WHISTLER

AGENDA

REGULAR MEETING OF MUNICIPAL COUNCIL
TUESDAY, JULY 7, 2015, STARTING AT 5:30 PM

In the Franz Wilhelmsen Theatre at Maurice Young Millennium Place
4335 Blackcomb Way, Whistler, BC V0N 1B4

ADOPTION OF AGENDA

Adoption of the Regular Council agenda of July 7, 2015.

ADOPTION OF MINUTES

Adoption of the Regular Council minutes of June 23, 2015.

PUBLIC QUESTION AND ANSWER PERIOD

PRESENTATIONS/DELEGATIONS

Free Shuttle Pilot Project	A presentation by Joel Chevalier Vice President of Employee Experience at Whistler Blackcomb, regarding the outcomes of the free shuttle pilot project for the #7 Staff Housing route service.
Cycling Infrastructure	A presentation by Frank Savage, President of the Whistler Cycling Club, regarding recommendations to MLA Jordan Sturdy for road cycling infrastructure and maintenance improvements in the Sea to Sky region.

MAYOR'S REPORT

INFORMATION REPORTS

2014 Annual Energy Consumption & Greenhouse Gas Performance Reporting Report No. 15-085 File No. 7215.01	*A presentation by municipal staff.* **That** Appendix A to Information Report 15-085, "Whistler Energy Consumption and Greenhouse Gas Performance Trends – 2014 Annual Report" be received.

Environmental Stewardship Update
Report No. 15-086
File No. 8365

A presentation by municipal staff.

That Information Report No. 15-086 regarding Environmental Stewardship Update be received.

ADMINISTRATIVE REPORTS

LLR 1223 – Stonesedge Kitchen Permanent Change to Food Primary Hours of Sale
Report No. 15-087
File No. LLR 1223

That Council authorize the resolution attached as Appendix "A" to Administrative Report No. 15-087 providing Council's recommendation to the Liquor Control and Licensing Branch in support of an application from Stonesedge Kitchen located at 4122 Village Green for a Permanent Change to Hours of Sale for Food Primary Licence No. 174190, to change hours of sale to 9:00 a.m. to 1:00 a.m. Monday through Sunday.

2015 Portobello Street Party Catering License Capacity
Report No. 15-088
File No. 8216

A presentation by municipal staff.

That Council endorse a requested capacity of over 500 people for a Catering Licensed event, subject to Liquor Control & Licensing Branch (LCLB), Fire Rescue and RCMP.

DVP 1105 – 101 4369 Main Street – Pizzeria Antico Sign Variance
Report No. 15-089
File No. DVP 1105

That Council approve the issuance of Development Variance Permit DVP 1105 for a proposed sign located at 101-4369 Main Street to:

1. Vary the fascia sign design as follows:
    a) Vary the lettering height from 300 mm to 503 mm

as shown on the sign design plan dated received May 22, 2015 prepared by Signage Centre and attached as Appendix B to Administrative Report No. 15-089; and further,

That Council direct staff to advise the applicant that prior to issuance of DVP 1105, that the rear-lighting method for the proposed sign be consistent with the Sign Bylaw, to the satisfaction of the General Manager of Resort Experience.

DVP 1100 – 8328, 8332, 8340 Mountain View Drive – Parcel Frontage and Retaining Wall Variances
Report No. 15-090
File No. DVP 1100

A presentation by municipal staff.

That Council approve the issuance of Development Variance Permit DVP 1100 for the proposed development located at 8328, 8332 and 8340 Mountain View Drive to:

1. Vary the parcel frontages as follows to facilitate proposed subdivision and to permit a detached dwelling greater than 325 square metres in gross floor area :
    a) At 8340 Mountain View Drive, vary the minimum frontage from 24 metres to 9.14 metres;
    b) At 8328 Mountain View Drive, vary the minimum frontage from 24 metres to 9.12 metres;
2. Vary the setbacks and height as follows for a proposed retaining wall:

a) At 8328 Mountain View Drive, vary the north side setback form 1.0 metre to 0.0 metres from the property line, and vary the height from 0.6 metres to 7.6 metres;
b) At 8332 Mountain View Drive, vary the south side setback from 1.0 metre to 0.0 metres from the property line and vary the height from 0.6 metres to 7.6 metres;

as generally shown on the Proposed Subdivision Plan dated October 25, 2014, prepared by Whistler Alpine Development and on the Roadworks Drawings R1 and R2, dated September 24, 2014, prepared by Kerr Wood Leidal Consulting Engineers, attached as Appendices C and D to Administrative Report No. 15-089;

That Council not vary the south side setback from 1.0 metre to 0.5 metres from the property line and not vary the height from 0.6 metres to 7.6 metres for a proposed retaining wall at 8328 Mountain View Drive; and further

That Council direct staff to advise the applicant that prior to issuance of DVP 1100, the following matters must be completed to the satisfaction of the General Manager of Resort Experience:

a) Adoption of Land Use Contract Discharge and Zoning Amendment Bylaw (RS1 Zone - 8340 Mountain View Drive) No. 2058, 2014;
b) Revised Roadworks drawings, stamped by a professional engineer, to reflect the approved variances;
c) Registration of a covenant on 8332 Mountain View Drive restricting gross floor area of a detached dwelling to 325 square metres;
d) Receipt of a tree preservation and landscape remediation plan generally in conformance with the planting plan attached as Appendix E to Report No. 15-089;
e) Receipt of a landscape estimate for the proposed landscaping; and,
f) Receipt of a letter of credit or other approved security in the amount of 135% of the landscape estimate, such security to be administered in accordance with Council Policy G-9 Landscape Security for Development Permit.

OTHER BUSINESS

CORRESPONDENCE

2015 Community Recognition Awards
File No. 3009

Correspondence from Lynne Embury-Williams, Executive Director of Wood *WORKS!* BC, dated June 2015, inviting nominations for recently completed civic buildings for the 2015 Community Recognition Awards.

ADJOURNMENT

WHISTLER

MINUTES

REGULAR MEETING OF MUNICIPAL COUNCIL
TUESDAY, JUNE 23, 2015, STARTING AT 5:30 PM

In the Franz Wilhelmsen Theatre at Maurice Young Millennium Place
4335 Blackcomb Way, Whistler, BC V0N 1B4

PRESENT:

Mayor N. Wilhelm-Morden

Councillors: S. Anderson, J. Crompton, J. Ford, J. Grills, A. Janyk,

ABSENT: Councillor S. Maxwell

Chief Administrative Officer, M. Furey
General Manager of Infrastructure Services, J. Paul
General Manager of Resort Experience, J. Jansen
Acting General Manager of Corporate and Community Services and Corporate Officer, S. Story
Acting Director of Planning, J. Belobaba
Manager of Communications, M. Comeau
Manager of Strategic Alliances, J. Rae
Transportation Demand Management Coordinator, E. DalSanto
Recording Secretary, A. Winkle

ADOPTION OF AGENDA

Moved by Councillor J. Crompton
Seconded by Councillor J. Ford

That Council adopt of the Regular Council agenda of June 23, 2015.

CARRIED

ADOPTION OF MINUTES

Moved by Councillor A. Janyk
Seconded by Councillor J. Grills

That Council adopt the Regular Council minutes and Public Hearing minutes of June 9, 2015.

CARRIED

PUBLIC QUESTION AND ANSWER PERIOD

There were no questions from the public.

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PRESENTATIONS/DELEGATIONS

Discover Nature

A presentation was given by Kristina Swerhun, President of the Whistler Naturalists, regarding the development and launch of a new program, "Discover Nature."

MAYOR'S REPORT

Mayor Wilhelm-Morden reported that the Resort Municipality of Whistler is encouraging residents to collect food scraps by distributing free compost bins. Nesters and Function Junction depot staff began distributing 1,000 containers over the weekend. These food scraps can be collected at the depots, and sent to the composting facility in the Callaghan Valley. Since 2009, Whistler residents have reduced the amount of waste sent to the landfill from 600 kilograms to 516 kilograms. Part of that reduction is attributed to composting.

Mayor Wilhelm-Morden reported that the lineup for the Whistler Presents Summer Concert Series has been announced. This summer 14 concerts, ranging from Blue Rodeo and Michael Franti to the Great Lake Swimmers and the Vancouver Symphony Orchestra will play free concerts at Whistler Olympic Plaza. September 6th is the Resort Municipality of Whistler's 40th anniversary and everyone is invited to help us celebrate. Spirit of the West will play in the afternoon, and there will also be animation as well as gelato. More details will be released in the coming weeks. The concert lineup can be found at whistler.ca/whistlerpresents.

Mayor Wilhelm-Morden reminded everyone about Whistler's park regulations. Parks and beaches are only open from dawn until dusk and late night use is prohibited. Alcohol is also prohibited at all times on beaches, lakes and docks. Dogs are welcome in Whistler, but they should be leashed, except when in an off-leash park. They are also not allowed on public beaches or in playgrounds. The RCMP and Bylaw Officers will be conducting regular patrols throughout summer to enforce these regulations.

Mayor Wilhelm-Morden reported that there is an elevated fire risk, and asked that everyone be vigilant about reporting fires. In emergencies, please call 911 and the non-emergency number is 604-935-8260. Since the Fire Danger Rating is high at the moment, no campfires are currently allowed. When the rating drops again, anyone interested in having a campfire can apply online for a Fire Permit. For more information, please whistler.ca/fire.

Mayor Wilhelm-Morden reported that the Whistler's sprinkling regulations are in effect until September 30th. Odd numbered addresses can sprinkle on Wednesdays and Saturdays and even numbered addresses can sprinkle on Thursdays and Sundays. Residents with new lawns can apply for a sprinkling permit allowing sprinkling on the off days. As we move into the summer, it is extremely important to conserve water, especially since Whistler's alpine snowpack is low this year. Conserving water ensures that Whistler has enough water to fight fires as well as for drinking. Councillor Grills attended a Water Wise luncheon on Thursday, June 18 with local strata property managers, resort managers and irrigation companies. The meeting's goal

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was to encourage a sense of shared responsibility for protecting Whistler's water.

Councillor J. Grills reported on the Water Wise lunch, and commented on feedback shared by the irrigation companies at the meeting regarding their practices, and the drainage in Whistler. He commented that the meeting was beneficial.

Mayor Wilhelm-Morden reported that on Thursday she was at a Squamish Chamber of Commerce luncheon meeting to listen to a presentation about Garibaldi at Squamish by the proposed developer. Whistler has submitted preliminary submissions to the environmental assessment office, and the comments will be posted on their website shortly. She commented that Whistler is not in support of the development. She encouraged all residents, business owners and guests to read the documents available on the website and form their own opinion.

Mayor Wilhelm-Morden reported that Tough Mudder took place over last weekend. The obstacle course attracted 11,000 participants to Whistler Olympic Park. Later this year, Mudderella, a women-only version, will take place for the first time in Whistler on September 26. The municipality supports these events with the Resort Municipality Initiative funds.

Mayor Wilhelm-Morden reported that the inaugural session of the Vancouver Symphony Orchestral Institute at Whistler begins on June 28th and runs until July 5. The institute offers musicians between the ages of 15 to 25 the opportunity to learn from the award-winning Vancouver Symphony Orchestra musicians under music director Maestro Bramwell Tovey. Students will participate in the Whistler Institute Orchestra, with a performance at 1 p.m. on Sunday, July 5 at Whistler Olympic Plaza. The municipality has allocated funding for three years to develop the institute. Around 90 students applied this first year, which is an exceptional response.

Mayor Wilhelm-Morden reported that the Emily Carr University of Art and Design summer studio will take place from August 10 to 19. The studio is for teens aged 15 to 18. The program will be held at Alta Lake with training and supervision from Emily Carr University staff. Applications are still being received. Please visit whistler.ca for more information.

Mayor Wilhelm-Morden reported that Wednesday, July 1, is Canada Day. The day will begin with a pancake breakfast at Florence Petersen Park next to the Whistler Public Library. Breakfast is by donation to the Whistler Community Services Society, with a minimum donation of $3. The 26th annual Canada Day parade begins at noon and runs from Whistler Olympic Plaza to Mountain Square. The parade's theme is Enchanted Forest. Activities and fund are scheduled throughout the day and into the evening. The Vancouver Symphony Orchestra's free concert begins at 3 p.m. at Whistler Olympic Plaza. The orchestra will also be performing free concerts later in the week on July 3 and 4 at 8 p.m. It is an honour to once again have the Vancouver Symphony Orchestra perform in Whistler to celebrate Canada's birthday, as well as over the Independence Day weekend for American visitors.

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Mayor Wilhelm-Morden reported that the RMOW is honoured to welcome Mayor Fujimaki, his wife, and other dignitaries from Karuizawa, Whistler's Sister City. They arrive June 30th for a couple of days and will be participating in the Canada Day parade. She asked that everyone give them a warm Whistler welcome.

Mayor Wilhelm-Morden reported that the Whistler Chamber held the 2015 Whistler Excellence Awards last Thursday. She congratulated all the nominees and especially to the winners:

- Bob Deeks, from RDC Fine Homes, won Business Person of the Year
- Anne Townley won Citizen of the Year
- Chromag Bikes won Innovative Business of the Year
- Liam Peyton, from Whistler Beer Festival, won Rising Star of the Year
- Whistler Visitor Centre won the small business Service Excellence Award
- The Adventure Group won the large business Service Excellence Award
- Whistler Conference Centre won Sustainability in Action Business
- Stella Harvey won Whistler Champion of Arts & Culture

Mayor Wilhelm-Morden reported that last week, as members of Board of Directors of Tourism Whistler, she and Mike Furey attended a one and a half day strategic planning session. There were three speakers, they did a SWOT analysis, and looked at the strategic plan.

Mayor Wilhelm-Morden commented on the new planting at Lorimer Road and Blackcomb Way, on the street side of the wooden fencing of the heliport. She asked people to walk on the opposite sidewalk rather than the roadway.

ADMINISTRATIVE REPORTS

2015-2016 Annual Operating Agreement (AOA) – Transit and Whistler Transit Management Advisory Committee (TMAC) 2014 Summary
Report No. 15-083
File No. 534

Moved by Councillor A. Janyk
Seconded by Councillor J. Grills

That Council authorize the Mayor and Corporate Officer to execute the *2015-2016 Whistler Transit Annual Operating Agreement (AOA)* for the period April 1, 2015 through March 31, 2016.

CARRIED

2015 Annual Report and Corporate Plan
Report No. 15-084
File No. 4325.

Moved by Councillor J. Ford
Seconded by Councillor J. Crompton

That Council receive and consider Information Report to Council No. 15-084, "2015 Annual Report and Corporate Plan" for the Resort Municipality of Whistler, as required by the *Community Charter*; and further,

That Council consider submissions and questions from the public with respect to the report.

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Mayor Wilhelm-Morden called three times for submissions from the public.

S. Story indicated that no correspondence has been received.

CARRIED

MINUTES OF COMMITTEES AND COMMISSIONS

Recreation and Leisure Advisory Committee

Moved by Councillor A. Janyk
Seconded by Councillor J. Grills

That minutes of the Recreation and Leisure Advisory Committee meeting of May 7, 2015 be received.

CARRIED

Forest and Wildland Advisory Committee

Moved by Councillor J. Ford
Seconded by Councillor J. Crompton

That minutes of the Forest and Wildland Advisory Committee meeting of May 13, 2015 be received.

CARRIED

BYLAWS FOR ADOPTION

Land Use Contract Amendment Bylaw (Blueberry Hill) No. 2072, 2015

Moved by Councillor J. Ford
Seconded by Councillor J. Crompton

That Land Use Contract Amendment Bylaw (Blueberry Hill) No. 2072, 2015 be adopted.

CARRIED

Land Use Contract Amendment Authorization Bylaw (Blueberry Hill) No. 2088, 2015

Moved by Councillor J. Crompton
Seconded by Councillor J. Ford

That Land Use Contract Amendment Authorization Bylaw (Blueberry Hill) No. 2088, 2015 be adopted.

CARRIED

Water User Rates Amendment (Water Meter Specifications) Bylaw No. 2091, 2015

Moved by Councillor J. Grills
Seconded by Councillor A. Janyk

That Water User Rates Amendment (Water Meter Specifications) Bylaw No. 2091, 2015 be adopted.

CARRIED

OTHER BUSINESS

There were no items of Other Business.

DRAFT

CORRESPONDENCE

Speeding Vehicles on Rainbow Drive
File No. 3009

Moved by Councillor J. Ford
Seconded by Councillor J. Crompton

That correspondence from Natasha Pulfrey, dated June 7, 2015, regarding speeding vehicles on Rainbow Drive be received and referred to staff.

CARRIED

Singing Pass Trail Washout
File No. 3009

Moved by Councillor J. Ford
Seconded by Councillor S. Anderson

That correspondence from Bill Moore, dated June 7, 2015, regarding a washout on Singing Pass Trail at Harmony Creek, and requesting the municipality, Whistler Blackcomb and BC Parks cooperate to resolve the situation be received and referred to staff.

CARRIED

Science/Engineering World
File No. 3009

Moved by Councillor A. Janyk
Seconded by Councillor J. Ford

That correspondence from Tadeusz Francis van Wollen, dated June 12, 2015, regarding the idea of organizing in Whistler "Science/Engineering World" for children be received and referred to staff.

CARRIED

ADJOURNMENT

Moved by Councillor J. Crompton

That Council adjourn the June 23, 2015 Council meeting at 6:16 p.m.

CARRIED

Mayor N. Wilhelm-Morden

Corporate Officer: S. Story

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WHISTLER

REPORT | INFORMATION REPORT TO COUNCIL

PRESENTED: July 7, 2015 **REPORT:** 15-085

FROM: Chief Administrator's Office **FILE:** 7215.01

SUBJECT: 2014 ANNUAL ENERGY CONSUMPTION & GREENHOUSE GAS PERFORMANCE REPORTING

COMMENT/RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation be endorsed.

RECOMMENDATION

That Appendix A to Information Report 15-085, "Whistler Energy Consumption and Greenhouse Gas Performance Trends – 2014 Annual Report" be received.

REFERENCES

- **Appendix A**
  Whistler Energy Consumption and Greenhouse Gas Performance Trends – 2014 Annual Report

PURPOSE

The primary purpose of this Annual Report is to provide a summary of the Whistler community's energy and greenhouse gas (GHG) emissions performance the period between 2000 and 2014.

The second part of this report includes a summary of the ongoing energy and emissions performance for the RMOW's internal corporate operations.

DISCUSSION

As a mountain town, Whistler has long been concerned with the issue of climate change. Our community has a special dependence on stable snow and weather patterns, making us very aware of our shared responsibility to manage greenhouse gas emissions, and even more sensitive to the reality of the potential impacts if we do not.

Regular public reporting of both the community and corporate energy and greenhouse gas emissions performance is a commitment of the Whistler Official Community Plan, the RMOW Carbon Neutral Operations Plan, our Council-adopted commitments within the BC Climate Action Charter, as well as the Provincial Climate Action Rebate Incentive Program.

The attached report provides a brief background on energy and emissions planning in Whistler, detailed historical information, a review of associated targets for each section, specific detail on 2014 energy consumption and emissions trends at both the community and corporate scale, as well as a short section on key associated insights and trends for each subsection of the report.
Select highlights of the attached report include:

COMMUNITY LEVEL EMISSIONS

2014 Community GHG Emissions:

Greenhouse gas emissions in Whistler are made up of emissions from stationary sources (buildings and infrastructure systems), mobile sources (passenger vehicles, fleets, and transit), as well as emissions from landfilled wastes. Passenger vehicle transportation within RMOW boundaries continues to represent the largest share of the overall emission footprint (57%), followed by natural gas consumption at 33% (primarily used for space and water heating).

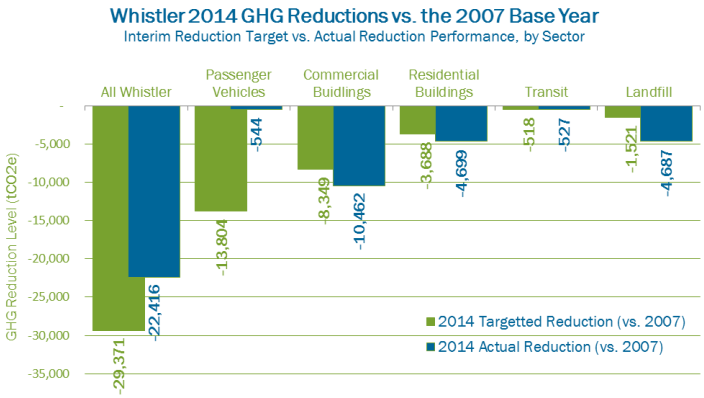
The community of Whistler has committed to community-level greenhouse gas reductions of: 33% by 2020; 80% by 2050; and 90% by 2060 (versus 2007 levels).

Up to 2012, our community could be justifiably proud of the fact that we had collectively managed to remain on pace towards our 2020 goal. This report shows that 2013 and even more so 2014 GHG emission levels are no longer on track to meet the OCP targets. Significant improvements will be required to regain our OCP targeted reduction levels.

Total community GHG emissions in 2014 were estimated to be 110,500 tCO2e.This level is approximately 17% lower than 2007 levels, and 22% lower than 2000 levels – a significant achievement. However, to remain on target toward the 2020 emission goals, a further 4-5% reduction in emissions was required in 2014. Rather than decreasing by a further 4-5% (3,000 – 4,000 tC02e), 2014 community emission levels actually increased over 2013 levels (+0.8%, +830 tCO2e).

GHG emissions intensity (GHG emissions per population equivalent) improved in 2014 to 3.84 tCO2e/PE (a 5% improvement vs 2013). This is the lowest estimated intensity level since detailed reporting began in 2000.

The key sector of the Whistler economy that is lagging behind in the journey toward our GHG reductions targets is passenger vehicle related emissions. While most sectors of the community are near, or ahead of targeted reduction levels, passenger vehicle emissions are estimated to have achieved only 4% of the required emission reductions of this sector to this point.



Looking ahead, the key challenge for our community will be regaining the rate of reduction achieved over the first five year of the commitment period when further 'one-time changes' (such as the piped propane to natural gas conversion) are, for the most part, no longer readily available. To remain on target toward our reduction goals, additional incremental reductions of 3,000 to 4,000 tonnes of CO2e will be required annually for the remainder of the decade. These future GHG reductions will need to be premised primarily on actual energy conservation and increased efficiency rather than one-time technological changes in provincial or community systems. As predicted in 2013, the required incremental conservation will be particularly challenging for our community as historic performance assessments demonstrate the community-wide energy conservation gains at this

scale have little to no historical precedent locally.

2014 Community Energy Consumption & Expenditures:

Community energy consumption has not followed the same downward trajectory as community GHG emissions during the period between 2007 and 2014. In fact, the three years from 2010 to 2012 have been the three highest years of energy consumption ever recorded in Whistler.

However, 2014 results indicate that total community energy consumption did decrease for the fourth year in a row – an encouraging trend (down 3.5% from 2007 levels and down 2.1% year over year). Unfortunately, despite this drop, 2014 levels were still above community targeted levels.

Electricity is the most prevalent type of energy consumed in Whistler at 45% of the total consumption (unchanged from 2010), followed by vehicle fuels (~31%), and natural gas at approximately one quarter of total consumption.

The estimated annual collective energy expenditure within Whistler has increased by more than $33 million since 2000 ($83 million vs. $49 million). Energy expenditures for residential buildings now total approximately $20 million/year, with commercial buildings expenditures totaling approximately $24 million on an annual basis (passenger vehicles and fleets make up the remainder). Total passenger vehicle estimated expenditures increased to an estimated $35M/year up by over $7.7M/year over 2007 levels.

CORPORATE LEVEL EMISSIONS

2014 Corporate GHG Emissions:

The RMOW's Carbon Neutral Operations Plan sets the targets for total corporate GHG reductions as follows: 10% by 2010; 20% by 2013; and 30% by 2015 – all relative to 2008 levels. Total direct corporate GHG emissions in 2014 were 1,510 tCO2e. This level of emissions is 35% below the benchmark 2008 level, but 4% higher than 2013 levels.

On a division-by-division basis, the relative emissions footprint of corporate operations is primarily associated with the following three divisions:

- (46%) Infrastructure Services—which includes roads crews, solid waste systems, the water utility as well as the sewer utility;
- (25%) Corporate and Community Services—including bylaw, fire, Meadow Park Sports Centre, and other recreation programs; and
- (29%) Resort Experience (REX)—which includes village maintenance operations, horticulture/turf/irrigation crews, parks and trails, as well as facility construction and maintenance operations.

Emissions across corporate operations are produced primarily from the combustion of mobile fuels (gasoline, diesels) at 47%, followed by natural gas at 43%, and electricity at 10%.

Over the last few years, the primary source of emission reductions across municipal operations has been natural gas reductions at Meadow Park Sports Centre (MPSC) – emissions from this facility are down more than 62% (~450 tCO2e) since 2008. It is further worth noting that a significant part of the recent reductions in emissions can be attributed to a lower BC Hydro emission factor for electricity (i.e. less CO2e per unit of electricity produced).

2014 Corporate Energy Consumption & Expenditures:

Total corporate energy consumption increased in 2014 by 3% to 74,000 GJ/year. This is above the 2010 target recommended within the RMOW Integrated Energy Plan (64,000 GJ/year), and considerably higher than the upcoming 2020 target (55,000 GJ).

Electricity consumption makes up the greatest portion of total energy consumed across municipal operations at 69% of the total consumption, followed by natural gas (17%), and mobile fuels (14%).

Overall, 2014 energy expenditures across municipal operations increased by 8% to ~$1.78M.

Electricity consumption makes up the largest portion of corporate energy expenditures ($1.2M/year), followed by mobile fuels ($350K/yr) and natural gas ($230K/yr).

Considerably more detail including numerous interpretive charts and figures are included within the attached Report (see Appendix A).

COMMUNITY ENERGY MANAGEMENT PLANNING

Building from the data presented in this Report, during 2015 staff are leading the Community Energy and Climate Action Plan (CECAP) project to update the existing RMOW Integrated Energy, Air Quality and Greenhouse Gas Management Plan. The aim of this project is to set out strategic directions for mitigating Whistler's contribution to climate change, as well as compiling recommended adaptation strategies designed to prevent and minimize the likely impacts of predicted changes to future local climate regimes.

The current Integrated Energy Management Plan was completed in 2004 and is overdue for revision. Much has changed over the past 10 years, both in terms of infrastructure (e.g. propane to natural gas conversion) as well as policy (OCP, Climate Action Charter, Provincial Energy Plan, UN IPCC Reports). Furthermore, adaptation strategies aimed at preventing or minimizing anticipated negative impacts of climate change have become an increasingly critical component to climate action plans. Given these significant changes, the new Community Energy and Climate Action Plan must be updated to reflect this new context, and address its associated challenges and opportunities.

As discussed above, current detailed performance tracking indicates that Whistler is not expected to meet existing OCP targets related to energy and emissions reductions. This updated plan is required to evaluate the appropriate steps required to achieve our targets, as well as to ensure that the community undertakes adaptation planning to ensure critical infrastructure and relevant community systems are appropriately prepared for the likely impacts of a changing climate.

Project Structure:

1. A small internal **Project Management Team** will lead the development of the CECAP. This team meets regularly to coordinate and deliver all aspects of the project.

2. A broader internal **Staff Content Expert Committee** has been engaged to provide content-specific input throughout the project timeline.

3. An external **Community Advisory Group** (CAG) has been assembled to support the development and implementation recommendations of the CECAP. The CAG is comprised of stakeholders representing a broad spectrum of key sectors related to local climate change mitigation and adaptation issues. The CAG has met once already and is expected to meet regularly over the course of the CECAP development, then move to a semi-annual or annual basis during the implementation phase of the project.

4. Community-wide public input will also be sought at strategic points throughout the project timeline (e.g. open house, online survey).

WHISTLER 2020 ANALYSIS

The compilation and dissemination of the attached Report moves our community toward the following Whistler2020 Descriptions of Success:

W2020 **Strategy**	**TOWARD** **Descriptions of success that resolution moves us toward**	**Comments**
Energy	Residents, businesses and visitors understand energy issues	This Report supports and increases local knowledge (resident and business) of Whistler's energy consumption performance.
	The energy system is continuously moving towards a state whereby a build-up of emissions and waste into air, land and water is eliminated	This Report provides the basis for tracking and evaluating the emissions performance of local patterns of energy use.
Built Environment	Limits to growth are understood and respected	This Report contributes to the discussion about 'limits to growth' through the inclusion of detail related to our Council-adopted targets and in particular, Whistler's performance relative to these energy and emission targets (limits) over time.
Natural Areas	Natural systems guide management approaches	The Report provides detailed data related to greenhouse gas emissions – scientific consensus support the position that increasing atmospheric concentrations of GHGs are altering natural climatic conditions across the planet.
Visitor Experience	The visitor experience is based on practices and systems that efficiently use sustainable materials and energy	The Report evaluates both our energy consumption per population equivalent, as well as our emissions footprint per population equivalent – two meaningful measures of our collective 'resource efficiency' as a resort community.

The compilation and dissemination of the attached report does not move our community away from any of the adopted Whistler2020 Descriptions of Success.

OTHER POLICY CONSIDERATIONS

Regular public reporting of both of community and corporate energy and greenhouse gas emissions performance is a commitment of the Whistler Official Community Plan, the RMOW Carbon Neutral Operations Plan, and our Council-adopted commitments within the BC Climate Action Charter.

BUDGET CONSIDERATIONS

The tracking and reporting of energy consumption, expenditures and GHG emissions does not have direct budget implications beyond the dedication of staff time. The inventories themselves however do provide the basis of forecasting future energy budgets for individual Divisions, Departments and Workgroups across the organization

COMMUNITY ENGAGEMENT AND CONSULTATION

The Report will also be posted on the RMOW website (whistler.ca) for public access and review.

Moreover, the results of this Report is used as a foundational element in the Community Advisory Group engagement that has been convened for the planned update to the Community Energy and Climate Action Plan (CECAP) project.

SUMMARY

The purpose of the 'Whistler Energy Consumption and Greenhouse Gas Performance Trends - 2014 Annual Report" is to brief Council and the community with respect the Whistler community's, energy and greenhouse gas (GHG) emissions performance for the year 2014 and to report out on our progress toward our stated targets.

Reporting of both of community and corporate energy and greenhouse gas emissions performance is a commitment of the Whistler Official Community Plan, the RMOW Carbon Neutral Operations Plan, and our Council-adopted commitments within the BC Climate Action Charter.

Respectfully submitted,

Ted Battiston
Manager of Special Projects

for
Mike Furey,
Chief Administrative Officer

APPENDIX A

WHISTLER **ENERGY CONSUMPTION** AND **GREENHOUSE GAS** PERFORMANCE TRENDS

2014 ANNUAL REPORT

Chief Administrator's Office
The Resort Municipality of Whistler | June 2015

THE PREMIER MOUNTAIN RESORT COMMUNITY
MOVING TOWARD A SUSTAINABLE FUTURE

WHISTLER

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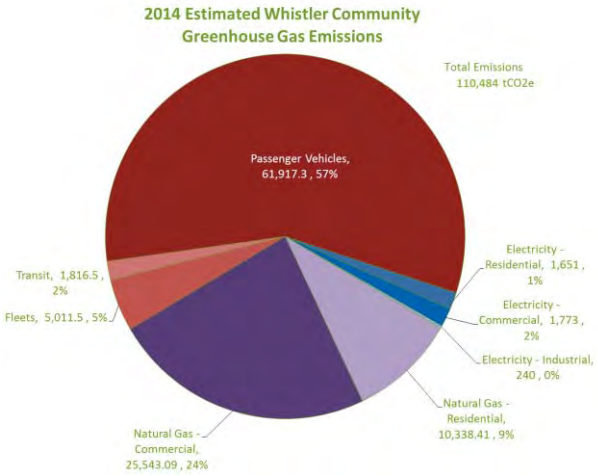
1 EXECUTIVE SUMMARY

As a tourism-focused mountain town, Whistler has long been concerned with the issue of climate change. The resort community has a special dependence on stable snow and weather patterns, making us very aware of our shared responsibility to manage greenhouse gas emissions, and even more sensitive to the reality of the potential impacts if we do not.

Since 2010, the primary purpose of this Annual Report has been to provide a summary of Whistler's energy and greenhouse gas (GHG) emissions performance for the previous year. The secondary purpose of this report includes a summary of the energy and emissions performance for the RMOW's internal corporate operations. This ongoing performance data forms the foundation for informed energy cost management and ongoing climate change mitigation efforts.

COMMUNITY-WIDE PERFORMANCE

2014 COMMUNITY GHG EMISSIONS: Greenhouse gas emissions in Whistler are made up of emissions from stationary sources (buildings and infrastructure systems), mobile sources (passenger vehicles, fleets, and transit), and emissions from landfilled wastes. Passenger vehicle transportation within Resort Municipality of Whistler (RMOW) boundaries continues to represent the largest share of the overall emission footprint at 57%, followed by natural gas consumption at 33% (primarily used for space and water heating).



Larger version of this chart in Section 3.1.2

The community of Whistler has committed to community-level greenhouse gas reductions of: 33% by 2020; 80% by 2050; and 90% by 2060 (each versus 2007 levels). From 2008 until 2012, the community managed to remain on pace towards these targets – **however the 2013 and 2014 community results suggest that Whistler is no longer be on pace to meet the community's 2020 target GHG reduction level.**

Total community GHG emissions in 2014 were estimated to be **110,500 tCO2e**[1]. The 2014 level is approximately 17% lower than 2007 levels and 23% lower than 2000, but **1% above last year's level** and 46% higher than 1990 levels. It is worth noting that the primary driver for the GHG reductions over the last few years has been the decreasing GHG intensity of BC Hydro electricity – without this decrease in GHGs/kWh, Whistler's total emission level would be approximately 6,000 tCO2e higher than presented within this report.

From a GHG emissions intensity perspective, estimated 2014 GHG emissions per population equivalent[2] decreased year over year by 6% to 3.8 tCO2e/PE. This intensity is 26% lower than 2007 levels, and is the lowest annual per capita measure since detailed record keeping began in 2000.

Looking ahead, the key challenge for our community will be maintaining the rate of reduction achieved over the first five years of our commitment period as further 'one-time changes' (such as the piped propane to natural gas conversion and the landfill cap and capture projects) are, for the most part, no longer readily available. To remain on target toward our reduction goals, additional, incremental

[1] **Carbon dioxide equivalent** (or **CO_2e**) is the most common unit of measure for quantifying the amount of 'climate change impact' a given type and amount of greenhouse gas may cause, using the functionally equivalent amount or concentration of carbon dioxide (CO_2) as the reference.
[2] The nature of Whistler being a tourism community means the number of people in Whistler on any given day is generally far greater than the population counts provided Canada Census or BC Statistics estimates. The total Population Equivalent is an estimate of the total number of people in Whistler on an average annualized basis. The indicator is often used in 'per capita' measures to normalize the data and make it comparable to other communities. More detail on the composition of the Population Equivalent can be found at: http://www.whistler2020.ca/whistler/site/genericPage.acds?instanceid=2985334&context=2985223

reductions of ~4,000 tonnes of CO2e will be required each and every year for the remainder of the decade (or approx. a 4% reduction each year).

From an overall perspective, Whistler still needs to reduce annual emissions by 21,400 tCO2e by the end of the 2020 year to meet its target – a further reduction of approximately one fifth of our current annual emission levels.

2014 Community Energy Consumption & Expenditures: Community energy consumption since the base commitment year of 2007 did not follow the same downward trajectory as community GHG emissions initially. In fact, the three years from 2010 to 2012 were the three highest years of estimated energy consumption ever recorded in Whistler. However, in the past five years, community energy consumption has been steadily decreasing at a rate of approximately 2% each year.

> It is expected that future GHG reductions will need to be premised primarily on *actual energy conservation* and *increased efficiency* rather than *one-time technological changes in community systems*.

Total community energy consumption in 2014 was estimated to be 3.01 million GJ (down 3.5% from 2007 levels, and down 2.1% year over year, but approximately 98% higher than 1990).

Electricity is the most prevalent type of energy consumed in Whistler, at 45% of the total consumption, followed by vehicle fuels (~31%), and natural gas at 23% of total consumption.

The estimated annual collective energy expenditure within Whistler has increased by more than $34 million since 2000 ($83 million vs. $49 million). Energy expenditures for residential buildings now total approximately $20 million/year, with commercial building expenditures totaling approximately $24 million on an annual basis (passenger vehicles and fleets make up the remainder). Total passenger vehicle estimated expenditures increased to an estimated $35M/year, which is an increase of over $7.7M/year compared to 2007 levels.

Finally, with the exception of recent changes to piped natural gas in Whistler, increases in energy rates continue to outpace the rate of inflation so it is expected that the combined community expenditure will continue to rise faster than our collective ability to pay for it. This fact underscores the importance of increasing community-wide energy conservation and energy efficiency.

2014 CORPORATE OPERATIONS PERFORMANCE

2014 Corporate GHG Emissions: The RMOW's Carbon Neutral Operations Plan sets the targets for total corporate GHG reductions as follows: 10% by 2010; 20% by 2013; and 30% by 2015 – all relative to 2008 levels.

Total corporate GHG emissions in 2014 were 1,510 tCO2e. This level of emissions is 4% higher than 2013 levels, but it is still approximately 35% below the 2008 benchmark (the reference year for RMOW target setting).

As demonstrated in the chart to the right, corporate emissions are currently below the 2014 annual GHG emission levels targeted in the 2009 Carbon Neutral Operations Plan. However, if emissions continue to increase year over year, it is possible that the RMOW will fail to meet future emissions reduction targets.

Larger version of this chart in Section 4.1.1

On a division-by-division basis, the relative emissions footprint of corporate operations is as follows: (46%) Infrastructure Services — which includes roads crews, solid waste systems, the water utility, and the sewer utility; (29%) Resort Experience (REX) —

which includes village maintenance operations, horticulture, turf, and irrigation crews, parks and trails, as well as facility construction and maintenance operations; and (25%) Corporate and Community Services — including bylaw, fire, Meadow Park Sports Centre, and other recreation programs.

GHG emissions across corporate operations are produced primarily from the combustion of mobile fuels (gasoline and diesels) at 47%, followed by natural gas at 43%, and electricity at 10%.

Over the last few years, the primary source of GHG emission reductions across municipal operations has been attributed to a decrease in BC Hydro's emission factor, as well as natural gas reductions at the WWTP and Meadow Park Sports Centre (MPSC). Despite an a small increase year over year, 2014 MPSC emission levels were still 430 tCO_2e lower than 2008 benchmark levels.

2014 Corporate Energy Consumption & Expenditures: Total corporate energy consumption increased in 2014 by 3% year over year to 74,000 GJ/year. Electricity consumption makes up the greatest portion of total energy consumed across municipal operations at 69% of the total consumption, followed by natural gas (17%), and mobile fuels (14%).

While 2014 Resort Experience's energy consumption decreased by 5% year over year, Corporate and Community Services and Infrastructure Services both saw year over year increases of energy consumption, 3% and 8% respectively. Currently, Infrastructure Services' consumption level is 13% higher than 2008 base year levels. However, Resort Experience's consumption levels have decreased to 7% below base year levels, and Corporate and Community Services continue to see the largest consumption decrease, currently sitting at 31% less energy use compared to 2008.

Overall, 2014 energy expenditures across municipal operations increased by 8% to ~$1.78M (this was due to the combined influence of a 3% increase in consumption, and increases in the unit rates of various energy sources). Electricity consumption makes up the largest portion of corporate energy expenditures (~$1M/year), and expenses increased in all three of the major divisions: Corporate and Community Services' by 7%, Resort Experience's by 1%, and Infrastructure Services' by 13%.

SUMMARY COMMENTS

The impact of changing climatic conditions – especially reliable snow patterns – has the potential to substantially impact Whistler's primary economic engine – tourism. Informed, strategic planning that considers and evaluates the impacts of the issues related to climate change and rising fuel costs can help to ensure that Whistler is best positioned to maintain its success into the future.

Accurate, detailed data is fundamental to these discussions; information such as that which is included in this report will continue to provide a strong basis for informed decision-making as our community measures its success, matures, evolves and thrives in the coming decades.

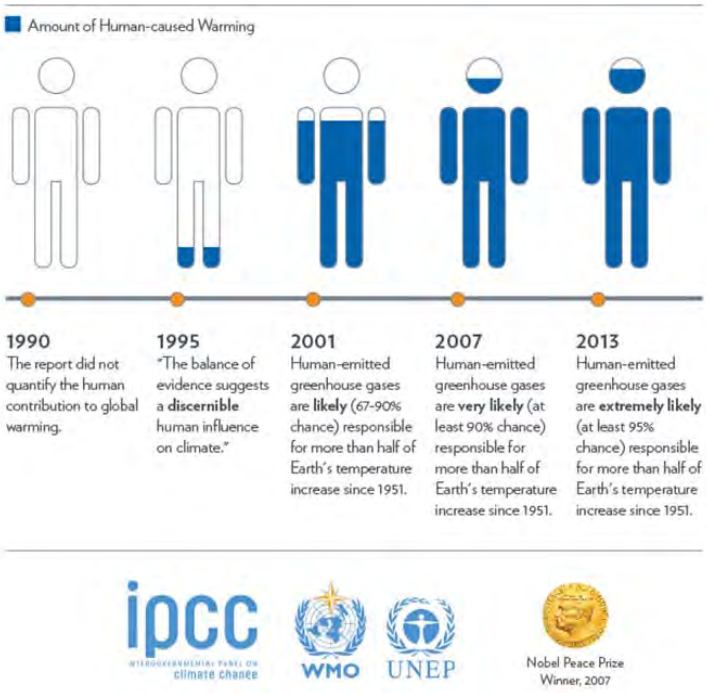
2 INTRODUCTION

Whistler is not sustainable. However, our Vision is to be the *Premier Mountain Resort as we move toward sustainability*. Implied in this vision is a journey — an understanding that it will take continued commitment to get to our intended destination. Whistler also understands that on this journey we will have to find a way to do things more efficiently.

As a mountain town, Whistler has long been concerned with the issue of climate change. Our resort community has a special dependence on stable snow and weather patterns, making us very aware of our shared responsibility to manage greenhouse gas emissions, and even more sensitive to the reality of the potential impacts if we do not. Throughout our community, both private and public organizations understand that the integrity of functional natural systems is absolutely fundamental to the wellbeing of our community, and the viability of our economic engines.

Moreover, we now live in an era of **climate responsibility** and by extension this **requires climate action**; climate change is a certainty, as is human responsibility for it[3]. The IPCC concluded in 2013 that "human emitted greenhouse gases are extremely likely (at least 95% chance) responsible for more than half of Earth's temperature increase since 1951."

Reducing our greenhouse gas emissions is one of the most significant actions we can take as a community to take responsibility for our part in solving the climate crisis.



The primary purpose of this Annual Report is to provide a summary of Whistler's community-wide energy and greenhouse gas emissions performance over the past year (Section 0). The report includes detailed performance data, highlights key trends and insights, and benchmarks our performance against our Council-adopted targets. **It is the intent of this report to support and inform the strategic management of energy and climate-changing emissions across our community.**

The second part of this report (Section 4) includes a summary of the energy and emissions performance of the RMOW's internal corporate operations. Although corporate emissions represent less than 1.5% of the total community GHG emissions, RMOW staff have the greatest level of direct control over these corporate emissions, and as such, have the opportunity and responsibility to both lead by example, and demonstrate success.

This is the 4th Performance Report that has been produced at this level of detail (2010, 2011, and 2013 are available on whistler.ca).

[3] Climate Change 2013, The Physical Science Basis – Working Group 1 Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, IPCC, 2013. http://www.ipcc.ch/report/ar5/wg1/

2.1 BACKGROUND

Whistler is one of the few communities in BC that has a relatively long history of both setting emissions reductions targets and actively monitoring its GHG emissions footprint. This commitment is evident in our dedication to Integrated Community Sustainability Planning, long-term measurement and reporting of energy consumption and GHG emissions performance, the integration of energy and emission reduction goals into broader municipal policies and practices, and continued participation on provincial and national advisory committees.

2.1.1 Whistler2020: Our Community's Comprehensive Sustainability Plan

The Whistler community understands that sustainability is not just about the environment; that three concepts – ecological integrity, fiscal viability, and social justice – point to a larger and integrated strategy, and that these three concepts are not as strong in isolation as they are when considered together.

In 2005 the RMOW adopted Whistler2020, the community's comprehensive, long-term sustainability plan, as direction setting policy.

