

# Corporate Administration Staff Report

**DATE:** April 20, 2020

**TO**: Chief Administrative Officer

**FROM**: Barclay Pitkethly, Deputy Chief Administration Officer

SUBJECT: Silverdale Neighbourhood Planning Request

**ATTACHMENTS:** A – Letter of Request from Silverdale Hills GP INC.

B - LAN 64 Silverdale Comprehensive Planning Area Neighbourhood Planning

Terms of Reference

#### **RECOMMENDATION:** Council consider and resolve:

That a letter of authorization be issued directing staff to work with Silverdale Hills GP Inc. to prepare an application for a proponent-driven neighbourhood planning process for the 'Central Neighbourhood' precinct in the Silverdale Comprehensive Planning Area.

#### **PURPOSE:**

The District has received a letter from Silverdale Hills GP Inc. seeking Council authorization to initiate a proponent-driven Neighbourhood Planning process for the Central Neighbourhood precinct in the Silverdale Comprehensive Planning Area (SCPA). The request is in accordance with the provisions set out in Council Policy LAN.64 - Silverdale Comprehensive Planning Area Neighbourhood Planning Terms of Reference and is supported with the majority ownership of lands by Polygon Homes Ltd.

#### **DISCUSSION AND ANALYSIS:**

Neighbourhood planning can only be initiated by Council. This is fundamental to maintain and manage the neighbourhood planning process from a resourcing perspective and to maintain orderly growth with the District. Silverdale Hills GP Inc. is requesting Council to initiate the first phase of neighbourhood planning in Southwest Mission and specifically within the Central Neighbourhood precinct of the SCPA (see Attachment A – Letter of Authorization).

While LAN.64 provides two paths to neighbourhood planning, one that includes a municipal-driven process and the other a proponent-driven processes, both of which can be undertaken through internal or external resources, it has been anticiapted that the early phase(s) of neighbourhood planning in the SCPA would likely occur through a proponent-driven process given the expertise and financial wherewithal readily available with larger private sector firms. However, until internal expertise grows and resources become available through development revenue thus supporting a shift to utilize municipal staff and resources, Council's consideration to authorize the preparation of an application is for a proponent-driven and developer resourced planning process.

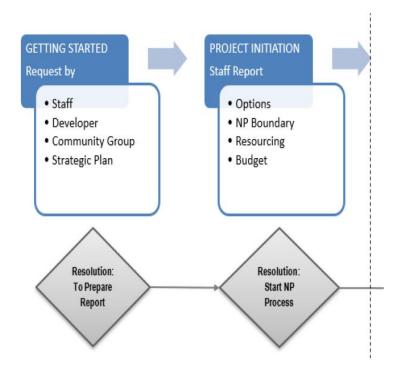
LAN.64 stipulates that any proposal to develop in the SCPA begin with the Council's authorization whether initiated by staff or by an external party. As detailed in Attachment B, the request put forward by the Silverdale Hills GP Inc. initiates Step 1: Council Authorization of the planning process. And, as outlined within the Road Map, please see Figure 1 – LAN 64 Road Map, the request to consider initiation of neighbourhood planning is within the 'Getting Started' portion of the process.

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Should authorization be granted by Council by way of resolution, Step 2: Neighbourhood Planning Initiation, can commence. This second step is represented by the 'Project Initiation' phase of the process as illustrated in Figure 1 below. Authorization by Council allows work to commence on gathering and compiling all the information needed for Council to make an informed decision on whether to initiate neighbourhood planning. Information critical to the decision-making process will include, but is not limited to the following:

- a) submission of an application fee of \$5,000
- b) development of a scope of work with timelines;
- c) development of a Communications and Public Engagement Strategy; and
- d) formulation of all costs to prepare the neighbourhood plan to be covered by the proponent.

