

# CORPORATION OF THE TOWNSHIP OF ESQUIMALT

# Staff Report

File #:20-034

### **REQUEST FOR DECISION**

DATE: February 19, 2020

Report No. DEV-20-005

TO: Laurie Hurst, Chief Administrative Officer

**FROM:** Trevor Parkes, Senior Planner and Bill Brown, Director of Development Services

#### SUBJECT:

Rezoning Application - 874 Fleming Street

#### **RECOMMENDATION:**

- That Council resolves that Amendment Bylaw No. 2988, attached as Appendix A to Staff Report DEV-20-005, which would amend Zoning Bylaw, 1992, No. 2050, by changing the zoning designation of 874 Fleming Street [PID 002-900-246, Lot B, Section 10, Esquimalt District, Plan 25267], shown cross-hatched on Schedule 'A' of Bylaw No. 2988, from Multiple Family Residential [RM-4] to Comprehensive Development District No. 130 [CD. No. 130], be given first and second reading; and
- 2. That Council authorizes the Corporate Officer to schedule a public hearing for Zoning Bylaw 1992, No. 2050, Amendment Bylaw No. 2988, and to advertise for same in the local newspaper.
- 3. That the applicant wishes to assure Council that uses and development will be restricted and amenities provided as identified in staff report no. DEV-20-005, the applicant has voluntarily agreed to register a Section 219 Covenant on the title for 874 Fleming Street, [PID 002-900-246, Lot B, Section 10, Esquimalt District, Plan 25267], in favour of the Township of Esquimalt, providing the lands shall not be subdivided, built upon or used (as appropriate to the requirement, as drafted by the Township's solicitor at the applicant's expense) in the absence of, but not limited to, the following:
  - Constructing the building to Step 4 of the BC Energy Step Code.
  - Providing electric car charging for 7 spaces as well as for mobility scooters and electric bikes.
  - Ensuring tree protection for the significant arbutus tree located on the southeast portion of the site.

- Prohibiting stratification and sale of the units within the building.
- Providing amenity spaces as detailed in the architectural plans attached as Appendix C of Staff Report DEV-20-005.

To this end, Council direct staff and legal counsel for the Township to coordinate with the property owner to ensure a Section 219 Covenant addressing the aforementioned issues is registered on the property title, in priority to all financial encumbrances, prior to returning Amendment Bylaw No. 2988 to Council for consideration of adoption.

#### **RELEVANT POLICY:**

Local Government Act Official Community Plan Bylaw, 2018, No. 2922 Zoning Bylaw, 1992, No. 2050 Declaration of Climate Emergency Parking Bylaw, 1992, No. 2011 Development Application Procedures and Fees Bylaw, No. 2791, 2012 Advisory Planning Commission Bylaw, 2012, No. 2792

#### STRATEGIC RELEVANCE:

This Request for Decision supports the following specific strategic objective: Support community growth, housing and development consistent with our Official Community Plan.

#### BACKGROUND:

#### Purpose of the Application

The applicant is requesting a change in zoning from the current zone of Multiple Family Residential [RM-4], to create a new Comprehensive Development District [CD-130]. This change is required to accommodate the proposed 6-storey, 137 unit, purpose built affordable rental and multiple family residential building including a 60 space underground parking garage and 7 surface parking stalls.

Evaluation of this application should focus on issues related to zoning such as the proposed height, density, massing, proposed unit sizes, siting, setbacks, lot coverage, usable open space, parking, permitted uses, fit with the neighbourhood, and consistency with the overall direction contained within the Official Community Plan.

This site is located within Development Permit Area No. 1 - Natural Environment, No. 6 - Multi-Family Residential, No. 7 - Energy Conservation and Greenhouse Gas Reduction and No. 8 - Water Conservation of the Township's Official Community Plan. Should the rezoning be approved, a Development Permit would be considered for consistency against the guidelines of Development Permit Area No. 6 Multi-Family Residential. Furthermore, the form and character of the buildings, landscaping, and consistency with guidelines relating to natural environment protection, energy conservation, greenhouse gas reduction, and water conservation would be controlled by a Development Permit that would be considered by Council at a future date as the proposed development is still situated within Development Permit Areas 1, 7 and 8.

#### <u>Context</u>

Applicant:	Greater V	ictoria Housing	Society [James	Munro/ Carly	Abrahams]
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**Owners:** Greater Victoria Housing Society, Inc. No. S-0005025

**Property Size:** Metric: 3909 m<sup>2</sup> Imperial: 42076 ft<sup>2</sup>

**Existing Land Use:** Multiple Family Residential [Affordable Seniors Rental]

#### Surrounding Land Uses:

North:Single Family Residential/ Vacant LandSouth:Park/ Single Family ResidentialWest:Vacant land [Future Development Site]East:Multiple Family Residential

OCP Proposed Land Use Designation: Medium Density Residential [No change necessary]

**Existing Zoning:** RM-4 [Multiple Family Residential]

**Proposed Zoning:** CD [Comprehensive Development District]

#### Official Community Plan

The Official Community Plan Proposed Land Use Designation for the subject property is 'Medium Density Residential', considering developments with a Floor Area Ratio of up to 2.0 and up to six storeys in height. The proposed development is consistent with the height of six storeys but has a Floor Area Ratio of 2.1. Consistent with the direction contained within the Official Community Plan relating to density bonuses, the applicant is proposing to provide affordable rental and special needs housing for the benefit of the community.

OCP Section 5.1 includes a policy to 'support the development of a variety of housing types and designs to meet the anticipated housing needs of residents. This may include non-market and market housing options that are designed to accommodate young and multi-generational families, the local workforce, as well as middle and high income households.'

OCP Section 5.1 also includes a policy to 'encourage the development of rental accommodation designed for a variety of demographic household types, including young families.

OCP Section 5.3 Medium and High Density Residential Development includes an objective to support compact, efficient medium density and high density residential development that integrates with existing proposed adjacent uses.

As the proposed development has a floor area ratio of 2.1, it is inconsistent with the following policy:

• Consider new medium density residential development proposals with a Floor Area Ratio of up to 2.0 and up to six storeys in height, in areas designated on the "Proposed Land Use

#### Designation Map".

Notwithstanding this inconsistency, the following policies address the use of density bonus for this proposed development in order to achieve consistency with the Official Community Plan:

- Consider, where appropriate, development proposals with densities greater than those set out in the OCP through density bonus of floor-space provided that the additional density result in the provision of community amenities deemed appropriate by Council for the benefit of the community.
- Recognize, for the purposes of density bonuses, "amenities" may include but are not limited to:
  - 1. Privately-owned, publicly-accessible open space;
  - 2. Public art;
  - 3. Contributions towards the enhancement of public recreation facilities;
  - 4. Contributions towards street and boulevard enhancements, including street furniture and decorative lighting;
  - 5. Building to a higher step of the BC Energy Step Code than required under the Building Bylaw;
  - 6. Group daycare and respite for children and adults;
  - 7. Preservation of heritage structures, features or assets;
  - 8. Affordable housing units;
  - 9. Special needs housing units;
  - 10. Community gardens;
  - 11. Enhanced green family play space for residents;
  - 12. Public space improvements supporting and surrounding transit stations; and
  - 13. Other as may be appropriate to the development proposal or surrounding community as deemed appropriate by Council.

The applicant's proposal is for the entire building to be affordable rental housing and the design includes seven (7) fully accessible units as noted in the Applicant's Narrative [Appendix D].

Supporting policies in OCP Section 5.3 consistent with the proposed development include:

- Encourage new medium density and high density residential development with high quality design standards for building and landscaping and which enhance existing neighbourhoods.
- Prioritize medium density and high density residential development in proposed land use designated areas that:
  - 1. reduce single occupancy vehicle use;
  - 2. support transit service;
  - 3. are located within close proximity to employment centres; and
  - 4. accommodate young families.
- A mix of dwelling unit sizes should be provided in medium density and high density residential land use designated areas in order to meet the varying housing needs of Esquimalt residents.
- Encourage the incorporation of spaces designed to foster social interaction.
- Encourage the installation of electric vehicle charging infrastructure in medium and high density residential developments.

Official Community Plan, Section 5.4 states an objective to encourage a range of housing by type,

tenure and price so that people of all ages, household types, abilities and incomes have a diversity of housing choice in Esquimalt.

Through the provision of affordable, special needs and seniors housing, the proposed development would be consistent with the following policies in this section:

- Encourage the provision of affordable housing by the private market and the non-profit housing sector.
- Encourage the placement of new rental, affordable, special needs, and seniors housing in accordance with designated residential land use areas as they are integral components of inclusive neighbourhoods.
- Avoid the spatial concentration of affordable and special needs housing in neighbourhoods.
- Consider bonus density, parking relaxations or other development variances where a development proposal includes affordable, special needs or seniors housing. This may apply to both market and non-market housing, and mixed-use proposals. A housing agreement may be entered into between the Township and the owner.

Official Community Plan, Section 5.5, states an objective to expand and protect seniors housing in Esquimalt to enable citizens to "age in place".

Supporting policies in OCP Section 5.5 consistent with the proposed development include:

- Support and facilitate development of multi-generational housing, including in medium and high density residential developments.
- Encourage child friendly developments that provide appropriate amenities such as outdoor play areas for young children that are well separated from traffic circulation and parking areas.
- Encourage more accessible housing for people with mobility limitations on the ground floor of medium and high density residential buildings.
- Encourage the development of seniors housing that is within close proximity and accessible to services and amenities.

Official Community Plan, Section 5.6, states an objective to address the shortage of family and child friendly housing in Esquimalt.

OCP Section 11.3.1 Public Cycling Infrastructure states the following policy:

• Encourage end-of-trip facilities including secure lockup and shower facilities.

OCP Section 11.3.2 New Development states the following policy:

• Encourage bike lockers in multi-unit residential and commercial/commercial mixed-use developments.

OCP Section 11.4 Public Transit states an objective to encourage transit oriented development that takes advantage of the transit system and increases use of the transit system.

OCP Section 11.7 Public Parking states an objective to on-site parking with all land use.

A supporting policy in OCP Section 11.7 consistent with the proposed development includes:

• Encourage New developments should meet the needs of the land use designation and bylaws to achieve on-site parking or have a variances supported by a parking study.

OCP Section 13.3.3 Building Energy Efficiency states the following policies:

- Adopt best practices based on evolving building technologies and materials.
- Encourage the adoption of passive, efficient, and renewable energy systems in new buildings and during building retrofits
- Investigate options for encouraging developers to achieve high energy performance in new developments through such tools as density bonusing, expedited permit approval process, rebate of development fees, revitalization tax exemption, and other incentives.
- Pursue higher energy-efficiency performance in new developments, through the achievement of higher steps in the BC Energy Step Code as an amenity associated with rezoning.

Under OCP Section 13.3.6 Passenger Vehicle Alternatives, the following policies are listed:

- Encourage the installation of electric vehicle charging infrastructure in all new multi-unit developments.
- Pursue the installation of electric vehicle charging capacity in new developments during the rezoning process.

Relevant Development Permit Area Guidelines to consider as it relates to the rezoning application include:

- Retain existing healthy native trees, vegetation, rock outcrops and soil wherever possible.
- Avoid disturbing, compacting and removing areas of natural soil as this can lead to invasion by unwanted plant species, poor water absorption and poor establishment of new plantings. Use of local natural soil in disturbed and restored areas will support re-establishment of ecosystem functions.
- In residential locations plan for 'nature out front'; for new landscaping in front and exterior side yards use a variety of site-appropriate, native species; thereby contributing positively to pedestrian friendly urban streets, future greenways and habitat enhanced corridors.
- New buildings should be designed and sited to minimize visual intrusion on to the privacy of surround homes and minimize the casting of shadows on to the private outdoor space of adjacent residential units.
- Underground parking should be encouraged for any multi-unit residential buildings exceeding four storeys.
- Avoid excessively long blank walls adjacent to public streets.
- Avoid expansive blank walls (over 5 m in length) and retaining walls adjacent to public streets.
- Orient buildings to take advantage of site specific climate conditions, in terms of solar access and wind flow; design massing and solar orientation for optimum passive performance.
- Build new developments compactly, considering the solar penetration and passive performance provided for neighbouring sites, and avoid shading adjacent to usable outdoor open spaces.
- Strategically site buildings to sustain and increase the community's urban forest tree canopy cover.
- Use heat pumps, solar panels, green (living) roofing or an innovative system to improve a building's energy efficiency.
- Provide space for absorbent landscaping, including significantly sized trees on the site by not allowing underground parking structures to extend beyond building walls.

### <u>Zoning</u>

**Density, Lot Coverage, Height and Setbacks:** The following chart indicates the floor area ratios, lot coverage, setbacks, height, parking and usable open space of this proposal. Zoning Bylaw, 1992, No. 2050, does not currently contain a zone that can accommodate this proposed development.

	Comprehensive Development CD-130
Residential Units	137
Residential Floor Area Ratio	2.10
Lot Coverage	70%
Lot Coverage above Parking Level	50%
Parking Structure Setbacks	
<ul> <li>Front [Fleming Street]</li> </ul>	0.0 m
East Side	0.9 m
North Side	2.9 m
<ul> <li>Eastern Interior Side</li> </ul>	4.2 m
West Side	2.0 m
Rear [North]	1.1 m
Building Setbacks (Minimum)	
<ul> <li>Front [Fleming Street]</li> </ul>	5.3 m
East Side [Footpath]	3.9 m
North Side	6.8 m
Eastern Interior Side	4.9 m
West Side	1.9 m
• Rear [North]	7.4 m
Building Height	22 m [6 storeys]
Off Street Parking	67 spaces
Usable Open Space	6.0%
Bicycle Parking	137 resident + 6 visitor

Floor Area Ratio: The FAR of this proposal is 2.1 which is greater than the acceptable amount of 2.0 for a building in a 'Medium Density Residential' designated area defined in the Official Community Plan. To address this requested increase in density the applicant proposes to provide 137 affordable housing units which is consistent with the OCP policy direction for Council considering added density.

