects. This strategy area also addresses opportunities for meaningful work, sustainable businesses and creating a positive climate for local businesses. This strategy also focuses on providing exceptional experiences and excellent value to visitors with the intent being to increase repeat visitation and recommendations. It includes the welcoming and servicing of visitors: (1) before their visit; (2) upon their arrival and for the duration of the stay; and (3) upon leaving.

Programs, products and services

Key Challenges and Gaps:

- Income Data: Income data indicates that a significant percentage of permanent residents earn incomes of \$18,000 (2006); Median employment income in 2005 was \$21,884 (\$26,324 (males), \$17,914 (females)); \$49,726 family median income (2005); 38% of residents worked full time, full year in 2005.
- Income on housing: According to the Local Health Area Socio-Economic Profile, 25% are paying 30% or more of their income on housing costs; average gross rent was \$681 in 2006;
- Harrison is a very seasonal destination with visitation heavily concentrated in the summer months.
- The lack of a night-time economy
- Current challenge of breaking away from a monogamous workforce to that of workplace diversity. Harrison Hot Springs is comprised primarily of service businesses. Although some service sector jobs are higher paying and offer flexibility (e.g. consultants, lawyers), many are lower paying. Employees also face high cost housing and expensive day to day costs.
- Visitors will often seek out retail and dining options in the Village and although some excellent retail and dining options are available there is room for improvement.
- Lack of packaged, market-ready, year-round tourism experiences for all seasons
- The hotel's monopoly on the hot springs water as use of the water in the public pool is not sufficient.
- Lack of retail options

Opportunities and Assets:

- Tourism is the main economic base of the community
- The tourism market is shifting towards destinations with a wider array of outdoor activities and night life, higher quality facilities and experiences, and more diverse tourism opportunities.
- Harrison Hot Springs Resort & Spa is the village's largest visitor attraction and drives visitation on a year-round basis.
- The Village experienced a 23.4% population growth between 2001 and 2006.
- The top three industries with the greatest labour force in Harrison are accommodation and food services, manufacturing, and retail trade (including food, clothing and general merchandise stores). These stats indicate a community that over the past decade has become less diverse and increasingly reliant on visitors as the economic base. (BC Stats)

- The number of overnight visitors to Harrison has fluctuated with global and regional tourism trends, while the number of local day visitors has likely increased with population growth in the Fraser Valley and local festival activities.

Infrastructure and Sites

Key Challenges and Gaps:

- Accommodation is at capacity during the summer season; however waterfront condos at the east end of Esplanade are largely vacant during the year and often in the summer. Condo rentals are overseen by the strata with bylaws indicating the number of rentals allowed, the VoH currently has little influence in this area
- Limited parking availability during peak visitor days.
- National/International Transportation: There is no easy access for commercial flights. The closest airport with commercial flights is a 1.5 hr drive to the Vancouver or 45 minutes to Abbotsford airport, and there is no public transportation to the airports from Harrison. Harrison Hot Springs Resort & Spa has a bus plus there is a private company that provide airport service - both will pick you up at your house.
- Limited local transportation options for visitors.
- Lack of integrated on-line platforms and initiatives.

Opportunities and Assets:

- A distinct village core exists that can be developed in a way that reflects Harrison's character.
- Need to improve beachfront to better the experience when visiting the beach.
- Boat launch facility
- Plaza
- Parks and playgrounds
- Washrooms
- Float plane dock and public wharf
- Beach
- Harrison Visitor Centre
- Golf course
- Ranger Station Public Art Gallery
- Beachfront redevelopment

Communications/Education

Key challenges and gaps:

- Centralized resource to communicate
- Seasonal and conflicting attitudes to tourism exist
- Lack of understanding and education on the value of the tourism system, for all types of visitors (day use and over-night)

Opportunities and assets:

- Chamber of Commerce activities

Resources

Key challenges and gaps:

- Under developed relationships with government
- Fractured organizational structure
- Attracting and developing resources
- Unemployment rate is 8.3% compared to BC rate of 6% (2006)

Opportunities and assets:

- Communities in Bloom
- Harrison Business Community, Village of Harrison Hot Springs, Ministry of Community Services, Tourism Harrison Society, service clubs and community support groups

Research and Studies

Key challenges and gaps:

- Research on amount of economy locally-based
- Lack of ongoing research on tourism numbers and measurable results
- Lack of integration of policies and branding from muni and tourism Harrison

Opportunities and assets:

- Tourism Development Strategy
- Resort Development Strategy
- BC Community Profile statistics and census data (2006)

Plans, Policies, Regulations

Key challenges and gaps:

- Incomplete Village enhancement/reinvestment plan missing for core commercial area
- Lack of new/existing business enhancements/attraction initiatives
- Lack of priority from Village on development & enhancement of key tourism activity areas
- Lack of integration of Tourism Harrison and Village

Opportunities and assets:

- OCP Chapter 2 goals based on The Regional Growth Strategy (RGS):
 - Support and Enhance the Agriculture Sector
 - Achieve Sustainable Economic Growth
- OCP: Goal 3: Develop tourism and recreation features and activities for the benefit of residents and visitors
- OCP policy: Develop an attractive, visitor-friendly Village Centre that provides a wide range of accommodation and services
- OCP policy: Work toward the beautification of the entrance corridor into Harrison Hot Springs through the preparation and implementation of a Hotsprings Road Improvement Plan
- OCP policy: Develop a comprehensive and integrated system of green spaces and pedestrian and bicycles routes through the preparation and implementation of a Parks and Trails Master Plan
- Parks and Trails Master Plan
- Economic Development Action Plan
- Harrison Kent Regional Tourism Plan (2007)
- Tourism Development Strategy
- Resort Development Strategy

Buildings and Sites

This strategy area is concerned with meeting residents' education, health and other social needs. Health needs include physical, mental, emotional, and spiritual health needs through services, infrastructure, interactions, relationships and a strong community fabric. It also includes community safety. From an individual perspective it addresses access to local and regional care services and health promotion. The education component addresses education-related participation, including formal and informal opportunities. It also addresses conditions required to make these services accessible and inclusive with minimized environmental impact. This strategy area is connected with the Arts, Culture, Recreation and Leisure strategy area since the illness prevention aspects of leisure pursuits are linked with health services.

Programs, products and services

Key Challenges and Gaps:

- Green building/development incentive program
- According to the Local Health Area Socio-Economic Profile, 25% of residents pay 30% or more of their income on housing costs.

Opportunities and Assets:

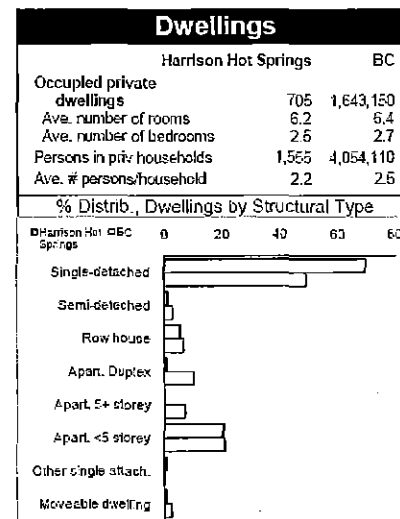
- BC Assessment data reports the assessed value of single-family dwellings was \$376,000 in 2009 and \$344,000 in 2010. The average sale price of a single-family dwelling in Harrison Hot Springs has remained relatively consistent since 2007 staying in the mid \$300,000s.

Infrastructure and Sites

Key Challenges and Gaps:

- **Space:** The limited development capacity due to the geography of the area the Village is situated in, and therefore the need to carefully integrate new development with the natural setting.
- **Density:** The supply of large vacant properties is diminishing. This will lead to redevelopment of older parts of Harrison Hot Springs where appropriate opportunities exist for higher density development and where services are available. Increased density would also create a livelier village environment.
- **Quality:** Significant residential growth has occurred in Harrison Hot Springs in recent years and there are concerns about the aesthetic appeal of development and the effects on the lakeshore scenery and on the small village character. Increased apartment development along the lakeshore has not led to significant redevelopment of the village centre or expansion of commercial services. Public space has been beautified, private space is run down however is slowly improving.
- **Effect on Tourism:** The lakeshore is a critical area of Harrison Hot Springs with a high potential for major new development and redevelopment. This area is part of the Village's commercial and tourism focus and requires special attention. Its development must be managed carefully to ensure the "small Village" character of Harrison is maintained while building on the opportunities that this area provides.
- The issues related to commercial development are primarily associated with developing an attractive and distinct tourist destination, and expanding the range of commercial services available for a growing residential population.

- **Cost:** Residents are concerned about the cost of servicing new development while also maintaining and upgrading the existing infrastructure, parks and amenities in Harrison Hot Springs.
- **Greenhouse Gas Emissions:** Buildings account for 42% of greenhouse gas emissions in the Village of Harrison Hot Springs (2007).
- **Energy Use:** Residential buildings utilize 100% of all propane distributed to community buildings and approximately 62% natural gas sold within the community (2007)
- **Energy Sources:** Most residential buildings in Harrison use either electric baseboard heating, or natural gas, also some heating oil and propane with some use of supplementary wood heating (Source: CEEP, 2010). Commercial buildings use electric baseboard heating, or natural gas. There are no shared energy systems in Harrison except for the electricity grid
- **Energy Costs:** Residential and commercial building energy costs are high due to the high cost of propane, oil, natural gas and electricity.
- **Material Use:** Residential and small commercial buildings are generally built by a local workforce, using materials imported from other parts of the country. Most homes are built to code.
- No green building design guide currently exists
- Invasive species may be included in certain landscapes, which can impact the local flora and fauna. Streamkeepers & a regional partnership exist to track and manage invasive species especially along waterways.
- Few rental opportunities exist in the VoH, most rental agreements are done privately
- Predominantly multi-family residential units are located in the lakeshore area and single family residential units are located in the remainder of the village.
- Standards for design need enhancing, current design guidelines for public and private spaces in OCP need updating
- **Opportunities and Assets:**
 - Excluding the option of future expansion into the East Sector, there are three potential approaches to accommodating growth in Harrison Hot Springs:
 - Infill development on existing vacant lots
 - Multi-family residential development in the Lakeshore area
 - Low/medium density residential subdivision within central Harrison
 - There is currently about 730 residential units in the community (2007 OCP)
 - Dwelling mix as per 2006 Census profile:



- The housing stock within the Village is younger than in the province having most buildings constructed between 1996 and 2000.
- Influence new construction: The number of building permits issued has remained consistent between 2009 and 2010 at eight, this after seeing a significant decline in building permits being issued between 2005 and 2008 (from 16 to 3).

Communications/Education

Key challenges and gaps:

-

Opportunities and assets:

-

Resources

Key challenges and gaps:

-

Opportunities and assets:

- Village of Harrison Hot Springs, school district, landowners and developers, businesses, Harrison Hot Springs Resort, utility suppliers, home owners, renters

Research and Studies

Key challenges and gaps:

- Residential water use amounts are known for new construction only recently

Opportunities and assets:

- View Preservation Strategy
- Resort Development Strategy
- Regional Growth Strategy of the Fraser Valley Regional District (FVRD)

Plans, Policies, Regulations

Key challenges and gaps:

- Currently no green building policy or bylaw
- Incomplete Village enhancement/reinvestment plan missing for core commercial area

Opportunities and assets:

- OCP Chapter 2 goals based on The Regional Growth Strategy (RGS):
 - Manage Urban Land Responsibly
 - Protect and Manage Rural and Recreational Lands
- OCP Chapter 4 Policy: Within the Lakeshore Special Planning Area, provide for a variety of uses in locations designated on the Future Land Use Map, as follows:
 - Village Centre
 - Waterfront Commercial
 - Lakeshore Marine Tourist Commercial
 - Lakeshore Residential
 - Lakeshore Beach and Public Use
- Capital Works Plan
- Village Centre Design Plan
- View Preservation Strategy
- Resort Development Strategy
- Regional Growth Strategy of the Fraser Valley Regional District (FVRD)

Land Use and Natural Areas

The Land Use and Natural Areas Strategy seeks to manage development in a way that maintains livability, natural areas, and economic development. The strategy addresses the locations, patterns and types of all physical development as well as the amount and timing of these developments. It also addresses how the community will protect, and attempt to restore ecosystem integrity and biodiversity throughout the area and region.

Programs, products and services

Key Challenges and Gaps:

- Inadequate parking availability during peak visitor days
- Few well maintained hiking and biking trails exist in close proximity to the Village
- Ownership status of surrounding areas result in few options to be developed for visitor use (including the sole-ownership of the Hot Springs held by the Hotel)

Opportunities and Assets:

- Hot Springs, within Harrison and the surrounding area
- Hike-able mountain terrain and beauty

Infrastructure and Sites

Key Challenges and Gaps:

- Due to an increased rate of growth, the Village core area is under pressure to grow and redevelop. To encourage commercial redevelopment in this location, revitalization of the public infrastructure is required.
- No consistency in look or feel exists in the Village core
- The Village of Harrison Hot Springs is facing increasing growth pressures, particularly as a result of the demand for vacation properties and second dwellings. This creates a “shadow population” which generates seasonal or peak demands on both the Village’s soft services (e.g. parks, recreation, protective services, health care, etc.) and hard services (water, waste, roads, etc.).
- Concern about the park lands in the East Sector: All Future planning should particularly consider protection of several designated rare and endangered species and threatened species of plants and animals, and other environmental factors.
- Climate change indicators show an increase to wildfires, pests, air quality issues, evacuations and emergency preparedness, reduced recreation/backcountry access resulting in current infrastructure at many levels unable to adapt to these changes.
- Geography:
 - The Village contains some known areas that are subject to hazardous conditions. These areas include the steep slopes at both the eastern and western boundaries of the Village. Significant portions of the Village are located within the floodplain.
 - On the western side of the Village, the Resource Area includes the area between the westernmost boundary of subdivided land and the west boundary of the Village. The majority of the western land consists of mountainous terrain which is heavily forested and lies entirely within the areas subject to hazardous conditions.
 - On the eastern side of the Village, the Resource Area includes the potentially unstable mountain slopes along the edge of the East Sector and relatively flat valley bottom land

between the base of Bear Mountain and McCombs Drive. These lands are partially within an area subject to hazardous conditions.

Opportunities and Assets:

- The Village currently owns about 50 ha of park land and holds a park reserve covering 32 ha on Crown land.
- Beachfront improvements are underway to mitigate erosion issues, and make the area more usable for visitors.
- The compact core area is a unique mix of stores, professional offices and restaurants that create a compact main street.
- Geography:
 - The East Sector Special Planning Area consists of about 162 hectares of land east of McCombs Drive, including the western slopes of Bear Mountain. The area is undeveloped and heavily wooded, and much of it lies within the Agricultural Land Reserve. A portion of the area is held by the Village for park (32 ha) and for public works (2 ha). The majority of the land is owned privately (29 ha) and by the Crown provincial (99 ha).
 - Harrison is located near Sasquatch Provincial Park. The Park draws in some visitors.
 - Harrison Hot Springs is located in a unique natural environment of woodlands, where still today viable native flora and fauna populations exist within and adjacent to the community. The Village is located at the south end of Harrison Lake, 124 km east of Vancouver, Harrison's land area 5.47 km².
 - Harrison is a 120 km drive to Vancouver and 1 hr from the United States. The closest airport with commercial flights is a 1.5 hr drive to the Vancouver or 45 minute to the Abbotsford airport. There is no easy public transportation to or from the nearest airports. Harrison Hot Springs Resort & Spa has a bus plus there is a private company that provide airport service - both will pick you up at your house.
- Harrison Lake has many uses and values including: cultural values for First Nations, currently a source of potable water for surrounding residents, transportation route, fish and wildlife habitat and high value recreational opportunities.
- The lagoon (currently not being used to full potential. Some lagoon-restoration plans exist in the current OCP).

Communications/Education

Key challenges and gaps:

- Lack of information regarding flora and fauna of area for education of residents and visitors
- Lack of communication with key private as well as government officials and stake holders of the lands surrounding Harrison, and the impact any degradation of these lands would have on the economic development of Harrison as a key player in Tourism in BC as a whole.

Opportunities and assets:

- Miami River Planting Project

Resources

Key challenges and gaps:

- Access to data identifying ecosystems and habitat existing in parks, crown lands, and walkways

Opportunities and assets:

- Village of Harrison Hot Springs, Agricultural Land Commission, Ministry of Agriculture and Lands, Regional District of Kent, Provincial and National Parks

Research and Studies

Key challenges and gaps:

- Climate change indicators show an increase to wildfires, pests, air quality issues, evacuations and emergency preparedness, reduced recreation/backcountry access resulting in current infrastructure at many levels unable to adapt to these changes.

Opportunities and assets:

- View Preservation Strategy
- Slope Hazard Evaluation – Harrison Hot Springs 1988, supplemented by ‘Hazard Lands - Secondary Study in 1992

Plans, Policies, Regulations

Key challenges and gaps:

- Protected area network mapping and strategy does not exist
- Climate change mitigation and adaptation strategy does not exist since climate change indicators show an increase to wildfires, pests, air quality issues, evacuations and emergency preparedness, reduced recreation/backcountry access resulting in current infrastructure at many levels unable to adapt to these changes.

Opportunities and assets:

- OCP Chapter 2 lists a number of goals based on The Regional Growth Strategy (RGS):
 - Protect the Natural Environment and Promote Environmental Stewardship
 - Protect and Manage Rural and Recreational Lands
- FUTURE LAND USE DESIGNATIONS (as per OCP):
 - Village Centre: To develop a distinct commercial and mixed commercial – residential town centre with a full range of services
 - Waterfront Commercial: To develop tourist-oriented commercial uses, with some residential uses, and sensitivity to protecting views of the lake
 - Lakeshore Marine Tourist Commercial: To develop an area of marine-oriented tourism uses with pedestrian connections to Esplanade Avenue
 - Lakeshore Residential: To develop an area of moderate density multifamily residential land uses
 - Low Density Residential: To develop an area of single family and two family dwellings
 - Tourist Commercial: To develop an area of tourist commercial uses that provides opportunities for growth of tourism activities
 - Resource: To maintain the natural resource features within the ALR and steep uplands surrounding the village
 - Public Use: To provide for a variety of school, institutional and park uses
- The East Sector to the community and the environmental and drainage concerns, no development, including park facilities, will be considered in this area until several issues are rectified – listed OCP Section 7.3.1.

- OCP policy: Areas which are physically difficult to develop will be designated as Resource
- OCP policy: Permitted uses on lands within the Resource designation include parks and public facilities, recreation facilities (private and public) agriculture, and one single family dwelling per parcel
- OCP policies: To protect development on or near steeply sloping lands; To protect development from flooding; To promote fire- smart practices in residential and commercial areas adjacent to forested areas
- OCP Section 3.3.4: Forest cover on private lands designated as Resource will be protected by a tree protection bylaw and development permit area.
- Village Centre Design Plan
- Future Land Use Designation Map
- Parks and Trails Master Plan
- Geotechnical Hazard Development Permit Area

Education, Health and Social Services

This strategy area is concerned with meeting residents' education, health and other social needs. Health needs include physical, mental, emotional, and spiritual health needs through services, infrastructure, interactions, relationships and a strong community fabric. It also includes community safety. From an individual perspective it addresses access to local and regional care services and health promotion. The education component addresses education-related participation, including formal and informal opportunities. It also addresses conditions required to make these services accessible and inclusive with minimized environmental impact. This strategy area is connected with the Arts, Culture, Recreation and Leisure strategy area since the illness prevention aspects of leisure pursuits are linked with health services.

Programs, products and services

Key Challenges and Gaps:

- No opportunities for higher formal education exist in the Village.
- No professional emergency health care services exist in the Village.
- The Village has a significant elderly population with the majority of residents over the age of 60. The proportion of seniors in the population is projected to increase, while the proportion of children and youth will decline.
- 49% of residents between the age of 25 and 54 do not have any post-secondary credentials.
- 49% of 18 year olds who did not graduate Grade 12 (Avg 2007/08-2008/09), compared to the BC average of 20%.
- Access to the hot springs water for many locals is not affordable, particularly the seniors who comprise a large portion of the residents.

Opportunities and Assets:

- The four season's climate and the geographic location provide the Mountain-Valley Community with a full range of recreational activities.
- Youth and senior interests generally met, but can be improved
- Hot springs water provides health and social opportunities to the community.
- Harrison has its own Elementary school and surrounding fields that could be utilized more for the community while school is not in session.

Infrastructure and Sites

Key Challenges and Gaps:

- Fire services may not be sufficient to meet future fire protection requirements.