Figure 1 - LAN 64 Road Map



<sup>\*</sup> NP denotes Neighbourhood Planning

It is noted that a request and subsequent authorization does not commit Council to initiate neighbourhood planning, but rather, authorizes a proponent to make an application and begin work with District staff to develop a workplan to complete neighbourhood planning.

# **Proponent Driven Application**

The application process enables the proponent to work with the District of Mission to develop a model in which District staff play a critical role, where a project group will be established to facilitate the process and clear lines of communication will be established. As noted, employing a proponent application process will build capacity within current staff resources and work to empower the District to play more of a lead role in future neighbourhood planning projects throughout the District.

Alternatively, Council may decide to move forward with a District-driven process in which, as per Council Policy LAN 64, a report would be prepared outlining the work plan, needed resourcing including in-house staffing and hired consultants, a communications and public engagement strategy and associated budget implications.

Recognizing the current capacity within the District, a proponent-driven process may be the most

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appropriate model to move this initiative forward at this time, especially in the early phases of planning in the SCPA.

It is also noted that prior to any initiation of neighbourhood planning, an analysis of the potential for community amenity contributions as well as any implications to taxation for development in Silverdale will be finalized. The analysis will provide a thorough understanding of the District's financial obligations and benefits to development, which will include updated cost to development cost charges (DCCs) related infrastructure projects, updated Community Amenity Contributions Policy based on the findings of the Mission Infrastructure Strategy (MIS), and an evaluation of the ability of the District to pay for the added costs as they relate to the ongoing operation and life-cycle costs that come with the development of a new neighbourhood, or in other words, will taxation revenue from the new homes and businesses in Silverdale be able to pay for these added services and amenities?

#### **COUNCIL GOALS/OBJECTIVES:**

The proposed resolution starts to fulfill Council's 2018 – 2022 Strategic Plan and initiates priority action item 4.7:

### 4. Livable Complete Community

Council supports the evolution of Mission as a livable, attractive, and complete community that meets the everyday needs of its residents.

#### Goals:

To develop distinct neighbourhoods and a livable community

To be an attractive community for living, working, and playing

To the greatest extent possible, meet the social, cultural, and physical needs of the community

# Priority Action 4.7 Undertake neighbourhood planning

Short Term:

Southwest Mission

#### FINANCIAL IMPLICATIONS:

Silverdale Hills GP Inc. will be required to pay a \$5,000 application fee which is anticipated to fund the District staff's time required to support this initial application process. A work plan and associated costs for the neighbourhood planning stage will be developed during the application process and presented to Council prior to seeking authorization to begin this phase.

#### SIGN-OFFS:

Barclay Pitkethly,

Deputy Chief Administration Officer

Reviewed by:

Dan Sommer, Director of Development Services

#### Comment from Chief Administrative Officer:

"Once approved by CAO, type 'Reviewed' here"

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# ATTACHMENT A



March 24, 2020

Mayor and Council District of Mission c/o Mike Younie, CAO District of Mission 8645 Stave Lake St, Mission, BC V2V 4L9

# RE: Letter of Authorization to Undertake a Proponent-led Neighbourhood Plan

Dear Mayor and Council,

Congratulations on the adoption of the SW Mission Neighbourhood Plan Terms of Reference. Your decision is a major step towards realizing the community vision for Silverdale.

As set out in the Neighbourhood Plan process, Polygon respectfully requests Council approve a Letter of Authorization for us to proceed with the preparation of a proponent-led Neighbourhood Plan for the Central Neighbourhood in SW Mission.

#### **Ownership**

Per the attached plan Polygon owns 507.20 ha (69.1%) of the 733.61 ha contained within the Central Neighbourhood, as identified in Mission's Master Infrastructure Strategy. As such our ownership exceeds the minimum 60% of land area ownership required to initiate a Neighbourhood Plan, per the adopted Terms of Reference.