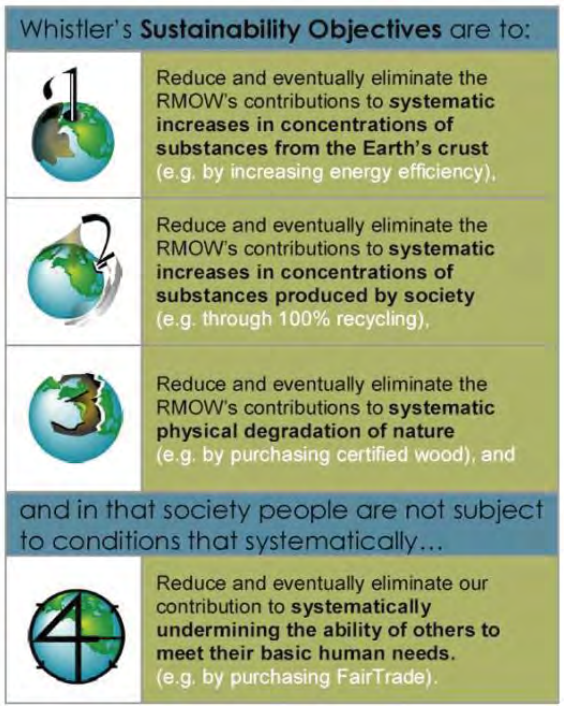
Whistler2020 is Whistler's Integrated Community Sustainability Plan, an expression of the community's vision as required by the Province of British Columbia. Whistler2020 is the product of thousands of voices across our resort community coming together to **articulate the vision of the resort community we aspire to be.**

The community vision articulated within Whistler2020 is organized around the following five priorities:

1. Enriching Community Life
2. Enhancing the Resort Experience
3. Ensuring Economic Viability
4. Protecting the Environment
5. Partnering for Success

Moreover, Whistler2020 imbeds and integrates four science-based Sustainability Objectives premised on the Natural Step principles (see box on the right) into the vision and the framework for making decisions. In this sense, these Sustainability Objectives act as a compass to help frame and guide decision-making and ongoing planning.

Working within the Whistler2020 framework, the community has aimed to steadily integrate the Sustainability Objectives broadly into all aspects of community planning and development strategies – from Energy and Transportation strategies, to Economic and Visitor Experience strategies. Through the consistent application of the four shared Sustainability Objectives, our community is striving to integrate climate change mitigation into all community policies and operational practices.



Though climate change is viewed mainly as an environmental problem, it is much more than that.

Climate change extends far beyond a solely environmental perspective.

2.1.2 Whistler's Community Energy Planning – A Brief History

Whistler committed to its first greenhouse gas emission reduction targets in 1997. In that year, Whistler Council endorsed the Kyoto Protocol target of having our community's emissions at 6% below 1990 levels by the year 2012. For municipal (corporate) emissions, Council also committed to being a part of the "20% Club", committing to reducing corporate emissions 20% below 1990 levels by 2012 — **two aspirations that the community of Whistler did not achieve**.

Following up on these commitments, the RMOW participated in the Federation of Canadian Municipalities' (FCM) Partners for Climate Protection (PCP) program. The PCP program was launched by FCM as an extension of ICLEI's (Local Governments for Sustainability) Cities for Climate Protection program in the United States. Partner cities become members in a network of municipalities that began working toward the achievement of the five management-based milestones of the program. The milestones were designed to create tools and processes that were easy to understand and implement, and also provide effective guidance for municipalities to take serious steps toward climate action.

To meet the commitments of the Partners for Climate Protection program process, the RMOW developed the first Integrated Energy, Air Quality, and Greenhouse Gas Management Plan in Canada in 2004.

FCM/ICELI Partners for Climate Protection

The five milestones of the Partners for Climate Protection program are:

1. Create a greenhouse gas emissions inventory and forecast;
2. Set an emissions reductions target;
3. Develop a local action plan;
4. Implement the local action plan or a set of activities; and
5. Monitor progress and report the results.

In 2007, the Resort Municipality of Whistler became the first community in Canada to complete all five milestones for both community and corporate emissions.

The recommended implementation scenario in the Integrated Energy Plan acknowledged that achieving our community target of 6% below 1990 levels would be very difficult to achieve by 2012. As such, the plan recommended a reductions scenario that would see Whistler's emissions at 9% below 2000 levels (but 22% above 1990 levels) by 2020. This was recommended in contrast to the forecasted *business as usual* (i.e. take no action) scenario that predicted Whistler community GHG emissions would rise to 92% above 1990 levels (47% above 2000) by the year 2020.

In September of 2007, at the Union of BC Municipalities (UBCM) conference in Vancouver, Whistler was one of original sixty-two[4] local governments in BC that signed on to the Province's voluntary BC Climate Action Charter. The Charter opens with the following statement, agreed to by all signatories, **"Scientific consensus has developed that increasing emissions of human caused greenhouse gases (GHG), including carbon dioxide, methane and other GHG emissions, that are released into the atmosphere are affecting the Earth's climate."**[5]

Currently approximately 180 BC communities have become signatories to the Charter. By signing, local governments agreed that:

5. In order to contribute to reducing GHG emissions:

   (a) Signatory Local Governments agree to develop strategies and take actions to achieve the following goals:

   (i) being carbon neutral in respect of their operations by 2012, recognizing that solid waste facilities regulated under the Environmental Management Act are not included in operations for the purposes of this Charter.

   (ii) measuring and reporting on their community's GHG emissions profile; and

   (iii) creating complete, compact, more energy efficient rural and urban communities(e.g. foster a built environment that supports a reduction in car dependency and energy use, establish policies and processes that support fast tracking of green development projects, adopt zoning practices that encourage land use patterns that increase density and reduce sprawl.)[6]

[4] The BC Climate Action Charter was eventually signed by more than 170 local governments across British Columbia.
[5] The British Columbia Climate Action Charter, Section 1
[6] The British Columbia Climate Action Charter. Section 5.

The charter is a voluntary agreement designed to bring local government support for the Province's broader overall climate action strategy of reducing emissions 33% (from 2007 levels) by 2020.

Enacted in 2008, Bill 27, *the Green Communities Act*, requires local governments to include (among other things) greenhouse gas emission targets, policies and actions in their Official Community Plans and Regional Growth Strategies.

In response to the *Green Communities Act*, the RMOW has integrated specific targets (discussed later in this report), policies, and actions within its Official Community Plan, and developed a Carbon Neutral Operations Plan.

Moving ahead, staff are in the process updating the Whistler Integrated Energy Plan. The **Community Energy and Climate Action Plan (CECAP)** project seeks to update the existing RMOW Integrated Energy, Air Quality and Greenhouse Gas Management Plan and set out strategic directions for mitigating Whistler's contribution to climate change. The project will also recommend adaptation strategies to prevent and minimize the likely impacts of 'locked-in' changes to future local climate regimes.

The current Integrated Energy Management Plan was completed in 2004 and is overdue for revision. Much has changed over the past 10 years, both in terms of infrastructure (for example, the community's conversion from propane to natural gas) as well as policy (in the form of the local OCP, the provincial Climate Action Charter, the Provincial Energy Plan, and, globally, the UN IPCC Reports). Furthermore, adaptation strategies aimed at preventing or minimizing anticipated negative impacts of climate change have become an increasingly critical component to climate action plans. Given these significant changes, our new Community Energy and Climate Action Plan must be updated to reflect this new context and its associated challenges and opportunities; the targeted completion date for the CECAP Q1 of 2016, with implementation to follow.

Building on the background and contextual elements presented in Section 2, Section 0 details how the community of Whistler is progressing toward our energy and emission reduction goals, while Section 4 presents similar performance data for RMOW corporate operations.

3 COMMUNITY PERFORMANCE

Since the year 2000, RMOW staff have tracked and compiled community energy consumption, energy expenditure and GHG emission data. At the community level, primary sources of data to support this inventory are accessed from local utilities (BC Hydro and FortisBC), as well as from local traffic counter data (both provincial and municipal) and annual RMOW waste and recycling performance tracking. Sections 3.1 and 3.2 of this report summarize the most current performance trends for 2014.

3.1 COMMUNITY GREENHOUSE GAS EMISSIONS

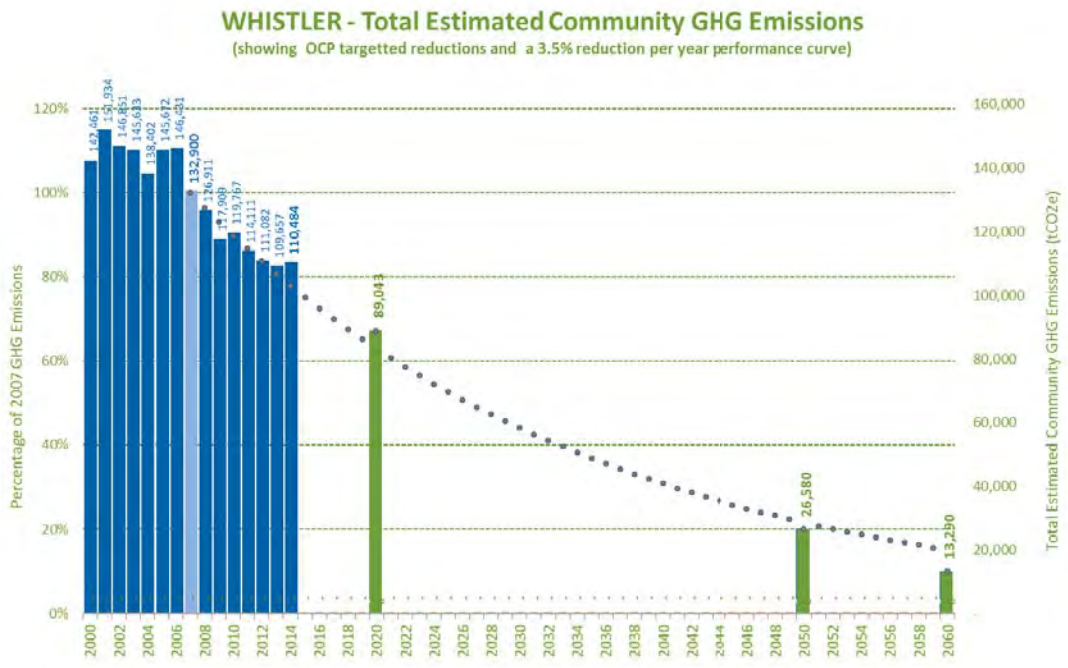
Section 3.1 deals specifically with GHG emissions at the community level, this section includes information on related Council-adopted targets, an overview of 2014 performance, as well as a short section on key associated insights and trends.

3.1.1 Community GHG Reduction Target

As previously stated, the *Provincial Green Communities Act* (Bill 27, 2008) requires all municipalities to adopt **targets**, policies and actions for the reduction of community-wide GHGs. As per the Whistler Official Community Plan, when compared to 2007 GHG emission levels, the community of Whistler has committed to community-level greenhouse gas reductions of: **33% by 2020, 80% by 2050[7]; and 90% by 2060**.

33% by 2020
80% by 2050
90% by 2060

If it is anticipated that the attainment of these targets is achieved at a consistent rate (or pace) over the coming decades, these targets translate into an **annual GHG reduction of approximately 3.5% per year**. The following chart illustrates the potential achievement of this 'target' over time. The chart presents the community targets (green bars), the historic community emissions levels (blue bars) as well as an indication of the annual reductions that would be required to achieve the prescribed targets using a constant rate of improvement model (orange dots).



[7] 33% by 2020 and 50% by 2050 are identical to the Provincial targets set by the Government of BC.

As demonstrated on the chart above, the community of Whistler managed to remain generally on pace towards our targets for the first five years of the target period. GHG emission reductions achieved during these five years (2008-2011) were impressive – averaging approximately 4,300 tonnes of reductions annually over the five year period.

It is worth noting however, that the primary sources of the reductions over the first four years were generally **one-time** only events:

1) the changes to Whistler's waste management processes (i.e. landfill closure, landfill gas management, organics recycling and the switch to the advanced landfill management systems at Rabanco);
2) the switch from piped propane to natural gas across the community;
3) the changes brought about through the provincial low-carbon fuel standards for gasoline and diesel, and;
4) the decrease in GHG intensity (GHG/kWh) of BC Hydro supplied electricity.
5) the reduction in diesel consumption associated with the hydrogen transit bus pilot project, (Note that pilot project has since ended, resulting in an increase in diesel consumption in 2014)

It is also important to note that the 6th year of the commitment period **(2013) did not remain on the intended curve toward the 2020 adopted target** (33% reduction vs. 2007). 2013 year-over-year emission reductions levels were only 1,425 tCO2e (1.3%), which is far less than the targeted 3,000 to 4,000 tCO2e (3.5%) required to remain on the target curve. **Moreover, this past year (2014) is the first in the 7 years of the commitment period that has seen an increase in total emissions, rather than a reduction**. Whistler's emissions in 2014 were 110,484 tCO2e, which represents an increase of 1,242 tCO2e year-over-year, as opposed to the 5,800 tCO2e reduction that would have been necessary for the community to remain on the target curve of a 33% reduction by 2020.

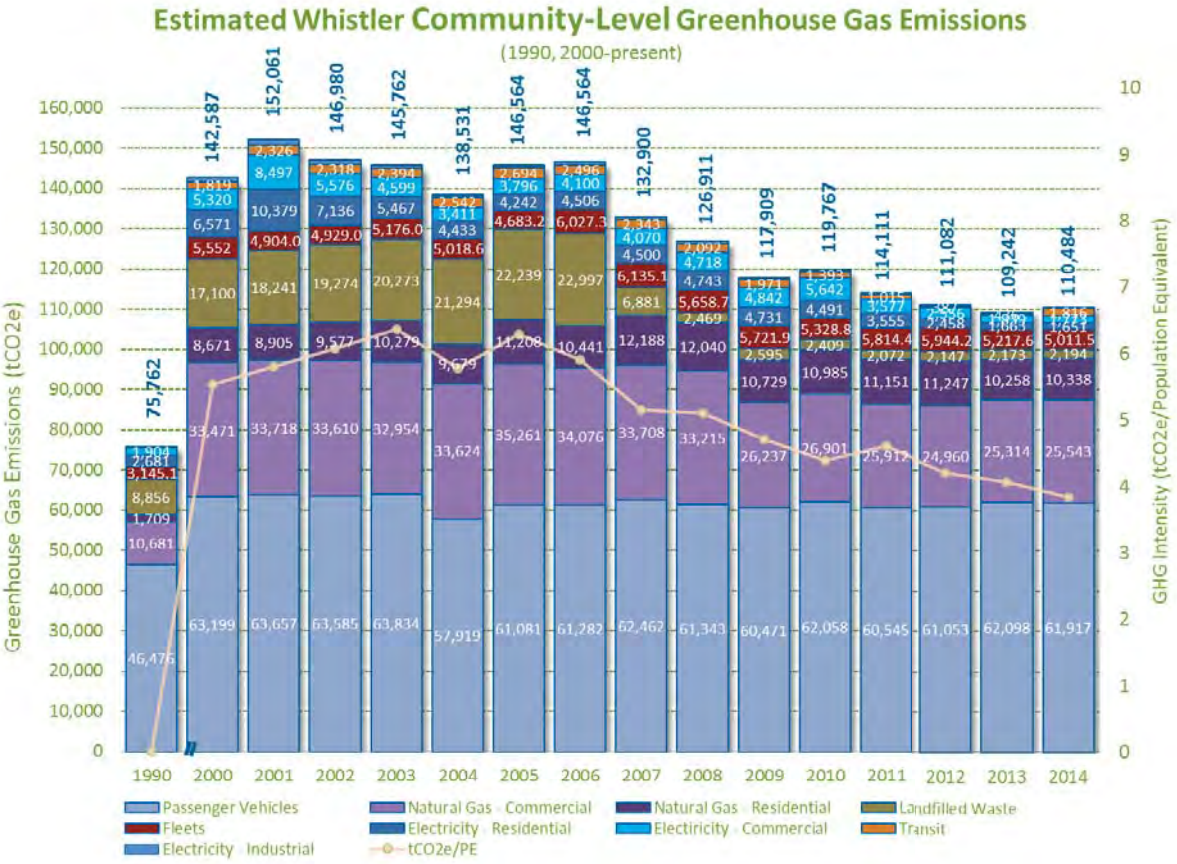
2014 community GHG levels are estimated at 17% below the 2007 base year (rather than the targeted 22.1%). For the 2015 year to return to a level on or below the target curve will require an annual reduction of approximately 10,000 tCO2e. A reduction of this size has only once been achieved in Whistler's history (when the landfill was closed and the cap and capture membrane was installed).

Looking ahead, the key challenge for our community will be regaining the rate of reductions achieved over the 2008-2012 period as further 'one-time changes' are, for the most part, no longer readily available. To remain under the target curve presented above, additional reductions of 3,500 to 4,500 tonnes of CO2e will be required annually for the next 10 years. Future GHG reductions will need to be primarily premised on ***actual energy conservation*** and ***increased efficiency*** rather **than *one-time technological or infrastructure changes in community systems*.** The required conservation will be particularly challenging for the community as historic performance assessments demonstrate the energy conservation gains have proven elusive over the past decade.

Bottom Line: Given that Whistler does not currently have plans for GHG reduction initiatives of a similar scale/impact as the natural gas conversion project coupled with the fact that annual collective energy efficiency improvements have historically modest across the community, **it is unlikely that community emissions will remain on target to achieve the adopted 2020 target levels included in Whistler's Official Community Plan.**

3.1.2 Community GHG Emission Performance

Total community emissions in 2014 were estimated to be **110,500 tCO2e**. This level is approximately 16.9% lower than 2007 levels, 22.5% lower than 2000, but **1% above 2013 levels** and above our current community target levels.



From a GHG emissions intensity perspective, 2014 GHG emissions per population equivalent[8] decreased to 3.8 tCO2e/PE. This level is 6% below 2013 levels and the lowest annual per capita measure since detailed record keeping began in 2000. This is primarily driven by an increase in population equivalent in the 2014 year. Stated another way, while total community emissions went up somewhat, the number of people in the resort increased more significantly, hence the ratio, or the emissions/person went down.

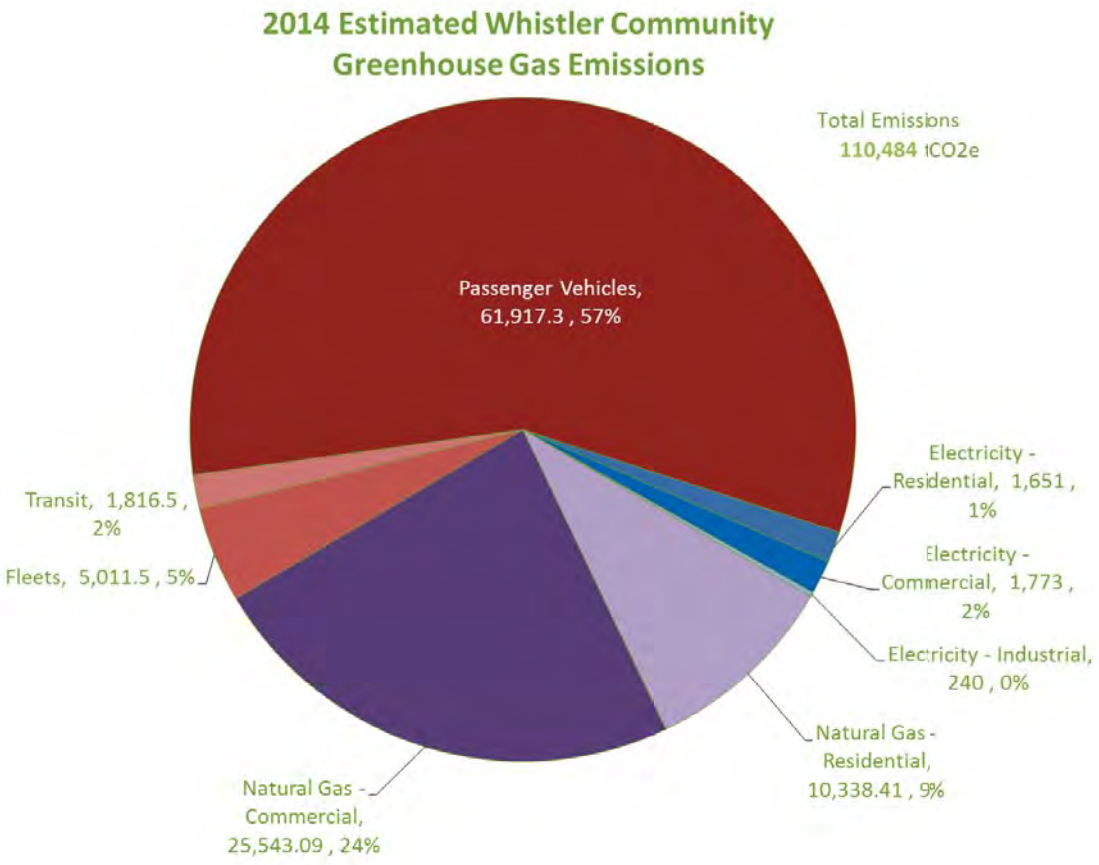
As noted above, the primary drivers of reductions in previous years have been the changes to the local waste management system (especially landfill gas capture); the switch from piped propane to piped natural gas, the BC Transit Hydrogen Transit Fleet pilot project (which has since ended), and more recently, the provincial low carbon fuel standards and the decreasing GHG intensity of BC Hydro electricity.

As further one-time changes such as those noted above become less available to our community, **Whistler will no longer achieve reductions without substantive 'energy conservation' becoming the core driver of further emission reductions.**

[8] The nature of Whistler being a tourism community means the number of people in Whistler on any given day is generally far greater than the population counts provided Canada Census or BC Statistics estimates. The total Population Equivalent is an estimate of the total number of people in Whistler on an average annualized basis. The indicator is often used in 'per capita' measures to normalize the data and make it comparable to other communities. More detail on the composition of the Population Equivalent can be found at: http://www.whistler2020.ca/whistler/site/genericPage.acds?instanceid=2985334&context=2985223

Distribution of Emissions

Greenhouse gas emissions in Whistler are made up of emissions from stationary sources (buildings and infrastructure systems), mobile sources (passenger vehicles, fleets, and transit), as well as emissions from landfilled wastes. The approximate share of each of these sources is presented in the following chart.



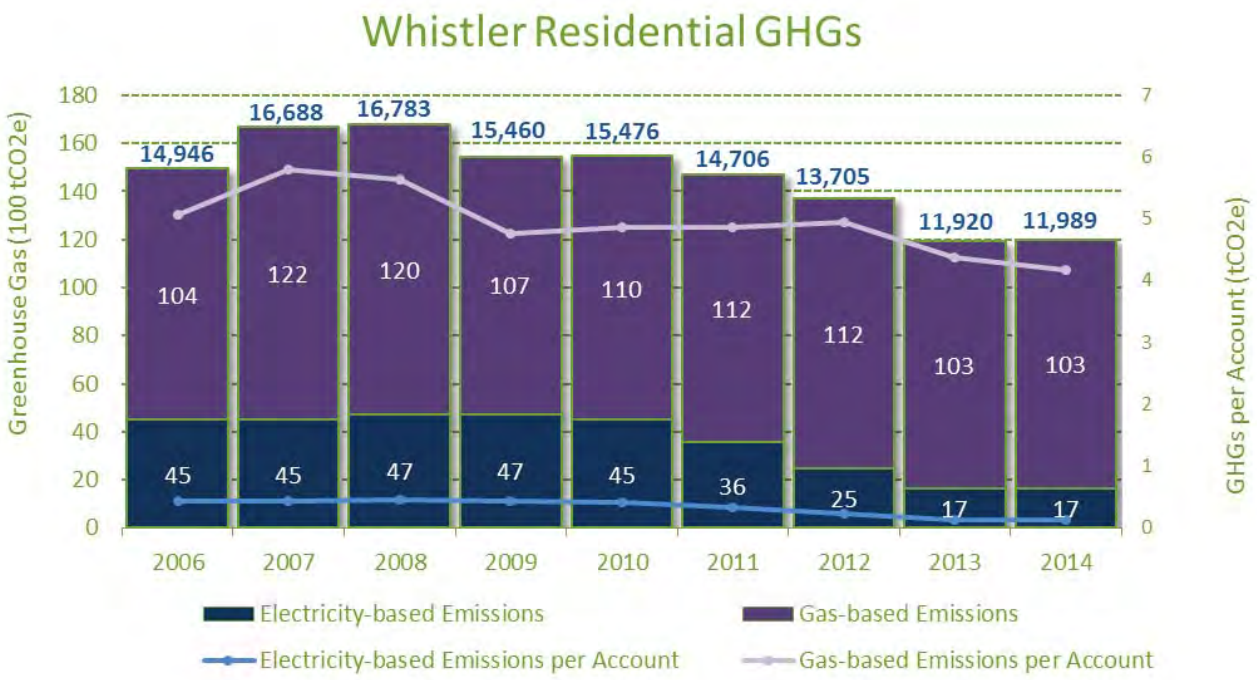
Passenger Vehicles

Passenger vehicle transportation within RMOW boundaries continues to represent the largest share of the overall emission footprint (57%), followed by natural gas consumption at 33% (primarily used for space and water heating).

Whistler Buildings - GHGs

The following two charts show the changes in greenhouse gas emissions from key segments of the community building inventory.

Residential GHG Emissions



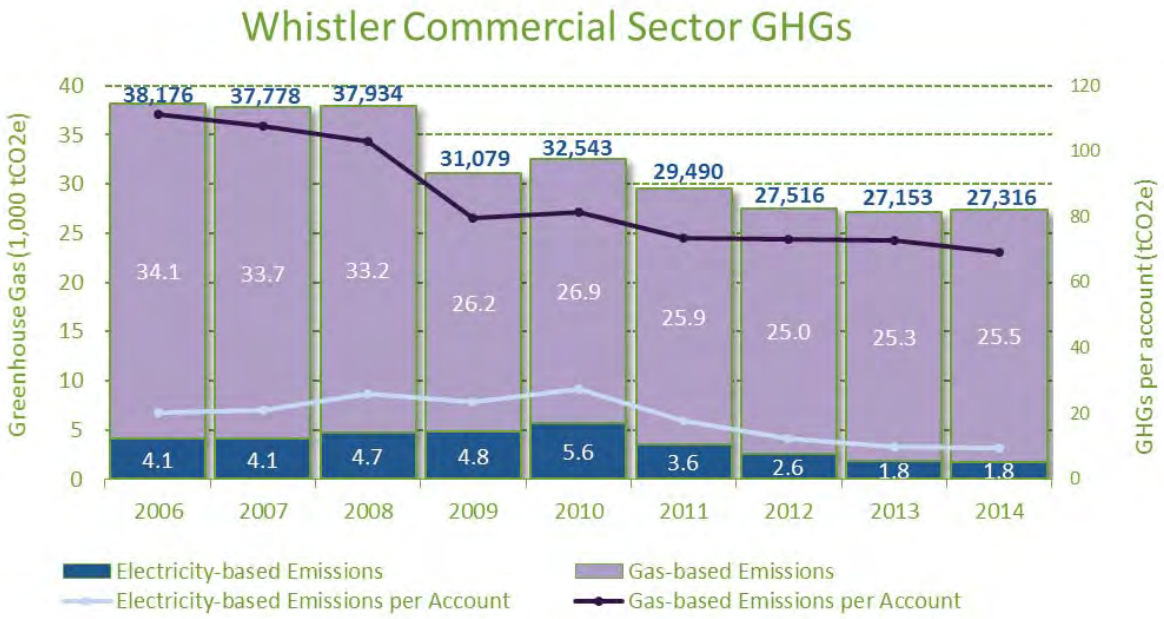
Residential Natural Gas Emissions

Natural gas based GHG emissions across the residential sector have increased by 1% year over year, which represents relatively consistent emissions year over year. Additionally, 2014 natural gas emissions per residential account decreased year over year, and due to a similar reduction in 2013, this figure is currently the lowest on record.

Residential Electricity Emissions

Electricity-based emissions have decreased in the residential sector on both a total basis, as well as an emissions per account basis. While total electrical consumption did decrease in 2014 (-4%), the primary driver of decreasing electricity-based emissions over the past few years is the reduction in system-wide BC Hydro GHG emissions intensities.

Commercial GHG Emissions



Commercial Natural Gas Emissions

Commercial sector GHG emissions have decreased substantively since the conversion from propane to natural gas was finalized in 2009 (commercial heating gas emissions have declined by 28% versus 2006 levels). Most recently however, commercial natural gas emissions have remained steady over the past three years and remain approximately 27% lower than pre conversion 2007 levels. Commercial heating gas emissions per account are also currently at all time lows.

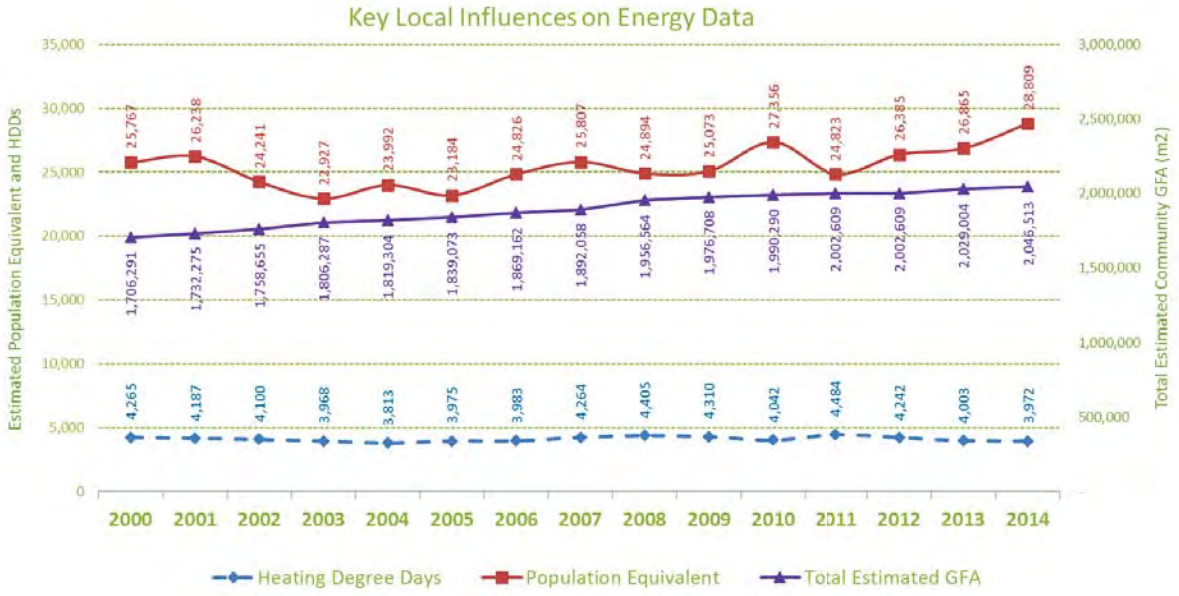
Commercial Electricity Emissions

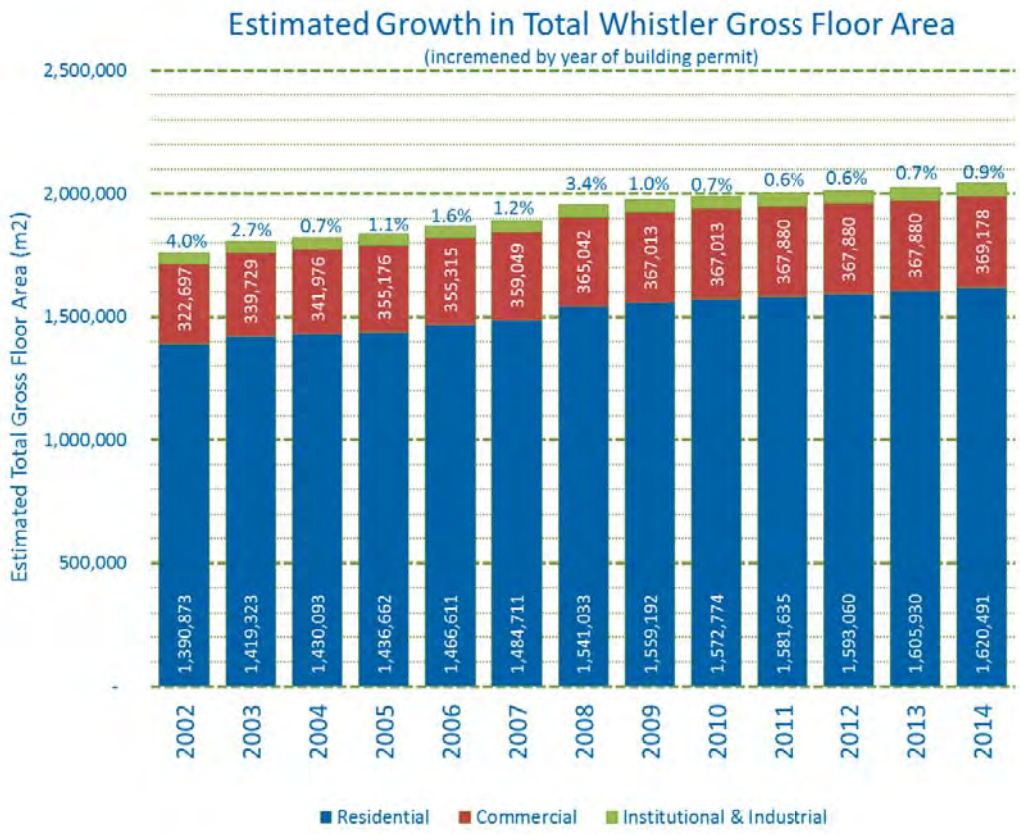
Over the last 10 years, GHG emissions from electricity consumption remained relatively steady until the 2010 Olympic Games year. Since the Games year, emission levels have decreased substantively for each of the following three years. These reductions are partially driven by a small drop in electrical consumption post Games (though still higher than pre-2010), but are primarily driven by decreasing GHG intensity levels across the BC Hydro system (i.e. reductions driven by forces outside our community). Commercial electricity based emissions have remained constant year over year.

Emissions per account have followed patterns similar to that described above.

The following three charts provide detail regarding the primary influences on energy consumption and emissions trends over time. These data are useful for the exploration of possible explanations for observed change over time. It is however important to note that Whistler's **emission reduction targets are set at total emission levels** – targets are not at set at per-capita or per-ft^2 intensity levels.

In the end, intensity measure may help us understand which factors are driving changes in performance, but it is only the total parts-per-million (ppm) of carbon in the atmosphere that defines and shapes the impacts of climate change. It is for this reason that Whistler chose to set total emission targets rather than emission intensity targets.





BC Hydro Emission Factor Comparison (tCO2e/GWh)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
3 year rolling average	40.7	34.7	23.7	24.7	26.3	24.7	26.0	25.3	25.3	19.0	13.7	10.6

3.1.3 Key Community GHG Performance Insights

Total GHG Emissions

- 57% of all estimated community-level emissions (~62,000 tonnes annually) are produced by passenger vehicle transportation within municipal boundaries. The passenger vehicle sector provides a critically important opportunity for future community emission reductions.
- For the first time since 2010, emission levels rose year over year in 2014, resulting in the fact that **the community is no longer on the anticipated statistical path to achieve our 2020 emission reduction goals.**
- Moreover, the lack of additional, significant one-time changes (i.e. low hanging fruit like the propane to natural gas conversion project) will make future progress toward our 2020 target much more difficult.

Commercial Buildings GHG Emissions

- Total emissions and emissions per commercial account are the lowest since detailed record keeping began (78 tCO2e/commercial acct).
- Collectively, commercial building emissions have decreased by 28% from the 2007 year – as such this sector is maintaining a strong trajectory toward the 2020 target (-33%). However, there was a slight increase in commercial building emissions in 2014.

Residential Buildings GHG Emissions

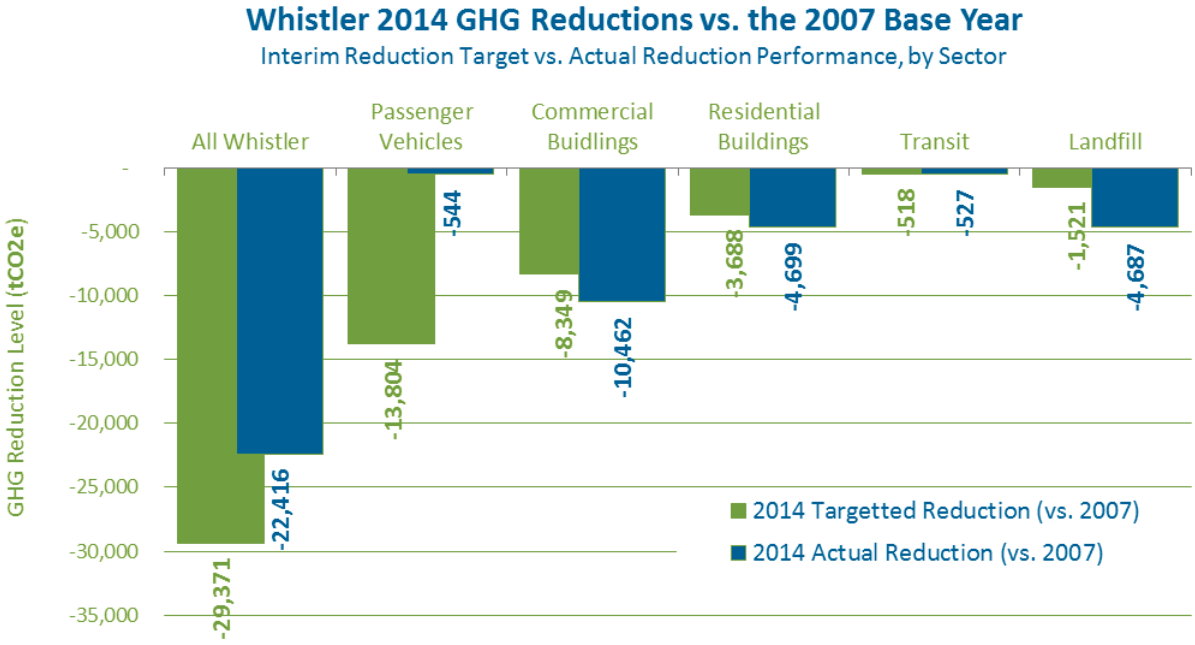
- Total residential GHGs have dropped from 2007 levels by 28% (primarily due to the shift to natural gas from propane and the decrease in BC Hydro GHG intensity – collectively cleaner fuels). This level of progress positions the residential building sector well for meeting the 33% reduction by 2020. However, year over year emissions remained relatively steady, and further reductions will be required to remain on target.
- The primary source of emissions across the residential inventory remains natural gas consumption (~80%).
- The shift to natural gas (from propane), and the decreasing GHG-intensity of BC Hydro electricity are the primary reasons for the strong GHG reductions in this sector. It should be noted that energy consumption across the sector has only decreased by 9% since 2007 (highlighting the role that cleaner fuels have contributed to the 28% GHG reduction noted above).

Transportation GHG Emissions

- Low carbon fuel standards have helped to mitigate the emissions from both gasoline and diesel consumption (5% ethanol blend in gasoline, and 4% biodiesel blend in diesel).
- Estimated total vehicle kilometres travelled (VKT) in Whistler (locals and visitors combined) has continued to increase over the last 10 years
- The average fuel efficiency of BC registered vehicles has only improved by ~3-4% over the last 10 years. This change has slowly reduced emission levels per kilometre driven from 2000 levels, but not by enough to cause sector-wide reductions in total estimated emissions. Moreover, recent trends indicate that lower gasoline prices may be contributing to an increase in the purchase of light duty trucks and SUVs, and a concurrent decrease in smaller passenger vehicle – a trend that works counter to the increased efficiencies noted above.
- The new fuel standards and the increases in vehicle efficiency are still far too small to move passenger vehicle emissions to the targeted reduction levels discussed in Section 3.1.1 above. Much more efficient vehicles, fuel switching to lower carbon fuel sources, and/or a decrease in VKT per person will be required to catalyze required emission reductions in this sector.
- **Estimated passenger vehicle emissions have remained at the same level as 2007 base year (vs. the 19% interim target level). This difference (11,500 tCO2e in unmet reductions) represents the single largest reason why the community is failing to maintain interim target reduction levels.**

Looking Ahead

- As previously noted, the key challenge for our community moving forward, will be regaining the rate of reduction achieved over the five years of the commitment period. This is due to the fact that further 'one-time changes' are, for the most part, no longer readily available.
    - Future reductions will need to be primarily premised on actual energy conservation and efficiency rather than one-time technological changes in community systems.
    - As seen in the chart below, the greatest need (and opportunity) for ongoing emission reductions is in the **passenger vehicle sector**.



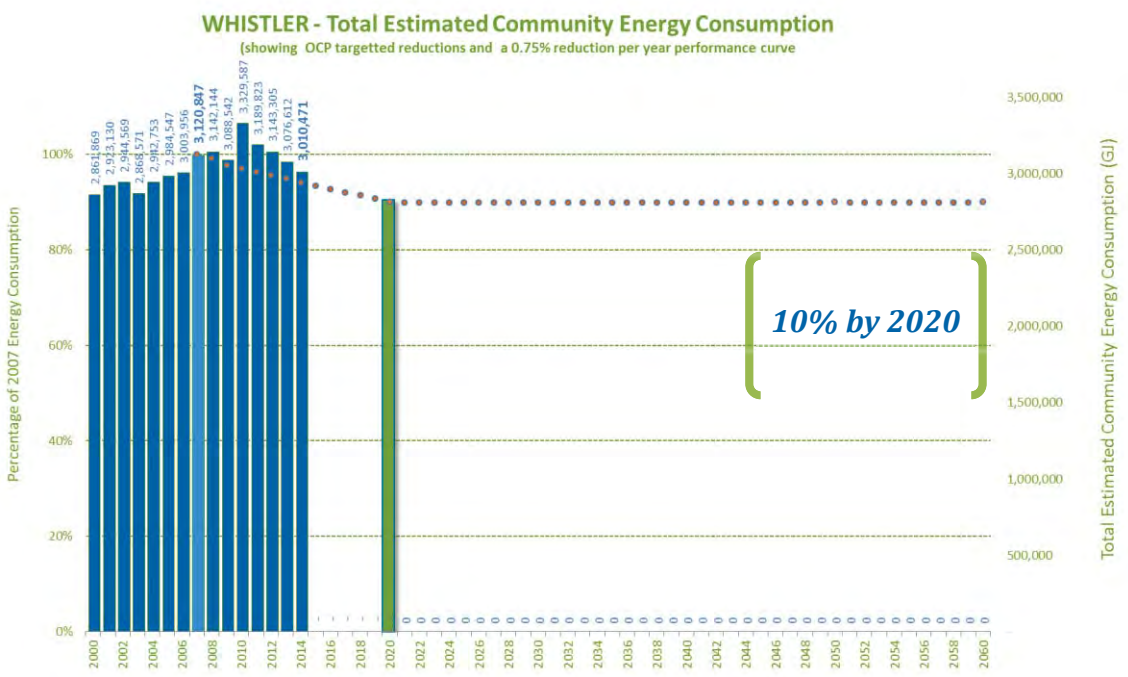
3.2 COMMUNITY ENERGY CONSUMPTION

Section 3.2 deals with energy consumption and energy expenditures at the community level. This section includes information on related targets, an overview of 2013 performance, as well as a short section on key associated insights and trends.

3.2.1 Community Energy Reduction Target

OCP Amendment Bylaw 1983, 2011 includes the Objective: '*Make Energy Conservation the Core Strategy and Highest Priority for Achieving Our Greenhouse Gas Emission Reduction Goals'*. To this end, the OCP Amendment Bylaw also includes a community-scale energy reduction target: "***The municipality will lead a community-wide effort to reduce total energy consumption to a level 10% lower than 2007 by 2020***".

This proposed policy introduces Whistler's first comprehensive energy reduction target – and one of the first by a local government in BC. Similar to the chart in Section 3.1.1 above , if it is assumed that this energy reduction target will achieved at a consistent pace over the next decade, this target translates into a 0.75% annual energy consumption reduction over the target period (2011 – 2020). A visual presentation of this rate of reduction is included below for clarity.

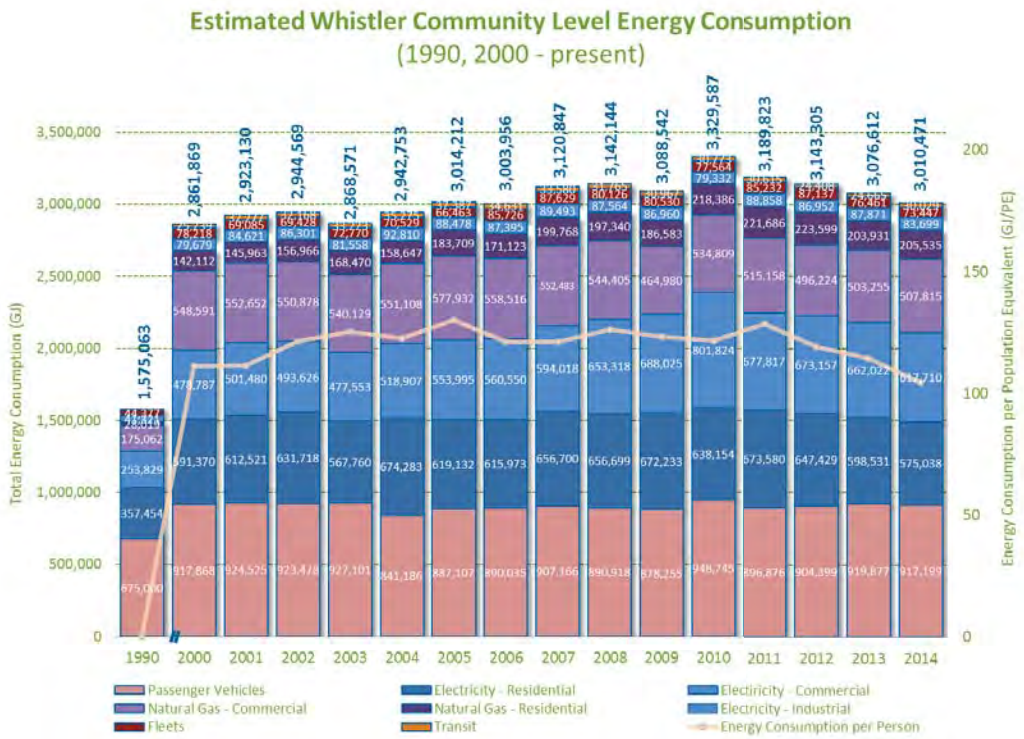


As evidenced in the chart above, historic energy consumption has not followed the same trajectory as community GHG emissions during the period between 2007 and 2013. **In fact, the 2010, 2011 and 2012 energy consumption levels were the highest three years of energy consumption ever recorded in Whistler.** However, community wide energy consumption has continued to decrease over the last 4 years, and if this trend continues the community may, in fact meet the anticipated 10% reduction target by 2020.