Opportunities and Assets:

-

Communications/Education

Key challenges and gaps:

- More opportunities for workshops, training and lifelong learning

Opportunities and assets:

-

Resources

Key challenges and gaps:

-

Opportunities and assets:

- Village of Harrison Hot Springs, Health Authority, school district, residents, fire department

Research and Studies

Key challenges and gaps:

- 2008 BC Stats taxation statistics reported the Average Income as \$36,129 (after tax)

Opportunities and assets:

- The community is approximately 1800 permanent residents. The summer population is estimated to double, possibly triple, on weekends. The VoH gets more than 6000 vehicles entering the Village on Hotsprings Road on Saturdays as second-homeowners and tourists descend upon the community to enjoy the main attraction of Harrison Lake.
- BC Stats "Community Facts" based on the 2006 Census predicted the VoH population to be 1,594 in 2009.
- Aboriginal identity 6% of total population (2006); At the north end of Harrison Lake is a small Indian community of the In-SHUCK-ch Nation, Port Douglas, British Columbia.
- Residents generally feel safe; Good sense of community – most feel connected; however, need to engage young, educated people better.

Plans, Policies, Regulations

Key challenges and gaps:

-

Opportunities and assets:

- OCP 6.3.3 Affordable, Rental and Special Needs Housing
 - The Zoning Bylaw will provide for the use of density bonusing in as a means of encouraging the development industry to incorporate the provision of affordable or special needs housing in their residential developments

Transportation and Mobility

The Transportation and Mobility strategy area is concerned with the movement of residents and materials to, from and within a community in a more efficient and sustainable manner that is consistent with the community's rural nature. It includes all modes of local and regional transportation and focuses on vehicles, roads, trails, lighting, mass transit and supportive technologies.

Programs, products and services

Key Challenges and Gaps:

- Limited public transportation options within the community. A bus operates to Agassiz and from Agassiz to Chilliwack.
- BC transit regional services: Very limited public transportation to and from other communities, although BC Transit has a limited bus route through Harrison-Agassiz-Bridal Falls-Rosedale-Chilliwack six days of the week.
- Transportation services could be improved in a number of ways including:
 - Closer airports;
 - Improved pedestrian connections;
 - Options for recreational vehicles to access Harrison Lake;
 - Improved parking solutions;
 - Providing better connections from highway traffic into Harrison's Village core; and
 - Unique opportunities for residents and visitors with accessibility challenges.
- There is no easy access for commercial flights. The closest airport with commercial flights is a 1.5 hr drive to the Vancouver or 45 minutes to the Abbotsford airport, and there is no public transportation to the airport from Harrison. Harrison Hot Springs Resort & Spa has a bus plus there is a private company that provide airport service - both will pick you up at your house.
- Transportation accounts for 50% of Harrison's greenhouse gas emissions.
- In 2010, more than 800,000 vehicles entered the gates of the Village of Harrison Hot Springs.

Opportunities and Assets:

- 84% of employed labour force commutes by automobile and 13.7% by walking/biking
- The Village of Harrison has kept records of their vehicle fleet but not the amount of fuel used per vehicle. In 2011, the Village of Harrison vehicle fleet consisted of 17 vehicles. Of these vehicles, 18% of the municipal fleet vehicles were more than twenty years old, 41% were from the 1990's, and 35% were 2000 model year vehicles or newer.

Infrastructure and Sites

Key Challenges and Gaps:

- Lillooet Ave is a provincial highway, and therefore has more restrictions on it.
- Logging trucks often drive through town taking away from the character and feel desired by the community

Opportunities and Assets:

- The Village of Harrison has a relatively compact core that is very walkable.

- Limited parking available

Communications/Education

Key challenges and gaps:

-

Opportunities and assets:

-

Resources

Key challenges and gaps:

- Translink bus system

Opportunities and assets:

- Strong desire to make the community more transit friendly and less dependent on automobiles.
- Village of Harrison Hot Springs, Ministry of Highways, residents, business owners, landowners and developers, government, Regional Tourism, BC Transit

Research and Studies

Key challenges and gaps:

- Due to the single road leading in and out of Harrison places an increased risk for evacuation options in case of disaster.

Opportunities and assets:

- A third party was recently hired to review the traffic plan for the Village focusing on traffic calming devices and speed limits within the Village area.

Plans, Policies, Regulations

Key challenges and gaps:

- Speed restrictions upon entrance to Village may not be sufficiently ensuring the safety of bikers and vehicles.
- Lack of consistency in village signage reflecting the Village character

Opportunities and assets:

- OCP Chapter 2 lists a number of goals based on The Regional Growth Strategy (RGS):
 - Increase Transportation Choice and Efficiency
- **OCP policy:** Develop a comprehensive and integrated system of green spaces and pedestrian and bicycles routes through the preparation and implementation of a Parks and Trails Master Plan
- **OCP policies:** Designate the Major Roads shown on the Future Land Use Designation Map; Minimize through traffic on roads in residential neighbourhoods; Develop a parking plan for Esplanade Avenue and Lillooet Avenue in conjunction with the proposed Village Centre Design Plan; In collaboration with Ministry of Transportation, apply for conversion of Hotsprings Road between Lillooet Avenue and Esplanade Avenue from Provincial Highway to local road; Improve sidewalks and bicycle paths in the Village, including measures to enhance pedestrian safety along Hotsprings Road; Work with representatives from the Ministry of Air, Water and Land Protection to improve signage to the Provincial Park, and to

minimize traffic impacts on the Village of visitors to the Provincial Park; Encourage the initiation of direct bus service from the long-distance bus terminal in Chilliwack to Harrison Hot Springs; Update Development Cost Charges to help finance the capital costs of providing roads to service new development.

- Hotsprings Road Improvement Plan
- Parks and Trails Master Plan

Current Reality-External Context

Relevant external context that provides additional challenges or opportunities to move toward the DOS (e.g. regional/global trends, external funding, other levels of government).

- Long-term transportation options are currently being explored by the provincial Government

Food

The Food strategy area addresses how the community supports an affordable and reliable food system within and beyond its boundaries that nourishes resident's appetite, celebrations and culture. The strategy maintains the integrity of the land and people providing the food while moving toward a more sustainable system. It deals with food systems from farm to fork to disposal.

Programs, products and services

Key Challenges and Gaps:

- Farming as a labour force experienced a 100% decrease from 2001 to 2006 (BC Stats)
- Most food is imported from facilities far outside regional boundaries which lead to dependency on transportation requirements, high energy consumption, and potentially unsecure supply chains.
- A significant amount of energy is used throughout the food supply chain.
- Lack of Farmer's Markets
- Participation in "handpicked in the Valley" programming with local areas
- Participation in fall fair in Agassiz

Opportunities and Assets:

- Accommodation and food services is the largest industry
- Slow Food Tour

Infrastructure and Sites

Key Challenges and Gaps:

- Non organic challenges lead to soil degradation
- A short growing season combined with unstable weather conditions creates a need for diversification of crops as well as available growing and storage facilities (greenhouses, cold frames, root cellars).
- A significant amount of energy is used throughout the food supply chain.

Opportunities and Assets:

- Need to develop a strategy to incorporate food waste into the Village's solid waste management program.
- Closest farmer's market is in Agassiz

Communications/Education

Key challenges and gaps:

- Workshops and programs on gardening, organic foods, cooking, etc.
- Usage of website to promote locally grown food

Opportunities and Assets:

- Slow Food Tour

Resources

Key challenges and gaps:

-

Opportunities and assets:

- Village of Harrison Hot Springs, Ministry of Agriculture, School District, Chamber of Commerce, BC Association of Farmers' Markets, developers, residents

Research and Studies

Key challenges and gaps:

-

Opportunities and assets:

-

Plans, Policies, Regulations

Key challenges and gaps:

-

Opportunities and assets:

- OCP Chapter 2 lists a number of goals based on The Regional Growth Strategy (RGS):
 - Support and Enhance the Agriculture Sector

Energy, Waste and Water Systems

The Energy, Waste and Water strategy area is concerned with supplying high quality water and energy and materials/waste services in an affordable, reliable and sustainable way. It focuses on provincial, regional and small district energy generation and delivery systems and management practices and appropriate sourcing of water and materials, delivery, use and end of life management related to the municipality's operations and community as a whole. The energy, materials and water demand from buildings, commercial activity, transportation and land use patterns is primarily covered by those respective strategies. The scope of this strategy also extends to flood control and stormwater management.

Programs, products and services

Key Challenges and Gaps:

- The Village of Harrison is facing increasing growth pressures, particularly as a result of the demand for vacation properties and second dwellings. This growth creates tangible costs for infrastructure required to service new developments. At the same time, it also creates a "shadow population" which generates seasonal or peak demands on the Village's soft services (e.g. parks, recreation, protective services, etc.).
- Vehicle fuels – little choice or resiliency or redundancy leaving community vulnerable to fossil fuel supply cost increases and shortages.
- Building heating energy – fair choice available between electricity, natural gas, propane, and wood heat. Electricity, natural gas and propane heated buildings are vulnerable to fuel supply cost increases and delivery disruption.

Opportunities and Assets:

- The Village has made a commitment to use the Village's influence to reduce both community, and municipal corporate emissions by signing on to the BC Climate Action Charter.
- In early 2011, the Village of Harrison Hot Springs joined the FCM-ICLEI (Local Governments for Sustainability) Partners for Climate Protection (PCP) program.
- The Village of Harrison has in place a number of initiatives and programs. Including:
 - Curb-side recycling pickup for single family residential areas, with a system in place to pay for extra bags
 - The FVRD has a target of 25% reduction in the residential residual waste deposited at the curb-side by the year 2016, and a secondary target of an overall 70% diversion rate, encompassing all waste sectors, by the year 2016 (FVRD Solid Waste Management Plan)

Infrastructure and Sites

Key Challenges and Gaps:

- Future growth of Harrison Hot Springs is constrained by the availability of water, sewer, drainage and other infrastructure.
- The capacity of the sewage treatment plant is estimated to serve a population of 4,750 permanent and seasonal residents and visitors to about year 2017, and the outfall peak capacity has a remaining 15 year design horizon, subject to being able to meet water

quality standards. (Harrison is projected to have a population of 3,000 during the decade 2020-2030).

- Water supply infrastructure is currently sufficient with regard to water storage and distribution system for fire protection. Not sufficient is the filtration system.
- Risk of availability of domestic water due to potential climate change impacts
- Concern over the decline of the Miami River due to sedimentation and development
- The infrastructure needs can be generally described as follows:
 - Water Supply – proposed expansion of the reservoir capacity and extension of the intake pipe, and extension of fire protection water supply to the southern areas of the village, as well as some older areas.
 - Wastewater Management – significant upgrading of the treatment plant to meet community demand and environmental standards, improvement of collection system, and long-term planning of a new plant or connection to a regional wastewater treatment facility.
 - Stormwater Management – development of a Drainage Plan, in conjunction with Miami River restoration and East Sector planning process that will improve flood protection, reduce and manage runoff, and encourage groundwater infiltration. Currently, most of the older neighbourhoods in the village have no storm water drains, or system. Many drain pipes are not connected or maintained.
 - Solid Waste Management – promotion of the “reduce, reuse and recycle” approach to waste management.
- Need to review and develop a strategy to incorporate food waste into the Village’s solid waste management program
- Need to implement a water metering program
- Need to install a water treatment process to treat lake water for domestic use and investigate alternate source for safe water.
- Wells exist as a backup for the lake water. Much of the older section of the village still has private wells for each house. No connection to the community water system.
- Shared energy systems include is the electricity grid and the natural gas delivery system. There are no district heating systems.
- Currently no renewable energy systems for water and waste
- 50.0% of the community’s GHG emissions are from transportation, 42.7% are from buildings, and 7.2% from solid waste. 83.8% of residents drive to work.

Opportunities and Assets:

- Construction of the \$1.5 million Water Reservoir project got underway in the fall of 2009 and was commissioned in January of 2010.
- An upgrade of the Village’s Waste Water Treatment plant is underway planned for completion in January 2012.
- The Village has a curb-side collection program that includes household waste, recycling and green waste.
- There is an abundance of wood biomass in the forests of BC because of fuel management treatments, ecosystem restoration, mountain pine beetle salvage, etc. At present, much of this is unused and is left to rot or burned on-site. The BC and Federal Governments are encouraging communities to explore bio-energy opportunities and have financial and technical support available.

- Electricity is supplied from the BC Hydro grid, with the majority of electricity generated from renewable hydro electric generation stations, plus natural gas and coal fired electricity imported from Alberta and Washington.
- The Village of Harrison Hot Springs waste and recycling is collected and processed at the following locations:
 - Curb-side recycling is collected in and trucked to the Emterra facility in Chilliwack and then processed at the company's recycling facility in Surrey. (FVRD Solid Waste Management Plan Update).
 - Curb-side pick-up for waste. Waste is transported for disposal to Bailey Landfill (FVRD Solid Waste Management Plan Update)
 - Curb-side pick-up for organics is collected and transported to the Parr Road Depot in Chilliwack. (FVRD Solid Waste Management Plan Update)
 - Sewage is collected and put through a primary lagoon process in Harrison Hot Springs (Right beside the hot springs source. West side of the lake just north of the hot springs source.)
- Residents can drop off blue bag recyclables and a variety of other recyclable items at Kent Recycling. (FVRD Solid Waste Management Plan Update)
- The Harrison Mills transfer station has free stores on site where reusable household items and appliances can be dropped off or picked up free of charge. (FVRD Solid Waste Management Plan Update)
- Water Reservoir and Water Reservoir construction
- Upgrade of Waste Water Treatment Plant
- The Village of Harrison Hot Springs has untapped Geothermal potential for heating and cooling

Communications/Education

Key challenges and gaps:

-

Opportunities and assets:

-

Resources

Key challenges and gaps:

- No alternative energy sources exist or are being considered at this time

Opportunities and assets:

- Harrison Hot Springs contains the Miami River and Miami Slough and their watersheds, the various natural habitats in the East Sector, and other natural resource values associated with the steep slopes and with Harrison River.
- The source of water for the Village of Harrison Hot Springs is Harrison Lake. Halfway down Harrison Lake on its eastern shore is the valley of the Silver River, also known as the Big Silver River, one of its tributaries being the Little Silver. Opposite Silver River on the west shore of Harrison Lake is Twenty-Mile Bay, site of one of the lake's many hot springs. The Harrison enters the Fraser near the community of Chehalis.
- Village of Harrison, FCM-ICLEI (Local Governments for Sustainability), BC Hydro, Fraser Valley, businesses, residents, homeowners, land owners and developers, NGOs

Research and Studies

Key challenges and gaps:

- Climate change:
 - Is expected to impact water availability, forest ecosystems, seasons, and snowpack; over the past 50 years, the average temperature in British Columbia has risen by 1.5°C, which is greater than the global average;
 - impacts on water quantity include reduced or limited municipal water supply, reduced streamflow, decrease in aquifer recharge rate, increased flooding in early spring, drought conditions;
 - impacts on water quality include increased turbidity in streams, decreased watershed and wetland health and integrity, water treatment costs, decreased recreation.
- The 2010 corporate GHG inventory indicates that the Village of Harrison Hot Springs produced 90 tonnes of carbon dioxide (CO₂) emissions through municipal operations that year. The inventory shows that most of the emission output came from the public vehicle fleet operation, 38.29 tCO₂e that is 42.8% of the total CO₂e in 2010. The sewer accounts for 14.85 tCO₂e or 16.6% of the total CO₂e in 2010. In 2010, recreation facilities (this includes the Memorial Hall, Village Centre Plaza Square, and municipal parks) produced 10.81 tCO₂e, fire station produced 7.10 tCO₂e, public works yard compound 7.89 tCO₂e, and village office 6 tCO₂e.

Opportunities and assets:

- Water and Wastewater Sustainability Strategy
- Community Sustainable Development Strategy

Plans, Policies, Regulations

Key challenges and gaps:

- Effective measures for the utilization of non-potable water do not exist.
- Water metering exists, new construction only, making consumption extremely difficult to track.
- Currently there are no practices of protecting water sources within Harrison Hot Springs

Opportunities and assets:

- The current Village of Harrison Hot Springs OCP states that the Village will strive to reduce community greenhouse gas emissions 16% below 2007 levels by 2020.
- LONG TERM VISION
 - Includes a compact village centre
- PRIORITY ACTIVITIES
 - Zoning Bylaw – Update the zoning bylaw, revisions to densities, density bonusing
 - Parks and Trails - Prepare a master plan for an integrated network of green spaces
 - Hotsprings Road Design – Enhancing pedestrian/bicycling corridor
 - Bus Service – encourage the provision of direct bus services
 - Waste Composting – Investigate the feasibility of establishing a municipal composting program
- GOALS
 - Goal 2: Establish a distinct, pedestrian-oriented village centre with a range of commercial services.

- Goal 3: Develop tourism and recreation features and activities for the benefit of residents and visitors.
- Goal 7: Manage traffic and parking and promote transportation alternatives.
- Goal 8: Provide for a mix of housing types for all ages and incomes.
- REGIONAL CONTEXT STATEMENT
 - The Village is addressing goals contained in the Regional Growth Strategy, which will support emissions reductions, including:
 - Increase Transportation Choice and Efficiency;
 - Manage Urban Land Responsibly;
 - Develop a Network of Sustainable Communities;
 - Protect the Natural Environment and Promote Environmental Stewardship;
 - Protect and Manage Rural and Recreational Lands; and
 - Manage Water, Energy Resources, and Waste Responsibly
- Work has begun on the Community Green House Gas reduction strategies to comply with the Climate Action Charter and Bill 27 requirements.
- OCP Chapter 2 lists a number of goals based on The Regional Growth Strategy (RGS):
 - Manage Water, Energy Resources and Waste Responsibly
- OCP 10.3.1 Transportation - Roads are primarily intended to provide for the safe and efficient movement of traffic with minimal direct access to fronting properties; Minimize through traffic on roads in residential neighbourhoods; Improve sidewalks and bicycle paths in the Village; improve signage to the Provincial Park, and to minimize traffic impacts on the Village of visitors to the Provincial Park; Encourage the initiation of direct bus service from the long-distance bus terminal in Chilliwack to Harrison Hot Springs
- OCP 10.3.3 Sanitary Sewer - Review engineering and financing options and prepare plans for expanding the sewage treatment plant to serve long term population growth and tourism expansion in the community and to protect ambient water quality
- OCP 10.3.4 Water Systems - Ensure that existing and potential well sites are identified and protected; Monitor proposals to withdraw water from Harrison Lake for GVRD residents and ensure consultation with Village residents
- OCP 10.3.5 Drainage - Prepare an overall Drainage Plan for the Village; Ensure that the Drainage Plan recognizes environmental considerations
- OCP 10.3.6 Solid Waste - Work with the Fraser Valley Regional District on the implementation of the Regional Solid Waste Plan; Continue to work with all levels of government and local interest groups in the promotion of waste reduction and recycling programs; Investigate the feasibility of establishing a municipal composting program, perhaps in conjunction with the District of Kent
- OCP 10.3.7 Energy and Climate Change - Promote energy conservation, transportation efficiency and public transit in public infrastructure investments and development planning; Encourage the Provincial government to expand local government infrastructure planning grants in support of local actions to address climate change (Action 13, Weather, Climate and the Future: BC's Plan, Dec 2004); Encourage energy conservation and efficiency and other green building measures in proposals for new tourist accommodation facilities and major public facilities, including future redevelopment of the Memorial Hall
- OCP Section 2.4: Goal 10: Reduce community greenhouse gas emissions 16% below 2007 levels by 2020.

