

AGENDA

COMMITTEE OF THE WHOLE

Monday, May 12, 2014

7:00 p.m.

Committee Room, Municipal Hall

355 West Queens Road,

North Vancouver, BC

Council Members:

Mayor Richard Walton

Councillor Roger Bassam

Councillor Robin Hicks

Councillor Mike Little

Councillor Doug MacKay-Dunn

Councillor Lisa Muri

Councillor Alan Nixon



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COMMITTEE OF THE WHOLE

7:00 p.m.
Monday, May 12, 2014
Committee Room, Municipal Hall,
355 West Queens Road, North Vancouver

AGENDA

1. ADOPTION OF THE AGENDA

1.1. May 12, 2014 Committee of the Whole Agenda

Recommendation:

THAT the agenda for the May 12, 2014 Committee of the Whole be adopted as circulated, including the addition of any items listed in the agenda addendum.

2. ADOPTION OF MINUTES

2.1. April 14, 2014 Committee of the Whole

p. 7-10

Recommendation:

THAT the minutes of the April 14, 2014 Committee of the Whole meeting be adopted.

3. REPORTS FROM COUNCIL OR STAFF

3.1. Capilano Watermain No. 9 Project

p. 13-20

File No.

Presentation: Mr. Goran Oljaca, Engineering and Construction Division Manager, Water Services Department and Ms. Vanessa Anthony, Consultation and Community Relations Coordinator, Liquid Waste and Water Services Departments, Metro Vancouver

3.2. Moving Forward on Electric Vehicle Charging Stations in the District of North Vancouver

p. 21-27

File No. 16.8620.01/013.000

Recommendation:

THAT the Committee of Whole recommends to Council:

THAT Council direct staff to implement electric vehicle (EV) ready guidelines outlined in the report "Moving Forward on Electric Vehicle Charging Stations in the District of North Vancouver" by the Section Manager, Environmental Sustainability dated May 1, 2014, specifically:

- a) A minimum of 20% EV-ready parking stalls (with the appropriate mix of Level 1 and Level 2 charging stations and encouragement of pre-ducting for future access to 100% Level 1 charging stations) in new multi-family developments through the rezoning process;
- b) The appropriate provision for EV-ready Level 2 charging stations in new commercial and institutional developments focusing on Town and Village Centres; and,
- c) Report back to Council in 12-18 months on progress to implement EV-ready charging infrastructure and recommended bylaw changes to effectively implement EV-ready charging infrastructure.

4. PUBLIC INPUT

(maximum of ten minutes total)

5. RISE AND REPORT

Recommendation:

THAT the May 12, 2014 Committee of the Whole rise and report.

MINUTES

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**DISTRICT OF NORTH VANCOUVER
COMMITTEE OF THE WHOLE**

Minutes of the Committee of the Whole Meeting of the Council for the District of North Vancouver held at 7:17 p.m. on Monday, April 14, 2014 in the Committee Room of the District Hall, 355 West Queens Road, North Vancouver, British Columbia.

Present: Mayor R. Walton
Councillor R. Bassam
Councillor R. Hicks
Councillor M. Little
Councillor D. MacKay-Dunn
Councillor L. Muri

Absent: Councillor A. Nixon

Staff: Mr. D. Stuart, Chief Administrative Officer
Mr. B. Bydwell, General Manager – Planning, Properties & Permits
Ms. C. Grant, General Manager – Corporate Services
Mr. G. Joyce, General Manager – Engineering, Parks & Facilities
Mr. J. Gordon, Manager – Administrative Services
Mr. S. Ono, Manager – Engineering Services
Ms. M. Welman, Manager – Strategic Communications & Community Relations
Ms. E. Geddes, Section Manager, Transportation
Ms. C. Walker, Chief Bylaw Officer
Ms. K. O'Malley, Assistant Manager – Waste Reduction, North Shore Recycling
Ms. L. Brick, Confidential Council Clerk
Ms. N. Foth, Transportation Planning Technologist
Ms. J. Meilleur, Communications, Marketing & Program Coordinator, North Shore Recycling

1. ADOPTION OF THE AGENDA

1.1. April 14, 2014 Committee of the Whole Agenda

MOVED by Councillor MURI

SECONDED by Councillor MACKAY-DUNN

THAT the agenda for the April 14, 2014 Committee of the Whole be adopted as circulated, including the addition of any items listed in the agenda addendum.

CARRIED

2. ADOPTION OF MINUTES

Nil

3. REPORTS FROM COUNCIL OR STAFF

With the consent of Council, Mayor Walton varied the agenda as follows:

3.2. Highway Use Permits

File No.

Ms. Nicole Foth, Transportation Planning Technologist, provided an overview of the framework recommended by staff to address issues relating to highway use permits and the fines and fees charged for use of District roads. Staff noted that concerns have been raised regarding the management of traffic around construction sites, the unauthorized placement of bins or other materials on the road ways, and the obstruction of traffic for loading and off-loading of materials.