Lot Coverage: The lot coverage of the building above the parking level is 50%, compared to 70% for

the lot coverage at the parking level. This represents a significant increase to Lot coverage when compared to the RM-5 Multiple Family Residential zone that would restrict lot coverage to 30% of the area of the parcel.

Usable Open Space: The Township multiple family zones that accommodate apartment developments generally require the provision of usable open space in the amount of not less than 7.5% of the area of the parcel. This development has allocated 6.0% open space that would meet the definition of useable open space. In addition to this space the building design includes three amenity rooms, all offering direct connection to outdoor decks or patios, the largest of which is located at the southwest corner overlooking the park. These amenity rooms are available for use by all residents.

Parking: Parking Bylaw, 1992, No. 2011 requires 1.3 parking spaces per unit to be provided for multiple family developments. This proposal incorporates 67 parking spaces to serve 137 residential rental dwelling units, a ratio of 0.48 spaces per unit.

In addition to requesting a significant reduction to the total number of parking spaces required, the applicant is requesting a reduction to number of Visitor Parking spaces provided from 1 in 4 required spaces to approximately 1 in 6 spaces [i.e. from 17 to 13 spaces].

The applicant has provided a Transportation and Parking Study, produced by Bunt and Associates, stamped Received October 30, 2019 [ Appendix G], which supports the proposed number of residential parking and visitor parking spaces.

The proposed design also accommodates a single Loading Space in the surface parking lot for use by moving vans as well as delivery vehicles attending the site. This space is modestly shorter than the requirements for a Loading Space detailed in Parking Bylaw No. 2011 [6.4m vs 7.5m in length] however staff are not concerned by this modest reduction in length as the proposed space dimensions are expected to adequately accommodate larger vehicles expected to attend this site.

#### Comments from Other Departments

The plans for this proposal were circulated to other departments and the following comments were received:

**Community Safety Services:** Building to be constructed to requirements of BC Building Code 2018 and municipal bylaws. Plans will be reviewed for compliance with BC Building Code upon submission of a Building Permit application.

**Engineering Services:** Engineering staff has completed a preliminary evaluation of Works and Services that would be required for the proposed 137 unit multiple family residential building. Staff confirms that the design appears achievable on the site and that appropriate works and services are available in the immediate area. If approved, the development must be serviced in accordance with bylaw requirements including, but not limited to, new sewer and drain connections, underground hydro, telephone and cable services and new road works would be required up to the centre line of Fleming Street, meaning the installation of a significant portion of roadway. Should the application be approved, additional comments will be provided when detailed civil engineering drawings are submitted as part of a Building Permit application.

#### Fire Services

Esquimalt Fire Department requests the following issues be addressed;

- 1. Complete construction of Fleming Street to the western lot line including in the design sufficient space to allow the fire apparatus to turn around.
- 2. No overhead obstructions across the face of the building [i.e. powerlines].
- 3. Consider the mature size of trees proposed for the frontage of the property and limit consideration to types that will not present access issues in the future.
- 4. Water Supply for fire fighting purposes must be provided in accordance with *Fire Underwriter Survey Supply for Fire Protection*.
- 5. Installation of a new hydrant near the West Side Lot Line of 874 Fleming Street to address current and future fire suppression needs.

#### Parks Services:

Tree protection plan must include fencing surrounding the critical root zone sited around the dripline of all trees scheduled to be retained on the site. Any trees scheduled for removal as a result of this proposal shall be reviewed to determine if a Tree Removal Permit is required.

#### **Recommendation from the Advisory Planning Commission [APC]**

This application was considered at the regular meeting of the APC held on August 20, 2019. The APC made the following recommendation:

"That the application for a rezoning be forwarded to Council with a recommendation to approve because the proposal meets the need for affordable housing and is a sensitive development to the neighbourhood".

#### **Recommendation from the Design Review Committee [DRC]**

This application was considered at the regular meeting of the DRC held on September 11, 2019. The DRC made the following recommendation:

"The DRC recommends that the application be forwarded to Council with a recommendation to approve as it provides a valuable amenity in affordable housing and follows the design guidelines".

#### Timeline

June 17, 2019 - Application received August 20, 2019 - Application reviewed by the Advisory Planning Committee September 11, 2019 - Application reviewed by the Design Review Committee October 30, 2019 - Revised drawings received February 11, 2020 - Revised drawings received

#### ISSUES:

1. Rationale for Selected Option

The form of this proposal complies with the 'Medium Density' 'Proposed Land Use Designation' (OCP Schedule B) and is consistent with the policy direction contained within the

OCP for medium density residential development with the exception of requiring bonus density. The applicant has addressed the requested density bonus by committing to providing both affordable and special needs housing consistent with the direction contained in the OCP.

The development would add affordable housing units targeted toward families and seniors thereby meeting an identified need in Esquimalt. While the proposal provides for a lower parking capacity than has traditionally been considered for multiple family buildings, this reduction has been supported by parking demand in other GVHA facilities and on the premise that the target clients are less likely to own vehicles than those able to afford market housing. This reduction in parking capacity also serves to encourage residents to choose alternative, lower carbon transportation solutions.

The applicant has indicated a willingness to voluntarily enter into a Section 219 Covenant to secure amenities including constructing the building to Step 4 of the BC Energy Step Code, providing electric car charging for 7 spaces as well as for mobility scooters and electric bikes, ensuring tree protection for the significant Arbutus tree located on the southeast portion of the site, securing the amenity spaces within the building for the benefit of residents and prohibiting stratification and sale of the units within the building.

The applicant has also agreed to enter into a housing agreement to secure the entire building as affordable rental units and provide for not less than seven accessible housing units constructed to the BC Housing accessibly standards. Finally, the DRC and the APC have both indicated support for the project.

- 2. Organizational Implications This Request for Decision has no organizational implications.
- 3. Financial Implications

This Request for Decision has no financial implications.

 Sustainability & Environmental Implications Increasing residential density in existing neighbourhoods is believed to make a community more sustainable.

The applicant has completed the Green Building Checklist [Appendix E] and the applicant also proposes to construct this building to meet Step 4 of the BC Energy Step Code 4 requirements.

5. Communication & Engagement Public Notification:

As this is a rezoning application, should it proceed to a Public Hearing, a notice would be mailed to tenants and owners of properties within 100m (328 ft) of the subject property. A sign indicating that the property is under consideration for a change in zoning has been placed on the Fleming Street frontage of the property and would be updated to reflect the date, time and location of the Public Hearing. Additionally, notice of the Public Hearing would be placed in two editions of the Victoria News.

Applicant's Public Consultation:

The applicant held a Community Open House and met with neighbours on May 29, 2019 in order

to comply with the public consultation procedures of Development Application Procedures and Fees Bylaw, 2012, No. 2791 [Appendix H].

#### **ALTERNATIVES:**

1. That Council gives Bylaw No. 2988 first and second readings, directs staff to schedule a Public Hearing and begin development of a Section 219 covenant.

2. Council postpone consideration of Bylaw No. 2988 pending receipt of additional information.

#### CORPORATION OF THE TOWNSHIP OF ESQUIMALT

#### **BYLAW NO. 2988**

#### A Bylaw to amend Bylaw No. 2050, cited as the "Zoning Bylaw, 1992, No. 2050"

THE MUNICIPAL COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF ESQUIMALT, in open meeting assembled, enacts as follows:

- 1. This bylaw may be cited as the "ZONING BYLAW, 1992, NO. 2050, AMENDMENT BYLAW NO. 2988".
- 2. That Bylaw No. 2050, cited as the "Zoning Bylaw, 1992, No. 2050" be amended as follows:
  - (1) by adding the following words and figures in Section 31, Zone Designations, in the appropriate alpha-numeric sequence:

"Comprehensive Development No. 130 (874 Fleming Street) CD No. 130"

(2) by adding the following text as Section 67.117 (or as other appropriately numbered subsection within Section 67):

#### 67.117 COMPREHENSIVE DEVELOPMENT DISTRICT NO. 130 [CD NO. 130]

In that Zone designated as CD No. 130 [Comprehensive Development District No. 130] no Building or Structure or part thereof shall be erected, constructed, placed, maintained or used and no land shall be used except in accordance with and subject to the regulations contained in or incorporated by reference into this Section.

#### (1) Permitted Uses

The following Uses and no others shall be permitted:

- (a) Dwelling Multiple Family
- (b) Home Occupation

#### (2) Parcel Size

The minimum Parcel Size of fee simple Parcels created by subdivision shall be 3900 square metres.

#### (3) Number of Principal Buildings

Not more than one (1) Principal Building shall be located on a Parcel.

#### (4) <u>Number of Dwelling Units</u>

No more than one hundred thirty-seven (137) Dwelling Units shall be located on a Parcel

#### (5) Floor Area Ratio

- (a) The Floor Area Ratio shall not exceed 2.0.
- (b) The maximum Floor Area Ratio may be increased to 2.1 upon the owner entering into a Housing Agreement under Section 483 of the Local Government Act with the Township, securing all the dwelling units as affordable housing, restricting stratification of the building, and including provisions related to the administration, management and reporting in accordance with the Township's customary form.

#### (6) Building Height

No Principal Building shall exceed a Height of 22 metres.

#### (7) Number of Storeys

The maximum number of Stories shall be six (6).

#### (8) Lot Coverage

- (a) Principal Buildings shall not cover more than 70% of the Area of the Parcel including a parking structure.
- (b) Notwithstanding 8(a), that portion of the Principal Building constructed at or above the First Storey shall not cover more than 50% of the Area of the Parcel.

#### (9) <u>Siting Requirements</u>

Within this CD-130 Zone, lot lines, setbacks and yards shall be determined in accordance with Figure 1 (below).



Figure 1.

#### (a) Principal Building:

- (i) Front Setback: A Principal Building shall be located as follows:
  - 1. No Principal Building shall be located within 6.9 metres of the Front Lot Line.
  - 2. That portion of the Principal Building defined by the canopy of the front entry area and associated support columns, located on the First Storey of the Principal Building and measuring not more than 7.5 metres in width along the front face of the Principal Building, must be setback a minimum of three (3) metres more from the Front Lot Line.
- (ii) East Side Setback: No Principal Building shall be located within 3.9 metres of the East Side Lot Line.
- (iii) North Side Setback: No Principal Building shall be located within 7.5 metres of the North Side Lot Line.
- (iv) Eastern Interior Side Setback: No Principal Building shall be located within 5.3 metres of the Eastern Interior Side Lot Line.
- (v) West Side Setback: A Principal Building shall be located as follows:
  - 1. No portion of the First Storey of the Principal Building shall be located within 4.7 metres of the West Side Lot Line.
  - 2. No portion of the Principal Building above the First Storey shall be located within 5.7 metres of the West Side Lot Line.
  - 3. The portion of the Principal Building above the First Storey must be setback a minimum of one (1) metre more from the West Side Lot Line than the First Storey.
  - Notwithstanding all other requirements of Section 9(a)(v), no portion of a Principal Building at or above the First Storey, located within 15.5 metres of the Rear Lot Line, shall be located within 5.1 metres of the West Side Lot Line.
- (vi) Rear Setback: No Principal Building shall be located within 7.4 metres of the Rear Lot Line.

#### (b) Accessory Buildings:

No Accessory Buildings shall be permitted.

#### (10) Siting Exceptions

#### (a) Principal Building:

- (i) The minimum distance to the Front Lot Line may be reduced by not more than 1.4 metres to accommodate building support columns located on the First Storey.
- (ii) The minimum distance to the Front Lot Line may be reduced by not more than 1.6 metres to accommodate that portion of the Principal Building located above the First Storey.
- (iii) The minimum distance to the North Side Lot Line may be reduced by not more than 0.7 metres to accommodate that portion of the Principal Building located above the First Storey.
- (iv) The minimum distance to the Eastern Interior Side Lot Line may be reduced by not more than 0.4 metres to accommodate that portion of the Principal Building located above the First Storey.
- (v) The minimum distance to a Lot Line may be reduced by not more than the following distances to accommodate the parking structure situated below the First Storey of a Principal Building:

1.	Front Lot Line:	5.0 metres
2.	East Side Lot Line:	3.1 metres
3.	North Side Lot Line:	4.7 metres
4.	Eastern Interior Side Lot Line:	1.2 metres
5.	West Side Lot Line:	2.8 metres
6.	Rear Lot Line:	6.5 metres

- (vi) Notwithstanding Section 10(v), the minimum distance to the Front Lot Line may be reduced to 0.0 metres to accommodate the potion of the underground parking structure designated for use as an electrical substation and electrical, mechanical, and water service rooms measuring not more than 18.5 metres in width along the Front Lot Line.
- (vii) The minimum distance to the Front Lot Line may be reduced by not more than 2.8 metres to accommodate the above ground structure at the parkade entrance.
- (viii) The minimum distance to the West Side Lot Line may be reduced by not more than 2.7 metres to accommodate the portion of the underground parking structure designated for a garbage and recycling room and the above ground structure at the parkade entrance.

- (11) <u>Roof</u>
  - (a) Roof Top Coverage: Notwithstanding Zoning Bylaw No. 2050, Section 15(4)(a), in the CD-130 zone Structures exceeding the maximum allowable Building Height must occupy less than 15% the area of the roof.
  - (b) Roof Overhang: Notwithstanding Zoning Bylaw No. 2050, Section 16(1)(b), in the CD-130 zone the required setback may be reduced by not more than 1.3 meters to accommodate roof eaves.