Currently, Whistler's total energy consumption is still 50,000 GJ higher than projected target levels for 2014.

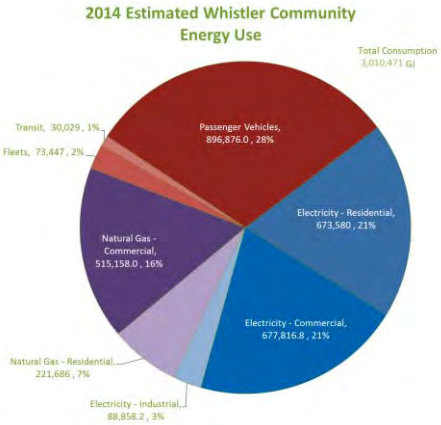
3.2.2 Community Energy Consumption Performance

Energy consumption in Whistler includes consumption from stationary sources (buildings and infrastructure), as well as mobile sources (passenger vehicles, fleets, and transit). Total community energy consumption in 2014 was estimated to be **3.01 million GJ** (down 3.54% from 2007 levels, and 2.2% below 2013 levels).Energy consumption per population equivalent has decreased over the last few years as well, with 2014 showing a marked improvement over the 10 year average, and the single best performance level since detailed reported began in 2000.



To sum, 2014 total energy consumption is lower than the 10 year average and the current trend suggests that it is possible to meet our 2020 goal if this improvements continue. Year over year consumption continue to show signs of modest improvement (~2%/yr), and per population equivalent levels have improved over each of the last three years.

Electricity is the most prevalent type of energy consumed in Whistler at 45% of the total consumption (unchanged from previous years), followed by vehicle fuels (~30%), and natural gas at approximately one quarter of total consumption. It is worth noting that due to the fact that different energy sources have differing carbon content, GHG emissions are much more heavily associated with consumption of fossil fuels (i.e. gasoline, diesels, and natural gas). This fact accounts for the differences in relative proportions depicted in this chart as compared the similar chart presented in Section 0.



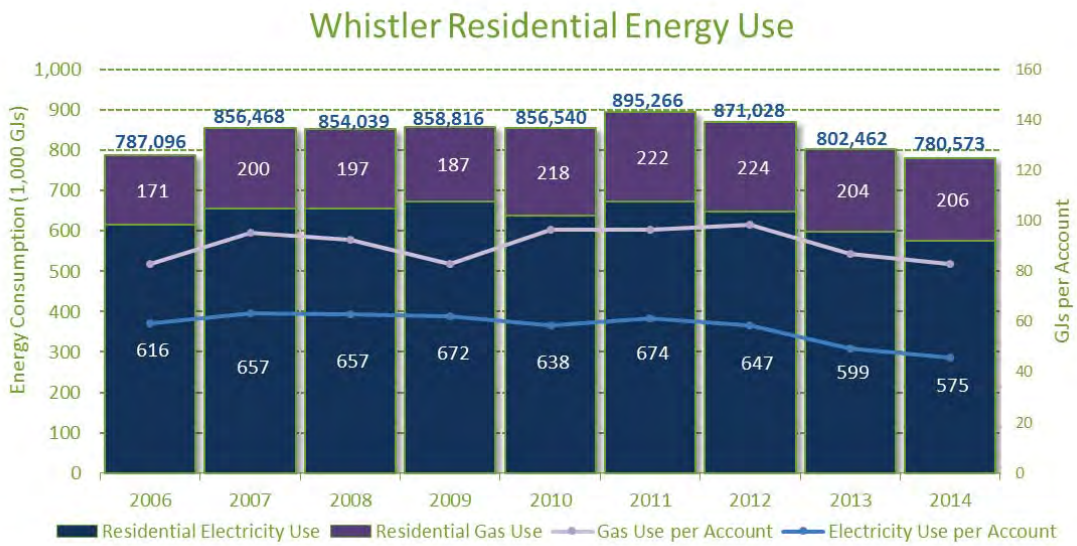
Though overall consumption has decreased year over year, GHG emissions have increased. In 2014, there was an increase in consumption of natural gas (~6,000 GJ, +300 tCO2e) and a decrease in electricity consumption (~70,000GJ, -100 tCO2e). Additionally, although there was a small decrease in fleet and passenger vehicle usage (down ~3,000 GJ, ~200 tCO2e and ~2,600 GJ, 100 tCO2e

respectively), there was an increase in consumption by Transit buses (~5000 GJ), which was also associated with a large increase in emissions (+1,380 tCO2e) as the hydrogen bus pilot project was phased out last year.

Whistler Buildings – Energy Consumption

Total energy consumption across Whistler's buildings is presented in the following two charts.

Residential Building Energy Consumption



Residential electricity consumption decreased in 2014 in both total terms and on a per account basis. Total 2014 residential energy consumption was the lowest since 2005 at 780,573 GJ (down 8.9% versus the average of the previous 5 years). This change reflects decreases in both electricity and gas consumption across the residential sector and may be partially explained by a slightly warmer winter in 2014 versus the average of the previous five seasons.

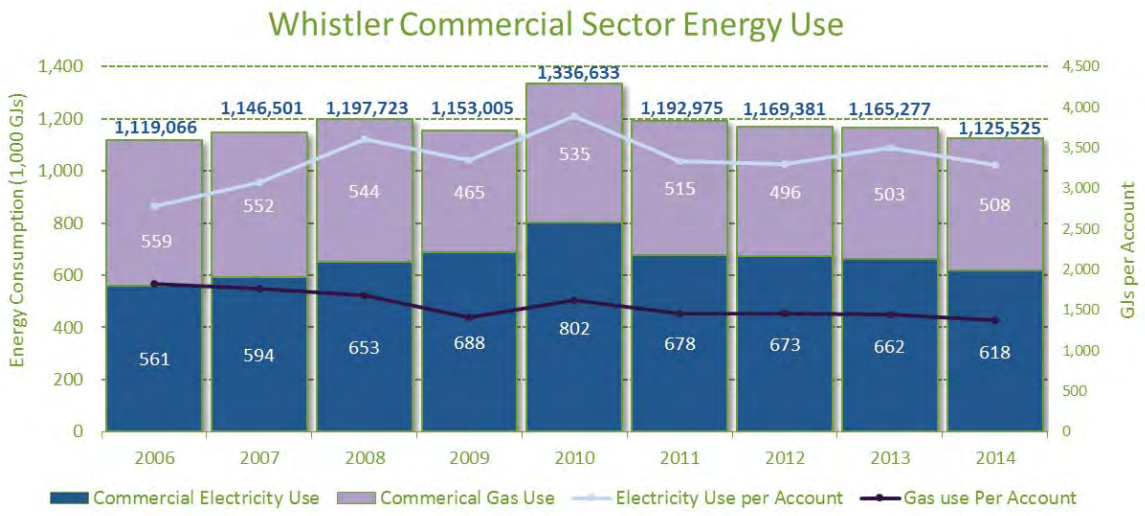
Residential Natural Gas

2014 natural gas consumption per account is 8% below the 10 year average consumption levels. Currently, the data may be beginning to suggest is that Whistler homes served by natural gas are, on average, becoming slightly more (gas) efficient over time.

Residential Electricity

Residential electricity consumption per account decreased in 2014 to one of the lowest levels in the last decade.

Commercial Building Energy Consumption



2014 results indicated that there has been a 4% decrease year over year in overall energy consumption by the commercial sector.

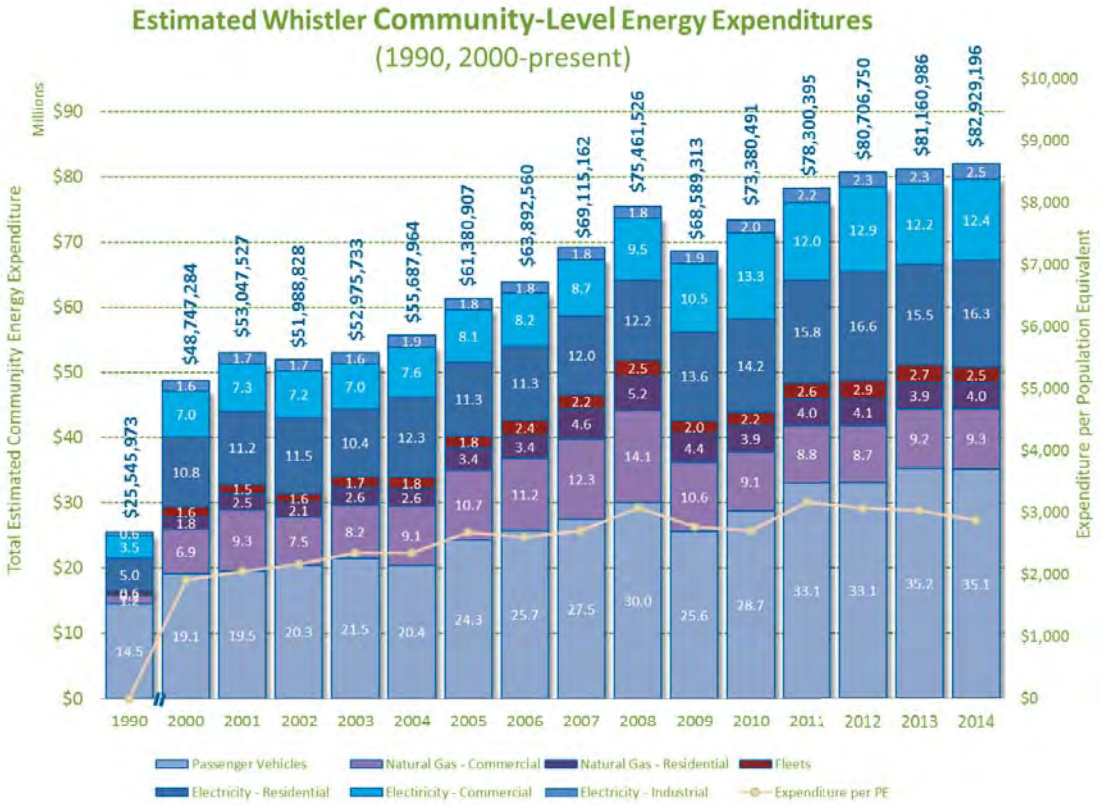
Commercial Natural Gas & Electricity

The period from 2003 through to 2008 saw a significant shift in commercial energy consumption trends. This period saw decreases in propane use at the same time as commensurate increases in electricity use across the sector. In sum, energy consumption was little changed, but the 'fuel-shift' did lead to lower overall GHG emissions. The primary reason for this shift was likely attributable be the increased use of hybrid electric boilers for space and water heating loads in the large hotel sector (i.e. a fuel shift from natural gas/propane to electricity for space and water heating loads in the commercial sector).

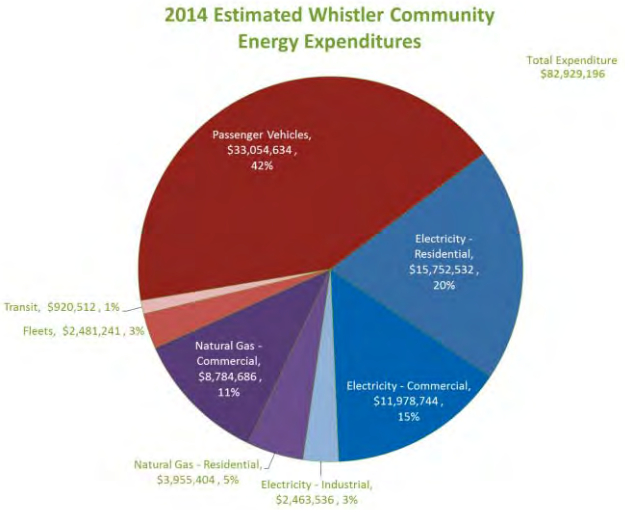
Given the recent change in rate structures in Whistler, it will be important to track this trend into the future. It is quite possible that a shift back to natural gas from electricity may occur. If this effect is observed, the net effect would likely be an increase in GHGs associated with this sector.

Energy Expenditures

The estimated annual collective energy expenditure within Whistler[9] has increased by more than $34 million between 2000 and 2014 ($83 million vs. $49 million). Increases in energy rates continue to outpace the rate of inflation, so it is expected that the collective community energy expenditure will continue to rise faster than our collectively ability to pay for it – a trend that underscores the importance of increasing both energy conservation and energy efficiency across the community.



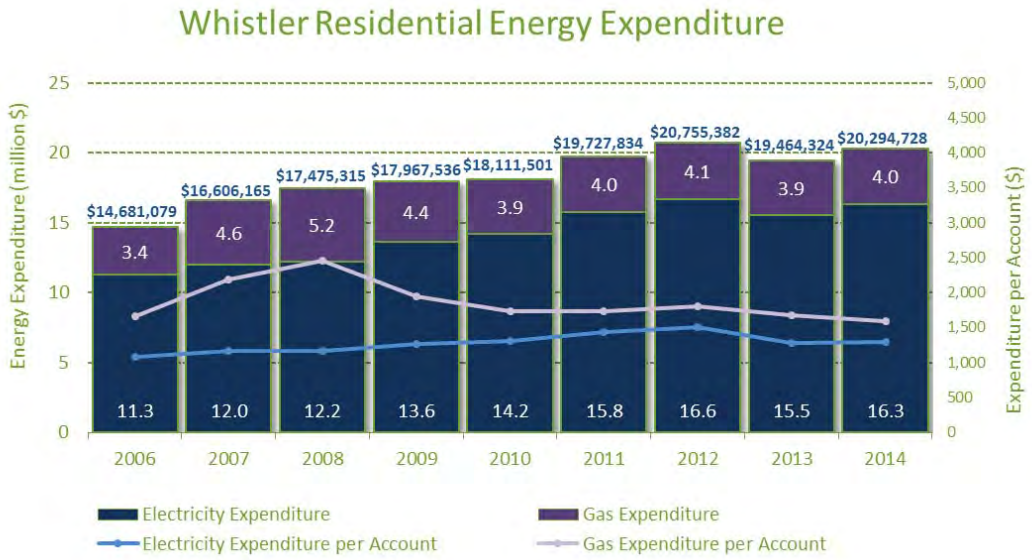
Energy expenditures for buildings (both commercial and residential) have remained relatively constant since 2008 at approximately $42-44 million/year with electricity expenditures increasing by a margin nearly equal to the drop in natural gas expenditures. Fuel prices for gasoline increased markedly in 2012 and 2013, resulting in significant increases in total passenger vehicle estimated expenditures (2013: $35M vs. 2009: $25.5 M). However, gasoline prices dropped in the latter half of 2014, which resulted in constant expenditures for passenger vehicle fuels year over year.



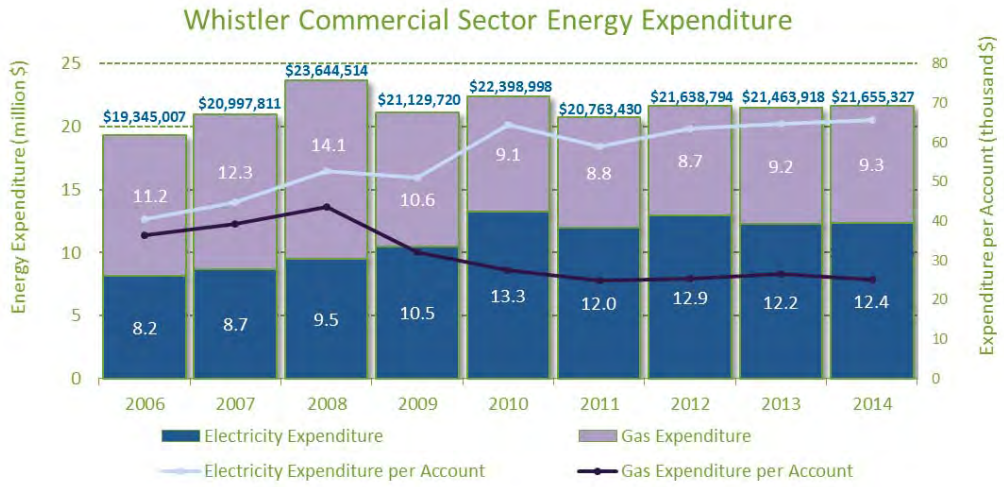
[9] Note that this number includes an estimate of the consumption of gasoline for all vehicle kilometres travelled within Whistler's municipal boundaries. As such it includes a portion (i.e the portion within municipal boundaries) of the incurred costs of energy consumption associated with both visitors arriving by automobile, as well as commuting employees from neighbouring communities.

The final two charts in this section present the nine-year trend in cumulative energy expenditures across Whistler's key building inventory. Despite the decrease in the price of natural gas (versus propane) in 2009 and 2010, total expenditures in the residential sector continues to demonstrate an upward trend. Residential expenditures now exceed $20 million/year, and commercial expenditures are slightly above $21 million.

Rate escalation expected electricity over the next number of years will average approximately 5% per annum. However, given the recent British Columbia Utilities Commission (BCUC) amalgamation ruling, an expected that a 30-40% reduction in local natural gas pricing has begin its three year-phase in process (Jan, 2015).



Residential building expenditures decreased in 2013 for the first time in a decade due to a reduction in total energy consumption across this sector. However, expenditures increased again in 2014 despite a continued reduction in overall consumption. This is due to the fact that rates increased (primarily electricity) by a margin in excess of the per cent reduction in 2014 consumption levels.



Total commercial energy expenditures have remained constant for the past three years despite continued reductions in overall consumption. There was a small increase in 2014 commercial building energy expenditures on a per account basis for electricity (+1.4%) and a more market decrease in expenditures in 2014 for natural gas per account (-5%).

3.2.3 Power Down - Residential Energy Assessment Rebate Program

The Residential Energy Assessment Rebate Program offers Whistler homeowners $250 towards an Energuide for Homes home energy evaluation - a service which normally cost between $300 and $400. Since the program began in August, 2014, approximately 160 new and existing homes have been assessed.

Although the current sample size is small (approx. 120 existing homes), staff have been evaluating the results of these assessments and will continue to update the program and associated policies to maximize the efficiency benefits targeted through the program.

3.2.4 Key Community Energy Consumption & Expenditure Performance Insights

Total Energy Consumption

- Total community energy consumption decreased each of the last four years. Despite this positive performance, 2014 was still the 8th highest level of energy consumption since detailed record keeping began in 2000.
- Community energy consumption trends are currently on track to meet OCP targeted levels if the community continues to reduce consumption by ~2% each year. If reductions slowed to 1% each year (or increased), the community will narrowly miss the 2020 target.
- Current community energy consumption levels (3.01 million GJ/yr) are approximately 15% higher than the recommended forecast in the RMOW's 2003 Integrated Energy Plan.

Residential Energy Consumption

- 2014 residential energy consumption decreased in both total terms, as well as on a per account basis.
- 2014 was the lowest level of residential energy consumption since 2003 – this trend is driven primarily by lower levels of electricity consumption in the sector, as gas consumption remains slightly higher than the 10 year average.

Commercial Consumption

- 2014 commercial consumption levels have decreased by 3.4% year over year and are slightly below the 10 year average
- Though there was a marked shift from natural gas consumption to electricity consumption in the commercial sector between 2005 and 2012, over the past two years natural gas consumption has increased while electricity consumption has decreased.

Passenger Vehicles

- Despite increases in vehicle fuel efficiencies, estimated energy consumption associated with passenger vehicles has not changed significantly since 2000 – this is the primary reason that GHGs within this sector have lagged so far behind all other sectors with respect to meeting the reduction targets.

Total Energy Expenditures

- Though overall consumption levels continue to decline, rising fuel and electricity rates have combined to ensure that total energy expenditures are at the highest levels ever in Whistler ($83M/yr)
- Gasoline expenditures associated with passenger vehicle use remained constant year over year. Despite a marked drop in gasoline prices in the latter half of 2014, yearly expenditure remained at ~$35M.
- Declining natural gas rates contributed to lower (but recently rising) total natural gas expenditures over the years since the conversion to natural gas from propane (now at $13.3 M/yr)

Residential Building Sector Expenditures

- 2014 residential electricity expenditures increased by ~$1M versus 2013, and this year is the second highest year on record ($16.3M/yr)
- Residential gas expenditures remained relatively level year over year, at $4.0/yr from 2013 levels ($3.9M).

Commercial Building Sector Expenditures

- Total 2014 commercial energy expenditures remained relatively constant at 2013 levels ($21.6M/yr)
- 2014 commercial electricity expenditures were the third highest on record, but are expected to decrease in 2015 due to decreasing natural gas rates.
- Due to increased consumption in 2014, gas expenditures increased year-over-year to the highest level post conversion ($9.3M)

Looking Ahead

- The data suggests that there is some increasing energy efficiency in the residential sector, but more years of consistent trend data is required to confirm. Opportunities exist to catalyze further gains in this sector.
- The commercial sector has made some progress toward decreased energy intensity across its collective inventory. However, further energy reduction initiatives are required to keep this sector on track to meet 2020 goals.
- Passenger vehicle trends have fallen far behind targeted levels of reductions – this fact represents a critically important opportunity to target future improvements.

4 CORPORATE PERFORMANCE

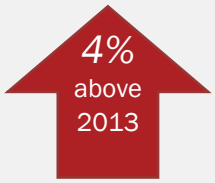
Initiated as part of the 2004 RMOW Integrated Energy, Air Quality, and GHG Management Plan, detailed energy and emission inventories are now compiled, assessed, and presented to key operations staff across the organization on a regular basis. Energy consumption, emissions, and expenditures are tracked independently by fuel type (gasoline, diesels, electricity and natural gas) for each division, department, and workgroup across all corporate operations.

The primary purpose of these inventories is to provide the basis for identifying energy conservation opportunites, assessing energy performance across key municipal building assets, and structuring business case assessements for potential upgrades and efficiency retrfofits. Additionally, these inventories are designed to satisfy Council-adopted commitments to external programs such as the Partners for Climate Protection program and the BC Climate Action Charter, as well as the internal commitments in the RMOW Integrated Energy Plan, the RMOW Carbon Neutral Operations Plan, and the Whistler Offical Community Plan.

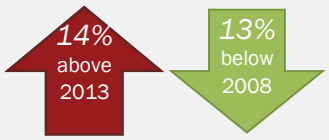
As a means of comparison to community-wide emissions, RMOW corporate emissions represent approximately 1.4% of the total community estimated emissions. Despite this relatively small share of overall emissions, the RMOW has recognized and accepted the need for leadership in carbon and energy management across the organization.

Further, the ongoing upward pressure on energy rates (energy rates are rising 3-5 percentage points faster than the rate of inflation) makes it clear for all organizations that energy consumption should be tracked, managed and ultimately reduced.

4.1 KEY CORPORATE INSIGHTS and SUMMARY

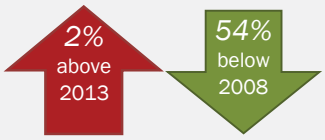


Total corporate GHG emissions in 2014 were **1,510 tCO2e**, which is **4% higher than the 2013 level**, but approximately **35% below the benchmark 2008 level** (the reference year for RMOW target-setting).



Infrastructure Services

increased emission levels by 14% year over year (YOY), but still remain 13% lower than 2008 benchmark levels



Corporate and Community Services

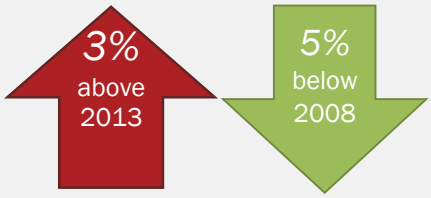
emission levels increased by 2% YOY, which means that current levels are now 54% below their corresponding 2008 benchmark level.

Resort Experience (REX)

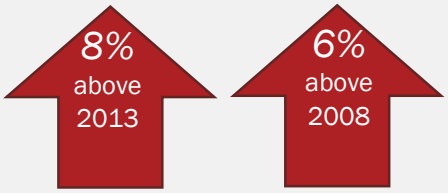
decreased annual emissions by 6% in 2014 to a level that is now approximately 35% lower than 2008 levels.

GHG emissions are still markedly lower compared to the base year despite the 2014 rise in emissions year over year. However, if emissions continue to increase in 2015, it will be difficult for the RMOW to continue meeting reduction targets. Trends in total energy use and expenditures have reversed year over year, and as such, the RMOW has seen an increase in both areas.

2014 Total Corporate Energy Use



2014 Total Corporate Energy Expenditures



4.2 CORPORATE GREENHOUSE GAS EMISSIONS

Section 4.2 deals specifically with greenhouse gas emissions associated with RMOW corporate operations, this section includes information on related targets, an overview of 2014 performance results, as well as a short section on key associated insights and trends.

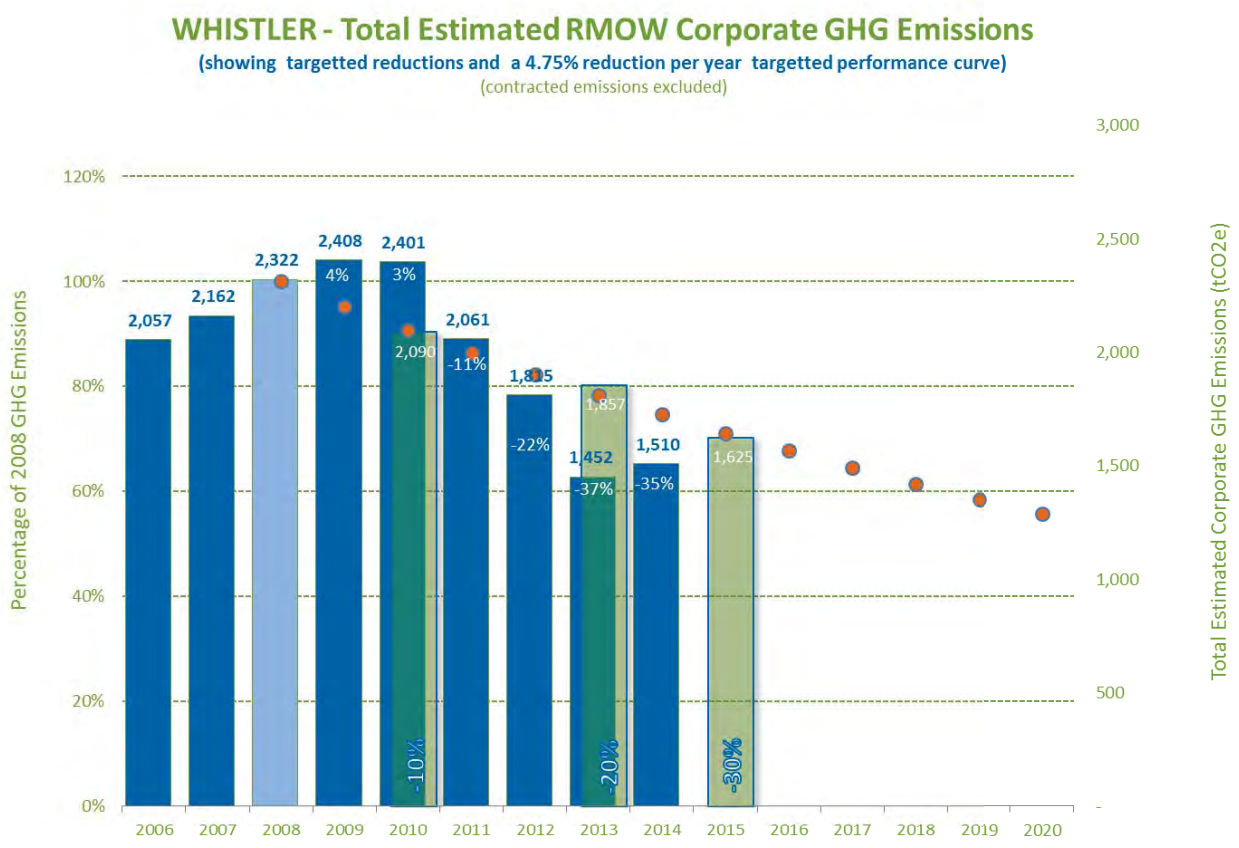
4.2.1 Corporate GHG Reduction Targets

The RMOW's Carbon Neutral Operations Plan sets the targets for total corporate GHG reductions as follows:

- 10% by 2010
- 20% by 2013
- 30% by 2015

(all relative to **2008** levels)

The following chart presents these targets graphically (light green bars), the historic corporate emissions levels (blue bars) as well as an indication of the annual reductions that would be required to achieve the prescribed targets using a constant rate of improvement model at approximately -5% (orange dots).

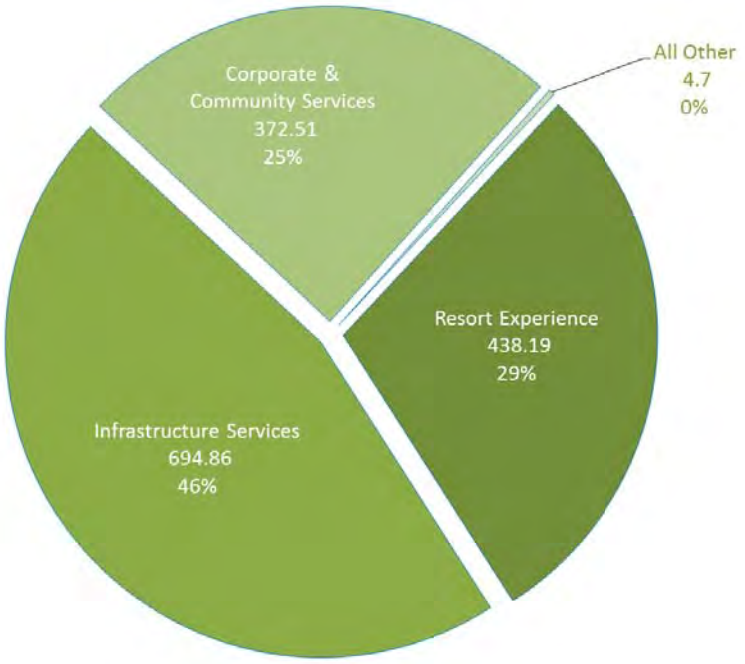


As demonstrated in the chart above, RMOW corporate emissions reduced substantively between 2010 and 2013. However, between 2013 and 2014, emissions increased by 4%. While this level of emissions is still ~220 tCO2e below the 2014 target curve, if emissions continue to increase in 2015 it will be increasingly difficult for the RMOW to meet future reduction targets.

4.2.2 Corporate GHG Performance

Total direct corporate GHG emissions in 2014 were **1,510 tCO2e**, which is 4% higher than the 2013 level, but 35% below the benchmark 2008 level (the reference year for RMOW target setting). As demonstrated by the previous chart, this level of emissions is still ~13% lower than the emissions target for 2014.

On a division-by-division basis, the relative emissions footprint of corporate operations is primarily associated with the following three divisions: (46%) **Infrastructure Services** (which includes roads crews, solid waste systems, the water utility as well as the sewer utility); (25%) **Corporate and Community Services** (including bylaw, fire, Meadow Park Sports Centre, and other recreation programs); and (29%) **Resort Experience** (which includes village maintenance operations, horticulture, turf, and irrigation crews, parks and trails, and facility construction and maintenance operations). The relative contributions from each division are shown below.



2014 Corporate GHG emissions by organizational Division are presented below.

13% below 2008

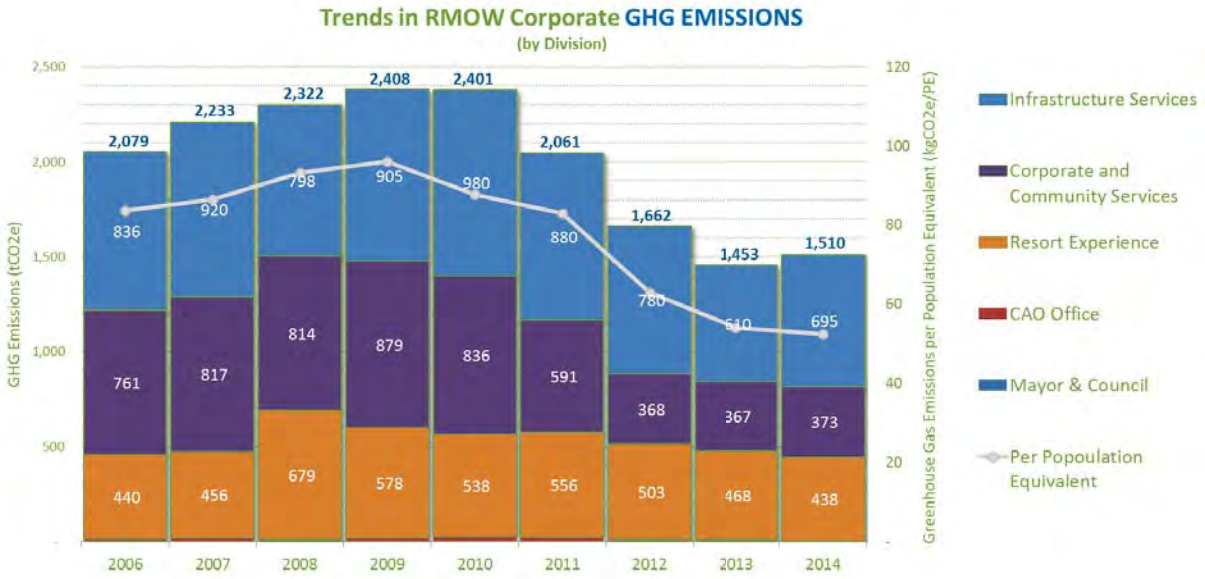
- **Infrastructure Services**
  emission levels **increased** by 14% year over year (YOY), which puts current levels at 13% lower than 2008 benchmark levels

54% below 2008

- **Corporate and Community Services**
  emission levels **increased** by 2% YOY, which means that current levels are 54% below their corresponding 2008 benchmark level.

35% below 2008

- **Resort Experience** (REX)
  decreased annual emissions by 6% in 2013, and emission levels are now approximately 35% lower than 2008 levels.

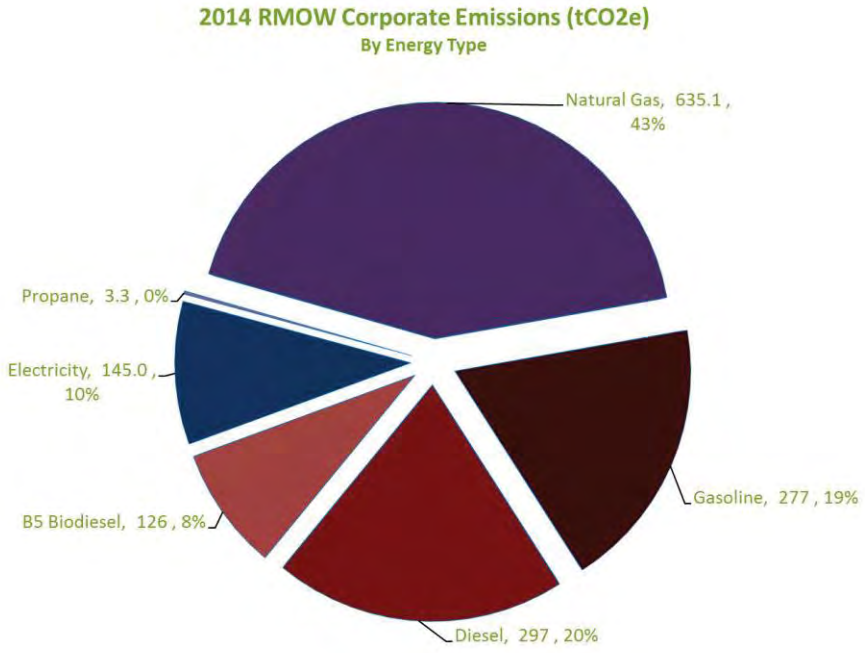


As seen in the chart above, the primary source of 2014 emissions increases was the Infrastructure Services division, which coincidently was the primary source of reductions in 2013 (this volatility seems to be primarily associated with the emissions from the roads crew, and may be related to changes in snow clearing requirements).

In the bigger picture, the largest source of reductions over the last decade has clearly been the energy retrofits at MPSC – especially the geo-exchange and solar hot water systems.

Distribution by Fuel Type

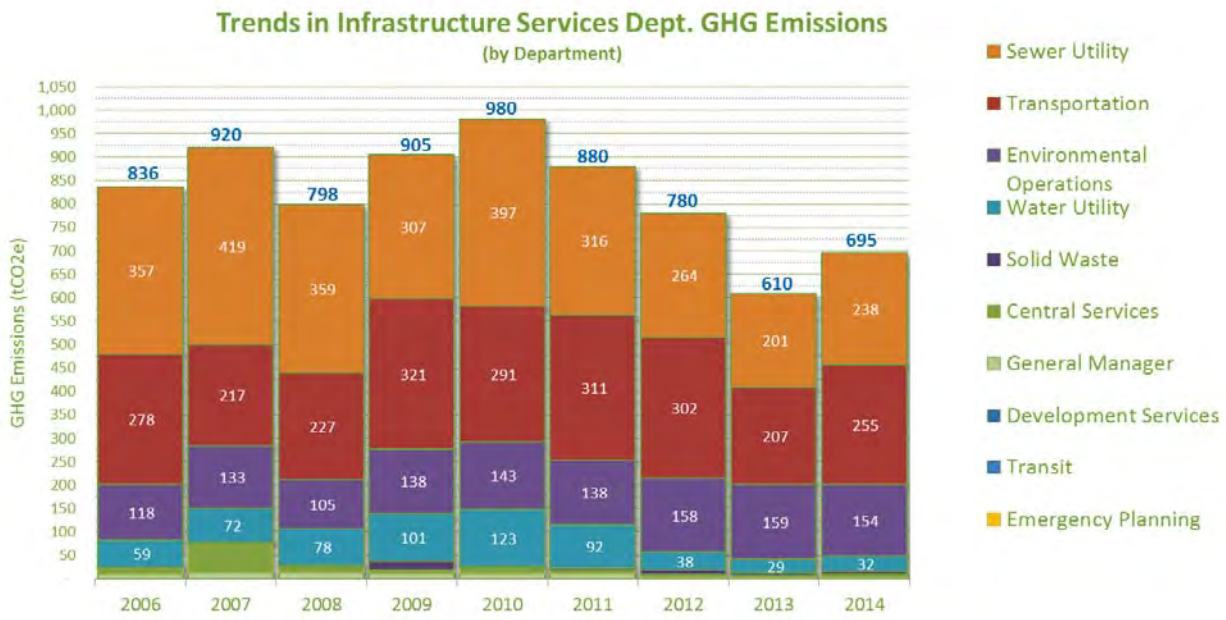
Seen as a whole, corporate emissions come from two primary sources – 47% from mobile sources (gasoline and diesels), and 53% stationary sources (natural gas and electricity). The relative shares of each of these energy types are presented below.



4.2.3 Divisional Trends

Infrastructure Services

Changes in Infrastructure Services emission levels over the last eight years are presented below:



Infrastructure Services' GHG emission trends by key functional area:

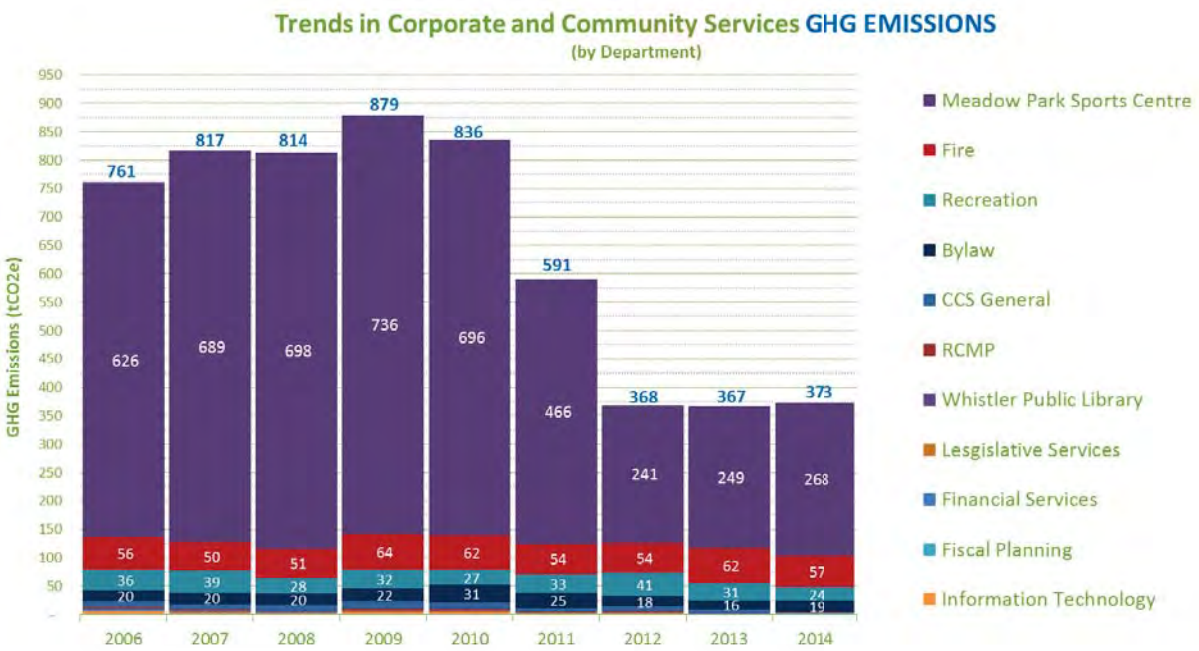
2014	Sewer	Transport.	Env. Ops	Water	TOTAL
YOY	19%	23%	-3%	9%	14%
vs. 2008	-34%	12%	46%	-59%	-13%

Key Insights

- WWTP emissions increased on a year over year basis but are still 121 tCO2e (34%) lower than the 2008 benchmark level. In 2013, emissions associated with the WWTP reached an all-time low of 201 tCO2e and 2014 emissions are still the second lowest ever recorded.
- Mobile emissions from the transportation (roads) department saw a year over year increase of almost 50 tCO2e. This is at least partially the result of a lower than average snow clearing year in 2013, which resulted in almost a 100 tCO2e decrease. However, the current emission levels for the transportation department are currently 12% higher than 2008 benchmark levels.

Corporate and Community Services

Changes in Corporate and Community Services emission levels over the last eight years are presented below:



Corporate and Community Services GHG emission trends by key functional area:

2014	MPSC	Fire	Rec	Bylaw	TOTAL
YOY	8%	-9%	-23%	20%	2%
vs. 2008	-62%	12%	-16%	-5%	-54%

Key Insights

- The primary driver of reduced emissions within this division was MPSC. At MPSC emission levels have remained relatively constant for the past few years, with a small growth trend appearing in the recent data. Despite an 8% increase year over year, 2014 MPSC emission levels were still 430 tCO2e lower than 2008 benchmark levels.
- The Fire department's emissions have increased compared to 2008 benchmark levels, however the scale of these changes are small in total terms (<10 tCO2e in each case).

Resort Experience

Changes in REX emission levels over the last six years are presented below.

As the emissions from the REX division are overwhelmingly associated with the Parks/Village Operations functional area, a more detailed breakdown is included in the table below.

Park/Village Operation dept. GHG emission trends by key functional area are demonstrated below along with the total REX trends:

2014	P/Vops	V.Maint.	Land S	Parks &T	FC & M	TOTAL
YOY	-7%	7%	-5%	24%	-7%	-6%
vs. 2008	-34%	25%	34%	3%	-35%	-35%

Key Insights

- Facility Construction & Maintenance emissions represent the largest share of this division, so their reductions of 20 tCO2e year over year and 140 tCO2e versus 2008 levels contribute the most to the total reductions for the division. These reductions in 2014 came primarily from decreased natural gas use at buildings such as MY Place, WAG, and Municipal Hall.
- Increases in emissions in Village Maintenance and Parks and Trail Maintenance are relatively small, with no more than ~10 tCO2e increases year over year in either department. However, Village Maintenance, Landscaping, and Parks and Trail Maintenance divisions are all above 2008 benchmark levels.

4.2.4 Key Corporate GHG Emission Performance Insights

Overall

- RMOW corporate emissions are up 4% YOY but are still 35% lower than the 2008 benchmark year and 13% lower than the emissions target for this year.
- Large reduction in GHG emissions in previous years were largely due to upgrades at Meadow Park Sports Centre, a decrease in BC Hydro's emission factor for electricity, and also a reduction in consumption across departments, specifically in Infrastructure Services. However, since many of the larger retrofit projects were completed in previous years, consumption in 2014 stayed relatively constant or increased in many departments, which resulted in an overall increase in emissions year over year.