The presentation highlighted:

- The current fine for unauthorized use of a road space is \$90; Bylaw Officers can also issue stop work orders, call the RCMP to intervene, or have vehicles or items towed from the road way;
- Fines can be issued for bins or containers placed on the roadway, signs or banners, delivery vehicles parked on the road, and things which are blocking the sidewalk or bike lane;
- In 2013 607 permits were granted for road use and 58 fines issued for unauthorized road use;
- Staff recommend increasing the fine to \$500 for arterial roads and \$250 for local and collector roads as well as implementing a deposit and fee system to manage traffic around construction projects.

Discussion ensued regarding methods to deter unauthorized occupation of road ways and the concerns and frustrations of residents when they encounter these obstructions.

Council expressed concern that road ways have been closed for invalid reasons and requested that applicants demonstrate a bona fide need for the closure. Council spoke in support of large deposits for road closures and that stop work orders be implemented if the rules are not adhered to. Further concern was expressed regarding traffic management and resident safety when road ways are obstructed unlawfully.

Council inquired if fines could be applied for multiple infractions in the same day; staff noted that multiple offences are listed in the Offence Act as daily events and cannot be fined more than once in 24 hours.

In response to a Council query, staff advised that utility companies will not be required to apply for highway use permits.

Staff advised that the GIS Department has been tracking construction sites, road closures, and road use permits to ensure a minimum of disruption.

Council requested that road closures and road use be scheduled outside of peak hours and that an awareness of school zones and timing must be considered in allowing road use disruptions.

Staff advised that they will report back with the proposed bylaw changes which can be tied to a fine system. It was noted that collector roads will be included with the arterial roads for the fine system.

Staff reported that they have recently submitted an RFP for flagging companies and the issues identified by Council will be forwarded to these companies for consideration.

MOVED by Councillor MURI

SECONDED by Councillor MACKAY-DUNN

THAT it be recommended to Council:

1. THAT staff bring forward amendments to the Street and Traffic Bylaw and Bylaw Notice Enforcement Bylaw in order that, for smaller projects, fines are increased to \$500 for unauthorized use of main arterial roads and \$250 for unauthorized use of local-serving roads.
2. THAT staff report back to Council on a framework to implement a system whereby a fee is charged for unauthorized use of roads and withdrawn from a security deposit that the District receives for a building permit or servicing agreement, and a potential deposit system for specific business licenses.

CARRIED

3.2. Recycling Update

File No. 11.5370.01/000.000

Mr. Steve Ono, Manager – Engineering Services, spoke regarding the Multi-Material BC (MMBC) program which will come into effect on May 19, 2014.

Ms. Jen Meilleur, Communications, Marketing & Program Coordinator, North Shore Recycling, provided an outline of the new regulations for material accepted at the curbside under MMBC and the communication plan to residents.

It was noted that in 2011 the Provincial recycling regulations were changed to make manufactures responsible for the recycling of their products and packaging material. The program is designed to encourage manufacturers to use less material in packaging their products.

Staff advised that there will be several new items added to the recycling stream; however, the new requirements call for glass to be separated from the recycling stream and be directed by residents to recycling depots. Staff are continuing to explore options for handling glass at curb side. Staff advised that the concern from MMBC is that the automated collection system, or single stream system, used by many municipalities causes glass to contaminate the other materials; it was noted that the District has a three stream system which minimizes the cross contamination.

The communication program includes an information insert mailed to residents with the utility bills and a flyer attached to blue boxes.

Staff noted that the City of Coquitlam has signed with MMBC; however, the Township of Langley and Corporation of Delta have opted out entirely. The District and several other municipalities have opted for a combined program and are taking advantage of the incentives which are being offered.

Council commented that if glass is removed from the recycling stream there is a high likelihood that it will be placed in the waste stream; concern was raised that this shift would increase the waste stream costs more than if the District continued to collect glass separately in the recycling stream.

In response to a query about the best practice for dealing with glass it is was noted that glass is viewed, almost universally, as a contaminant but the separate stream method creates a cleaner end product. It was noted that, Metro Vancouver is further ahead regarding recycling than many areas of North America.

Mr. Ono advised that staff will hold public meetings to identify the community's values regarding recycling and report back in the fall with an update on the process and suggestions for going forward.

MOVED by Councillor MURI
SECONDED by Councillor LITTLE
THAT it be recommended to Council:

THAT the April 7, 2014 report of the Communications and Community Programs Coordinator North Shore Recycling Program be received for information.

CARRIED

4. PUBLIC INPUT

Nil

5. RISE AND REPORT

MOVED by Councillor MURI
SECONDED by Councillor LITTLE
THAT the April 14, 2014 Committee of the Whole rise and report.