#### (12) Fencing

Subject to Section 22 no fence shall exceed a Height of 1.2 metres In front of the front face of the Principal Building and 2 metres behind the front face of the Principal Building.

#### (13) Usable Open Space

Usable Open Space shall be provided in an amount not less than 6.0% of the Area of the Parcel.

### (14) Off-Street Parking

- (a) Off street parking shall be provided in accordance with Parking Bylaw, 1992, No. 2011(as amended).
- (b) Notwithstanding Section 13 of Parking Bylaw, 1992, No. 2011(as amended), off-street parking shall be provided in the minimum ratio of 0.48 spaces per dwelling unit.
- (c) Notwithstanding Section 11(1) of Parking Bylaw, 1992, No. 2011(as amended), a minimum of 13 parking spaces shall be marked "Visitor".
- (d) Notwithstanding Section 16 of Parking Bylaw, 1992, No. 2011(as amended), one parking space shall be provided in the surface parking area having dimensions of not less than 3.3 metres width and 6.3 metres length and shall be clearly designated as a Loading Area.
- (3) by changing the zoning designation of PID 002-900-246 Lot B, Section 10, Esquimalt District, Plan VIP25267 [874 Fleming Street], shown crosshatched on Schedule "A" attached hereto, from RM-4 [Multiple Family Residential] to CD No. 130 [Comprehensive Development District No. 130].
- (4) by changing Schedule 'A' Zoning Map, attached to and forming part of "Zoning Bylaw, 1992, No. 2050" to show the changes in zoning classification effected by this bylaw.

#### Bylaw No. 2988

READ a first time by the Municipal Council on the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

READ a second time by the Municipal Council on the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

A Public Hearing was held pursuant to Sections 464, 465, 466 and 468 of the *Local Government Act* on the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

READ a third time by the Municipal Council on the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

ADOPTED by the Municipal Council on the \_\_\_\_ day of \_\_\_\_\_, 2020.

BARBARA DESJARDINS MAYOR

RACHEL DUMAS CORPORATE OFFICER







# 874 Fleming Street - 2017 Air Photo









D00	SITE SURVEY
D01	EXISTING SITE PLAN W/ PROPOSED BUILDING
D02	AVERAGE GRADE CALCULATION
D03	OVERALL SITE PLAN
D04	LEVEL PARKADE FLOOR PLAN
D05	LEVEL 1 FLOOR PLAN
D06	LEVEL 2 FLOOR PLAN
D07	LEVEL 3 to 5 FLOOR PLAN
D08	LEVEL 6 FLOOR PLAN
D08b	ROOF PLAN
D09	BUILDING ELEVATIONS
D10	BUILDING ELEVATIONS
D11	SUITE PLANS
D12	SUITE PLANS
D13	AREA SUMMARIES
D14	RENDERINGS
D15	EAST WEST SECTIONS
D16	EAST WEST SECTIONS
D17	EAST WEST SECTIONS
D18	NORTH SOUTH SECTIONS
D19	NORTH SOUTH SECTIONS
	193

LANDSCAPE CONCEPT PLAN

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# **ESQUIMALT RENTAL HOUSING**

874 FLEMING STREET, ESQUIMALT, BC

LOW HAMMOND ROWE ARCHITECTS

99-51





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PRELIMINARY - NOT FOR CONSTRUCTION

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GREATER VICTORIA HOUSING SOCIETY

874 FLEMING STREET, ESQUIMALT, BC











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AVERAGE GRADE: 11.78m GEO

AVERAGE GRADE CALCULATION 11.70 + 13.43 + 13.80 + 13.80 + 12.54 + 10.42 + 10.35 + 10.00 + 0.50 + 11.93 = 117.47 117.47 / 10 = 11.76m GEO

# EXISTING 11.03m

- EXISTING 10.00m EXISTING 9.50m NEW 1140m
- G: SOUTH INSIDE CORNER EXISTING 10.36m NEW 11.40m
- F: SOUTH CORNER EXISTING 10.42m NEW 11.40m
- E SOUTHEAST CORNER
- D: EAST OUTSIDE CORNER EXISTING 13.80m NEW 11.40m
- C: EAST INSIDE CORNER EXISTING 13.80m NEW 11.40m
- B: NORTHEAST OUTSIDE CORNER EXISTING 13.43m NEW 11.40m
- A: NORTHEAST CORNER

AVERAGE GRADE CALCULATION W/ BA



LOW HAMMOND ROWE ARCHITECTS



**ESQUIMALT RENTAL HOUSING** 874 FLEMING STREET, ESQUIMALT, BC

Lot & Plan VIP25267 Section 10 Land District 21Lot & Plan VIP25267 Section 10 Land District 21 PID: 002-900-246

Exist	ling RM-4	OCP	Proposed		Notes	
	na		3909 m <sup>2</sup>	42076 sf		
i.	30.Q %	-	10 %			
	1.0	2.0	2,10			
uth	7.5 m		5.5 m			
uth last ( last	6,0, m		4.Q m 5.1 m			
lest lest	6,0 m		4.8 m 2,0 m			
rth	7,5 m	1000	7.5 m			
	11 m 4 storeys	6 Ştoreys'	20.6 m B storiet	Average Grade: T, O, Roof Surface:	11.75 32.35	
	7.5 %	1	25.96			

	*Area calculated	to exterior face of e	aterior sheathing - for construction budget purposes
	1,643 m <sup>2</sup> 1,691 m <sup>2</sup> 1,691 m <sup>2</sup> 1,691 m <sup>2</sup> 1,691 m <sup>2</sup>	17,685 sf 18,199 sf 18,199 sf 18,199 sf 18,199 sf	
E Destande	2,488 m <sup>2</sup>	17,212 sf 107,692 sf 26,780 sf 134,471 sf	*Griss Ilushia Area
arkeye	16,455 11	134/4/1 3)	OTOS LAODIE VIED
	Arga (m2)	Area (sq It)	
ker Office	11.60 m <sup>4</sup>	125 sf	
iset	3.44 m <sup>4</sup>	37 sf	
curity*	5.00 m <sup>2</sup>	54 sf	*1.68 m x 6 floors
:	4.90 m <sup>2</sup>	53 sf	
Rm	55.80 m <sup>2</sup>	601 sf	
n Room	222.00 m <sup>2</sup>	2,390 sf	
Room*	301.61 m <sup>2</sup>	2.170 sf	
	sub+ m <sup>2</sup>	5,429 sf	

Area (m2) Area (sq ft) 1,960 m<sup>3</sup> 21,097 sf

\*Area calculated to interior face of exterior wells - per zoning definition (FAR calculation) and excludes stairs, elev, corridors, 1,150 m<sup>2</sup> 12,379 sf

	1,430	m²	15,393 sf	
	1,430	m²	15,393 sf	
	1,430	m²	15,393 sf	
	1,430	m²	15,393 sf	
r	1.450	m <sup>2</sup>	14531 st	
·	2,220	mi	88,480 sf	

and faundry, amenity rooms, wc's

iculated	to centre	ine of party	Level 1	Level 2	Lavel 3	Level 4	Level 5	Level 6	Units	%	
	197	.4		6				_	24	10	
2	388	ef			1	1	1	1	4	2	
m <sup>2</sup>	388	ef	1	2	1	1	1	4	7	5	
n <sup>2</sup>	533	sf	6	2	5	5	5	11	34	25	
n <sup>3</sup>	568	sf		5	5	5	5		20	15	
n <sup>a</sup>	608	sf		1	1	1	1		4	3	
n <sup>2</sup>	535	sf	1					Ĩ	2	1	
n²	571	sf		1	1	1	1		4	3	
n²	\$36	sf						3	3	2	
n²	786	sf	2	1	4	4	4	5	20	15	
n²	838	sf		1	1	1	1		4	3	
n <sup>2</sup>	978	sf		1	1	1	1	1	5	4	
n²	1387	sf	3						-	2	
12	1387	sf	3						3	2	
		Sub Total	16	20	26	25	26	23	Dro	100	-
									ΠΕυ	EIVE	U
leguire	1	Proposed		Stalls	/unit		1				
17	8 stalls 9 stalls	67	stalls	0.49	/unit			1			
								· .	-		
42	etalle	127	stalls	1.00	lumb			- 1	-FR	1 1 203	20
4.3	atons	137	510115	1.00	/ UPA					202	.0
							1	00		-	
		14	stalls					200	HR OF	IOWNS	5HI
								So !	OF ES		Т
							-	14			(







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SECTION 5.2 0.3.(.1 5.3.2.1 5.3.2.3 5.3.3.1 5.4.1.3 5.4.1.4 5.5.1.1 6.5.1 6.1.3 6.2.2 6.2.2.3 6.2.2.3 6.2.3.1	DESCRIPTION Unit Area Style Entry-Coset Min With Uning Room seeling capacity Circulation spaces Min, With Diming Room seeling capabity Door open ful Access bed-foot and 2 sites Provide Linar Closet Or Counter Closet Law. Counterfor Min Width Towel Bark Width 3 Piece Bahroom Showe (44:4:120mm) or ST	BCH 86 m2 915 mm 8 gearts 920 mm 1015 mm 6 gearts YES YES YES 2090 mm 800 mm 800 mm 10 10 degress YES 2090 mm 10 degress 110 degress 120 degre	PROVIDED YES YES YES YES YES YES NO YES YES YES YES YES YES YES YES	VALUE/COMMENTS   90.8 m2   90.8 m2   1400 mm   8 sents   -   8 sents   1.5 m2 in Parkade T8D   3475 mm   915 mm   915 mm   915 mm   915 mm
8.2.5	Lav Basin with Vanity Powder Room Water Closet Lav Basin with Vanity	1 1 1	YES YES YES YES	1 1
SECTION 5.4.2	DESCRIPTION Bedroom type 1 A / 1 B / 1 C	BCH YES	PROVIDED	VALUE/ COMMENTS
	Type A: Min Area Type A: Min Dimension Type B: Min Area Type B: Min Area Type B: Min Dimension Type C Closel width Type C. Min Area Ture C. Min Area	11.15 m2 2800 mm 1500 mm 9.30 m2 2800 mm 1500 mm 8.50 m2 2800 mm	YES YES YES YES YES YES YES	11,13 m2 3136 mm 2185 mm 9.72 m2 3100 mm 1880 mm 8.53 m2 2690 mm

















ESQUIMALT RENTAL HOUSING 874 FLEMING STREET, ESQUIMALT, BC

- NOT FOR CONSTRUCTION PRELIMINARY

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L'A LOW HAMMOND ROWE ARCHITECTS



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LOW HAMMOND ROWE ARCHITECTS

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ESQUIMALT RENTAL HOUSING 874 FLEMING STREET, ESQUIMALT, BC



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ESQUIMALT RENTAL HOUSING 874 FLEMING STREET, ESQUIMALT, BC



SECTION KEY PLAN





PRELIMINARY - NOT FOR CONSTRUCTION

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(H)(G) (F) 1()L (E) (D) C (B) (A) T.O. ROOF STRUCT. 28200 ¢ 24900 ¢ 21000 ¢ 16300 \$ SIDE YARD 11400 ¢ GEO & HE IN EXISTING PARKADE 1 3 D17 EAST WEST SECTION 06





LOW HAMMOND ROWE ARCHITECTS









PRELIMINARY - NOT FOR CONSTRUCTION

LOW HAMMOND ROWE ARCHITECTS







PRELIMINARY - NOT FOR CONSTRUCTION



NORTH SOUTH SECTIONS D19



Plan 2

25

3

4

bush This Plan was prepared for Municipal inspection purposes and is for the exclusive use of our client. All rights reserved. No person may copy, reproduce, transmit, or alter this document in whole or in part without the consent of the signatory. The signatory accepts no responsibility or liability for any damages that may be suffered by a third party as a result of any decisions made, or actions taken based on this document.

This document shows the relative location of the surveyed structures and features with respect to the boundaries of the parcel described above. This document shall not be used to define property lines or property corners. This location certificate has been prepared in accordance with the ABCLS Professional Reference Manual and is certified correct this 6th day of February, 2020.



orbutus

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## C This document is not valid unless digitally signed and sealed.

The following non-financial charges are shown on the current title and may affect the property.

M76301 - Undersurface Rights 106260G - Undersurface Rights A64775 - Restrictive Covenant



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CORP. OF TOWNSHIP

OF ESQUIMALT

ELOPMENT SERV

C. Feb 10, '20 Rezoning Submission Revisions

B. Oct 22, '19 Revised Rezoning Submission

LADR LANDSCAPE ARCHITECTS

#3-864 Queens Ave. Victoria B.C. V8T 1M5 Phone: (250) 598-0105 Fax: (250) 412-0696

A. Aug 19, '19 Rezoning Submission

874 Fleming St.

Esquimalt, B.C.

Landscape Concept

DRAWN O.L.

CHECKED B.W.

1 of 1

SHEET

REVISIONS

ROJECT

TITLE

SCALE

ATE

Plan

As shown

PROJECT No. 1907

Oct 22, 2019

Galaxy Magnolia	6 cm cal.
Black pine	6 cm cal.
Douglas Fir	3 m hL
Common Name	Size
Mexican Orange Blossom	# 5 pot
Smoke Bush	# 7 pol
Common Name	Size
Redtwig Dogwood	# 5 pot
Red Flowering Currant	# 5 pot
Nootka Rose	# 2 pot
Salmonberry	# 2 pot
Sweet Box	# 1 pot
Common Name	Size
Salal	# 1 pot
Skimmia	# 1 pot
Hardhack	# 1 pot
Common Name	Size
Common White Yarrow	# 1 pot
Dwarf Astilbe	# 1 pot
Purple Coneflower	SP4
Japariese Silver Grass	# 5 pot
Fountain Grass	# 1 pot
Sword Fern	SP4
Goldsturm Black Eyed Susan	SP4



June 17, 2019

Township of Esquimalt 1229 Esquimalt Road Esquimalt, British Columbia V9A 3P1

Dear Mayor Desjardins, Council, and Staff:

#### Re: Application to Rezone 874 Fleming Street, Esquimalt, British Columbia

Please accept this letter as part of our Rezoning Application for 874 Fleming Street, a proposed one hundred and thirty-seven (137) unit permanently affordable, residential rental building.