Divisional Insights

- Infrastructure Services' emissions increased by 14% year over year, mainly as a result of increased natural gas consumption at the WWTP, and an increase in the Transportation department's mobile fuel use. Current levels are still this division are currently 13% lower than 2008 benchmark levels.
- Corporate and Community Services emissions increased by 2% year over year. However, there has been a 54% decrease in emissions since the 2008 base year, mainly due to upgrades at MPSC.
- REX was the only major division that saw an emissions decrease in 2014 (-6%), and the majority of this decrease was due to a decrease in stationary natural gas use in Facilities, Construction & Maintenance (specifically at MY Place, WAG, and Municipal Hall)
- Municipal buildings with the lowest energy intensity of GHG emissions include the following: (all expressed as kgCO2e/ft2/year)
    - *Lost Lake Passivhaus: 0.07*
    - *Spruce Grove Field House 0.16*
    - *Whistler Public Library 0.29*[10]

4.3 CORPORATE ENERGY CONSUMPTION

Section 4.3 deals specifically with the energy consumption associated with RMOW corporate operations. This section includes information pertaining to energy consumption targets, an overview of 2014 performance levels, and a short section on key associated insights and trends.

4.3.1 Corporate Energy Consumption Reduction Targets

The RMOW does not currently have any formally adopted targets for corporate energy consumption. The existing RMOW Integrated Energy, Air Quality and GHG Management Plan does, however, include recommended corporate energy consumption targets for 'consideration' (p. 58). These recommended energy consumption targets for municipal operations are: year 2010 (64,000 GJs), and year 2020 (55,000 GJs).

The RMOW Carbon Neutral Operations plan does not include formal targets but rather recommends ongoing commitment to energy conservation as both (a) the primary strategy for reducing corporate GHG emissions, and (b) an important means of controlling ongoing utility and fuel costs across corporate operations.

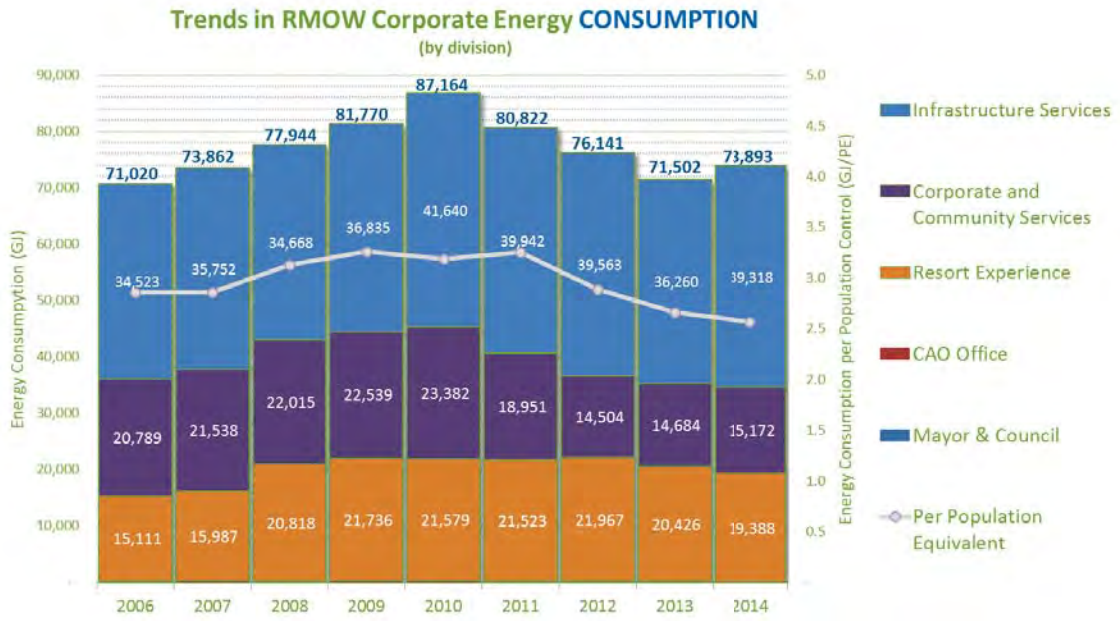
NOTE: the OCP Amendment Bylaw 1983, 2011 includes a commitment to update the Community Energy & Emissions Plan every five years. When updated, this new community energy plan will include a

[10] For reference, MY Place emits 2.10 kgCO2e/ft2/year

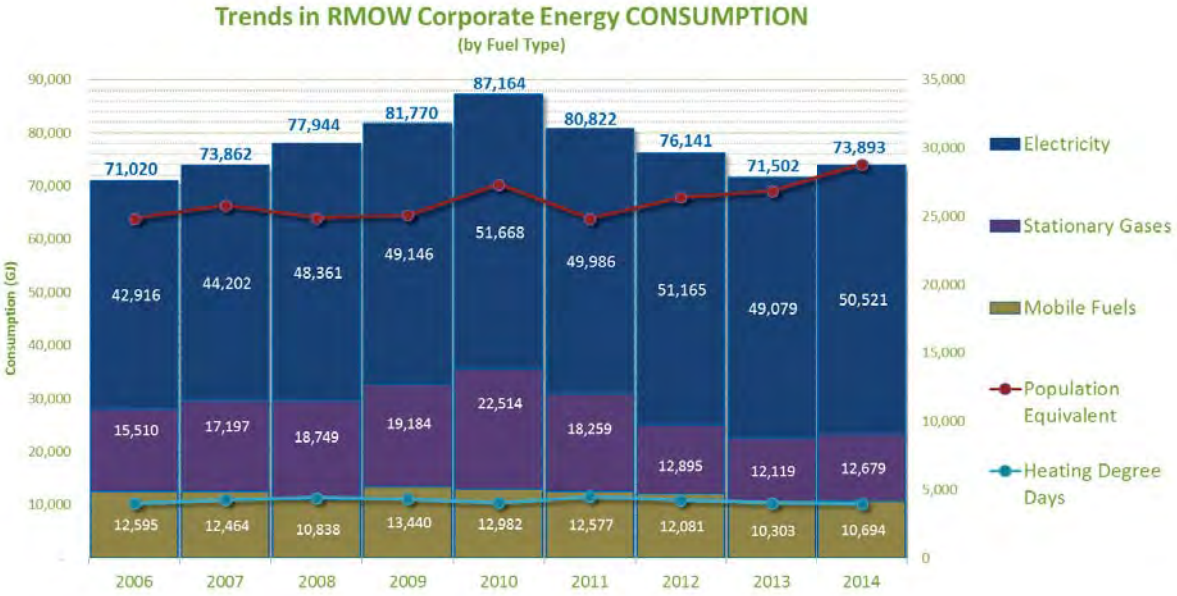
community and corporate engagement process that should provide a suitable forum for the consideration of any future formalized corporate energy consumption targets for municipal operations.

4.3.2 Corporate Energy Consumption Performance

Total corporate energy consumption increased in 2014 by 3% to **73,893 GJ/year**. This is still above the 2010 target recommended within the RMOW Integrated Energy Plan (64,000 GJ/year), and considerably higher than the upcoming 2020 target (55,000 GJ). The nine-year trends in corporate energy consumption are presented below:

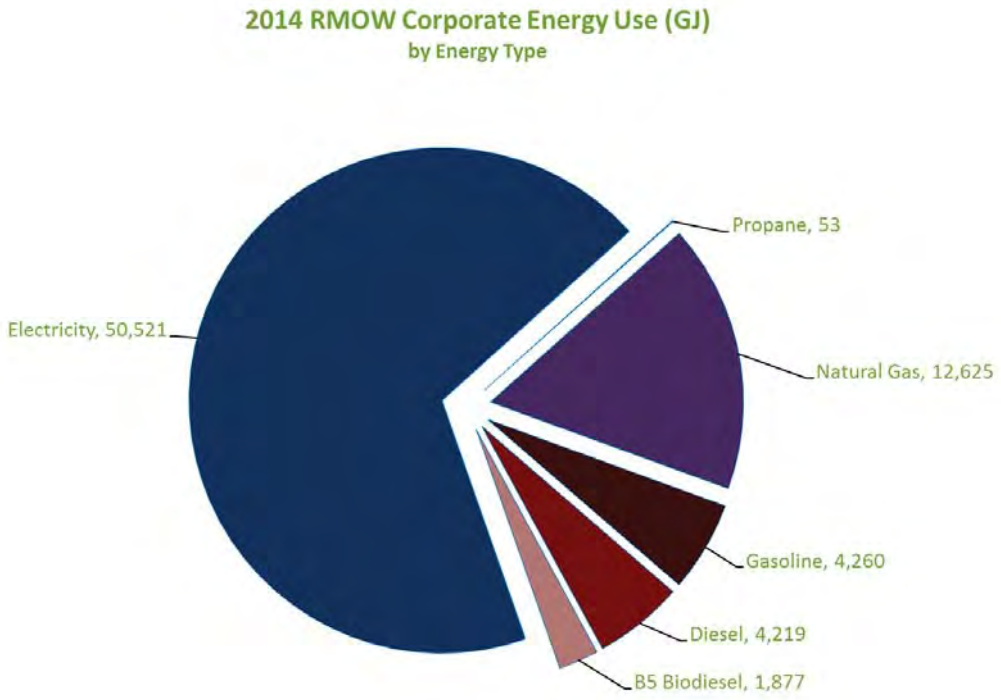


If the corporate energy consumption is subdivided by fuel type rather than by organizational division, the nine-year trends appear as follows:

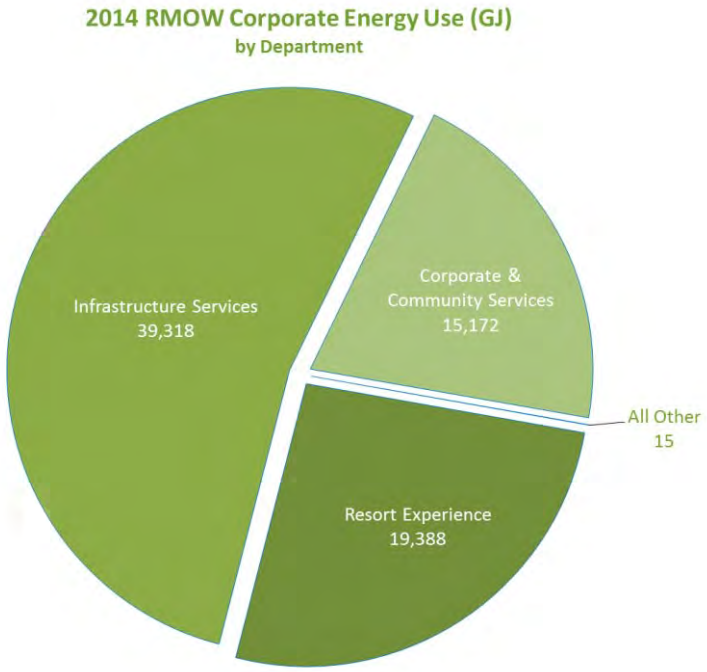


Electricity consumption makes up the greatest portion of total energy consumed across municipal operations at 68.4% of the total consumption, followed by natural gas (17.1%), and mobile fuels (14.5%).

A more detailed breakdown of 2013 corporate energy consumption, presented by energy type, is included below:



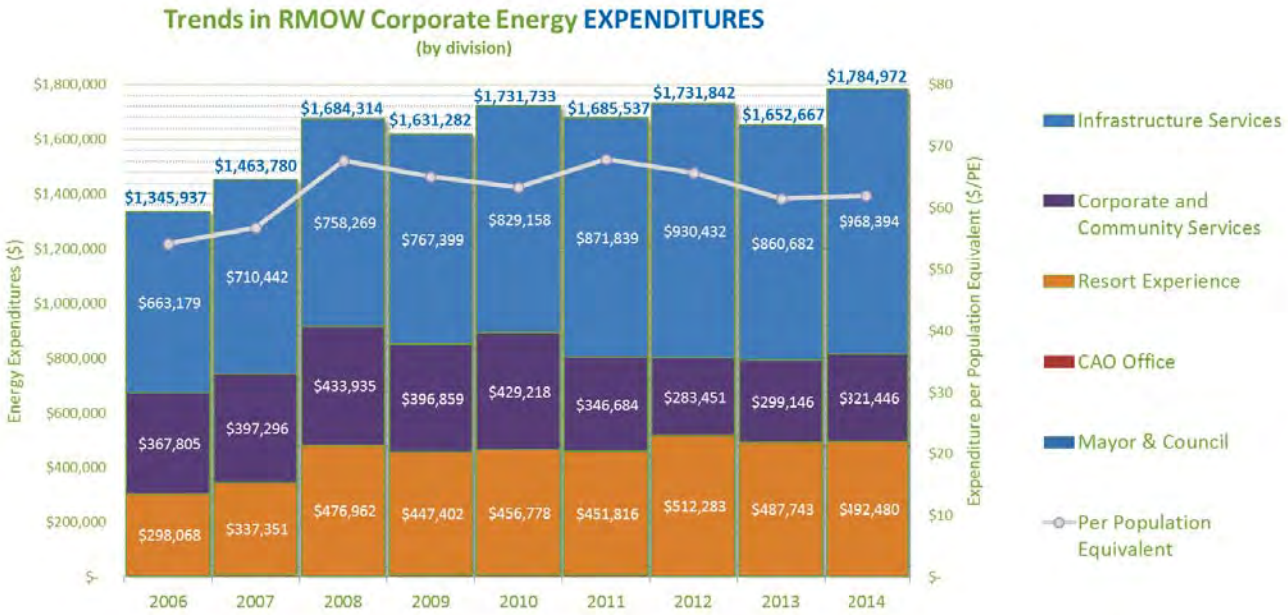
Finally, 2013 energy consumption by division is included for reference below:



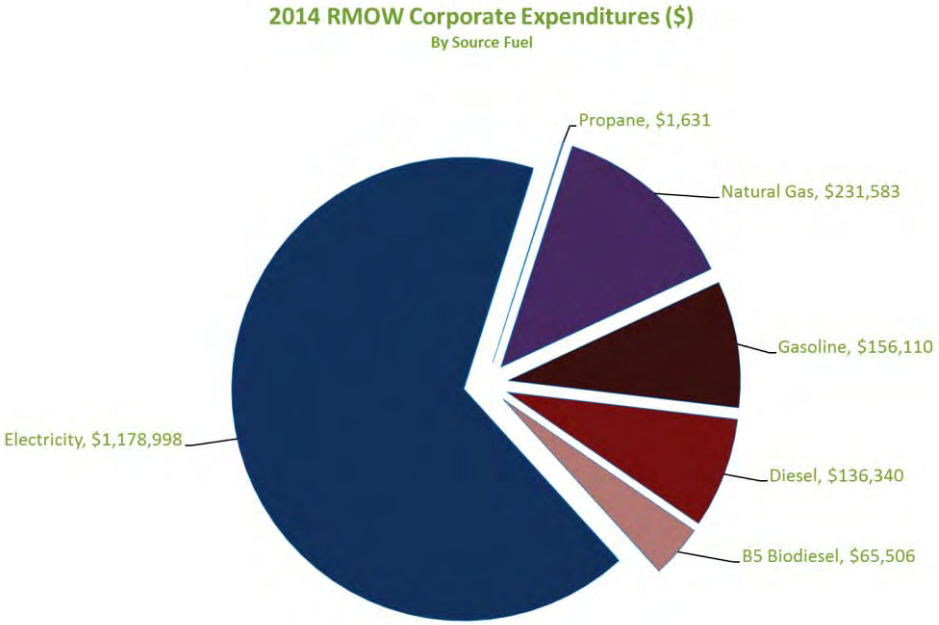
Corporate Energy Expenditures

Total 2014 corporate energy expenditure increased by approximately 8% to a total of $1.78 million in 2014. Note that the increase in expenditures is greater than the increase in consumption. Further conservation will be the key to controlling future expenditures at a level consistent with the current budgets given the ongoing trends in rate inflation (with the exception of recent natural gas rate changes, utility rate inflation continues to generally exceed the Consumer Price Index (CPI)).

The nine-year trends in total corporate energy expenditure are presented below:



2014 corporate energy expenditures by fuel type are presented in the following chart:



4.3.3 Performance of Key Corporate Buildings

Across its operations, the RMOW has made investments into energy efficiency and green building technologies for more than a decade. The benefits of these initiatives vary according to the project, but include reduced GHG emissions, reduced energy consumption, decreased energy expenditures, healthier buildings and decreased materials and resources within the construction process. For the purposes of this report, an update on energy consumption, expenditure and emissions is provided for key buildings across RMOW operations.

Whistler Public Library

Whistler Public Library (WPL) opened in 2008 as Whistler's first LEED Gold certified building. The building has won numerous awards, including BC Wood Works award for innovative hemlock construction methods, as well as the Lieutenant-Governor Award in Architecture.

Energy performance at the WPL indicates that the building is operating at more than 64% better than the Model National Energy Code for Buildings (MNECB). At this level of performance (~840 GJ/yr.), annual utility costs are running approximately $22,000 less than had the building been built to typical building code standards (MNECB).

Spruce Grove Field House

In 2001, the RMOW chose to install a geo-exchange heat pump instead of a gas furnace at SGFH. The incremental cost of the GHX equipment was $126,350, however the system was forecast to reduce operating costs by $21,800/year thereby producing an expected simple pay back (SPB) period of 5.8 years and an internal rate of return (IRR) on invested capital of 16.5%.

Actual annual reductions in energy costs have averaged $20,700 since the installation of the GHX equipment, producing a SPB of 6.1 years (IRR of 15.5%). As of 2008, the incremental cost of the GHX system had been fully recovered and annual utility savings continue to run at approx. $18,000/year versus the forecasted gas-powered furnace baseline. 2014 annual energy costs at SGFH were less than $10,000 ($1.67/ft2/year; 163 kWh/m2/year). Annual GHG emissions from SGFH were 0.94 tCO2e (emissions with a gas furnace were forecasted at 56-67 tCO2e/year).

Meadow Park Sports Centre

In 2010, a $930,000 energy system upgrade was installed at MPSC. The new system incorporated both evacuated tube solar technology and a vertical loop geo-exchange bore field. The system design employs the solar panels to pre-heat the domestic hot water loads directly, while the heat pumps draw heat from the ground (70 boreholes at 155' depth) to serve the various pool loads within the building (lap pool, leisure pool & hot tub).Utility cost reductions that were anticipated as a result of these upgrades were estimated at $115,000 - $130,000/ year (SPB: 6.5 – 7.8 years; IRR: 10% - 13%), with annual GHG reductions forecasted at 300-350 tCO2e/year.

While the finalization of the project construction and commissioning phases was delayed until mid-2011, the system is now fully functional and working well. In 2014, annual energy expenditures at MPSC were $256,482, a 7% increase from 2013 expenditures, but still 32% ($123,000/yr) lower than 2008 base year expenditures. Note that year over year increase is due to a 4% increase in energy consumption, coupled with an increase in electricity rates.

Lost Lake PassivHaus

The $1.5 million project was the result of partnership between the RMOW, the Austria Passive House Group (APG) and Sea-to-Sky Consulting. A grant from the Whistler Blackcomb foundation was also instrumental to the realization of this project. The Passive House (PH) approach to construction uses radically improved building envelope design and components to achieve dramatic reductions in building energy consumption of approx. 90% compared with standard Building Code construction. This energy usage translates into has less than half of the energy consumption of a Platinum LEED house – Canada's current high standard for "green"

building. The small amount of heating energy which is still needed in a Passive House can then be supplied via the ventilation air stream. Passive houses are well established in Europe with over 17,000 existing passive units; approximately 4,000 of these are in Austria.

In partnership with BC Hydro, the RMOW tracked the energy consumption at the LLPH from Jan of 2011 to Dec '12 using a real time Energy Management Information System (EMIS). At the end of the pilot project, the results showed that all building heating loads (including hot water) consumed 2,922 kWh (11.7 kWh/m2/yr), and all other loads in the building combined for a total of 15,156 kWh (60 kWh/m2/yr) – both values well inside the limits allowable within the rigorous passive house certification protocol.

The bottom line is that over the course of an entire year, it cost only $250 to provide all the heat required by this 2,700 ft2 building (a typically built building in our climate would consume approx. 10 times this amount).

4.3.4 Key Corporate Energy Consumption Performance Insights

Energy Consumption

Overall

- Corporate energy consumption increased in 2014 for the first time since 2010. Corporate consumption was 3% higher in 2014 than it was in 2013, but this level is still approximately 4,000 GJ lower than 2008 benchmark levels.

Divisional Insights

- Corporate and Community Services and Infrastructure Services both saw year over year increases of energy consumption (3% and 8% respectively). Resort Experience saw a decrease in consumption of 5% below 2013 levels.
- Infrastructure Services' consumption level is still 13% higher than 2008 base year levels.
- Resort Experience's consumption levels have decreased to 7% below base year levels, while Corporate and Community Services continue to see the largest consumption decrease, currently sitting at 31% less energy use compared to 2008.

Energy Expenditures

Overall

- Overall 2014 energy expenditures across municipal operations increased by 8% year over year to ~$1.78M. Current expenditures have increased by approximately $100,000 (6%) from benchmark 2008 levels.
- Electricity makes up over $1M/yr of the total corporate energy expenditure.

Divisional Insights

- Corporate and Community Services' energy expenses increased year over year by 7%. However, CCS's expenditures are still over $112,000 lower than benchmark 2008 levels, primarily related to savings achieved at MPSC.
- Year over year, Infrastructure Services and Resort Experience both saw increases in expenditures (13% and 1%, respectively). The large increase in Infrastructure Services is due to an increase in mobile fuel use in the Transportation department, and an in natural gas consumption at the WWTP. Opposite trends in these factors contributed to a decrease between 2012 and 2013.
- Upgrades in energy efficiency across the operation have yielded solid, expected returns on investment. However, without further investments in additional energy efficiency and conservation across the operation, continued increases in energy expenses are likely.

5 CLOSING COMMENTS

The impact of changing climatic conditions – especially reliable snow patterns – has the potential to substantially impact Whistler's primary economic engine – tourism. Informed, strategic planning that considers and evaluates the impacts of the issues related to climate change and rising fuel costs (on which Whistler's economy is fundamentally dependent) can help to ensure that Whistler is best positioned to maintain its success into the future.

Energy management as sound fiscal management is seen as a key priority by leading organizations both across our community, and beyond. As such, RMOW staff are committed to tracking corporate and community level energy consumption, expenditures, and associated greenhouse gas emissions on an annual basis. Moreover, our community is vocally concerned about both effective energy management and the ongoing mitigation of our local contributions to global climate change, and they continue to tell us so across a variety of community engagement channels.

Accurate, detailed data is fundamental to these discussions; information like that which is included within this report will continue to provide a strong basis for informed decision-making as our community measures its success, matures, evolves, and thrives in the coming decades.

Emissions from our corporate and community inventories are not the only emissions related to the activities of our community – as a community premised on destination tourism, there are significant emissions associated with the travel to, and from Whistler. While precise data on the scale of these emissions is difficult to quantify, the research undertaken during the creation of our existing Integrated Energy, Air Quality and GHG Emissions Management Plan did endeavor to estimate the approximate level of these emissions. By using visitor point-of-origin data from Tourism Whistler research and applying typical distance-based emission factors for various travel modes, a total estimate of 'inter-community' estimated GHG emissions was calculated for the year 2000. Assuming a relatively stable point-of-origin mix, and then applying total annual visitation numbers, inter-community travel emissions have been coarsely estimated for each year from 2001 through 2014. In approximate terms, inter-community travel emissions likely represent 5-10 times the total footprint included within our community inventory. Given its scale and relation to our community economic engines, this is an issue that should not be overlooked within Whistler's ongoing discussions of climate mitigation and adaptation approaches.

6 APPENDICES

A	Whistler Updated 2014 Community Energy & Emissions Inventory
B	RMOW 2014 Corporate Energy & Emissions Inventory
C	Summary of Emission Factors
D	Summary of Corporate Carbon Neutral Commitment • RMOW Carbon Footprint • Verified Emission Reductions (VERs)

Whistler

Community Energy & Greenhouse Gas Inventory 2000-present

			Stationary Energy Use (Buildings)								Mobile Energy Use													Waste	Grand Totals		Intensity Performance		
			Electricity				Propane/Natural Gas			All Buildings	Fleet Usage									Transit			Passenger Vehicles				GHG Intensity (tCO2e/PE)	Energy Intensity (GJ/PE)	Expenditure Intensity ($/PE)
			residential	commercial	industrial (sm com)	subtotal	residential	commercial	subtotal	Building Total	gasoline	E5 gasoline	E10 gasoline	B5 biodiesel	B10 biodiesel	B20 biodiesel	diesel	diesel(s) subtotal	subtotal	B4 biodiesel	diesel	subtotal	gasoline	Landfill					
1990 (estimated)	Consumption	litres					1,106,750.5	6,914,949.0	**8,021,699.5**	**8,021,699.5**	470,647.0						728,573.7	728,573.7	**1,199,220.7**				**19,284,755.0**					
		kWH	99,202,687	70,508,160	11,479,073	**181,270,919.2**																				Consumption			
	Energy	GJ	357,453.6	253,829.4	41,322.1	**652,604**	24,019.0	175,062.0	**203,081.0**	**855,685.1**	16,473.5						27,904.0	27,904.0	**44,377.5**		-		**675,003.0**		**1,575,063**	Energy	1990 (estimated)	n/a	n/a	n/a
	(27) GHG	tCO2e	2,680.9	1,903.7	309.9	**4,895**	1,709.49	10,680.87	**12,390.4**	**17,284.9**	1,134.3						2,011	2,011.0	**3,145.1**				**66,476.2**	**8,859.7**	**75,762**	GHG				
	Expenditure	approx. $	$ 4,966,634	$ 3,525,408	$ 573,904	**$ 9,065,946**	$ 198,375	$ 1,239,419	**$ 1,437,813**	**$ 10,503,759**	$ 296,508						$ 284,144	$ 284,144	**$ 580,651**			$ -	**$ 14,463,503**		**$ 25,545,973**	Expenditure				
2000	Consumption	litres					5,461,424.0	21,669,345.0	**27,282,779.1**	**27,282,779.1**	964,536.6						1,343,525.5	1,343,525.5	**2,308,063.3**		65,980.3	**6 5 8,990.3**	**26,223,488.8**			Consumption	2000	5.53	111.1	$ 1,915
		kWH	164,269,458	132,996,400	22,133,057	**319,398,916.0**																							
	Energy	GJ	591,370.0	478,787.0	79,879.0	**1,149,818**	14,212.0	5 48,591.0	**690,707.1**	**1,840,5 44.6**	26,760.1						51,456.4	51,456.4	**78,217.7**		25,239.0	25,239.0	**9 17,86 8.0**		**2,861,869**	Energy				
	(40) GHG	tCO2e	6,570.8	5,319.9	885.3	**12,776**	8,670.52	3,470.58	**42,141.1**	**54,917.1**	1,842.5						3,708	3,708.1	**5,551.9**		1,818.8	**1,818.8**	**63,139.6**	**17,100.3**	**142,587**	GHG				
	Expenditure	approx. $	$ 10,808,930	$ 6,982,211	$ 1,598,007	**$ 19,389,250**	$ 1,776,400	$ 6,857,388	**$ 8,633,889**	**$ 28,023,089**	$ 573,402						$ 1,007,644	$ 1,007,644	**$ 1,581,048**		$ 599,681	**$ 599,681**	**$ 19,143,147**		**$ 49,346,965**	Expenditure				
2001	Consumption	litres					5,765,538.5	21,829,756.5	**27,595,295.1**	**27,595,295.1**	664,838.8						1,196,214.2	1,196,214.2	**1,861,052.6**		842,759.3	**8 42,759.3**	**26,413,679.3**			Consumption	2001	5.80	111.4	$ 2,051
		kWH	170,144,631	139,299,908	23,505,964	**332,950,504.5**																							
	Energy	GJ	612,520.6	501,479.6	84,621.5	**1,198,623.6**	145,963.0	552,05 2.1	**698,6 19.3**	**1,897,2 42.9**	23,270.5						45,814.4	45,814.4	**69,085.1**		32,277.3	**32,277.3**	**9 24,52 5.0**		**2,923,130**	Energy				
	(61) GHG	tCO2e	10,378.8	8,497.3	1,433.9	**20,310**	8,005.48	33,718.35	**42,6 23.8**	**62,933.8**	1,602.3						3,302	3,301.6	**4,904.0**		2,326.0	**2,326.0**	**63,657.0**	**18,240.6**	**152,061**	GHG				
	Expenditure	approx. $	$ 11,195,517	$ 7,313,245	$ 1,697,131	**$ 20,205,895**	$ 2,466,775	$ 9,339,820	**$ 11,806,6 67**	**$ 32,012,562**	$ 531,871						$ 956,971	$ 956,971	**$ 1,488,843**		$ 766,911	**$ 766,911**	**$ 19,546,123**		**$ 53,814,438**	Expenditure				
2002	Consumption	litres					6,201,157.0	21,759,689.5	**27,959,846.8**	**27,959,846.8**	662,834.3						1,206,987.2	1,206,987.2	**1,869,821.2**		819,903.2	**8 19,903.2**	**26,383,764.5**			Consumption	2002	6.06	121.5	$ 2,176
		kWH	175,477,178	137,118,356	23,972,522	**336,568,057.8**																							
	Energy	GJ	631,717.8	493,626.0	86,301.1	**1,211,646.7**	15,666.0	550,878.2	**707,8 49.0**	**1,919,4 95.7**	23,200.4						46,227.0	46,227.0	**69,427.6**		32,167.9	**32,167.9**	**9 23,47 8.0**		**2,944,569**	Energy				
	(41) GHG	tCO2e	7,136.1	5,576.1	974.9	**13,687**	9,576.79	33,610.13	**43,186.9**	**56,874.0**	1,597.4						3,331	3,331.3	**4,929.0**		2,318.1	**2,318.1**	**63,58 4.9**	**19,273.8**	**146,980**	GHG				
	Expenditure	approx. $	$ 11,546,398	$ 7,198,714	$ 1,730,816	**$ 20,475,931**	$ 2,134,738	$ 7,491,944	**$ 9,626,7 46**	**$ 30,102,677**	$ 556,781						$ 1,013,869	$ 1,013,869	**$ 1,570,651**		$ 764,312	**$ 764,312**	**$ 20,315,500**		**$ 52,753,140**	Expenditure				
2003	Consumption	litres					6,054,565.0	21,835,108.5	**27,989,673.9**	**27,989,673.9**	605,513.2						1,346,646.2	1,346,646.2	**1,952,158.9**		867,463.3	**8 67,463.3**	**26,807,275.6**			Consumption	2003	6.36	125.1	$ 2,345
		kWH	157,711,048	132,653,721	22,054,960	**313,019,729.9**																							
	Energy	GJ	567,759.7	477,553.4	81,557.8	**1,126,870.2**	16,8 470.0	5 40,129.3	**708,6 04.6**	**1,835,4 76.8**	21,194.0						51,575.9	51,575.9	**72,769.9**		33,223.4	**33,223.4**	**9 27,10 1.0**		**2,865,571**	Energy				
	(35) GHG	tCO2e	5,467.3	4,598.7	785.4	**10,851**	10,278.07	31,954.22	**42,233.0**	**54,084.3**	1,459.3						3,717	3,716.7	**5,176.0**		2,393.2	**2,393.2**	**63,814.3**	**20,273.8**	**145,762**	GHG				
	Expenditure	approx. $	$ 10,377,387	$ 6,964,120	$ 1,635,688	**$ 18,977,397**	$ 2,569,168	$ 8,236,972	**$ 10,806,2 20**	**$ 29,783,617**	$ 538,907						$ 1,198,515	$ 1,198,515	**$ 1,737,423**		$ 769,392	**$ 769,392**	**$ 19,290,432**		**$ 53,765,125**	Expenditure				
2004	Consumption	litres					6,206,556.5	21,768,771.5	**28,035,328.2**	**28,035,328.2**	568,827.3						1,321,678.3	1,321,678.3	**1,890,505.0**		921,024.2	**9 21,024.2**	**26,023,684.0**			Consumption	2004	5.77	122.7	$ 2,356
		kWH	187,300,944	144,140,916	25,780,616	**357,222,476.0**																							
	Energy	GJ	674,283.3	518,907.3	92,810.2	**1,286,003.2**	15,8 647.0	5 51,108.1	**709,7 55.9**	**1,995,7 63.1**	19,910.0						50,619.6	50,619.6	**70,529.5**		35,274.8	**35,27 4.8**	**8 41,18 6.0**		**2,942,753**	Energy				
	(24) GHG	tCO2e	4,412.8	3,411.3	610.1	**8,454**	9,679.35	33,624.15	**43,303.5**	**51,757.8**	1,370.9						3,648	3,647.8	**5,018.6**		2,542.0	**2,542.0**	**57,91 8.8**	**21,294.0**	**138,531**	GHG				
	Expenditure	approx. $	$ 12,324,402	$ 7,567,398	$ 1,861,260	**$ 21,753,164**	$ 2,617,676	$ 9,093,284	**$ 11,711,0 38**	**$ 33,464,2 01**	$ 540,386						$ 1,255,594	$ 1,255,594	**$ 1,795,981**		$ 818,132	**$ 818,132**	**$ 20,427,701**		**$ 56,526,096**	Expenditure				
2005	Consumption	litres					7,256,505.5	22,828,318.5	**30,084,824.7**	**30,084,824.7**	510,643.0			43,107.6		60,026.9	1,165,550.4	1,268,684.9	**1,779,327.2**		976,181.8	**9 76,181.8**	**25,846,647.0**			Consumption	2005	6.29	130.0	$ 2,686
		kWH	171,981,194	153,887,410	24,577,249	**350,045,855.1**																							
	Energy	GJ	619,132.2	553,934.6	88,478.1	**1,261,607.1**	18,709.0	577,932.1	**761,6 47.1**	**2,023,2 54.2**	17,873.4			1,651.0		2,299.0	44,640.0	48,590.0	**66,463.1**		37,387.3	**37,38 7.3**	**8 87,10 7.0**		**3,014,212**	Energy				
	(25) GHG	tCO2e	4,242.2	3,795.9	606.2	**8,644**	11,208.44	35,260.74	**46,469.2**	**55,113.5**	1,230.6			108.6		127.4	3,217	3,452.9	**4,683.2**		2,694.3	**2,694.3**	**61,08 0.6**	**2,239.0**	**145,811**	GHG				
	Expenditure	approx. $	$ 11,316,363	$ 8,079,089	$ 1,774,477	**$ 21,169,932**	$ 3,398,617	$ 10,691,744	**$ 14,090,4 72**	**$ 35,260,403**	$ 510,643			$ 47,418		$ 66,030	$ 1,165,550	$ 1,278,998	**$ 1,789,642**		$ 888,325	**$ 888,325**	**$ 24,330,861**		**$ 62,269,232**	Expenditure				
2006	Consumption	litres					6,759,358.5	22,061,380.0	**28,820,738.9**	**28,820,738.9**	565,016.0			55,013.8		117,364.5	1,549,521.9	1,721,901.3	**2,386,916.9**		904,215.0	**9 04,215.0**	**25,828,300.0**			Consumption	2006	5.90	121.0	$ 2,607
		kWH	171,103,625	155,708,346	24,276,391	**351,088,363.6**																							
	Energy	GJ	615,973	560,590.0	87,395.0	**1,263,920**	17,1 23	558,516.0	**729,6 44.2**	**1,993,5 64.3**	19,776.6			2,107.0		4,495.0	59,345.9	65,940.1	**85,725.7**		34,631.0	**34,63 1.0**	**8 90,03 5.0**		**3,003,956**	Energy				
	(26) GHG	tCO2e	4,507.7	4,100.3	639.3	**9,245**	10,440.54	34,076.12	**44,516.7**	**53,762.0**	1,361.7			138.6		280.0	4,277	4,665.6	**6,027.3**		2,495.6	**2,495.6**	**61,28 2.2**	**22,907.0**	**146,564**	GHG				
	Expenditure	approx. $	$ 11,258,619	$ 8,174,688	$ 1,752,755	**$ 21,186,061**	$ 3,422,460	$ 11,170,319	**$ 14,592,8 80**	**$ 35,778,940**	$ 598,917			$ 60,515		$ 129,101	$ 1,642,493	$ 1,832,110	**$ 2,431,029**		$ 822,836	**$ 822,836**	**$ 25,682,583**		**$ 64,715,396**	Expenditure				
2007	Consumption	litres					7,890,836.0	21,828,078.5	**29,719,915.5**	**29,719,915.5**	556,073.0			121,260.0		71,895.0	1,571,079.0	1,764,194.8	**2,321,267.3**	318,923.0	557,856.0	**8 76,779.0**	**25,917,793.6**			Consumption	2007	5.15	120.9	$ 2,710
		kWH	182,416,681	165,005,013	24,859,169	**372,280,863.6**																							
	Energy	GJ	656,700	594,018.0	89,493.0	**1,340,214**	19,768	552,483.0	**752,257.7**	**2,092,471.4**	19,663.0			4,644.2		2,752.0	60,769.3	68,166.4	**87,629.2**	12,214.6	21,305.6	**33,58 0.2**	**9 07,16 6.0**		**3,120,947**	Energy				
	(25) GHG	tCO2e	4,493.6	4,070.1	613.2	**9,183**	12,188.23	33,708.04	**45,896.3**	**55,079.2**	1,340.1			305.6		152.5	4,330	4,795.0	**6,135.1**	803.7	1,539.7	**2,343.4**	**62,46 1.7**	**6,881.0**	**132,900**	GHG				
	Expenditure	approx. $	$ 12,019,650	$ 8,671,541	$ 1,796,579	**$ 22,487,773**	$ 4,586,515	$ 12,326,270	**$ 16,912,8 09**	**$ 39,400,583**	$ 622,802			$ 122,473		$ 66,825	$ 1,429,682	$ 1,618,980	**$ 2,241,783**	$ 32,112	$ 507,649	**$ 829,761**	**$ 27,472,797**		**$ 69,944,924**	Expenditure				
2008	Consumption	litres					7,794,930.0	21,503,997.5	**29,298,928.3**	**29,298,928.3**	612,787.0			94,309.0		36,891.0	1,403,888.0	1,532,087.3	**2,144,874.0**	829,336.3		**8 29,337.9**	**25,453,527.3**			Consumption	2008	5.10	126.2	$ 3,076
		kWH	182,416,484	181,477,164	24,323,468	**388,217,118.0**																							
	Energy	GJ	656,699	653,317.7	87,564.5	**1,397,580**	19,740	5 94,405.0	**741,7 51.4**	**2,139,3 35.9**	21,648.0			3,612.0		1,412.9	53,653.3	58,677.5	**80,125.7**	31,763.2		**31,76 4.0**	**8 90,91 8.0**		**3,142,144**	Energy				
	(26) GHG	tCO2e	4,742.8	4,718.4	632.4	**10,094**	12,010.09	33,215.18	**45,255.3**	**55,348.9**	1,476.8			237.7		78.3	3,866	4,181.7	**5,658.7**	2,089.9	-	**2,09 1.5**	**61,34 1.0**	**2,469.0**	**126,911**	GHG				
	Expenditure	approx. $	$ 12,230,106	$ 9,536,089	$ 1,799,666	**$ 23,565,465**	$ 5,245,209	$ 14,107,825	**$ 19,353,0 61**	**$ 42,919,526**	$ 680,194			$ 126,374		$ 47,220	$ 1,635,308	$ 1,826,642	**$ 2,506,837**	$ 1,111,311	$ -	**$ 1,111,313**	**$ 30,035,162**		**$ 76,572,839**	Expenditure				
2009	Consumption	litres					7,370,028.5	18,366,710.0	**25,736,739.1**	**25,736,739.1**	540,164.3			80,926.0		-	1,528,107.0	1,609,032.8	**2,149,196.4**	803,540.0		**8 03,54 0.0**	**25,091,745.4**			Consumption	2009	4.70	123.2	$ 2,774
		kWH	186,880,727	191,271,019	24,174,852	**402,326,601.2**																							
	Energy	GJ	672,233	688,025.2	86,959.9	**1,447,221**	18,6 583	464,980.0	**651,5 68.9**	**2,098,7 90.1**	18,936.2			3,099.5		-	53,525.8	61,624.1	**80,530.0**	30,966.7		**30,96 6.7**	**8 78,25 5.0**		**3,088,542**	Energy				
	(25) GHG	tCO2e	4,730.5	4,841.7	611.9	**10,184**	10,729.3	26,234.9	**36,966.2**	**47,150.4**	1,331.8			203.9		-	4,218	4,420.4	**5,721.0**	1,970.7	-	**1,97 0.7**	**60,47 1.1**	**2,595.0**	**117,909**	GHG				
	Expenditure	approx. $	$ 13,600,503	$ 10,503,548	$ 1,886,736	**$ 25,990,792**	$ 4,367,033	$ 10,626,172	**$ 14,993,2 26**	**$ 40,984,018**	$ 512,836			$ 77,690		$ -	$ 1,421,140	$ 1,498,829	**$ 2,011,715**	$ 970,248	$ -	**$ 970,248**	**$ 25,593,580**		**$ 69,559,561**	Expenditure				
2010	Consumption	litres					8,626,247.0	21,124,955.5	**29,751,202.5**	**29,751,202.5**	538,507.6			73,399.3		-	1,459,664.0	1,533,063.3	**2,071,570.9**	552,933.0		**5 52,93 3.0**	**27,105,644.7**			Consumption	2010	4.38	121.7	$ 2,704
		kWH	177,406,854	222,907,154	22,054,198	**422,368,206**														-		-							
	Energy	GJ	638,154	801,824.3	79,331.6	**1,519,310**	21,8 386	534,809.0	**755,1 95.0**	**2,272,5 05.1**	18,848.2			2,811.2		-	55,904.4	58,715.6	**77,563.8**	21,177.1		**30,77 3.0**	**9 48,74 5.0**		**3,329,587**	Energy				
	(25) GHG	tCO2e	4,491	5,642	558	**10,691**	10,984.82	26,900.89	**37,885.7**	**48,577**	1,272.8			185.0		-	3,871	4,056.4	**5,328.8**	1,391.4	-	**1,39 1.4**	**62,05 8.4**	**2,409**	**119,767**	GHG				
	Expenditure	approx. $	$ 14,195,359	$ 13,280,245	$ 1,963,823	**$ 29,439,427**	$ 3,916,142	$ 9,118,753	**$ 13,034,8 95**	**$ 42,474,322**	$ 565,438			$ 84,147		$ -	$ 1,524,606	$ 1,608,753	**$ 2,174,186**	$ 580,580	$ -	**$ 580,580**	**$ 28,231,983**		**$ 73,961,071**	Expenditure				
2011	Consumption	litres					8,756,597.0	20,348,741.0	**29,105,338.0**	**29,105,338.0**	557,119.7			60,328.0		-	1,695,955.0	1,716,283.0	**2,273,402.7**	393,617.0		**3 93,61 7.0**	**25,623,747.3**			Consumption	2011	4.60	128.5	$ 3,171
		kWH	187,255,325	188,433,060	24,702,582	**400,390,967.0**														-		-							
	Energy	GJ	673,580	677,817	88,858	**1,440,255**	22,1 686	515,158	**736,8 44.0**	**2,177,0 99.3**	19,499.6			2,310.5		-	63,422.3	65,732.8	**85,232**	15,075.3		**30,615**	**8 96,87 6**		**3,189,823**	Energy				
	(19) GHG	tCO2e	3,955	3,577	469	**7,601**	11,150.81	25,912.45	**37,063.3**	**44,665**	1,316.4			152.0		-	4,346.0	4,498.1	**5,814.4**	1,014.7	-	**1,01 4.7**	**60,545.4**	**2,072**	**114,111**	GHG				
	Expenditure	approx. $	$ 15,752,532	$ 11,978,744	$ 2,183,542	**$ 29,914,818**	$ 3,975,302	$ 8,784,686	**$ 12,759,9 88**	**$ 42,674,806**	$ 646,259			$ 69,981		$ 1,854,715	$ 1,924,696	**$ 2,570,955**	$ 413,298	$ -	**$ 413,298**	**$ 33,054,634**		**$ 78,713,693**	Expenditure				
2012	Consumption	litres					8,813,160.5	19,600,848.0	**28,433,008.5**	**28,433,008.5**	381,728.0	22,659.0	153,790.5	35,495.0	31,226.0	-	1,698,325.0	1,765,046.0	**2,323,223.5**		142,777.3	**1 42,77 7.3**	**25,838,684.4**			Consumption	2012	4.21	119.1	$ 3,065
		kWH	179,985,206	187,137,582	24,172,706	**391,295,494.0**														-		-							
	Energy	GJ	647,429	673,157	86,952	**1,407,538**	22,5 99	496,224	**719,8 23.0**	**2,127,3 60.7**	13,160.8	79.3.1	5,382.8	1,359.4	1,195.9	-	65,045.0	67,600.4	**87,137**		5,968.3	**2 4,408**	**9 04,30 9**		**3,143,305**	Energy				
	(14) GHG	tCO2e	2,458	2,556	330	**5,343**	11,247.03	24,960.07	**36,207.1**	**41,551**	901.9	5 3.5	363.4	89.4	78.7	-	4,457.2	4,625.4	**5,944.2**	-	387.2	**3 87.2**	**61,05 3.3**	**2,147**	**111,082**	GHG				
	Expenditure	approx. $	$ 16,649,189	$ 12,988,995	$ 2,333,465	**$ 31,971,649**	$ 4,106,193	$ 8,893,799	**$ 12,799,9 91**	**$ 44,727,640**	$ 480,877	$ 22,660	$ 193,776	$ 44,369	$ 40,906	-	$ 2,122,906	$ 2,208,181	**$ 2,905,594**	$ -	$ 171,333	**$ 171,333**	**$ 33,073,516**		**$ 80,878,083**	Expenditure				
2013	Consumption	litres					8,055,374.5	19,878,572.5	**27,933,847.0**	**27,933,847.0**	255,029.0	11,884.1	165,424.9	62,242.3		-	1,519,045.7	1,601,288.0	**2,033,626.0**	167,439.9		**1 67,43 9.9**	**26,280,882.6**			Consumption	2013	4.07	114.5	$ 3,029
		kWH	166,391,496	184,042,131	24,428,104	**374,861,731.0**														-		-							
	Energy	GJ	598,531	662,022	87,871	**1,348,423**	20,3 931	5 03,255	**707,1 86.0**	**2,055,6 09.5**	8,926.2	41.6.0	5,790.0	2,383.9	-	-	58,944.7	61,328.6	**76,461**	6,412.9	-	**2 4,665**	**9 19,07 7**		**3,076,612**	Energy				
	(10) GHG	tCO2e	1,663	1,839	244	**3,746**	10,257.73	25,313.73	**35,571.5**	**39,317**	602.6	2 8.1	390.9	156.9	-	-	4,039.2	4,196.1	**5,217.6**	436.1	-	**4 3.6.1**	**62,09 8.1**	**2,173**	**109,242**	GHG				
	Expenditure	approx. $	$ 15,538,193	$ 12,248,824	$ 2,328,291	**$ 30,115,308**	$ 3,926,131	$ 9,215,094	**$ 13,141,2 25**	**$ 43,256,533**	$ 341,739	$ 15,925	$ 216,707	$ 82,160		-	$ 2,031,540	$ 2,113,700	**$ 2,688,070**	$ 221,021	$ -	**$ 221,021**	**$ 35,216,303**		**$ 81,382,006**	Expenditure				
2014	Consumption	litres					8,113,632.5	20,058,092.5	**28,177,325.0**	**28,177,325.0**	251,219.7	11,491.0	107,689.2	58,878.6		-	1,465,481.8	1,524,260.4	**1,954,760.2**	69,757.8		**6 9,757.8**	**26,204,367.4**			Consumption	2014	3.84	104.5	$ 2,879
		kWH	159,860,437	171,723,384	23,268,258	**354,852,079.0**														-		-							
	Energy	GJ	575,018	617,710	83,690	**1,276,446**	20,5 535	5 07,815	**713,3 50.0**	**1,989,7 96.3**	8,792.9	40.2.2	5,809.2	2,255.0	-	-	56,127.2	58,382.3	**73,447**	26,708.5	-	**3 0,029**	**9 17,19 9**		**3,010,671**	Energy				
	(10) GHG	tCO2e	1,651	1,773	240	**3,664**	10,238.41	25,583.09	**35,821.5**	**39,485**	590.8	2 7.2	390.2	148.4	-	-	3,946.1	3,994.5	**5,011.3**	1,816.5	-	**1,81 6.5**	**61,91 7.3**	**2,194**	**110,484**	GHG				
	Expenditure	approx. $	$ 16,336,324	$ 12,357,013	$ 2,403,536	**$ 31,196,873**	$ 3,955,404	$ 9,298,314	**$ 13,253,7 18**	**$ 44,413,591**	$ 336,634	$ 15,398	$ 217,870	$ 79,486		-	$ 1,831,852	$ 1,911,338	**$ 2,481,241**	$ 920,512	$ -	**$ 920,512**	**$ 35,113,862**		**$ 82,929,196**	Expenditure				

