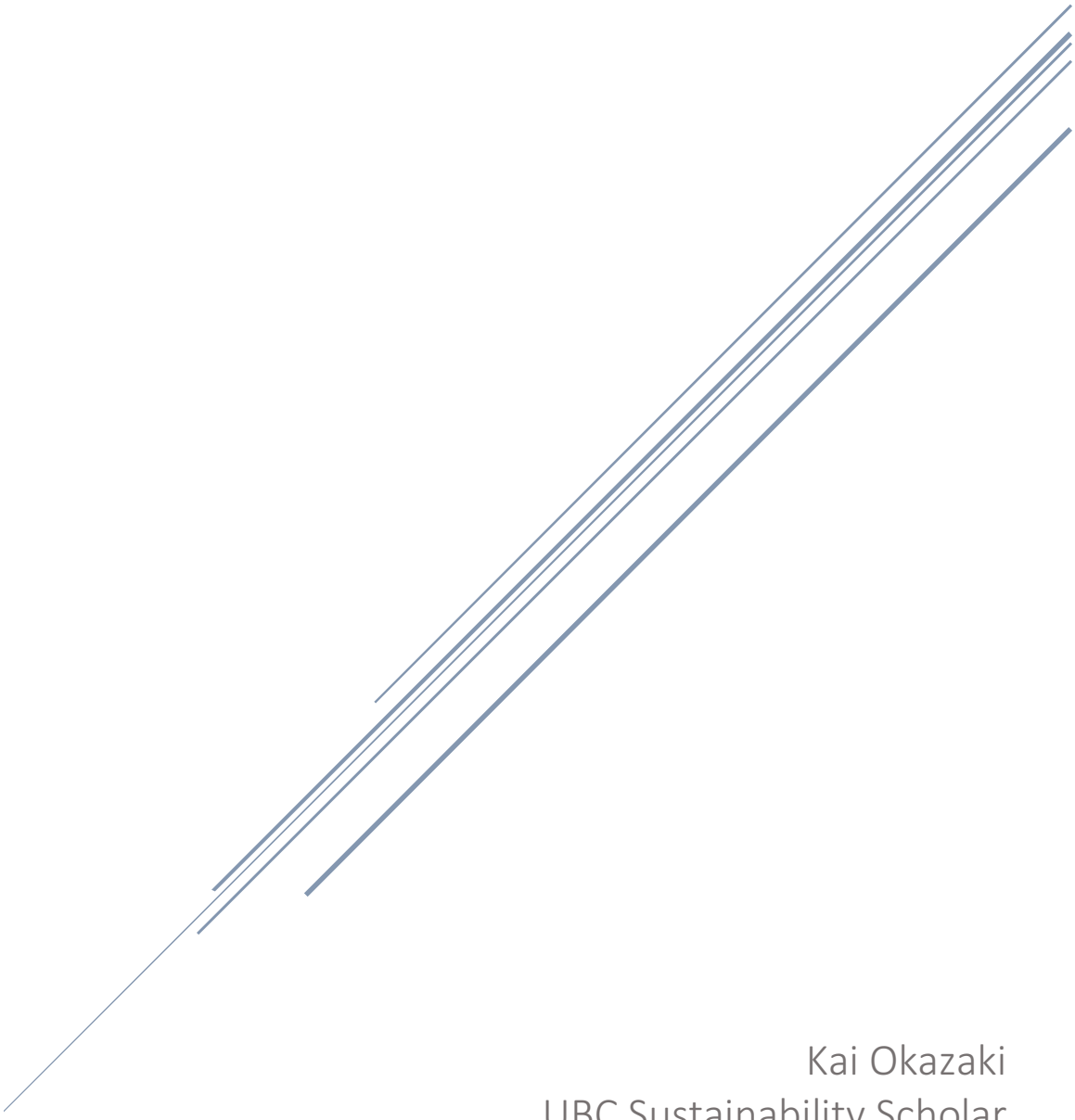
EVOLVING THE SUSTAINABILITY REPORT CARD

City of New Westminster



Kai Okazaki
UBC Sustainability Scholar
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Evolving the Sustainability Report Card

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1. Executive Summary

Municipalities across the Metro Vancouver region have expressed commitments to the importance of sustainability within broad policy frameworks such as Official Community Plans, Local Area Plans, and economic and environmental plans. Many of these local governments have also developed specific policies and tools to facilitate voluntary or mandatory inclusion of specific sustainability measures or standards into new development. In 2011, a pilot development review tool called the Sustainability Report Card (report card) was introduced to increase the uptake of environmental, social / cultural, and economic factors in larger projects requiring a development permit or rezoning application, with the intent to be utilized during the development application stage as a review mechanism.

Since inception, the report card has not been subsequently updated by the City of New Westminster. As such, the report card has not been utilized to its full potential as a tool to bring greater rigour and consideration of sustainability in development applications, and assist developers and planners at the application and pre-application stages.

A number of key program and policy actions have been undertaken in support of environmental, social / cultural and economic sustainability at New Westminster. Within the environmental area alone, major progress has been made in implementing numerous actions identified in New Westminster's Community Energy & Emissions Plan, and well as the Envision 2032 Sustainability Framework. In addition, New Westminster is in the final stages of updating its Official Community Plan, so consideration of the purpose and function of the report card is very timely in 2017. The City is also an active stakeholder participant in the provincial Step Code technical and advisory committees, and will be developing an energy Step Code overlay to support land uses in the new Official Community Plan in 2017. As such, the new report card will support utilization of the new Energy Step Code for BC.

With the updated version, this will include feedback, input, and comments from interdepartmental staff, developers, and other involved members to help guide the direction of the new report card. There were a range of options for evolving the report card in consideration of staff and industry feedback. This process of updating the report card was to rethink and reformat the tool itself. Approaches included updates to interpret the scores as sustainability benchmarks for development applications and create meaningful dialogue between the applicant and planner. Another approach is to transition the report card to be more of a guideline document, outlining the City's expectations on new development. Rather than providing a checklist, these guidelines would include design- and site-based considerations that would serve as a key motivator for the City staff using and interacting with the tool and with applicants. An informed decision will be made collaboratively at the staff workshop in October, 2017.

2. Origin/Purpose

The current report card was approved by City Council in April 2011, replacing the previous Smart Growth Development Checklist (2004-2011). The tool is a voluntary, checklist-based 'report card' that applies to all development permit rezoning, special development permit and major development variance permit applications. There are five different report card versions that respond to different types of land uses: (1) Residential; (2) Commercial; (3) Mixed-Use; (4) Industrial; and, (5) Institutional. The checklist has 'quick win' and lower cost environmental items that are required, as well as voluntary sustainability attributes that must be determined early in the development process. Applicants must address score card elements within each of three areas: (1) Environmental; (2) Social & Cultural; and, (3) Economic. More scoring weight is given to energy, greenspace, heritage, affordable housing and job creation within the score card.

With support from BC Hydro and City of New Westminster, a UBC Sustainability Scholar was hired in 2017 to undertake background research and review of the current report card, interview key staff as well as design and development professionals, and update the sustainability tool accordingly for development applications.

This report provides City Council and staff with an updated version of New Westminster's report card as well as a synopsis of feedback from 23 interview conducted during the scholar term. The updated report would be in alignment to various sustainability strategies and plans, including the Official Community Plan (OCP), Envision 2032 Sustainability Framework, and the Community Energy and Emissions Plan (CEEP). In addition, the newly revised report card will be a tool for staff and applicants to engage and encourage responsible practices using a social /cultural, economic, and environmental lens.

2.1 Research Question

The project generated the following questions to conduct research and analysis:

> Q1: What is the current use or function of the report card?
> Q2: What value does the report card hold today?
> Q3: How can we improve the integration and use of the report card during the development application review process?

These research questions framed the scope, including the goals and objectives, for what the UBC Scholar was able to produce as deliverables for New Westminster.

2.2 Deliverables

The Sustainability Scholar will provide the following final products. These products can offer options for City staff to decide on an option that can be further explored with the next scope of the project:

(1) Sustainability Report Card Report
    a. Data: New Westminster population and building data analysis
    b. Review: sustainability tools with development applications in Metro Vancouver
    c. Research: Interview and qualitative data analysis
(2) Flowchart of Development Application with Sustainability Report Card indications
(3) Updated Guide and Scorecard Items with rubric
(4) PowerPoint Presentation of key findings with the Sustainability Report Card
(5) Report update for City Council

3. Background

The report card adhered to the principles and objectives, that:

- Assess how an application fulfils the sustainability goals of the City's Official Community Plan and other policies
- Address each of the three major areas of sustainability (Environment, Social & Cultural, and Economic) and;
- Be fair, easy-to-use and flexible, and not add time to the approval process

Currently, there are two parts to the report card: (1) *A Guide for Applicants*; and, (2) the *Sustainability Report Card*, separated by land use types. The intent is for planners to use this report card input and scoring with the applicant to encourage sustainability practices as the development application evolves throughout the process. As well, the report card items were intended to be updated as new programs and plans became adopted by the City (see *Appendix A* for flowchart of a development application). In practice, the report card has not been used to its' full potential due to:

- The report card items becoming outdated over time
- The subjective scoring between the applicant and staff and;
- No system in place for updated documentation, implementation of checklist items, and monitoring over the development application

These challenges indicated above formed the development of my research questions for this report.

3.1 Importance of Sustainability for New Westminster

3.1.1 Population Growth

New Westminster is continually growing in population, increasing from 58,549 in 2006 to 70,996 in 2016 (Table 1). As well, Metro Vancouver is growing in population from 2.1 million in

2006 to 2.5 million in 2016. Within the last 10 years, Metro Vancouver region has seen a percent population change of 16.4% and 21.3% in New Westminster.