874 Fleming Street, currently known as Esquimalt Lions Lodge, was designed and constructed by the Esquimalt Lions Club in 1972. The Greater Victoria Housing Society acquired the four (4) storey, seventyseven (77) unit apartment building in 1980 and has continued operation of the building to this day. A recent feasibility study indicates that the current site is underutilized and can support a building nearly twice in size. As the current building is well past its effective life and no longer meets the needs of the tenants, we are proposing to rezone the property from RM-4 to a site-specific zone.

The site is a single lot approximately 3,903 sq. m. and is bounded by single family lots to the north, an undeveloped treed lot to the west, a multi-residential building to the east, and the Esquimalt Lions Park to the south. The proposed development is a six (6) storey wood frame building, over a single below grade parkade. The ground floor will contain multiple common rooms with patios, common laundry room, and caretaker's office with washroom facilities.

The proposed development is being designed to Step 4 of the BC Energy Step Code subject to funding availability. The Greater Victoria Housing Society strives to create Zero Emission buildings by eliminating the need for a natural gas, domestic hot water heating system, thereby reducing annual CO<sup>2</sup> outputs entirely.

The proposed development is designed using Crime Prevention through Environmental Design (CTPED) principles to engage and promote safety and security for tenants and visitors. To minimize opportunities for concealment, the building footprint is uncomplicated, with minimal alcoves and recesses. Landscaping is similarly articulated with a combination of low ground cover and high crown plant species that provide clear sight lines into front, rear, and side yards eliminating blind spots. Appropriate levels of shielded lighting provide safe, well-lit pathways and garden areas around the building, specifically at entry and exit doors.

The proposed development has been carefully designed to conform with the *Official Community Plan* (OCP). The OCP recognizes this site under Section 5.3, Medium and High Density Residential Development. The proposed development meets the strategic directions as outlined by thoughtfully increasing residential density and enhancing the existing neighbourhood through quality design.

The OCP acknowledges affordable housing units as an amenity to the Township of Esquimalt under section 5.4, Affordable Housing. It is the intent of the Greater Victoria Housing Society to design and construct this development as a purpose-built rental building to be owned and operated by the Greater Victoria Housing Society. The proposed development includes twenty-eight (28) studios, sixty-seven (67) one bedroom units, twenty-four (24) two bedroom units, five (5) three bedroom units, six (6) four bedroom units, and seven (7) fully accessible studios, with rental rates set to assist seniors and families earning very low to moderate incomes.

The proposed development allows seniors to 'age in place' in age-friendly housing and addresses the shortage of family and child-friendly housing in the Township of Esquimalt.

Funding for the proposed development is provided by BC Housing as part of the provincial Community Housing Fund program. As per the funding agreement with BC Housing, the Greater Victoria Housing Society will enter into an Operating Agreement with BC Housing for a period of no less than thirty-five years. This agreement will outline minimum and maximin rental amounts, along with the demographic of residents.

Tenants will have the opportunity to take advantage of the neighbouring parkland, schools, recreation facilities, and public transportation, aiding in an active lifestyle and the ability to live, work, and play in the Township of Esquimalt.

The provision of one hundred and thirty-seven (137) units (sixty (60) net units) will provide many benefits to the current tenants, neighbours, and the community at large. The increase in density on the site is beneficial to the local economy as it will increase the consumer base to the neighbourhood, in addition to consumers and employees for local businesses.

The form, massing, and character have been developed in keeping with Section 23, DPA.: 6 Multi-Family Residential as listed in the OCP. The proposed development addresses the Guidelines under Section 23.5 as follows:

- Sightlines have been limited along the north elevation as to not intrude on neighbouring properties, in addition to the increased 6.5 m. setback.
- Appropriate setbacks along the south elevation highlight the proposed building entrance and add key interest to the streetscape, encouraging interaction at the street level.
- Enhanced landscaping creates visual stimulation and allows for distinct separation between the proposed building and the neighbouring residential properties.

Convenient and efficient transportation access encourages opportunities for cycling, walking, and public transit use.

The proposed development includes sixty (60) secure underground parking stalls, seven (7) surface stalls, including a loading bay, and a bicycle facility capable of accommodating one hundred and thirty-eight (138) bicycles.

A total of 10% of all parking stalls will be equipped with EV charging stations. Additional conduit will be distributed to each remaining parking stall for the installation of future EV charging stations. Charging for mobility scooters and electric bicycles will be provided.

As per the Development Application Procedures and Fee Bylaw No.: 2791, 2012, a Community Open House was held in the evening on the 29<sup>th</sup> of May, 2019. The Greater Victoria Housing Society welcomed more 25 members of the neighbourhood and community to view the proposed development plans and provide comments and feedback. The response was overwhelmingly positive.

The Greater Victoria Housing Society further met with the current tenants of the Esquimalt Lion's Lodge on the 29<sup>th</sup> of May, 2019, to discuss the redevelopment of the site and the details of the Tenant Relocation Plan.

Founded in 1956, the Greater Victoria Housing Society is a non-profit organization dedicated to providing affordable rental housing. For over 62 years, the Greater Victoria Housing Society has provided homes to low to moderate-income seniors, families, working individuals, and adults with disabilities. The Greater Victoria Housing Society owns and operates seventeen (17) properties and seven hundred and twenty-six (726) units of affordable housing throughout the region. The Greater Victoria Housing Society currently owns and manages one hundred and sixty-eight (168) units of seniors' housing in the Township of Esquimalt.

We thank you for your time and consideration.

Sincerely, Kaye Melliship **Executive Director** /CA

References:

Official Community Plan - June 25, 2018

Official Community Plan - Schedule B Proposed Land Use Designations

2326 Government Street, Victoria, British Columbia V8T 5G5 | P: 250.384.3434 F: 250.386.3434



# Green Building Checklist

Completed checklists form part of the application package reviewed by staff and ultimately, Council. New buildings and developments have impacts that last well beyond the construction period. Reducing the consumption of natural resources and increasing resilience to a changing climate are part of the challenge of building more sustainably. This checklist will help you identify and present how your project will help the Township meet its goals of becoming cardon neutral by 2050.

Applicant's Name	Greater Victoria Housing Society	JUN

Site Address

874 Fleming Street

JUN 1 7 2019 CORP. OF TOWNSHIP

OF ESQUIMALT

	PMENT	SEL
1.0 0	Certification	Please check
1.1	Step Code (Please indicate level)	
1.2	EnerGuide rating	
1.3	LEED	
1.4	Passive House	
1.6	Living building	
1.7	Other (Built Green BC, R-2000, Green Shores etc.)	1
2.0 5	biting	
2.1	New buildings > 10 m <sup>2</sup> are located > 20 m from the high water mark (HWM) of the Gorge Waterway.	Required
2.2	New buildings >10 $m^2$ are located at least 10 m from the HWM from the outer coastline.	Required
2.3	Flood Construction Level has been established using sea level rise projections for the life of the building.	
2.4	Habitats of threatened and endangered species have been protected from impacts of development.	
2.5	Buildings are located within disturbed or developed areas.	1
3.0 S	horeline Protection Measures	
3.1	Landscaping within 10 m of the high water mark consists primarily of native plant and tree species.	Required
3.2	A conservation covenant has been signed to protect sensitive ecosystems within 10 m of the shoreline.	
3.3	At least one native tree capable of (now or in the future) supporting the nest of a Bald Eagle, Osprey etc. has been retained or is planted within 30 m of the high water mark (HWM).	
3.4	Removal of at least 30% of hardened shoreline and replacement with erosion control measures designed to improve the habitat of the shoreline.	
3.5	Light from building and landscaping does not cast over water.	
3.6	Wildlife habitat has been incorporated into seawall design.	

4.0 S	tormwater Absorption and Treatment	Please Check
4.1	An on-site stormwater retention system has been designed to retain at least the first 3 cm of rainfall from each rain event.	
4.2	Stormwater will be treated for pollutants prior to release to the stormdrain system or to a surface water source.	
4.3	The project features a green roof.	
4.4	The total amount of impervious surface is not greater than 20%.	
5.0 V	Vater Conservation	
5.1	The irrigation system has been designed to reduce potable water use by 50% compared to conventional systems.	
5.2	Waterless urinals will be used.	
5.3	Water features use re-circulating water systems.	
5.4	Rainwater will be collected for irrigation purposes.	
5.5	Toilet and kitchen sink drains are separate from other drains to the point of exit.	
5.6	An approved greywater reuse system will be installed.	
6.0 T	rees/Landscaping	
6.1	The project is designed to protect as many native and significant trees as possible.	1
6.2	There will be no net loss of trees.	
6.3	Trees will be planted in soil volumes calculated to support the full grown size of the tree.	
6.4	At least 25% of replacement trees are large canopy trees.	
6.5	Topsoil will be protected from compaction, or stockpiled and reused.	
6.6	Erosion control measures have been designed and installed to prevent erosion of topsoil.	
7.0 B	iodiversity	
7.1	New landscaping is predominantly native plant and tree species.	
7.2	Invasive species will be removed from landscaped areas.	1
7.3	At least two biodiversity features have been incorporated into the new or existing landscaping (see section 18.5.3 of the OCP for ideas).	
8.0 E	nergy Conservation	and a strength
8.1	The building is pre-plumbed for solar hot water.	Required
8.2	Install a greywater heat recovery unit.	
8.3	Passive cooling is supported through flow-through ventilation design, low E windows, solar shades, shade trees etc.	
8.4	Passive heating is supported via building orientation, window design and thermal mass.	
8.5	The building will have necessary structural support and conduit for Solar PV.	
8.6	Obtain minimum of 20% of building energy consumption through community based or on-site renewables, such as district energy, waste heat recovery, geothermal, solar PV, solar hot water.	
8.7	Heating uses a low carbon heating source, such as air source heat pump.	

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9.0 T	ransportation	Please Check
9.1	Building will have a car share or bus pass program for residents.	
9.2	Enhanced facilities for bicyclists such as showers, lockers, storage etc.	
9.3	Charging infrastructure for E-bikes will be provided.	
9.4	EV charging conduit supplied to 100% of residential parking units.	1
9.5	30% of residential parking spaces include an electrical outlet or EV charging equipment.	
9.6	Adequate space in the electrical system to provide EV charging for 100% of parking stalls.	
9.7	For commercial buildings, Level 2 or Level 3 EV charging provided for employees and/or visitors.	
10.0	Waterials/Waste	
10.1	Employs at least 3 advanced framing techniques described in the CHBA builder's manual to reduce unnecessary lumber and sheathing.	
10.2	Uses at least two materials which are certified for recycled content.	1
10.3	Uses engineered structural material for two major applications (>10% of floor area).	1
10.4	5 major building elements made from >50% recycled content.	
10.5	Use foundation, floor and >50% of walls from existing building.	
10.6	Deconstruct at least 50% of existing building for material salvage.	
10.7	Use at least five major materials or systems produced in BC.	
10.8	Use certified sustainably harvested wood for one major structural or finishing application (eg framing, plywood, floors)	
10.9	Eliminate use of wood from threatened trees.	1
10.10	Recycling area provided within residential suites.	
10.11	Recycling collection area for multi-family buildings.	1
10.12	Pickup of compostables provided in multi-family units.	1
10.13	Construction waste management practices used to reduce and separate waste and divert at least 50% from the landfill.	

Please include a brief description of how this project contributes to a reduction in greenhouse gas emissions and moves the municipality closer to its ultimate target of becoming carbon neutral by 2050 (use next page if needed).

The proposed development is being designed to Step 4 of the BC Energy Step Code subject to funding availability. We strive to create Zero Emission buildings by eliminating the need for a natural gas, domestic hot water heating system, thereby reducing CO2 entirely. A total of 10% of all parking stalls will be equipped with EV charging stations. Charging for mobility scooters and electric bicycles will be provided.

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<u>Talbot Mackenzie & Associates</u> Consulting Arborists

# 874 Fleming St, Esquimalt

# Construction Impact Assessment &

Tree Preservation Plan

Prepared For: Greater Victoria Housing Society 2326 Government St Victoria, BC V8T 5G5

Prepared By: Talbot, Mackenzie & Associates Noah Borges – Consulting Arborist ISA Certified # PN-8409A TRAQ – Qualified

Date of Issuance:

June 26, 2019 *Updated*: February 11, 2020

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Box 48153 RPO - Uptown Victoria, BC V8Z 7H6 Ph: (250) 479-8733 Fax: (250) 479-7050 Email: tmtreehelp@gmail.com



Talbot Mackenzie & Associates

**Consulting Arborists** 

Jobsite Property:	874 Fleming St, Esquimalt
Date of Site Visits:	February 13, 2019 and February 4, 2020
Site Conditions:	Existing multi-story building with at-grade parking area. No ongoing construction activity.

# **Summary:**

- We anticipate 26 trees will have to be removed, in addition to several trees within cluster NT15.
- Based on discussions with the applicants, it is our understanding that excavation will occur up to the west, north, and east property lines for construction of the underground parkade, except in the areas indicated that overlap with the CRZ of Arbutus #249.
- We recommend the retention status of Grand Fir trees NT10 and NT12 be determined at the time of excavation, based on the number and size of roots encountered.
- Trees NT2-4, NT16, and NT17 may have to be removed if excavation is required down to bearing soil within the footprint of the Fleming St road extension. We recommend their final retention status be determined on site by the project arborist at the time of road construction.
- The design of the underground parkade has been modified in an effort to reduce impacts to Arbutus #249. It is located approximately 8m to the west and 8.5m to the north. To retain this tree, shoring techniques will need to be used to minimize the extent of excavation outside the parkade footprint. In addition, we estimate approximately 15% of its crown will need to be pruned if 1m of clearance from the proposed building is desired.