CARRIED
(8:27 pm)

Mayor

Municipal Clerk

REPORTS

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Capilano Main No. 9
Technical and Public Process Overview
For District of North Vancouver Weekly Update to Council

Purpose

Capilano Main No. 4, between Cleveland Dam and Edgemont Boulevard, is a 63" ID reinforced concrete cylinder pipe, built in 1936. This section of the main is primarily located on a steep unstable slope on the east side of the Capilano Valley. This side of the valley has experienced occasional slope failures, one of which caused the loss of the main for an extended period. Capilano Main No. 4 needs to be replaced in a more stable location to provide additional capacity for growth and ensure the reliability of supply to the North Shore, Vancouver, Richmond and Delta. A more resilient pipeline in a more secure location is required for this portion of the Capilano transmission system.

Pipeline Diameter and Capacity

System modeling has indicated that a 2.1m (84") diameter pipe is required for the new main.

Route Determination

Several alignments were considered for the proposed Capilano Main No. 9 including the Handsworth community east of Capilano Road, Capilano Road corridor, Capilano east valley slope and Capilano west valley slope. The Capilano Road corridor is the preferred route for Capilano Main No. 9.

Proposed Length and Connection Points

The total length of the main will be approximately 2 km. The upstream limit of the proposed main will be approximately 60 m south of the Break Head Tank (BHT) adjacent to the Capilano River Regional Park parking lot. The downstream limit of the main will be the intersection of Edgemont Boulevard and Capilano Road where it will connect to Capilano Mains No. 4 and 5. To ensure adequate system operation and control there are three proposed valve chambers. Their proposed locations and functions are noted below:

1. On the outlet from the BHT at the tie-in location of Capilano Main No. 9
2. West side of Capilano Road north of Edgemont Boulevard
3. Edgemont Boulevard intersection at Capilano Road

Funding and Schedule

The estimated cost for the design and construction of Capilano Main No. 9 (Phase 2) along Capilano Road is approximately \$30 million, including contingency. Detailed design of this proposed main is scheduled to be complete by fall 2014, with construction anticipated to begin in early 2015. The duration of construction will be dependent upon the specified hours of work which are currently under review with the District of North Vancouver. Based on normal working hours, construction is expected to take approximately one year.

Construction Impacts

It is anticipated that construction along Capilano Road between Prospect Avenue and Edgemont Boulevard will require full road closures during construction hours between the ends of the construction zone. The construction zone is anticipated to be approximately 150m in length. During non-construction hours, single-lane, one way traffic will be provided.

Traffic Management Strategy (TMS) Approach

The TMS has been developed in order to answer the following questions:

1. What type of traffic control is required for the work?
2. What is the likelihood of delays?
3. What special circumstances must be accommodated?

In order to complete the strategy, the following were completed:

1. Gather project information
2. Determine the project category as per BC Ministry of Transportation's *Traffic Management Guidelines for Work of Roadways*
3. Determine the likelihood of traffic delays
4. Determine the duration of any planned traffic stoppages or road closures
5. Perform risk assessment
6. Determine the traffic management sub-plans recommended by the basic TMS
7. State the criteria of the TMS
8. Submit the TMS for approval by Metro Vancouver (MV) and District of North Vancouver (DNV)

Municipal and Public Involvement

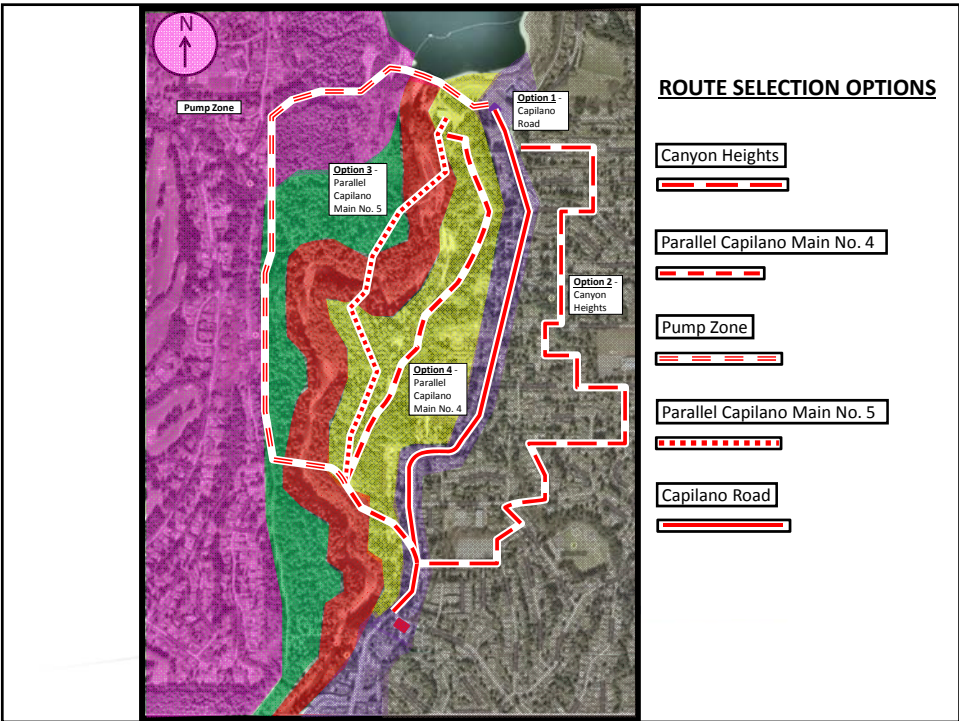
Key participants:

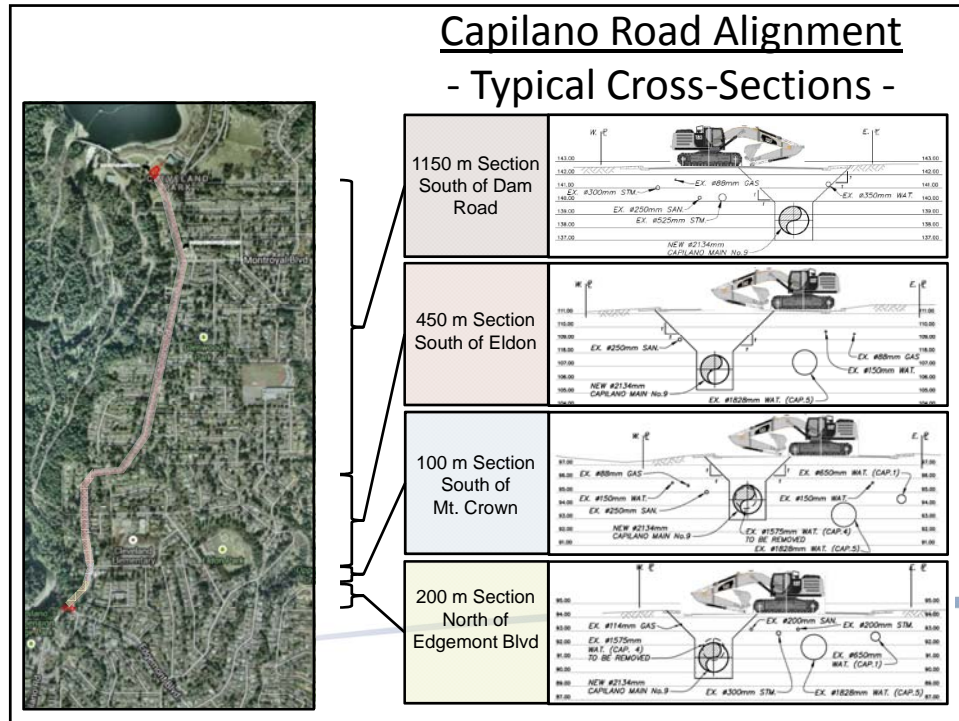
- Member municipality - DNV Staff, Mayor and Council
- Stakeholders –DNV's Community Monitoring Advisory Committee (CMAC), including Grouse Mountain Resorts and Capilano Suspension Bridge
- Public - community associations, residents and businesses

Traffic impacts are the main concern on this project. MV is currently consulting with all participants on the draft TMS, considering input and where possible incorporating feedback into the TMS prior to submitting it to DNV for final approval.

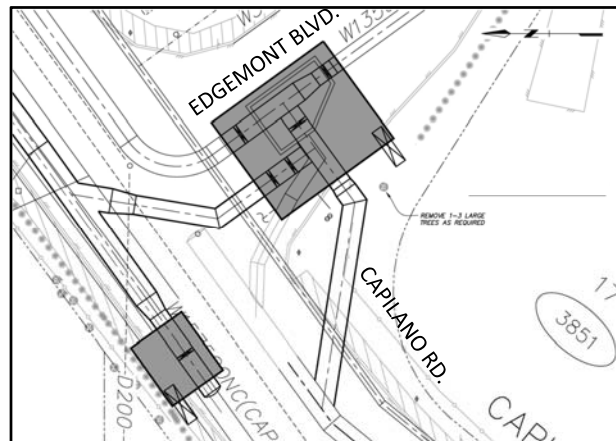
Technical and Public Process Schedule	
2014	TMS, Detailed Design, Construction Tender
Feb 2014	Presentation to CMAC – project overview
March 2014	Presentation to CMAC – focus on route selection
April 2014	Presentation to CMAC – focus on TMS
May 2014	Presentation to CMAC – focus on TMS, construction impacts and public process
June 2014	Public meeting for input on draft TMS
June 2014	Submit final draft TMS to DNV for approval
2014 - 2016	Ongoing CMAC meetings for updates and input
2014 - 2016	Ongoing meetings with DNV
2014 - 2016	Ongoing public involvement and communications
Early 2015 – Early 2016	Construction
Early 2015 and Mid 2015	Open houses following the start of construction