- CEEI (2007)
- Corporate Greenhouse Gas Inventory and Reduction Plan

Appendix B: Proposed Initial Actions Recommended for Consideration by CSAT

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners	Other Strategy Links
1. Buildings and Sites	1	Improve the information centre visibility	Make the current visitor info centre more visible from the street, and make it more appealing to go into it.	The current information centre is not very visible or attractive from the road and it is easily missed. It could easily become a hub for the distribution of info about the village and its surroundings.	3	Medium	High	Easy	Yes	1	Tourism Harrison	Chamber of Commerce, VCM, HHS	Economy and Tourism
	2	Determine the best location for village services	Investigate moving space for community services, information centre, village office, maintenance yard to more suitable location.	The current lands could be used in a more efficient way for the whole of the community.	2, 3	High	High	Difficult	Yes	1-2	HHS	Developer, Public-Private Partnership	Land Use and Natural Areas
	3	Sustainable building guidelines	Develop guidelines to ensure that buildings adhere to the highest standards for sustainability.	As a leading edge sustainable community Harrison needs to modify building requirements to reflect its vision.	1, 5, 4, 8	High	Moderate	Medium	Yes	1	HHS	Developers	Energy, Waste and Water systems
	4	Modify Design guidelines	Revisit the village design guidelines.	Ensure the look and feel of Harrison is in tune with the overall sustainable vision and the small town setting.	3, 4, 7, 8	High	High	Medium	Yes	1	HHS	Developers, Businesses	Economy and Tourism

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of Implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners	Other Strategy Links
2. Education, Health and Social Services	1	Community Economic Vitality, Health & Wellness Workshops	Develop and Implement Workshops allowing all stakeholders and entrepreneurs to become more aware of community business environment; increase awareness of health/wellness and technology.	Building capacity in the community.	1, 2, 3, 4, 5	Medium	High	Easy (if position available)	Possibly	Immediate & ongoing	Community Services	Partnerships with UFV/UBC/BCIT; Tourism Harrison, Village; Fraser Health	Economy and Tourism
	2	Medical/Health/Wellness Incentive	Provide needs assessment (qualitative data collection) for use in soliciting medical caregivers in the private sector.	To encourage private sector medical care givers.	1, 2, 3, 5	Medium	High	Easy	Yes	Immediate	HHS	Fraser Health	
	3	Resident Online Survey	Online survey to gauge resident perceptions and attitudes.		6, 7	Medium	High	Easy	Yes	1 year	HHS		
3. Economy and Tourism	1	Hotel/Conference Center Initiative	Develop an incentive and information package to encourage hotel/conference center use	To encourage quality hotel and meeting space.	1	Extremely High	High	Easy	Yes	1 year	Tourism Harrison	Hotels, HHS	
	2	Visitor Surveys	Develop, operate and manage visitor satisfaction and needs surveys within Harrison during peak season.	To provide quantitative information with which to make decisions	1	High	High	Easy	Yes	1 year	HHS	Tourism Harrison	Arts, Culture, Recreation and Leisure
	3	Business Incentive Program	Develop and create an incentive and information package.	Encourage local quality business expansion, as well as bring in others to fill gaps.	1, 8, 10	High	High	Easy	Yes	1 year	HHS	Chamber, Tourism Harrison	
	4	Enhance & Promote Tourism Products	Improve and add to trail signage & QR codes and tourism product diversification.	Enhance existing and add new products and value added services like signage.	2, 4, 6	High	High	Easy	Yes	1-2 years	Tourism Harrison		Education, Health and Social Services
	5	Pursue opportunities of re-development of the hot springs source and pool	Explore options for making the hot springs easily available for members of the community.	Goal to make more usable for members of the community.	4, 7	Moderate	Moderate	Moderate	Likely			HHS	Tourism Harrison

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners	Other Strategy Links
4. Arts, Culture, Recreation and Leisure	1	Events and Recreation Coordinator	Create an event coordinator position (Overlapping with all areas)	To facilitate, attract and sustain a diverse offering of events and recreation activities.	1, 2, 3, 4, 6	High	High	Difficult	High	1 year	Partnership of Tourism Harrison/HHS	Chamber, Art council	Economy and Tourism
	2	Hiking & Biking Trails	Develop a hiking/biking trail network (all types of biking – mountain, road, recreational). Use the natural areas surrounding the village.	Provide more opportunities for tourism products and commuting options.	1, 2, 3, 4, 5, 7, 8, 9, 10, 11	High	High	Difficult	High	2-3 years	HHS	Partnership Gov't tourism; Tourism Harrison; HHS, Clubs, Chamber of Commerce	Land Use and Natural Areas
	3	Vision Statement	To develop a community vision statement. (re-visit the vision statement in the next OCP update)	Having completed new branding and the ICSP, the Village is primed to update its vision statement in the OCP.	All	High	High	Moderate	Extremely High	1-2 years	HHS	All stakeholders	
	4	Arts & Culture School Initiative	Create an arts and culture school initiative to encourage the arts and culture economy. (i.e. summer stock theatre)	Assist in the operation and management of the arts society; bolster volunteers; enhance all types of arts and culture happenings in the village.	All	High	High	Easy	Extremely High	1-2 years	Art Council		Economy and Tourism
5. Energy, Waste and Water Systems	1	Renewable Energy Sources	Review and assess alternative energy sources	Provide renewable energy resources and provide energy security and a competitive advantage.	1, 2, 3	High	High	Easy	Yes	1	HHS	Environmental Groups, Developers, Utilities company	Buildings and Sites
	2	Reduce, Re-use, and Recycle program	Develop a comprehensive recycling and waste reduction program to include residents, businesses, and tourists.	Currently massive amounts of recyclable material is put in the garbage at local parks and beaches. Visitors and residents using Harrison businesses need to see that Harrison has adopted recycling at all levels of the community.	5, 7, 10	High	High	Medium	Yes	1	HHS	Environmental Groups, Chamber	Buildings and Sites

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners	Other Strategy Links
	3	Climate change adaptation and mitigation strategy	Develop a high level climate change adaptation and mitigation report highlighting the risks of climate change for the HHS.	Water shortages, floods, temperature changes, etc., are all potential risks facing the HHS. Information on these risks is beneficial for future planning.	6	High	low	Easy	Yes	1	HHS		Land Use and Natural Areas
6. Food	1	EAT LOCAL Harrison Hot Springs Program	Promote local growers and local restaurants.	To support local food producers and promote HHS as sustainable food community.	1, 3, 4	Medium	Medium/Low	Easy	Yes	1 year	Chamber	Tourism Harrison, Circle Farm,	Education, Health and Social Services
	2	Farmers Market	Encourage a Saturday Farmers Market.	To provide the space and the coordinator to organize and collect.	1, 2, 3, 4, 5, 6, 8	Medium	High	Moderate	Yes	1 year	HHS & Event Coordinator	Tourism Harrison	Education, Health and Social Services
7. Land Use and Natural Areas	1	Increase in infill development	Increase the amount of infill development in the community through zoning and OCP revisions.	Encourage higher density, discourage sprawl, and provide for more diverse and affordable housing options.	2, 3, 4, 8	High	High	Difficult	Yes	Ongoing	HHS	Developers, businesses	Buildings and Sites
	2	Beachfront improvements	Create a clean, inviting area in the current beachfront.	Improve safety, water quality and infrastructure.	1	High	High	Moderate	Yes	3 - 5	HHS	Chamber, Tourism Harrison, Environmental Groups	Economy and Tourism
	3	Hiking/walking trail program	Improve hiking/walking trails & augment them with interpretive signs and information to promote the importance of green space.	Green spaces are more likely to be considered important and to protect if consistently maintained and accessible.	1, 8	High	High	Difficult	Yes	immediate & ongoing	Streamkeepers	HHS, Groups, MoE	Arts, Culture, Recreation and Leisure
8. Transportation and Mobility	1	Transportation Strategy	Develop a strategy to support low impact forms of transportation including walking, cycling, public transit and green energy vehicles.	Improve mobility while minimizing environmental impact and increase good health.	1, 3, 4, 5	High	High	Moderate	Yes	2 years	HHS	Developers, MoT	Education, Health and Social Services
	2	Pedestrian Areas	Focus on pedestrian oriented development that is safe and friendly to all.	Health and Safety	1, 2, 3, 5, 8	High	High	Medium	Yes	Ongoing	HHS	Developers, MoT	Economy and Tourism

- * Does the proposed action and direction provide enough return on the financial, political and stakeholder investment in order to resource future actions?
- > What is the financial impact of the action on the organization if they implement the action? (Does it reduce long-term operating costs, have a strong return on investment)?
 - > What is the financial impact on other stakeholders from implementing the action?
 - > If required, would citizens be willing to pay for this policy through a tax increase? or Would enough users pay a user fee to make this policy a reality?

Appendix C: List of all Action Ideas

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners
1. Arts, Culture, Recreation and Leisure	1	Harrison Museum	Harrison should have its own museum	to enrich the visitors and residents of our own heritage which is different from Agassiz	7							
	2	Use of school buildings	In partnership with the school district, the gym could be used as a community center for public use	Elementary school with gym exists in the heart of the community. This facility, particularly the gym is under-utilized. A partnership could be made with the community and the school district to expand the existing gym facility to expand the offerings to include more of what the community needs making the facility better for everybody, and more used. Especially as the land area of the village could be used up in the foreseeable future, making a facility such as this one multi-purpose can not only conserve funds, but also space.								
	3	SuperHost (now WorldHost) program		To be mandatory for all who work with the public in Harrison								
	4	Use of the #1 attraction to Harrison – the Hot Springs.	Release the Hot Springs Water to be used by others than just the hotel	The hot springs water is not used effectively at this time in the larger picture of the community of Harrison Hot Springs. Visually, the source of the water is an embarrassing sight, and has been so for many years. Other commercial operations should have	several	high	High	Easy	Yes	1 - 2	HHS	Hotel, private partners

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of Implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners
				access to the water, and also provide locals with affordable access.								
	5	Community outdoor pools	Outdoor, perhaps indoor swimming pool incorporated into the lagoon area or otherwise close the lakeshore tourist area. Water slides? This should be an attraction to both locals and tourists. Incorporate hot springs water for part of it.	Particularly with the frequency of swimmers litch appearing at the shore areas of the lake, as well as the bad reputation of the lagoon for its drop offs and weeks at the bottom, clean swimming areas are in demand.	Several	high	high	Medium	Yes	5	HHS	Hotel, private partners
	6	Hiking and biking trails	Use the natural areas surrounding the village. This would give more opportunities for tourists as well as locals to exercise and enjoy nature.	There is a lack of hiking and biking trails in the Harrison area	Several	High	High	Medium	Yes	2	HHS	Local businesses, new developers contributions
	7	Native people's tributary day.	A festival or weekend or day designated to the first nations people and Harrison's discovery.	It would expand our culture outlook and possibly bring in tourism and gather members of the community.	#3	high					HHS	Chehalis Band, Salish Band
	8	Snow sports day	Where the youth and village work together to make a small snowboard/ski park in the school field. (i.e. a pump track)	It would give the youth something to do, and give tourists that live close by another reason to come in the winter.	#1	medium					Village workers/HHS And the youth community members.	
	9	Events Coordinator Position	Festival and events duties and responsibilities	Ensure continuation of activities	1,2,3, 5,	High	High	Difficult	Yes	ongoing	Art Society & Tourism Harrison	Village contribution \$\$
	10	Survey – during and post-event (mail in)	Data base development	Ensure satisfaction and track trends (Event Coordinator position)	1, 2, 3, 5	High	High	Moderate	Yes	ongoing	Arts Society & Tourism Harrison	Tourism Harrison & Village contribution \$\$
	11	COMMUNITY VISION	This is critical step in the sustainability of Harrison for all sections	Without a vision created from ALL stakeholders, sustainable will never be attained.	ALL	High	High	High	High	High	Collaboratio: Tourism Harrison Lead	All stakeholders
	12	Support local Arts Groups	Provide ongoing financial support to local Arts	The best way to build arts and culture is to	1, 4	high					Village, Chamber	Prov Gov.t / Kent

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of Implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners
			groups such as Harrison Festival and Arts Council	help existing groups to maintain and grow								
	13	Joint planning between Harrison & Agassiz	Harrison and Agassiz need to work together to provide a full range of arts, culture, rec and leisure opportunities	Both communities are too small to provide full range, by combining resources more can be accomplished then by duplicating	2, 6, 8	high					Village, Kent,	FVRD
	14	Harrison Museum	To provide learning's on FN history, Village history, Sasquatch legacy mini museum as part of visitor center	Many visitors to Harrison are curious about history of area and Sasquatch story	3, 1, 7						Village,	Harrison Tourism, Chamber
	15	Build a Skate Park and fix Lacrosse Box		So the young, both local and visiting, have somewhere to expend their energy without creating problems for others.								
	16	Provide more classes and activities.	Classes or lectures on gardening, the arts, our Gold Rush history, wind surfing etc.	To bring people together. Many groups are active in the village, e.g. hiking, arts, naturalists, Festival, craft shows etc. but currently little connection between them all.								
	17	Revive the Sand Castle Festivities		We are already noted for Sandcastles. Invite a group of Sand castle builders to construct 1 large sandcastle on the beach then offer lessons to families and children on weekends in how to build sand castles. Participation is the key not only art appreciation.								
2. Economy and Tourism	1	Develop a map of local attractions including slow food tour etc.	This would outline things that people could do while in Harrison. Package experiences together. i.e.;	Something like this may be available now, but is not readily available		High	High	Easy	Yes	1	HHS / chamber of commerce	

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners
			overnight stay and boat tour, or fishing tour etc. Make this map available everywhere.									
	2	Add more large hotels and conference facilities to the offering	Attract a hotel developer or chain to build a hotel and conference center in Harrison. There are numerous locations that could be utilized for this.	Harrison could be marketed as a conference destination if there were more large meeting areas as well as more hotel rooms. This would improve the overall appeal of Harrison as a destination for conferences	Various	High	High	Medium	Yes	5	HHS to source a developer	
	3	International as well as local promotion of Harrison as a package, and as a destination.	Promote Harrison (not just the hotel) as an oasis of healing, relaxing destination with a vibrant arts scene. (arts scene to be developed)	Create packages that will give visitors choices of local offerings with the essence of the community	Various	High	High	Easy	yes	ongoing	Individual hotels in conjunction with the Chamber of commerce	
	4	Trail maintenance	A group works together to clean up the trails to make sure they're walkable and enjoyable.	If stream keepers or another nature-based group did this it would be voluntary and invasive species could also be looked after.	#1,2 and 5	high					Stream keepers or other nature-based groups	HHS
	5	Trail advertisement	Signs to advertise trails and their difficulty.	Allows tourists to realize how many opportunities there are to enjoy nature and the village and its trails.	#2 and 4						HHS?	
	6	Visitor Feedback	Visitor Surveys to monitor, track: visitor satisfaction levels and market needs	Imperative in gauging product/service satisfaction; WOM; gauge advertising reach & branding efforts; tracking visitor #'s as benchmarks on community success; opportunities to spot trends & demographic changes (Tourism Harrison New position)		High	High	Very Easy	Superb	Twice/year	Tourism Harrison	Village & Chamber of Commerce; Vancouver Coast & Mnts Govt investment (student)

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of implementation	Good ROJ*	Timeframe for completion (# years)	Lead Partner	Other Partners
	7	Tourism Resources/Assets	Undertake full inventory assessment of all tourism resources; categorize by themes; develop strategies for each segment	Spot opportunities and gaps in product line ups; prioritizes activities. This will likely require another staff for Tourism Harrison (Tourism Harrison New position)		High	High	Easy (staff assignment)	Excellent	1 month	Tourism Harrison	Vancouver Coast & Mnts
	8	Business incentive program	Work to building incentive to attract the "right" businesses to Harrison i.e. Art school		1	Medium	Medium	Easy (staff assignment)	Yes	5 year plan	Village of Harrison	Tourism Harrison; Chamber of Commerce
	9	Encourage Eco Tourism	As part of Harrison's vision for sustainable/green tourism policy/financial backing for encouraging tourism activities that support that vision should be implemented	Eco tourism is not currently very advanced in Harrison, it needs to be encouraged and supported for long term growth	1,2,8						Village	Chamber
	10	Improve communication	Improve communication & education between business community, Village and residents	Residents need to understand the positive impact of businesses to economy/tax base – businesses need to understand residential concerns and issues	4,5						Chamber	Residents, Village
	11	Business Improvement	Create program to encourage business improvement particularly of run-down buildings lots	Certain buildings and lots in Harrison look run-down or unkempt. This is a negative for both visitor and resident experience. A program or incentives for beautification could help.	2,1,6						Village	Chamber
	12	Pursue opportunities of re-development of the hot springs source and pool	Explore options for making the hot springs easily available for members of the community.	Goal to make more usable for members of the community.	4, 7	Moderate	Moderate	Moderate	Likely		HHS	Tourism Harrison (?)
	13	Utilise our interesting Gold Rush history to attract tourists	Have a Paddlewheeler week when the boat is in town, with history displays in shops, and contests for people wearing 19th	Many people have enjoyed this historic tour on the boat in the last four years, proving there is a core of local people								

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of Implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners
			century costumes, etc.	interested in our First Nation, Fur trade and Gold Rush history.								
	14	Hotel/Conference Center Initiative	Develop an incentive and information package to encourage hotel/conference center use	To encourage quality hotel and meeting space.	1	Extremely High	High	Easy	Yes	1 year	Tourism Harrison	Hotels, HHS
3. Education, Health and Social Services	1	First Aid Volunteers	Level 3 First Aiders to volunteer in cases of emergency									
	2	"Book mobile"	Mobile or stationary library in the village									
	3	Establish medical facilities	Harrison needs a medical clinic and pharmacy of sorts to serve the community as well as the tourists. Offerings should include at least a part time physiotherapist, dentist as well as a full time GP in a walk in clinic.	There are no medical facilities for tourists, the hospitality work force, as well as the aging population.	Various	High	Low	Easy	Depends on need!	1 –start small and build services on it in time.	contractor	
	4	Bank or ATM machines.	Should be a trusted and recognized name brand of a bank machine i.e.; RBC or CIBC etc. People need to be able to access the cash that we want them to spend!	There are no banking services in Harrison.	Various	Medium	Low	Easy	Good	1	Recognized bank & local businesses for a location	
	5	Grocery store	Attract an investor to build and run a grocery store that could service all of the needs of the community.	Harrison needs to have a grocery store that is more than a convenience store to serve locals as well as tourists.	Various	High	High	Medium	Good	2 - 3	Grocery store chain	
	6	Community Economic Vitality, Health & Wellness Workshops	Develop and implement Workshops allowing all stakeholders and entrepreneurs to become more aware of community business environment; increase awareness of health/wellness and technology.	Building capacity in the community.	1, 2, 3, 4, 5	Medium	High	Easy (if human resources allow)	Long-term	ongoing	Community Services	Partnerships with UFV/UBC/BCIT; Tourism Harrison, Village; Fraser Health

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which Do5?	Impact (high, medium, low)	Visibility	Ease of Implementation	Good ROI?	Timeframe for completion (# years)	Lead Partner	Other Partners	
4. Energy, Waste and Water Systems	7	Resident Surveys	Online surveys (ongoing) to gauge resident perceptions and attitudes	Ensure community is "on track" with public participation	6, 7	High	High	Easy	ongoing	ongoing	Village (event coordinator)	All local stakeholders. UPV/other (BCTI?); Provincial Govt agencies	
	8	Annual Sustainability Awards	Reward local entrepreneurs, business leaders, companies engaging in sustainable efforts.	Shows encouragement of the values of sustainability: a celebration of everything and everyone that deserves recognition as a leader in sustainable initiatives and actions.	ALL	High	High	High	High	High	Collaborator: Chamber of Commerce, Tourism Harrison & Village	All stakeholders	
	9	Promote Harrison as a Healing Center	Promotion of Harrison as a healing center combined with financial incentives to encourage health related residential and visitor health services, i.e. hydrotherapy, massage, holistic medicine etc.	Harrison has a history of offering healing and to encourage this sector would support the ongoing vision for Harrison	2, 1, 3						Village		
	10	Encourage learning activities in conjunction with tourist offerings	Focus on attracting learning conferences around healthy living, FN knowledge, Saasquatch history, etc.	Try and associate Harrison with targeted learning opportunities that relate to our overall vision and are authentically Harrison	4, 3, 2								
	11	Residents Association	Create a Residents Association to provide the opportunity for community dialogue, education, input etc.	An association that could provide input to Council and other groups would give residents a stronger feeling of inclusion	6, 7							Residents	Village Chamber
	1	Alternative Energy Sources	Review and assess alternative energy sources										
	2	Make use of the geothermal energy in the hot springs	Use the natural pent up energy to heat buildings or....	In today's age of green energy and lower carbon footprint, Harrison should be a model of energy sustainability by using the untapped natural geothermal	Various	High	high	Difficult	Good	5		HHS	

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which Dos?	Impact (high, medium, low)	Visibility	Ease of implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners
				energy that is within the community								
	3	Disguise or move the waste water treatment plant		The location that the water treatment plant is in now, being so close to the source of the hot springs often creates confusion amongst visitors that this facility is part of the hot springs. With the planned expansion of the plant, it would be an opportune time to move it away from where the public tourist areas are. In light of the fact that this is an expensive, long term endeavor, some sort of disguising of it would be a shorter term –quick fix.	Various	High	High	Quick fix solution – easy. Long term solution –difficult	good	Quick fix -1. Long term solution -5 - 10		
	4	Promote Recycling with Visitors	All public venues and parks should have recycling receptacles	Currently massive amounts of recyclable material is put in the garbage at local parks and beaches	5						Village	
	5	Promote Recycling with businesses	All businesses should adopt recycling programs and they should be visible to the extent possible	Visitors and residents using Harrison businesses need to see that Harrison has adopted recycling at all levels of the community	10						Village	Chamber
	6	Local renewable energy coop	Renewable energy options are identified and public (businesses residents) given opportunity to participate as part of coop	Local renewable energy options need to be identified and then implemented – a coop can help get community involved and deal with funding	3						Village	Chamber BC Hydro Residents
5. Food	1	Compost System	Develop and implement a compost system		7							