## Scope of Assignment:

- To inventory the existing bylaw protected trees and any trees on municipal or neighbouring properties that could potentially be impacted by construction or that are within three metres of the property line
- Review the proposal to demolish the existing building and construct a new multi-storey building with an underground parkade, a new driveway, at-grade parking, and turnaround area
- Comment on how construction activity may impact existing trees
- Prepare a tree retention and construction damage mitigation plan for those trees deemed suitable to retain given the proposed impacts

**Methodology:** We visually examined the trees on the property and prepared an inventory in the attached Tree Resource Spreadsheet. Each by-law protected tree was identified using a numeric metal tag attached to its lower trunk. Municipal trees and neighbours' trees were not tagged. Information such as tree species, DBH (1.4m), crown spread, critical root zone (CRZ), health,

structure, and relative tolerance to construction impacts were included in the inventory. The bylaw protected trees with their identification numbers were labelled on the attached Site Plan. The conclusions reached were based on the information provided within the attached plans from Low Hammond Rowe Architects (dated February 11, 2020).

# Limitations:

- No exploratory excavations have been requested and thus the conclusions reached are based solely on critical root zone calculations and our best judgement using our experience and expertise. The location, size and density of roots are often difficult to predict without exploratory excavations and therefore the impacts to the trees may be more or less severe than we anticipate.
- Servicing plans were not available for comment. We recommend the project arborist review the servicing plans once they become available to assess potential impacts to any trees to be retained. We recommend directing all underground services outside the CRZs of trees to be retained where possible.
- Where trees were not surveyed on the plans provided, we have added their approximate locations. The accuracy of our estimated locations has not been verified by a professional surveyor.

**Summary of Tree Resource:** 37 trees were inventoried, 19 of which are by-law protected trees on the subject property. To the west of the existing building is a forested area where there are several large Douglas-firs within 5m of the property line. There are 7 trees located within the road dedication south of the property.

**Trees to be Removed:** We anticipate 26 trees will have to be removed, in addition to several trees within cluster NT15:

- Trees #246-248, 250-262, 285, 286, NT5, NT7-9, NT11, NT13, and NT14: Based on discussions with the applicants, it is our understanding that excavation will occur up to the west, north, and east property lines for construction of the underground parkade, except in the areas indicated that overlap with the CRZ of Arbutus #249 (see discussion below). The stumps of NT9 and NT11 should be left in place or routed to grade, rather than removed, to avoid damaging the root systems of trees to be retained (NT10 and NT12).
  - Douglas-fir NT7 (~70cm DBH) has not been professionally surveyed. We estimate it is approximately 3m from the property line. If excavation is to occur up to the northwest property corner, we anticipate large roots from this tree will be encountered, resulting in significant health and structural impacts. If excavation can be restricted to outside of 5m from its base, it may be able to be retained.
  - Big Leaf Maple NT11 (35cm DBH) is a small tree and will likely incur significant root loss. We anticipate its health will be significantly impacted if excavation occurs up to the west property line. Since it is a small tree, it will likely not pose a high risk of failure even if a large number of roots are severed. If the neighbour would prefer to

retain this tree, we recommend any roots encountered be pruned back to sound tissue at the edge of excavation.

- All trees with the prefix "NT" are located offsite, and the owners of the trees should be notified of the proposed impacts to their trees. It should be noted that NT14 has not been professionally surveyed, but we estimate it is growing less than 2m away and will be significantly impacted.
- Trees NT1 and most of the trees in cluster NT15 will have to be removed to extend Fleming Street.

# Trees with Retention Status "To be Determined"

- **Grand Firs NT10** (55cm DBH) and **NT12** (43cm DBH): Between these trees and the west property line are other trees (NT9 and NT11) and the stump of a previously removed tree, which could restrict root growth. We recommend the project arborist supervise all excavation within the CRZs of these trees and their final retention status be determined at the time of excavation. It should be noted that Grand Firs typically exhibit very poor tolerance to root loss and changes in site hydrology, and are susceptible to insect pests (Balsam twig aphid and Balsam Woolly adelgid) and disease (needle cast), which often lead to crown dieback and large dead limbs. In our opinion, if these trees are disturbed during construction, it would be a reasonable option to remove them and plant replacement trees elsewhere on site. NT12 has not been professionally surveyed. The neighbour should be notified of the potential impacts tot their trees.
- Fleming Street Extension: Trees NT2-4, NT16, and NT17 are located along the south edge of the proposed road extension. The remaining trees in cluster NT15 (not within the road footprint) will also have overlapping CRZs. If excavation down to bearing soil is required within the footprint of the proposed road extension and roots from any of these trees are encountered, their health and/or structural stability could be significantly impacted. If an effort will be made to retain the trees, the depth of the curb sub-base will likely have to be reduced and the grade of the new street will have to be elevated above any large roots to avoid significant health and structural impacts (see attached specification for constructing paved surfaces over root systems). Several of these trees will require clearance pruning.

# Potential Impacts on Trees to be Retained and Mitigation Measures

- Underground Parkade: Based on discussions with the applicant, it is our understanding that a significant amount of blasting is expected to be required for construction of the underground parkade. Blasting can unintentionally extend beyond the areas that are intended to be disturbed and into the CRZs of trees to be retained, which may result in unanticipated impacts and possibly require additional trees to be removed. We recommend the recommendations in the "Blasting" section below be followed when working around these trees.
  - Arbutus #249 (101cm DBH) the nearest point of the parkade is approximately 8m away
  - Trees NT10, NT12, NT14, and NT18, located on neighbouring properties

We recommend the project arborist supervise any excavation within the CRZs of these trees. Depending on the extent of excavation and blasting, and the number and size of roots encountered, their retention viability may have to be re-evaluated. Outside the areas of excavation, the existing grades within the CRZs of these trees should be maintained where possible.

As trees NT10, NT12, NT14, and NT18 are located on adjacent properties, the property owners should be notified of the potential impacts to their trees. Any roots encountered should be pruned back to sound tissue at the edge of excavation.

• Arbutus #249 (101cm DBH): The underground parkade is located approximately 8m to the west and 8.5m to the north. The plans have been amended in an effort to minimize impacts to the health of the tree. Root growth will likely be partially restricted to the north by the presence of the existing stairway, retaining wall, and parking area. For this tree to be retained, shoring techniques will be required to limit the extent of excavation. Based on discussions with the applicant, it is our understanding that a significant amount of blasting is expected to be required for construction of the underground parkade and that excavation is expected to occur approximately 2m outside the parkade footprint. Arbutus trees typically exhibit poor tolerance to root loss and changes in hydrology. Depending on the extent of blasting and excavation, and on the number and size of roots encountered, particularly in the area west of the tree, the health of this tree may be significantly impacted.

The potential health impacts will likely be exacerbated by clearance pruning from the new building. This tree's crown extends approximately 9m to the north and west. The building is approximately 7m west of the tree and 8m to the north. If 1m of clearance from the building is desired, several large limbs (up to 15cm in diameter) growing westward will have to be pruned, in addition to one ~10cm limb extending 9-10m to the north. In total, this could amount to up to 15% of its crown being removed. All pruning must be completed by an ISA Certified Arborist to ANSI A300 pruning standards. Limbs should be pruned back to suitable laterals where appropriate. If additional clearance is required for building construction (e.g. to install scaffolding), this could result in additional health impacts. To limit the amount of pruning required, alternatives to full scaffolding should be considered, such as hydraulic lifts, ladders, or platforms.

We recommend the project arborist supervise all excavation within this tree's CRZ, including removal of the stairway, retaining walls, and paved parking areas and walkways. Any roots severed during excavation should be pruned back to sound tissue to encourage rapid wound compartmentalization and new root growth.

• Arborist Supervision: All excavation occurring within the critical root zones of protected trees should be completed under supervision by the project arborist. Any severed roots must be pruned back to sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound. In particular, the following activities should be completed under the direction of the project arborist:

- Any excavation for construction of the underground parkade within the CRZs of trees #249, and NT6, NT10, and NT12
- Removal of the existing paved areas within the CRZ of Arbutus #249
- Excavation for the construction of the Fleming St Road extension within the CRZs of trees NT2-4, NT16, NT17, and any trees remaining in cluster NT15
- **Barrier Fencing:** The areas surrounding the trees to be retained should be isolated from the construction activity by erecting protective barrier fencing. Where possible, the fencing should be erected at the perimeter of the critical root zones. The barrier fencing must be a minimum of 4 feet in height, of solid frame construction that is attached to wooden or metal posts. A solid board or rail must run between the posts at the top and the bottom of the fencing. This solid frame can then be covered with plywood, or flexible snow fencing. The fencing must be erected prior to the start of any construction activity on site (i.e. demolition, excavation, construction), and remain in place through completion of the project. Signs should be posted around the protection zone to declare it off limits to all construction related activity. The project arborist must be consulted before this fencing is removed or moved for any purpose.
- **Minimizing Soil Compaction:** In areas where construction traffic must encroach into the critical root zones of trees to be retained, efforts must be made to reduce soil compaction where possible by displacing the weight of machinery and foot traffic. This can be achieved by one of the following methods:
  - Installing a layer of hog fuel or coarse wood chips at least 20 cm in depth and maintaining it in good condition until construction is complete.
  - Placing medium weight geotextile cloth over the area to be used and installing a layer of crushed rock to a depth of 15 cm over top.
  - Placing two layers of 19mm plywood.
  - Placing steel plates.
- **Demolition of the Existing Building:** The demolition of the existing house and any services that must be removed or abandoned, must take the critical root zone of the trees to be retained into account. If any excavation or machine access is required within the critical root zones of trees to be retained, it must be completed under the supervision and direction of the project arborist. If temporarily removed for demolition, barrier fencing must be erected immediately after the supervised demolition.
- **Mulching**: Mulching can be an important proactive step in maintaining the health of trees and mitigating construction related impacts and overall stress. Mulch should be made from a natural material such as wood chips or bark pieces and be 5-8cm deep. No mulch should be touching the trunk of the tree. See "methods to avoid soil compaction" if the area is to have heavy traffic.
- **Blasting:** Care must be taken to ensure that the area of blasting does not extend beyond the necessary footprints and into the critical root zones of surrounding trees. The use of small low-concussion charges and multiple small charges designed to pre-shear the rock face will reduce fracturing, ground vibration, and overall impact on the surrounding environment. Only

explosives of low phytotoxicity and techniques that minimize tree damage should be used. Provisions must be made to ensure that blasted rock and debris are stored away from the critical root zones of trees.

- **Scaffolding:** This assessment has not included impacts from potential scaffolding including canopy clearance pruning requirements. If scaffolding is necessary and this will require clearance pruning of retained trees, the project arborist should be consulted. Depending on the extent of pruning required, the project arborist may recommend that alternatives to full scaffolding be considered such as hydraulic lifts, ladders or platforms. Methods to avoid soil compaction may also be recommended (see "Minimizing Soil Compaction" section).
- Landscaping and Irrigation Systems: The planting of new trees and shrubs should not damage the roots of retained trees. The installation of any in-ground irrigation system must take into account the critical root zones of the trees to be retained. Prior to installation, we recommend the irrigation technician consult with the project arborist about the most suitable locations for the irrigation lines and how best to mitigate the impacts on the trees to be retained. This may require the project arborist supervise the excavations associated with installing the irrigation system. Excessive frequent irrigation and irrigation which wets the trunks of trees can have a detrimental impact on tree health and can lead to root and trunk decay.
- Arborist Role: It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:
  - Locating the barrier fencing
  - Reviewing the report with the project foreman or site supervisor
  - Locating work zones, where required
  - Supervising any excavation within the critical root zones of trees to be retained
  - Reviewing and advising of any pruning requirements for machine clearances
- **Review and site meeting**: Once the project receives approval, it is important that the project arborist meet with the principals involved in the project to review the information contained herein. It is also important that the arborist meet with the site foreman or supervisor before any site clearing, tree removal, demolition, or other construction activity occurs and to confirm the locations of the tree protection barrier fencing.

Please do not hesitate to call us at (250) 479-8733 should you have any further questions.

Thank you,

Neal Bogs-

Noah Borges ISA Certified #PN-8409A TRAQ – Qualified

# Talbot Mackenzie & Associates ISA Certified Consulting Arborists

# Encl. 3-page tree resource spreadsheet, 8-page site and building plans, 1-page specification for constructed paved areas over tree roots, 1-page barrier fencing specifications, 2-page tree resource spreadsheet methodology and definitions

#### **Disclosure Statement**

Arborists are professionals who examine trees and use their training, knowledge and experience to recommend techniques and procedures that will improve their health and structure or to mitigate associated risks.

Trees are living organisms, whose health and structure change, and are influenced by age, continued growth, climate, weather conditions, and insect and disease pathogens. Indicators of structural weakness and disease are often hidden within the tree structure or beneath the ground. It is not possible for an Arborist to identify every flaw or condition that could result in failure or can he/she guarantee that the tree will remain healthy and free of risk.

Remedial care and mitigation measures recommended are based on the visible and detectable indicators present at the time of the examination and cannot be guaranteed to alleviate all symptoms or to mitigate all risk posed.