RMOW Energy and GHG Emissions Assessment - 2014

By Division, Department, and Worksgroup - showing potential carbon carbon costs related to 'neutrality' commitment

Division	Dept.	Workgroup	Organizational Unit	Totals							
					cost ($)	mobile fuels (Litres)	mobile fuels (GJ)	stationary gas (GJ)	Electricity (GJ)	Total Energy Use (GJ)	GHGs (tCO2e)
1100			**Mayor & Council**	$	165	123.4	4.3	-	-	4	0.29
	1101		Mayor & Council	$	165	123.4	4	-	-	4	0.29
				$	-	-	-				-
1200			**CAO Office**	$	2,488	1,856.6	11	-	-	11	4.39
	1201		Administrator	$	2,483	1,853.3	11	-	-	11	4.38
	3100		Human Resources	$	4	3.3	0	-	-	0	0.01
				$	-	-	-				-
5000			**Resort Experience**	$	492,480	80,981.2	2,935	4,131	12,322	19,388	438.19
	5100		General Manager	$	2,514	1,876.4	65	-	-	65	4.43
	1401		Partnership & Economic Services	$	2	1.2	0	-	-	0	0.00
	5200		Resort Parks Planning	$	1,040	816.7	28	-	-	28	1.84
	1402		Village Animation	$	1,950	1,502.6	52	-	-	52	3.44
	5400		Resort Planning	$	849	-	22	-	-	22	1.50
	5300		Park/Village Operations	$	480,021	71,976.6	2,601	4,131	12,322	19,054	415.98
	7200		Building Dept.	$	5,236	4,123.1	143	-	-	143	9.38
	8300		Environment Stewardship	$	869	684.6	24	-	-	24	1.62
				$	-	-	-				-
6000			**Infrastructure Services**	$	968,394	164,091.0	6,145	3,789	29,384	39,318	694.86
	6100		General Manager	$	1,388	1,088.7	38	-	-	38	2.45
	6200		Development Services	$	13	9.7	0	-	-	0	0.02
	6400		Transportation	$	173,692	94,516.4	3,619	-	1,630	5,249	255.15
	6500		Central Services	$	3,621	2,378.6	83	19	-	102	6.61
	6600		Environmental Operations	$	80,916	63,038.6	2,293	-	-	2,293	153.81
	8200		Water Utility	$	288,718	-	-	-	11,055	11,055	31.73
	8300		Sewer Utility	$	347,181	3,031.4	110	3,770	14,186	18,066	237.73
	6600		Solid Waste	$	72,788	-	-	-	2,513	2,513	7.21
	6800		Transit	$	-	-	-	-	-	-	-
	6800		Emergency Planning	$	37	27.6	1	-	-	1	0.07
				$	-	-	-				-
7000			**Corporate & Community Services**	$	321,446	44,084.0	1,600	4,759	8,814	15,172	372.51
	7100		CCS General	$	55	43.3	2	-	-	2	0.10
	2200		Lesgislative Services	$	384	286.5	10	-	-	10	0.68
	2300		Financial Services	$	236	175.9	6	-	-	6	0.42
	2400		Fiscal Planning	$	167	124.8	4	-	-	4	0.29
	2500		Information Technology	$	829	634.9	22	-	-	22	1.46
	4100		Bylaw	$	18,812	8,111.0	281	-	313	595	19.12
	4300		Fire	$	29,087	22,532.7	839	-	-	839	56.54
	5800		Meadow Park Sports Centre	$	258,800	1,824.9	63	4,759	8,500	13,322	267.94
	4200		RCMP	$	466	367.1	13	-	-	13	0.84
	5500		Whistler Public Library	$	724	570.3	20	-	-	20	1.35
	5700		Recreation	$	11,884	9,412.8	340	-	-	340	23.77
				$	-	-	-				-
				$	1,784,972	291,136.2	10,694	12,679	50,521	73,893	1,510.24
			All Other		2,653.2		14.9	-		14.9	4.7
										bio tCO2e	23.06

APPENDIX C – Summary of Emission Factors

Summary of Emission Factors

based on 2012 BC Best Practices Methodology for Quantifying GHG Emissions, BC Ministry of Environment (Sept, 2012)

Stationary Emissions

Source Fuel	TOTAL (Petro)		Key Conversion	
	t CO2e/GJ	tCO2e/litre		
Natural Gas	0.0503	n/a		
Propane	0.0610	0.001544	0.025310	GJ/litre
Diesel (B0)	0.0728	0.002790	0.038300	GJ/litre

Mobile Emissions

Light Duty Vehicles

Source Fuel	TOTAL (Petro)		TOTAL (Bio)		TOTAL (All)		Key Conversion	
	t CO2e/GJ	tCO2e/litre	t CO2e/GJ	tCO2e/litre	t CO2e/GJ	tCO2e/litre		
Gasoline (E0)	0.0709	0.00248	0.00000	0.0000	0.0709	0.002483	0.03500	GJ/litre
E5 Gasoline	0.0675	0.00236	0.00319	0.0001	0.0707	0.002436	0.03500	GJ/litre
E10 Gasoline	0.0641	0.00224	0.00638	0.0001	0.0705	0.002389	0.03500	GJ/litre
Diesel (B0)	0.0713	0.00273	0.00000	0.0000	0.0713	0.002732	0.03830	GJ/litre
B4 Diesel (RLCFR)	0.0685	0.00262	0.00275	0.0001	0.0713	0.002722	0.03830	GJ/litre
B5 Diesel	0.0678	0.00260	0.00343	0.0001	0.0712	0.002720	0.03830	GJ/litre
B10 Diesel	0.0643	0.00246	0.00687	0.0002	0.0711	0.002707	0.03830	GJ/litre
B20 Diesel	0.0572	0.00219	0.01373	0.0003	0.0710	0.002681	0.03830	GJ/litre
Propane	0.0605	0.00153	0.00000	0.0000	0.0605	0.001532	0.02531	GJ/litre
Natural Gas	0.0562		0.000000	0.0000	0.0562		0.05379	GJ/kg

Light Duty Trucks (incl. SUVs & Minivans)

Source Fuel	TOTAL (Petro)		TOTAL (Bio)		TOTAL (All)		Key Conversion	
	t CO2e/GJ	tCO2e/litre	t CO2e/GJ	tCO2e/litre	t CO2e/GJ	tCO2e/litre		
Gasoline (E0)	0.0720	0.00252	0.00000	0.0000	0.0720	0.002519	0.03500	GJ/litre
E5 Gasoline	0.0685	0.00240	0.00319	0.0001	0.0717	0.002471	0.03500	GJ/litre
E10 Gasoline	0.0650	0.00228	0.00638	0.0001	0.0714	0.002422	0.03500	GJ/litre
Diesel (B0)	0.0713	0.00273	0.00000	0.0000	0.0713	0.002733	0.03830	GJ/litre
B4 Diesel (RLCFR)	0.0685	0.00262	0.00275	0.0001	0.0713	0.002722	0.03830	GJ/litre
B5 Diesel	0.0678	0.00260	0.00343	0.0001	0.0713	0.002720	0.03830	GJ/litre
B10 Diesel	0.0643	0.00246	0.00687	0.0002	0.0712	0.002707	0.03830	GJ/litre
B20 Diesel	0.0572	0.00219	0.01373	0.0003	0.0710	0.002681	0.03830	GJ/litre
Propane	0.0605	0.00153	0.00000	0.0000	0.0605	0.001532	0.02531	GJ/litre
Natural Gas	0.0562		0.000000	0.0000	0.0562		0.05379	GJ/kg

Heavy Duty Vehicles

Source Fuel	TOTAL (Petro)		TOTAL (Bio)		TOTAL (All)		Key Conversion	
	t CO2e/GJ	tCO2e/litre	t CO2e/GJ	tCO2e/litre	t CO2e/GJ	tCO2e/litre		
Gasoline (E0)	0.0672	0.00235	0.00000	0.0000	0.0672	0.002352	0.03500	GJ/litre
E5 Gasoline	0.0640	0.00224	0.00319	0.0001	0.0672	0.002235	0.03500	GJ/litre
E10 Gasoline	0.0607	0.00212	0.00638	0.0001	0.0671	0.002117	0.03500	GJ/litre
Diesel (B0)	0.0708	0.00271	0.00000	0.0000	0.0708	0.002712	0.03830	GJ/litre
B4 Diesel (RLCFR)	0.0680	0.00260	0.00275	0.0001	0.0708	0.002722	0.03830	GJ/litre
B5 Diesel	0.0673	0.00258	0.00343	0.0001	0.0707	0.002720	0.03830	GJ/litre
B10 Diesel	0.0638	0.00244	0.00687	0.0002	0.0707	0.002707	0.03830	GJ/litre
B20 Diesel	0.0568	0.00218	0.01373	0.0003	0.0705	0.002681	0.03830	GJ/litre

Off Road Vehicles

Source Fuel	TOTAL (Petro)		TOTAL (Bio)		TOTAL (All)		Key Conversion	
	t CO2e/GJ	tCO2e/litre	t CO2e/GJ	tCO2e/litre	t CO2e/GJ	tCO2e/litre		
Gasoline (E0)	0.0675	0.00236	0.00000	0.0000	0.0675	0.002361	0.03500	GJ/litre
E5 Gasoline	0.0642	0.00225	0.00319	0.0001	0.0674	0.002243	0.03500	GJ/litre
E10 Gasoline	0.0609	0.00213	0.00638	0.0001	0.0673	0.002125	0.03500	GJ/litre
Diesel (B0)	0.0785	0.00301	0.00000	0.0000	0.0785	0.003007	0.03830	GJ/litre
B4 Diesel (RLCFR)	0.0754	0.00289	0.00275	0.0001	0.0782	0.002722	0.03830	GJ/litre
B5 Diesel	0.0746	0.00286	0.00343	0.0001	0.0781	0.002720	0.03830	GJ/litre
B10 Diesel	0.0707	0.00271	0.00687	0.0002	0.0776	0.002707	0.03830	GJ/litre
B20 Diesel	0.0630	0.00241	0.01373	0.0003	0.0767	0.002681	0.03830	GJ/litre

APPENDIX D –Summary of 2014 Corporate Carbon Neutral Commitment

RMOW Energy and GHG Emissions Assessment - 2014

By Division, Department, and Worksgroup - showing potential carbon carbon costs related to 'neutrality' commitment

Division	Dept.	Workgroup	Organizational Unit	Totals GHGs (tCO2e)		carbon cost ($) (not GST)
1100			**Mayor & Council**	**0.29**	$	7.29
	1101		Mayor & Council	0.29	$	7.29
				-		
1200			**CAO Office**	**4.39**	$	109.67
	1201		Administrator	4.38	$	109.47
	3100		Human Resources	0.01	$	0.20
				-		
5000			**Resort Experience**	**438.19**	$	11,107.33
	5100		General Manager	4.43	$	110.84
	1401		Partnership & Economic Services	0.00	$	0.07
	5200		Resort Parks Planning	1.84	$	45.90
	1402		Village Animation	3.44	$	86.02
	5400		Resort Planning	1.50	$	37.42
	5300		Park/Village Operations	415.98	$	10,552.09
	7200		Building Dept.	9.38	$	234.56
	8300		Environment Stewardship	1.62	$	40.44
				-		
6000			**Infrastructure Services**	**694.86**	$	17,598.34
	6100		General Manager	2.45	$	61.25
	6200		Development Services	0.02	$	0.58
	6400		Transportation	255.15	$	6,454.92
	6500		Central Services	6.61	$	165.37
	6600		Environmental Operations	153.81	$	3,921.39
	8200		Water Utility	31.73	$	793.33
	8300		Sewer Utility	237.73	$	5,943.32
	6600		Solid Waste	7.21	$	256.54
	6800		Transit	-	$	-
	6800		Emergency Planning	0.07	$	1.63
				-		
7000			**Corporate & Community Services**	**372.51**	$	9,312.66
	7100		CCS General	0.10	$	2.56
	2200		Lesgislative Services	0.68	$	16.92
	2300		Financial Services	0.42	$	10.39
	2400		Fiscal Planning	0.29	$	7.37
	2500		Information Technology	1.46	$	36.59
	4100		Bylaw	19.12	$	478.03
	4300		Fire	56.54	$	1,413.56
	5800		Meadow Park Sports Centre	267.94	$	6,698.38
	4200		RCMP	0.84	$	20.95
	5500		Whistler Public Library	1.35	$	33.68
	5700		Recreation	23.77	$	594.24
				-		
				1,510.24	$	38,135.28

Verified Emission Reduction (VERs)

2010 – 2012 Carbon Neutrality: The RMOW has purchased and retired Verified Emission Reduction credits equal to its entire corporate carbon footprint for every year between 2010 and 2012 inclusive. A summary is provided below:

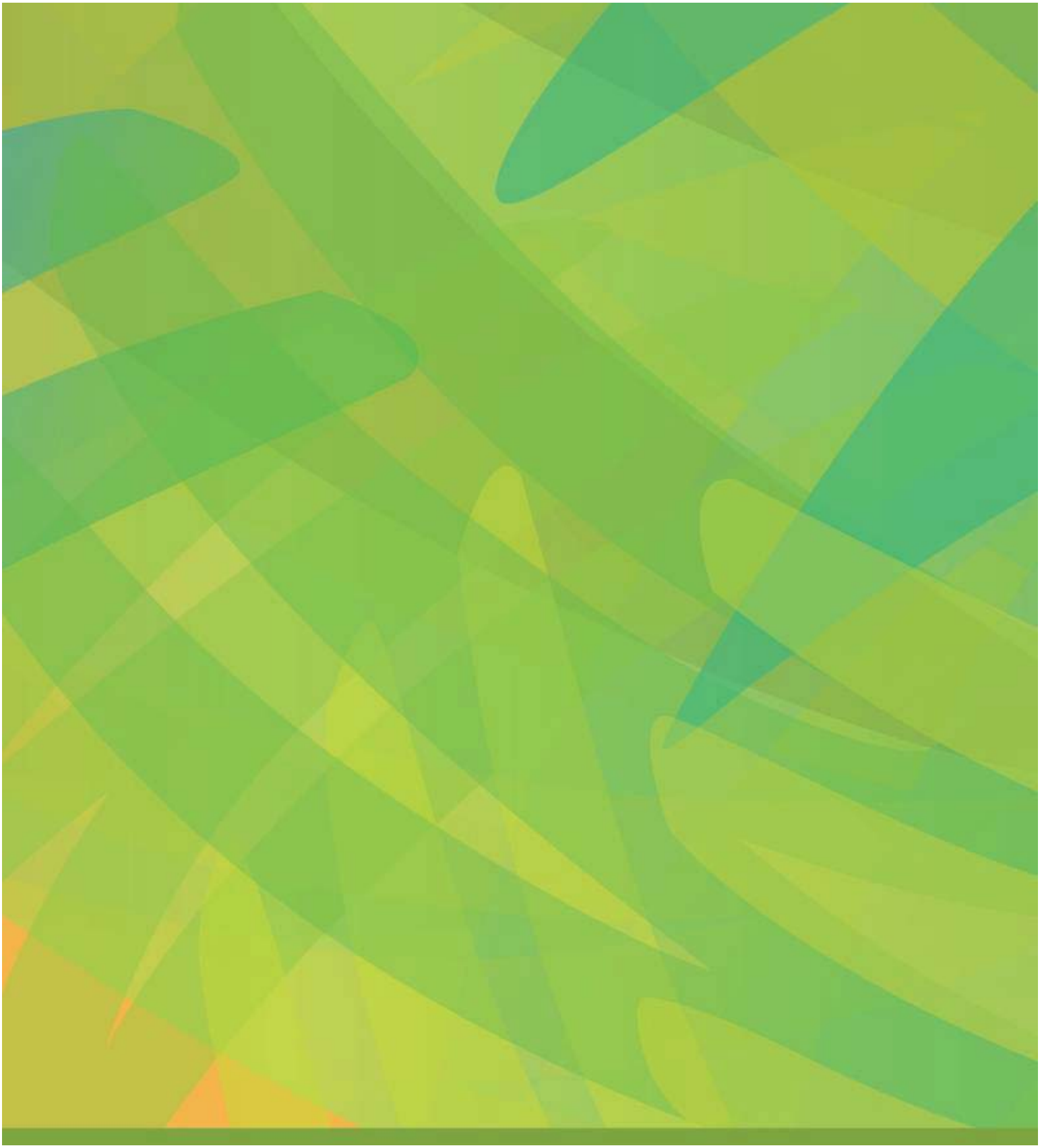
Year	VERs	Project	Certification Standard	Registry	Vendor
2010	1,145 tonnes	Mare Monastir Wind Farm, Turkey	Gold Standard – project reference: GS368	GS APX Registry	Offsetters Clean Technology Inc.
	1,145 tonnes	Sun Select Aldegrove Biomass Boiler, British Columbia	ISO 14064-3 and CDM additionality tool	Markit Registry	Offsetters Clean Technology Inc.
2011	1,063 tonnes	Mare Monastir Wind Farm, Turkey	Gold Standard – project reference: GS368	Markit Registry	Offsetters Clean Technology Inc.
	1,063 tonnes	Sun Select Aldegrove Biomass Boiler, British Columbia	ISO 14064-3 and CDM additionality tool	Markit Registry	Offsetters Clean Technology Inc.
2012	973 tonnes	Mare Monastir Wind Farm, Turkey	Gold Standard – project reference: GS368	Markit Registry	Offsetters Clean Technology Inc.
	974 tonnes	Sun Select Aldegrove Biomass Boiler, British Columbia	ISO 14064-3 and CDM additionality tool	Markit Registry	Offsetters Clean Technology Inc.

2013 and 2014 Carbon Neutrality. The RMOW, in support of the Cheakamus Community Forest (CCF) has delayed the purchase of VERs to allow time for the CCF to fully finalize the the creation of third-party certified VERs locally. The CCF has recently finished the validation and verification processes for its first tranche of offsets. More information about the project can be found on the Cheakamus Community Forest (CCF) website (http://www.cheakamuscommunityforest.com/ccf-projects/)

RMOW staff feel that the benefits of supporting a local offset project, the co-benefits associated with the project approaches, and the independent, third party rigour that is being applied to the CCF project, justify the delay in achieving formal neutrality with respect to 2013 and '14 corporate operations.

The RMOW is currently in negotiations with the CCF to purchase offsets to fully neutralize both the 2013 and 2014 corporate operations.

Consistent with our commitments in both the UBCM Climate Action Charter, and the RMOW Carbon Neutral Plan, the RMOW remains committed to achieving carbon neutrality with respect to all corporate operations. All RMOW departments have been charged internally for the costs associated with the RMOW carbon neutrality commitments. All departments continue to use the price signals that these costs imply ($25/tCO2e) to improve financial decision making and preference cost-effective projects and initiatives that are capable of continuously reducing carbon emissions, and decreasing carbon costs across corporate operations. See Appendix D above for more detail.



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WHISTLER

REPORT | INFORMATION REPORT TO COUNCIL

PRESENTED:	July 7, 2015	**REPORT:**	15-086
FROM:	Resort Experience	**FILE:**	8365
SUBJECT:	ENVIRONMENTAL STEWARDSHIP UPDATE		

COMMENT/RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Resort Experience be endorsed.

RECOMMENDATION

That Information Report No. 15-086 regarding Environmental Stewardship Update be received.

REFERENCES

PURPOSE OF REPORT

The purpose of this report is to summarize and share the activities of the Environmental Stewardship department.

DISCUSSION

The Environmental Stewardship (ES) department consists of a manager, a part-time Environmental Coordinator, a casual Bear Smart Program Assistant, and two term Fish & Wildlife Technicians. Collectively, the Department manages and implements a wide variety of projects with a significant amount of partnership, research, and public outreach.

Municipal Process

The ES department is part of the Planning Department's referral process for development permit and variance applications. Each week, requests are received for reviews and/or site visits to provide insight and recommendations related to meeting the RMOW environmental goals.

The Environmental Protection Bylaw introduced a tree cutting permit process in 2014. The Environmental Coordinator manages the process and has fielded numerous inquiries, many of which end up going through the Development Permit process, but also issuing tree cutting permits.

Cheakamus Community Forest

The ES Manager is the administrator for the Cheakamus Community Forest (CCF). Partnership in the CCF allows the RMOW to have control over where and when harvesting takes place in the 33,000 hectares surrounding our community. In 2014, the CCF logged 21,872 m^3 in 14 openings over 30 hectares in total, with an average opening size of 2.2. hectares. Plans are in place to harvest near the annual allowable cut of 21,000 m^3 in the autumn once the fire hazard drops.

A significant milestone was achieved this spring when the CCF and the Province signed an Atmospheric Benefits Sharing Agreement that allows for the generation and sale of carbon offsets. This is the first such agreement to be signed with a B.C. community forest. The carbon offsets generated by the CCF are created by improved forest management actions on the 33,000 hectares it manages. These actions are guided by the community forest's Ecosystem Based Management plan, in reduced harvest volumes, extended harvest rotations, expanded reserves, protection of old growth forests and important wildlife habitat. These voluntary actions go above and beyond regulatory requirements. The revenue generated by the sales will be used to bolster the EBM approach and make improvements to the forest infrastructure such as roads and recreation amenities.

Currently, the CCF is completing an integrated resource planning project that identifies Old Growth Management Areas, voluntary ecosystem-based management areas, wildfire management areas, special management areas related to commercial tourism operators, as well as other protected areas such as riparian and winter ranges. The objective is to identify areas that will not be harvested, and then develop a multi-year harvesting plan based on the remaining suitable areas. The plan is scheduled for public review in the fall.

Bears

The ES Manager is co-chair of the Whistler Bear Working Group (BWG) which is comprised of representatives from the Conservation Officer Service (COS), Bylaw, RCMP, Get Bear Smart Society, Carney's and Whistler Blackcomb. The group meets monthly to plan overall strategy as well as address current issues. The Bear Smart Program Assistant is a casual position first hired in 2014 to provide support to the COS and Bylaw, and deliver public education in alignment with RMOW commitments as a provincially-designated Bear Smart Community.
http://www.env.gov.bc.ca/wld/bearsmart/

Given the RMOW and Whistler community's desire to proactively manage bears in an effort to reduce human-bear conflict and bear deaths as much as possible, the RMOW and COS sign an annual agreement whereby the RMOW provides $15,000 to the COS to deliver a higher level of service than their provincial budget will allow. We have a good relationship with the COS and they are committed to the program.

Wildfire Management

The ES Manager took over the wildfire management program from the Fire Chief in early 2014. Interface thinning projects are partially funded through the UBCM and developed based on priorities identified in the Community Wildfire Protection Plan that Council endorsed in 2014 along with the Landscape Scale Fire Behaviour Model report. The current project above Millar's Pond builds on previous thinning work done in 2009 to create a contiguous area of thinned trees that reduces the risk of wildfire. Future thinning projects will take place above Alpine Meadows, Brio and Kadenwood.

Landscape level fuel breaks are also being undertaken following the recommendations of the Landscape Scale Fire Behaviour Model report prepared in 2013. These fuel breaks complement the interface work being done around Whistler neighbourhoods, and is funded entirely by the RMOW in collaboration with the CCF. Fuel breaks reduce the risk of wildfire, and in the event of a fire will be more likely to slow a fire down and provide a defensible space for fire-fighting crews. Work began along the old Callaghan FSR in December 2014 and will continue this fall, hopefully with funds augmented by a successful response to our Federal Gas Tax fund application.

Forest & Wildland Advisory Committee

The ES Manager is the staff support person for the long-standing Forest and Wildland Advisory Committee (FWAC) which advises Council on matters related to CCF harvesting, commercial and public recreation issues, and wildland/habitat issues. It also acts as the public review body on community forest activities. FWAC meets monthly.

Ecosystem & Species Monitoring

Whistler is in the fortunate position of having relatively good quality water and habitat, but we need to understand changes over time in order to take appropriate corrective actions as necessary. Currently, ES is monitoring:

- Baseline ecosystem and species monitoring including indicator species such as beavers, fish (spawning patterns), pileated woodpeckers (old growth indicator), voles (food chain foundation), and coastal tailed frogs (amphibians & water quality indicators). The purpose is to monitor species abundance over time against our targets, and be able to identify trends and take action as necessary or possible.
- Western Toads are a blue listed species that breed in Lost Lake and migrate through the beach and special events area to the forest. The ES Fish & Wildlife Technicians monitor the toads' activity and communicate with the Parks and Special Events teams. When the toads begin their migration, the ES Fish & Wildlife Technicians work to ensure the toads can move as safely as possible using fencing, signs and public education to reduce mortality. In 2015, we will hold a "Toadfest" day whereby we will engage the public to assist with moving the toads past the populated areas, trails and roads and out into the forest. This will happen toward the end of July at the peak of the migration.
- Lake, stream & water quality monitoring is undertaken to track trends. We partnered with Ministry of Environment over the last decade or so to gather baseline data for the lakes and streams, and are in the process of developing water quality objectives for the lakes. This provides a good understanding of the normal range of lake water quality parameters against which we can measure future results, and take action as necessary.
- Beach water quality is monitored weekly through the summer by the Fish & Wildlife Technicians in coordination with Vancouver Coastal Health. This ensures that the water meets recreational water quality objectives and is safe for swimmers.

Invasive Species

ES supports and collaborates with the Sea to Sky Invasives Species Council to plan and deliver initiatives to reduce the impacts and spread of invasive species. This year, we are partnering to remove all known yellow flag iris locations in the Whistler valley. It is a riparian plant that spreads along waterways and crowds out native plants. More information on SSISC can be found at http://www.ssisc.info/blog

Community Energy and Climate Adaptation Plan

Ted Battiston is the lead on the project, and the ES Manager and Environmental Coordinator are supporting the work, particularly related to adaptation planning. A community advisory group is formed and has already met once. Second meetings are coming up in July. As well, in internal staff content expert group is formed to review and provide additional information to the recommendations of the community group and overall plan.

Air Quality

ES supports and collaborates with the Sea to Sky Clean Air Society to plan and deliver air quality initiatives for the air shed and specifically in Whistler. We support Bike to Work week planning and the anti-idling campaigns, for example.

More information on S2SCAS can be found at http://seatoskyairquality.ca/

Species at Risk
The federal Species at Risk Act (SARA) applies to federal lands, but local governments must be consistent with SARA, and have an opportunity to protect species at risk by incorporating the SARA objectives into our planning tools. Given the RMOW's policy statements related to protecting sensitive ecosystems and managing for species at risk, the ES Manager and Environmental Coordinator are developing systems for integrating species at risk into the planning process. The ES team is in the process of identifying the species at risk in Whistler, management objectives and recommendations, and developing the review process.

Public Education & Outreach
ES collaborated with the GO Fest team to incorporate the environment as a key pillar of the event. ES coordinated a Friday night speaker at Millennium Place, and three outdoor adventures related to the Earth, Water and Air themes of GO Fest. Response was positive and the activities will be included in GO Fest in the future.

The Spring Into Nature events were held over spring break to celebrate the International Day of Forests, World Water Day and Earth Hour and consisted of two film showings, presentations, an interactive display at the Whistler Public Library and an Earth Hour candlelight skate at the Plaza.

Geese Management
In 2014, Alta Lake beaches were closed due to high fecal coliform counts for the first time in over a decade. It was determined that the growing geese population was the main contributor. Parks has been taking steps to reduce geese activity at some of our parks over the last couple of years such as hiring a dog trainer to chase geese away and placing low fencing along beaches to discourage landings. But given the increase in negative impacts last year, staff developed a geese management plan that includes continuing to scare the birds away but also addling eggs to flatten the numbers. This is a long term project and we are committed to continuing it to improve the user experience at our popular beach parks.

WHISTLER 2020 ANALYSIS

W2020 Strategy	TOWARD Descriptions of success that resolution moves us toward	Comments
Natural Environment	Use of critical natural areas is avoided and use of surrounding areas is limited to ensure ecosystem integrity	Cheakamus Community Forest
	Indigenous biodiversity is maintained	Invasive Species
	Continual learning about natural areas and species informs appropriate restoration and protection efforts	Ecosystem & Species Monitoring, Air Quality, Wildfire Management
Energy	The energy system is continuously moving towards a state whereby a build-up of emissions and waste into air, land and water is eliminated	Community Energy & Climate Adaptation Plan
Partnership	Partners work together to achieve mutual benefit	Bear Management

Visitor Experience	The resort is comfortable, functional, safe, clean and well maintained	Geese Management
Learning	Opportunities exist within developed and recreational areas for people to learn about the natural environment	Public Outreach & Education

W2020 **Strategy**	**AWAY FROM** **Descriptions of success that resolution moves away from**	**Mitigation Strategies and Comments**
	N/A	

OTHER POLICY CONSIDERATIONS

All ES activities are grounded in the Corporate Strategy, Whistler2020, the OCP and other Council approved documents such as the wildfire planning reports.

BUDGET CONSIDERATIONS

Each project has an approved municipal budget and some have additional funding from outside sources such as the UBCM and CFOW.

COMMUNITY ENGAGEMENT AND CONSULTATION

Community engagement and consultation varies depending on the project but ES is committed to connecting with our community. For example, when the Millar's Pond fuel thinning project was proposed this year and it appeared that the Tunnel Vision mountain bike trail would be affected, we met with WORCA to discuss, had site visits and agreed on how to proceed.

SUMMARY

The ES department is involved in a variety of projects that contribute to the quality of our natural environment. The staff is committed and dedicated to adding value to our community.

Respectfully submitted,

Heather Beresford
ENVIRONMENTAL STEWARDSHIP MANAGER
for
Jan Jansen
GENERAL MANAGER RESORT EXPERIENCE

WHISTLER

REPORT | ADMINISTRATIVE REPORT TO COUNCIL

PRESENTED: July 7, 2015 **REPORT:** 15-087

FROM: Resort Experience **FILE:** LLR 1223

SUBJECT: LLR 1223 – STONESEDGE KITCHEN PERMANENT CHANGE TO FOOD PRIMARY HOURS OF SALE

COMMENT/RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Resort Experience be endorsed.

RECOMMENDATION

That Council authorize the resolution attached as Appendix "A" to Administrative Report No. 15-087 providing Council's recommendation to the Liquor Control and Licensing Branch in support of an application from Stonesedge Kitchen located at 4122 Village Green for a Permanent Change to Hours of Sale for Food Primary Licence No. 174190, to change hours of sale to 9:00 a.m. to 1:00 a.m. Monday through Sunday.

REFERENCES

Applicant: Stonesedge Kitchen
Location: 4122 Village Green

Appendices: "A" – Council Resolution – Permanent Change to a Liquor Licence
"B" – Location Plan
"C" – Letter from Stonesedge Kitchen dated April 30, 2015

PURPOSE OF REPORT

This report presents a recommendation for Council's consideration regarding an application for a permanent change to hours of sale for Stonesedge Kitchen food primary licence. For this type of licence change the provincial Liquor Control and Licensing Branch (LCLB) requires local government comment in the form of a resolution from Council regarding the suitability of the licence change and specifically addressing considerations relating to the potential for noise, the impact on the community, whether the amendment may result in the establishment being operated in a manner that is contrary to the primary purpose and the views of residents. The proposed resolution in favour of the application, including the rationale for support, is attached as Appendix "A".

DISCUSSION

Licence Change Request – Hours of Sale

The Resort Municipality of Whistler has received an application from Stonesedge Kitchen located at 4122 Village Green (shown on Appendix "B") for a permanent change to hours of sale for existing food primary licence No. 174190. The current and requested hours of liquor sales are as follows:

	Current Hours of Sale	Requested Hours of Sale
Monday through Saturday	9:00 a.m. to 1:00 a.m.	9:00 a.m. to 1:00 a.m.
Sunday	9:00 a.m. to midnight	9:00 a.m. to 1:00 a.m.

The permanent change in hours of sale will permit the restaurant to serve liquor to the full extent of the municipal hours of service guidelines. An explanation of the request is included in a letter from the applicant, attached as Appendix "C". Stonesedge Kitchen is requesting this extension of liquor service hours to provide consistent daily hours of operation for customers of this seven day a week business.

Municipal Review Process

For this type of application Council Policy G-17 *Municipal Liquor Licensing Policy* specifies a public advertising period, a good standing review, a referral to Liquor Licence Advisory Committee (LLAC) members for comment, a staff report to Council and a Council resolution to the LCLB in a prescribed format.

A summary of the applicant's proposal was referred by e-mail to LLAC members on May 11, 2015, and members were asked to provide their comments. There were no objections were raised by LLAC members who provided comment.

Current Good Standing Status

In order for the Municipality to give consideration to an application requesting a permanent change to a licence the applicant must be in "Good Standing" with respect to the compliance and enforcement history of the establishment. The application was referred to the LCLB inspector, the Whistler Detachment of the RCMP, the Whistler Fire Rescue Service and the RMOW Building and Bylaws Departments. Each was asked to provide a written list of any contraventions and their disposition for the 12-month period preceding the date of the application and any other comments considered to be relevant. There were no compliance issues identified, so the applicant is considered to be in Good Standing.

LCLB Policy and Approval Process

The maximum hours of sale allowed by the LCLB for a licensed establishment are between the hours of 9 a.m. and 4 a.m., subject to limitation by local government. The LCLB process for a permanent change to hours of sale past midnight for a food primary licence requires that specific conditions regarding the licence be addressed and comments be provided to the LCLB in a specifically worded and formatted resolution from local government. The LCLB process requires that local government take into consideration the potential for noise, the impact on the community, whether the amendment may result in the establishment being operated in a manner that is contrary to the primary purpose and the views of residents and asks the details of the process used by local government in determining those views. The resolution must also include a recommendation as to whether the licence amendment should be approved.

The proposed resolution presented in Appendix "A" addresses all of the LCLB requirements. In summary, the proposed licensing will provide for improved customer service for both visitors and residents alike and is not expected to have any significant negative impacts on the resort community and is consistent with municipal liquor licensing policies.

WHISTLER 2020 ANALYSIS

W2020 Strategy	TOWARD Descriptions of success that resolution moves us toward	Comments
Visitor Experience	The resort community's authentic sense of place and engaging, innovative and renewed offerings attract visitors time and time again	The permanent change in hours of sale will permit Stonesedge Kitchen to serve liquor to the full extent of the municipal hours of service guidelines. Specifically, permitting liquor service seven days a week until 1:00 a.m. while dining will meet expectations of residents and visitors of a Whistler Village restaurant.
Economic	The Whistler economy provides opportunities for achieving competitive return on invested capital	The applied for liquor license change would allow the Stonesedge Kitchen to take full advantage of the business opportunities available to a food primary establishment.

W2020 Strategy	AWAY FROM Descriptions of success that resolution moves away from	Mitigation Strategies and Comments
Built Environment	Visitors and residents can readily immerse themselves in nature, free from noise and light pollution	Noise from an establishment or from patrons leaving an establishment serving alcoholic beverages can be disruptive to visitors staying in nearby accommodations. If the application for a Sunday 1:00 a.m. closing time for liquor sales is approved, there is not expected to be an increase in noise from the establishment. The establishment currently has a 1:00 a.m. closing time for liquor sales six days a week and there has not been a history of noise or disturbances. The Good Neighbour Agreement requires all doors and windows to be closed by 10:00 pm.
Health & Social	Community members eat healthy food, exercise and engage in leisure and other stress relieving activities that assist in preventing illness and they avoid the abusive use of substances that evidence indicates have negative effects on physical and mental health	Any expansion of hours of alcohol sales has the potential for over-service and/or excessive consumption. Stonesedge Kitchen has signed a Good Neighbour Agreement that commits it to procedures and training to avoid potentially adverse effects of their products and services.

OTHER POLICY CONSIDERATIONS

Under policies developed and supported by the Liquor Licence Advisory Committee and in Council Policy G-17, a permanent change to hours of sale for a food primary licence within municipal hours of service guidelines specifies a thirty-day public comment period, a good standing review, a LLAC referral for comment, a staff report to Council and a resolution to the LCLB in the prescribed format. For this type of application Council Policy G-17 requires a referral to the LLAC for a two-week comment period, but there is no formal report to or recommendation from the committee.

Council Policy G-17 hours of liquor service guideline for restaurants is "9:00 am to 1:00 am Monday through Sunday." Council Policy G-17 further states that, "Establishments that have existing hours of service that are less than the general range for the applicable category of establishments are eligible to apply for an extension of hours to the limits of the range for the category, with approval

being subject to the municipal review process including consideration of the compliance and enforcement history of the establishment."

COMMUNITY ENGAGEMENT AND CONSULTATION

In accordance with municipal policy the applicant advertised the proposed permanent change to its food primary license in the May 21, May 28 and June 11, 2015 editions of Pique Newsmagazine and posted a sign at the establishment (commencing May 21, 2015) in order to provide opportunity for public comment. The advertisements and sign requested that any comments be provided in writing to municipal staff on or before June 20, 2015. No comments were received.

SUMMARY

This report presents a recommendation regarding an application for a permanent change to hours of sale for the food primary licence at Stonesedge Kitchen. The report also provides a resolution in support of the application for Council's consideration that addresses criteria specified by the LCLB. The resolution is a result of the application of municipal policy and consultation with the community.

Respectfully submitted,

Frank Savage
PLANNER
for
Jan Jansen
GENERAL MANAGER OF RESORT EXPERIENCE

APPENDIX A

General Manager,
Liquor Control and Licensing Branch

RE: Application for a Permanent Change to a Liquor Licence for Stonesedge Kitchen food primary licence No. 174190, to change hours of sale to 9:00 a.m. to 1:00 a.m. Monday through Sunday.

At the Council meeting held on July 7, 2015 the Council passed the following resolution with respect to the application for the above named amendment:

"Be it resolved that:

1. The Council recommends the amendment to the licence for the following reasons:
   The proposed licensing will provide for improved customer service for both visitors and residents alike and will not have any significant negative impacts on the resort community. The applicant has entered into a Good Neighbour Agreement and Noise Mitigation Plan with the Municipality.

2. The Council's comments on the prescribed considerations are as follows:

   (a) The potential for noise if the application is approved:
   If the application for a Sunday 1:00 a.m. closing time for liquor sales is approved, there is not expected to be an increase in noise from the establishment. The establishment currently has a 1:00 a.m. closing time for liquor sales six days a week and there has not been a history of noise or disturbances. Stonesedge Kitchen has signed a Good Neighbour Agreement which requires all doors and windows to be closed by 10:00 p.m. The establishment is subject to the provisions of the municipal *Noise Control Bylaw No. 1660, 2004*, and the Good Neighbour Agreement commits the establishment to limit noise disturbances and to comply with the Noise Control Bylaw.

   (b) The impact on the community if the application is approved:
   If the application is approved the impact on the community will likely, on balance, be positive by meeting the service expectations of both visitors and residents. Negative impacts on the community are not anticipated as a result of the requested change to the licence.

   (c) Whether the amendment may result in the establishment being operated in a manner that is contrary to the primary purpose:
   It is unlikely that this amendment will result in this establishment being operated in a manner that is contrary to its primary purpose, as the emphasis is on food service rather than liquor service with this application. The establishment's operating procedures must ensure that it is operated at all times in a manner appropriate to its food primary license.

   (d) The views of residents:
   Council believes that residents are in favour of the application and that residents are not opposed to the application. The method used to gather the views of residents

> was placement of an information sign in a public location (commencing May 21, 2015) and advertisements in three editions of the weekly local newspaper, Pique Newsmagazine, commencing May 21, 2015. No comments were received. Further, the municipal Liquor License Advisory Committee, comprising various community representatives, provided comment on the application."

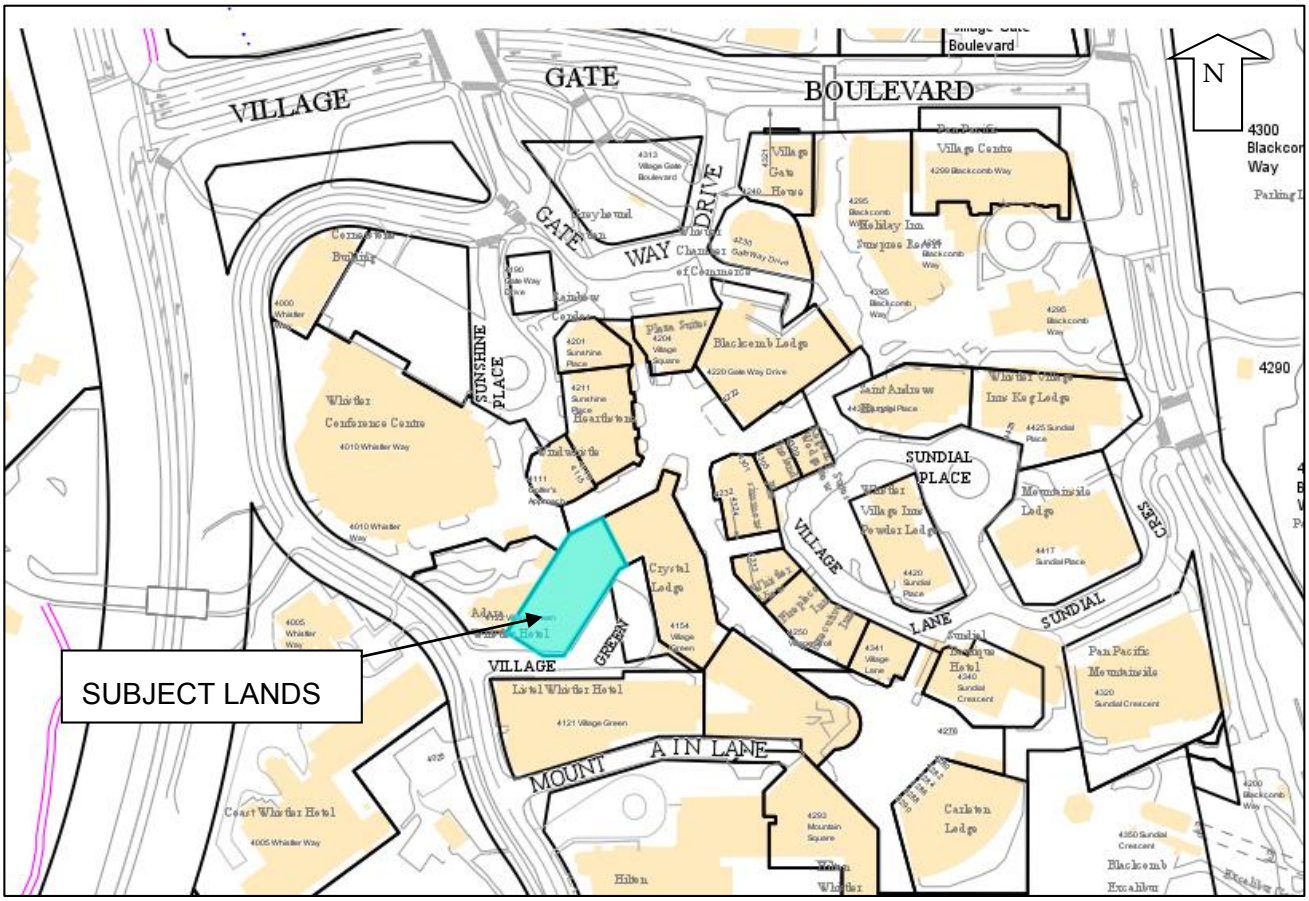
The undersigned hereby certifies the above resolution to be a true copy of the resolution passed by the Council of the Resort Municipality of Whistler on July 7, 2015.