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners
	2	Fish Market	Introduce a fish market for locally caught stock	The lake and river system provide an abundance of fish not currently available to those who do not fish themselves	5							
	3	More and diversified food offerings	Encourage more food establishments to open in Harrison to serve the increased tourist traffic that will result from the other implementations in this document.	There is a lack of quality fine dining options, as well as diversity in fast food outlets	Various	High	High	Medium	Yes	3-5	Private contractors	
	4	Seasonal offerings	Create distinct seasonal offerings in food and decorations across the restaurant offerings in the village. This can spread into the village atmosphere and will make people want to come and visit Harrison during each season. I.e.; Christmas spectacular	Creating distinct seasonal atmospheres and events can create an excuse to invite visitors to return to the village over and over.		High	High	Easy	Yes	1	HHS & Chamber of Commerce	
	5	Feasibility Study – Produce Market	Assess economic benefits to residents and local businesses of having a weekly product market held in town.	Promotes local growing of food	1, 2, 3, 4, 5, 6							
	6	Restaurant/Food Growers Collaboration	Promote local restaurants and dining out with locally grown produce	Like: Vancouver EAT OUT	1, 2, 3, 4, 5, 6							
	7	Eat Local Program	Integrate local foods, Circle Farm tour products into Harrison restaurants and café's	Healthy approach to local food that helps build the sustainable Harrison brand.	1.3.4						Chamber	
	8	Local Garden Program	Build on the current local garden program to stimulate production of local produce		5						Village	
6. Land Use and Natural Areas	1	Increase in Infill's	Increase the amount of Infill's in the community	Infill is preferred by the community	4							

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of Implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners
	2	Convert the lagoon	Create a clean, inviting swimming area in the current lagoon area	Can be done in conjunction with "community pools" above. The lagoon as it is now is underutilized as a drawing card to attract visitors to Harrison. The water is dirty, full of weeds and has a bad reputation amongst visitors due to its drop offs and water weeds. The possibilities are endless as to what could be done here. I have many ideas!		High	High	Difficult	Very good ROI	3 - 5	HHS	Developers of other new local businesses, private partners, government grants
	3	Miami river restoration	Restore the river to what it was many years ago, and use it as an attraction for water activities within the village. Link it to the proposed park land in the East sector of the village. Use it as a transportation route.	The use of this waterway can add to the charm of the village while also providing an avenue to display some of the nature that this area has to offer.		High	High	Medium	Yes	2 - 5	HHS	Community groups, private contractor
	4	Surrounding lands	Gain access and control to surrounding crown lands as well as unused private holdings. This would include crown lands within eye sight of the touristic part of Harrison that if marred would impact the beauty and charm of what Harrison is trying to promote.	The <u>visible and walkable</u> lands surrounding the village could deter visitors from coming if they were destroyed or defaced, while they can also attract visitors if they are used for their benefit. The ones accessible from the village could be used to create hiking and or biking trails, while others can be preserved in their current state for locals and visitors alike to enjoy.		High	Low, and that is the desired effect!	Medium	Good	2 - 5	HHS	Government of BC, private land owners

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners
	5	Municipal Government and Community Sustainable Stewardship Index	Online visual performance of Village decisions and actions according to resident VISION and community action teams.	Accountability and Transparency Index and Measurements of performance	ALL	High	High	Computer programming	High	High	Economic Development Committee – Village/Tourism Harrison/Art Council/Chamber	All stakeholders
	6	Limits of Acceptable Change	Determine the kinds of conditions that will be permitted to occur in the area	Recognize inevitable impacts as a result of human use. How much change is acceptable	1, 2, 6, 8	High	High	Moderate	High	High	Outside Party (lead)	All stakeholders
	7	Hiking trail program	Improve hiking trails & augment them with interpretive signs and information to promote the importance of green space	If green spaces are maintained and accessible they are more likely to be considered important to protect	1, 8	High	High				Streamkeepers	HHS, Groups, MoE
	8	Implement long term village vision	The vision and long term plan for the water front needs to be updated and implemented	The current vision for the waterfront needs to be revisited in light of the sustainability initiative, updated and implemented.	2						Village	
	9	Add pay parking		Use the income to clean up the lagoon and a bylaws enforcement officer.								
7. Buildings and Sites	1	Replacement of Memorial hall	Replace the current facility with a modern one that is more multi-purpose. Meeting rooms, function rooms, display rooms, office space, retail space etc.	The current facility, even though it was recently renovated, is out dated, and uninviting. The space that it occupies in the village is under-utilized with this building.		High	High	Difficult	Yes	3	HHS	BC government, private contractors
	2	Improve the info center visibility	Make the current visitor info center more visible from the street, and make it more appealing to go into it.	The current info center is not very visible or attractive from the road. It is easily missed. It could easily become a hub for the distribution of info about the village and its surroundings.		High	High	Easy	Yes	1	HHS	Chamber of Commerce, Tourism BC

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of Implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners
8. Transportation and Mobility	3	Determine the best location for village services	Investigate moving space for community services, information centre, village office, maintenance yard to more suitable location.	The current lands could be used in a more efficient way for the whole of the community.	2, 3	High (potential) v - depending on what the land is used for)	High	Medium	Yes - potential ally	2 - 4	HHS	Developer, Public-Private Partnership.
	4	Sustainable building	Buildings in Harrison should adhere to the highest standards for sustainability	As a leading edge sustainable community Harrison needs to modify building requirements	5						Village	
	5	Modify Design Guidelines	The design guidelines for Harrison need to reflect the importance of the small village atmosphere and natural setting of the Village	The look and feel of Harrison needs to be in tune with the overall sustainable vision and the small town setting	3						Village	
	1	Hotel shuttle service	Hotel(s) could have its (their) own airport shuttle van / bus like hotels in Whistler have. Could be shared with other hotels that will be built in the future									
	2	Transportation Strategy	Better signage, carriageway markings, road designs in the future and the knowledge that all forms of transport including cycling and walking must be addressed at the same time to save revisiting these problems in the future.	A generic management team would understand these problems and must be trained in all aspect of road and highway design.								
4	3	Car Rentals	A car rental or drop off depot would be useful for people travelling to and from the airport									
	4	Pedestrian Areas	Designate the beach front -esplanade avenue in whole or in part as a pedestrian only area to encourage people being									

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which Dos?	Impact (high, medium, low)	Visibility	Ease of implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners
			out of their cars and mingling. An open market type atmosphere for vendors and shops.									
	5	Nightlife	All of those condos on the beach front between the memorial hall and the boat launch should have been built with commercial space facing Esplanade.									
	6	Mini busses – electrically powered	Provide transportation around the community and to Agassiz	Harrison, becoming a showpiece for sustainability, can provide transportation around the community and perhaps to Agassiz using energy efficient electric busses. Likely the extent of this service would vary depending on the season.		High	High	Medium	Yes	1 - 2	HHS	Private partner or translink
	7	Community airport shuttle van that can serve Abbotsford as well as YVR	Establish a "Harrison Airport Shuttle Bus" that will transport travellers to and from the airport on a daily basis.	There is no easy transportation to and from either of the airports in the GVRD. The cost of this should be shared by each of the hotels and motels in the village according to the number of rooms offered, as well as the passengers. The shuttle should be run by an independent entity, and this bus could also serve as a transportation connection to Vancouver, not just the airport.		High	High	Easy	Yes, potentially.	1	HHS & Private contractor (not connected to any of the local hotels)	
	8	Car free Resort Destination	Create hiking, biking and paddling routes that can be undertaken from the Village without use of car	Promoting Harrison as a car free holiday destination would support our sustainable	3, 8							

Main Strategy Area	Action	Short Title	Action Description	Rationale/Comments	Which DoS?	Impact (high, medium, low)	Visibility	Ease of implementation	Good ROI*	Timeframe for completion (# years)	Lead Partner	Other Partners
				vision								

- * Does the proposed action and direction provide enough return on the financial, political and stakeholder investment in order to resource future actions?
- > What is the financial impact of the action on the organization if they implement the action? (Does it reduce long-term operating costs, have a strong return on Investment)?
- > What is the financial impact on other stakeholders from implementing the action?
- > If required, would citizens be willing to pay for this policy through a tax increase? or Would enough users pay a user fee to make this policy a reality?

Appendix D: Action Monitoring Tool

Ref #	Name of Action	Period	Status	Lead organization	Progress	Progress comment	Previous progress	Previous progress comment	Main Strategy	Strategy Links
1.1	Improve the Information centre visibility			Tourism Harrison					Buildings and Sites	Economy and Tourism
1.2	Move the village services			VoH					Buildings and Sites	Land Use and Natural Areas
1.3	Sustainable building guidelines			VoH					Buildings and Sites	Land Use and Natural Areas
1.4	Modify Design guidelines			VoH					Buildings and Sites	Energy, Waste and Water Systems
2.1	Community Economic Vitality, Health & Wellness Workshops			VoH/Tourism Harrison					Education, Health and Social Services	Economy and Tourism
2.2	Medical/Health /Wellness Incentive			VoH					Education, Health and Social Services	Education, Arts, Culture and Recreation
2.3	Resident Online Survey			VoH					Education, Health and Social Services	
3.1	Hotel/Conference Centre Initiative			VoH					Economy and Tourism	
3.2	Visitor Surveys			VoH					Economy and Tourism	Arts, Culture, Recreation and Leisure
3.3	Business Incentive Program			VoH					Economy and Tourism	
3.4	Enhance & Promote Tourism Products			Tourism Harrison					Economy and Tourism	Education, Health and Social Services
3.5	Pursue opportunities of re-development of the hot springs source and pool			VoH					Arts, Culture, Recreation and Leisure	Education, Health and Social Services
4.1	Events and Recreation Coordinator			VoH/Tourism Harrison					Arts, Culture, Recreation and Leisure	Economy and Tourism
4.2	Hiking & Biking Trails			VoH					Arts, Culture, Recreation and Leisure	Education, Health and Social Services
4.3	Vision Statement			VoH					Arts, Culture, Recreation and Leisure	

4.4	Arts & Culture School Initiative			Art Council						Arts, Culture, Recreation and Leisure	Economy and Tourism
5.1	Renewable Energy Sources			VoH						Energy, Waste and Water Systems	Buildings and Sites
5.2	Reduce, Re-use, and Recycle program			VoH						Energy, Waste and Water Systems	Buildings and Sites
5.3	Climate change adaptation and mitigation strategy			VoH						Energy, Waste and Water Systems	Land Use and Natural Areas
6.1	EAT LOCAL Harrison Hot Springs Program			Chamber						Food	Education, Health and Social Services
6.2	Farmers Market			VoH						Food	Education, Health and Social Services
7.1	Increase in Infill development			VoH						Land Use and Natural Areas	Buildings and Sites
7.2	Beachfront Improvements			VoH						Land Use and Natural Areas	Buildings and Sites
7.3	Hiking/walking trail program			VoH						Land Use and Natural Areas	Transportation and Mobility
8.1	Transportation Strategy			VoH						Transportation and Mobility	Education, Health and Social Services
8.2	Pedestrian Areas			VoH						Transportation and Mobility	Education, Health and Social Services

Appendix E: List of Recommended Core Indicators

					Sustainable Harrison Priority	Harrison Main Strategy	
1	Low Income Prevalence	Proportion of economic families below the low income cutoffs.	Prevalence of low income - the percentage of a specific group below Statistics Canada's low income cut-offs (LICO).	Resident affordability is a challenge with a range of impacts, from community quality of life to health to economic viability. It is important that community members are able to afford the basic lifestyle that enticed them to live in Harrison, and that businesses are able to attract a strong local workforce.	Stats Canada Census	Ensuring Economic Viability	Education, Health and Social Services
2	Education Attainment	Proportion of residents having attained some level of post-secondary education.	This indicator reports how many people have achieved higher level education.	Individuals' prosperity, economic opportunity, inclusion, health and sense of wellbeing is often tied to education. Education also generally contributes to a skilled and productive workforce, and helps communities to address opportunities and challenges as they arise.	Stats Canada Census	Ensuring Economic Viability	Education, Health and Social Services
3	Local Workforce	Proportion of employed labour force that both lives and works in Harrison	This indicator measures the percentage of Harrison employees living within Harrison.		Stats Canada Census	Ensuring Economic Viability	Economy and Tourism
4	Economic Dependency Ratio	Economic Dependency Ratio of residents	The ratio of transfer payments to the total employment income reported by taxfilers within an area. This indicator reports the degree of dependence on transfer payments and income assistance programs by comparing the total amounts received from other levels of government to the total tax filed income generated in the community	The dependency ratio provides information on community economic health. Comparing dollars transferred into the community from other levels of government to the taxfiled income generated by a community provides a sense of the financial dependency and/or contribution	BC Stats (~2 year lag)	Ensuring Economic Viability	Economy and Tourism
5	Median Income	Real median income	This indicator measures 'real' median individual income of people who place a Harrison address on their annual tax return. Real median income reveals whether purchasing power is increasing or decreasing relative to inflation. Actual income reported unadjusted for inflation is also displayed for comparison purposes.	Median individual income can help reflect a community's overall economic wellbeing. As a proxy of purchasing power, it is also one measure contributing to individual quality of life. Median income is a commonly measured indicator and is readily comparable across communities.	Stats Can (costs \$80)	Ensuring Economic Viability	Economy and Tourism

7	Business Licenses	Mix of new, closed and existing businesses	This indicator reports on the mix of new business licenses, renewals and non-renewed business licenses.	A healthy investment climate can be reflected in the total number of new businesses forming, continuing operations and closing. Tracking new business licenses, renewals of licenses and non-renewals provides a proxy for these categories.	Village of Harrison (VoH)	Ensuring Economic Viability	Economy and Tourism
25	Population	Total Population of Harrison and Ratios of Age Structures	This indicator measures the total size of Harrison's full-time population	A population base that is not declining indicates a desire for people to live in Harrison and is a proxy for overall satisfaction with life in the community for various demographics. Diverse communities provide more opportunities for intergenerational interaction help to measure whether communities are attractive to a range of ages. Additional analysis: Dependency rate : (population 0-14 + population over 64)/(population 15-64)*100; Rejuvenation rate: (population over 65)/(population 0-14)*100; Substitution rate: (population 15-24)/(population 55-64)*100	BC Stats/MSP Stats/Census	Enriching Community Life	Education, Health and Social Services
16	Housing Diversity	Proportion of single-family dwellings compared to multi-family, secondary suites	This indicator measures the range of housing available and the relative proportion	More housing types provides greater choice and affordability	Stats Can/BC Stats	Enriching Community Life	Buildings and Sites
19	Arts, Culture, Recreation and Leisure Participation	Proportion of residents attending any category of arts, culture, recreation and leisure offering at least once a month	This indicator measures residents' attendance at arts, culture, recreation and leisure offerings and reports on the proportion attending at least one of these offerings once a month. Arts, culture, recreation and leisure offerings are defined as: films or slide shows; live music/concerts, live theatre, dance or literary events; art galleries, art displays, museums or heritage displays.	Arts, culture, recreation and leisure events are identified as very important components of community life in the Village of Harrison. To have an ongoing presence, these events require support from both community members and visitors. Monitoring resident participation at arts, culture, recreation and leisure offerings provides a sense of the support these offerings receive from community members.	VoH, Tourism Harrison, activity operators	Enriching Community Life	Arts, Culture, Recreation and Leisure
22	Length of bike-friendly commuting routes	Total length of commuting routes in Harrison	This measures accessibility and safety of non-motorized transportation options.		VoH	Enriching Community Life	Transportation and Mobility
23	Local Transport Satisfaction	Proportion of residents satisfied with alternative transport options in Harrison	This indicator reports on resident satisfaction with Harrison's transportation alternatives to the single occupancy vehicle such as cycling and pedestrian routes (and transit).	Alternative options for transportation are important in order to transition from single occupancy vehicle (SOV) travel to more benign modes of transportation such as walking, biking, transit and carpooling. These alternative options must be convenient and attractive for use by residents or visitors.	VoH Community Survey	Enriching Community Life	Transportation and Mobility

24	Volunteer Rates	Proportion of residents who volunteered in the past year	This indicator profiles the proportion of the population volunteering for at least one hour per month.	Volunteer rates provide a sense of the level of community members' engagement in various aspects of community life. High rates of volunteerism can contribute to stronger social and economic systems as volunteers build relationships and go unpaid to provide important services to the community.	VoH Community Survey	Enriching Community Life	Education, Health and Social Services
27	Drinking Water Quality	Drinking Water Quality	This indicator measures quality of Harrison's drinking water and takes into account the frequency, duration and magnitude of water advisories. Boil water advisories are issued when tested sample results do not meet Canadian Drinking Water Guidelines and as a precautionary measure when there is some cause for concern, such as a minor break somewhere in the water delivery system. The indicator does account for water quality issues for water pipes or systems on private property.	Access to clean, healthy drinking water is a basic health requirement for people living in or visiting Harrison.	VoH, Ministry of Environment	Enriching Community Life	Energy, Waste and Water Systems
28	Usage of Lake and Beachfront	Number of people using Harrison Lake and the Beachfront in summer and winter for recreation			Count & Tourism Survey & Municipal boat launch count	Enhancing the Visitor Experience	Arts, Culture, Recreation and Leisure
30	Visitor Satisfaction	Proportion selecting the top 2 choices on a five point scale.	This indicator measures visitors' satisfaction with their overall stay in Harrison reporting on the response to "How memorable, authentic and/or transformational would you say your experience in Harrison has been?"	A memorable, authentic, and transformational visitor experience in Harrison is an essential criteria for ensuring the long-term health of Harrison's tourism economy. A strong economy in turn helps to support the health and stability of local community life. Capturing perceived experience reveals visitor's feelings about their entire trip from start to finish and influences whether the visitor will return to Harrison and promote the resort community via word of mouth	Visitor Survey	Enhancing the Visitor Experience	Economy and Tourism
21	Community Parks Satisfaction	Proportion of residents and tourists satisfied with the proximity and availability of park space in Harrison	This indicator reports on community members and visitor satisfaction with the proximity and availability of park space in Harrison.	Accessible landscaped park areas are used by a wide variety of people and they enrich community life. Urban parks facilitate interaction amongst all demographic groups in individual neighbourhoods and in the resort community as a whole.	VoH Community Survey	Enhancing the Visitor Experience	Land Use and Natural Areas

32	Low impact recreation activities	Proportion of recreational activities that are non-motorized and/or are energy efficient			Count/survey	Protecting the Environment	Arts, Culture, Recreation and Leisure
33	Energy Use	Total primary energy used including intra-community transportation	Total energy used includes the energy employed to create the electricity delivered, the energy used to generate space and water heating/cooling, as well as transportation energy for some of the larger fleets of vehicles in Harrison. Not included is the private vehicle transportation energy in Harrison as well as the embodied energy of the products used in the community.	Energy is a critical input to certain aspects of day to day life in Harrison. At the same time, non-renewable energy use has an impact on future energy supplies as well as ecosystem and human health locally and abroad. Even large renewable projects such as hydroelectric dams have significant impacts on land and aquatic ecosystems. An ability to reduce Harrison's dependence on energy resources may help the community better adapt to future price shocks, reduce overall environmental impact, and avoid associated negative health issues.	VoH, CEEP	Protecting the Environment	Energy, Waste and Water Systems
34	Greenhouse Gas Emissions	Total greenhouse gas (ghg) emissions	Total greenhouse gas (GHG) emissions results include the GHGs created from generating the electricity that we use, the energy used to generate heat/cooling, transportation energy for the larger fleets of vehicles in Harrison and estimates of the emissions from intra-community transportation as well emissions resulting from Harrison's landfilled waste.	Scientists agree that greenhouse gas emissions (GHG) are contributing to global climate change. This changing climate will impact on Harrison's local economy, community life, visitor experiences as well as directly on the local natural environment. Climate change and GHG emissions are global and local issues that require solutions at all levels and reducing Harrison's contribution is an important aspect of our commitment to stewardship of the natural environment, environmental responsibility and long-term sustainability.	CEEP	Protecting the Environment	Energy, Waste and Water Systems
36	Water Use	Total potable and non-potable water flows	Water use measures the total of water extracted then delivered from water plants and non-potable systems to end users. Water uses that are not captured within this measure include private purpose uses such as for Harrison's golf course.	Water is one of Harrison's important assets, supporting natural areas, wildlife, residents and visitors. Using water resources wisely is fundamental to an environmentally-responsible approach to living. This issue relates not only to the availability of the resource; it is also a municipal infrastructure priority that can translate into millions of dollars spent or saved. This indicator provides an important snapshot of whether demand management of water resources are resulting in overall resource conservation.	VoH	Protecting the Environment	Energy, Waste and Water Systems
37	Waste Water Effluent Quality	Number of days waste water discharge flows are out of compliance with provincial permit requirements	This indicator tracks the number of days where effluent (water leaving the waste water plant) test results are out of compliance with the permit standards.	Waste Water is a potential pressure on local and regional water bodies.	VoH	Protecting the Environment	Buildings and Sites