Table 1: Population for New West and Metro Vancouver (Source: Statistics Canada, 2006, 2011, 2016 Census)

	2006	2011	2016	% Change (2006-2016)
New Westminster	58,549	65,976	70,996	21.3%
Metro Vancouver	2,116,581	2,313,328	2,463,431	16.4%

By examining the rest of the Metro Vancouver municipalities and their percent change in population, New Westminster was the 6th largest in percent population growth of 12.7% (7427 people) in the 2006 – 2011 Census (Figure 1), and 9th largest with 7.6% (5020 people) in the 2011-2016 Census (Figure 2). This information identifies that the population of New Westminster has increased more during 2006-2011 period than the 2011-2016 period but is still increasing consistently over the last 10 years of data. Metro Vancouver's Regional Growth Strategy (RGS) that was adopted in 2011 has identified goals that cities will need to achieve, including to support development as population continues to increase in New Westminster, and across the region.

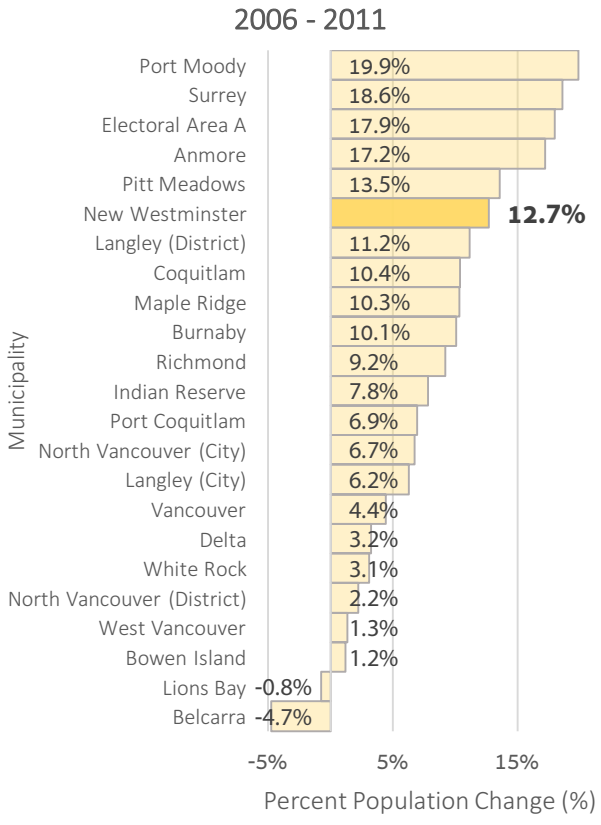

Figure 1: Percent Population Change, 2006-2011 (Source: Statistics Canada 2011 and 2016 Census)

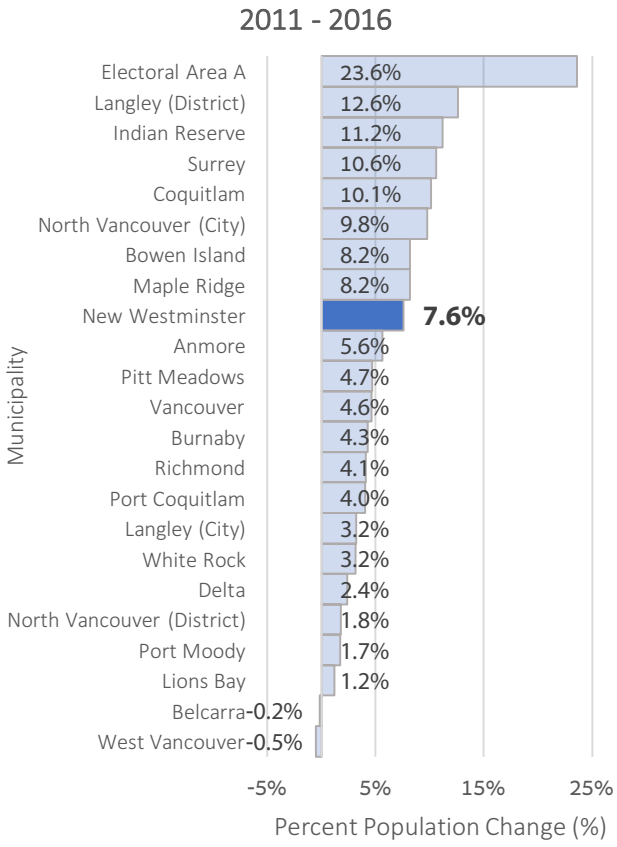

Figure 2 : Percent Population Change, 2011-2016 (Source: Statistics Canada 2011 and 2016 Census)

3.1.2 Greenhouse Gas Emissions – Building and Transportation

New and existing buildings are a key policy and program focus in New Westminster, and both City staff and Council recognize the importance of integrating sustainability principles and objectives in the built environment. In New Westminster, the building and transportation sectors are the largest consumers of energy and contributors to greenhouse gases (GHG). From the Community Energy and Emissions Plan (CEEP), vehicles account for 55% of GHG emissions, buildings account for 41% of the GHG emissions, and solid waste accounts for 4% (Figure 3). There are specific objectives, targets and actions set in New Westminster's CEEP for improved building energy efficiency and GHG emission reduction to mitigate climate change. With the final adoption of the 2041 Official Community Plan in September 2017, policies and actions for community energy and emissions identify areas to focus reducing GHG emissions through one of their goals:

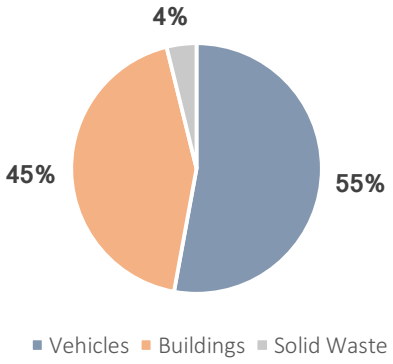

Figure 3: City-wide GHG Inventory (Adapted from: Community Energy and Emissions Plan, 2011)

"*New Westminster is an energy-efficient and low-carbon community that takes action to reduce greenhouse gas emissions and is resilient to the impacts of climate change*."

(Section 4: Energy, Emissions & Climate Change, Official Community Plan 2041, p. 68)

3.1.3 Building Permits Issued - Housing Units and Types

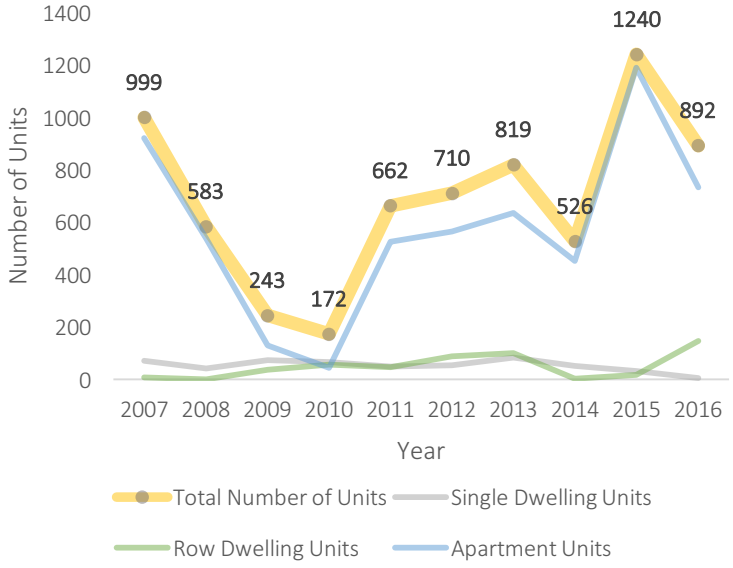

Figure 4: Total number and types of units from residential building permits, 2007-2016
(Source: BC Statistics and Statistics Canada, 2017)

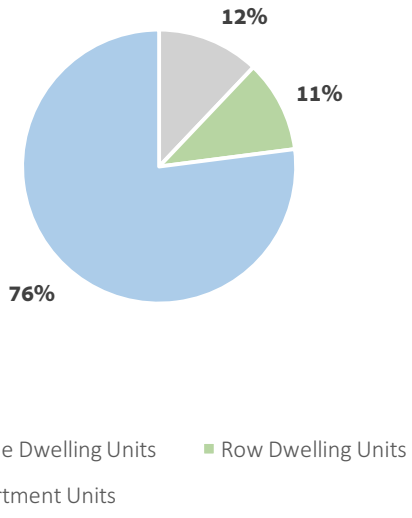

Figure 5: Average percentage of unit types from residential building permits, 2007-2016
(Source: BC Statistics and Statistics Canada, 2017)

The trends in the number of units are shown from 2007-2016 for residential building permits issued (Figure 4). Throughout the period, apartments have the highest number of units issued for building permits over other unit types (see Appendix B for complete table).

The apartments averaged at 76% of the units being constructed from the 2007-2016 period, while single dwelling units averaged at 12% and row dwelling at 11% (Figure 5). Overall, apartment units dominate in terms of numbers of new dwelling units in New Westminster.