Sincerely,

Shannon Story
CORPORATE OFFICER
Resort Municipality of Whistler

APPENDIX B

LOCATION PLAN – STONESEDGE KITCHEN



APPENDIX C

EST. 2014

Mr. Savage April 30th, 2015

C/o The Resort Municipality of Whistler,

I am writing this letter to request an extension of hours to our liquor licence for STONESEDGE KITCHEN, unit 13-4122 Village Green, Whistler, B.C. We are applying for the extension on Sundays from midnight, to 1am. The reason for the request is, to provide a consistent hour of operation to our establishment. This will fall in toe with all of our local neighbours. The existing establishment previous to us occupying it (Kypriyaki Norte) was given the opportunity, and never committed to it. As the new tenants/owners we would like to provide the community of Whistler a welcoming with these hours, as we do 6 other days a week.

Feel free to contact me with any questions or concerns that you may have.

Regards,

April Solonyka

Owner/Operator

WHISTLER

REPORT | ADMINISTRATIVE REPORT TO COUNCIL

PRESENTED:	July 7, 2015	**REPORT:**	15-088
FROM:	Resort Experience	**FILE:**	8216
SUBJECT:	2015 PORTOBELLO STREET PARTY CATERING LICENSE CAPACITY		

COMMENT/RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Resort Experience be endorsed.

RECOMMENDATION

That Council endorse a requested capacity of over 500 people for a Catering Licensed event, subject to Liquor Control & Licensing Branch (LCLB), Fire Rescue and RCMP.

REFERENCES

APPENDIX A – Portobello Street Party Site Plan 700

APPENDIX B – LCLB Letter & Catering License Authorization Report

APPENDIX C – Property Owner Approval Letter

PURPOSE OF REPORT

A Catering License event with a requested capacity of over 500 people is brought forward for Council's consideration.

DISCUSSION

CANTRAV Services Inc. working with The Fairmont Chateau Whistler is producing the *Portobello Street Party*, a licensed catered event *for a private group* to be held on Wednesday, August 5, 2015, in the Wizard Walk Stroll. The liquor license will be provided by the Fairmont Whistler's Catering License Endorsement. Servers and supervisors will have Serving it Right accreditation.

The *Portobello Street Party* is a r*ustic elegance* themed welcome event for a corporate group. Delegates are staying at The Fairmont Chateau Whistler. Food & beverage service stations will be set throughout the event site. Liquor service will occur within a fenced area. Liquor service hours requested are 6:30pm to 10pm. Maximum capacity requested is 700 people including delegates, event & security staff. All attendees will be 19 years or older. A security plan approved by the LCLB and Whistler RCMP will be implemented. There will be adequate toilet facilities and a complete a site clean-up after the event.

Appendix A provides a *Portobello Street Party* site plan with a maximum capacity of 700 people.

Appendix B includes an approval letter and authorization report from the LCLB.

Similar *Portobello Street Party* themed events, with max capacity under 500 people, have been successfully held on numerous occasions. Whistler Blackcomb (the property owners), Wizard Walk merchants, LCLB, Fire Rescue, RCMP and municipal staff have not experienced any issues. The

event setup for 700 people is identical to that with a maximum capacity of 500 people except with some additional stools placed around the existing high top tables.

APPENDIX C provides a copy of the approval letter from the property owners, Whistler Blackcomb.

WHISTLER 2020 ANALYSIS

W2020 Strategy	TOWARD Descriptions of success that resolution moves us toward	Comments
Economic	Whistler holds competitive advantage in the destination resort marketplace as a result of its vibrancy and unique character, products and services	The *Portobello Street Party* is an authentic high-quality Whistler experience event that helps support conference and group business in the resort.
Economic	Whistler proactively seizes economic opportunities that are compatible with tourism, and effectively adapts to changing external conditions	As above.
Visitor Experience	Visitors feel genuinely welcome; Visitors perceive Whistler products, services and activities to be excellent value	As above.
Visitor Experience	The resort community's authentic sense of place and engaging, innovative and renewed offerings attract visitors time and time again	As above.

OTHER POLICY CONSIDERATIONS

Council Policy G-17 Municipal Liquor Licensing Policy requires approval from Council for any Special Occasion Licensed or Catering License event of more than 500 people. The maximum occupant load for the area to be licensed is approved by Whistler Fire Rescue Service in conformance with the Council Policy G-17 and the BC Fire Code.

BUDGET CONSIDERATIONS

None

COMMUNITY ENGAGEMENT AND CONSULTATION

The property owners, Whistler Blackcomb, are in support of the event and have approved use of the land for the purposes of the event.

CANTRAV has notified local merchants via a "Merchant Support Letter". Notification signage will be installed that will direct the general public around the event site and along store-front arcades. All stores bordering the site close at 6:00 pm and the event starts at 7:00 pm. During set up, event and security staff will inform the public that the businesses are still open. No business will have to close early in result of this event.

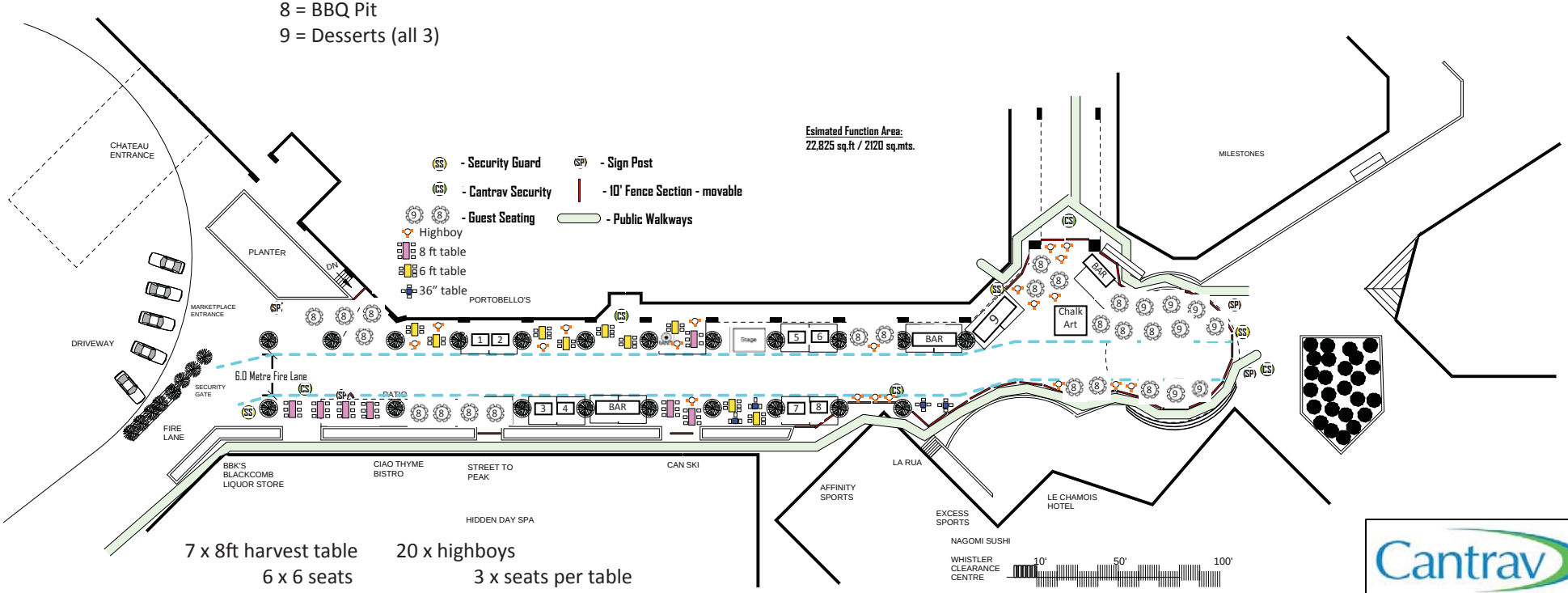
There is a Farmer's Market on Wednesday, August 5, therefore, CANTRAV contacted and received support from the Farmer's Market organizers. Timing and location of the *Portobello Street Party* will not conflict with the Farmer's Market.

SUMMARY

The *Portobello Street Party* is a r*ustic elegance* themed welcome event for a corporate group on Wednesday, August 5, 2015, 6:30pm-10pm in the Wizard Walk stroll. The requested maximum capacity is 700 people for the licensed area including delegates, event & security staff. RMOW staff support the Catering License request over 500 people subject to approval by LCLB, Fire rescue, RCMP and Council.

Respectfully submitted, Bob Andrea
MANAGER, VILLAGE ANIMATION AND EVENTS
for
Jan Jansen
GENERAL MANAGER OF RESORT EXPERIENCE

1 = Salad Market
2 = Healthy Station TBD
3 = The Fry Basket
4 = Batter Up
5 = Driftwood Skewers
6 = Burger Shack
7 = Mac & Cheese
8 = BBQ Pit
9 = Desserts (all 3)



7 x 8ft harvest table	20 x highboys
6 x 6 seats	3 x seats per table
1 x 5 seats	26 x 60" tables
9 x 6ft harvest table	7 x 9 seats
5 x 5 seats	19 x 8 seats
4 x 4 seats	60 x brown chivari barstools
4 x 36" harvest table	30 x natural barstools
2 x 4 seats	45 x vineyard barstools
2 x 3 seats	52 x galvanized barstools
	215 x natural wood garden chairs
	= 402 (57% seating for 700)

Cantrav

Production Title
22 West 2nd Avenue
Vancouver, BC
V5Y 1B3

Drawing Title
ADP Inside Sales Street Party
700 pax

Designer: -
Director:
Drawn By:
Scale: 1:500
Venue: Portobello Blvd
Drawing No.: 1 of 1
Date:
CAD File Name: Street Party

Liqour Control and Licensing Branch

Mailing Address:
PO Box 9292 Stn Prov Govt
Victoria BC V8W 9J8

Fourth Floor
3350 Douglas Street
Victoria BC

Telephone: (250) 952-5787
Fax: (250) 952-7066
http://www.pssg.gov.bc.ca/lclb

APPENDIX B

Dear licensee,

Thank you for notifying LCLB of your upcoming licensed catered event. Based on the event information provided, your catered event has been **approved**.

Please review the attached Catering Authorization report and submit a copy to the local police where the event is being held.

Any additional changes to your event must be reported to the liquor inspector.

For additional information please see the Terms and Conditions guide at http://www.pssg.gov.bc.ca/lclb/resources or contact your liquor inspector.

Regards,

Liquor Control and Licensing Branch

Liquor Control and Licensing Branch
Liquor Control and Licensing Act

2015-01093

CATERING AUTHORIZATION

Licence Number
132427
Expiry Date
September 30, 2015

Licensee Information

Licensee: Canadian Resort Hotels Limited Partnership
Phone: 604 902-2769 **Fax:** 604 938-2070 **Email:** Christine.McCann@fairmont.com

Event Contact Information

Contact Name: Christine McCann **Phone:** 604 938-2080

Event Information

Host Name: ADP
Event Start Date: 2015-08-05 **Event End Date:** 2015-08-05

Day 1: Event Hours: 6:30 PM **to** 10:00 PM **Liquor Hours:** 6:30 PM **to** 10:00 PM

Event Type: Corporate
Event Description: Rustic Elegance themed welcome event for a corporate group. Delegates are staying at The Fairmont Chateau Whistler. Full food & beverage service stations will be set throughout
Food Service Type: Buffet
Proposed Entertainment: Live Music
Number in Attendance: 700
Event is Being Held: ☐ Indoors ☒ Outdoors ☐ Both **Minors in Attendance:** ☐ Yes ☒ No
Event Location: The event will be hosted on the Wizard Walk, running from the circle area to in front of Portobello. Full fencing & security provided by Cantrav Services.
4599 chateau blvd
WHISTLER, BC V0N 1B4

TERMS AND CONDITIONS

- The terms and conditions to which this Catering Authorization is subject include the terms and conditions contained in the publication `A Guide for Liquor Licensees in British Columbia? as that publication is amended from time to time.

June 11, 2015
Issue Date **General Manager**

Liquor Inspector Contact Information

Name: Holly Glenn
Phone: 604 894-5623 **Email:** Holly.Glenn@gov.bc.ca

March 29, 2015

To Whom It May Concern,

RE: Special Occasion License – August 5th, 2015

We refer to the application of ADP ~Cantrav for a Special Occasion License from the British Columbia Liquor Control and Licensing Branch for an event to be held on Whistler Blackcomb premises on August 5th, 2015. This letter confirms that ADP~Cantrav is authorized to host a street party event on August 5th, 2015 between 6:00pm – 10:00pm at the base of Blackcomb Mountain in front of the Fairmont Chateau Whistler Hotel.

Sincerely,

Whistler Blackcomb

Whistler Mountain Resort Limited Partnership
Blackcomb Skiing Enterprises Limited Partnership
4545 Blackcomb Way, Whistler, BC, Canada, V0N 1B4
Phone 604.932.3141 Fax 604.938.7527
whistlerblackcomb.com

WHISTLER BLACKCOMB

WHISTLER

REPORT | ADMINISTRATIVE REPORT TO COUNCIL

PRESENTED:	July 7, 2015	**REPORT:**	15-089
FROM:	Resort Experience	**FILE:**	DVP 1105
SUBJECT:	DVP 1105 – 101 4369 MAIN STREET – PIZZERIA ANTICO SIGN VARIANCE		

COMMENT/RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Resort Experience be endorsed.

RECOMMENDATION

That Council approve the issuance of Development Variance Permit DVP 1105 for a proposed sign located at 101-4369 Main Street to:

1. Vary the fascia sign design as follows:
   a) Vary the lettering height from 300 mm to 503 mm

as shown on the sign design plan dated received May 22, 2015 prepared by Signage Centre and attached as Appendix B to Administrative Report No. 15-089; and further,

That Council direct staff to advise the applicant that prior to issuance of DVP 1105, that the rear-lighting method for the proposed sign be consistent with the Sign Bylaw, to the satisfaction of the General Manager of Resort Experience.

REFERENCES

Location:	101-4369 Main Street
Legal:	Plan LMS 2818, Lot 88, District Lot 5275, New Westminster District Group 1, & DL 7310, Together With an interest in the common property in proportion to the unit entitlement of the strata lot as shown on form 1 or V, as appropriate.
Owner:	647218 BC LTD
Zoning:	LA2 (Lodge Accommodation Two)
Appendices:	"A" Location Map
	"B" Sign Design Plan
	"C" Letter from member of the public

PURPOSE OF REPORT

This report seeks Council's consideration for a variance to "Sign Bylaw No. 558, 1987" to accommodate an increased lettering height on a new fascia sign at 101-4369 Main Street.

Section 922 of the *Local Government Act* allows Council to vary regulations contained in a sign bylaw by way of a development variance permit.

DISCUSSION

The owner of Pizzeria Antico is proposing a sign requiring a variance to the Municipal Sign Bylaw that will be erected at their address of 101-4369 Main Street in Whistler Village. Pizzeria Antico occupies a corner unit, facing the intersection of Main Street and Northlands Boulevard in the building referred to as the Alpenglow. A location map is attached as Appendix A.

The proposed sign is a fascia sign type identified as “west elevation wall sign” on the Alpenglow’s comprehensive sign plan. The sign plan describes a sign in this location as having individual aluminum letters 300 mm (12 inches) in height with front-lighting mounted above the letters.

A sign was initially erected in this location without a valid sign permit. The municipality enforced the Sign Bylaw as the sign was erected without a valid permit, and the sign did not meet the maximum sign area, maximum letter height and rear-lighting methods permitted by the Sign Bylaw, and the owners subsequently removed the sign. The owner was advised to submit a sign permit application for a sign that complied with the Sign Bylaw or a development variance application.

Following further discussion with staff, the owners submitted a development variance application for a sign that would meet the area requirements for a fascia sign type, but would exceed the lettering height maximum and use an unconventional lighting method. The originally requested variances are described below:

Variance Request	Sign Bylaw No. 558, 1987 Regulation
1. Vary the fascia sign design as follows: a) Vary the lettering height from 300 mm to 503 mm. b) Vary the rear lighting method of the proposed sign from individually incised plastic or glass letters or symbols mounted in a solid opaque sign face to individual LED low voltage light bulbs	Section 4.9 – Lettering 4.9.1 Maximum lettering size on any sign is 300 mm. Section 4.5 – Lighting 4.5.2 Limited use of rear-lighting is permitted, provided it is restricted to the name of the building or principal business only and further restricted to: (a) Individually incised plastic or glass letters or symbols mounted in a solid opaque sign face; (b) Individual halo-lit lettering or symbols mounted on a solid opaque background; (c) Awning signs where only the letters or symbols are rear-lit, the remainder of the awning being a solid opaque fabric.

Upon further review of the proposal, staff informed the applicant that a variance to the permitted rear-lighting methods to permit open channel lighting method could not be supported by staff due to concerns of setting a precedent, maintenance issues respecting timely replacement of individual burned out bulbs, monitoring the illumination levels of the individual bulbs, and ongoing enforcement challenges.

The owner has agreed to use a rear-lighting method that is approvable through the Sign Bylaw. A rear-lit sign is appropriate as this business is the building’s primary tenant (occupies the most floor area at this building) and due to the low light condition at the rear of the building. The requested variance for lettering height is identified on the sign design plan attached as Appendix B.

WHISTLER 2020 ANALYSIS

W2020 Strategy	TOWARD Descriptions of success that resolution moves us toward	Comments
Built Environment	The built environment is attractive and vibrant, reflecting the resort community's character, protecting viewscapes and evoking a dynamic sense of place.	The Alpenglow comprehensive sign plan contemplates a sign in this location with 300 mm letter height. The proposed sign is well coordinated with both the architectural elements on the façade and other signs on the façade. There is also ample space on the façade to incorporate the increased letter height and the sign does not exceed the maximum sign area permitted by the Sign Bylaw.
	To maintain vibrancy, Whistler Village is the core of the resort community.	Supports the vibrancy of a local business in a peripheral Village location.

W2020 Strategy	AWAY FROM Descriptions of success that resolution moves away from	Mitigation Strategies and Comments
None.		

OTHER POLICY CONSIDERATIONS

DVP Criteria

Staff have established criteria for consideration of development variance permits. The proposed letter height variance is considered to be consistent with these criteria as described in the table below.

Potential Positive Impacts	Comment
Complements a particular streetscape or neighbourhood.	The proposed sign is well coordinated with both the architectural elements on the façade and other signs on the façade. There is also ample space on the façade to incorporate the increased letter height and the sign does not exceed the maximum 2.0 square metre sign area permitted by the Sign Bylaw for a fascia sign. Further, the sign is located at the façade of the building facing Northlands Boulevard rather than the pedestrian Village Stroll.
Works with the topography on the site, reducing the need for major site preparation or earthwork.	Not applicable.
Maintains or enhances desirable site features, such as natural vegetation, trees and rock outcrops.	Not applicable.
Results in superior siting with respect to light access resulting in decreased energy requirements.	Not applicable.
Results in superior siting with respect to privacy.	Not applicable.
Enhances views from neighbouring buildings and sites.	Not applicable.

Potential Negative Impacts	Comments
Is inconsistent with neighbourhood character.	Cascade Lodge, also facing Northlands Boulevard, has signs with letter height exceeding 300 mm that is well coordinated with that building's façade.
Increases the appearance of building bulk from the street or surrounding neighbourhood.	Not applicable.
Requires extensive site preparation.	Not applicable.
Substantially affects the use and enjoyment of adjacent lands (e.g. reduces light access, privacy, and views).	Not applicable.
Requires a frontage variance to permit greater gross floor area, with the exception of a parcel fronting a cul-de-sac.	Not applicable.
Requires a height variance to facilitate gross floor area exclusion.	Not applicable.
Results in unacceptable impacts on services (e.g. roads, utilities, snow clearing operations).	Not applicable.

BUDGET CONSIDERATIONS

There are no significant budget implications with this proposal. Development Variance Permit application fees provide for recovery of costs associated with processing this application.

COMMUNITY ENGAGEMENT AND CONSULTATION

A sign describing DVP 1105 is posted on the property.

Notices were sent to surrounding property owners in June 2015. At the time of writing this report, one letter has been received from a member of the public, who is opposed to the larger sign with built in lighting. This letter is attached as Appendix C.

SUMMARY

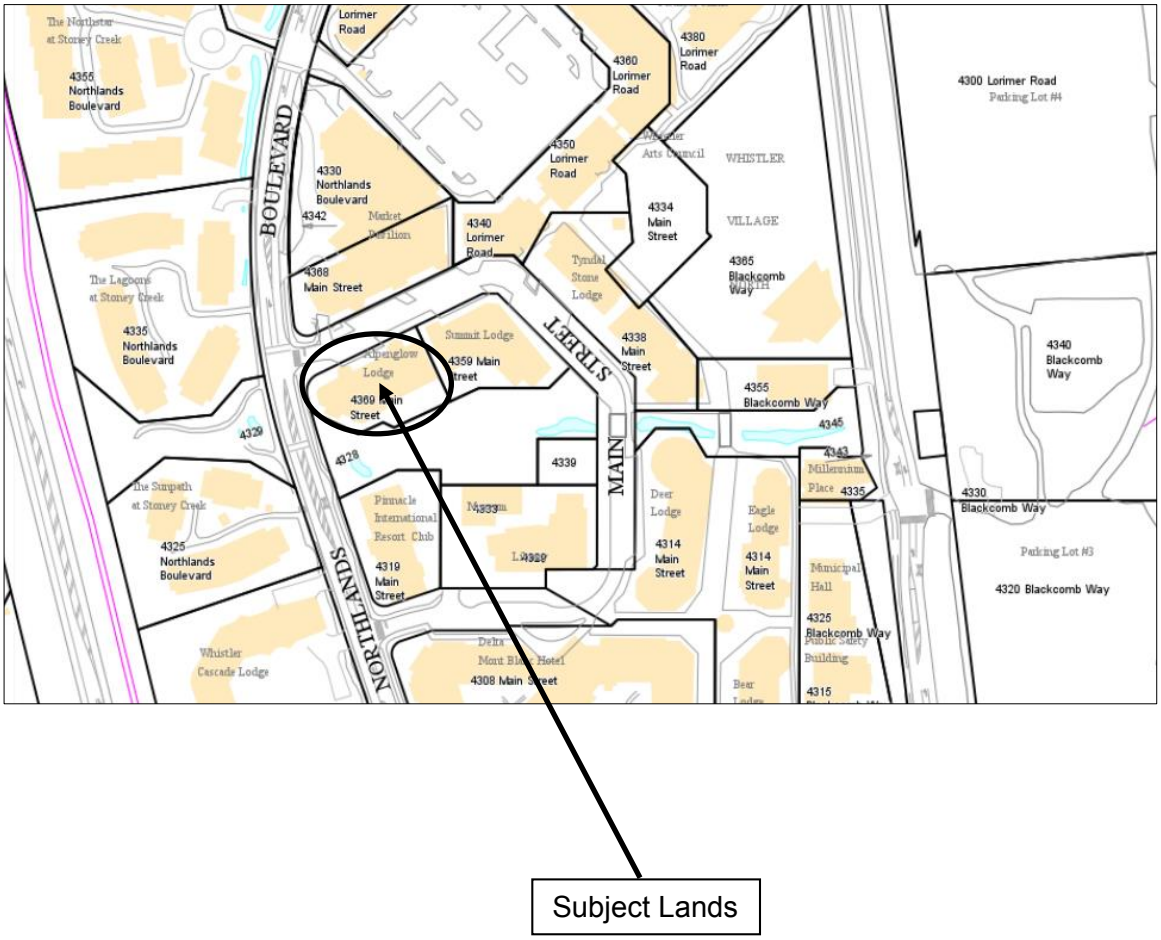
Development Variance Permit DVP 1105 proposes a variance to "Sign Bylaw No. 558, 1987" for a variance to the lettering height of a proposed fascia sign at 101-4369 Main Street for Council's consideration. The proposed sign is considered to be well coordinated with the architectural elements on the building façade, there is ample space on the façade to incorporate the increased letter height and the sign does not exceed the maximum 2.0 square metre sign area permitted by the Sign Bylaw for a fascia sign. Further, the sign is located at the façade of the building facing a vehicular street, not the pedestrian Village Stroll and there is precedent of signage with larger letters on the same street. Staff recommend approving the proposal with the conditions outlined in the above recommendations.

Respectfully submitted,

Brook McCrady
Planning Analyst
for
Jan Jansen
General Manager of Resort Experience

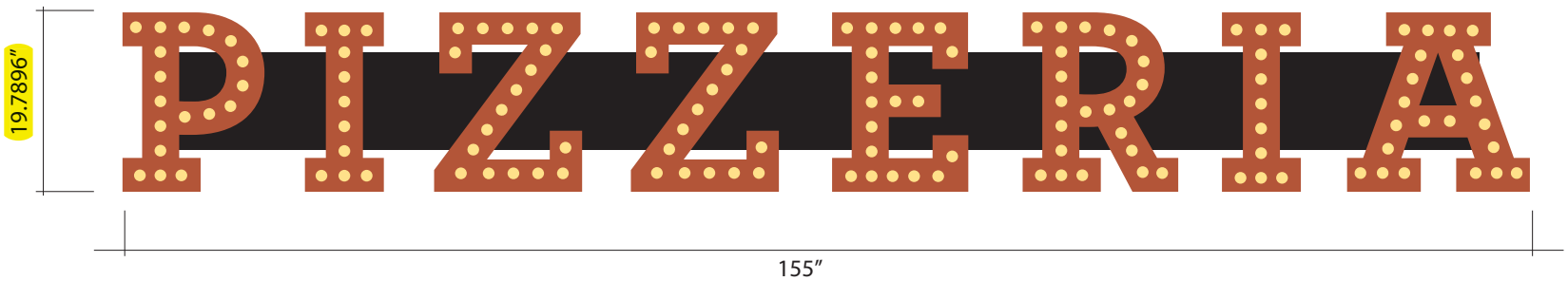
APPENDIX A

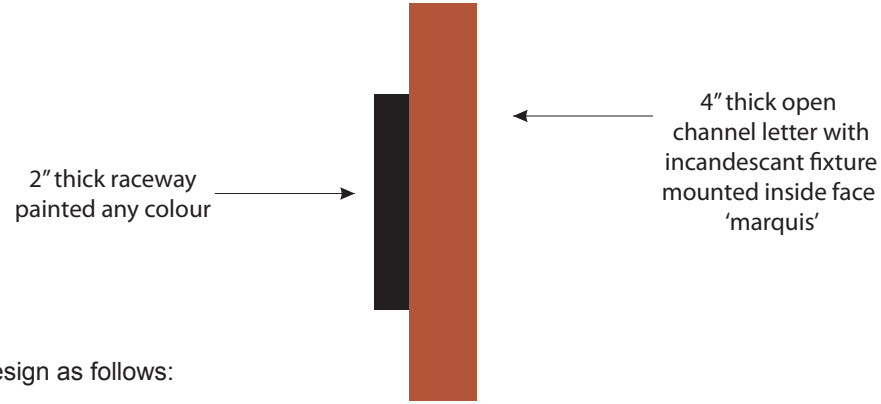
LOCATION MAP



APPENDIX B

Recieved RMOW May 22, 2015





Variance Request

1. Vary the fascia sign design as follows:

Vary the lettering height from 300 mm to 503 mm (19.7").

Sign 1

Routed and illuminated fascia display

Graphics / Substrate

signagecentre.com	Client	Pizzeria Antica	Job No.		Date		☐ CONCEPTUAL NOT FOR CONSTRUCTION	☑ SHOP READY CONSTRUCTION CAPABLE
1112 Franklin Street, Vancouver, BC	Address		Designer		Rev.			
Ph. 778.999.8468			Sales	Kristyn Christiansen			Scale: ¼"=1'-0"	Page: 1

This drawing is the property of SignageCentre Ltd.

Brook McCrady

To: Nancy Johnston
Subject: RE: pizzeria

From: Paul Fournier [mailto:mixmasterfab@hotmail.com]
Sent: Saturday, June 20, 2015 12:27 PM
To: Nancy Johnston
Subject: Re: pizzeria

Hi Nancy ,

Please let it be known that I oppose as well as I am very concerned regarding the variance application .
It is a bit of a slippery slope and may well open a can of worms for Village signage .
Whistler has long prided itself as a pristine mountain resort environment and larger signs with built in lighting are obtrusive and inconsistent with design guidelines and bylaws .
Thank you for your time and effort , I really appreciate it .

Regards

Paul Fournier
604 932 6300

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WHISTLER

REPORT | ADMINISTRATIVE REPORT TO COUNCIL

PRESENTED:	July 7, 2015	**REPORT:**	15-090
FROM:	Resort Planning	**FILE:**	DVP 1100
SUBJECT:	DVP 1100 – 8328, 8332, 8340 MOUNTAIN VIEW DRIVE – PARCEL FRONTAGE AND RETAINING WALL VARIANCES		

COMMENT/RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Resort Experience be endorsed.

RECOMMENDATION

That Council approve the issuance of Development Variance Permit DVP 1100 for the proposed development located at 8328, 8332 and 8340 Mountain View Drive to:

1. Vary the parcel frontages as follows to facilitate proposed subdivision and to permit a detached dwelling greater than 325 square metres in gross floor area :
   a) At 8340 Mountain View Drive, vary the minimum frontage from 24 metres to 9.14 metres;
   b) At 8328 Mountain View Drive, vary the minimum frontage from 24 metres to 9.12 metres;
2. Vary the setbacks and height as follows for a proposed retaining wall:
   a) At 8328 Mountain View Drive, vary the north side setback form 1.0 metre to 0.0 metres from the property line, and vary the height from 0.6 metres to 7.6 metres;
   b) At 8332 Mountain View Drive, vary the south side setback from 1.0 metre to 0.0 metres from the property line and vary the height from 0.6 metres to 7.6 metres;

as generally shown on the Proposed Subdivision Plan dated October 25, 2014, prepared by Whistler Alpine Development and on the Roadworks Drawings R1 and R2, dated September 24, 2014, prepared by Kerr Wood Leidal Consulting Engineers, attached as Appendices C and D to Administrative Report No. 15-089;

That Council not vary the south side setback from 1.0 metre to 0.5 metres from the property line and not vary the height from 0.6 metres to 7.6 metres for a proposed retaining wall at 8328 Mountain View Drive; and further

That Council direct staff to advise the applicant that prior to issuance of DVP 1100, the following matters must be completed to the satisfaction of the General Manager of Resort Experience:

a) Adoption of Land Use Contract Discharge and Zoning Amendment Bylaw (RS1 Zone - 8340 Mountain View Drive) No. 2058, 2014;
b) Revised Roadworks drawings, stamped by a professional engineer, to reflect the approved variances;
c) Registration of a covenant on 8332 Mountain View Drive restricting gross floor area of a detached dwelling to 325 square metres;
d) Receipt of a tree preservation and landscape remediation plan generally in conformance with the planting plan attached as Appendix E to Report No. 15-089;
e) Receipt of a landscape estimate for the proposed landscaping; and,

f) Receipt of a letter of credit or other approved security in the amount of 135% of the landscape estimate, such security to be administered in accordance with Council Policy G-9 Landscape Security for Development Permit.

REFERENCES

Location:	8328, 8332 and 8340 Mountain View Drive
Legal:	8328 Mountain View Drive - Lot Q, Block 29, District Lot 7301, Plan 17958
	8332 Mountain View Drive - Lot P, Block 29, District Lot 7301, Plan 17958
	8340 Mountain View Drive - Lot 29, except part in Plan 17958, District Lot 7301, Plan 15206
Owner:	0954216 BC Limited
Zoning:	8328 and 8332 Mountain View Drive - RSI (Single Family Residential One) Zone
	8340 Mountain View Drive – currently LUC, proposed RS1 Zone pending adoption of Land Use Contract Discharge and Zoning Amendment Bylaw (RS1 Zone - 8340 Mountain View Drive) No. 2058, 2014
Appendices:	"A" Location Map
	"B" Letter from applicant
	"C" Proposed Subdivision Plan
	"D" Roadworks Drawings
	"E" Planting Plan
	"F" Letters from neighbours

PURPOSE OF REPORT

This report seeks Council's consideration for variances to "Zoning and Parking Bylaw 303, 1983" for parcel frontage variances at 8328 and 8340 Mountain View Drive and retaining wall height and setback variances at 8328 and 8332 Mountain View Drive.

Section 922 of the *Local Government Act* allows Council to vary regulations contained in a zoning bylaw by way of a development variance permit.

DISCUSSION

The lands that are the subject of the variances are located at 8328, 8332 and 8340 Mountain View Drive at the top of Alpine Meadows (see Appendix A). All three lots are currently undeveloped.

To address driveway access issues to 8340 Mountain View Drive, the applicant has prepared an integrated development proposal for 8328, 8332 and 8340 Mountain View Drive that addresses access and development through a proposed new three lot configuration and shared access driveway (road)[1], subject to rezoning 8340 Mountain View Drive to the RS1 (Single Family Residential One) Zone, consistent with the zoning of adjacent parcels in the surrounding neighbourhood.

The proposed rezoning, and conditions of adoption of related zoning amendment bylaw cited as Land Use Contract Discharge and Zoning Amendment Bylaw (RS1 Zone - 8340 Mountain View

[1] A driveway accessing more than 1 detached dwelling must be constructed to RMOW Strata Road standard.

Drive) No. 2058, 2014 is described in Administrative Report to Council No. 15-071, dated May 26, 2015. One of the conditions of adoption of Bylaw No. 2058 is that the frontage variances for the proposed subdivision and the retaining wall variances for the proposed road be approved for issuance by Council.

The proposed new three lot configuration (subdivision) will require frontage variances to permit two proposed panhandle parcels with frontages of 9.12 metres and 9.14 metres to build a detached dwelling greater than 325 square metres in gross floor area.

The proposed road may require a retaining wall height and setback variance for a proposed rockstack retaining wall up to 7.6 metres (25 feet) in height located closer to side property lines than is permitted by the Zoning Bylaw. Although the applicant does not know for certain if a retaining wall will be necessary at this time, the applicant is requesting the necessary variances in case the subsurface conditions during excavation warrant the need for a retaining wall (refer to applicant letter attached as Appendix B).

The requested variances are described in the table below and illustrated on the Proposed Subdivision Plan and on the Roadworks Drawings attached as Appendices C and D.

<table>
<tr><th>Variance Request</th><th>Zoning and Parking Bylaw No. 303, 1983 Regulation</th></tr>
<tr><td>1. Vary the parcel frontages as follows to facilitate proposed subdivision and to permit a detached dwelling greater than 325 square metres in gross floor area:
a) At 8340 Mountain View Drive, vary the minimum frontage from 24 metres to 9.14 metres;
b) At 8328 Mountain View Drive, vary the minimum frontage from 24 metres to 9.12 metres;</td><td>Section 11.1.4.1 – Site Dimensions
The minimum required parcel area, usable site area and frontage are as follows:
<table>
<tr><th>GROSS FLOOR AREA</th><th>MINIMUM PARCEL AREA</th><th>MINIMUM USEABLE SITE AREA</th><th>MINIMUM FRONTAGE</th></tr>
<tr><td>325 square metres or less</td><td>695 square metres</td><td>465 square metres</td><td>18 metres</td></tr>
<tr><td>greater than 325 square metres</td><td>928.6 square metres</td><td>575 square metres</td><td>24 metres</td></tr>
</table></td></tr>
<tr><td>2. Vary the setbacks as follows for a proposed retaining wall:
a) At 8328 Mountain View Drive, vary the south side setback from 1.0 metre to 0.5 metres from the property line, vary the north side setback from 1.0 metre to 0.0 metres from the property line, and vary the height from 0.6 metres to 7.6 metres;
b) At 8332 Mountain View Drive, vary the south side setback from 1.0 metre to 0.0 metres from the property line and vary the height from 0.6 metres to 7.6 metres.</td><td>Section 5.7.1 – Projections into Required Setback Areas
The following features are permitted in setback areas:
(d) landscape features including planters, stairs, walkways, decks, retaining walls and decorative walls, provided such features are not greater than 0.6 metres in height above any point of the adjacent grade and are set back at least one metre from any side parcel line and at least two metres from the front and rear parcel lines. (Bylaw No. 916)</td></tr>
</table>

WHISTLER 2020 ANALYSIS

W2020 Strategy	TOWARD Descriptions of success that resolution moves us toward	Comments
Built Environment	The built environment is attractive and vibrant, reflecting the resort community's character, protecting viewscapes and evoking a dynamic sense of place.	The proposed approach proposes one shared driveway access to the 3 parcels instead of three. The applicant has demonstrated that the proposed shared driveway access can be achieved at a lessor slope gradients, with lessor cut impact and more snow storage capabilities than a driveway up the panhandle of 8340 Mountain View Drive.
	Limits to growth are understood and respected.	The proposed new 3 lot configuration will not increase the total number of parcels from what currently exists and will not increase bed units.

W2020 Strategy	AWAY FROM Descriptions of success that resolution moves away from	Mitigation Strategies and Comments
Built Environment	The built environment is attractive and vibrant, reflecting the resort community's character, protecting viewscapes and evoking a dynamic sense of place.	After further consideration and neighbour input staff feels that the driveway alignment should respect retaining wall height and setback regulationss in the south side setback of 8328 Mountain View Drive. A realignment of access driveway A to not require variances in that setback, while maintaining turning radius' and slope gradient, would reduce the total driveway length from 118 meters to approximately 113 metres, resulting in an additional cut of approximately 0.5 metres at the top of the driveway (STA 0+100).
	Limits to growth are understood and respected.	The proposed new 3 lot configuration and requested variances will enable 3 detached dwellings to be built up to 465 sq. m. in gross floor area instead of the 325 sq. m. in gross floor area typical of the immediate neighbourhood.

OTHER POLICY CONSIDERATIONS

DVP Criteria

Staff have established criteria for consideration of development variance permits. Not all of the proposed variances are considered to be consistent with the criteria as described in the table below. Staff recommend that the proposed driveway alignment meet retaining wall height and setback regulations in the south side setback of 8328 Mountain View Drive and that a covenant be registered on 8332 Mountain View Drive restricting gross floor area to 325 square metres.

Potential Positive Impacts	Comments
Complements a particular streetscape or neighbourhood.	A shared driveway accessing 3 lots will reduce land disturbance impacts on the steetscape.
Works with the topography on the site, reducing the need for major site preparation or earthwork.	The proposed shared driveway access will require major earthwork, however, the applicant has demonstrated that a driveway up the panhandle of 8340 Mountain View Drive would also require retaining wall height & setback variances, and that the proposed shared driveway access can be achieved at a lessor slope gradient, with lessor cut impact and more snow storage capabilities than a driveway up the panhandle of 8340 Mountain View Drive.
Maintains or enhances desirable site features, such as natural vegetation, trees and rock outcrops.	The proposed building envelopes for the 3 lots are compliant with the Riparian Areas Regulation & Geotechnical report recommendations. A landscape remediation plan and landscape security is recommended to be required prior to issuance of the development variance permit. There are currently no tree preservation requirements on any of the parcels. Tree preservation areas will be secured through the related rezoning process (see Legal Encumbrances section of this report).
Results in superior siting with respect to light access resulting in decreased energy requirements.	Not applicable.
Results in superior siting with respect to privacy.	Not applicable.
Enhances views from neighbouring buildings and sites.	A landscape remediation plan and landscape security will be required prior to issuance of the development variance permit.
Potential Negative Impacts	**Comments**
Is inconsistent with neighbourhood character.	Letters from neighbours identify many disadvantages to the immediately impacted neighbour by the proposed retaining wall height & setback variances in the south side setback of 8328 Mountain View Drive including safety, increased vehicle noise and fumes and decreased privacy resulting in penalizing an existing property to the benefit of another. Also identified is the proposed property line adjustment to enable a house that is larger than the other houses on the street, altering neighborhood character and increasing value to the applicant.
Increases the appearance of building bulk from the street or surrounding neighbourhood.	The proposed 3 lot configuration increases the frontage of 8332 Mountain View Drive from 19.69 metres to 30.28 metres. The existing 19.69 metre frontage restricts gross floor area of a detached dwelling to 325 square metres,

	consistent with the existing streetscape, while the proposed 30.28 metre frontage enables a detached dwelling up to 465 square metres. Registration of a covenant on 8332 Mountain View Drive restricting gross floor area to 325 square metres is recommended to be required prior to issuance of the development variance permit.
Requires extensive site preparation.	After further consideration and neighbour input, staff feels that the driveway alignment should respect retaining wall height and setbacks in the south side setback of 8328 Mountain View Drive. A realignment of access driveway A to not require variances in that setback, while maintaining turning radius' and slope gradient, would reduce the total driveway length from 118 meters to approximately 113 metres, resulting in an additional cut of approximately 0.5 metres at the top of the driveway (STA 0+100).
Substantially affects the use and enjoyment of adjacent lands (e.g. reduces light access, privacy, and views).	The neighbour that would be most affected by the proposed retaining wall height & setback variances in the south side setback of 8328 Mountain View Drive has raised valid safety, increased vehicle noise and fumes, and decreased privacy concerns respecting a 7.6 metre high retaining wall within 0.5 metres of their property line, and after further consideration, staff feels that the driveway alignment should respect retaining wall height and setback regulations in the south side setback of 8328 Mountain View Drive.
Requires a frontage variance to permit greater gross floor area, with the exception of a parcel fronting a cul-de-sac.	Panhandle parcels are similar to a parcel fronting a cul-de-sac. At 6,239 sq. m. and 8,612 sq. m. parcel area, the two proposed panhandle lots far exceed the minimum 928.6 sq. m. parcel area required to build greater than 325 sq. m., have sufficient parcel width to accommodate the 6 m side setbacks required to build greater than 325 sq. m., and meet the minimum useable site area requirements to build greater than 325 sq. m.
Requires a height variance to facilitate gross floor area exclusion.	Not applicable.
Results in unacceptable impacts on services (e.g. roads, utilities, snow clearing operations).	Road grades and geometry are designed to RMOW standards for a 3 lot private road. One shared driveway off of Mountain View Road to access 3 lots instead of three driveways enables more snow storage capabilities in the Mountain View Drive road right of way for RMOW.

Zoning and Parking Bylaw 303

The requested variances to "Zoning and Parking Bylaw 303, 1983" are described in the Discussion section of this report.

The proposed new lot configurations for 8328, 8332 and 8340 Mountain View Drive meet all other regulations of "Zoning and Parking Bylaw 303, 1983" as demonstrated in the table below:

RS1 Zone	**GROSS FLOOR AREA**	**MINIMUM PARCEL AREA**	**MINIMUM USEABLE SITE AREA**	**MINIMUM FRONTAGE**
	325 square metres or less	695 square metres	465 square metres	18 metres
	greater than 325 square metres	928.6 square metres	575 square metres	24 metres
Proposed				
8328 Mountain View Drive		6,239 sq. m.	3,330 sq. m.	9.12 metres
8332 Mountain View Drive		2,162 sq. m.	1,760 sq. m.	30.28 metres
8340 Mountain View Drive		8,612 sq. m.	7,984 sq. m.	9.14 metres

Legal Encumbrances

The issuance of the proposed variances is subject to adoption of Land Use Contract Discharge and Zoning Amendment Bylaw (RS1 Zone - 8340 Mountain View Drive) No. 2058, 2014 to rezone 8340 Mountain View Drive to RS1.

A condition of adoption of Bylaw No. 2058 is to discharge the existing no further subdivision covenant registered on the titles of 8328, 8332 and 8340 Mountain View Drive subject to registration of a new covenant on the same parcels to:

a) prohibit any further subdivision beyond that contemplated by the plans attached as Appendix B to Report 15-071;

b) restrict access to said proposed subdivision to the alignment identified in Appendix C to Report 15-071 and to RMOW standards;

c) secure tree preservation areas and building envelopes consistent with the plans attached as Appendix B to Report 15-071;

d) require a final landscape plan and landscape security generally in conformance with the Planting Plan attached as Appendix B to Report 15-071;

e) require all residences on Lot 29 (proposed Lots P and 29) to be sprinklered to NFPA Standards and all development to use low or non-combustible siding and Fire-Smart principles;

f) require environmental monitoring during construction;

g) require geotechnical engineer sign-off on all final cut and fill construction; and

h) require a green building commitment consistent with Green Building Policy G-23.

BUDGET CONSIDERATIONS

There are no significant budget implications with this proposal. Development Variance Permit application fees provide for recovery of costs associated with processing this application.

COMMUNITY ENGAGEMENT AND CONSULTATION

A sign describing DVP 1100 is posted on the property.