41	Average density	Average density of all Harrison housing stock.	This indicator measures the density of dwelling developments on land that is zoned for development. It excludes land used as parks, protected areas or very low density developments.	Density is a common measure of more sustainable planning. Increased density can reduce the costs of community infrastructure and operations, increase community interaction and vibrancy, and help protect green space. Density can also increase the viability of transit programs to reduce some of the negative impacts from transportation.	VOH	Protecting the Environment	Land Use and Natural Areas
42	Stream and Lake Health	Proportion of water bodies containing healthy populations of macroinvertebrates	This indicator helps us to better understand the health of Harrison's streams by tracking the mix and quantity of invertebrate species found in Harrison's water bodies. Complete stream and lake health monitoring is beyond the scope of the current methodology and these results should be viewed as providing preliminary knowledge.	One of Harrison's greatest assets is the abundance of healthy ecosystems supporting natural areas, wildlife, residents and visitors. Water body ecosystems are essential to the survival and enjoyment of residents/visitors and species in the natural environment. Sampling populations of small organisms is a relatively low-cost, replicable assessment that can easily illustrate the productivity of a stream.	Ministry of Environment, DFO, Streamkeepers	Protecting the Environment	Land Use and Natural Areas
45	Village Core Traffic	Annual Average Daily Traffic through the Village Core	This indicator measures the annual average daily two way traffic.	Annual average daily traffic downtown is used in this case as a proxy for the potential pollution impacts from transportation to and around Harrison, as well as modal split.	VOH count	Protecting the Environment	Transportation and Mobility
50	Materials Used	Estimated amount of all materials used and disposed (includes landfilled, recycled, composted etc.,)	This indicator represents the estimated proportion of materials recycled/composted through Waste Centres and collected at the Recycle Centres. This indicator includes biosolids if possible.	Offering visitor services and maintaining resident lifestyles and needs currently requires significant quantities of various materials. Waste is generally produced and energy generally used (embodied) in all stages of extracting, making, packaging, transporting, using and finally disposing of products and residuals. Currently, all of these lifecycle stages have potential negative environmental impacts which are measured using the proxy total material use in Kimberley. Managing material use is important and can contribute to a reduction of overall material flows. Ultimately this indicator focuses on the Reduce portion of the 3 R's.	First Class Waste Services	Protecting the Environment	Energy, Waste and Water Systems

Appendix F: List of All Potential Indicators

						Sustainable Harrison Priority	Harrison Main Strategy
1	Low Income Prevalence	Proportion of economic families below the low income cutoffs.	Prevalence of low income - the percentage of a specific group below Statistics Canada's low income cut-offs (LICO).	Resident affordability is a challenge with a range of impacts, from community quality of life to health to economic viability. It is important that community members are able to afford the basic lifestyle that enticed them to live in Harrison, and that businesses are able to attract a strong local workforce.	Stats Canada Census	Ensuring Economic Viability	Education, Health and Social Services
2	Education Attainment	Proportion of residents having attained some level of post-secondary education.	This indicator reports how many people have achieved higher level education.	Individuals' prosperity, economic opportunity, inclusion, health and sense of wellbeing is often tied to education. Education also generally contributes to a skilled and productive workforce, and helps communities to address opportunities and challenges as they arise.	Stats Canada Census	Ensuring Economic Viability	Education, Health and Social Services
3	Local Workforce	Proportion of employed labour force that both lives and works in Harrison	This indicator measures the percentage of Harrison employees living within Harrison.		Stats Canada Census	Ensuring Economic Viability	Economy and Tourism
4	Economic Dependency Ratio	Economic Dependency Ratio of residents	The ratio of transfer payments to the total employment income reported by taxfilers within an area. This indicator reports the degree of dependence on transfer payments and income assistance programs by comparing the total amounts received from other levels of government to the total tax filed income generated in the community	The dependency ratio provides information on community economic health. Comparing dollars transferred into the community from other levels of government to the taxfiled income generated by a community provides a sense of the financial dependency and/or contribution.	BC Stats (2 year lag)	Ensuring Economic Viability	Economy and Tourism
5	Median Income	Real median income	This indicator measures 'real' median individual income of people who place a Harrison address on their annual tax return. Real median income reveals whether purchasing power is increasing or decreasing relative to inflation. Actual income reported unadjusted for inflation is also displayed for comparison purposes.	Median individual income can help reflect a community's overall economic wellbeing. As a proxy of purchasing power, it is also one measure contributing to individual quality of life. Median income is a commonly measured indicator and is readily comparable across communities.	Stats Can (casts \$80)	Ensuring Economic Viability	Economy and Tourism
6	Diversity of Economy	Number of industries supporting x% of Harrison's labour force.	Labour force breakdown by main industries	This measures the diversity and balance of industries employing Harrison's labour force.	BC Stats every 5 years	Ensuring Economic Viability	Economy and Tourism

7	Business Licenses	Mix of new, closed and existing businesses	This indicator reports on the mix of new business licenses, renewals and non-renewed business licenses.	A healthy investment climate can be reflected in the total number of new businesses forming, continuing operations and closing. Tracking new business licenses, renewals of licenses and non-renewals provides a proxy for these categories.	Village of Harrison (VoH)	Ensuring Economic Viability	Economy and Tourism
8	Housing Affordability	Proportion of residents paying more than 30% of household income on housing	This indicator measures the proportion of residents spending more than 30% of their household income on housing. Housing costs include rent or mortgage payments, water, energy and taxes minus any rental income per year.	Housing costs are a significant in determining whether local employees choose to live in the community. The proportion of household income spent on housing is a standard measure of housing affordability.	BC Stats	Ensuring Economic Viability	Buildings and Sites
9	Income Below Costs	Proportion of Harrison permanent common law couple households earning below the income required to afford a specified basket of goods	This indicator measures the estimated proportion of a particular demographic group reporting incomes below the cost of a basic basket of goods including housing, transportation, food, and clothing. It is based on the Canada-wide Market Basket Measure as well as data gathered by the Federation of Canadian Municipalities.	Resident affordability is a challenge with a range of impacts, from community quality of life to the village's economic viability. It is important that community members are able to afford the basic lifestyle that enticed them to live in Harrison, and that businesses are able to attract a strong local workforce. The affordability situation for various groups can be measured by comparing Harrison's cost of living to resident incomes.	VoH, Stats Can	Ensuring Economic Viability	Education, Health and Social Services
10	Recreation Participation	Proportion of residents participating in recreation activities on more than 3 days a week	This indicator measures the proportion of Harrison residents participating in recreation activities more than three times a week.	Recreation and leisure is an important aspect of community life in Harrison Residents are encouraged to participate to lead healthy lifestyles, and to help maintain a strong recreation culture in the community. Recreating on more than three days a week both benefits individual health and displays a commitment to a recreation lifestyle.	VoH Community Survey?	Enriching Community Life	Education, Health and Social Services
11	Farmers Markets	Number of farmers markets days in the local area	This indicator measures the contribution to the local economy and food supply by local producers. ("Local" refers to any area within approximately 100km of Harrison)		VoH	Enriching Community Life	Food
12	Local Food	The proportion of restaurants that serve local food or subscription to Oceanwise.	This indicator measures the contribution to the local economy by local producers and the reduced need for transportation of non-local food. ("Local" refers to any area within approximately 100km of Harrison)		Survey of restaurants	Enriching Community Life	Food

13	Services Proximity	Average distance from all dwellings in Harrison to the closest location with convenience services	This indicator reports the average distance as the crow flies from all Harrison properties to convenience service nodes.	Convenience services provide residents with products and services such as staple groceries that are required on a daily or every two days. As well, these locations can be gathering places, encouraging interaction among neighbourhood community members. Minimizing distances between resident homes and these basic services supports walking and other alternatives to vehicle transportation.	VOH	Enriching Community Life	Land Use and Natural Areas
14	Transit Availability	Transit frequency (hours or days) within Harrison's municipal boundary.	Measures availability of bus service from Harrison to neighbouring communities.		BC Transit	Enriching Community Life	Transportation and Mobility
15	Rental Availability	Average number of listed units available for rent	The number of long term rental units listed in local newspaper each week is counted and divided to provide the annual average number of units available for rent each week.	Housing availability at affordable prices is important to help maintain a strong vibrant community and in order to attract and retain a local workforce for Harrison businesses. The number of long term rentals provides a sense of Harrison's vacant housing supply and therefore the availability for community members.	VOH / Real Estate body	Enriching Community Life	Buildings and Sites
16	Housing Diversity	Proportion of single-family dwellings compared to multi-family, secondary suites	This indicator measures the range of housing available and the relative proportion	More housing types provides greater choice and affordability	VOH	Enriching Community Life	Buildings and Sites
17	Child Development	Proportion of total kindergarten children considered vulnerable based on the Early Childhood Development Index (EDI)	This indicator reports the proportion of kindergarten children considered provincially vulnerable based on the Early Childhood Development Index (EDI). The EDI, administered in BC school districts assesses children's school readiness through measuring the following five scales: physical health and wellbeing, social competence, emotional maturity, language and cognitive development, communication and general knowledge. 'Vulnerable' refers to a child scoring within the bottom 10% of the population.	Childhood development tends to reflect the social and economic environment in which a child lives, and often correlates with overall community health. Research also shows that a person's capacity for learning, coping and overall wellbeing is shaped in the first five years of their life. The frequent use of the indicator in other jurisdictions and background research support for the metric provides validation and opportunities for comparison.	Human Early Learning Partnership UBC	Enriching Community Life	Education, Health and Social Services

18	Arts, Culture, Recreation and Leisure Programs	Number of programs	Measures range of arts, culture, recreation and leisure opportunities		VoH, Harrison Festival Society, Parks & Recreation Commission, Kent-Harrison Arts Council	Enriching Community Life	Arts, Culture, Recreation and Leisure
19	Arts, Culture, Recreation and Leisure Participation	Proportion of residents attending any category of arts, culture, recreation and leisure offering at least once a month	This indicator measures residents' attendance at arts, culture, recreation and leisure offerings and reports on the proportion attending at least one of these offerings once a month. Arts, culture, recreation and leisure offerings are defined as: films or slide shows; live music/concerts, live theatre, dance or literary events; art galleries, art displays, museums or heritage displays.	Arts, culture, recreation and leisure events are identified as very important components of community life in the Village of Harrison. To have an ongoing presence, these events require support from both community members and visitors. Monitoring resident participation at arts, culture, recreation and leisure offerings provides a sense of the support these offerings receive from community members.	VoH	Enriching Community Life	Arts, Culture, Recreation and Leisure
20	Home Gardens	Proportion of homes with gardens	This indicator measures the ability to grow food locally.		VoH Community Survey	Enriching Community Life	Food
21	Community Parks	Proportion of residents and tourists satisfied with the proximity and availability of park space in Harrison	This indicator reports on community members satisfaction with the proximity and availability of park space in Harrison	Accessible landscaped park areas are used by a wide variety of people and they enrich community life. Urban parks facilitate interaction amongst all demographic groups in individual neighbourhoods and in the resort community as a whole.	VoH Community Survey	Enriching Community Life	Land Use and Natural Areas
22	Length of bike-friendly commuting routes	Total length of commuting routes in Harrison	This measures accessibility and safety of non-motorized transportation options.		VoH	Enriching Community Life	Transportation and Mobility
23	Local Transport Satisfaction	Proportion of residents satisfied with alternative transport options in Harrison	This indicator reports on resident satisfaction with Harrison's transportation alternatives to the single occupancy vehicle such as cycling and pedestrian routes (and transit).	Alternative options for transportation are important in order to transition from single occupancy vehicle (SOV) travel to more benign modes of transportation such as walking, biking, transit and carpooling. These alternative options must be convenient and attractive for use by residents or visitors.	VoH Community Survey	Enriching Community Life	Transportation and Mobility

24	Volunteer Rates	Proportion of residents who volunteered in the past year	This indicator profiles the proportion of the population volunteering for at least one hour per month.	Volunteer rates provide a sense of the level of community members' engagement in various aspects of community life. High rates of volunteerism can contribute to stronger social and economic systems as volunteers build relationships and go unpaid to provide important services to the community.	VoH Community Survey	Enriching Community Life	Education, Health and Social Services
25	Population	Total Population of Harrison and Ratios of Age Structures	This indicator measures the total size of Harrison's full-time population. Additional analysis: Dependency rate: (population 0-14 + population over 64)/(population 15-64)*100; Rejuvenation rate: (population over 65)/(population 0-14)*100; Substitution rate: (population 15-24)/(population 55-64)*100	A population base that is not declining indicates a desire for people to live in Harrison and is a proxy for overall satisfaction with life in the community for various demographics. Diverse communities provide more opportunities for intergenerational interaction help to measure whether communities are attractive to a range of ages.	BC Stats/MSP Stats/Census	Enriching Community Life	Education, Health and Social Services
26	Arts, Culture, Recreation and Leisure Infrastructure and Facilities	Number of infrastructure and facilities that are shared among arts, culture, recreation and leisure partners to provide programming	New programs and services provided due to partnerships and collaboration		VoH, Parks & Recreation Commission, Kent-Harrison Arts Council, Fraser-Cascade School District	Enriching Community Life	Arts, Culture, Recreation and Leisure
27	Drinking Water Quality	Drinking Water Quality	This indicator measures quality of Harrison's drinking water and takes into account the frequency, duration and magnitude of water advisories. Boil water advisories are issued when tested sample results do not meet Canadian Drinking Water Guidelines and as a precautionary measure when there is some cause for concern, such as a minor break somewhere in the water delivery system.	Access to clean, healthy drinking water is a basic health requirement for people living in or visiting Harrison	VoH, Ministry of Environment	Enriching Community Life	Energy, Waste and Water Systems
28	Usage of Lake and Beachfront	Number of people using Lake Harrison and the Beachfront in summer and winter for recreation			Count & Tourism Survey	Enhancing the Visitor Experience	Arts, Culture, Recreation and Leisure
29	Diversity of Arts, Culture, Recreation and Leisure	Types of arts, culture, recreation and leisure programs	Diversity of program offerings	A mix of year-round arts, culture, recreation and leisure opportunities enhances the quality of life and visitor experience for people of all ages, abilities, incomes and interests.	VoH	Enhancing the Visitor Experience	Arts, Culture, Recreation and Leisure

30	Visitor Satisfaction	Proportion selecting the top 2 choices on a five point scale.	This indicator measures visitors' satisfaction with their overall stay in Harrison reporting on the response to "How memorable, authentic and/or transformational would you say your experience in Harrison has been?"	A memorable, authentic, and transformational visitor experience in Harrison is an essential criteria for ensuring the long-term health of Harrison's tourism economy. A strong economy in turn helps to support the health and stability of local community life. Capturing perceived experience reveals visitor's feelings about their entire trip from start to finish and influences whether the visitor will return to Harrison and promote the resort community via word of mouth	VoH Community Survey, Visitor Survey	Enhancing the Visitor Experience	Economy and Tourism
31	Green Building	Proportion of new development that is built to a comprehensive 'green building' standard	This indicator is meant to measure the proportion of new development each year that is built to a comprehensive, certified green building standard such as: LEED, Built Green or Harrison's own green building standard (if and when one exists).	Buildings, while critical for housing and numerous commercial and recreation activities, can have significant contributions to resource intensive and unethical material sourcing, clearing of natural areas, and wasteful resource use during the buildings life. Human health and productivity can be impacted by poor design and material selection while construction and deconstruction can introduce significant amounts of waste to local landfills. Comprehensive 'Green Building Standards' have the ability to reduce the negative impacts of building often creating a more livable space. Additionally many of the design features even offer a direct return on investment.	VoH	Protecting the Environment	Buildings and Sites
32	Low impact recreation activities	Proportion of recreational activities that are non-motorized and/or are energy efficient			Count/survey	Protecting the Environment	Arts, Culture, Recreation and Leisure
33	Energy Use	Total primary energy used including intra-community transportation	Total energy used includes the energy employed to create the electricity delivered, the energy used to generate space and water heating/cooling, as well as transportation energy for some of the larger fleets of vehicles in Harrison. Not included is the private vehicle transportation energy in Harrison as well as the embodied energy of the products used in the community.	Energy is a critical input to certain aspects of day to day life in Harrison. At the same time, non-renewable energy use has an impact on future energy supplies as well as ecosystem and human health locally and abroad. Even large renewable projects such as hydroelectric dams have significant impacts on land and aquatic ecosystems. An ability to reduce Harrison's dependence on energy resources may help the community better adapt to future price shocks, reduce overall environmental impact, and avoid associated negative health issues.	VoH, CEEP	Protecting the Environment	Energy, Waste and Water Systems

34	Greenhouse Gas Emissions	Total greenhouse gas (ghg) emissions	Total greenhouse gas (GHG) emissions results include the GHGs created from generating the electricity that we use, the energy used to generate heat/cooling, transportation energy for the larger fleets of vehicles in Harrison and estimates of the emissions from intra-community transportation as well emissions resulting from Harrison's landfilled waste.	Scientists agree that greenhouse gas emissions (GHG) are contributing to global climate change. This changing climate will impact on Harrison's local economy, community life, visitor experiences as well as directly on the local natural environment. Climate change and GHG emissions are global and local issues that require solutions at all levels and reducing Harrison's contribution is an important aspect of our commitment to stewardship of the natural environment, environmental responsibility and long-term sustainability.	CEEP	Protecting the Environment	Energy, Waste and Water Systems
35	Development Footprint	Total developed footprint in Harrison	The physical footprint of Harrison's developed area is calculated for this indicator. Developed areas include all zoned boundaries of land except for those zoned as parks, protected areas or extremely low density parcels of land.	Green space and access to natural areas are one of Harrison's most attractive qualities. This indicator provides the ability to track the physical growth of the urban landscape with a goal to limit continuous encroachment on the surrounding natural areas.	VoH	Protecting the Environment	Land Use and Natural Areas
36	Water Use	Total potable and non-potable water flows	Water use measures the total of water extracted then delivered from water plants and non-potable systems to end users. Water uses that are not captured within this measure include private purpose uses such as for Harrison's golf course.	Water is one of Harrison's important assets, supporting natural areas, wildlife, residents and visitors. Using water resources wisely is fundamental to an environmentally-responsible approach to living. This issue relates not only to the availability of the resource; it is also a municipal infrastructure priority that can translate into millions of dollars spent or saved. This indicator provides an important snapshot of whether demand management of water resources are resulting in overall resource conservation.	VoH	Protecting the Environment	Energy, Waste and Water Systems
37	Waste Water Effluent Quality	Number of days waste water discharge flows are out of compliance with provincial permit requirements	This indicator tracks the number of days where effluent (water leaving the waste water plant) test results are out of compliance with the permit standards.	Waste Water is a potential pressure on local and regional water bodies.	VoH	Protecting the Environment	Buildings and Sites

38	Local Air Quality	Number of days that the particulate matter 2.5 (PM2.5) is over the 24 hour >15 ug/m3 health reference level	This indicator measures the number of days that particulate matter, a local air pollutant often related to energy use, exceeds suggested health levels.	Particulate matter (PM) is the term for particles found in the air, including dust, dirt, soot, smoke, and liquid droplets. It contributes to poor air quality that negatively affects human health, and is an important measure from both a health perspective as well as attractiveness as a resort destination. Particulate matter 2.5 measures locally based contributions with a threshold based on Canada Wide Health Standards.	BC Ministry of the Environment	Protecting the Environment	Education, Health and Social Services
39	Renewable Energy Installations	Number of distributed installations (solar thermal and electricity, efficient biomass, other, ground-source heat pump)	This indicator measures the number of renewable energy installations.		VoH Community Survey?	Protecting the Environment	Energy, Waste and Water Systems
40	Low-impact Energy Bylaw	Bylaws that require renewables or low-impact energy sources for buildings	This indicator measures the legal measures to stipulate renewable/low impact energy for buildings		VoH	Protecting the Environment	Energy, Waste and Water Systems
41	Average density	Average density of all Harrison housing stock	This indicator measures the density of dwelling developments on land that is zoned for development. It excludes land used as parks, protected areas or very low density developments.	Density is a common measure of more sustainable planning. Increased density can reduce the costs of community infrastructure and operations, increase community interaction and vibrancy, and help protect green space. Density can also increase the viability of transit programs to reduce some of the negative impacts from transportation.	VoH	Protecting the Environment	Land Use and Natural Areas
42	Stream and Lake Health	Proportion of water bodies containing healthy populations of macroinvertebrates	This indicator helps us to better understand the health of Harrison's streams by tracking the mix and quantity of invertebrate species found in Harrison's water bodies. Complete stream and lake health monitoring is beyond the scope of the current methodology and these results should be viewed as providing preliminary knowledge.	One of Harrison's greatest assets is the abundance of healthy ecosystems supporting natural areas, wildlife, residents and visitors. Water body ecosystems are essential to the survival and enjoyment of residents/visitors and species in the natural environment. Sampling populations of small organisms is a relatively low-cost, replicable assessment that can easily illustrate the productivity of a stream.	Ministry of Environment, DFO, Streamkeepers	Protecting the Environment	Land Use and Natural Areas