#### 874 Fleming St Tree Resource Spreadsheet

Tree ID	Common Name	Latin Name	<b>DBH (cm)</b> ~ approximate	Crown Spread (m)	CRZ (m)	Relative Tolerance	Health	Structure	Remarks and Recommendations	Retention Status
246	European Walnut	Juglans regia	46, 34	10	10.0	Poor	Good	Fair		Х
247	European Walnut	Juglans regia	40	8	6.0	Poor	Good	Fair		х
248	European Walnut	Juglans regia	46	8	7.0	Poor	Good	Fair	Under shared ownership with municipality, asymmetric crown due to competition	Х
249	Arbutus	Arbutus menziesii	101	14	15.0	Poor	Good	Good	Minor dieback	Retain
250	Arbutus	Arbutus menziesii	12	2	2.0	Poor	Good	Fair		Х
251	Grand Fir	Abies grandis	24	4	3.5	Poor	Fair	Fair		Х
252	Scouler's Willow	Salix scouleriana	85	14	10.0	Moderate	Good	Fair	Limb conflicts with fir 251	Х
253	Douglas-fir	Pseudotsuga menziesii	44	5	6.5	Poor	Fair	Fair/poor	Previously topped, 2 new leaders	Х
254	Douglas-fir	Pseudotsuga menziesii	41	3	6.0	Poor	Fair/poor	Fair/poor	Topped	Х
255	Douglas-fir	Pseudotsuga menziesii	70	8	10.5	Poor	Good	Fair		Х
256	Scouler's Willow	Salix scouleriana	41, 35	6	7.5	Moderate	Fair	Poor	Decay in trunk of 35cm stem - consider removal	Х
257	Douglas-fir	Pseudotsuga menziesii	88*	8	13.0	Poor	Good	Fair		Х
258	Arbutus	Arbutus menziesii	43, 14	8	7.5	Poor	Good	Fair	Leans towards building, foliage up to building	Х
259	Grand Fir	Abies grandis	16	3	2.5	Poor	Good	Good	Growing against chain-link fence	Х
260	Western Red Cedar	Thuja plicata	~25, 25	6	6.0	Poor	Fair/poor	Fair/poor	Declining tops, growing against chain link fence	Х
261	Grand Fir	Abies grandis	15	3	2.5	Poor	Good	Good	Growing against chain-link fence	X
262	Douglas-fir	Pseudotsuga menziesii	25	5	4.0	Poor	Fair	Good		X

Prepared by: Talbot Mackenzie & Associates ISA Certified and Consulting Arborists Phone: (250) 479-8733 Fax: (250) 479-7050 email: tmtreehelp@gmail.com

#### 874 Fleming St Tree Resource Spreadsheet

Tree ID	Common Name	Latin Name	<b>DBH (cm)</b> ~ approximate	Crown Spread (m)	CRZ (m)	Relative Tolerance	Health	Structure	Remarks and Recommendations	Retention Status
285	Grand Fir	Abies grandis	18	4	2.5	Poor	Good	Good		х
286	Douglas-fir	Pseudotsuga menziesii	16	3	2.5	Poor	Good	Good		Х
NT1	Hawthorn	Crataegus spp.	22, 17	5	3.0	Good	Fair	Fair	Municipal	Х
NT2	Apple	Malus spp.	35 below unions	8	4.0	Moderate	Good	Fair	Municipal	TBD
NT3	Black Cottonwood	Populus trichocarpa	60, 59	12	14.5	Poor	Good	Fair	Municipal	TBD
NT4	Black Cottonwood	Populus trichocarpa	63	10	9.5	Poor	Good	Good	Municipal	TBD
NT5	Big Leaf Maple	Acer macrophyllum	~50	10	6.0	Moderate	Fair	Fair	Neighbour's, ivy on trunk	Х
NT6	Garry Oak	Quercus garryana	~70	16	7.0	Good	Good	Fair	Neighbour's, ~5m from property line, crown overhangs bridge, large deadwood	Retain
NT7	Douglas-fir	Pseudotsuga menziesii	~70	8	10.5	Poor	Good	Fair	Neighbour's, ~1.5m from property line, ivy on trunk, appears topped	Х
NT8	Douglas-fir	Pseudotsuga menziesii	~60	10	9.0	Poor	Good	Fair/poor	Neighbour's, ~1m from property line, topping wound 2/3 height	Х
NT9	Grand Fir	Abies grandis	60	6	9.0	Poor	Good	Fair	Neighbour's, multiple leaders	Х
NT10	Grand Fir	Abies grandis	55	5	8.5	Poor	Good	Fair	Neighbour's, multiple leaders	TBD
NT11	Big Leaf Maple	Acer macrophyllum	35	5	4.0	Moderate	Fair	Fair	Neighbour's, swelling at base	х
NT12	Grand Fir	Abies grandis	43	3	6.5	Poor	Good	Fair	Neighbour's	TBD
NT13	Grand Fir	Abies grandis	60, 42	8	13.0	Poor	Good	Fair	Neighbour's, codominant union at base	х
NT14	Scouler's Willow	Salix scouleriana	~40	6	5.0	Moderate	Fair	Fair/poor	Near property line, prostrate growth	Х
NT15	Cluster of willows, plums, hawthorns	-	-	-	-	Moderate to Good	-	-	Located on municipal and adjacent property (867 Lampson St). Several willow trees in this cluster are by-law protected	X (some trees)

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#### 874 Fleming St Tree Resource Spreadsheet

Tree ID	Common Name	Latin Name	<b>DBH (cm)</b> ~ approximate	Crown Spread (m)	CRZ (m)	Relative Tolerance	Health	Structure	Remarks and Recommendations	Retention Status
NT16	Douglas-fir	Pseudotsuga menziesii	~50	8	7.5	Poor	Good	Fair	Municipal tree. Located in centre of cluster NT15	TBD
NT17	Garry Oak	Quercus garryana	~30	6	3.0	Good	Good	Fair	Municipal tree, located in southwest corner of cluster NT15	TBD
NT18	Douglas-fir	Pseudotsuga menziesii	~50	6	7.5	Poor	Good	Fair	Neighbour's tree, deflected leader	Retain

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CONSTRUCTION FOR -NO

874 FLEMING STREET, ESQUIMALT, BC



\*Is measured from the centre line of party walls, the face of the exterior sheathing,

852 m<sup>2</sup>

144 m<sup>2</sup>

252 m<sup>2</sup>

PARKADE OUTLINE BELOW

Area (sf)

382 sf

388 sf

388 sf

and the centre line of the corridor walls

Area (m2)

36 m

36 m<sup>2</sup>

36 m<sup>2</sup>

# Units

24

7

CONSTRUCTION N N N  $\bigcirc$ PRELIMIN

**RESIDENTIAL UNITS** 

Studio A1

Studio A2

Studio Acc.





ESQUIMALT RENTAL HOUSING 874 FLEMING STREET, ESQUIMALT, BC

# PROJECT DATA - 874 Fleming St Esquimalt, BC

# RM-4

ZONING:

LEGAL: Lot B Plan VIP25267 Section 10 Land District 21Lot B Plan VIP25267 Section 10 Land District 21 PID: 002-900-246

Exis	ting RM-4	ОСР	Proposed		Notes
SITE AREA:	na		3909 m <sup>2</sup>	42076 sf	
LOT COVERAGE:	30.0 %		50 %		
DENSITY (FAR)*:	1.0	2.0	2.10		
SETBACKS: (Building Front) South (Parkade) South East (Inner) East	7.5 m 6.0 m		5.5 m 0.0 m 4.0 m 5.1 m		
(Building) West (Parkade) West (Rear) North	6.0 m 7.5 m		4.8 m 2.0 m 7.5 m		
HEIGHT:	11 m	6 Storoug	20.6 m	Average Grade:	11.75
USABLE OPEN SPACE:	7.5 %	6 5101895	7.5 %	s i. o. Rooi surface:	32.33

GROSS* FLOOR AREA:	*Area calculated t	*Area calculated to exterior face of exterior sheathing - for construction budget purposes						
LEVEL 1	1,643 m <sup>2</sup>	17,685 sf						
LEVEL 2	1,691 m <sup>2</sup>	18,199 sf						
LEVEL 3	1,691 m <sup>2</sup>	18,199 sf						
LEVEL 4	1,691 m <sup>2</sup>	18,199 sf						
LEVEL 5	1,691 m <sup>2</sup>	18,199 sf						
LEVEL 6	1,599 m <sup>2</sup>	17,212 sf						
Total	10,005 m <sup>2</sup>	107,692 sf						
PARKADE	2,488 m <sup>2</sup>	26,780 sf						
GLA* + Parkade	12,493 m <sup>2</sup>	134,471 sf	*Gross Livable Area					
AUXILARY SPACES	Area (m2)	Area (sq ft)						
Care Taker Office	11.60 m <sup>2</sup>	125 sf						
Mop Closet	3.44 m <sup>2</sup>	37 sf						
Tele/Security*	5.00 m <sup>2</sup>	54 sf	*1.68 m x 6 floors					
Staff WC	4.90 m <sup>2</sup>	53 sf						
Laundry Rm	55.80 m <sup>2</sup>	601 sf						
Common Room	222.00 m <sup>2</sup>	2,390 sf						
Storage Room*	201.61 m <sup>2</sup>	2,170 sf						
Total	504 m <sup>2</sup>	5,429 sf						
LOT COVERAGE AREA:	Area (m2)	Area (sq ft)						
Typical Floor Plate Area +	1,960 m <sup>2</sup>	21,097 sf						
Canopy + Parkade Protrusion + Roof								
NET* TOTAL FLOOR AREA	*Area calculated t	o interior face of e	exterior walls - per zoning definition (FAR calculation)					

				and excludes stairs, elev, corridors,
LEVEL 1	1,150	0 m <sup>2</sup> 12,37	9 sf	and laundry, amenity rooms, wc's
LEVEL 2	1,430	0 m <sup>2</sup> 15,39	3 sf	
LEVEL 3	1,430	0 m <sup>2</sup> 15,39	3 sf	
LEVEL 4	1,430	0 m <sup>2</sup> 15,39	3 sf	
LEVEL 5	1,430	0 m <sup>2</sup> 15,39	3 sf	
LEVEL 6	1,350	0 m <sup>2</sup> 14,53	1 sf	
Total	8,220	0 m <sup>2</sup> 88,48	0 sf	

# SUITE BREAKDOWN

	unit areas calculated t	o centre line of party	wall and o	outside fac	e of exter	ior sheath	ing		Total		
Unit Type	Unit Area		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Units	%	
Studio Type A1	36 m <sup>2</sup>	382 sf		6	6	6	6		24	18	
Studio Type A2	36 m <sup>2</sup>	388 sf			1	1	1	1	4	3	
Studio Type A3	36 m <sup>2</sup>	388 sf	1	2	1	1	1	1	7	5	
1 BD Type B1a	50 m <sup>2</sup>	533 sf	6	2	5	5	1 1 5 5 5 5		34	25	
1 BD Type B1b	53 m <sup>2</sup>	568 sf		5	5	5	5		20	15	
1 BD Type B1c	57 m <sup>2</sup>	608 sf		1	1	1	1		4	3	
1 BD Type B2a	50 m <sup>2</sup>	535 sf	1				5 5 1 1 1 1		2	1	
1 BD Type B2b	53 m <sup>2</sup>	571 sf		1	1	1	1 1		4	3	
1 BD Type B3	50 m <sup>2</sup>	536 sf						3	3	2	
2 BD Type C1a	73 m <sup>2</sup>	786 sf	2	1	4	4	4	5	20	15	
2 BD Type C1b	78 m <sup>2</sup>	838 sf		1	1	1	1		4	3	
3 BD Type D	91 m <sup>2</sup>	978 sf		1	1	1	1	1	5	4	
4 BD Type E1	129 m <sup>2</sup>	1387 sf	3						3	2	
4 BD Type E2	129 m <sup>2</sup>	1387 sf	3						3	2	

# **PARKING BREAKDOWN:**

	•••			
	F	Required	Proposed	Stalls /unit
RM-4 & RM-5	1.3	178 stalls		
Senior's Housing	0.5	69 stalls	67 stalls	0.49 /unit
BICYCLE PARKING:				
		137 stalls	137 stalls	1.00 /unit
SCOOTER PARKING:				
			14 stalls	

16 20 26 26 26

Sub Total



23 **137** 100

# Talbot Mackenzie & Associates

**Consulting Arborists** 

Diagram – Site Specific Driveway, Parking and Walkway



# Specifications for Paved Surfaces Above Tree Roots (Driveway, Parking and Walkway Areas)

- 1. Excavation for construction of the driveway/parking/walkway areas must remove only the top layer of sod and not result in root loss
- 2. A layer of medium weight felted Geotextile fabric (Nilex 4535, or similar) is to be installed over the entire area of the critical root zone that is to be covered by the paved surface. Cover this Geotextile fabric with a layer of woven Amoco 2002 or Tensar BX 1200. Each piece of fabric must overlap the adjoining piece by approximately 30-cm.
- 3. A 10cm layer of torpedo rock or 20-mm clean crushed drain rock, is to be used to cover the Geotextile fabric (depth dependent on desired finished grade).
- 4. A layer of felted filter fabric is to be installed over the crushed rock layer to prevent fine particles of sand and soil from infiltrating this layer.
- 5. The bedding or base layer and permeable surfacing can be installed directly on top of the Geotextile fabric.
- 6. Two-dimensional (such as CombiGrid 30/30 or similar) or three-dimensional geo-grid reinforcements can be installed in combination with, or instead of, the geotextile fabric specified in the attached diagram.
- 7. Ultimately, a geotechnical engineer should be consulted and in consultation with the project arborist may specify their own materials and methods that are specific to the site's soil conditions and requirements, while also avoiding root loss and reducing compaction to the sub-grade.