3.1.4 Building Permit Issued - Land Use Types

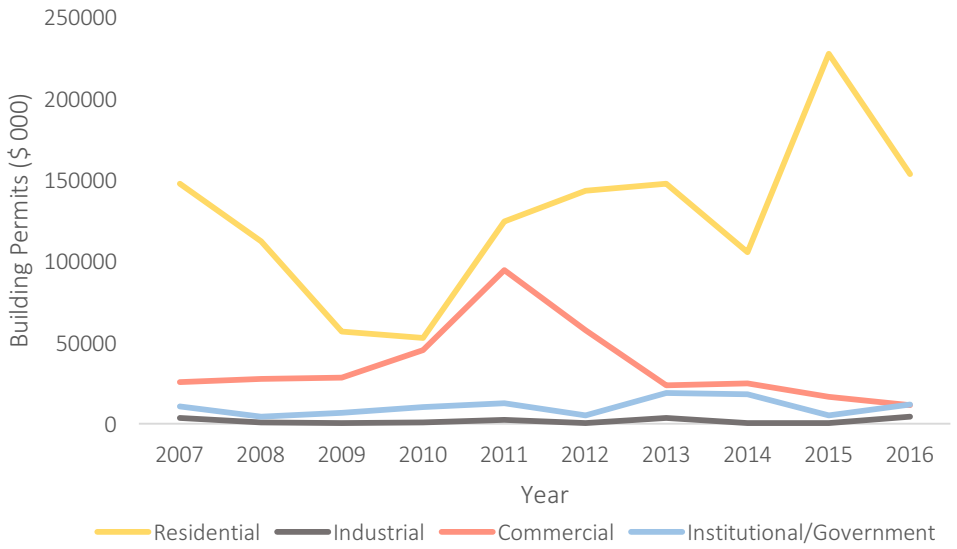

Figure 6: Amount of building permits issued by land use types, 2007-2016 (Source: BC Statistics and Statistics Canada, 2017)

Based on land use types, the trend shows that residential has the highest value ($) of building permits issued in New Westminster (Figure 6). This identifies that the residential land use has been the most active development sector in comparison to other land use types (acknowledging that mixed use was not included, as the data was not available for comparison). Over the time period, residential has an average of 71% of total amount of building permits issued, following commercial with 22%, institutional/government with 6%, and lastly industrial with 1% (Figure 7).

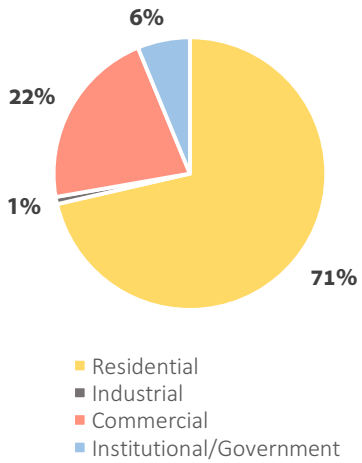

Figure 7: Average amount of building permits issued based on land use types, 2007-2016
(Source: BC Statistics and Statistics Canada, 2017)

4. Sustainability Scorecards, Checklists and Guidelines in Metro Vancouver

Out of the 23 municipalities within Metro Vancouver, approximately 50% (i.e. 11 municipalities) utilize a checklist or scorecard-based tool to encourage sustainable development (Table 2). These include scorecards, checklists, guidelines and indexes, with qualitative and quantitative components associated for each form. Of the tools surveyed, four include only qualitative measures, one included only quantitative measures, four include both qualitative and quantitative measures, and two local governments have tools that utilize neither qualitative or quantitative measures, but referred as a guideline instead.

Table 2: List of municipalities and their sustainable development tool

Member	Sustainability tool	When Used	Qualitative/ Quantitative	Specification
Bowen Island	Green Design Building Checklist	DP, Rezoning	N/N	• Encourages green design but functions as a reference guide (bullet points, pg. 31) • List of items categorized by subject area similar to New West (general descriptions and some prescriptive measures)
Delta	Green Growth Index	DP, Rezoning	Y/Y	• Index out of 100 points; not defined in how some are scored (no rubric identified) • Some sections provided external links for references • Focus is primarily on environmental and social sustainability; economic requests to have a series of questions answered on a separate page • Have options to select level of commitment and sign
Langley (City)	Sustainable Community Development Checklist	DP, Rezoning, and Subdivision	Y/N	• Checklist with no pass/fail standards set • Some items are under bylaws and some are optional • Similar launch time of program with New West (2011)
New Westminster	Sustainability Report Card	DP, Rezoning, Special Development Permit, Major Development Variance Permit	Y/Y	• Provides separate forms based on land use types • Items are scored and weighted by importance • Allows comments for both applicant and City staff on each report card item • Report card items range from generic to prescriptive measures of sustainability

Member	Sustainability tool	When Used	Qualitative/ Quantitative	Specification
North Vancouver (City)	Sustainable Development Guidelines	DP, Rezoning	Y/N	• Guideline with yes/no with comments for each checklist item • Refers to active design guideline for guideline items • Items are similar to New West; general descriptions with some prescriptive measures
Pitt Meadows	Sustainability Checklist	DP, Rezoning	Y/N	• Similar version to New West's scorecard items; checklist divided by land use types • Includes score system with no rubric or guidance • Provides summary of scores with achieved, missed and non-applicable section to write
Port Coquitlam	Sustainability Checklist	DP, Rezoning	N/Y	• Scoring system with rubric "None (0), Poor (1-2), Good (3-4), Excellent (5) x weight of item • Applicants asked to fill application out and provide supplementary information on statistical data of calculations and the LEED checklist attached with checklist; • Only one to factor weighting with rubric for the sustainability criteria
Port Moody	Sustainability Checklist	DP, Rezoning	Y/Y	• Checklist intended as a project guide (with ideal development scenarios) • Yes/No/NA with comments; each item is a numerical weighting (but doesn't tell you how to rate for staff) • Divided into 4 pillars of sustainability; mainly general description with some prescriptive measures • Includes glossary to define what terms mean
Surrey	Sustainable Development Checklist	OCP Amendment, Rezoning, DP, NCP Amendment, Subdivision (>3 lots)	Y/N	• Descriptive qualitative checklist with yes/no/not permitted options • Quantitative measures requested with specific checklist items • Includes glossary to define what terms mean

Member	Sustainability tool	When Used	Qualitative /Quantitative	Specification
UBC	Residential Environmental Assessment Program	DP	Y/Y	• Living Lab structure for testing and research • Prescriptive measurements and scoring system based on LEED V4 checklist (REAP performance levels of gold, gold plus, platinum, and platinum plus) • Divided by mandatory and optional credit scores • By building permit phase, REAP documentation is signed off by professional that will meet requirements with plans (for mandatory credit components)
Vancouver	Sustainable Development Guidelines	DP, Rezoning	N/N	• For development, it requests the existing tools to use sustainable development requirements • If rezoning, there is a rezoning policy (Green Buildings Policy for Rezoning) with two choices: (a) achieving a near zero emissions building (Passive House standard); or (b) achieving a low emission standard and LEED™ GOLD requirement. • No checklist or scorecard style, it is required by applicants

5. Existing Policy Practices in New Westminster

Since 2011, a number of key programs have been undertaken in support of sustainability practices in New Westminster. These include:

- Envision 2032 Sustainability Framework (2013)
- 2041 Official Community Plan (September 2017)

The **Envision 2032 Sustainability Framework** (2013) consists of four pillars: (1) Social, (2) Cultural, (3) Environmental, and (4) Economic. The SRC plans to continue utilizing this framework as the City's Integrated Community Sustainability Plan (ICSP).

The **2041 Official Community Plan** (OCP) (2017) is a long-range planning document that provides direction and ensures that the city remains one of the most livable communities in Metro Vancouver. As the final adoption will proceed in September / October 2017, the report card will be in alignment to the OCP's vision, goals, policies, and actions.

As well, there are additional plans, strategies, policy actions and implementation frameworks that will be supporting sustainability practices (alphabetical order):

- B.C. Energy Step Code (Implementation framework / timing, 2017)
- Community Energy & Emissions Plan (2011, and a CEEP update planned for 2018)
- Environmental Strategy and Action Plan (In process, 2018)
- Family Friendly Housing Policy (2016)
- Housing Affordability Strategy (2010)
- Integrated Stormwater Management Plan (In process, 2017)
- Master Transportation Plan (2015)
- Secured Market Rental Housing Policy (2013)
- Urban Forestry Management Strategy (2016)

The **B.C. Energy Step Code (2017)** is a voluntary provincial standard that provides a consistent, incremental approach to achieving more energy efficient buildings that go beyond the base BC Building Code requirements. As the City of New Westminster develops specific building performance requirements tied the Step Code, and brings this into the regular processes of building regulation and compliance verification within the City, the report card will also need to support and be in alignment to these new requirements.

The **Community Energy and Emissions Plan** (CEEP) (2011) identifies the importance of GHG reduction and energy efficiency for the City. As a result, the report card will integrate with policies and program initiatives that have been launched in New Westminster since formal adoption of the CEEP in 2011.

The **Environmental Strategy and Action Plan** (ESAP) (2017) is currently under development, with the express goal of seating clear direction for the City in areas of environmental protection, enhancement, stewardship, and resilience. The plan will serve as a tool to help implement environmental initiatives under the Envision 2032 framework. As the plan becomes developed, the report card will work towards aligning to ESAP under the Environmental section of the report card.

The **Family Friendly Housing Policy** (2016) is a policy and bylaw that was the first of any kind in British Columbia to require a minimum percentage of three-bedroom units in new multi-family projects. With this mandate, the report card will address housing policy for three-bedroom units in multi-family projects under 'housing'.

The **Affordable Housing Strategy** (2010) enables the City to develop policies and tools that will promote housing affordability to meet the full range of incomes and needs in the City. The report card will be address the strategy with report card items under 'housing'.