43	Sensitive Habitat	Total hectares of sensitive habitat or/include restored.	This indicator provides a coarse understanding of the amount of remaining sensitive ecosystems (permanent wetlands, old forests, and forested floodplains and riparian areas) in Harrison. This task is achieved by assessing the extent of sensitive areas that don't overlap with developed land. Developed areas include all zoned boundaries of land except for those zoned as parks, protected areas, development buffers, or extremely low density parcels of land.	One of Harrison's greatest assets is the abundance of healthy and intact land and water ecosystems. Due to past habitat losses the current extent of permanent wetlands, old forests, and forested floodplains and riparian areas should be maintained or enlarged. Failure to do so may contribute to the fragmentation and degradation of this critical environment.	Voh	Protecting the Environment	Land Use and Natural Areas
44	Invasive Species	Distribution and size of invasive species	This indicator measures the prevalence of invasive species the built environment.		Streamkeepers, Regional District partnership	Protecting the Environment	Land Use and Natural Areas
45	Village Core Traffic	Annual Average Daily Traffic through the Village Core	This indicator measures the annual average daily two way traffic.	Annual average daily traffic downtown is used in this case as a proxy for the potential pollution impacts from transportation to and around Harrison, as well as modal split.	Voh count	Protecting the Environment	Transportation and Mobility
46	Length of Roads	Total length of roads in the Voh	The length of all paved roads in Harrison are included in this indicator. While the width of roads also impacts the environment, it is not represented.	A greater distance of roads within a specified area generally indicates more physical encroachment on nature resulting in issues such as soil erosion, loss of habitat, disruption of wildlife, noise and loss of limited land.	Voh	Protecting the Environment	Transportation and Mobility
47	Waste Diversion	Estimated proportion of materials diverted from the landfill	This indicator represents the estimated proportion of materials recycled/compost through Waste Services. The measurement includes biosolids from the waste water treatment plant that are composted.	Solid waste takes up land, emits greenhouse gases, and among other things can leach harmful materials into the surrounding environment. Recycling, one of the "Three R's" following reduce and re-use, is one strategy employed to limit the impacts of waste, and to conserve virgin material stocks such as aluminum.	First Class Waste Services, Voh	Protecting the Environment	Energy, Waste and Water Systems

48	Hazardous Materials	Proportion of total hazardous waste diverted from landfills	This indicator provides a crude estimate of the percentage of Harrison's hazardous waste that is diverted from the landfill through waste stewardship bins. Note that hazardous waste flowing through the waste water system is not captured in this measure.	Hazardous waste impacts human health and degrades the environment. Since many hazardous substances are persistent, breaking down very slowly in the environment, they build up in the air, water, food and soil. Diverting hazardous materials from the landfill helps to minimize leakage into the environment and reuses these materials as inputs for other products. Though the indicator is an estimate, it still raises awareness levels to develop actions that improve the diversion of these materials.	First Class Waste Services, Public Works?, VoH	Protecting the Environment
49	Landfilled Waste	Total amount of waste landfilled	This indicator measures the total kilograms of solid waste material collected from Harrison and disposed of in the landfill. This measure probably captures most demolition waste.	Offering visitor services and maintaining resident lifestyles and needs currently requires significant quantities of various materials, which in turn can quickly produce 'waste'. Landfilled waste represents materials that are often unnecessary or may have been used for something more purposeful such as composting, recycling or potentially energy use. Solid landfilled waste also takes up land space, emits greenhouse gases, and among other things can leach harmful materials into the surrounding environment.	First Class Waste Services	Protecting the Environment
50	Materials Used	Estimated amount of all materials used and disposed (includes landfilled, recycled, composted etc...)	This indicator represents the estimated proportion of materials recycled/composted through Waste Services and collected at the Recycle Centres. This indicator includes biosolids if possible.	Offering visitor services and maintaining resident lifestyles and needs currently requires significant quantities of various materials. Waste is generally produced and energy generally used (embodied) in all stages of extracting, making, packaging, transporting, using and finally disposing of products and residuals. Currently, all of these lifecycle stages have potential negative environmental impacts which are measured using the proxy total material use in Kimberley. Managing material use is important and can contribute to a reduction of overall material flows. Ultimately this indicator focuses on the Reduce portion of the 3 R's.	First Class Waste Services	Protecting the Environment

Appendix G: Monitoring and Reporting Spreadsheet – sample indicator

Harrison
ICSP Indicators (2010-2020)



Enriching Community Life	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Proportion of economic families below the low income cutoffs (%)														
Proportion of economic families below the low income cutoffs (%) - Absolute Change														
Proportion of economic families below the low income cutoffs (%) - 10Y % Change														
Proportion of economic families below the low income cutoffs (%) - 3 year Rolling % Change														
Proportion of economic families below the low income cutoffs (%) - 3 year Rolling % Change														
Notes or Commentary for Current Year:														

Appendix H: Sustainability Decision-Making Framework
Sustainable Harrison

Decision Making Framework

An Integrated Community Sustainability Plan is the community's highest level policy and guides decision-making at all levels. Ultimately, the vision articulated in the ICSP is implemented through daily decision-making. Below is a worksheet that outlines four strategic questions to help assess any type of action, (plan, policy, project, procurement, or practice) by using the *Sustainable Harrison* sustainability framework to inform decision-making. For a more comprehensive and user-friendly version of this tool, visit the <http://harrisonhotsprings.ca/> web page.

NAME OF PROPOSED ACTION:

BRIEF DESCRIPTION OF THE ACTION:

DATE:

REVIEWED BY:

1 DOES THE ACTION MOVE HARRISON TOWARDS OUR SHARED VISION OF SUCCESS?

Indicate which priorities the action supports:

1. Protecting the Environment 2. Ensuring Economic Viability 3. Enriching Community Life 4. Enhancing the Visitor Experience

Indicate the top *Sustainable Harrison* Strategy Areas that the action supports:

1. Buildings and Sites 2. Education, Health & Social Services 3. Economy and Tourism
 4. Arts, Culture, Recreation & Leisure 5. Energy, Waste & Water Systems 6. Food
 7. Land Use and Natural Areas 8. Transportation and Mobility

Which main Descriptions of Success would the action move us toward?

Are there any Descriptions of Success that the action may move us away from?

1.	1.
2.	2.
3.	3.





How could we maximize the positive impacts of the action?

How could we avoid or minimize these potential negative impacts of the action?

1.	1.
2.	2.
3.	3.

2 DOES THE ACTION MOVE HARRISON TOWARD OUR SHARED SUSTIANABILITY OBJECTIVES?

Does the action reduce and eventually eliminate Harrison's contribution to:

	Toward Quickly	Toward Slowly	Neutral	Away	If 'away,' how could you avoid or minimize this?
 Ongoing build-up of substances taken from the earth's crust.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 Ongoing build-up of toxic substances produced by society.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 Ongoing degradation of natural systems by physical means.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 Undermining the ability of people to meet their human needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3 DOES THE ACTION PRESENT A FLEXIBLE PLATFORM FOR FURTHER MOVEMENT TOWARDS Sustainable HARRISON?

In general, choosing actions that are as flexible as possible will help you avoid dead end situations. If technical or economic conditions change in the future, investments in flexible solutions will help ensure that these changes do not bring overly punitive costs, do not limit our ability to adapt with more sustainable solutions and ensure that future steps further reduce our impacts on natural systems.

Use the space to the right to indicate how your action incorporates long-term flexibility.

The action incorporates long-term flexibility by:

4 DOES THE ACTION PRESENT A GOOD FINANCIAL INVESTMENT?

	Capital: \$		Operating: \$/year	
What is the approximate cost of the action?				
Does this action reduce long term operating costs/ have a strong return on investment?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
If so, what is the approximate associated pay-back period for the investment?	Years:			
Have non-market costs been considered in your decision making?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
Are there financial costs to other stakeholders or citizens from the implementation of this action?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

Given your assessment of the benefits, challenges and long-term costs associated with this action, what is your level of comfort with moving forward?

<input type="checkbox"/>	Strongly support this action.
<input type="checkbox"/>	Support in principle, but support will depend on how the action is executed.
<input type="checkbox"/>	On the right track, but more information and/or substantial changes are required. Currently, not comfortable supporting this action.
<input type="checkbox"/>	The action as proposed is not supportable.

Appendix I: Next Steps: Ensuring Ongoing Success and Sustainability in Harrison

Creation of the ICSP is just the first step of many in a community's journey toward sustainability. Ensuring continued progress towards the shared vision requires annual monitoring and reporting on progress, and continued development and implementation of actions and initiatives. This document outlines the main areas for building on Harrison's ICSP and creating an ongoing process for institutionalizing sustainability in the community.

Partner with Community Stakeholders on Implementation

Since an ICSP is a long-term plan for the whole community, it is imperative that community stakeholders participate as partners with the Village of Harrison in the development and ongoing implementation of the plan. Community partners can participate in annual action planning, accept actions for implementation, participate in communicating sustainability and outcomes of the plan, and get other community partners on board.

To ensure that roles and responsibilities of community partners are clear, a partnership agreement signed between the municipality and the community partner is a useful tool. The partnership agreement should articulate a commitment to use the ICSP and its stated directions in decision-making, as well as some principles for community partnerships (e.g. collaboration, transparency). Appendix J - Sample Partnership Agreement, is attached.

While it is ideal that community partners come on board during the development of the ICSP, they can come on board at any time, as long as they are provided an understanding of the process and the benefits – to them and to the broader community – of participating in a long-term sustainability journey.

Create Task Forces

The Sustainable Harrison Community Sustainability Action Team (CSAT) can continue its role in the ICSP process and cover all strategy areas or a number of Task Forces comprised of community partners can be created to move the community forward in specific strategy areas. The benefits of creating multiple Task Forces is that it increases the number of community members actively engaged in the process, shares the workload, and helps to broaden the perspectives and expertise brought to the table, thereby strengthening the outcomes overall. These benefits should be weighed against the resources it will take to convene multiple groups into the future. Two suggestions are offered for Task Force structure:

1. Each strategy has its own Task Force: In this option, there is one Task Force for each of the Sustainable Harrison strategy areas, i.e. eight Task Forces in total.
2. Groups of strategies share one Task Force: Here, related strategies are grouped together and one Task Force is convened for each grouping. For example, the following strategy areas could be grouped, therefore requiring only four Task Forces, rather than eight as with the above option. For example:
 - a. Building and Sites + Energy, Water and Waste systems
 - b. Education, Health and Social Services + Food

- c. Land Use and Natural Areas + Transportation and Mobility
- d. Economy and Tourism + Arts, Culture, Recreation and Leisure

Annual Action Planning

Regardless of whether the Sustainable Harrison CSAT continues or Task Forces are created, one or the other should be engaged in annual action planning to ensure that the ICSP continues to be a living process and, most importantly, that it creates on-the-ground action and results. The CSAT or each Task Force reviews the results of past recommended actions, evaluates the most current indicator data, strategically assesses local and regional opportunities, and then presents a recommended set of actions for the following year.

The action planning process should continue in a manner similar to what occurred during the development of the ICSP and the initial set of actions. Here is a high-level outline of the process:

1. Before the CSAT/Task Force meeting(s):
 - a. Compile current reality information into strategy-specific documents for review by the CSAT or Task Forces before coming to the meeting. Current reality information should include: indicator performance data; status update on past actions; and updates on information critically relevant to the strategy area(s).
2. During the facilitated CSAT/Task Force meeting(s):
 - a. Review the Descriptions of Success (DoS) statements to ensure common understanding;
 - b. Review the current reality information and identify critical information gaps;
 - c. Brainstorm action ideas to move the community from the current reality toward the DoS;
 - d. Review and discuss the action ideas generated to ensure common understanding among the participants and to ensure that the actions will indeed move the community in the desired direction and won't have any unintended negative impact on other strategy area DoS;
 - e. Prioritize the actions to maximize the return (economic, sociocultural and/or environmental) on the investment based on four strategic questions:
 1. Does this action move us toward our Descriptions of Success?
 2. Does this action move us toward our Sustainability Objectives?
 3. Is this action a flexible platform for future improvement toward sustainability and success?
 4. Is this action a good financial investment?
 - f. Review and discuss the prioritized list to identify any potential gaps in the final set.
3. After the meeting(s):
 - a. Compile the actions;
 - b. Review to eliminate any overlapping and conflicting actions; and
 - c. Refine and finalize actions to ensure clarity (e.g. outcomes, lead organizations).

The prioritized actions are recommended to potential implementing organizations throughout the community, not just to the municipality, to reinforce that the ICSP is owned and implemented by a wide range of community partners.

An action monitoring spreadsheet is provided as an Appendix in the ICSP for keeping track of actions and their progress/status.

Ongoing Monitoring and Reporting

Monitoring and reporting progress toward (or away from) Harrison's vision is essential to provide transparency, inform decision-making and enable continuous improvement.

Ongoing, reliable monitoring provides the community with a number of essential functions and benefits, including:

- Informing decision-making throughout the community;
- Informing task force action planning;
- Ensuring transparency and accountability to community stakeholders;
- Engaging businesses, residents and visitors in the journey toward the vision by providing meaningful and timely information in an interactive way.

Communicating results will build excitement and support for the overall process, and should ideally be done on a regular schedule in time for action planning. The most efficient method of reporting back to the community likely is through a website. Publically-accessible, easy to understand, and easily updated, a web-based platform is fast, efficient, and effective for communicating results. Reporting in the same format and using the same metrics year after year will allow for trend spotting and systematic updating. If access to more specific data is available it is a good idea to add to the initial set of perhaps more high-level indicators with supporting ones. For example, total energy used can be reported on by sector and by energy type as well.

The initial set of priority indicators provided with Sustainable Harrison is based what type of data is currently available. An appropriate set of indicators can typically be selected through dialogue with data users, data providers and the CSAT/Task Forces. External research is then conducted to identify best practice indicators used in other jurisdictions, as well as internal research to understand what was already being reported within the community. Once this initial set of indicators is selected, other indicators without such readily available data can be added and the data sought. It's important to keep in mind that an indicator is not going to be very useful if there is no way to collect the data necessary to inform it, or that tremendous resources would be required.

Indicator assessment criteria usually include:

- Validity – to measure progress toward the descriptions of success or priorities
- Reliability – to provide consistently measured data over time
- Resource intensity (including information availability) – to achieve a balance of good data for good value
- Comparability – to benchmark against other communities where possible

It is useful to identify what currently exists in the community, region, or province that has bearing on a particular strategy, and then to build an indicator based on what that particular source might already track, or is able to track. For example, the number of vehicles on roads has bearing on a transportation strategy and an energy strategy; the number of registered vehicles per community is currently tracked by ICBC, and the number of vehicles on highways is tracked by the Province. This is an example of a good, specific indicator that could track the progress of a couple of strategies, which would then inform the progress of community priorities (in Harrison's case, Protecting the Environment).

Over time, indicators will evolve as further learning and increased capacity develops for useful reporting and monitoring. Common existing data sources include organizations such as Tourism BC, BC Hydro and Statistics Canada, and in some communities, Community Surveys, which are a great way of collecting unique information for your community. New data collection tools and sources may come on stream in the future and should be included in the monitoring system to make indicator results more robust and reliable.

One of the most important, yet often forgotten, steps in the monitoring and reporting process is celebrating successes - big or small. Celebrating successes is one of the most impactful things that can be done to maintain enthusiasm and strengthen buy-in for the ICSP. The monitoring process provides the ammunition for celebrating achievements by providing a clear reflection of the community's movement along its path towards the vision. Make community achievements public by posting on the VoH and partners' websites, advertising in the local newspaper, and presenting at local gatherings. Increased presence in the public eye will result in an increased interest in the ICSP process and in turn, more support and input from the community.

Align Decision-making with the ICSP

The ultimate goal for ICSP implementation is that *all* decisions are aligned with the ICSP, and this includes the formal decisions made by Council on policies, plans and procedures, to the day to day decisions made by staff, partners and community members on projects, practices and purchasing. There are two factors critical for successful alignment: training and tools. Decision-makers should understand the ICSP framework and how to apply it to their decision-making processes. Further, they will likely benefit from decision-informing tools, such as the ones included in Sustainable Harrison, to assist them through the process.

Revisit Harrison's Current Vision Statement

Through the ICSP process a detailed vision of Harrison emerged. These vision details are articulated in the priorities, sustainability objectives and descriptions of success for each strategy area and may or may not be consistent with the current vision statement. As creating a Vision Statement is generally a bottom up exercise, where details like those in the ICSP are articulated and then summarized in to a short one or two sentence statement, now would be a perfect time to check to see if the current vision statement encompasses the ICSP detailed vision and revise as needed. Whatever emerges from this vision statement process should be added to this document.

Current Vision Statement:

"A residential and resort community with an attractive and inviting village core of shops and services. A strong commitment to maintaining the scenic qualities, the environment, the quality of life and the vibrant recreational and cultural life combined with a high standard of development."

Periodic Review and Refinement of the ICSP

Keeping the ICSP current and ensuring that it continues to connect with stakeholder values is another important factor to attend to moving forward. While the actions are reviewed and planned

on an annual basis, other elements of the plan should be held more constant so that they can effectively guide action planning. However, the need for constancy should not outweigh the importance of reflecting the community's changing vision for the future. The one thing that will remain unchanged is the set of long-term sustainability objectives that define sustainability in the future. The other elements of the ICSP and suggestions for the frequency and method for updating them in the future are provided below.

- **Indicators:** Core indicators (based on the priorities) should be kept as constant as possible so that trends can be monitored and performance evaluated over time. However, transitioning to new and improved indicators as they become available should be considered annually so that decision-makers are armed with the best possible information.
- **Descriptions of success statements:** These should be reviewed and refined every five to ten years and be done by a CSAT team representing key community partners and stakeholders or by the Task Forces that may be created for each strategy area.
- **Vision and priorities:** The vision and priorities should be reviewed and refined every ten to twenty years through a process that includes the community at large.

Appendix J: Sample Community Partner Agreement

Harrison is blessed with an exceptional abundance of scenic beauty, recreational opportunities, and public events. Those of us who live here place high value on the natural environment and our lifestyles. Residents are actively involved in the community, which fosters a spirit that is cooperative and transformational. Together we can continue to build Harrison's success through sustainability.

As Partners, we share Harrison's vision, values and sustainability objectives.

As Partners, we commit to participating in Harrison's ongoing sustainability journey by:

- ▶ Participating in annual action planning processes;
- ▶ Implementing actions assigned to us that are within our means;
- ▶ Adopting our community's shared descriptions of success as guiding visions in the areas that we impact through our work; and
- ▶ Incorporating sustainability planning and implementation strategies in the way we do business.

As Partners, we are guided by our Partnership Principles:

COLLABORATION	INTEGRITY
INCLUSIVE ENGAGEMENT	TRANSPARENCY
INNOVATION	OPEN COMMUNICATION



VILLAGE OF HARRISON HOT SPRINGS

REPORT TO COUNCIL

TO: Mayor and Council DATE: October 3, 2011
FROM: Manager of Revenue Services FILE: 1690-01
SUBJECT: Approval for Credit Card Additions and Changes

ISSUE:

VISA Desjardins requires a copy of a resolution of Council on file to allow the CAO or the Director of Finance to sign for any additions or changes to the Village's Business Account.

RECOMMENDATION:

THAT Council appoint the CAO and the Director of Finance as signatories for approval of any additions or changes to the Village Business Account with VISA Desjardins

Respectfully submitted for your consideration;

[Signature of Peggy Parberry]
Peggy Parberry
Manager of Revenue Services

DIRECTOR OF FINANCE COMMENTS:

I concur with the recommendation.

[Signature of Dale Courtice]
Dale Courtice
Director of Finance

CHIEF ADMINISTRATIVE OFFICER COMMENTS:

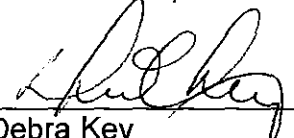
I concur with the recommendation.

[Signature of Ted Tisdale]
Ted Tisdale
Chief Administrative Officer


RECOMMENDATION:

THAT Council approve the endorsement of the Harrison Festival of the Arts Special Occasion Licence Applications.