Notices were sent to surrounding property owners on June 5, 2015. At the time of writing this report, three letters had been received from neighbours, all attached as Appendix F. Many disadvantages to the proposed retaining wall height and setback variances on the immediately impacted neighbour are identified including safety, increased vehicle noise and fumes and decreased privacy resulting

in penalizing an existing property to the benefit of another. Also identified is the proposed property line adjustment to enable a house that is larger than the other houses on the street, altering neighborhood character and increasing value to the applicant.

SUMMARY

Development Variance Permit DVP 1100 proposes variances to "Zoning and Parking Bylaw 303, 1983" for parcel frontage variances at 8328 and 8340 Mountain View Drive and retaining wall height and setback variances at 8328 and 8332 Mountain View Drive.

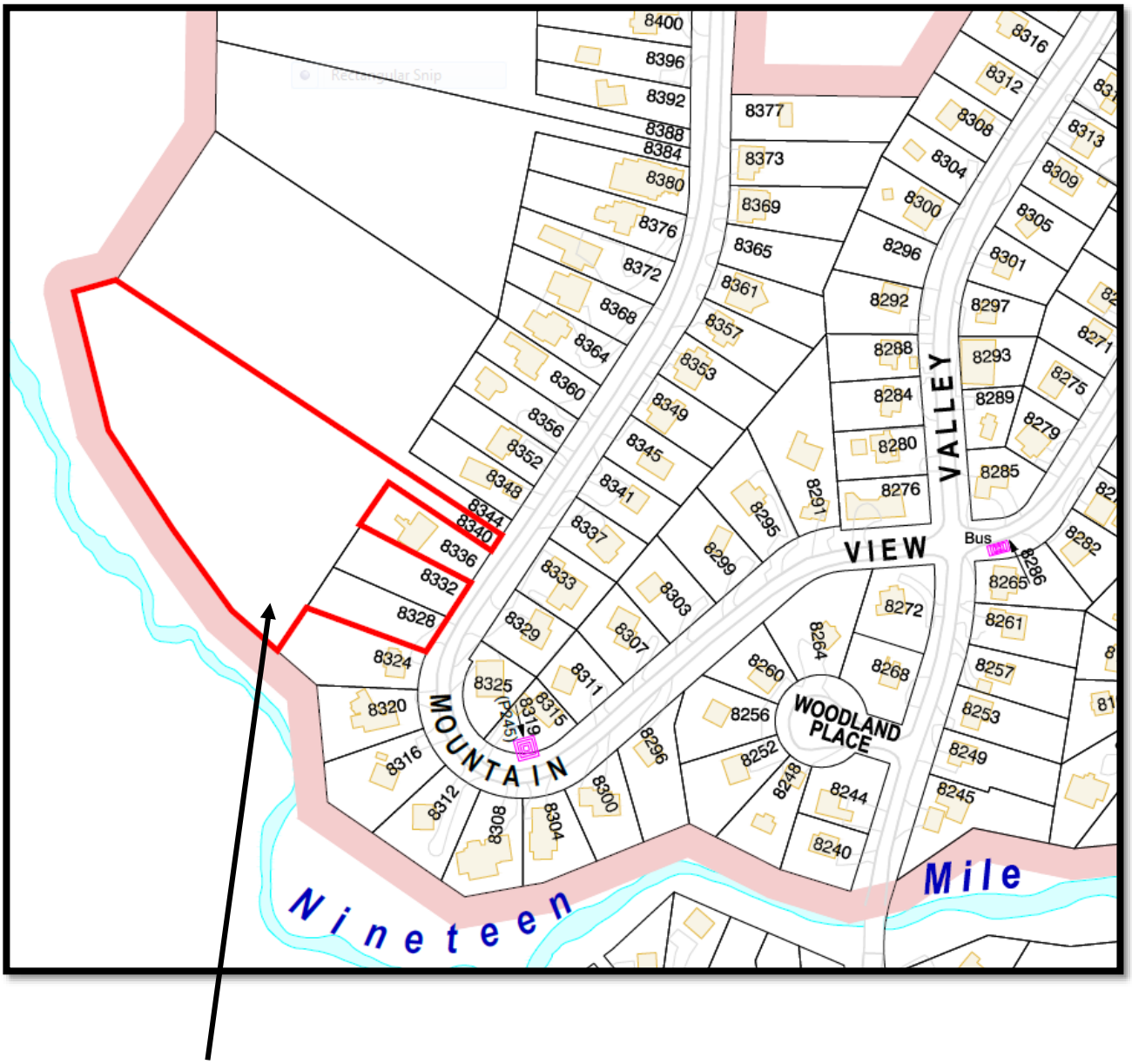
Staff recommend that not all of the requested retaining wall height and setback variances be granted.

Respectfully submitted,

Melissa Laidlaw
SENIOR PLANNER
for
Jan Jansen
GENERAL MANAGER OF RESORT EXPERIENCE

APPENDIX A

LOCATION MAP



SUBJECT PROPERTIES

WHISTLER
ALPINE
DEVELOPMENT CORP.

February 28th 2015

Att: Mayor and Council

Re: 0954216 B.C. LTD.
DEVELOPMENT VARIANCE PERMIT APPLICATION
8328 / 8332 MOUNTAIN VIEW DRIVE
WHISTLER, BC. CANADA

On behalf of 0954216BC.Ltd I would like to request that Council consider a variance request for 8328 and 8332 Mountain View Drive upon the adoption of Rezoning Application RZ 1069 and subsequent Subdivision application for 8328, 8332 and 8340 Mountain View Drive. We are requesting that council consider relaxing the conditions in the Zoning and Parking Bylaw No. 303 Section 4_4.1 and Section 5_7.1(d)

Bylaw No.303 4_4.1 it is states that "no building or structure other than a fence is permitted in any required setback are. Except as otherwise specified in this Bylaw". In the same Bylaw Section 5_7.1(d) states that "landscape features including planters, stairs, walkways, decks, retaining walls and decorative walls, provided such features are not greater than 0.6m in height above any point of the adjacent grade and are set back at least 1m from any side parcel line and are set back at least 2m from the front and rear parcel lines (Bylaw No. 916)".

To provide suitable access to all three properties we are requesting a variance to allow the construction of a private road and subsequent retaining wall or walls outside of the allowable setback areas for lot P 8328 Mountain View and Lot Q 8332 Mountain View, as will be deemed necessary upon the construction of the road when subsequent subsurface conditions will be determined.

The private road and possible retaining walls will be contained within the two properties 8328 and 8332 Mountain View Drive which are both owned by 0954216BC.Ltd. A portion of the anticipated retaining wall is adjacent to the neighbouring property to the south west, Lot O 8324 Mountain View Drive. If the subsurface conditions warrant the need for a retaining wall we would request the council grant a variance to Section 5_7.1(d) that would allow the construction of a retaining wall that is greater than 0.6m in height and potentially within the 1m of the side parcel line.

We would like to thank Mayor and Council for their consideration of our Variance Request

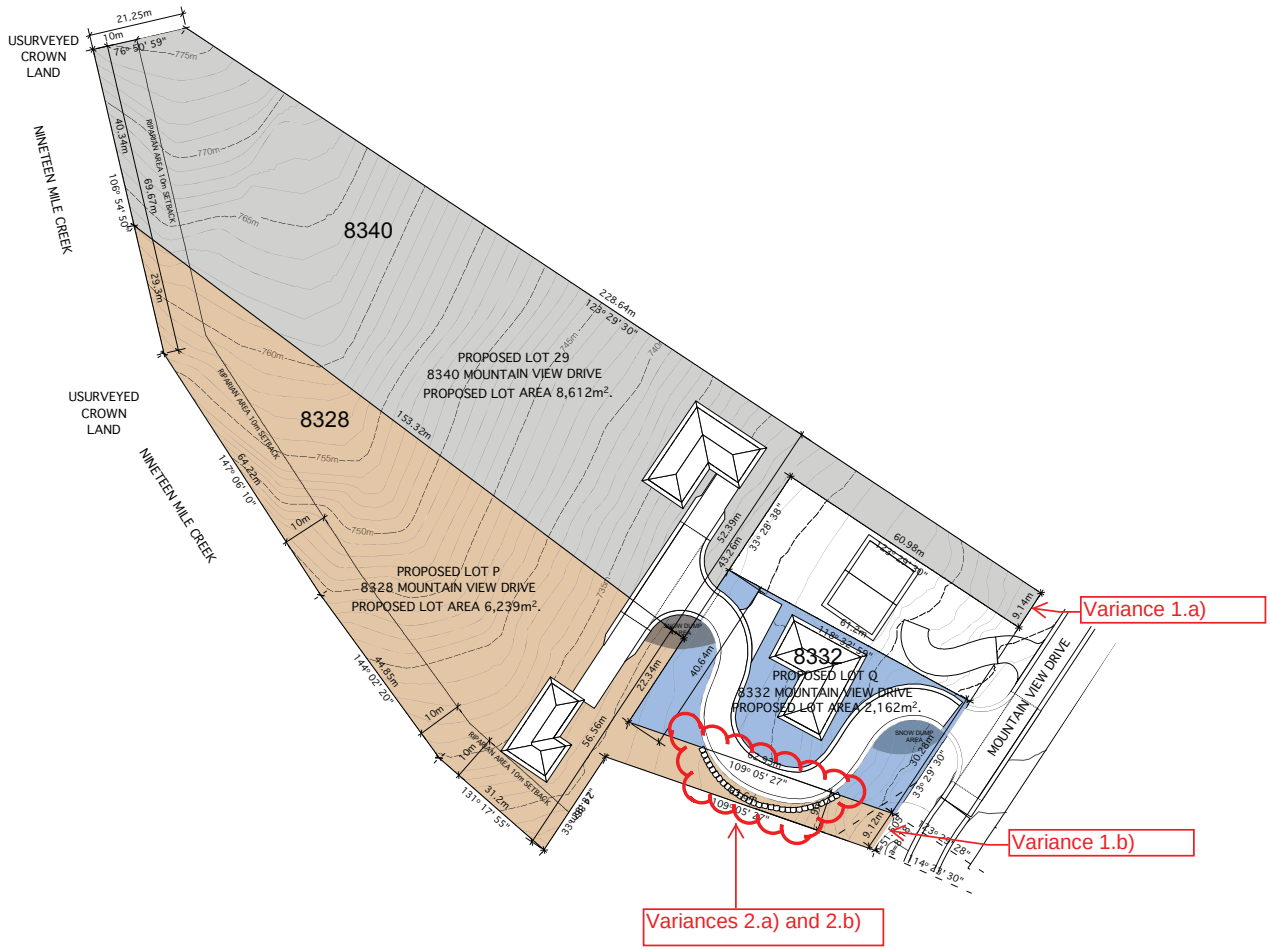
Sincerely,

Craig Ross
Whistler Alpine Development

RECEIVED
MAR 5 2015
RESORT EXPERIENCE PLANNING
RESORT MUNICIPALITY
OF WHISTLER

PROPOSED SUBDIVISION PLAN
OF LOT P AND Q D.L. 7301, PLAN 17958
AND LOT 29, EXCEPT PART IN PLAN 17958,
D.L. 7301, PLAN 15206, Gp. 1 N.W.D.

THIS PLAN LIES WITHIN THE 'SQUAMISH-LILLOOET' REGIONAL DISTRICT.
THIS PLAN LIES WITHIN THE JURISDICTION OFTHE APPROVING OFFICER OF THE RESORT MUNICIPALITY OF WHISTLER



8328 Mountain View Dr

Lot Area	0.624ha	6239m²
Minimum Lot Area		695m² or 928m²
Frontage		9.12m
Minimum Frontage		18m or 24m
Usable Site Area		3897m²
Minimum Usable Site Area		465m² or 575m²
Lot Zoning		RS1

8332 Mountain View Drive

Lot Area	0.216ha	2162m²
Minimum Lot Area		695m² or 928m²
Frontage		30.28m
Minimum Frontage		18m or 24m
Usable Site Area		1765m²
Minimum Usable Site Area		465m² or 575m²
Lot Zoning		RS1

8340 Mountain View Dr

Lot Area	0.861ha	8612m²
Minimum Lot Area		695m² or 928m²
Frontage		9.14m
Minimum Frontage		18m or 24m
Usable Site Area		7881m²
Minimum Usable Site Area		465m² or 575m²
Lot Zoning		RS1

8328 Mountain View Dr

Overall Site	100%	0.624ha
Steep Slope >40%	11.7%	0.073ha
Gentle Slope <40%	88.3%	0.551ha
Riparian Setback	25%	0.161ha
Steep Slope >40%	35%	0.057ha
Gentle Slope <40%	65%	0.104ha

8332 Mountain View Drive

Overall Site	100%	0.216ha
Steep Slope >40%	18.3%	0.040ha
Gentle Slope <40%	81.7%	0.176ha

8340 Mountain View Dr

Overall Site	100%	0.861ha
Steep Slope >40%	3%	0.026ha
Gentle Slope <40%	97%	0.834ha
Riparian Setback	5.4%	0.016ha
Steep Slope >40%	54.7%	0.025ha
Gentle Slope <40%	45.3%	0.021ha

WHISTLER ALPINE DEVELOPMENT

DESIGN BUILD HOME CONSTRUCTION RENOVATION CONSULTING
E-MAIL: INFO@CR-CONTRACTING.COM
PHONE: 604.905.6645
FAX: 604.905.6967

PROJECT: RZ 1069.

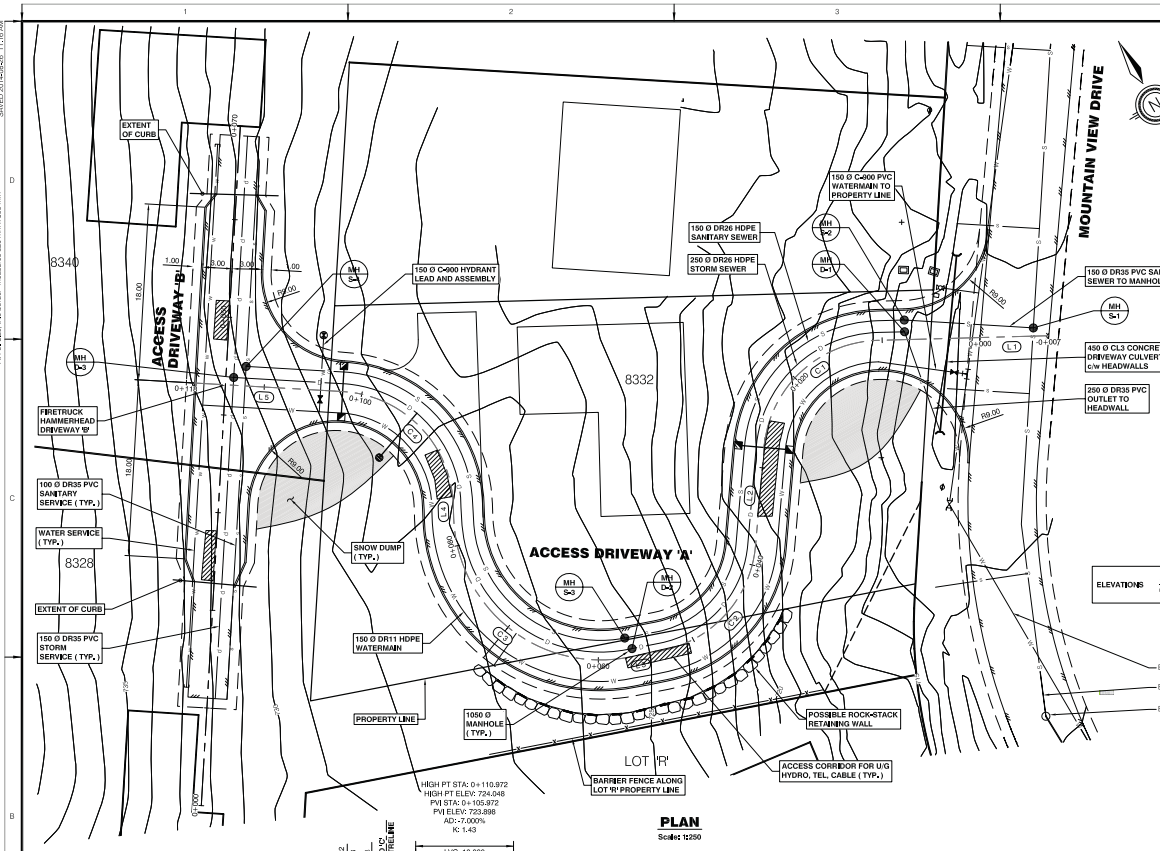
DRAWING TITLE: PROPOSED LOTS

REVISION SCHEDULE

No.	Date	Description

DESIGN
DRAWN BY: CR
SCALE: AS NOTED
DATE: 2510/2014

SHEET: PL-1



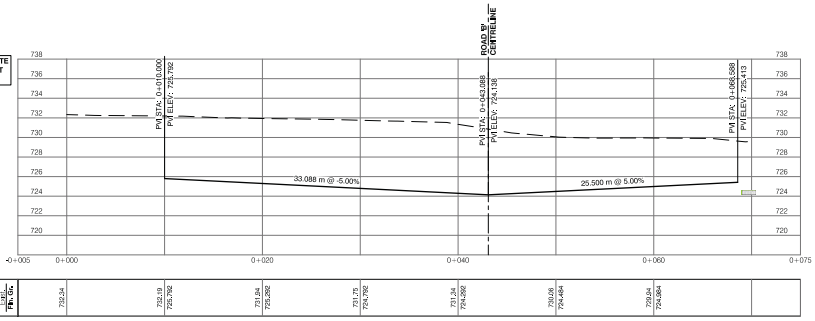
PLAN

Scale: 1:250

ALIGNMENT LINE DATA						
LINE #	START STATION	END STATION	LENGTH	AZIMUTH	START COORDINATES	END COORDINATES
L 1	-0+007.000	0+010.433	17.433 m	298° 28' 28"	N=5555430.099 E=502164.539	N=5555438.411 E=502149.214
L 2	0+027.923	0+038.013	10.090 m	214° 57' 56"	N=5555434.740 E=502133.659	N=5555426.471 E=502127.877
L 3	0+053.509	0+056.897	3.388 m	288° 57' 13"	N=5555421.999 E=502114.145	N=5555423.099 E=502110.941
L 4	0+082.843	0+084.216	1.373 m	28° 03' 34"	N=5555444.342 E=502102.576	N=5555445.554 E=502103.222
L 5	0+101.971	0+117.972	16.000 m	303° 17' 03"	N=5555461.230 E=502099.218	N=5555470.010 E=502085.843

8340 ALIGNMENT CURVE DATA				
CURVE #	RADIUS	DELTA	CURVE LENGTH	TANGENT
C 1	12.000	83°30'52"	17.490	10.712
C 2	12.000	73°59'17"	15.496	8.941
C 3	15.000	99°06'21"	25.946	17.596
C 4	12.000	84°46'31"	17.755	10.953

ACCESS DRIVEWAY 'A' CENTRELINE DATA TABLE



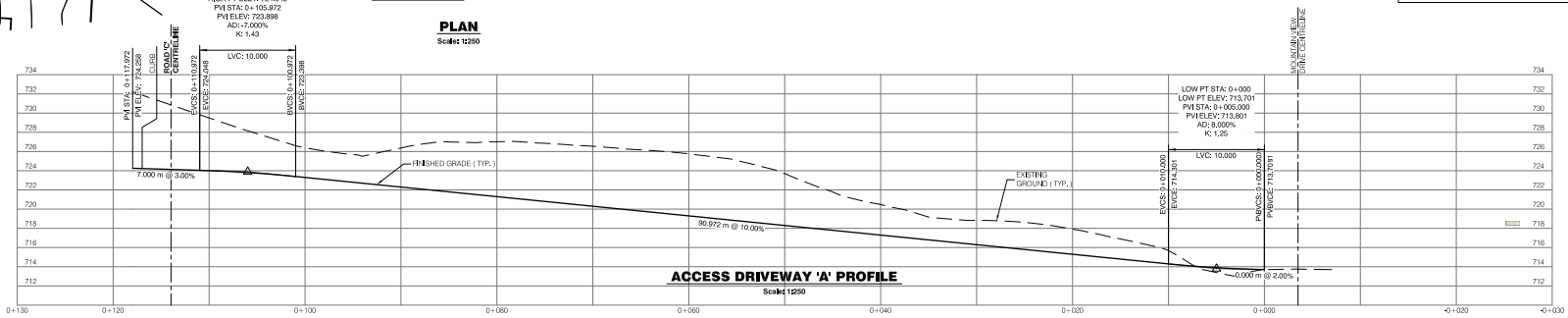
HAMMERHEAD & ACCESS DRIVEWAY 'B' PROFILE

Scale: 1:250

LEGEND

PROPOSED CURB & GUTTER

EDGE OF ASPHALT



ACCESS DRIVEWAY 'A' PROFILE

Scale: 1:250

KERR WOOD LEIDAL
consulting engineers
200 - 4185A Still Creek Drive
Burnaby, BC V5C 6G9
T (604) 294-2088 F (604) 294-2090
E mail@kwl.ca

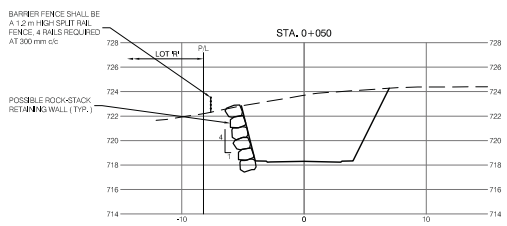
Seal:

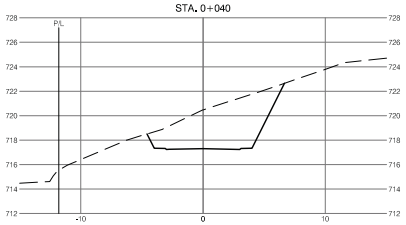
Rev	Date	Des	Dwn	Chk	Description of Revision	Rev	Date	Des	Dwn	Chk	Description of Revision
A	2104-08-26	RK	MP		PRELIMINARY FOR APPROVAL						

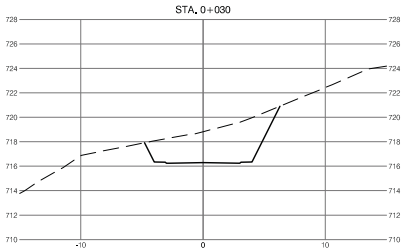
CRAIG ROSS GENERAL CONTRACTING LTD.
ALPINE WHISTLER DEVELOPMENT

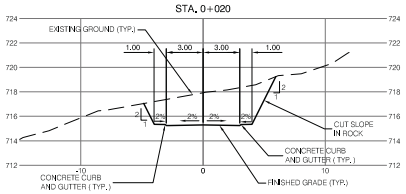
PLAN AND PROFILE

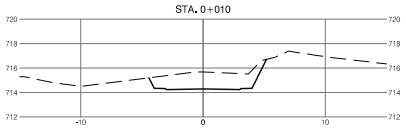
Project No. 3203.001 | Drawing No. R1 | Rev. A
Group: ROAD WORKS

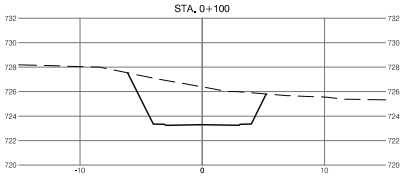


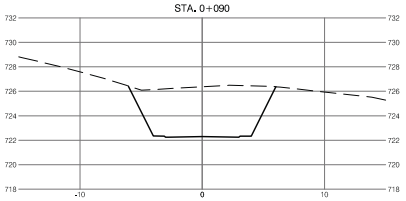


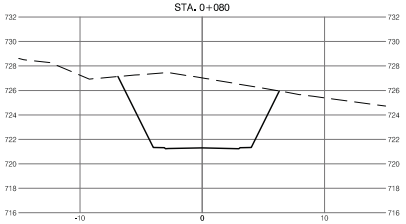


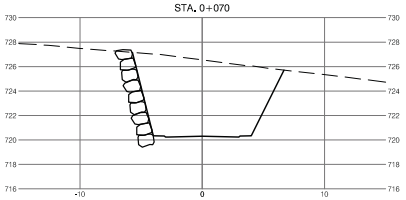


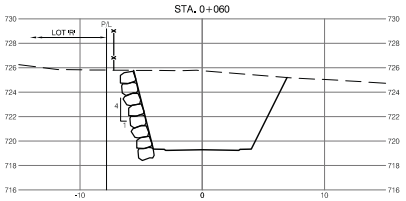






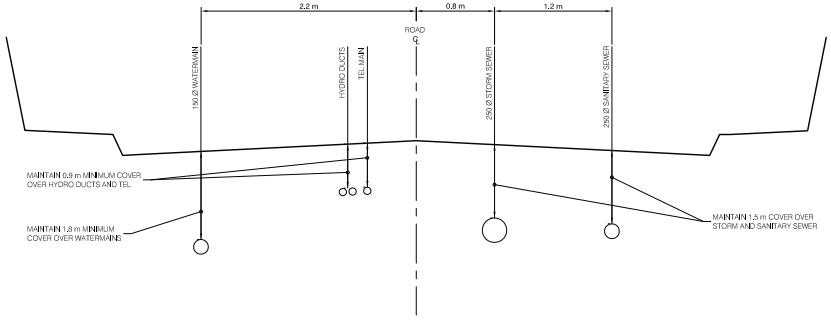






ACCESS DRIVEWAY 'A' SECTIONS

Scale: 1:200

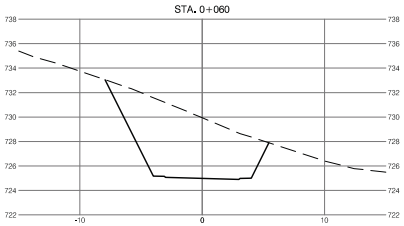


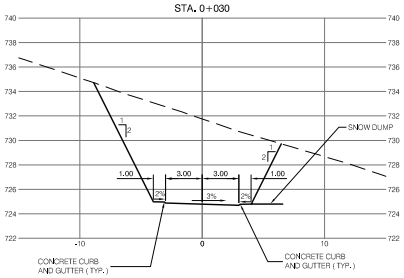
TYPICAL SECTION

N.T.S.

LOCAL ROAD STRUCTURE

- 50 mm ASPHALT
- 150 mm BASE GRAVEL
- 300 mm SUB BASE
- CURB AND GUTTER RMOW TYPE B
- REFER TO MMCD 2009 PLATINUM FOR CONSTRUCTION SPECIFICATIONS





ACCESS DRIVEWAY 'B' SECTIONS

Scale: 1:200

KERR WOOD LEIDAL
consulting engineers

200 - 4185A Still Creek Drive
Burnaby, BC V5C 6G9
T (604) 294-2088 F (604) 294-2090
E mail@kwl.ca

Seal:

Rev	Date	Des	Dwn	Chk	Description of Revision	Rev	Date	Des	Dwn	Chk	Description of Revision
A	2014-08-26	RK	MP		PRELIMINARY FOR APPROVAL						
B	2014-09-24	RK	MP		PRELIMINARY FOR APPROVAL						

CRAIG ROSS GENERAL CONTRACTING LTD.
ALPINE WHISTLER DEVELOPMENT

CROSS SECTIONS

Project No. 3203.001 | Drawing No. R2 | Rev. B
Group ROAD WORKS

SAVED 2014-09-25 4:48 PM
Paper Size = ANSI D
PC-Fit Size: 914.00mm x measures 520 mm x 800 mm
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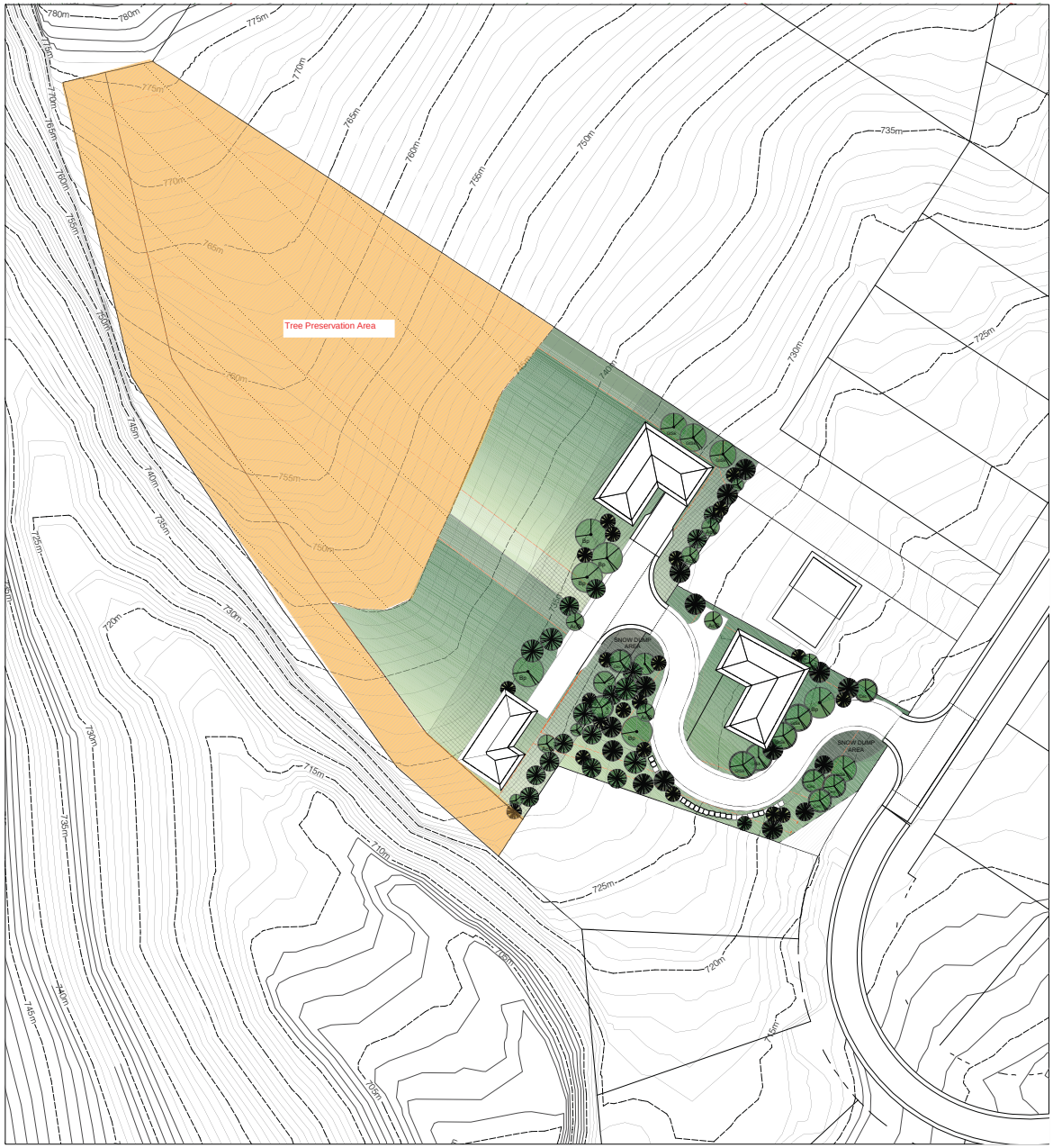
APPENDIX E



Legend

EXPECTED AREAS OF DISTURBANCE

Assumed Rock-cut slope- Potentially no vegitation possible

AREAS OF NON DISTURBANCE

Ravine bank setback- protected area- refer to RAR report temporary construction fencing installed along perimeter

POTENTIAL BUILDING ENVELOPES

and

Area New Planting- refer to plant list for plant species

Suggested Plant List

Botanical Name	Common Name
Trees	
Acer ginnala	Amur maple
Amelancheir grandiflora 'Autumn Brilliance"	Serviceberry
Betula papyrifera	Paper Birch
Cercis Canadensis	Redbud
Gleditsia triacanthos	Honeylocust
Picea glauca	White Spruce
Picea omorika	Serbian Spruce
Picea pungens	Colorado Spruce
Populus tremuloides	Trembling Aspen
Pseudotsuga menziessii	Douglas Fir
Thuja plicata	Red Cedar
Tsuga heterophylla	Western Hemlock
Ground covers, shrubs & perennials	
Alopecurus pratens aurea	Yellow Foxtail Grass
Arctostaphylos uva-ursi	Bearberry
Blechnum specant	Deer Fern
Calamagrostis Karl Forester	Feather Reed Grass
Coreopsis verticillata moonbeam	Tickseed
Cornus stolonifera	Red Twig Dogwood
Echinacea purpueas white swan	White Coneflower
Euonymus alata	Burning Bush
Euonymus fortunii gold splash	Gold Splash Euonymus
Helectotrichon sempervirons	Blue Oat Grass
Juniperus communis	Common juniper
Mahonia nervosa	Cascade Grape
Miscanthus sinensis	Maiden Grass
Picea pungens	Glauca Globosa
Pinus mugo	Mugo pine
Polystichum munitum	Sword Fern
Ribes sanginneum	Red currant
Rhododendron Cunninghams White	Rhododendron
Rosa meidiland	Shrub Rose
Sedum spectabile	Autumn Joy Stonecrop

Driven
By Nature
3665 Broadway Avenue | Vancouver | BC V6R 2C2 604.826.7649

Revision No.	Date
Issue for Rezoning	2014-10-01

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Client:

WHISTLER ALPINE DEVELOPMENT CORP.

Project Title:

Mountainview Estates

Drawing Title:

Planting Plan

Project North:

Drawn By:

Checked By:

Scale: 1:500

Job No.: 12-033

Sheet No.: L2.0

Melissa Laidlaw

From: Shane Finley <famed@shaw.ca>
Sent: Thursday, June 11, 2015 4:19 PM
To: Planning
Subject: Variance permit No.DVP 1100

Dear Ms. Laidlaw,

As property owners across the street from 8328/ 8332 Mountain View Drive, we are opposed to the development variance application No. DVP 1100.

Our family recently purchased our property because we love the location and wanted to be in an establish subdivision with no surprises. Its wrong to change the zoning or property boundaries that became a large factor in our purchase here. The Rules and zoning are in place to provide a stable platform for neighborhoods and communities so current and future residents can make educated decisions about where they live. Before our purchase we made sure there was not going to any future development or expansion nearby. The character of Whistler can be ruined if anybody can cheat the rules for personal gain. Its very obvious that this variance will provide a significant increase in value for the owner.

Regards,

Shane Finley.

Melissa Laidlaw

From: David Oakes <david_oakes@telus.net>
Sent: Monday, June 15, 2015 2:35 PM
To: Planning
Subject: Development Variance Application DVP 1100

As background we live essentially across the street from the proposed development.at #8325 Mountainview Dr

1. Re the variance 2(a) and 2(b) (the wall) the proposed wall should be finished aesthetically - ie rock or rock facing, not plain concrete. If not it will be an eyesore and perhaps affect property values in the area.(and possibly attract graffiti) 2. There must be a swale at the bottom of the driveway that directs all snow and rain runoff into the ditch on that side of the road. If not then the melting snow and rain will come across the road to my driveway and ditch. It will also run down the street around the corner and freeze in winter, making it very dangerous if not impassable. The ditch on the other side of the road drains to 19 Mile Creek across from #8315 (approx).
3. Snow clearing of the driveway must not add to what we now experience after a snow fall in terms of snow dumps. We get a lot of snow per storm on upper Mountainview, measured in feet not centimeters.

Yours truly
David and Brenda Oakes
8325 Mountainview Dr
604 938 9190 604 938 3699 (cell).
david_oakes@telus.net

Dr. G. Bernadette Yuan & Mr. Peter Young
Mailing address:
4585 Langara Avenue
Vancouver, B.C.
V6R 1C9

Whistler address:
8324 Mountainview Drive

June 16th, 2015

To: Melissa Laidlaw, Senior Planner, RMOW Planning Dept: planning@whistler.ca

Dear Sirs/Madam,

Re: Development Variance Permit Application DVP 1100

We attach for ease of reference our submission made before counsel on July 15th, 2014 with regard to the **Public Hearing for Land Use Contract Discharge and Zoning Amendment Bylaw (RS1 Zone-8340 Mountainview Drive) No. 2058, 2014.**

(1)Summary of why Variance Proposal 2a should be DENIED

The points raised in our July 2014 submission remain – however the detailed engineering plan now shows **new information which was not available nor clearly demonstrated on the original plans (Appendix 1) submitted in 2014.**

The request for 0.5 meter setback of an onerous retaining wall of a huge height drop requiring also a height allowance variance is a double-edged sword of harm for the 8324 Mountainview neighbor (our property). Relaxing the south setback 2a and granting an onerous height variance brings the road **TOO CLOSE** to the front entrance and living quarters of our house and will create dangers and harm in the form of:

- excessively close noise pollution, fumes and vibrations from vehicles,
- dangerous cliff with not enough setback from immediate neighbour and no proper terracing to mitigate severe cut to natural topography
- unsightly dangerous drop-off of 7.6 meter tall retaining wall (with inadequate angle of repose),
- negative aesthetics and negative impact on side and front views from our house
- from a safety point of view, increased risk of people (grandchildren, children and visitors at 8324 Mountainview) falling to their death from a cliff too close to the property line.

This variance for the retaining wall effectively will allow the proposed access road for the proposed Mountainview lots 8328 and 8340, including its 7.6 meter deep near vertical cut, which is now clearly detailed in the drawings, **to be situated too close to our northern property line and house.** The retaining wall is too steep - it should be terraced and landscaped with no lock block material but be rock or concrete with stone veneer and should be terraced in a way that

minimizes the impact of the road on us, the immediate neighbour, and minimizes the disturbance on the site's natural features. For the 24 foot drop, there should be stepped-down terracing and the road should be further away from our lot which would be more equitable for us especially since when we bought our property to enjoy the natural beauty, views and quietude we did not expect excessive traffic and all the negative aspects from a private road servicing multiple dwellings.

This variance is **not necessary** as the developer has clearly other choices of road design which can fit the road grades to RMOW guidelines without impinging the setback rules to bring an onerously precipitous retaining wall dangerously closer to the immediate neighbour. These height and distance variances (2a) effectively will also bring the road closer to the immediate neighbour than necessary and therefore will harm and devalue the immediate neighbor's property at 8324 Mountainview. (see Appendices 2 & 3 for examples).

As quoted in the Notice of Development Variance we received from Whistler, "Projections into Required Setback areas" includes "retaining walls (...) provided such features are not greater than 0.6 meters in height": 0.6 meters is less than 10% of the proposed 7.6 meter height of the cut and retaining wall proposed to be made 0.5 meters from the property line and therefore **closer to our home than regulations allow.** (For emphasis, 7.6 meters is about 24 feet – the height of three standard interior rooms stacked one on top of the other!)

2. Reason for the Variance

Looking at the developer's plan overall, it is clear that the sole justification for the variance is to allow the developer to make the proposed house on lot 8332 **much larger** than the other houses on the block. In effect, by shoving the road, and its 7.6 meter cut, closer to our property line - by using the variances outlined in variance 2a, the developer frees up space to increase the size of the new proposed house and keep the road **away** from his house. This represents a direct uncompensated transfer of wealth –from us to the developer. Our property is devalued, so his property value can be enhanced.

How can this be equitable?

In effect, as drawn, the developer is trying to squeeze **both** an **access road** and an **over-sized house** on to a site in a way in which ***they will not fit***–except by disadvantaging our property via this proposed variance.

Whistler's building rules are wisely in place precisely to prevent such disadvantaging from taking place.

(2.1) Variance 2a is NOT NECESSARY and SHOULD BE DISALLOWED

Attached to our submission are several other plans (Appendices 2 and 3) of private road access designed by engineering firms **which disadvantage us less by having the road set back more distant from our property line** and DO NOT REQUIRE VARIANCE 2a side setback to 0.5 me-

ters and also would not require such an onerous height variance with no terracing and no safe and aesthetic angle of repose. These other options also give the developer a road grade slope within the RMOW guidelines without infringing into the setback rules. When we bought our property we understood the vacant lots beside us were zoned for RS1 residential housing. We did not expect to have the encumbrances of a road which penalizes our enjoyment of our house – if there is such a road to be built, the development should respect the setback rules. **To do otherwise with a variance would be to penalize one party and unjustly benefit the other.**

(3) <u>Engineering concerns</u>

Much of our presentation in July 2014 focused on the proper design and engineering of the access road –with much concern specified as to esthetics, grade, snow removal, spring run-off, erosion impacts, construction risks, etc. By moving the road, and its deep cuts, closer to our property line by way of variance, any risks associated with the construction and build are **magnified** in terms of the impact on our home. These impacts will include blasting and vibration, during the construction phase, surface settling, sliding, and, we have been told, possibly folding of the surface after construction. In addition, we have been warned by engineers with regard to the adverse impacts of upsetting the water table –both ground water and sheet flow above the impervious layer that currently exists on the Mountainview slope. Disruption of the water table can cause shear forces which will destabilize our property's soil and building foundation and may cause discharge of water onto our driveway and property.

We have been advised that legal liability for mishaps and property damages resulting from the large cuts and road construction can only be transferred to the engineers responsible if "signed and sealed" **engineering and geo-technical and hydrological** engineering plans have been received.

There is no question that there is a lot of water on the high side of Mountainview. Indeed, one of the reasons given for not building the access road to the upper lots in this proposed project along the north panhandle that was originally provided in the original subdivision plans for that purpose is that a large volume of water surfaces along the pan-handle -- which would require culverts under the road.

If the variance is granted without such plans being in hand, and subsequent construction results in damages to our property we have been advised that we will have no choice but to bring action against those responsible, including, in the absence of "signed and sealed" technical engineering plans, the Municipality, the Planning Department, Mayor and Counsel.

(4)Landscaping remediation

A new proposed road, ***even if the variance is not granted and the proper required setback is respected***, has a major negative impact upon our lot. We would request that the municipality stipulate a comprehensive and detailed landscaping remediation requirement to mitigate both (i) the presence of a 24+ foot cliff created near our home as well as (ii) mitigating the esthetic damage caused by such a massive excavation so close to our home.

For emphasis, a major reason we OPPOSE THE VARIANCE is that a near-vertical cut and a retaining wall brought unnecessarily closer to our property with a height drop of 24-30 feet with no angle of repose or inadequate angle of repose creates an UNATTRACTIVE streetscape and an UNATTRACTIVE SITUATION FOR OUR HOUSE ON A MANMADE, DANGEROUS CLIFF AND CREATION OF AN OVERLY- CONSPICUOUS PLACEMENT OF OUR PREVIOUSLY WELL SITUATED HOUSE.

Even without the variance 2a, the developer needs to mitigate this devaluing of the streetscape and our house's appearance from the road as hanging off a cliff. A graded angle of repose to minimize excessive cut and fill, and a LANDSCAPING DESIGN to hide or camouflage the road and cliff is NECESSARY and **we do not see adequate attention to this** in the appendix B submission to council of May 2015.

Specific details of landscaping that we recommend:

(i) **There should be a reasonable angle of repose on the cut** – in keeping with what already exists in the neighborhood. In photograph (1) (included herein), taken further up Mountainview, the cut shown (which is approximately the height of the one proposed) has an angle of repose such that the top of the cut is set 15 or 20 feet back from the base. This has the effect of mitigating "cliff" risk (that is, risk of falling off the cliff) and the aesthetic problem of a 24 foot near vertical wall.

(ii) Photo #2, also taken further up Mountainview, shows an angle of repose on a similar cut of 20 or 25 feet. Note also that in photo #2, the cut is stepped. That is, there is a tree planting terrace half way up the cut – softening the look and mitigating cliff risk. **There should be a tree planting terrace at the top and terracing stages stepwise down the cut** to allow tree planting to mitigate cliff risk and to soften the appearance of the very large cut. Therefore the 7.7 meter height drop variance should not be allowed to be a sheer drop but terraced with a maximum step of 1.5 meter drop in height for each terraced step down to the road's shoulder and grade.

(iii) We are concerned that during the excavation process, the curved trench of the road may be abandoned in favor of essentially removing **all** of the land below the lower curve of the road – along the property line – exposing the view of the entire road to the street. Photographs ((3), (4) and (5) show **three mature trees adjacent to the property line that should be preserved** to ensure that the streetscape remains intact and the goal

should be to minimize the disturbance on the site's natural features especially in front facing Mountainview Street.

(5)Detailed discussion of Variance impacts

In addition, on discussion with the Planning Department, we have been advised to review the criteria for opposition to a variance application. Accordingly, submitted below are our reasons for opposing the preliminary statements of the developer's variance application.

REBUTTAL TO "PRELIMINARY ANALYSIS OF THE VARIANCES BASED ON THE ESTABLISHED CRITERIA FOR CONSIDERATION OF DEVELOPMENT VARIANCE PERMITS" pertaining to RZ 1069 - 8340 Mountainview Drive - Land Use Contract Discharge and Rezoning as published on May 26th 2015 Council Meeting.

We are the immediate neighbors and owners of 8324 Mountainview which is the lot to the south of the proposed subdivision. We OPPOSE granting of the variance 2a) in DVP 1100 associated with the development: eliminating all but 0.5 meters of the south side setback and pushing a cliff like drop off closer to be in front of our property will devalue our property - it severely alters the natural topography not by 0.6 meters allowable but produces a drop of a total of 24 feet right at our front door and living quarters of our house. This harms our property by being unsightly, dangerous as grandchildren, children and visitors can now fall to their death or be severely injured as the cliff causes risk of fall being so close to our house and creates a significant liability to life and limb - and the variance removing all but 0.5 meters of the setback and allowing the steep 24 foot drop-off instead of a 0.6 m step, and necessary terracing, brings the road closer to our house which is harmful and devalues our property by decreasing privacy, increasing vehicular fumes and noises from a closer road servicing 18 bed units, and potentially twice that, and creating a cliff-like hanging perspective of our house's situation on its property vis-a-vis the severe unnatural cut to create the road below. The original south lot setback between the development and its immediate neighbour at 8324 Mountainview should be upheld and the variance 2a denied for both decreasing the distance from the immediate neighbour and allowing an onerous height drop-off relaxation.