The **Integrated Stormwater Management Plan** (ISMP) (2017) provides a long-term Green Infrastructure Strategy to protect and improve water quality of New Westminster's surrounding waterbodies. The various elements that are included in the ISMP will be updated and revised for the report card items listed under 'stormwater'.

The **Master Transportation Plan** (MTP) (2015) focuses on providing long-term guidance on transportation policies, priorities and investments over the next 30 years and beyond. The City's aspiration is for a compact, safe, and livable neighbourhood with vibrant mixture of functions and activities. The report card will address transportation items under 'transportation'.

The **Secured Market Rental Housing Policy** (2013) was adopted to identify strategies and actions outlined in the policy to focus on retaining, renewing, and enhancing the supply of secured rental housing. The report card will address secured market rental housing for existing and new buildings as items under 'housing'.

The **Urban Forest Management Strategy** (2016) is a 20-year strategy to review policy, identify best management practices in urban forestry, and set 40 actions to mitigate further loss of trees and increase tree canopy cover. The report card will address items from strategy in environmental section under 'urban forestry'.

The structure of the new / updated report card will be in alignment with the above policies and plans. By doing so, the hope is that the report card will elevate the standards and rigour on sustainability criterion and provide recommended targets above City requirements.

6. Interview

To gain a better understanding of the use and function of the tool, the Scholar conducted interviews with participants involved in development applications. The participants represent a diverse range of individuals to gain input, feedback, and suggestion for the report card:

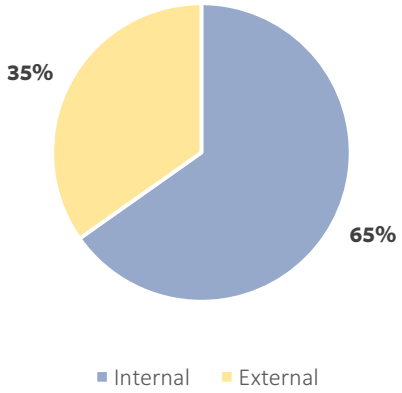

Figure 8: Percentage of internal and external respondents

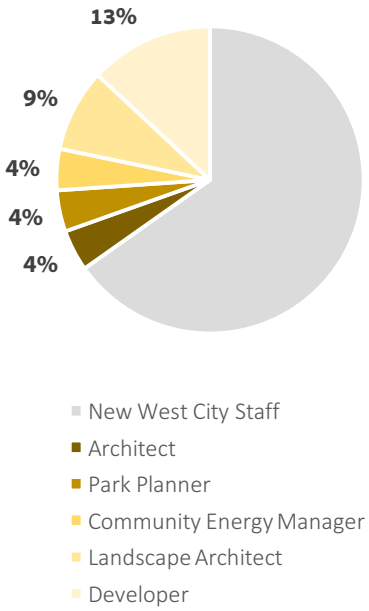

Figure 9: Percentage of external participants divided by profession

A total of 23 participants were engaged in this project (Table 3) by the Sustainability Scholar from June to August, 2017. The majority of the participants were from the City with 15 participants (internal), as they are the staff who are contributing and helping to revise the tool (Figure 8). The report card is a collaborative effort in gaining input from various departments and staff on various pieces of content. In addition, the participants included input from other involved members (external) that are part of development applications (Figure 9). These included professions in architecture, park planning, community energy, landscape architecture, and development, a total of 8 participants interviewed.

Table 3: Participants involved in the Sustainability Report Card interviews

	Participants	Number of Participants	Percentage of Respondent
Internal	City Staff	15	65%
External	Developer	3	13%
	Community Energy Manager (Surrey)	1	4%
	Landscape Architect	2	9%
	Architect, NWDP	1	4%
	Park Planner, NWDP	1	4%
	TOTAL	**23**	**100%**

7. Analysis

A thematic network[1] approach was used to interpret qualitative data into codes and themes of the issues discussed (Attride-Stirling, 2001). The approach summarizes the overall interview transcription collected into an organized sequence. From the respondents of the interviews, key themes, codes, and issues (in the form of discussion) were developed in the Table 4 below:

Table 4: Thematic Analysis Framework for Sustainability Report Card (Attride-Stirling, 2001)

Global Theme	Organizing Theme	Basic Theme	Code	Issues Identified
Evolving the Sustainability Report Card	Function	Users want update on report card	Revision	• Outdated; Cumbersome; Irrelevant; Not useful; Out of practice; Scorecard items are old
		Users find report card design needs change	Redesign	• Long list; Not user-friendly; Tedious; Checklist-based, scores are not used; Needs more defined measures of success
		Users still want to address specific sustainability practices for applications	Sustainability	• Economic; Social; Cultural; Environmental
	Utility	Users want to identify metrics of report card	Metric	• Subjective scoring for evaluating quantitative and qualitative items • Needs to be policy-driven (prescriptive quantitative measures; best practice in qualitative measures); items structured in phases

[1] The thematic network approach was used for this study to frame and breakdown texts into code and themes. This tool and approach provides steps to practical and effective procedures for conducting qualitative analysis, where many studies in the social sciences utilize this method. The thematic network enables summarizes main themes constituting a piece of text, structures each network step in the analytic process (including global, organizing, and basic themes, as well as codes and issues identified), and lastly, identifies insightful and rich exploration of a text's evident structures and underlying patterns.

		Users want to identify value of report card	Value	• Toothless; Overlapping content in other documents; • What do the scores represent? • How do we go above and beyond minimum requirements?
	System	Users want a better system in place for use of report card	Process	• SRC introduction, reiterations, and finalization • Identify specific committee members to review and revise • Divide the more general (macro scale) and detailed (micro scale) report card items
		Users want to identify who's responsible for the document, implementation, monitoring, and measuring	Responsibility	• Does the use of the tool end at DP stage? Should it also be utilized at the Building Permit and Occupancy stages? • Who can use this tool to be more rigourous and thorough with the applicant? • Accountability (e.g., some components of the report card are included in Letter of Assurance)

7.1 Function

Majority of the correspondents agreed that the report card was not being used to its' full potential. Every participant felt that sustainability generally is important for cities (encompasses a variety of work), and that identifying the function of the report card to serve that purpose was important.

Revision – the participants agreed unanimously that the report card needs an overall update. The content of the scorecard items is not up to current standards of practice in some cases, and is not in alignment with some of the newer policies and plans in place since 2011.

Redesign – the participants revealed that there are a lot of items to cover on the current scorecard, and this results in tedious and unnecessary work for the applicant and City staff. The items are intended to be scored but seeing as the design of the scorecard doesn't indicate what to do with the score; the items serve practice as a checklist (identifying that quantifiable scoring needs prescriptive targets or thresholds).

Sustainability – the framework of the current report card is divided into three sections (social/cultural, economic, environmental) and is intended to bring awareness items discussing long-term goals with the development application. Participants also acknowledge that the report card is in alignment with the Envision 2032 Sustainability Framework.

7.2 Utility

Many of the correspondents wanted to understand what the report card's current role in the development application and what sustainable practices does the report card bring to the discussion. In principle, the tool has metrics to identify quantity and quality of sustainability being asked of the applicant. In practice, the tool's usefulness or utility was questioned when there was no indication as to what the values were to represent.

Metric – The scorecard has a mix of policy-driven goals, bylaws, and optional items. The points assigned were initially determined by Council's priorities in 2011. However, the scores did not have a rubric to guide an applicant or staff and as a result, all respondents found the report card is too subjective. Another identified challenge is that there is no clear answer on how the overall scoring reflects an above average, average, or below average rating, as scoring data from the completed reports has not been collected or consolidated. Due to these gaps, staff noted that Council members do not review the report card scores even though applicants try their best to score as high as possible during the time of development application submission.

Value – some respondents felt that the report card is simply another application to complete in a bureaucratic sense, serving no purpose other than an incremental step toward a completed application. Others felt that the report card has good intentions but had difficulties

with what the values of the scores meant with the application. An extension to this question is how to go above and beyond the status quo or business-as-usual for new development applications.

7.3 System

As the report card became a requirement to submit with a development application, City staff felt that there was no system in place that would clearly instruct the process (steps) of how to report the tool and identify the roles and responsibilities from both, the applicant and the planner in using the tool.

Process – Respondents identified that applicants submit the report card with score and comments with the development application and then City staff responds with comments and a score. After the initial utilization of the report card in the development process, the tool is not used again. Because there is no subsequent (post-Development Permit) use of the tool, interviewees noted that some of the report card items have not been clearly defined yet. With some of the items not in full detail, many of the application's comments consist of responding to have a later conversation with the City staff. Generally, there is a lack of follow up on both ends for applicants and staff to continue using the tool after finalizing the Development Permit application.

Responsibility – Some interviewees expressed the need to hold applicants accountable for the sustainability attributes listed in the completed report card that is included in the development application. As use of the report card does not continue after the development permit has been issued, there is no verification that the scorecard items have been implemented, or monitored and measured. Currently, there is no signed agreement or letter of assurance between applicant and staff to hold accountability throughout the development application, building permit, to occupancy permit.

8. Options

Approach #1 - Revise and redesign the report card to current practice

There are many benefits with updating the report card. Some of the key components include developing a more prescriptive and robust approach for the score card will allow better guidance and understanding of the tool for the applicant, City staff, committees, and Council. Following this, if there is a better guidance with the tool, the scores can be used to compile baseline average score for each building type where the report card applies. These averages can set precedent to how these scores reflect New Westminster's development applications and encourage applicants to strive beyond minimum requirements. As well, New Westminster would be a leader in evolving a comprehensive planning tool for sustainable development compared to other municipalities.