Box 48153 RPO - Uptown Victoria, BC V8Z 7H6 Ph: (250) 479-8733 Fax: (250) 479-7050 Email: tmtreehelp@gmail.com

# **Tree Resource Spreadsheet Methodology and Definitions**

**<u>Tag</u>**: Tree identification number on a metal tag attached to tree with nail or wire, generally at eye level. Trees on municipal or neighboring properties are not tagged.

NT: No tag due to inaccessibility or ownership by municipality or neighbour.

**<u>DBH</u>**: Diameter at breast height – diameter of trunk, measured in centimetres at 1.4m above ground level. For trees on a slope, it is taken at the average point between the high and low side of the slope.

- \* Measured over ivy
- ~ Approximate due to inaccessibility or on neighbouring property

<u>**Crown Spread**</u>: Indicates the diameter of the crown spread measured in metres to the dripline of the longest limbs.

**<u>Relative Tolerance Rating</u>:** Relative tolerance of the tree species to construction related impacts such as root pruning, crown pruning, soil compaction, hydrology changes, grade changes, and other soil disturbance. This rating does not take into account individual tree characteristics, such as health and vigour. Three ratings are assigned based on our knowledge and experience with the tree species: Poor (P), Moderate (M) or Good (G).

<u>Critical Root Zone</u>: A calculated radial measurement in metres from the trunk of the tree. It is the optimal size of tree protection zone and is calculated by multiplying the DBH of the tree by 10, 12 or 15 depending on the tree's Relative Tolerance Rating. This methodology is based on the methodology used by Nelda Matheny and James R. Clark in their book "Trees and Development: A Technical Guide to Preservation of Trees During Land Development."

- 15 x DBH = Poor Tolerance of Construction
- $12 \times DBH = Moderate$
- $10 \times DBH = Good$

To calculate the critical root zone, the DBH of multiple stems is considered the sum of 100% of the diameter of the largest stem and 60% of the diameter of the next two largest stems. It should be noted that these measures are solely mathematical calculations that do not consider factors such as restricted root growth, limited soil volumes, age, crown spread, health, or structure (such as a lean).

# Health Condition:

- Poor significant signs of visible stress and/or decline that threaten the long-term survival of the specimen
- Fair signs of stress
- Good no visible signs of significant stress and/or only minor aesthetic issues

# **Structural Condition:**

- Poor Structural defects that have been in place for a long period of time to the point that mitigation measures are limited
- Fair Structural concerns that are possible to mitigate through pruning
- Good No visible or only minor structural flaws that require no to very little pruning

# **Retention Status:**

- X Not possible to retain given proposed construction plans
- Retain It is possible to retain this tree in the long-term given the proposed plans and information available. This is assuming our **recommended mitigation measures are followed**
- Retain \* See report for more information regarding potential impacts
- TBD (To Be Determined) The impacts on the tree could be significant. However, in the absence of exploratory excavations and in an effort to retain as many trees as possible, we recommend that the final determination be made by the supervising project arborist at the time of excavation. The tree might be possible to retain depending on the location of roots and the resulting impacts, but concerned parties should be aware that the tree may require removal.
- NS Not suitable to retain due to health or structural concerns



# Esquimalt Lions Lodge Redevelopment: *874 Fleming Street* Transportation and Parking Study

**Final Report** 

Prepared for Greater Victoria Housing Society

Date August 28, 2019

Project No. 04-19-0017



RECEIVED OCT 3.0 2019 CORP OF TOWNSHIP ELOPMENT SERVIC
August 28, 2019 04-19-0017

Daniel Saxton Greater Victoria Housing Society 2326 Government Street Victoria, BC V8T 5G5

Dear Mr. Saxton:

#### Re: Esquimalt Lions Lodge Redevelopment, 874 Fleming Street Transportation and Parking Study - Final Report

Please find attached our final Transportation and Parking Study for Greater Victoria Housing Society's Esquimalt Lions Lodge redevelopment which incorporates comments received from the Township on August 22, 2019. Upon reviewing vehicle ownership rates for residents at similar affordable rental buildings, we found the proposed vehicle parking supply appropriate. We also found that redevelopment will cause a modest amount of additional vehicles to use Fleming Street and no substantial impacts.

We trust this information will be helpful for your application approval. Please let us know if you have any questions or comments on the enclosed report.

Yours truly, Bunt & Associates

Simon Button, P.Eng. Transportation Engineer

TRANSPORTATION PLANNERS AND ENGINEERS

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# bunt 🗞 associates

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# 1. INTRODUCTION

#### 1.1 Study Scope and Objectives

Greater Victoria Housing Society (GVHS) is proposing to redevelop the existing Esquimalt Lions Lodge at 874 Fleming Street at in Esquimalt, BC. **Exhibit 1.1** shows the site location which is northwest of the northern terminus of Fleming Street. The existing property is a 77-unit affordable housing building operated by GVHS which is past its effective life and does not meet the current residents' needs. The redevelopment will replace the existing building with a 137-unit affordable housing building over a single phase.

The purpose of this study is to:

- · Review the development's parking strategy and determine its suitability; and,
- Evaluate the transportation impacts the proposed development has on the nearby road network;

#### 1.2 Development Details

The development proposes to have 137 affordable residential units offered below-market rates. **Table 1.1** summarizes the unit mix. The units are modestly sized with the majority of the units being studios and one-bedrooms designed for one or two residents each.

RESIDENTIAL UNIT TYPE	QUANTITY	PERCENT OF UNITS
Studio	28 units	20%
Accessible Studio	7 units	5%
One-bedroom	67 units	49%
Two-bedroom	24 units	18%
Three-bedroom	5 units	4%
Four-bedroom	6 units	4%
TOTALS	137 UNITS	100%

#### Table 1.1: Residential Unit Mix

**Exhibit 1.2** illustrates the proposed site plan. The development intends to extend Fleming Street westwards along the site's southern edge only. The Township of Esquimalt already has a right-of-way for this land. The development will have six surface parking stalls accessed off of this new east/west Fleming Street extension as well as access to the underground parkade.

1





# Exhibit 1.2 Peak Hour Site Plan



874 Fleming Street 04-19-0017 June 2019

# 2. LOCAL CONTEXT

#### 2.1 Land Use

The site is located at the northern terminus of Fleming Street, which is located in a mostly residential area. There are multiple recreational facilities nearby such as baseball fields and the Gorge Vale Golf Club. There is also a small cluster of commercial destinations at the Tillicum Road & Craigflower Road intersection and Esquimalt High School is located on the south side of Colville Road, between Phoenix Street and Carrie Street.

#### 2.2 Street Network

The development site is located on Fleming Street which is a short local street terminating at the development site. It is connected to Colville Road which provides east-west connectivity through Esquimalt and has one travel lane in each direction. Craigflower Road is located north of the development site and connects to both View Royal and Victoria. Craigflower Road has one through lane in each direction, in addition to left turn lanes.

#### 2.3 Walking

The nearby collector and arterial roads such as Colville Road, Lampson Street and Craigflower Road have sidewalks on both sides; however, local streets (including Fleming Street) typically do not. Designated pedestrian crossings are provided at major intersections and at regular intervals on Craigflower Road. A public walkway is available immediately east of the development site, connecting the northern terminus of Fleming Street with Craigflower Road.

#### 2.4 Cycling

Craigflower Road has painted bike lanes in both directions in the vicinity of the development site. The other major cycling route nearby is the E&N multi-use trail which connects through Victoria West and View Royal and is 600 metres from the development site

#### 2.5 Transit

The current and future residents are located within 100 metres of the bus stop for BC Transit route 14 which is located on Craigflower Road. Route 14 operates with 10-minute headways during peak periods and connects the site to the Victoria General Hospital, View Royal, Victoria West, Downtown Victoria, Camosun College (Lansdowne Campus) and the University of Victoria. Bus shelters are provided at both eastbound and westbound bus stops on Craigflower Road.

# 3. DEVELOPMENT PLAN REVIEW

#### 3.1 Bicycle Parking

The Esquimalt Parking (Bylaw 2011) does not have any requirements for bicycle parking for multi-family dwellings. However, the development is planning on providing 137 secure bicycle parking spaces (1.0 per unit) in the parkade. Approximately six short-term bicycle parking spaces with weather protection for visitors should be provided near the building's primary entrance.

#### 3.2 Vehicle Parking

#### 3.2.1 Bylaw Requirement

The Esquimalt Parking (Bylaw 2011) requires 1.30 parking spaces per dwelling unit in medium and highdensity buildings such as the proposed development which results in a requirement of 178 spaces. 0.25 spaces/unit are required to be reserved for visitors. This results in a requirement of 144 spaces for residents and 34 spaces for visitors. The Parking Bylaw does not account for the affordable nature of the development which results in residents owning substantially fewer vehicles (and thus requiring fewer parking spaces) than market residential buildings.

#### 3.2.2 Proposed Supply

The development plan includes 66 parking spaces (including 4 accessible spaces) which equates to 0.48 spaces per residential unit. One loading space is also provided.

#### 3.2.3 Vehicle Parking Demand Analysis

Providing the appropriate level of vehicle parking is critical, not enough spaces can cause parking demand to spill onto adjacent streets while over providing vehicle parking can result in wasted resources, unnecessary promotion of vehicle ownership and vehicle dependence.

For low-income residential buildings, the opportunity to provide lower, more appropriate vehicle parking supplies can lead to lower building construction costs and therefore lower rental rates.

To more specifically assess the anticipated vehicle parking demand of the proposed development Bunt examined a variety of development and location-specific factors.

#### Factors Affecting Resident Auto Ownership

Vehicle ownership, and therefore the need for vehicle storage (parking) depends on a number of factors. Key factors are listed below:

- Size of the household unit (number of bedrooms);
- Tenure of the unit (rental or strata);
- Income level;

- Number of working adults in the household (which related to the size of the unit but also age distribution of residents);
- Proximity to frequent and high-quality transit;
- Proximity and quality of active mode infrastructure; and,
- Transportation Demand Management (TDM) measures in place at the site.

#### **Comparable Affordable Housing Parking Rates**

Bunt obtained parking supply and parking demand data comparable GVHS buildings (**Table 3.1**) and comparable Capital Region Housing Corporation buildings (**Table 3.2**). The buildings compared were selected as they share similar characteristics such as expected resident demographics, unit size, proximity to services and that they are all non-downtown locations. Tables 3.1 and 3.2 show that the average parking demand is approximately 0.37 spaces per unit and no building had a parking demand greater than 0.59 spaces per unit. The existing Esquimalt Lions Lodge building has a residential parking demand rate of 0.27 spaces per unit.

COMPLEX NAME	LOCATION	SUBSIDIZED	NUMBER OF UNITS	PARKING SPACES	PARKING SPACES OCCUPIED BY TENANT	PARKING DEMAND RATE
Colwood Lodge	85 Belmont Road Victoria	YES	50	37	24	0.48
Constance Court	1325 Esquimalt Road Esquimalt	YES	52	26	18	0.35
Grafton Lodge	506 Crofton Street Esquimalt	YES	29	20	17	0.59
Townley Lodge	1780 Townley Street Saanich	NO	39	16	13	0.33
Esquimalt Lions Lodge	874 Fleming Street Esquimalt	NO	77	23	21	0.27
					Weighted Average	0.37
					Minimum Value	0.27
					MAXIMUM VALUE	0.59

#### Table 3.1: Vehicle Ownership Rates for Comparable GVHS Buildings in Greater Victoria

Source: Greater Victoria Housing Society

COMPLEX NAME	LOCATION	SUBSIDIZED	NUMBER OF UNITS	PARKING SPACES OCCUPIED BY TENANT	PARKING DEMAND RATE
Amberlea	3330 Glasgow Avenue	YES	44	22	0.50
The Birches	1466 Hillside Avenue	YES	49	8	0.16
Leblond Place	390 Waterfront Crescent	YES	53	23	0.43
Rosewood	1827 McKenzie Avenue	YES	44	15	0.34
Springtide	270 Russell Street	YES	48	19	0.40
The Heathers	3169 Tillicum Road	YES	26	11	0.42
Viewmont Gardens	4450 Viewmount Avenue	YES	36	14	0.39
			·	Weighted Average	0.37
				Minimum Value	0.16
				MAXIMUM VALUE	0.50

#### Table 3.2: Vehicle Ownership Rates for Comparable CRHC Buildings in Greater Victoria

Source: Capital Region Housing Corporation

#### **Effect of Lower Incomes**

The Canada Mortgage and Housing Corporation (CMHC) (Research Highlight, Socio-Economic Series Issue 50- Revision 2) concluded that household income is the second best predictor of vehicle ownership. As income increases, auto ownership and use increase. A study reported in the Australia Transportation Forum (2007) confirmed a strong correlation between vehicle ownership and household income. A study published by Pushkar et al (TRB 2000) based on a survey of 115,000 households in Toronto indicated that higher income households had more vehicles. A study conducted by Bunt & Associates in the Vancouver area in the early 1990s and in the Calgary area in 2003 also supported the positive, almost linear relationship between income and vehicle ownership.

#### **Effect of Tenure & Size of Units**

Rental units tend to have lower vehicle ownership levels compared to strata units. This contention is supported by findings from the 2012 and 2018 *Metro Vancouver Apartment Parking Studies* (MVAPS). The study included research and a comprehensive survey program of over 1,000 apartment household units in the Greater Vancouver area, including strata and rental units.

A key finding in the MVAPS was that residents of rental apartment units had average vehicle ownership that was approximately 65% of that of strata units. There was also a clear link between the number of bedrooms and vehicle ownership.

As discussed in Section 1, the units in the proposed development tend to be small in size. The building's units are designed to provide housing for low- to moderate-income families and seniors. All units are to be designated rental units.