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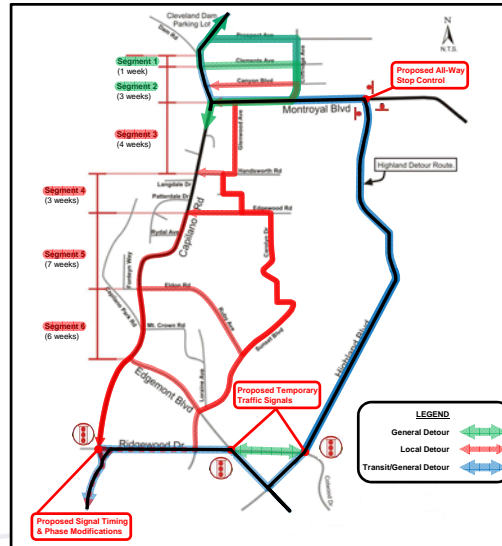




Edgemont Valve Chambers



- Detour Route Segments -



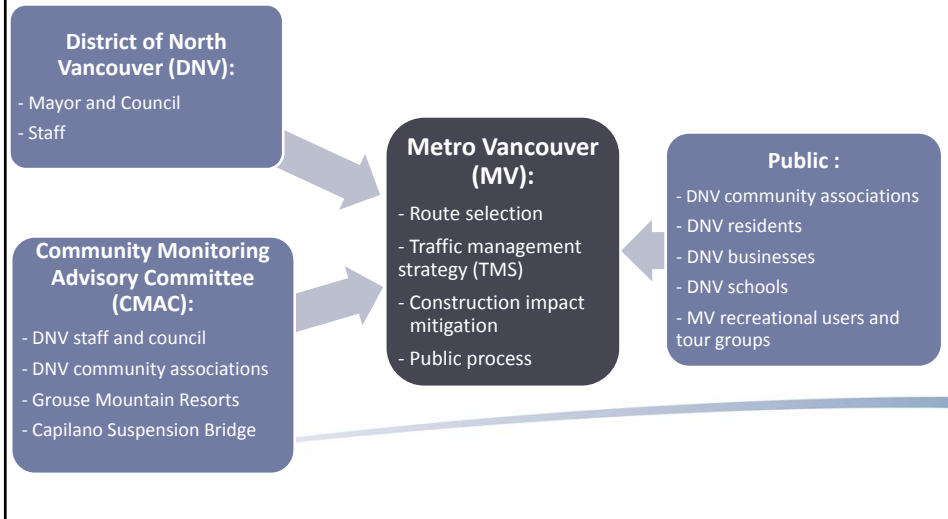
*Hwy #1 traffic will be directed to Westview for recreational access to areas north of Edgemont Boulevard, by-passing Edgemont Village.

- Construction Hours -

The public can be given the opportunity to provide input on construction and non-construction hours at future public meetings.

Construction Hour Options	2015				2016				2017			
	3 mo	6 mo	9 mo	12 mo	3 mo	6 mo	9 mo	12 mo	3 mo	6 mo	9 mo	12 mo
Normal Construction Hours (7am – 8pm)												
Partially Restricted Construction Hours (7am – 5pm)												
Fully Restricted Construction Hours (9am – 3pm)												
Night Construction Hours (7pm to 7am)												

Capilano Main No. 9 – Phase 2 Target Audiences



Capilano Main No. 9 – Phase 2 Community Relations

Public Meeting & Workshop – June 12, 2014

- Co-sponsored with Edgemont and Upper Capilano Community Association
- Input on draft TMS, construction impact mitigation and public process

Next Steps

- Ongoing communications and engagement with DNV, CMAC and the public
- A Community Relations Strategy will be developed for each of the public target audiences

AGENDA INFORMATION	
<input checked="" type="checkbox"/> Committee of the Whole	Date: May 12, 2014
<input type="checkbox"/> Finance & Audit	Date: _____
<input type="checkbox"/> Advisory Oversight	Date: _____
<input type="checkbox"/> Other:	Date: _____



The District of North Vancouver REPORT TO COMMITTEE

May 1, 2014

File: 16.8620.01/013.000

AUTHOR: Julie Pavey, Section Manager Environmental Sustainability

SUBJECT: Moving Forward on Electric Vehicle Charging Stations in the District of North Vancouver

RECOMMENDATION:

THAT the Committee of Whole recommends Council:

Direct staff to implement electric vehicle (EV) ready guidelines outlined in the staff report "Moving Forward on Electric Vehicle Charging Stations in the District of North Vancouver" dated May 1, 2014, specifically:

- a) A minimum of 20% EV-ready parking stalls (with the appropriate mix of Level 1 and Level 2 charging stations and encouragement of pre-ducting for future access to 100% Level 1 charging stations) in new multi-family developments through the rezoning process;
- b) The appropriate provision for EV-ready Level 2 charging stations in new commercial and institutional developments focusing on Town and Village Centres; and
- c) Report back to Council in 12-18 months on progress to implement EV-ready charging infrastructure and recommended bylaw changes to effectively implement EV-ready charging infrastructure.