Approach #2 – Develop policy to support report card transition to mandatory requirements for buildings (Development Permit & Rezoning)

Approach #2 is to hold more accountability with the applicant by developing a policy to have the report card become a complete and fulfilled requirement for buildings in both, development permits and rezoning applications. With this approach, the applicant would have to complete the report card with the understanding the items listed must be fulfilled by the end of their development application process. If the quantitative scores are still to be used, setting a minimum score average will be proponent to the report card's success rate. If the report card transitions into a checklist-based approach, then the applicant will need to select completed items throughout the process.

With the current implementation of the BC Energy Step Code for New Westminster, there is potential to use the report in various phases of a development application:

Development Permit
At the development permit phase, City staff utilizes available development tools to encourage sustainability practices with applicants. As the 2041 OCP becomes finalized later this year, the report card can evolve to be a useful tool, hold merit to robust sustainability criterion, and inform decision-makers with the score that reflects the current OCP policies and actions, as well as other key City policies listed earlier in this report (see Section 5 of report).

Rezoning
There are more opportunities to leverage the City's sustainability objectives when an applicant applies for a rezoning. An example of this would be City of Vancouver's Green Buildings Policy for Rezoning, where the City has set standards and guidelines as to performance targets and sustainability attributes for new development. An updated report card could have a role in supporting the development of new rezoning policy. This is particularly relevant given that buildings will need to become much more energy efficient in the next 15 years to meet the provincial and federal building code objectives of 'net-zero energy ready' buildings by 2032 (i.e. near-zero emissions building or projects built to certified Passive House standards). As well, the BC Energy Step Code could be incorporated into the updated report card, bringing energy performance standards for new development in line with the Step Code, for example referencing the upper levels of the Step Code as a condition for rezoning.

Building Permit
At the building permit phase, staff are focused on applicant's compliance to current building code practices and zoning bylaws. The Building Permit application checklist currently has a list of requirements to be completed by the applicant. In addition to this list, the report card may serve as a tool to hold applicants accountable to sustainability commitments agreed to during the development review / application stage. Through collaboration with Building Permit, the Development Planner may review the building permit application and include the report card as part of their reviewing process. In addition, as the City develops an implementation framework

for the BC Energy Step Code in fall 2017, enhanced energy requirements from the Step Code should be referenced in the applicable section of the report card.

Occupancy Permit
New Westminster currently does not have an occupancy permit application. Instead, current practice is to coordinate an inspection closer to the end of the construction where all involved parties will do a final walkthrough review. If all parties are satisfied with the construction and project expectations, a final occupancy permit is issued. The report card could potentially have a place in being part of the building inspection process, from conceptual design to the finalized product.

However, it is understood that developing a policy to support the report card's initiatives would require more time and responsibility from City staff to regulate and ensure requirements are being met. In addition, City staff would have to identify how the changes in the report card will align and fit with the OCP being finalized later this year.

Approach #3 – Remove subjective scoring component and develop sustainability design guidelines instead

This approach is to simplify the report card into a streamlined checklist system with current updates. The scoring was to emphasize Council's priorities at the time of inception in 2011, but staff found much of the report card evaluation criteria overly subjective. By removing the scores and instead, developing a sustainability design guideline-based approach may provide better utilization of the tool to identify components for the applicant to be aware, educated, and responsive to the City's vision of sustainable development. Some examples of guidelines that have been developed are Port Moody's Energy Performance Guidelines (2017) and City of North Vancouver's Active Design Guidelines (2015)

Approach #4 – Discontinue the Sustainability Report Card and integrate the items into current or enhanced regulatory and compliance verification forms applicable to new development

As the updated report card will reference many of the City's current plans, policies, and actions, the revised tool could be integrated into suitable application forms and other accountability mechanisms that already exist or could be developed. This includes mandatory documentation and/or compliance verification forms and/or letters of assurance on new development.

9. Recommendations

Step 1
The first recommendation is based on whether City staff would prefer or not prefer to continue utilizing a scoring method. Approach #1 and #3 are selected as two approaches recommended:

Approach #1 is recommended to update the current report card. If quantitative scores are to continue with the tool, the UBC Scholar has provided an updated version with rubric of the report card. The next steps for Staff will have to identify:

- How will the updated scores be represented in a development application?
- Where will the scores to recorded and monitored throughout the development application process?
- Who is responsible of keeping records of the report card scores?

These questions will address the gaps in how the current report card is structured and used for development applications and provide more rigour in sustainability criterion.

Approach #3 is also recommended to remove the quantitative scoring and instead, revise and update the report card to be structured as a design guideline. This approach would still provide flexibility in how the applicants pursue sustainability practices but still show some robust and prescriptive design guidelines that the City supports for new developments. The updated report card can be designed with visuals that elaborate some of the vague items listed and bring education and awareness to the applicants. This would address the importance and value of sustainability to the applicant and City staff can refer to the guideline as a tangible product in various stages of the development application.

Step 2
The second recommendation is based on whether City staff would prefer to continue the report card as a voluntary checklist-based system, or, to become a complete and fulfilled requirement for buildings in both, development permits and rezoning applications. If transitioning to a mandatory requirement for buildings then approach #2 is considered. The decision-making will take place during the staff workshop on whether Approach #1 or #3 (score versus not scored) is decided and then compared to Approach #2 (voluntary versus mandatory).

10. Project Next Steps and Timeline

Currently, the recommended approach for the SRC has been divided into three phases (Table 5). As the Sustainability Scholar completes the first phase, the timeline provides clear communication and transition to the staff who will continue to work towards evolving this planning tool.

Table 5: Timeline of the Sustainability Report Card with project scope, description and status of completion (highlighted items include Scholar's work completed)

Timeline	Project Scope	Description	Status
Phase 1 – May to August (2017)	*Research*	• Best practices research and review of sustainability tool for development applications • Compile data to identify the value for sustainability in development application • Select Interview candidates with series of identified questions, and compile interview findings	Complete
	Analysis & Recommendations	• Conduct interviews (internal and external candidates) for input, feedback, and suggestions • Analysis and synthesis of data collection • Provide Staff, Council and other committees feedback summary of key findings • Propose recommendations on revision of scorecard items and design • Review findings and recommended next steps for the project arising from Scholar's report	Complete
Phase 2 – September to December (2017)	*City Staff Workshop & Council*	• Workshop to discuss the tool's influence on development / rezoning applications and implications of findings from the Scholar's report • Draft a report update with mentor to present findings to council	October
	Design	• Update the design and function of the report card with workshop feedback	TBD
	Stakeholder Engagement and Testing	• Invite involved members for testing report card from various sustainability interests (i.e. interview candidates); test development application and rezoning • Identify areas of strengths, weaknesses, threats, and opportunities (S.W.O.T.) with key members	TBD
	Reiteration and Revision	• Reiterate and revise the design, function, and form of report card	TBD
Phase 3 – January to May (2018)	*Pilot*	• Pilot the revised report card with willing applicants on various land use types	TBD
	Survey	• Request feedback survey from users to further revision and finalization	TBD
	Finalization	• Finalized (updated) sustainability report card on City website	TBD

11. Conclusion

Municipalities across the Metro Vancouver region have expressed commitments to the importance of sustainability (social, cultural, economic, and/or environmental), within broad policy frameworks such as Official Community Plans, Local Area Plans, and economic and environmental plans. In 2011, a pilot development review tool called the Sustainability Report Card (report card) was introduced to increase the uptake of environmental, social / cultural, and economic factors in larger projects requiring a development permit or rezoning application, with the intent to be utilized during the development application stage as a review mechanism. The scope of the project was to identify the next steps for the report card and to bring better awareness and understanding for City staff and applicants. As buildings and communities age and change over time, the practice and reflection of sustainable development for both, the City staff and the applicants, are pivotal for a healthier, vibrant, and livable city.

The Scholar completed the project in hopes that the approaches and recommendations will assist all involved members in the process of development applications and to further push the sustainability envelope of what cities can become for the future.

12. Acknowledgements

I would like to thank the UBC Sustainability Scholar program, BC Hydro, and the City of New Westminster for funding and hosting this project. Without their contributions, my position offered for the 2017 year would have not been possible.

In addition, I would like to thank all of the interview participants that had taken their time to speak to me in regards to the project. Your contribution holds tremendous value to help better understand the revised direction of the planning tool and I hope that this was a great experience for you as it was for me.

I'd like to also acknowledge, recognize, and thank the New Westminster City staff. You have been not only kind but caring and supportive in helping me excel on this project this summer. It has been a pleasure to work with you and appreciate every effort of help I received.

Lastly, I would like to thank Norm Connolly for his dedicated effort and time with supervising and mentoring me throughout this project. You always brought positive outlooks throughout my time and gave me tremendous support, comfort, and knowledge at New Westminster. You have allowed me to explore further into the professionalism that I will be entering into and I hope to take your kind words as a way of reflective practice to people that I will work with in the future. Thank you.