#### **Visitor Parking**

The Township of Esquimalt Parking Bylaw (Bylaw 2011) requires a high level of residential visitor parking at 0.32 spaces per unit for multi-unit residential uses. However, based on Bunt's previous experience for similar village centres in municipalities across Greater Victoria and Metro Vancouver, a visitor parking supply rate of 0.05 to 0.10 spaces per unit is more appropriate for the proposed development.

This recommendation stems from the Metro Vancouver Residential Apartment Parking Study' which found that visitor parking demand never exceeded 0.06 vehicles per dwelling unit during the study period. These rates have been further substantiated by previous Bunt studies for similar projects.

#### 3.2.4 Vehicle Parking Summary

Due to location, unit size and demographic factors we anticipate that the proposed parking supply rate of 66 spaces total (0.48 spaces per unit) is appropriate for the proposed development. The empirical parking demand data presented above indicates that the parking supply should approximately consist of 52 to 59 residential spaces and 7 to 14 visitor spaces.

<sup>1</sup> The visitor parking demand results from the Metro Vancouver Residential Parking Study was obtained from suburban sites in Burnaby, Port Coquitlam and Richmond which had varying levels of transit service. The visitor parking demand was not correlated with proximity to the Frequent Transit Network; in fact the site with the worst transit service had the lowest peak visitor parking demand of 0.02 visitor vehicles per dwelling. Therefore the results from the Metro Vancouver Residential Parking Study are seen as applicable to the proposed development.

# 4. TRAFFIC OPERATIONS REVIEW

#### 4.1 Traffic Operations Assessment Methodology

The traffic operations were assessed at the Fleming Street & Colville Road intersection for the weekday AM & PM peak hours. The analysis was completed for the existing conditions (2019) and for the 2032 horizon year (ten years after development completion). The 2032 analysis includes the vehicle trips generated by the proposed development and background traffic (i.e. future traffic without development).

The operation of study intersection was assessed using the methods outlined in the 2000 Highway Capacity Manual (HCM), using the Synchro 9 analysis software. The traffic operations were assessed using the performance measures of Level of Service (LOS) and volume-to-capacity (V/C) ratio.

The LOS rating is based on average vehicle delay and ranges from "A" to "F" based on the quality of operation at the intersection. LOS "A" represents minimal queuing time conditions while a LOS "F" represents an over-capacity condition with considerable congestion and/or queuing time. A queuing time of fewer than 10 seconds receive a LOS A whereas queuing times greater than 50 seconds receive a LOS F. In downtown and Town Centre contexts, during peak demand periods, queuing times greater than 50 seconds (LOS F) are common.

The volume to capacity (V/C) ratio of an intersection represents the ratio between the demand volume and the available capacity. A V/C ratio less than 0.85 indicates that there is sufficient capacity to accommodate demands and generally represents reasonable traffic conditions in suburban settings. A V/C value between 0.85 and 0.95 indicates an intersection is approaching practical capacity; a V/C ratio over 0.95 indicates that traffic demands are close to exceeding the available capacity, resulting in saturated conditions. A V/C ratio over 1.0 indicates a congested intersection where drivers may have to wait through multiple signal cycles. In urban downtown and town centre contexts, during peak demand periods, V/C ratios over 0.90 and even 1.0 are common.

#### 4.2 Existing Conditions

Bunt collected the morning transportation data on February 1, 2019, and the afternoon transportation data on January 31, 2019. During this time period, 7:45 to 8:45 am was identified as the AM peak hour and 3:30 to 4:30 pm was identified as the PM peak hour. These peak hours are earlier than usual, likely impacted by the travel patterns caused by Esquimalt High School and CFB Esquimalt. **Exhibit 4.1** illustrates the vehicle volumes for these two peak hours.

Bunt observed approximately 100 vehicles per hour (both directions) on Colville Road during peak hours. 10 to 15 vehicles per hour (both directions) were observed on Fleming Street during peak hours. During data collection, the number of vehicles travelling on Fleming Street was separated into two categories: vehicles accessing the existing Esquimalt Lions Lodge and vehicles accessing the remaining 13 homes on Fleming Street. Although the sample size was fairly small, it is clear that the existing Esquimalt Lions Lodge contributes to less than half of the existing vehicle travel on Fleming Street. Exhibit 4.1 also shows the existing traffic operations for which there are no concerns. All movements operate within their capacity and have reasonable queuing times.

#### 4.3 Future Conditions

#### 4.3.1 Background Traffic Growth

Background traffic is the traffic that would exist without the proposed development. Background traffic was estimated by growing the existing vehicle volumes on Colville Road by 1% per year. This is a conservative assumption as the vehicle volumes in other locations in Esquimalt (such as Admirals Road and Esquimalt Road) are growing by less than this rate.

#### 4.3.2 Development Generated Traffic

The proposed redevelopment will increase the number of affordable residential units from 77 to 137. The resulting increase in vehicle traffic due to the 60 additional affordable residential units was estimated using two methods:

- 1. Using the observed number of vehicles entering/exiting the existing building.
- 2. Using industry standard vehicle trip rates.

#### Vehicle Trip Generation using Observed Travel Patterns

As previously mentioned in Section 4.2, the existing Esquimalt Lions Lodge contributes to less than half of the existing vehicle travel on Fleming Street. This equates to less than 7 vehicle trips during the AM peak hour and less than 8 vehicle trips during the PM peak hour. Since the existing building has 77 units, it generates 0.09 vehicle trips per unit during the AM peak hour and 0.10 vehicle trips per unit during the PM peak hour. If residents of the redeveloped Esquimalt Lions Lodge use their vehicle in a similar pattern to the existing residents, the additional 60 residential units equate to an additional <u>5 vehicles on Fleming Street during the AM peak hour</u>.

#### Vehicle Trip Generation using Standard Trip Rates

The Institute of Transportation Engineers (ITE) Trip Generation Manual (10<sup>th</sup> Edition) was also be used to estimate vehicle trip generation. The ITE trip rate for Mid-Rise Multifamily Housing was used as it is the most appropriate land use included in the manual. This trip rate likely overestimates the number of vehicle trips the building will generate because it is based on market-residential buildings. Low-income apartments generally having lower vehicle ownership rates and thus have lower vehicle trips. There are no ITE rates for low-income apartments.

**Table 4.1** presents the vehicle trips rates from the ITE Trip Generation Manual and the resulting vehicle trip generation. This vehicle trip generation method results in <u>22 additional vehicles on Fleming Street</u> <u>during the AM peak hour and 26 additional vehicles on Fleming Street during the PM peak hour</u>.

	AM PEAK HOUR			PM PEAK HOUR		
	TOTAL	IN	OUT	TOTAL	IN	OUT
Trip Rate	0.36 trips/unit	26%	74%	0.44 trips/unit	61%	39%
Trip Generation	22 trips	6 trips	16 trips	26 trips	16 trips	10 trips

#### Table 4.1: Peak Hour Vehicle Trip Generation

#### Vehicle Trip Generation Estimate

The two vehicle trip generation methods provide a significant range of <u>5 to 26 additional vehicle trips per</u> <u>peak hour</u>. The realized vehicle trip generation post-redevelopment is anticipated to be near the lower end of this range since the observed travel patterns are likely more accurate than the values in the ITE Trip Generation Manual.

#### 4.3.3 Traffic Operations Results

In order to complete a 'worst-case' analysis, the future conditions were assessed using the higher ITE Trip Generation Manual estimate of 25 additional vehicles during AM peak hour and 26 additional vehicles during the PM peak hour. **Exhibit 4.2** illustrates the 2032 vehicle traffic forecast which is based on vehicle traffic on Colville Road growing at 1% per year and the 'worst-case' traffic forecasts for the proposed redevelopment.

Exhibit 4.2 also demonstrates the traffic operation results for the year 2032. As with the existing conditions, there are no traffic operational concerns with the study intersection well within its capacity.





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# 5. SUMMARY AND RECOMMENDATIONS

#### 5.1 Summary

- GVHS intends to redevelop Esquimalt Lions Lodge which will increase the number of residential units from 77 to 137 (60 unit increase). All existing and future homes will be affordable rental apartments.
- Esquimalt Lions Lodge is located to the northwest of the northern terminus of Fleming Street. The development intends to extend Fleming Street westwards along the site's southern edge only. The Township of Esquimalt already has a right-of-way for this land.
- The Esquimalt Parking (Bylaw 2011) does not have a minimum vehicle parking supply rate specifically for affordable homes.
- The development plans to provide 0.48 vehicle parking spaces per unit. This supply rate was empirically tested against vehicle ownership rates in affordable residential buildings and visitor parking observations.
- Redevelopment is anticipated to add 5 to 10 vehicles to Fleming Street per peak hour.
- The intersection of Fleming Street & Colville Road currently operates within capacity and is forecasted to continue operating within capacity with the proposed development and background traffic growth.

#### 5.2 Recommendations

- Supplying approximately 0.48 vehicle parking spaces is appropriate for the proposed development. Of the 66 parking spaces provided, approximately 52 to 59 spaces should be reserved for residents and 7 to 14 spaces for visitors.
- Short-term bicycle parking should be provided on-site near the primary building entrance with weather protection.



February 19, 2020

Township of Esquimalt 1229 Esquimalt Road Esquimalt, British Columbia V9A 3P1



Dear Mayor Desjardins, Council, and Staff:

#### Re: Application to Rezone 874 Fleming Street, Esquimalt, British Columbia

Please accept this letter as a written summary of the consultation process that was undertaken with the community in relation to our rezoning application for 874 Fleming Street.

An Open House was held on Wednesday, the 29<sup>th</sup> of May, 2019, between the hours of 6:30 pm and 8:30 pm. The Open House was hosted at Esquimalt High School located at 847 Colville Road in Victoria, British Columbia. The location was selected to ensure accessibility and proximity to the subject property at 874 Fleming Street. Notices (see attached) were delivered 10 days prior to the event date by the Township of Esquimalt to surrounding neighbours within a minimum of a 100m radius to the property.

Several large display boards were produced to provide a visual representation of the project proposal and concept and displayed at the Open House. Team members from the Greater Victoria Housing Society were present to provide commentary to the proposal and answer questions from attendees. Low Hammond Rowe Architects, along with LADR Landscape Architects were present to respond to any design related questions.

A sign-in sheet was utilized to monitor the attendance of the event with approximately twenty-seven (27) individuals attending (see attached). Comment cards were made available to attendees, with a total of four (4) individuals providing comments in response. All commenters were supportive, with only one commenter providing options for consideration related to the neighbouring parkland.

Overall, the response and verbal discourse received from attendees was positive with a few showing an interest to move into the building once complete.

Please let us know if there are any questions regarding our consultation process with the community.

Sincerely,

Kaye Melliship Executive Director

2326 Government Street, Victoria, British Columbia V8T 5G5 | P: 250.384.3434 F: 250.386.3434



# COMMUNITY OPEN HOUSE

The Greater Victoria Housing Society is proposing to rezone and construct a six storey, affordable apartment building to replace the currently aging Esquimalt Lions Lodge located at 874 Fleming Street.

We welcome you to attend our Community Open House to learn more about the proposed development and to have any questions you may have answered.

# PLEASE JOIN US:

- DATE: WEDNESDAY, MAY 29th, 2019
- TIME: 6:30 PM to 8:30 PM
- LOCATION: ESQUIMALT HIGH SCHOOL LIBRARY 874 COLVILLE ROAD, VICTORIA, BRITISH COLUMBIA

The Greater Victoria Housing Society takes great pride in the planning and design of all our developments and we are excited to have you join us in this discussion!

For more information, please visit: WWW.GREATERVICHOUSING.ORG Email | development@greatervichousing.org Phone | 250.384.3434 Ext: 33





# COMMUNITY OPEN HOUSE 874 FLEMING STREET, VICTORIA, BRITISH COLUMBIA SIGN IN | 29.05.19

NAME SIGNATURE ADDRESS H-Vil Harbhagen Veilleux 103-471 Bundock the Duncan 209-874 Flemeng A. Dir Bach. A why Bach. J. Rughouske DE. CAROL BUEZICASE 911 Ciaraflower Fraham Sinch 574 Plenny >+ Debra Palak drock Unhaut Mark Ollerton 923 Craig flower 412 - 899 CRATGFLOWER KD. VICT CURT CLARKE Couldanke PatriciaParkins 1Varhi 35 Pilot St. Vicboria Peter Mann 7) sims Ave Vict. L-Qua MAQ-BSO Plany St A Moloughney A. MOLOUGHWEY 889 LAMPSON ST. Allemers-Andrea Demers 885 Craig flower Rd. #419. 860 Fleming 51 M. g Hachwell JOHN AASEN 864 11 J. Carn TOM PANZENBUSCIE 884 LAMPSON ST. 854 Fleminons). Jomes Nadeau 939 Craig flocoer Rd. DONNA BLACKWERL Blackwell 937 Craig Flower Ro Vic Esq Rossit Ross Guiffin BriunBlynt BruBU 874 Henring ST 4-47 Jo West Snamich Vd Brian Morn

# COMMUNITY OPEN HOUSE 874 FLEMING STREET, VICTORIA, BRITISH COLUMBIA

SIGN IN | 29.05.19

NAME SIGNATURE ADDRESS DAVID SMITH David Smit 880 CONIGFLOWER RD. ROBERT MCKIE 954 LAMPSON PL. 868 Fleming Street. 891 Lampson St David Renaldan Pour Complex 11 Alan Banun 885 Craceflorn Rd. 892 CONVINTE RD. - Blestin Houre () DAVID ABHTON



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good work



Name

Address

Andrea	Demers
# 419 -	885 CRAIGELOWER
VAA	2×4

Email updates will be provided as we continue with this process.

Email

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Questions or comments:

I am interested in being and wait list for Flemming St and anything else available in the Esquimaet area. (Tilliam /Burnside, te Please keep me updated! IERY excited!