Respectfully submitted for your consideration;


Debra Key
Deputy Chief Administrative Officer

DIRECTOR OF FINANCE COMMENTS:

fw/ 
Dale Courtice
Director of Finance

CHIEF ADMINISTRATIVE OFFICER COMMENTS:


Ted Tisdale
Chief Administrative Officer

HARRISON HOT SPRINGS

Naturally Refreshed

**VILLAGE OF HARRISON HOT SPRINGS
BYLAW NO. 988**

**A bylaw to amend Village of Harrison Hot Springs
Official Community Plan Bylaw 864, 2007**

WHEREAS the Mayor and Council has deemed it advisable to amend the Village of Harrison Hot Springs Official Community Plan Bylaw No. 864, the Official Community Plan Bylaw for the Village of Harrison Hot Springs, as adopted May 7, 2007;

NOW THEREFORE in open meeting assembled, the Mayor and Council of the Village of Harrison Hot Springs enacts as follows:

I. CITATION

This Bylaw may be cited for all purposes as the "Village of Harrison Hot Springs Official Community Plan Amendment Bylaw No. 988, 2011".

II. TEXT AMENDMENT

- A. That Schedule 1 - E, (Neighbourhood Plan – Pine Avenue) of the Village of Harrison Hot Springs Official Community Plan No. 864, be deleted and replaced with Schedule 1-E, Neighbourhood Plan – Pine Avenue, attached hereto and forming part of this Bylaw;
- B. That Schedule 1 – F (Neighbourhood Plan – Echo Avenue and Eagle Street) of the Village of Harrison Hot Springs Official Community Plan No. 864, be deleted and replaced with Schedule 1-F, Neighbourhood Plan – Echo Avenue and Eagle Street, attached hereto and forming part of this Bylaw.

III. READINGS AND ADOPTION

READ A FIRST TIME THIS 12th DAY OF SEPTEMBER, 2011

READ A SECOND TIME THIS 12th DAY OF SEPTEMBER, 2011

A PUBLIC HEARING WAS HELD ON THE _____ DAY OF _____, 2011

READ A THIRD TIME THIS _____ DAY OF _____, 2011

ADOPTED THIS _____ DAY OF _____, 2011

Mayor

Corporate Officer

SCHEDULE 1-E

NEIGHBOURHOOD PLAN – PINE AVENUE

A. POLICY FRAMEWORK

Council will utilize the following policies in guiding the development of land within the planning area:

1) Land Use Concept

A number of land use options were considered in the preparation of the **Neighbourhood Plan – Pine Avenue**. They differed with respect to the amount and location of small (400 square meters) and conventional lots (697 square meters), and low density multi family dwellings (townhouses). Only residential uses were considered.

The land use concept for the **Neighbourhood Plan – Pine Avenue** as outlined in **Appendix A**. All land fronting Hot Springs Road has been designated for small lot or multi-family residential development. New development on land fronting McCombs Drive can remain designated for conventional single family lots or alternatively be designated for small lot single family residential housing.

Based upon an average density of 35 units per hectare (14 units per acre), it is estimated that the maximum number of new dwelling units should not exceed 250 units.

2) Land Use and Density

- a) The land within the **Neighbourhood Plan – Pine Avenue** shall be developed as a residential neighbourhood.
- b) Within the **Neighbourhood Plan – Pine Avenue**, a mix of single family and multi family forms of residential development may be accommodated based upon the following maximum density limits:
 - i) Small residential lot – 400 sq. m. (4306 sq. ft.)
 - ii) Conventional residential lot – 697 sq. m. (7500 sq. ft.)
 - iii) Low density multi family residential – 35 units / ha (14 units / acre).

The maximum density limit of 35 units per ha. for the low density multi family residential development is equivalent to the density of a small residential lot subdivision.

- c) Small lot single family developments and low density multi family housing should be concentrated along Hot Springs Road and near the centre of the neighbourhood.

- d) To facilitate the efficient redevelopment of the lands, assembly of existing single family lots is the preferred approach; however redevelopment options for individual lots shall be considered.
- e) To avoid piecemeal development, rezoning applications shall only be considered for small lot residential subdivision or multi family development on sites greater than 0.4 ha (1 acre).
- f) Individual rezoning applications shall demonstrate the manner in which the proposed development will tie into adjacent lands or proposed development and to the neighbourhood as a whole.
- g) Rezoning applications for new development that would result in affordable housing opportunities for seniors or young families and that would be constructed to a higher than normal standard with green building technology shall be favourably considered.
- h) Secondary suites may be accommodated within houses on conventional single family lots subject to an amendment to the Zoning Bylaw.

3) Building Design and Landscaping

- a) Upon rezoning, multi family residential development shall be included within Multi Family Residential Development Permit Area No 3 and shall be subject to the applicable guidelines.
- b) Landscaping elements shall be incorporated along Hot Springs Road that will create a pleasing gateway into the Village.
- c) Buffers will be required in the form of landscaping along the interface with the surrounding neighborhoods to the north, east and south.

4) Transportation and Access

- a) Pine Avenue will continue to function as an east – west road within the neighbourhood.
- b) A new public east – west road connecting Hot Springs Road and McCombs Drive may be considered for ease of mobility.
- c) New internal public road(s) off Pine Avenue connecting back to Hot Springs Road or McCombs Drive may be considered.
- d) Individual driveway access onto Hot Springs Road shall be minimized and eliminated where possible.

5) Parks and Trails

- a) 0.2 ha (0.5 acre) of land, equivalent to 5% of the developable area of the neighbourhood, or payment equivalent in lieu.
- b) The neighbourhood park should be located in the central portion of the neighbourhood and should be connected to the new residential areas with trails where possible.
- c) The exact location of the proposed neighbourhood park shall be considered at the time of the subdivision or first rezoning application, however the ultimate decision shall depend upon the amount of land and location that is the subject of the first application.
- d) Both north - south and east - west pedestrian and cycling linkages shall be secured within the neighbourhood providing neighbourhood residents with connections to Hot Springs Road, McCombs Drive, and local amenities.

6) Infrastructure

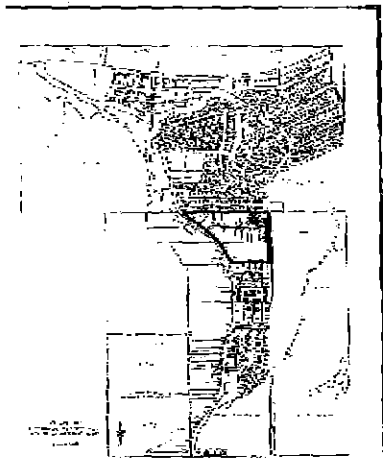
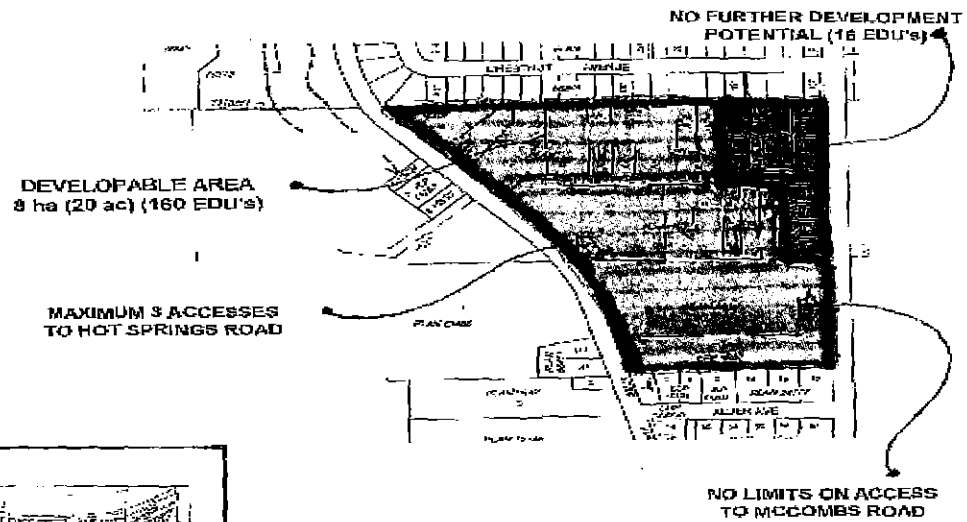
- a) Although Village services are adequate for new development in the planning area, the adequacy of the existing infrastructure to service any new development shall be determined prior to rezoning the lands.
- b) All on site works and upgrading of existing road frontages shall be the responsibility of the developer and shall be secured at the time of rezoning or subdivision.
- c) A comprehensive storm water management plan shall be prepared at time of rezoning or subdivision.

7) Environment

- a) Although there are no significant environmental features within the area, the Village shall encourage developers to retain mature trees where possible subject to the preparation of an arborist report.
- b) Clustering of development and smaller building footprints are encouraged to minimize the creation of impermeable surfaces.
- c) All development shall conform to applicable flood protection requirements.

APPENDIX A
LAND USE CONCEPT

VILLAGE OF HARRISON HOT SPRINGS
NEIGHBOURHOOD PLANNING AREA 1
PLANNING FRAMEWORK PROPOSAL



REFERRAL DOCUMENTS
NTS
OCTOBER 28, 2008

SCHEDULE 1-F

NEIGHBOURHOOD PLAN – ECHO AVENUE AND EAGLE STREET

A. BACKGROUND AND PURPOSE

The Village's Official Community Plan (OCP) designates the area bounded by Lillooet Avenue to the north, Mount Street to the east, Echo Avenue to the south, and Miami Creek to the west as **Neighbourhood Planning Area 2**. Section 3.2.4 of the OCP speaks to **Neighbourhood Planning Area 2** by indicating that the area has the potential to accommodate medium density multi family development by extending the Lakeshore Residential area designation southward provided that the redesignation takes place on the basis of a comprehensive development proposal that addresses the overall area.

B. PLANNING AREA STATISTICS

The following general information is provided for the planning area:

- 1) Size of Area: 5.5 ha (13.5 acres)
- 2) Number of Existing Lots: 46
- 3) Current Zoning: Primarily R-2 (Two Family Residential)
2 lots: R-4 (Multi Family Residential - Medium Density)
2 lots: P-1 (Community Institutional)
- 4) Existing Municipal Services: Municipal water and sewer

C. PLANNING CONTEXT AND ISSUES

Neighbourhood Planning Area 2 has been identified in the Official Community Plan as an area that could transition from a predominantly single family area with smaller older homes to an area with a series of medium density multi-family residential buildings. This neighbourhood is in close proximity to the Village's primary commercial area and Harrison Lake. Consistent with current sustainability principles, the increase in density of this neighbourhood is seen as an opportunity to promote a more walkable community enabling more people to live close to the beach and community's major amenities. The challenge for the Village in planning for the redevelopment of an existing established residential neighbourhood is the consideration of the following issues:

- 1) is the infrastructure capable of accommodating an increase in development?;
- 2) what can be done to mitigate the impacts of a neighbourhood in transition?;
- 3) will people be displaced if older housing is replaced with new housing?;

- 4) can the older homes co-exist with new development?;
- 5) will the densities be high enough to enable a developer to purchase land at a price that will be acceptable to the existing property owner?;
- 6) what are the important design features for the new housing?; and
- 7) what features can be integrated in the design of the area that would promote sustainability?

D. PLANNING PRINCIPLES

In an attempt to address the above noted issues, the redevelopment of **Neighbourhood Planning Area 2** shall respect the following planning principles:

- 1) The change of use and density of the neighbourhood shall respect the character of the single family neighbourhood on the south side of Echo Avenue.
- 2) To facilitate the efficient redevelopment of properties, the assembly of existing single family lots is the preferred approach; however redevelopment options for individual lots shall be provided where possible.
- 3) Density of development shall decrease as the distance from the lake increases.
- 4) New development shall be designed to cater to full time residents as opposed to part time residents.
- 5) Development proposals shall identify the manner in which existing residents who may be displaced will be housed elsewhere.
- 6) If necessary, new zones will be created to accommodate innovative development proposals.
- 7) Density bonuses will be considered for development projects that provide:
 - a) rental housing or have some units owned and operated by a housing society;
 - b) community amenities either within the neighbourhood or elsewhere within the Village;
 - c) green building elements that promote energy and water conservation; and
 - d) tangible opportunities for promoting alternative modes of transportation.
- 7) Infrastructure upgrades shall be the responsibility of the developer.

E. LAND USE CONCEPT

A number of land use options were considered in the preparation of the **Neighbourhood Plan**. They differed with respect to the amount and location of small (400 square meters) and conventional lots (557 - 697 square meters), and multi family dwellings (townhouses and low rise apartments). The land use concept for the **Neighbourhood Plan** is outlined in **Appendix A**, the highlights of which are as follows:

- the land fronting Lillooet Avenue and Eagle Street is designated for multi-family residential development;
- the land on the north side of Echo between Eagle and Mount is intended to remain single family in character accommodating smaller lots and / or a second smaller dwelling such as a cottage or coach house;
- the church on the south side of Lillooet would remain as part of the neighbourhood;
- Bear Avenue between Eagle and Spruce could be closed;
- the park along the Miami River would be linked to a new park at the intersection of Spruce and Lillooet that would serve the local park needs of the neighbourhood.
- the land designated as multi family outlined in Appendix B is subject to a Development Permit.

Based upon an average density of 30 units per hectare (12 units per acre), it is estimated that the maximum number of new dwelling units would be in the 120 - 150 unit range.

F. POLICY FRAMEWORK

Council will utilize the following policies in guiding the development of land within the planning area:

1. Land Use and Density

- a) The land within the **Neighbourhood Plan** shall be developed primarily as a residential neighbourhood. Commercial development as part of a mixed commercial / residential project will be accommodated on a small section of the south side of Lillooet Avenue between the Miami River park and Eagle Street. The church on the south side of Lillooet Avenue shall be retained adding diversity to the neighbourhood.
- b) Within the **Neighbourhood Plan**, a mix of single family and multi family forms of residential development may be accommodated based upon the following maximum density limits:

- i) Small residential lot – 400 sq. m. (4306 sq. ft.) minimum lot size with a 12 meter wide frontage except for panhandle lots;
 - ii) Conventional residential lot – 557 sq. m. (6000 sq. ft.) minimum lot size
 - iii) Low density multi family residential (townhouse –maximum 35 units / ha. (14 units / acre)
 - iv) Medium density multi family residential (low rise apartment – maximum 74 units / ha. (30 units / acre).
- c) The multi family site designated at the east end of Echo Avenue along Mount Road shall be developed in such a manner that vehicular access shall be arranged off of Lilfoet Avenue and not Echo.
 - d) For the lots on the north side of Echo Avenue designated Single Family, new zoning regulations shall be considered that will accommodate small cottages or guest houses in the rear portion of a lot, their size and siting to respect the single family character of the street.
 - e) The Village will consider innovative zoning regulations to retain the character house at the north-west corner of Echo and Eagle.
 - f) Secondary suites shall be accommodated within houses on conventional single family lots subject to an amendment to the Zoning Bylaw.
 - g) To facilitate the efficient redevelopment of the lands for multi family housing, assembly of existing single family lots is the preferred approach; however redevelopment options for individual lots shall be provided where possible.
 - i) Individual rezoning applications shall demonstrate the manner in which the proposed development will tie into adjacent lands or proposed development and to the neighbourhood as a whole.
 - j) Rezoning applications for new development that would result in affordable housing opportunities for seniors or young families and that would be constructed to a higher than normal standard with green building technology will be favourably considered.

2. Building Design and Landscaping

- a) Multi family residential development shall be included within Multi Family Residential Development Permit Area No. 3 and shall be subject to the applicable guidelines.
- b) Upon rezoning, small lot residential subdivision shall be the subject of development permit guidelines which shall be prepared in conjunction with the rezoning application.

3. Transportation and Access

- a) No new public roads shall be developed within the neighbourhood.
- b) The east end of Echo Road shall continue as a cul de sac and Mount Road between Lillooet and Echo will not be developed as a connecting road.
- c) Bear Avenue may be closed and disposed of to the adjoining properties when redevelopment takes place, but a trail link shall be maintained between the Miami River trail and the new park at Spruce Street.
- d) Spruce Street may be closed and converted into a neighbourhood park. That portion of Spruce Street that connects to Echo could be sold off as a single family lot, but in no way will any existing houses lose their driveway accesses.

4. Parks and Trails

- a) A new neighbourhood park utilizing the Spruce Street and Bear Avenue rights of way should be created and connected to the residential areas with trails where possible.
- b) As a condition of rezoning, developers will be requested to make a financial contribution towards the development of the Spruce Street Park or another community Park.
- c) The trails along the east side of the Miami River and within the Mount Street road allowance shall continue to provide important north – south trail linkages.

5. Infrastructure

- a) Although the Village wide water, sewer, and road systems are considered adequate for new development in the planning area, the adequacy of the existing on-site infrastructure to service new development shall be determined prior to rezoning the lands.
- b) Any required off-site, on-site, or upgrading of existing road frontages shall be the responsibility of the developer and shall be secured at the time of rezoning or subdivision as the case may be.

6. Environment and Hazard Land

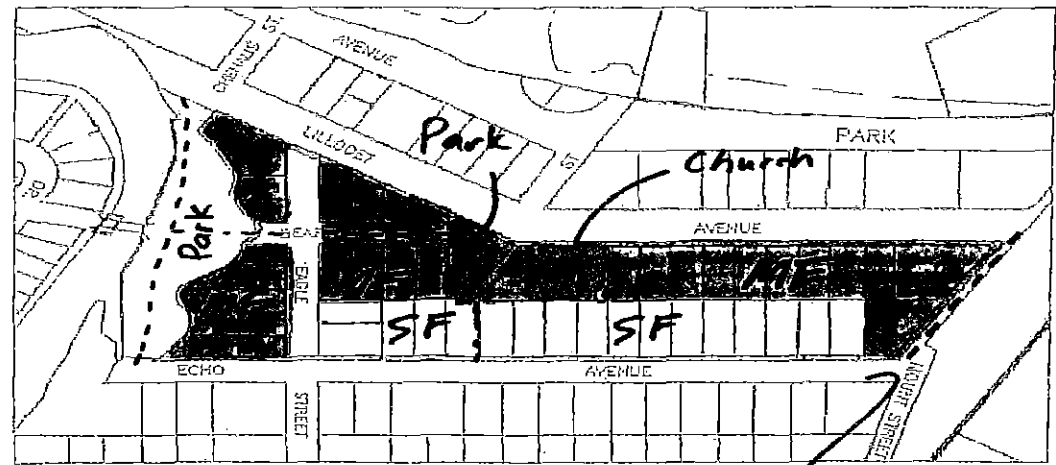
- a) Although there are no significant environmental features within the area, the Village shall encourage developers to retain mature trees where possible subject to the preparation of an arborist report.
- b) Clustering of development and smaller building footprints are encouraged to minimize the creation of impermeable surfaces.




- c) All development shall conform to applicable flood protection requirements.
- d) Redevelopment of the sites at the far east end of the Neighbourhood Plan area shall be subject to the applicable guidelines within the Geotechnical Hazards Development Permit Area No 4.