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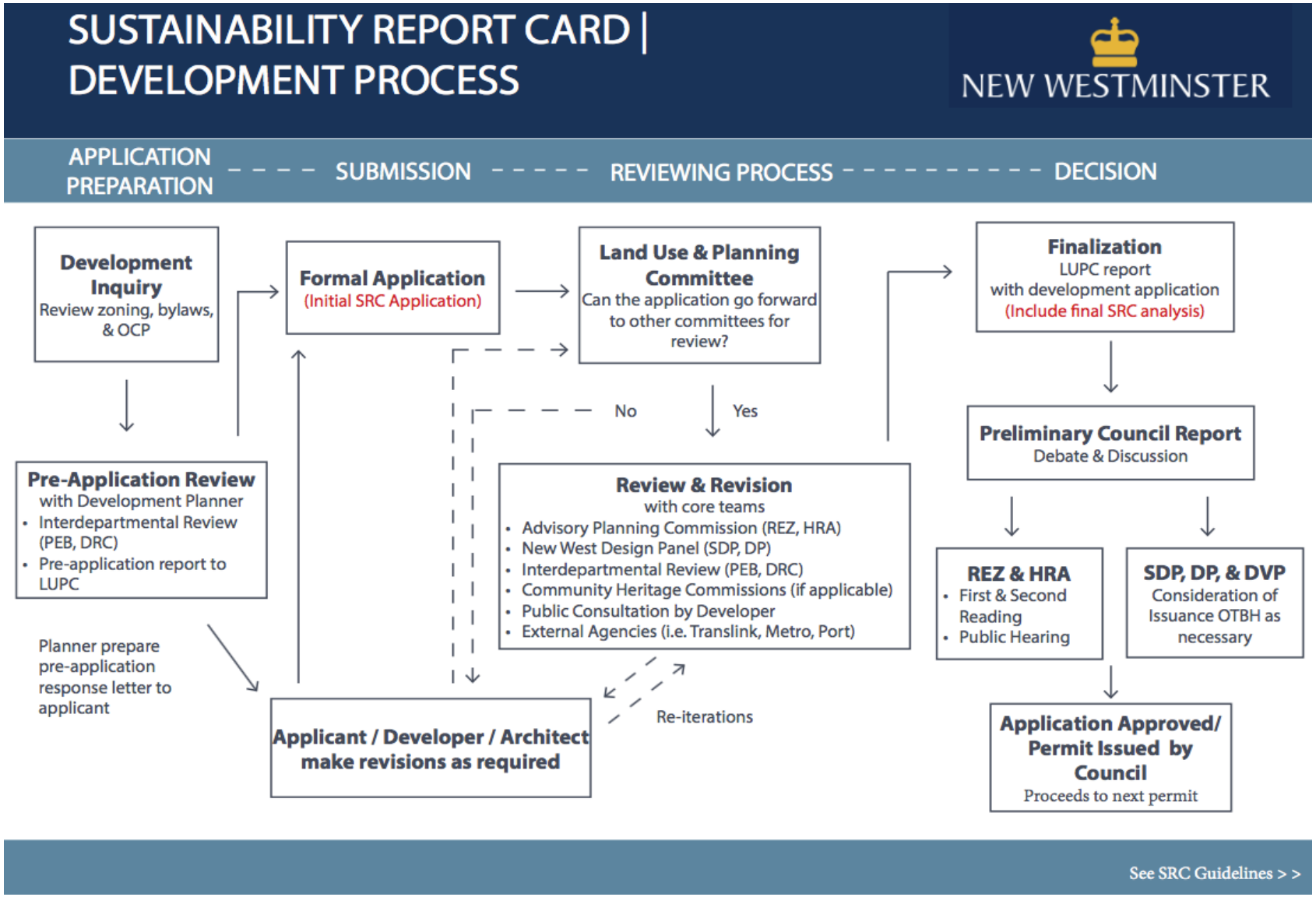
Appendix A – Development Application Flowchart



Appendix B - Tables

Table 1: Number and type of units for Residential building permits, 2007-2016 (Source: BC Statistics and Statistics Canada, 2017)

Year	Single Dwelling (Units)	Row Dwelling (Units)	Apartment (Units)
2007	70	7	920
2008	41	-	536
2009	73	35	129
2010	65	56	43
2011	49	45	524
2012	53	86	563
2013	82	99	634
2014	51	2	452
2015	31	16	1 189
2016	5	147	732
Total	**520**	**493**	**5722**

Table 2: Building permit issued based on value and land use type, 2007-2016 (Source: BC Statistics and Statistics Canada, 2017)

Year	Residential ($ 000)	Industrial ($ 000)	Commercial ($ 000)	Institutional/ Government ($ 000)
2007	147 517	3 310	25 293	10 365
2008	111 932	701	27 248	4 085
2009	56 389	277	28 123	6 361
2010	52 512	589	45 192	9 872
2011	124 117	2 072	94 408	12 417
2012	143 141	299	57 452	4 872
2013	147 308	3 316	23 503	18 619
2014	105 150	389	24 702	17 740
2015	227 372	261	16 420	4 983
2016	153 185	4 022	11 051	11 634

Appendix C – Sustainability Report Card Update

Environment

Focus	Current Version	2017 Update	Score Update
Waste & Materials	Incorporates 4-stream recycling collection (newsprint, paper, containers, organics) in a secure common area in the commercial portion of the building. a. Draft Metro Vancouver Recycling Space Standards (Appendix A) /2	Do you incorporate a 4-stream recycling collection (newsprint, paper, containers, organics) in a secure common area in the commercial portion of the building? If residential, incorporate it in residential portion of building. **Recommended**: Draft Metro Vancouver Recycling Space Standards (Minimum Size)	/1 – Meets recommendation /0 - Not pursued
	Includes a plan for construction waste disposal, specifying what percent of materials to be recycled (recommended: 60% of waste for demolition by weight; 80% of waste for construction by weight) a. See Metro Vancouver's DLC Waste Management Toolkit /1	Includes a plan for what percent materials to be recycled (see Metro Vancouver's DLC Waste Management Toolkit) **Recommended**: (1) 70%+ of waste recycled for demolition by weight with full recycling incentive deposit refund offered by the Waste Disposal and Recycling Services Plan and; (2) 80%+ of waste for construction by weight **Minimum**: <70% waste for demolition and construction, no recycling incentive deposit refund if <20%	/1 – Meets recommendation /0 – Meets minimum or not pursued

Waste & Materials	Incorporates use of recycled and/or salvaged materials, including those salvaged from ongoing site or off-site heritage buildings; facilitates salvaging of on-site heritage materials by contractors or persons/groups with heritage interest (recommended recycled – min. 7.5%; salvaged/refurbished – min. 10%; % of total building material cost. Also that heritage lumber/siding must be graded) /2	Do you incorporate recycled and/or salvaged materials (on- or off-site heritage materials)? **Recommended**: • Recycled +7.5%; • Salvaged/Refurbished >10% of total building material cost **Minimum**: • Recycled 7.5%; • Salvaged/Refurbished 10% of total building material cost	/2 – Meets recommendation /1 – Meets minimum /0 – Not pursued
	Uses low-VOC products such as paints, carpeting, and adhesives to improve indoor air quality /1	Do you use low-VOC products to improve indoor air quality? Indicate which type. **Recommended:** • Paints • Carpeting • Adhesives • Others	/1 – Meets recommendation; indicates which type /0 – Not pursued
		Maximum points for this subsection:	**/5**
Stormwater	Uses construction techniques which minimize site disturbance (sedimentation & erosion) during the development phase a. See specs in the City's Building Permit Requirement Package /1	Identify which construction techniques that are used to meet the guidelines and minimizes site disturbance during development **Recommended**: DFO Land Development Guidelines **Minimum**: Erosion and Sediment Control Plan requirements	/1 – Meets recommendation; indicate which items listed /0 –Meets minimum

Stormwater	Provide for stormwater retention & evaporation, and groundwater treatment & recharge in the stormwater management plan a. See Metro Vancouver's Stormwater Source Control Design Guidelines /3	Provide on-site stormwater management (capture and treatment) as part of the Integrated Stormwater Management Plan (see Metro Vancouver's Region-wide Baseline for On-site Stormwater Management) **Recommended**: DFO target capture and treat 50ml/day **Minimum**: required capture 25ml/day, treat 50ml/day (exception with Brunette River that require 50ml/day for both)	/2 – Meets recommendation /1 – Above minimum /0 – Meets minimum
	Uses drought-tolerant landscaping and/or high-efficiency or captured rainwater irrigation system /1	Implement a Comprehensive Stormwater Management Plan to retain rainfall Target. Retain stormwater on-site to the same level of annual volume of overland runoff allowable under pre-development conditions. **Recommended**: Incorporate appropriate Low Impact Development (LID) Best Management Practices (BMPs) strategies: • Bioretention, • Permeable paving, • Soil amendment, • Evapo-transpiration, • Infiltration and/or rainwater harvesting and reuse • Attempt to make use of innovative, low-impact techniques such as disconnected downspouts, permeable paving, swales, retention basins, rain gardens, sidewalk planters, xeriscaping, and nature-scaping, ecoroofs, rain barrels, and cisterns to convey, capture, infiltrate, and /or reuse stormwater. • Strive to minimize impervious areas (surfaces that do not allow stormwater infiltration), including roofs, driveways, sidewalks, and streets, or use porous materials for such areas.	/1 – Meets recommendation with one or more of the following /0 - Not pursued

Stormwater	Provide 20cm (8in) of topsoil as finished grading for groundwater recharge and stormwater retention/evaporation /1	Indicate the depth of topsoil (cm) provided as finished grading for groundwater recharge and stormwater retention/evaporation. **Recommended:** • Sodded lawns (30cm) • Shrubs and ornamental plants (45cm) • Trees (90cm)	/1 – Meets recommendation /0 – Not pursued
	Reuses existing topsoil and other soils through on-site or nearby storage and topsoil screening or other related practices /1	Do you reuse existing topsoil and other soil on-site? Indicate the amount. **Recommended:** • Retain a minimum of 50% • If existing soils are not suitable for tree growth, imported soil mix should be commercially prepared mix that meets the Growing Medium standards defined by the Canadian Landscape Standard (Current Edition).	/1 – Meets Recommendation /0 – Not pursued