REASON FOR REPORT:

This report is provided as background for the May 12th, 2014 Committee of the Whole meeting to update Council on EVs and EV charging infrastructure in the region and District and to seek Council's feedback on the implementation guidelines to provide EV-ready infrastructure in multifamily, commercial and institutional developments.

SUMMARY:

The District of North Vancouver is actively involved in the long-term transition to increased infrastructure to support EV charging options for residents and visitors to our community. EVs support the District's goal of developing an energy efficient community that reduces its

greenhouse gas (GHG) emissions and dependency on non-renewable fuels and the District has been involved in a number of projects to date in support of EV charging infrastructure.

BACKGROUND:

British Columbia (BC) is anticipated to have a high rate of EV ownership. There are a number of factors that are contributing to EV growth including:

- Technological improvements and increased availability of EVs;
- Regulatory pressures in response to concerns for transportation-related GHGs and their climate change impacts;
- Increasing costs of fossil fuels; and
- EVs contribute to improved air quality in cities as vehicle emissions are a source of air pollutants.

The projections for an increase in EVs have been supported by a recent increase in the market share of new car sales of EVs. EV car sales in Canada topped 3,100 vehicles in 2013, which was a 58% increase over 2012. As of December 2013, there were over 400,000 plug-in EVs in the world, led by the United States.

There are a number of factors that are expected to encourage a high rate of EV use in the District including:

- Large price differential between gas and electricity has reduced the operating costs of EVs over their projected life cycle;
- Clean electricity reduces vehicle GHGs significantly (97.5%);
- Driving patterns support EV use with the majority of all car trips less than 10 km, short distance trips are ideal for EVs;
- High rate of consumer acceptance of green technology and alternative vehicle uptakes (i.e. hybrids);
- OCP policy provides for compact town centres with alternate transportation options such as pedestrian, bike, transit and EV use and support the inclusion of EV charging infrastructure through new development; and
- The Province has been actively supporting the uptake of EVs through consumer rebates on vehicles and chargers and through grants to increase the availability of public charging infrastructure.

Charging Requirements

BC has positioned itself to be a leader in the rapid adoption of EVs. BC Hydro and other partners have developed EV charging infrastructure deployment guidelines to ensure the building of a successful EV infrastructure in BC.

The EV battery is located on-board the vehicle. Power is delivered to the battery through the EV coupler that allows for the electrical charging. There are three charging levels that are included in the Provincial EV Guidelines:

- **Level 1 Charging Station (120 volt, 20 amp)** This level uses the standard voltage in a 3 prong electrical outlet found in residential and commercial buildings and draws approximately 1.4kW of power. **A full charge will take 12-20 hours.**

- **Level 2 Charging Station (240 volt, 40 amp)** This level is considered the primary and preferred method for both private and public facilities and draws approximately 7.7kW of power. This allows a much faster battery charge but has additional requirements for grounding and shut-off mechanisms and cannot be used for other purposes. **A full charge will take 4-6 hours.**
- **Level 3 “DC Fast Charging” Station (450 volt DC, 200 amp)** This level is utility grade and uses specialized equipment for “Fast Charging” in commercial and public applications. It is intended to perform rapid charging similar to fuelling a car at a gas station (provides a 50% recharge in 10-15 minutes). **A full charge will take less than 30 minutes.**

Regional and District Support for infrastructure

There has been a considerable amount of work on EV infrastructure in BC in recent years. The Province provided a \$2.74-million Community Charging Infrastructure (CCI) Fund in 2012-2013 that contributed to the development of a province-wide network of 570 EV charging stations in locations accessible to the public or fleets across B.C.

The District of North Vancouver has been involved with a number of projects including:

- **Regional Planning for EV infrastructure (2012).** The District participated in a CCI funded Metro Vancouver coordinated project to undertake regional planning to support the increase the availability of public EV charging stations throughout the region. The District hosted one of the three regional workshops which provided information on EVs and the CCI program.
- **Installation of publicly available EV charging infrastructure (2011-2014).** The District approved a Level 2 public-use EV charging station at Angel Restoration in 2011 within a District right of way which was the first of its kind in Canada. The District installed a Level 2 EV charging station at District Hall through the CCI grant program and is currently working with BC Hydro to support a Level 3 DCFC Fast Charging Station within the District.
- **Understanding EV requirements for existing multi-family buildings (2012-2013).** In support of a Community Energy Association (CEA) project to look at EV infrastructure for existing multi-family buildings, the District hosted a focus-group meeting with strata properties on the North Shore to look at how residents of existing buildings can access EV charging infrastructure.
- **Understanding EV requirements for new multifamily, commercial and institutional developments (2012-2014)** District Staff have recently been including the consideration of EV charging facilities in new multi-family developments as part of the rezoning process with a goal of ensuring 20% of parking spaces are EV-ready. In addition to the Level 2 charging station at District Hall, the District has also included Level 2 charging stations in the new William Griffin Centre redevelopment.