We rebut the "Potential Positive Impacts" statement as presented to council and present our counterargument for disallowing the variance as follows:

POTENTIAL NEGATIVE IMPACTS

Does NOT complement streetscape or neighborhood	The integrated solution INCREASES land disturbance impacts on streetscape. The original two front lots would have provided for 2 houses of the same size and conformity as the other houses on the street and would continue the evenly spaced house balance of the block. By reconfiguring the lots, the developer is proposing a much larger 5000 sq ft house plus basement which will LOOM out like a sore thumb amongst the other houses. It will be enclosed by a hairpin turn road which will be conspicuously at odds with the block's house balance and stick out due to its severe cut and thus disturbance of the natural land topography and flow as well as the sheer cliff at the south border. Snow clearing for the trench-like road will be an issue as there is inadequate space designated to dump snow load on the plans submitted. Snow dumping area adjacent to our access driveway will likely cause access problems for us and mountains of snow dump will detract from streetscape. During the Spring warming, there is significant risk of discharge of water and freezing of water onto our driveway. Snow removal to a distant site by trucks may be necessary for the development as the snow load from the road will be tremendous - higher altitude heavier snow load and very little road shoulder space to store snow will be an issue.

Does NOT work with topography on site and there IS need for major site prep and earthwork	Steep cuts leave neighbor at 8324 Mountainview with unsightly and dangerous cliff cut which a variance would put dangerously close to the front door entrance and living quarter. Damages 8324 neighbor's property value due to aesthetics, creates unnatural unattractive "perch" of immediate neighbour's house, danger of erosion of cliff and damage to 8324 Mountainview house's foundation, danger of severe injury or death if children, grandchildren or visitors of owners of 8324 Mountainview fall down cliff, especially with setback decreased. Previously the natural topography provided no risk of safety or risk of plunging to death. 8324 Mountainview will suffer from decreased privacy and increased vehicular fumes and noise pollution from variance which moves an 18+ bed unit road closer than it would be if setbacks were respected and proper terracing for height drops were constructed in conformation with existing rules.
DOES NOT maintain site features	24 foot cut to south perimeter will provide negative site features with unsightly steep retaining wall which is aesthetically too close to building at 8324 Mountainview and will negatively impact site feature by removing natural topography and replacing it with unsightly vertical retaining wall, which will not have an aesthetic angle of repose and may cause erosion, property and soil shift or rupture with time, damage to 8324 Mountainview's building structural foundation etc. Unisghtly lock block retaining wall should NOT be allowed even with terracing.
DOES NOT ENHANCE VIEWS from neighboring buildings	I believe the sight of a gigantic house sticking out against 3500 sq foot RS1 neighbors will be a negative view site for all neighbors who can see the house at 8332 Mountainview Drive. As an immediate neighbour, my present view of a natural forested gentle graded topography next to me will be replaced with a view of a vertical cliff and severe dangerous drop-off from a retaining wall which is situated closer than it should be. A road and a looming house much larger and more conspicuous than any other house on the block will be ever present in my view and the views of other neighbours as well.

IS INCONSISTENT WITH NEIGHBOURHOOD CHARACTER	This <u>is</u> applicable. The neighborhood has primarily uniform 3500 sq ft houses. If the variance asking for the south perimeter setback to be eliminated were NOT GRANTED, the developer could still develop a substantial house on 8332 Mountainview in keeping with the streetscape. In effect, by asking for the variance, the developer wants to harm, disadvantage, and devalue the property at 8324 Mountainview - in order to essentially build a bigger house with the road further away from his house and closer to our house at 8324 Mountainview. Therefore, VARIANCE 2a should be disallowed. If the developer wants the road further away from his own proposed house, he can build a smaller or redesigned house which would be more in keeping with the streetscape balance.

A Geotechnical Report, which states "land is safe for intended use" is different from a geotechnical report which is signed and sealed and takes on liability for a retaining wall pushed to the property line by stating that the wall will not cause damage to the neighbor's house, structure, foundation or put the neighbor's soil at risk of erosion, collapse, overturning etc. A condition of the subdivision development with such a severe cut and retention should be to have a signed, stamped with professional seal, geotechnical report assuring that such a retaining wall would prevent in perpetuity any erosion, shift, rupture, overturning of the soils on the adjacent property at 8324 Mountainview which is going to bear the risk of any catastrophe as well as a hydrological report with the assurance that the disruption of ground water and sheet flow will not cause shearing forces to destabilize the land, building foundation and topography of the neighbor at 8324 Mountainview.

The double-edged variance asking for significant cut depth variance as well as pushing the retaining wall **<u>close to a neighbor obviously devalues the neighbor's property. It makes it unsaleable to any party who has concern for the safety of their family due to the obvious dangerous drop-off in front and to the side of the property as well as making the property unsightly due to sudden and drastic topography change and introducing risk to a purchaser</u>**

of property soil erosion, rupture of wall with ensuing liability issues including cracking of foundations, shifting of soil and disturbance of groundwater drainage and sheet flow drainage to the neighbor at 8324 Mountainview.

CONDITION OF ADOPTION/LEGAL DOCUMENTS

Regarding the list of legal registration, right of ways and legal documentation listed in May 26th 2015 report of Council, there should be consideration to add the following:

New Registration of Right of Way Easement for benefit of 8324 Mountainview neighbor over Property called 8328 Mountainview and 8332 Mountainview.

This would recognize our legal easement over the developer's lands which is for the benefit of our driveway and runs with the lands.

We submit these comments for your sincere consideration and strongly oppose granting of variance 2a of DVP 1100. We can be reached by the following contact details:

Dr. G. Bernadette Yuan and Mr. Peter Young
Email address: gbyuan1@gmail.com
Cell phone: 604-805-0267
Office phone: 604-277-9577 Office private phone 604-277-9517
Home phone: 604-228-9015
Pager: 604-640-2777

Mailing address in Vancouver: 4585 Langara Avenue, Vancouver, B.C. V6R 1C9
Whistler address in Whistler: 8324 Mountainview (note: please do not mail correspondence there, send mail to Vancouver address).

Thank you.

Sincerely,

Dr. G. Bernadette Yuan, M.D.
Mr. Peter Young

Attachment: Our presentation of July 15th, 2014

Dear Sirs/Madam,

Re: Public Hearing for Land Use Contract Discharge and Zoning Amendment Bylaw (RS1 Zone-
8340 Mountainview Drive) No. 2058, 2014 scheduled for July 15th 2014

I am the owner of 8324 Mountainview Drive, which is the adjacent property to the above-captioned property. I believe our property will be adversely affected by the granting of this zoning change to RS1 because the RS1 designation allows a subdivision of 3 properties which present plans, as submitted to me on Friday July 11th 2014 by Craig Ross, of Whistler Alpine Development Ltd., present multiple hazards and risks to our lot and potentially to the whole street and neighborhood. Our concerns are multiple and include concerns regarding the grade of the access road, snow removal and water drainage, and retention of very large, steep land cuts - all these factors put our property at risk and I request that further engineering studies be done and detailed plans be available that would address these concerns before the RS1 designation is granted so that we, and our neighbors, are assured that no damages will accrue to us and to reduce the risk of litigation as a result of these damages. I have detailed these multiple concerns below:

Negative Impact: We bought our Whistler house and property for the enjoyment of its peacefulness, quiet neighborhood, views and the aesthetic streetscape of Mountainview Drive. The deep cuts to put in the proposed very steep driveway and in fact, a second parallel driveway twinning off the main driveway in front will impact our property negatively from an aesthetic point of view as the cut will appear to have our house as a dangling peninsula over top a steep unattractive cut which is trench-like for the new driveway of our neighbors. The grades required to shoehorn in a very steep road servicing not one lot, but 3 lots with a total of 18 bed units as submitted (see plan enclosed) are, in our opinion, unsightly, dangerous and steep. The topographical map indicates that at the hairpin turn, apex of which is very close to our property line, will have at best an 18 degree slope (during the run of 126 feet approx there is a 23 ft rise measuring from start to finish of an 180 degree arc). The rise and run of the roadway and particularly the front switchback are clearly suboptimal, dangerous, too steep to be practical and detract severely from the streetscape from an aesthetic point of view.

Altogether, considering there is more than a 50 foot grade rise from front to back of the proposed "8332 Mountainview" front property, in order to access the back properties, the road will have an average grade of over 13% with the first and main switchback enclosing a much steeper hairpin turn at average 18-20% grade as mentioned above. This road, in an area which experiences considerably more snow because it is the highest altitude in Alpine Meadows, is overall very steep and extremely steep on switchbacks. Realistically it will be dangerous, even though it may fit allowable extremes of grades for a narrow private road - this top

of Mountainview is not an area where extreme road grades should be endeavored as the snow dumps are heavy in winter and snow clearance will be very challenging as explained below.

1) Road Grades: These are very steep grades. The steepest proposed hairpin turn is right next to our house. This will result in excessive noise from cars from all 3 properties (3 times 6 bed units equals 18 bed units equals potentially many cars) as they try to rev up to get up the steep slope and mark my words, some will be unsuccessful. In the winter, this street can be very dangerous in heavy snow and ice. Our neighbors have slipped into the ditch several times from a much less precipitous driveway. Our driveway has a 9 degree rise which is steep enough and already presents slipping challenges in ice and snow in winter. We have a legal easement over the frontage of Lot Q as it is called now before subdivision for unhindered access to and from our property. There is an existing paved driveway and retaining wall for our access benefit. There is a risk to damage of this driveway and retaining wall if cars careen down ice and snow on the proposed driveway of the new RS1 application, because cars encounter difficulty negotiating a tight turn approaching an 18-20 degree grade. I believe that this very steep driveway/road puts my driveway and retaining wall for my driveway at risk of damage and any car slipping into the ditch at the entrance to my property may prevent me from access to my property as well as causing damage to our retaining wall and driveway. I believe a proposed driveway servicing 18 bed units has to be put to more stringent grade requirements than a steep dangerous driveway servicing just 1 single family dwelling. I would want to see proper engineering drawings of road grades to assure the safety of all cars and drivers accessing this road/driveway and to make sure there will be no effect to my driveway access as well.

2) Snow removal and water drainage and runoff: This RS1 development will result in steep and deep road cuts to get from the front of Lot Q (the front lot) to the back of this lot and the front of the 2 lots in the back - an elevation change of over 55 feet. This cut will be deep on both sides of the road resulting in a large unattractive ditch-like cut. The drop-off from our property line to the road as it makes it way up the slope and comes adjacent to our property line is over 30 feet. We are concerned about how the snow removal will be effected since the sides of the road will be so high, the snow cannot be lifted and stored there and the road is very long and Mountainview, being highest in altitude of all the roads in Alpine Meadows, gets more snow than anywhere else in Alpine. The road, as it appears, will not have enough shoulder to accommodate the snow. We are concerned that since the diagrams for the mouth of the entrance to this roadway is adjacent to our driveway that snow will be pushed and accumulate in our easement, which will not be acceptable or tolerable to us. We are also concerned that when the snow melts, the water will run over the front of our easement driveway causing black ice or icy conditions in perpetuity since their driveway is higher and steeper than ours and the mouth of the driveway curves and angles towards our driveway and appears to abut our driveway at street level. Again, we believe engineering drawings and opinions should be a prerequisite for this RS1 designation for the safety of everyone and to ensure our property will not suffer damages from runoff water and ice or huge snow banks of snow clearance impinging our free and clear easement rights - as a result of this development. The construction of this driveway should indicate a swale or design to ensure our driveway does not become negatively affected in any way by the new roadway from snow accumulation, runoff water and ice or damage from cars which lose control from the steepness of the road.

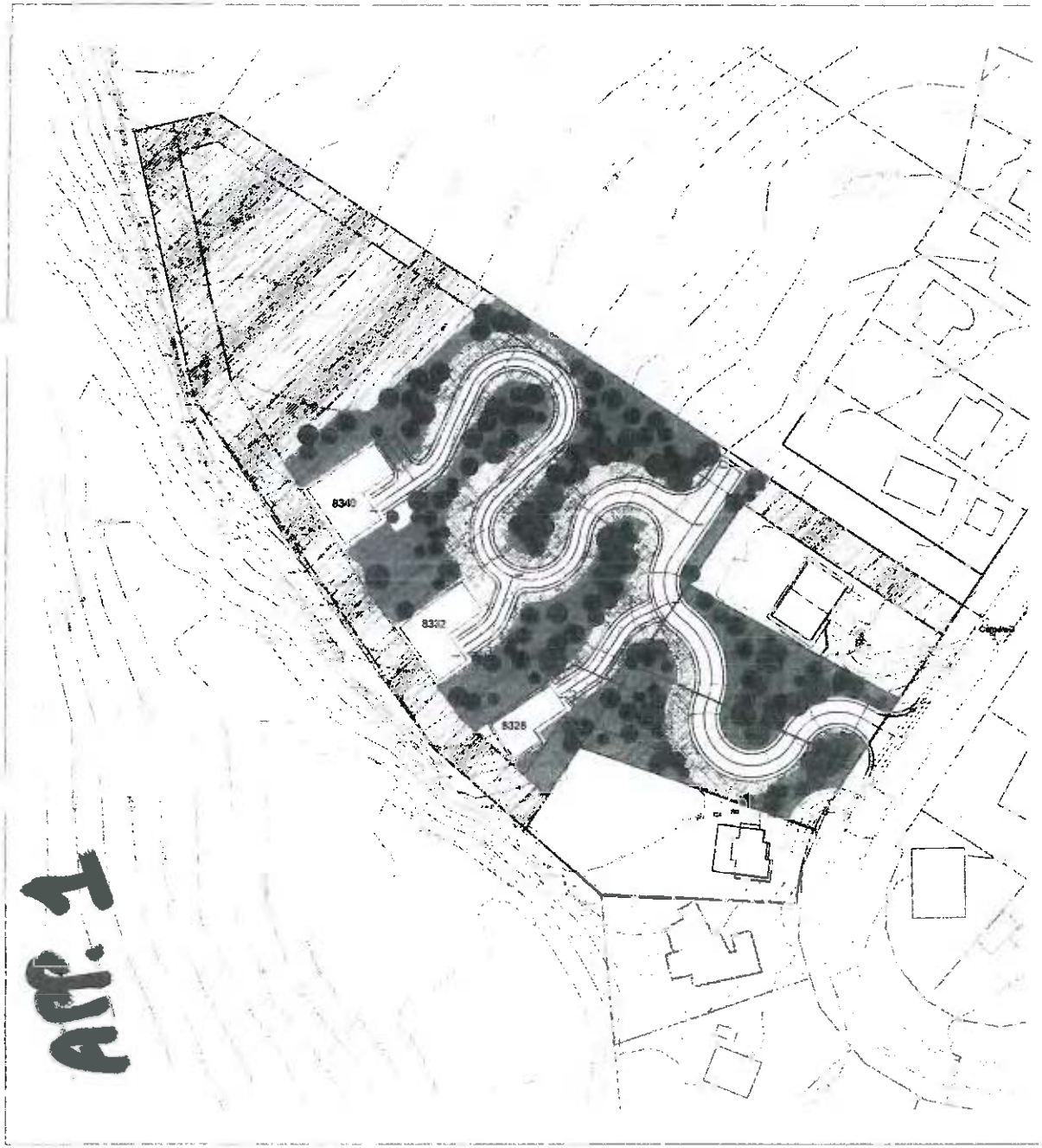
3) Retention of steep cuts and prevention of erosion and damage from erosion to our property and damage to our house foundations and structure from any land shift, settling or erosion as a result of severe land cuts:

We believe that in order to get RS1 designation for the 2 back lots, there should be engineering reports submitted which show that it is possible to retain properly the cuts required for the road. The rough plans as submitted to City Council in their May and June council minutes show very little detail other than a narrow road cutting very close to our property with a 30 foot drop resulting from the developers lowering the road from existing grade. Surely for a 30 plus foot drop and cut, there would be retention with an angle of repose which would then bring the road much further away from our property than the diagram as filed to date with City Council (for it is a diagram only and not an any way a plan with any detail of measurements and distance away from my property of retaining wall). As the adjacent property and house, I have concerns that my house is at risk as my land is at risk of collapsing into and over their roadway and my house and foundation is at risk as well. Before the RS1 is granted, as an impacted neighbor, I want to see detailed engineering plans showing the type of retention, engineering reports approving the angle of repose and reinforcing materials used and proof that the retention plans would not over time cause damage to my property from erosion, settling of my land and possible damage to my house and foundation. Will the engineering report, once it takes into consideration the setbacks imposed by the angle of repose of any retaining wall, still leave enough room for the driveway switchback such that the grades are practical and reasonable? The plans as I see it have the driveway right up to my property line with very little setback for retention and the run is very steep - so taking into account the retention setback, is this subdivision plan is feasible? This should be determined before RS1 zoning is granted allowing 2 lots to be made from 1 lot at the back. Should my lot suffer any of these possible damages, there would be large litigation costs to bear for the developers.

In conclusion, we have many serious concerns regarding this discharge of land use and rezoning of 8340 Mountainview because we have not seen satisfactory evidence of the issues outlined above being safely addressed and we can see many potential hazards which can harm our property and house and cause us irreparable damage. I believe that the Mayor, Council and the Planning Department of RMOW have a responsibility to us to ensure that we do not suffer damages as a result of the RS1 Zoning going ahead resulting in a suboptimal development project which causes hardship, harm and potential financial loss to us and to others.

Water drainage from the entire length of the long proposed road is a big issue. Another issue is fire risk since the road will be narrower than a regular road and have no fire truck turnaround. Fire risk will put our property at risk. Our property is large, heavily treed and certainly at increased fire risk with the development planned. We would request information as to how this development is going to deal with fire hazard. Our property as it is right now enjoys an unencumbered view of the Whistler Mountains and Green Lake. There is a telephone pole in front of one of the front lots of the developers. Under no circumstance should the developers plan to move this pole in front of our view along our property frontage to devalue our property. This pole will have to be moved for their driveway. Ideally the wires should be buried so it does not negatively impact other people not involved in this development.

When we got the Notice of Public Hearing by mail, we had a two-week notice. We went to the City Hall Planning and Engineering Department to see plans. The plans they had on file were the plans enclosed with the minutes of May 2014 and June 2014 Council meetings. We spoke with Roman Licko of Planning as to whether there were any more detailed plans filed and there were not. With the plans on file with the application for RS1 rezoning for 8340 Mountainview it is clear what the developers intentions are but there is no information on file addressing the above concerns which is integral to the whole development concept. If it is dangerous and harmful, it is not wise nor reasonable to rezone before answers to these questions are provided.



Legend

Acceptable Rock-out Cape- no Legislation

Riparian bank outside- prohibited area- refer to RAR report temporary construction fencing installed along perimeter

Area Near Planting- refer to plant list for plant species

Suggested Plant List

Botanical Name	Common Name
Trees	
Acer glabrum	Amur maple
Amelanchier grandiflora "Autumn Brilliance"	Serviceberry
Betula papyrifera	Paper Birch
Cornus Canadensis	Redbud
Gleditsia triacanthos	Honeylocust
Picea glauca	White Spruce
Picea orientalis	Serbian Spruce
Picea pungens	Colorado Spruce
Populus tremuloides	Trembling Aspen
Pseudotsuga menziesii	Douglas Fir
Thuja plicata	Red Cedar
Tsuga heterophylla	Western Hemlock

Ground cover, shrub & perennials

Alopecurus pratens aureus	Yellow Foxtail Grass
Arctostaphylos uva-ursi	Bearberry
Blechnum spicant	Deer Fern
Calamagrostis Karl Foerster	Feather Reed Grass
Corylopsis verticillata mentorensis	Rokujo
Cornus stolonifera	Red Twig Dogwood
Echinacea purpurea White coned	White Coneflower
Euonymus alata	Burning Bush
Euonymus fortunei gold splash	Gold Splash Euonymus
Helictotrichon sempervirens	Blue Oat Grass
Juniperus communis	Common Juniper
Mahonia nervosa	Cascade Grape
Miscanthus sinensis	Maiden Grass
Picea pungens	Glauca Globosa
Pinus mugo	Mugo Pine
Polystichum munitum	Sword Fern
Ribes sanguineum	Red currant
Rhododendron Cunningham's White	Rhododendron
Rosa nutkana	Pink Rose
Sedum spectabile	Autumn Joy Stonecrop

Issue for Rezoning — 2012-09-19

Date	Revision No.	Date

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Client

WHISTLER ALPINE DEVELOPMENT

Project Title:

Mountainview Estates

Drawing Title

Planting Plan

Scale: 1:500 — Job No.: 12-033

Sheet No.:

L2.0

ATT. 1

APP. 2

K. Plan 19584

EXPLANATORY PLAN OF EASEMENT OVER PART OF LOT 'Q', BLOCK 29, D.L. 7301, PLAN 17958, GP. 1, N.W.D.

Deposited in the Land Title Office at Vancouver B.C. this ....day of 198

Registrar

SCALE - 1:500(metric) BCGS 92J 016-3-1

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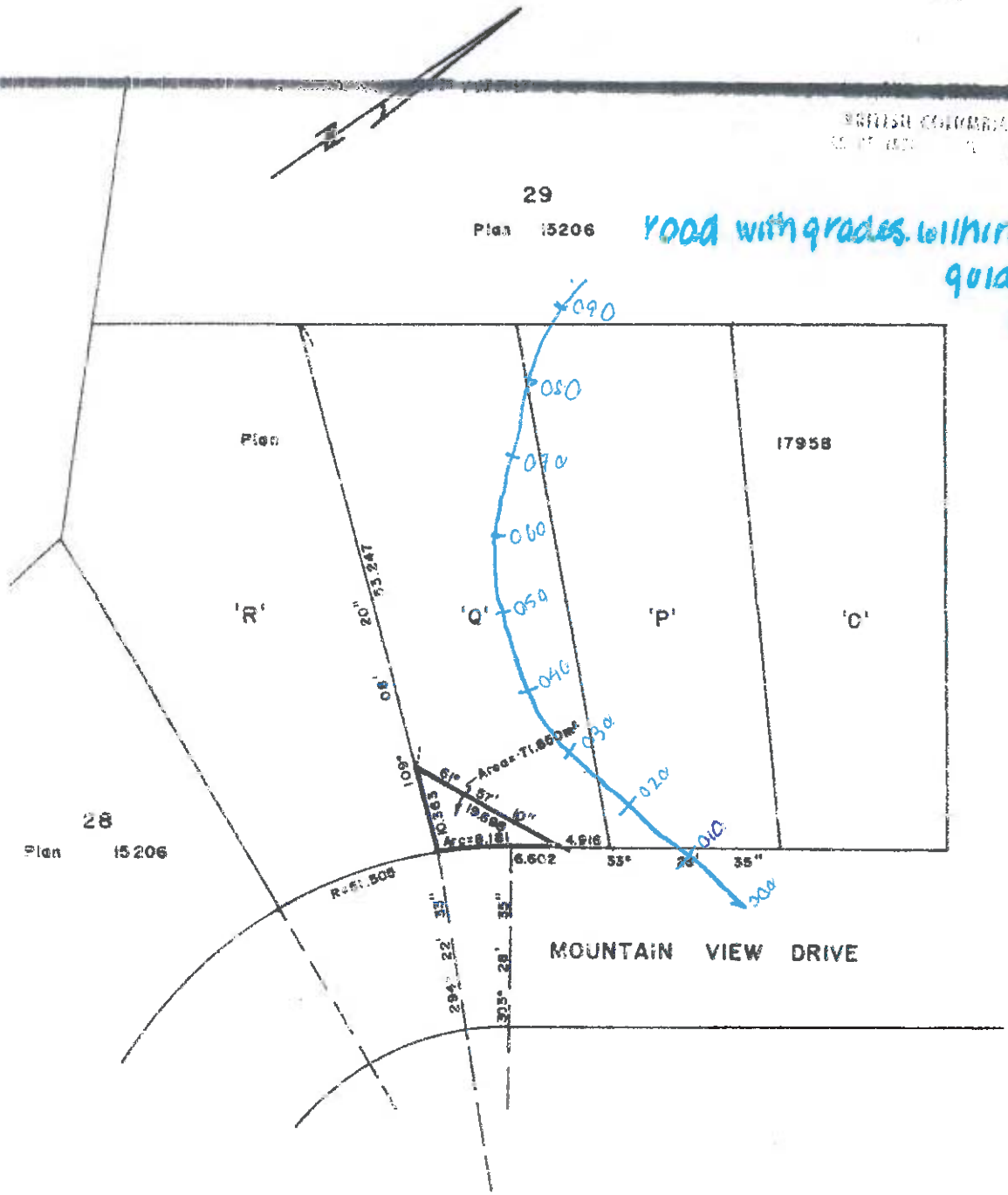


Certified correct according to 'Land Title Office' records.

June 19th, 1989

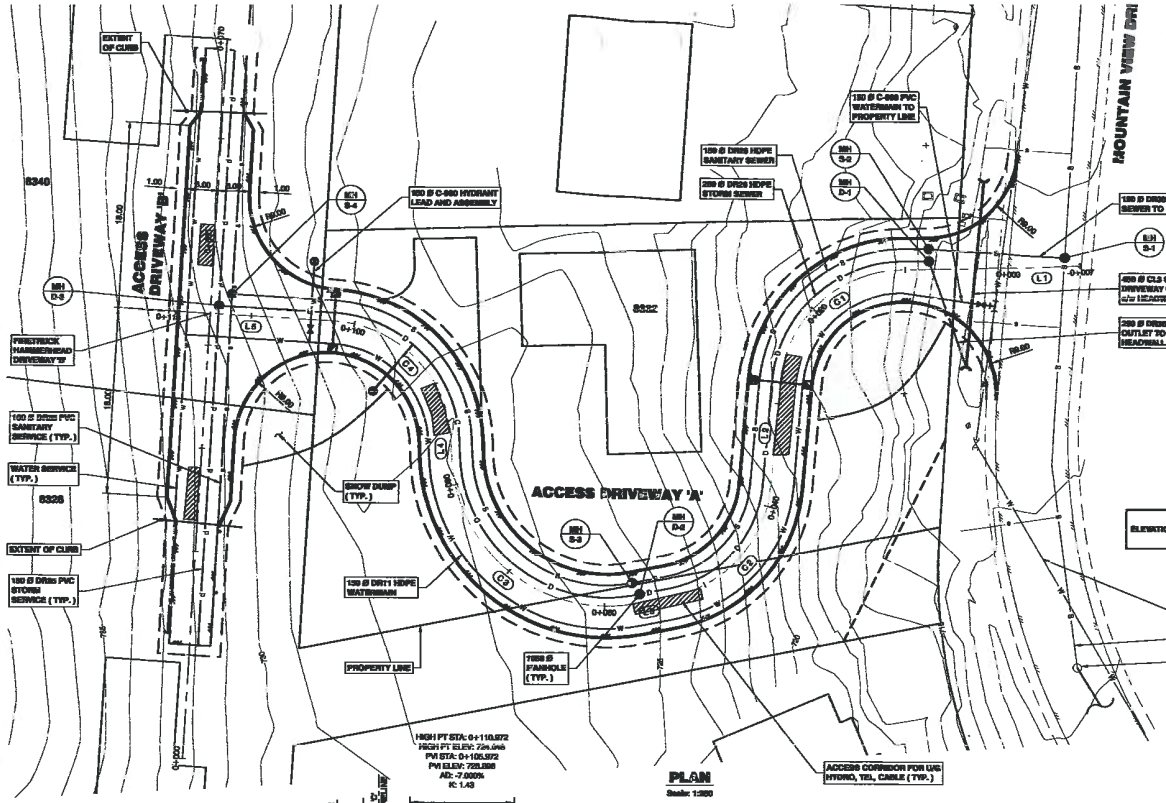
B.C.L.S.

Bearings are astronomic and derived from Plan 17958

This plan lies within the Squamish Lillooet Regional District

HERMON, BUNBURY & OKE
DOMS B.C. LAND SURVEYORS
VANCOUVER B.C.

S-5012 (J89652)



PLAN
Scale: 1:200

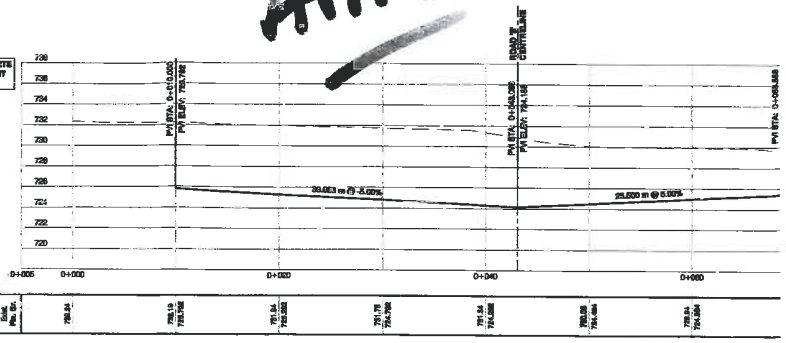
LINE #	STATION	STATION	LENGTH	AZIMUTH	COORDINATES	COORDINATES
L1	-0+007.000	0+010.403	17.469 m	258° 28' 22"	N=5555430.089 E=502184.533	N=5555[illegible] E=50[illegible]
L2	0+027.923	0+036.013	10.090 m	214° 57' 56"	N=5555434.740 E=502133.669	N=5555[illegible] E=502127.577
L3	0+059.509	0+062.837	3.303 m	262° 57' 13"	N=5555421.889 E=502114.145	N=5555428.099 E=502110.941
L4	0+082.943	0+084.216	1.273 m	28° 08' 34"	N=5555444.342 E=502102.676	N=5555445.554 E=502103.222
L5	0+101.971	0+117.972	16.000 m	358° 17' 09"	[illegible]	N=5555470.010 E=502095.849

8340 ALIGNMENT CURVE DATA

CURVE #	RADIUS	DELTA	CURVE LENGTH	T
C 1	12.000	83°30'32"	17.490	
C 2	12.000	73°59'17"	15.496	
C 3	15.000	95°08'21"	25.948	
C 4	12.000	84°46'51"	17.755	

ACCESS DRIVEWAY 'A' CENTRELINE DATA TABLE

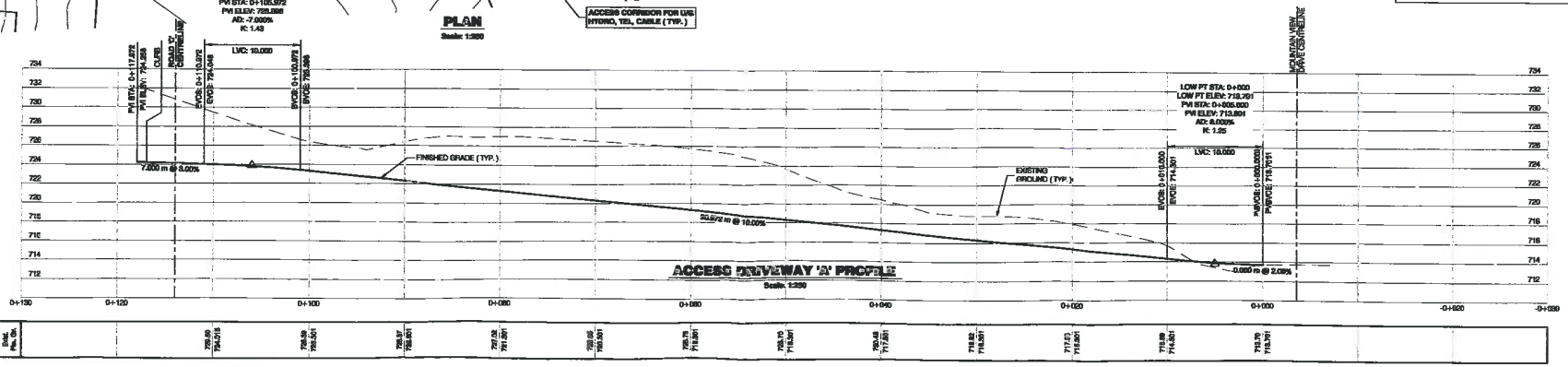
A.P. 3



HAMMERHEAD & ACCESS DRIVEWAY 'B' PROFILE
Scale: 1:200

LEGEND

- PROPOSED CURB & GUT
- EDGE OF ASPHALT



ACCESS DRIVEWAY 'A' PROFILE
Scale: 1:200

KERR WOOD LEIDAL
consulting engineers
200 - 4185A Still Creek Drive
Burnaby, BC V5C 6G9
T (604) 294-2088 F (604) 294-2099
E mail@kwl.ca

Seal:

Rev	Date	Des	Dwn	Chk	Description of Revision	Rev	Date	Des	Dwn	Chk	Description of Revision
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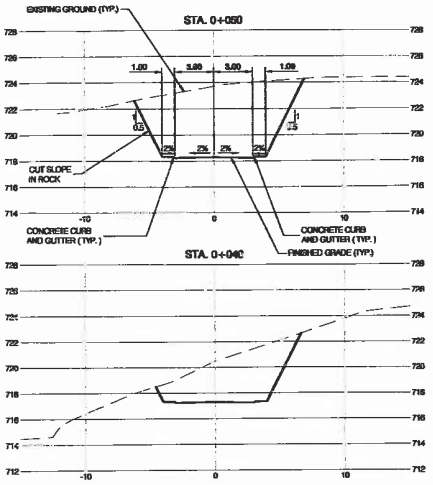
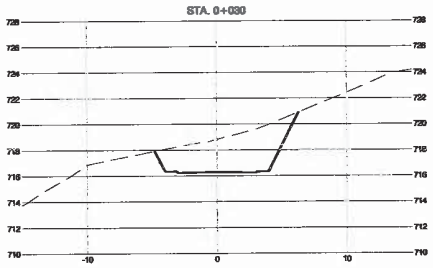
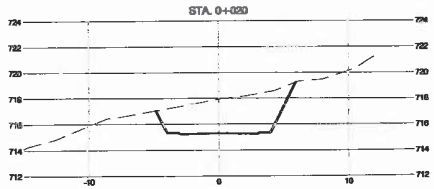
CRAIG ROSS GENERAL CONTRACT
ALPINE WHISTLER DEVELOPM

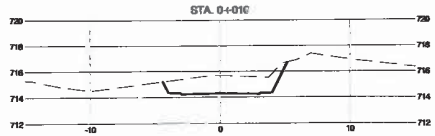
PLAN AND PROFILE

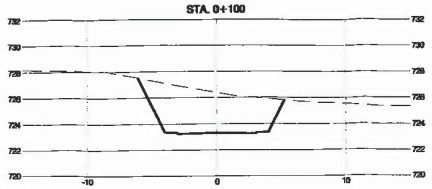
Project No. 3203.001
Group ROAD WORKS
Drawing No.

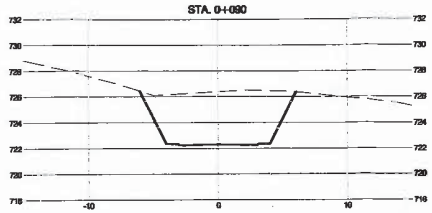


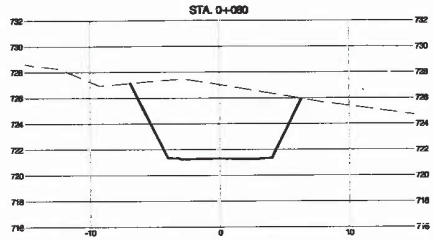


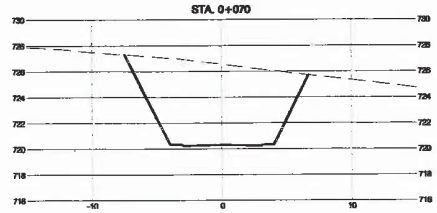


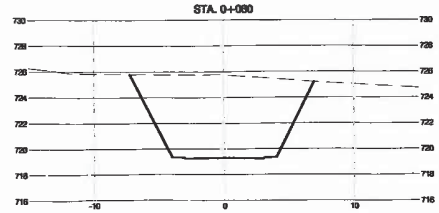








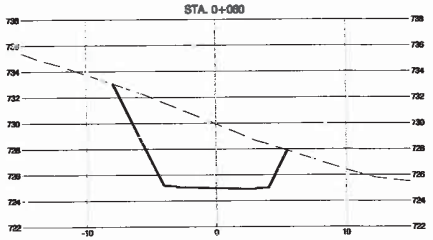


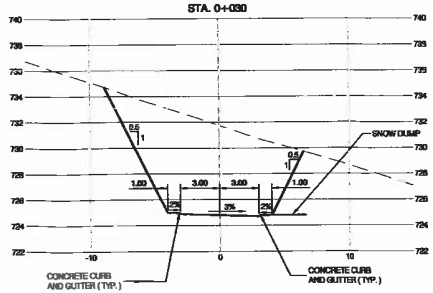


ACCESS DRIVEWAY 'A' SECTIONS

Scale: 1:200

LOCAL ROAD STRUCTURE
- 65 mm ASPHALT
- 150 mm BASE GRAVEL
- 300 mm SUB BASE
- CURB AND GUTTER (MOW TYPE B
- REFER TO MMCD 2009 PLATINUM FOR CONSTRUCTION SPECIFICATIONS





ACCESS DRIVEWAY 'B' SECTIONS

Scale: 1:200

KERR WOOD LEIDAL
consulting engineers

Seal:

Rev	Date	Des	Dwn	Chk	Description of Revision	Rev	Date	Des	Dwn	Chk	Description of Revision
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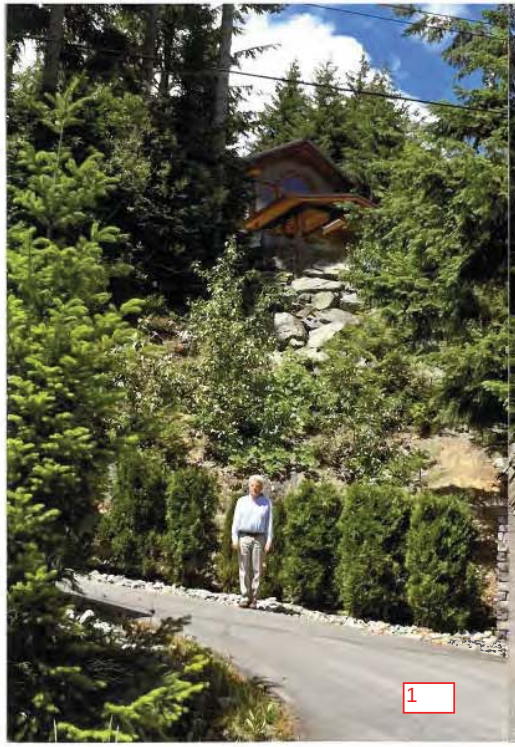
CRAIG ROSS GENERAL CONTRACTING LTD.
ALPINE WHISTLER DEVELOPMENT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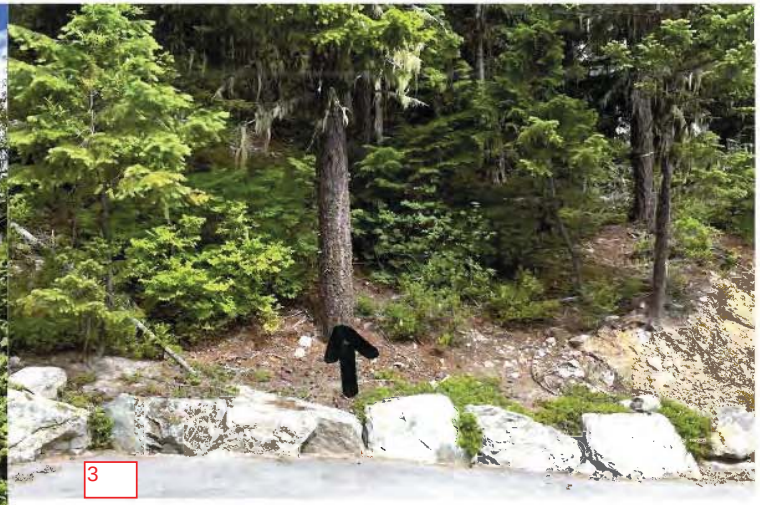
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Canadian Wood Council | Conseil canadien du bois

wood WORKS!
Program of the Canadian Wood Council

June 2015

Dear Mayor and Members of Council:

We are looking forward to your annual UBCM Convention in Vancouver this September.

With this letter, I invite your community to nominate a recently completed civic building for the **2015 Community Recognition Awards**. The awards are presented annually to communities that advocate for specifying wood use in a local project or through visionary initiatives that work toward building a community culture of wood.

Wood use in public buildings brings pride to B.C. towns and cities, and leaves a lasting legacy, which is an enduring celebration of our culture of wood. **You can nominate a project today: www.wood-works.ca/bc**

If you are thinking of a new project, there has never been a better time to take advantage of the many benefits wood has to offer.

Why wood? Wood is good!

Choosing wood for building is a good choice for socio-economic, environmental, budgetary and health reasons. It's a good choice for our economy, as forestry is a significant economic engine in B.C., and either directly or indirectly benefits us all.

It is also the best choice for the environment, as nothing can make a green building "greener" than optimizing the use of wood materials. Growing trees absorb CO2 and emit oxygen; wood materials sequester CO2 throughout their use; and substituting wood for other materials avoids substantial amounts of CO2 emissions. The result: high performance civic buildings which recognize our wood history and help us realize future sustainability goals.

Advanced technology and modern building codes are expanding opportunities for wood building products and systems. The result: distinctive and innovative civic buildings, designed and built throughout B.C. - which are also cost-effective. Our province's wealth of leading-edge designers, supported by organizations such as Wood *WORKS!* BC and the Canadian Wood Council, can show you how to make more of your scarce building and operating budgets. Our technical advisors can outline all the recent innovations in wood building products and systems to create comfortable, flexible, healthy and effective spaces.

There is a growing body of research demonstrating that working, learning and healing environments can be more healthful if they include natural elements in design, including wood. Demonstrated positive impacts include higher levels of health, better concentration and generally improved occupant performance for workers, students, patients and residents.

What's new in the world of wood? Consider the advantages and possibilities.

Our technical advisors can outline all the recent innovations in wood building products and systems to create comfortable, flexible, healthy and effective spaces. We are here to offer our technical expertise, training and education to help your local government realize a lower carbon footprint, and warm, beautiful, human-centred environments in which people thrive. Please call me if you are ready to move forward with a new civic project and I can give you more information on the free services Wood *WORKS!* BC can provide to your project teams.

Yours truly,

Lynn Embury-Williams
Executive Director
Wood *WORKS!* BC

WOOD *WORKS!* BC
837 Riverside Drive, North Vancouver, BC V7H 1V6 | Toll Free: 1-877-929-9663 ext. 1
www.wood-works.ca

About Wood *WORKS!* BC

Wood *WORKS!* is a national industry-led program of the Canadian Wood Council, with a goal to support innovation and provide leadership on the use of wood products and systems. Through workshops, seminars and case studies, Wood *WORKS!* provides education, training and technical expertise to building and design professionals and local governments involved with commercial, institutional and industrial construction projects throughout B.C. For more than 17 years, Wood *WORKS!* BC has facilitated practical, efficient, versatile and cost-effective building and design solutions through the use of wood – the most sustainable, natural and renewable building material on Earth.

Wood *WORKS!* BC has also worked extensively with municipalities on projects ranging from fire halls to arenas to recreation centres. Wood *WORKS!* BC is a recognized resource to help B.C. communities with the "build with wood" requirements on publicly-funded projects under the Wood First Act, and our expertise is available free-of-charge.

Wood *WORKS!* BC: Services to Local Governments

1. **Free Technical Advice**
   - Architectural, structural, fire, seismic, acoustic, envelope, environmental performance
2. **Source Wood Design Expertise and Provide Connections**
3. **Community Outreach**
   - Local Governments
   - Ministries / Associations
4. **Source Products and Building Systems**
5. **Professional Development/Liaison**
   - Architectural Institute of BC, Association of Professional Engineers of BC, Building Officials Association of BC
6. **Wood First Act Compliance Support**

2014 Community Recognition Award winners

AVICC -- Association of Vancouver Island and Coastal Communities (includes several local governments and First Nations in the Comox Valley): Comox Valley Economic Development Society for the Vancouver Island Visitor Centre (Merit: City of Nanaimo and District of Tofino)

AKBLG -- Association of Kootenay Boundary Local Governments: City of Kimberley for the Mark Creek Bridge (Merit: Village of Canal Flats)

NCLGA -- North Central Local Government Association: Town of Smithers for the Bovill Square

SILGA -- Southern Interior Local Government Association: Town of Summerland for the R.C.M.P. Building

LMLGA -- Lower Mainland Local Government Association: Village of Pemberton for the Downtown Community Barn (Merit: City of Richmond and Village of Harrison Hot Springs)

"The Community Recognition Awards have been presented to large and small communities throughout B.C. Every community can and should build with wood first, and use it wherever possible, including accenting with wood products. Building with wood is good, and being recognized with a Community Recognition Award is icing on the cake."

—Mary Sjostrom, Past Mayor – City Of Quesnel | Past President – UBCM