Stormwater & Habitat	Incorporates landscaped roofs on concrete buildings to improve building energy efficiency, reduce heat island effect & stormwater runoff, and create habitat & biodiversity. /3	Do you provide intensive or extensive landscaped roof? If so, indicate the purpose of the landscaped roof. **Recommended**: • Energy efficiency • Reduce heat island effect • Stormwater runoff • Create habitat & biodiversity for species • Others:_____	/3 – Green roof installed for at least 50% of Available Roof Space /2 – Cool roof installed for 100% of Available Roof Space (Cool roofing materials must have a minimum initial reflectance of 0.65 and minimum emittance of 0.90) /1 – Use a combination of a green and cool roof for at least 75% of Available Roof Space /0 - Not Pursued
		Maximum points for this subsection:	**/9**
Urban Forestry	Habitat: Removes invasive species and incorporates native or adaptive species which provide multi-storey habitat (groundcover, shrubs & trees) a. Defined by Invasive Plant Council of BC www.invasiveplantcouncilbc.ca /1	Urban Forestry: Do remove invasive species and incorporate native materials onsite? See BC Invasive Plant Council and Urban Forestry Management Strategy **Recommended**: • Restore minimum of 50% % of native material	/1 – Meets recommendation /0 – Not pursued

<table>
<tr>
<td>Urban Forestry</td>
<td>Provides plants and staked trees in accordance with BC Landscape Standard;

/1</td>
<td>Calculate the soil volume provided per tree. Both soil volume and the permeability of the surface area around in hardscape (i.e., the “tree pit”) should be maximized. To increase root zone volume, suspended pavement, structural soils or soil cells may be required.

Recommended:
<table>
<tr><th>Tree size category</th><th>Average Spacing</th><th>Per-tree Minimum Soil Volume</th></tr>
<tr><td>Large (>10 m canopy spread)</td><td>9 - 11 m</td><td>45 m^3/30 m^3 shared</td></tr>
<tr><td>Medium (~10 m canopy spread)</td><td>8 - 10 m</td><td>25 m^3/20 m^3 shared</td></tr>
<tr><td>Small (~6 m canopy spread)</td><td>6 - 10 m</td><td>10 m^3/5 m^3 shared</td></tr>
<tr><td>Very Small (~3 m spread)</td><td>3 – 6 m</td><td>5 m^3</td></tr>
</table>
Soil volume should be a depth of 1 m. The soil volumes quoted should be considered as minimums for the size categories listed and are based on a minimum of 0.3m^3 of soil per 1 m^2 of canopy area.</td>
<td>/1 – Meet recommendation

/0 – Not pursued</td>
</tr>
</table>

Urban Forestry	Provides open greenspace and other greened features, including landscaped common areas and walkways to green the built environment; provides space for growing food in common areas (i.e. at-grade gardens or raised planters) /3	Does your site provide open greenspace and other green features? Indicate which type. **Recommended:** • Landscaped common areas • Landscaped walkways • Community garden space (at-grade; raised planters) • Others: _____	/3 – 3 features described /2 – 2 features described /1 – 1 feature described 0/ - Not pursued
	Retains sound original trees and landscape features or provides a net gain in tree canopy and landscaped area a. See specs in City's Building Permit Requirement Package /2	Do you retain sound original trees and landscape features? If so, do you provide a net gain tree canopy and landscaped area? See Urban Forestry Management Plan and Tree Bylaw. **Recommended:** • Provide tree canopy cover distributed across the site area and the public boulevard at a minimum rate of: 1 tree for every 66 m^2 of 40% of the site area.	/2 – Meets recommendation with net gain /1 – Indicate percentage/number of tree or landscaped area /0 – Not pursued
	NEW	Provide a landscape plan (including trees, shrubs, and groundcover) showing that 50% of the plantings be native and/or adaptive species. **Recommended**: • Where possible, locate newly planted trees to provide shade in the summer and allow for solar access in the winter. • Combine landscape plan with storm-water management to provide surface water filtration and aesthetic benefits. • Non-native turf needs about 35 inches of water per year to thrive, whereas native turf needs much less water per year.	/1 Meets Recommendation /0 Not pursued

Urban Forestry	NEW	Preserve protected trees on site (equal to or greater than 20cm DBH and trees of any size on City-owned lands) and any significant trees (equal to or greater than 60cm DBH) on the project site. **Recommended**: • Consult a local arborist in the site design process to identify significant trees suitable for preservation which must have an anticipated size at maturity that will not interfere with building areas or require topping or heavy pruning to control height and growth.	/1 Meets Recommendation /0 Not pursued
	NEW	Install an efficient irrigation system to water trees and landscaped areas. **Recommended:** • For all landscape planting beds and trees, use drip and/or bubbler irrigation system. • For turf, separately zone turf based on watering needs. • A zone manifold and/or timer/controller that can be programmed to control the frequency, time of day and duration of irrigation for each watering zone to minimize evaporative losses while maintaining healthy plants and obeying local regulations and water-use guidance. • A moisture sensor controller or rain delay controller or weather-based irrigation controller designed to eliminate irrigation overwatering when plant needs are met by natural precipitation. • Use high-efficiency irrigation nozzles with average distribution uniformity (DU) of at least 0.70.	/1 Meets Recommendation /0 Not pursued
		Maximum points for this subsection:	**/10**

Smart Energy Use	Uses energy-efficiency lighting in individual residential & commercial units and common areas /1	Do you provide energy efficient lighting within residential units and/or commercial units, as well as common areas? **Recommended:** LED lighting	/1 – Meets recommendation /0 – Not pursued
	Provides programmable thermostats in each residential and commercial unit /2	Do you provide programmable thermostats within each residential and/or commercial unit? **Indicate types(s)** _____	/1 – Meets recommendation /0 – Not pursued
	Provides EnergyStar-related home appliances, commercial food service equipment and other applicable equipment a. See www.energystar.gov under 'products' /1	Do you provide EnergyStar home appliances, commercial food service equipment or other applicable rated equipment? **Indicate types(s)** _____	/1 – Meets recommendation /0 – Not pursued

Smart Energy Use	In wood-frame buildings, incorporates high efficiency HVAC system (heat recovery systems, variable speed fans, etc.) /2	**For larger buildings over 600 m^2** (6,458 ft^2)**:** Provide commissioning of building mechanical systems and controls / HVAC equipment prior to occupancy. Applicable to Part 3 and Part 10 of the BC Building Code: **Recommended:** Third party oversight of building commissioning process to ensure the building is operating as per its design intent. Commissioning process should follow a recognized methodology such as CAS Z320-11 (2016) or *Building Commissioning Standard*. **For smaller buildings under 600 m^2** (6,458 ft^2)**:** Provide proper sizing of HVAC systems in relation to occupant load and whole building energy modeling. Applicable to Part 9 of the BC Building Code: **Recommended:** Mechanical HVAC systems should be sized according to heat load calculations as per CSA F280-12 (2017) *Determining the required capacity of residential space heating and cooling appliances.*	/2 – Meets recommendation /0 – Not pursued
		Maximum points for this subsection:	**/5**

Enhanced Building Energy Performance		Achieves a performance level of the BC Energy Step Code, as verified by pre-construction whole building energy modeling. Specific energy performance requirements are included in BC Building Code Section 9.36.6, applicable to wood-frame single-detached homes, duplexes, townhomes and multi-residential buildings up to three floors in height; and in BC Building Code Section 10.2.3 of Division B applicable to larger multi-residential, commercial and mixed-use commercial / residential buildings. **For buildings over 600 m^2** (6,458 ft^2), applicable to Part 10 of the BC Building Code as per Table 10.2.3.3.A [applicable to multi-residential buildings] or Table 10.2.3.3.B [applicable to commercial buildings]. **For buildings under 600 m^2** (6,458 ft^2), applicable to Part 9 of the BC Building Code as per Table 9.36.6.3.A.	<u>Multi-Residential</u> /5 – Step 4 /4 – Step 3 /2 – Step 2 /1 – Step 1 /0 – Not pursued <u>Commercial</u> /5 – Step 3 /3 – Step 2 /1 – Step 1 /0 – Not pursued <u>Residential</u> /5 – Step 5 /4 – Step 4 /3 – Step 3 /2 – Step 2 /1 – Step 1 /0 – Not Pursued

Neighbourhood Low Carbon Energy Systems		Building is designed to be compliant with the connection bylaw requirements within the designated service area for the Sapperton Renewable District Energy System. Is this building fully compatible with connection requirements of the Sapperton Renewable District Energy System, as verified by pre-construction design drawings? Indicate whether this building will receive all of its heating service or partial heating service from Sapperton Renewable DES: **All** heating service (space heating + domestic hot water) _____ **Partial** heating service (domestic hot water only) _____	/3 – Full heating service /1 – Partial heating service /0 – Not pursued
		Maximum points for this subsection:	**/8**
Sustainable Transportation	Provides electric plug-ins to support resident use of electric vehicles (recommended 10% of resident stalls) a. See BC Hydro's electric vehicle charging infrastructure deployment guidelines /1	Do you provide electric vehicle charging capacity within the building? See Canadian electric vehicle charging infrastructure deployment guidelines and other applicable guidelines provided by City staff. See Canadian electric vehicle charging Infrastructure deployment guidelines Indicate percentage of total resident / occupant sparking stalls: **Recommended:** 10% _____ 20% _____ Over 20% _____	/3 – Over 20% /2 – 20% /1 – 10% /0 – Not pursued

Sustainable Transportation			
	Provides commercial end-of-trip bicycle facilities a. City policy (Appendix B) /1	Do you commercial provide end-of-trip bicycle facilities? **Recommended**: New Westminster Bicycle end-of-trip facilities policy (see attached)	/1 – Pursued /0 – Not Pursued
	Provides a co-op vehicle and assignment parking space per City parking reduction incentive policy a. Zoning bylaw section 150.74 allows 3-space parking reduction if co-op vehicle & space is provided (www.modo.coop) /1	Do you provide designated co-op (Modo) or car-sharing (Zip Car, EVO or Car2Go) parking space on-site or within the building? **Recommended:** parking and reduction incentive policy (Bylaw 150.74) or designated car-sharing stalls	/2 – Pursued /0 – Not Pursued
		Maximum points for this subsection:	**/6**
		TOTAL POINTS	**/43**

Social

<table>
<tr><th>Subject</th><th>Current Version</th><th>2017 Update</th><th>Score</th></tr>
<tr><td rowspan="3">Housing</td><td rowspan="2">Provides adaptable housing design features above city requirements (includes other residential or commercial adaptable & barrier-free design features beyond building code a. Example: accessible businesses; housing for lifespan of all people including children & parents with strollers; visitability features

/3</td><td>Do you provide adaptable housing design features (see Adaptable Housing)? Indicate percentage.