G. CONCLUSION

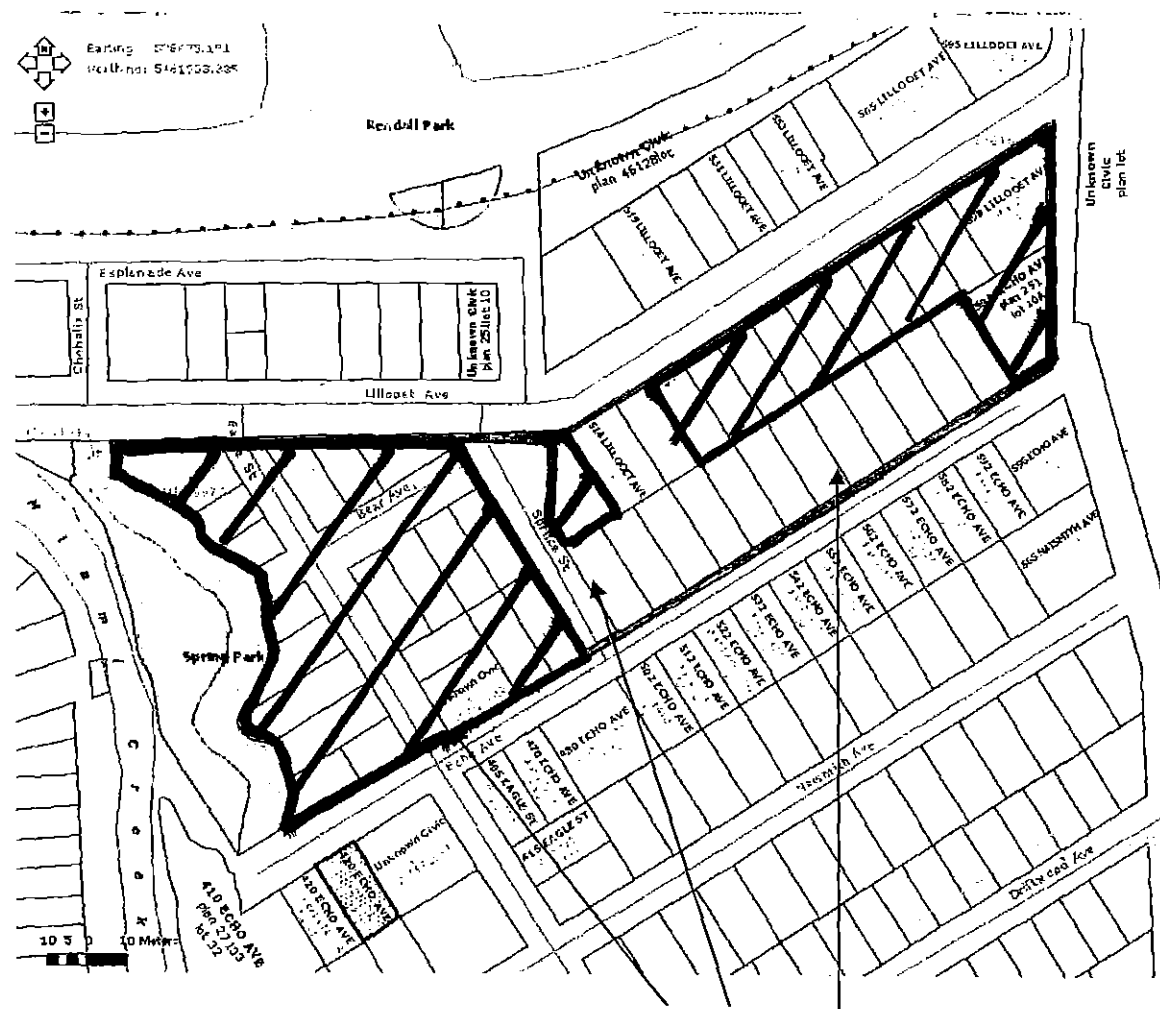
The Neighbourhood Plan has been devised in accordance with a series of planning principles that are consistent with best management practices related to sustainability. The density and housing form that has been established will enable the neighbourhood to provide a gradual transition from the higher density area along the lake to the single family neighbourhood to the south. It is anticipated that the changes to the neighbourhood will take place over time.

APPENDIX A
LAND USE CONCEPT



-  Single Family Residential
-  Multi Family Residential
-  Trail

APPENDIX B
MULTI FAMILY RESIDENTIAL DEVELOPMENT PERMIT AREA



**Multi Family Residential
Development Permit Area**

HARRISON HOT SPRINGS

Naturally Refreshed

**VILLAGE OF HARRISON HOT SPRINGS
BYLAW NO. 989**

A bylaw to amend Village of Harrison Hot Springs Zoning Bylaw 672, 1996

WHEREAS the Mayor and Council has deemed it advisable to amend the Village of Harrison Hot Springs Zoning Bylaw No. 672, 1996, the Zoning Bylaw for the Village of Harrison Hot Springs, as adopted October 28, 1996;

NOW THEREFORE in open meeting assembled, the Mayor and Council of the Village of Harrison Hot Springs enacts as follows:

I. CITATION

This Bylaw may be cited for all purposes as the "Village of Harrison Hot Springs Zoning Bylaw Amendment Bylaw No. 989, 2011".

II. TEXT AMENDMENT

That the Village of Harrison Hot Springs Zoning Bylaw Number 672-1996, be amended by:

- 1. Page 42, Section 7.3 Residential One (Small Lot) Zone (R3)
 - (a) subsection .1 Intent, be amended by deleting the words, "on small bare land strata *parcels*";
 - (b) subsection .3 Conditions of Use, delete in its entirety;
 - (c) subsection .4 Regulations, Column II, section .8, Maximum Building Height, amend 6.0 m to 10.7 m and 2.4 m to 5.0 m.

III. READINGS AND ADOPTION

READ A FIRST TIME THIS 12TH DAY OF SEPTEMBER, 2011

READ A SECOND TIME THIS 12TH DAY OF SEPTEMBER, 2011

A PUBLIC HEARING WAS HELD ON THE _____ DAY OF _____, 2011

READ A THIRD TIME THIS _____ DAY OF _____, 2011

ADOPTED THIS _____ DAY OF _____, 2011

Mayor

Corporate Officer

HARRISON HOT SPRINGS

Naturally Refreshed

**VILLAGE OF HARRISON HOT SPRINGS
BYLAW NO. 990**

**A bylaw to amend Village of Harrison Hot Springs
Zoning Bylaw 672, 1996**

WHEREAS the Mayor and Council has deemed it advisable to amend the Village of Harrison Hot Springs Zoning Bylaw No. 672, 1996, the Zoning Bylaw for the Village of Harrison Hot Springs, as adopted October 28, 1996;

NOW THEREFORE in open meeting assembled, the Mayor and Council of the Village of Harrison Hot Springs enacts as follows:

I. CITATION

This Bylaw may be cited for all purposes as the "Village of Harrison Hot Springs Zoning Bylaw Amendment Bylaw No. 990, 2011".

II. AMENDMENT

That the Village of Harrison Hot Springs Zoning Bylaw Number 672-1996, be amended by:

(a) That the following property legally described as:

"Lot B, Plan LMP7279, Section 13, Township 4, Range 29, W6 Meridian, New Westminster District currently zoned as Residential Two Zone (R2) be rezoned as Residential One (Small Lot) Zone (R3)"

II. MAP AMENDMENT

A. That Schedule A, the Zoning Map of the Village of Harrison Hot Springs Bylaw No.672, be amended by rezoning the lands as outlined in red on Schedule 1 of this Bylaw from Residential Two Zone (R2) to Residential One (Small Lot) Zone (R3).

B. That the map appended hereto designated as Schedule 1 showing such amendment is an integral part of this Bylaw.

III. READINGS AND ADOPTION

READ A FIRST TIME THIS 12th DAY OF SEPTEMBER, 2011

READ A SECOND TIME THIS 12th DAY OF SEPTEMBER, 2011

A PUBLIC HEARING WAS HELD ON THE _____ DAY OF _____, 2011

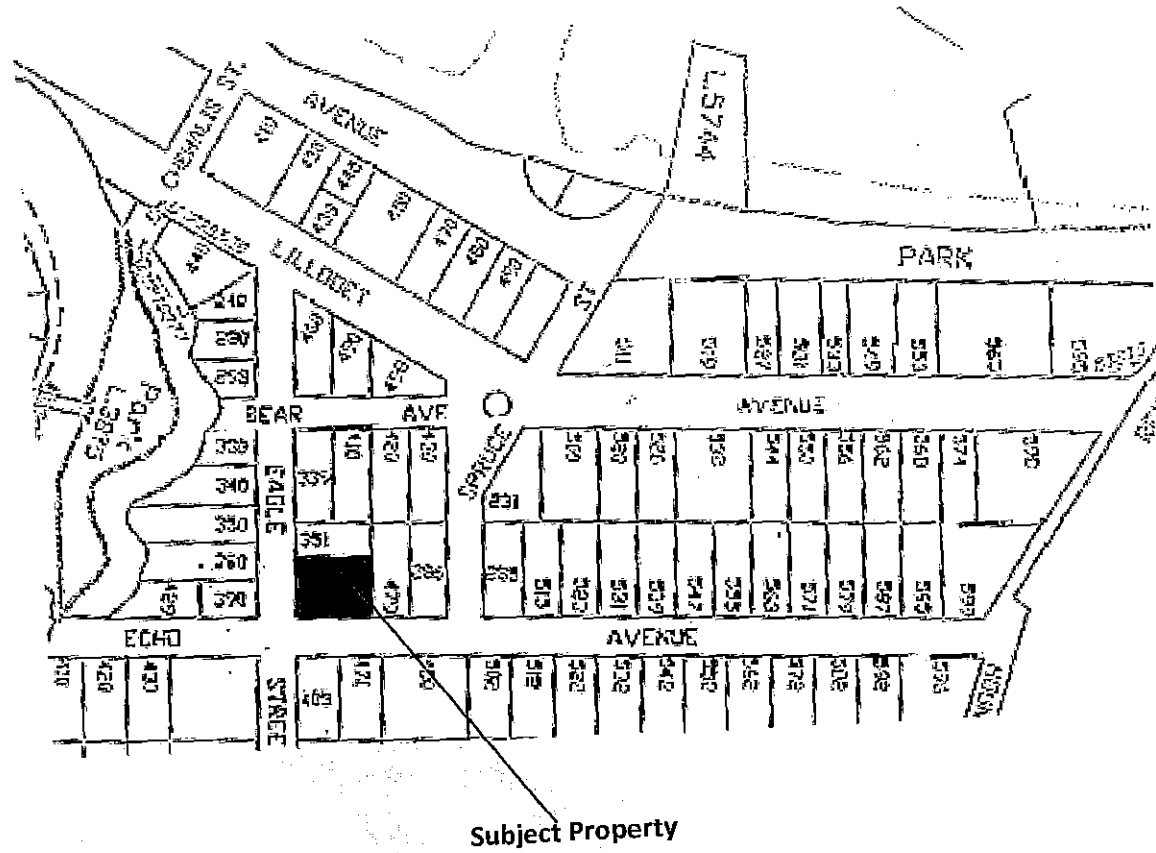
READ A THIRD TIME THIS _____ DAY OF _____, 2011

ADOPTED THIS _____ DAY OF _____, 2011

Mayor

Corporate Officer

Schedule 1 of Bylaw 990



Residential Two Zone (R2) to
Residential One (Small Lot) Zone (R3)

**VILLAGE OF HARRISON HOT SPRINGS
MINUTES OF THE SPECIAL MEETING OF COUNCIL**

DATE: September 23, 2011
TIME: 9:00 a.m.
PLACE: Council Chambers, 495 Hot Springs Road

IN ATTENDANCE: Mayor Ken Becotte
Councillor Bob Perry
Councillor Dave Harris
Councillor Dave Kenyon

CAO, Ted Tisdale
Director of Finance, Dale Courtice
CEDO, Andre Isakov
Manager of Revenue Services, Peggy Parberry

ABSENT: Councillor Allan Jackson
Operations Manager, Ian Gardner
DCAO/Corporate Officer, Debra Key

+
1. **CALL TO ORDER**

The Mayor called the meeting to order at 9:00 a.m.

2. **INTRODUCTION OF LATE ITEMS**

3. **APPROVAL OF AGENDA**

Moved by Councillor Harris
Seconded by Councillor Kenyon

THAT the agenda be approved.

**CARRIED
UNANIMOUSLY**

4. **ADOPTION AND RECEIPT OF MINUTES**

None

5. **BUSINESS ARISING FROM THE MINUTES**

None

CONSENT AGENDA

i. Bylaws

ii. Agreements

**iii. Committee/
Commission
Minutes**

iv. Correspondence

DELEGATIONS

None

8. CORRESPONDENCE

None

9. BUSINESS ARISING OUT OF CORRESPONDENCE

None

**REPORTS OF COMMITTEES, COMMITTEE OF THE WHOLE
AND COMMISSIONS**

None

10. REPORTS FROM MAYOR

None

11. REPORTS FROM COUNCILLORS

None

Councillor Harris

Councillor Kenyon

Councillor Jackson

Councillor Perry

12. REPORTS OF STAFF

13.

BYLAWS

Moved by Councillor Kenyon
Seconded by Councillor Harris

THAT Bylaw No. 991 Bylaw to Regulate Docks be given first and second reading.

CARRIED
UNANIMOUSLY

On page 4 under Dock Management item number 27 be removed from Bylaw No. 991 Bylaw to Regulate Docks.

Moved by Councillor Kenyon
Seconded by Councillor Perry

THAT Bylaw No. 991 Bylaw to Regulate Docks be given third reading as amended.

CARRIED
UNANIMOUSLY

14.

QUESTIONS FROM THE PUBLIC

None

15.

ADJOURNMENT

Moved by Councillor Perry
Seconded by Councillor Harris

THAT the meeting adjourned at 9:07 a.m.

CARRIED
UNANIMOUSLY

Ken Becotte
Mayor

Debra Key
Corporate Officer

A bylaw to Regulate Municipal Docks

WHEREAS the Village of Harrison Hot Springs has deemed it advisable to establish a bylaw to regulate municipal docks;

NOW THEREFORE the Council of the Village of Harrison Hot Springs of Harrison Hot Springs, in an open meeting assembled enacts as follows:

1. CITATION

This Bylaw may be cited for all purposes as the "Village of Harrison Hot Springs of Harrison Hot Springs Municipal Docks Bylaw No. 991, 2011".

2. INTERPRETATION

In this bylaw:

"abandoned" means leaving a vessel or watercraft at a dock for a period in excess of 7 days;

"authorized personnel" includes a Peace Officer, Bylaw Enforcement Officer or employee of the Village of Harrison Hot Springs or designate;

"berth" means a location at a dock where a vessel or watercraft may be moored;

"dangerous goods" means dangerous goods as defined in the *Transport of Dangerous Goods Act*;

"dock" means a landing pier for vessels and watercraft;

"emergency personnel" include any person, group or organization required by provincial or federal statute to respond to emergency situations;

"emergency vehicle" means a police vehicle, ambulance or fire department vehicle;

"liquor" has the same meaning as in the *Liquor Control and Licensing Act* of British Columbia;

"loading zone" means that area of a dock used solely for loading and unloading passengers, supplies or freight and identified by a yellow painted tie rail and/or signage;

"moor" means to secure a vessel, watercraft or seaplane by means of lines, cables or anchors;

"raft" means the mooring of one vessel or watercraft along side another;

"seaplane" means an aircraft on floats whether operated privately or commercially;

"vessel" means any ship or boat or any other description of vessel which is or can be propelled by machinery, except a seaplane, and used or designed to be used in navigation;

"Village" means the municipality of the Village of Harrison Hot Springs;

"watercraft" means any ship or boat or any other description of vessel that is not propelled by machinery and is used or designed to be used in navigation;

ENFORCEMENT POWERS

3. All authorized personnel may enforce this bylaw in the course of their duties.
4. Any authorized personnel may order a person who does anything contrary to this bylaw to leave a dock immediately, or within a period of time specified by the authorized personnel, and every person so ordered shall comply with the order and leave the dock immediately or within the specified time period.
5. No person shall hinder, oppose, molest or obstruct authorized personnel in the discharge of their duties.
6. Authorized personnel and emergency personnel, while acting in the course of their duties, as well as emergency vehicles, are exempt from the provisions of this bylaw.

FINES

7. A person who contravenes this bylaw commits an offence and is subject to a fine under the Bylaw Notice Enforcement Bylaw.

PUBLIC CONDUCT

8. No person shall obstruct or interfere with any person, vessel, watercraft or seaplane lawfully using a dock.
9. No person shall behave in a disorderly, dangerous or offensive manner on a dock.

NOISY ACTIVITIES

10. No person shall while on or moored at a dock, make or cause noises or sounds including the playing of musical instruments, radios, tape players, compact disc players or similar devices or operate any equipment, vehicles, vessel, watercraft, seaplane or machinery which disturbs or tends to disturb the quiet, peace, enjoyment and comfort of other persons. The above does not prohibit music integral to a camp or community celebration provided the music occurs between the hours of 8:00 a.m. and 10:00 p.m.

LIQUOR

11. No person shall possess an open container of liquor on a dock.

SIGNS

12. No person shall place, post or erect a sign on a dock unless with permission of the Village.

DAMAGE

13. No person shall remove, destroy or damage any dock or structure or sign attached to a dock.
14. No person shall remove, destroy or damage any sign, notice, rule or regulation posted on a dock by or under the authority of the Village.
15. No person shall deposit or leave any garbage, refuse, empty or broken bottles, cans, paper, animal excrement or other waste material on a dock or in the water surrounding a dock.

STORAGE

16. No person shall store any material of any kind, including a watercraft, on the surface of a dock unless in an area posted as a storage area.

LOADING ZONE

17. No person shall cause a vessel, watercraft, seaplane or vehicle to be left unattended at a posted loading zone.
18. No person shall cause a vessel, watercraft or seaplane to remain moored in a posted loading zone for a period in excess of 60 minutes unless otherwise authorized by the Village.

VEHICLES

19. (1) No person shall drive a vehicle on a dock except for the express purpose of loading or unloading or parking in a designated zone or the vehicle is being used for the purpose of repairing or maintaining the dock.
- (2) Despite section 19(1), the Village may cause to be posted a sign prohibiting a person from driving a vehicle on a dock for any purpose.

CONSTRUCTION

20. No person shall build or place any structure on a dock unless authorized by the Village and local land use regulations.

TIME LIMIT

21. (1) No vessel, watercraft or seaplane shall moor at a dock for a period in excess of 12 hours unless otherwise authorized by the Village, but will not be moored overnight.
- (2) Vessels, watercraft or seaplanes may remain moored longer than 12 hours or overnight, when in the opinion of Council, longer moorage is required in recognition of a community event.

DANGEROUS GOODS

22. No vessel, watercraft or seaplane carrying dangerous goods or explosives shall moor at a dock for longer than is necessary to effect immediate loading or unloading.
23. No vessel, watercraft or seaplane carrying dangerous goods or explosives moored at a dock shall be left unattended.

RESPONSIBILITY

24. For the purpose of these regulations, the person having charge of a vessel, watercraft or seaplane is deemed to be responsible for the vessel, watercraft or seaplane and the action of its crew.

RESERVED BERTH

25. At the discretion of the Council, a section of dock may be reserved for the exclusive use of a vessel, watercraft or seaplane on condition that the person in control of the vessel, watercraft or seaplane obtain a permit from the Village.

DOCK MANAGEMENT

26. In order to facilitate the proper management, control and use of a dock, Village staff may order a vessel, watercraft or seaplane to move or alter its position.
27. Village staff, at their discretion, may order that any particular vessel, watercraft or seaplane is not allowed to moor to the dock.
28. When required by limited mooring space any person in charge of a vessel or watercraft may raft the vessel or watercraft provided that no more than two vessels or watercrafts are rafted or such lower or higher number of vessels or watercrafts as specified by the Village and sign posted.

ABANDONMENT

29. No person shall abandon a vessel, watercraft or seaplane at a dock.
30. Where the Village staff believes a vessel, watercraft or seaplane has been abandoned at a dock, or in violation of section 21(1), and they have made reasonable but fruitless efforts to obtain the name and address of or to contact the owner or person last in charge of the

vessel, watercraft or seaplane, the staff must make a report to the Village with recommendations for the removal of the abandoned vessel, watercraft or seaplane.

OBSTRUCTION

31. The Village staff may direct the position, time, place and manner in which a vessel, watercraft or seaplane may be moored, loaded or unloaded at a dock.
32. Except as permitted by the Village staff, no person shall moor a vessel, watercraft or seaplane at a dock in such a manner as to unduly obstruct the movement of other vessels or watercraft.
33. Except as permitted by the Village staff, the lines fastening a vessel, watercraft or seaplane to a dock shall not cross the dock or be attached to anything other than the fastenings provided for the purpose.
34. Except as permitted by the Village staff, no person shall:
 - (1) use the surface of a dock for any major maintenance or repair work; or
 - (2) do any other thing in such a manner as to impede the use of the dock by others.

GENERAL MANAGEMENT

35. (1) The Chief Administrative Officer is responsible for the operation, administration and management of the docks and may post signs and give such orders either orally or in writing, in respect of the operation of the dock, as are authorized by these regulations.
 - (2) No person shall contravene
 - (a) an order of the Chief Administrative Officer given under subsection (1); or
 - (b) the directions or instructions on any sign posted under subsection (1).
 - (3) Where a vessel, watercraft, seaplane or goods are not removed from a dock immediately after the removal thereof is ordered by the Chief Administrative Officer, the Chief Administrative Officer may have the vessel, watercraft, seaplane or goods removed from the dock at the owner's expense.

PERMITS

36. Notwithstanding sections 21 and 25, only those persons in charge of a vessel, watercraft or seaplane whose purpose is to support and/or enhance tourism or a community wide event that benefits the public will be authorized to obtain such permit.

SEVERANCE

39. If a section, subsection, sentence, clause or phrase of this Bylaw is for any reason held to be invalid, by the decision of any Court, such decision shall not affect the validity of the remaining portions of this Bylaw.

READINGS AND ADOPTION

40. READ A FIRST TIME THIS 23rd DAY OF SEPTEMBER, 2011

READ A SECOND TIME THIS 23rd DAY OF SEPTEMBER, 2011

AMENDED AND READ A THIRD TIME THIS 23rd DAY OF SEPTEMBER, 2011

ADOPTED THIS DAY OF , 2011

Mayor

Corporate Officer