- **Education and Outreach (2012-2014).** The District has been providing education and outreach on EVs through information on the District's website and the installation of directional signage. There is a regional public awareness campaign for EVs to raise awareness and promote the update of EVs planned for launch in 2014.
- **Fleet Purchases (2014).** Municipalities are among the early adopters of EVs using their fleet purchases and high visibility of fleet vehicles to maximize public exposure to EVs. The District is currently working on the purchase of EVs for the municipal fleet.

EXISTING POLICY:

The Official Community Plan (OCP) was adopted by Council in 2011 and includes:

- A goal to develop an energy-efficient community that reduces its greenhouse gas emissions and dependency on non-renewable fuels while adapting to climate change;
- A policy to monitor the development of alternative energy and low emissions vehicles and devise supportive policies for establishing community charging stations and plug-in facilities as necessary (OCP, Section 5.5 The Road Network and Goods Movement, Policy 8);
- A policy to encourage new and innovative clean fuel alternatives for vehicles and supportive infrastructure such as electric charging stations, hydrogen highway and others (OCP, Section 9.5 Air Quality, Policy 3); and
- A target of 33% reduction in community GHG emissions by 2030.

The Town and Village Centre Implementation Plans are guided by the OCP policies and include specific strategies addressing the consideration of EV-ready infrastructure and priority spaces for EV, and the installation of EV-ready charging infrastructure in multi-family, civic and commercial uses and buildings.

The Transportation Plan also provides direction to monitor the development of alternative energy vehicles and provide supportive infrastructure as necessary. (Transportation Plan, Policy Direction #4).

ANALYSIS:

The provincial 'Green Communities' legislation in 2008 (referenced as Bill 27) amended the *Local Government Act* and *Community Charter* to require municipalities to establish GHG reduction targets, supporting policies and actions in their OCP. EVs play a role in reducing transportation related GHG emissions as our high reliance on the automobile (85% of commuter trips, 79% of all trips) accounts for about 43 percent of the District's GHG emissions that contribute to climate change.

For a successful transition to EVs in the District, there needs to be sufficient EV charging infrastructure to reduce "range anxiety" for potential owners. Currently the majority of EV charging infrastructure is located in public areas, commercial spaces and single family dwellings. There is a need to ensure this infrastructure is expanded into new multi-family and mixed-use developments in the Town Centres as the OCP targets 75-90% of new residential units to be located within the Network of Centres.

Staff are actively working to ensure that infrastructure is integrated into new developments and have recently used an interim goal of 20% EV-ready parking spaces in the rezoning process. Staff have researched requirements in other municipalities in the region including:

- City of Vancouver. The City of Vancouver have special bylaw making authority under the Vancouver Charter. In 2011, Vancouver passed a bylaw that all new multi-family building are required to have 20% EV-ready parking. Additionally, all new single family homes are required to have pre-wiring in their garage.
- City of Burnaby. The City of Burnaby uses the rezoning process and parking relaxation to require 10% EV-ready parking (blend of Level 1 and Level 2).
- City of Richmond. In 2013, Richmond adopted an update of their OCP which requires all new multi-family projects to include a minimum of 20% EV-ready parking stalls and an additional 25% pre-ducted for future wiring.
- District of West Vancouver. West Vancouver has an adopted policy that "all new Multi Family development provide an appropriate number of dedicated EV plug-in outlets, ideally one for each unit, and new commercial developments over 1500m² in floor area provide for an expansion of the public EV charging network."
- City of North Vancouver. The City of North Vancouver has required EV-ready Level 2 charging stations on larger developments and is currently reviewing their EV-ready requirements.

Staff recommend that the District should pursue:

- A minimum of 20% EV-ready parking stalls (with the appropriate mix of Level 1 and Level 2 charging stations and encouragement of pre-ducting for future access to 100% Level 1 charging stations) in new multi-family developments through the rezoning process; and
- The appropriate provision for EV-ready Level 2 charging stations in new commercial and institutional developments focusing on Town and Village Centres.

In addition, staff will continue to encourage EV ready facilities in multi-family residential and mixed-use development permit applications.

Staff would like to formalize this as a District guideline to be used over the next 12-18 months and monitor EV market share in new car sales following the end of the provincial rebate programs. Staff will work with development applicants to encourage additional pre-ducting for EV infrastructure at the time of development to facilitate future EV access and to gain a better understanding of the costs.