Recommended: 60%+
Minimum: 40%</td><td>/3 – 60%+
/2 – 50-59%
/1 – 40-49%
/0 – 40% Meets minimum</td></tr>
<tr><td>Do you include adaptable and barrier-free design features beyond building code (see Adaptable Housing)?

Indicate which:
Accessible businesses
Accessible housing for all people (children, parents with strollers, seniors)
Visitability features
Others_____</td><td>/1 – Pursued
/0 – Not Pursued</td></tr>
<tr><td>Provides ground-oriented units

/1</td><td>Do you provide ground-oriented units? Indicate percentage.

Recommended: 15%+</td><td>/3 – 15%
/2 – 10%
/1 – 5%
/0 – Not Pursued</td></tr>
<tr><td>Provide a diversity of unit sizes

/1</td><td>Do you provide a diversity of unit sizes for rental (see Family friendly Housing Policy)? Indicate percentage of total unit sizes.

Recommended: 15%+ for 3 Bedrooms

<table><tr><th>Unit Type</th><th>% of total Units</th></tr><tr><td>1 BD</td><td></td></tr><tr><td>2 BD</td><td></td></tr><tr><td>3 BD</td><td></td></tr></table></td><td>3 bedrooms:
/3 – 15%+
/2 – 10-14%
/1 – 5-9%
/0 – <5% or Not Pursued</td></tr>
</table>

<table>
<tr><td>Housing</td><td></td><td>Do you provide a diversity of unit sizes for ownership (see Family friendly Housing Policy)? Indicate percentage of total unit sizes.

Recommended: 20%+ for 3 Bedrooms

<table><tr><td>Unit Type</td><td>% of total Units</td></tr><tr><td>1 BD</td><td></td></tr><tr><td>2 BD</td><td></td></tr><tr><td>3 BD</td><td></td></tr></table></td><td>3 bedrooms:
/3 – 20%+
/2 – 15-19%
/1 – 10-14%
/0 - <10% or not Pursued</td></tr>
<tr><td></td><td>Provides long term market or non-market rental units.

/5</td><td>Do you provide long-term secured market rental units? Indicate percentage.

Recommended: 40%+</td><td>/3 – 40%+
/2 – 20-39%
/1 – 0-19%
/0 – Not Pursued</td></tr>
<tr><td></td><td>Includes affordable market housing units.

/4</td><td>Do you provide non-market housing units (see Affordable Housing)?
Indicate percentage.

Recommended: 50%+ (exemption allowed for buildings with <100 units)</td><td>/5 – 50%+
/4 – 40-49%
/3 – 30-39%
/2 – 20-29%
/1 – 0-19%
/0 – Not Pursued</td></tr>
<tr><td colspan="3" align="right">Maximum points for this subsection:</td><td>/21</td></tr>
<tr><td>Heritage</td><td>Include professional heritage conservation plan; achieves a “recognized industry standard” for heritage conservation
a. Defined in “Standard & guidelines for Conservation of Historic Places in Canada www.historicplaces.ca

/4</td><td>Remove – Not needed as outlined in heritage application</td><td></td></tr>
</table>

	Includes reuse of an existing heritage structure through restoration or rehabilitation. May include re-location /2	Remove	
Heritage	Includes references to historic site or neighbourhood character or history in the proposed architecture and/or land use a. Integrates authentic and existing heriWaste & materialtage features such as signs, garden walls, gates, sidewalks, and/or heritage trees/landscaping /2	Remove	
		Maximum points for this subsection:	**REMOVE**
Amenities	Provides public amenities above City voluntary amenity contribution policy (ceck all that apply: child care facility, communal gardens, play areas, public art, public gathering place, other_____)	Indicate what public amenities above City voluntary amenity contribution policy are provided. **Recommended:** • Childcare community spaces for 40 & over children (exemption for child care space for 39 and less children) • Communal garden • Public play area/gathering space • Public Art installation • Other:_____	/5 – All pursued /4 - 4 pursued /3 – 3 pursued /2 – 2 pursued /1 – 1 pursued /0 – not pursued
	Provides private amenities (check all that applies: accessible green roof, play areas, social gathering place, other_____)	Indicate what private amenities are provided. **Recommended:** • Accessible social gathering/common areas (interior and/or exterior) • Amenity room:_____ Other:_____	/2 – All pursued /1 – 1 pursued /0 – Not pursued
		Maximum points for this subsection:	**/7**

Urban Forestry	NEW	Provide opportunities for residents to develop strong support networks and promote social responsibility. **Recommended:** • Design spaces or features that promote social sustainability. Describe how designed spaces or features that will help residents develop an inclusive sense of community and cultivate meaningful support networks	Response:
		Maximum points for this subsection:	**N/A**
		TOTAL POINTS	**/28**

Economic

Subject	Current	Updated	Score
Employment	Maximizes OCP potential for long-term job creation on site /6	Do you create long-term jobs on site? Indicate types of jobs anticipated.	/1 - Pursued /0 – Not Pursued
	Result in net increase in City's property tax base /4	Remove	
	Provides office floor space /4	Do you provide office floor space? Indicate the type of jobs: • Technology • Health • Social Enterprise • What jobs have most potential to use office space? Others:_____	/1 - Pursued /0 – Not Pursued
	Support destination commercial uses such as specialty retail, entertainment & dining or other regional destination function /3	Do you support destination commercial uses, such as specialty retail, entertainment, and dining? Indicate uses:	/1 - Pursued /0 – Not Pursued
		Maximum points for this subsection:	**/7**

Land Use	Creates more intensive use of land that supports local businesses /2	Do you provide a variety of land use that supports local businesses? Indicate land use type. **Recommended:** • Office • Industrial • Retail	/1 - Pursued /0 – Not Pursued
	Redevelops a contaminated brownfield site /4	Remove	
	Supports and/or is compatible with ongoing viability of surrounding existing commercial or industrial employers; supports walking to shops & services by strengthening an existing/planned neighborhood centre or broadening its current retail/service mix /3	Do you provide support and/or compatibility with ongoing viability of surrounding existing commercial or industrial employers? Explain how.	/1 - Pursued /0 – Not Pursued
		Do you provide diversity in spaces for various sizes of businesses to function? Explain how you strengthen neighbourhood centres or broaden retail/service mix.	/1 - Pursued /0 – Not Pursued
		Maximum points for this subsection:	**/3**
Intelligent City	NEW	Are you connected to City's fibre infrastructure? BridgNet	/1 - Pursued /0 – Not Pursued
		Maximum points for this subsection:	**/1**
		TOTAL POINTS	**/11**

Kai Okazaki
UBC Sustainability Scholar

Revised 2017-12-12

Bicycle End-of-Trip Facilities Policy (Adopted October 27, 2008)

1.0 **Intent:**

The provision of end-of-trip bicycle parking facilities for every new development or an addition to a development in New Westminster which results in a requirement of four or more bicycle parking spaces in accordance with the New Westminster Zoning Bylaw.

2.0 **Implementation:**

End-of-trip bicycle parking facilities required in accordance with the above Intent shall be required as a condition of approval of rezonings.

The provision of end-of-trip bicycle parking facilities in accordance with the above 'intent' will be strongly encouraged by the City of New Westminster where a project does not require rezoning. The provision of end-of-trip bicycle parking facilities will be included in the City's Smart Growth Checklist and will be considered when determining if a project has sufficiently addressed the need to develop in a sustainable manner.

3.0 **End-of-Trip Facility Standards**

	Minimum Number for Each Gender		
Required Number of Class A Bicycle Spaces	Water Closets	Wash Basins	Showers
0-3	0	0	0
4-29	1	1	1
30-64	2	1	2
65-94	3	2	3
95-129	4	2	4
130-159	5	3	5
160-194	6	3	6
Over 194	6 plus 1 for each additional 30 bicycle spaces or part thereof	3 plus 1 for each additional 30 bicycle spaces or part thereof	6 plus 1 for each additional 30 bicycle spaces or part thereof

Where Class "A" bicycle parking is required for non-dwelling uses, the minimum number of clothing lockers will equal 0.7 times the number of bicycle parking spaces for each gender. At least 50% of the clothing lockers should be full size (min. 18 cm. [7"] in height).