Based on the information gathered during the next 12-18 months, staff anticipate providing a recommendation for Council's consideration to include EV infrastructure requirements in the most effective development mechanism such as the Energy and Water Conservation and Greenhouse Gas Emission Reduction Development Permit Area (DPA) or the Zoning Bylaw.

Over time, a vision of 100% access to Level 1 EV charging infrastructure and an appropriate number of Level 2 charging stations in strategic locations (i.e. Town and Village Centres) is desired which is consistent with regional directions and those of many municipalities.

Timing/Approval Process:

Staff propose a phased approach to ensure that adequate infrastructure is included in new developments.

1. Staff have proposed guidelines for EV infrastructure to be used in the development review process.
2. Staff will monitor the implementation and report back to Council in 12-18 months on the recommended bylaw changes to effectively implement EV-ready charging infrastructure in all new multi-family residential, institutional, commercial and potentially industrial developments.

Concurrence:

This information has been reviewed by inter-departmental staff teams and revised accordingly.

Financial Impacts:

The District has partnered in the recent work to support EV technology through partnerships with the Province, Metro Vancouver region and other member municipalities. The financial costs have been minimal to date with the availability of funding from the Province. The Provincial funding including the Clean Energy Vehicle program which offered rebates on EVs and planning and infrastructure grants offered through the CCI program. Unfortunately, the Provincial programs ended on March 31st, 2014.

Liability/Risk:

The requirements for EV charging infrastructure are consistent with the OCP, are required to follow electrical code and do not expose the District to any particular liability or risk.

Social Policy Implications:

While many of the benefits of EVs are environmental, EVs also provide:

- Health benefits
- Green tourism economic opportunities for local businesses

The CEA's EV Primer estimated that, by 2020, EVs in Metro Vancouver could save almost \$15 million annually due to personal and commercial fuel cost saving and health benefits arising from reducing air emissions.

Environmental Impact:

A switch to EVs will reduce GHG emissions and eliminate tailpipe emissions of harmful air pollutants. Over a 12 year lifespan, an EV that travels 20,000 km annually will save:

- 46.8 tonnes of GHGs;
- 1.32 kilograms of common air contaminants (CACs); and
- \$20,000 in fuel costs.

Public Input:

Community engagement took place during the OCP review process which included policies and direction to support EV charging infrastructure. There has been additional consultation through current development applications and the recommendations reflect feedback from staff and stakeholders. Staff will continue to engage with the development community and the public on EVs and EV charging facilities in the District.

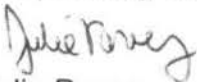
Conclusion:

This report provides an update to Council on EVs and EV charging infrastructure in the region and District and to seek Council's feedback on the guidelines to provide EV-ready infrastructure in multifamily, commercial and institutional developments.

Options:

1. THAT the Committee of Whole recommends Council:
Direct staff to implement electric vehicle (EV) ready guidelines outlined in the staff report "Moving Forward on Electric Vehicles in the District of North Vancouver" dated May 2, 2014, specifically:
 - a) A minimum of 20% EV-ready parking stalls (with the appropriate mix of Level 1 and Level 2 charging stations and encouragement of pre-ducting for future access to 100% Level 1 charging stations) in new multi-family developments through the rezoning process;
 - b) The appropriate provision for EV-ready Level 2 charging stations in new commercial and institutional developments focusing on Town and Village Centres; and
 - c) Report back to Council in 12-18 months on progress to implement EV-ready charging infrastructure and recommended bylaw changes to effectively implement EV-ready charging infrastructure.
2. Alternatively, the Committee of the Whole may direct staff on an alternate course of action.

Respectfully submitted,



Julie Pavey

Section Manager, Environmental Sustainability

REVIEWED WITH:

<input type="checkbox"/> Sustainable Community Dev.	_____
<input type="checkbox"/> Development Services	_____
<input type="checkbox"/> Utilities	_____
<input type="checkbox"/> Engineering Operations	_____
<input type="checkbox"/> Parks & Environment	_____
<input type="checkbox"/> Economic Development	_____
<input type="checkbox"/> Human resources	_____

<input type="checkbox"/> Clerk's Office	_____
<input type="checkbox"/> Communications	_____
<input type="checkbox"/> Finance	_____
<input type="checkbox"/> Fire Services	_____
<input type="checkbox"/> ITS	_____
<input type="checkbox"/> Solicitor	_____
<input type="checkbox"/> GIS	_____

External Agencies:

<input type="checkbox"/> Library Board	_____
<input type="checkbox"/> NS Health	_____
<input type="checkbox"/> RCMP	_____
<input type="checkbox"/> Recreation Com.	_____
<input type="checkbox"/> Museum & Arch.	_____
<input type="checkbox"/> Other:	_____

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