#### **Professional Consulting Team**

Polygon has assembled an experienced professional consulting team to deliver all of the components of the Neighbourhood Plan, including but limited to:

- Master Planning and Urban Design; Public Consultation and Facilitation: EKISTICS
- Environmental Assessment and Management: Pottinger Gaherty
- Geotechnical Assessment and Management: GeoPacific
- Archaeological Assessment and Management: Arrowstone
- Transportation Engineering: Bunt & Associates
- Civil Engineering (water, sanitary, rainwater management and street design): *InterCAD*
- Market Analysis and Land Economics: Rollo & Associates

Each of these firms has worked directly for the District and therefore have a clear understanding of the District's expectations regarding the Neighbourhood Plan process and associated deliverables.

#### Workplan and Resourcing

Polygon is prepared to work with District Staff to define the specific workplan for the Central Neighbourhood Plan and identify the necessary budget resources (i.e. internal staff or an external consultant) to provide the municipal oversight. Once the workplan and resourcing has been determined, Polygon is prepared to file a Neighbourhood Plan Application for staff review, and Council consideration, per the assessment criteria set out in the Terms of Refence.

#### Schedule

We expect the preparation of the Central Neighbourhood Plan to take approximately 12 months from the date our application is approved. A further 6 months is expected to advance the Plan through the District's formal OCP Amendment and Zoning Bylaw processes.

In consideration of the significant timelines and resources required to undertake the Neighbourhood Plan process, we respectfully seek your approval for a Letter of Authorization to proceed with a proponent-led Neighbourhood Plan in a timely manner.

In the interim, should you have any questions please do not he sitate to contact me.

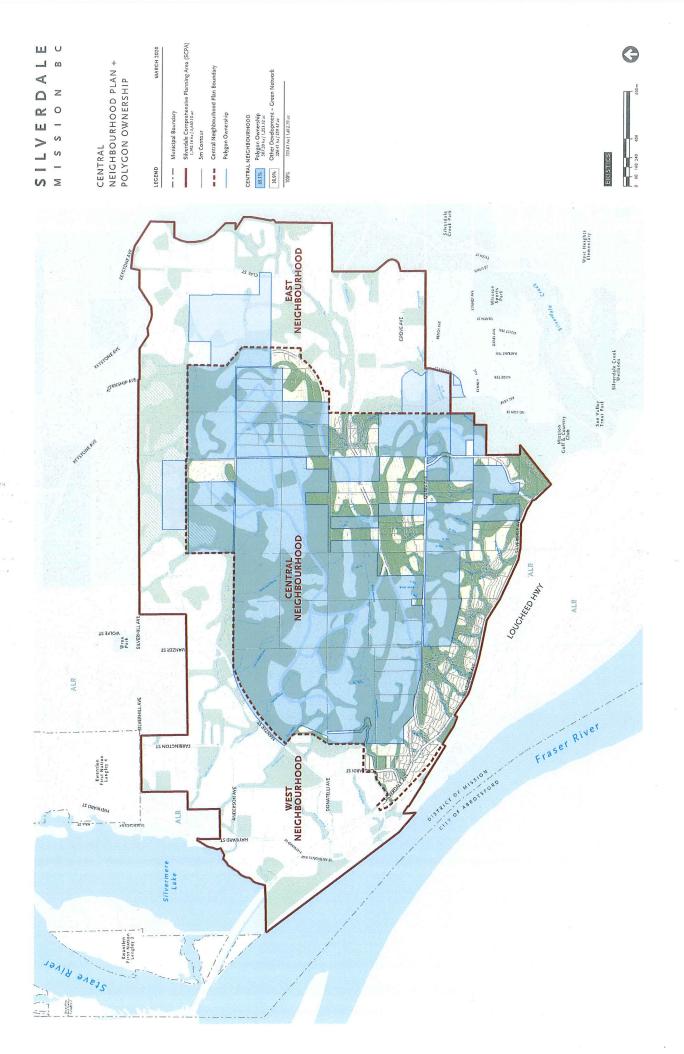
Sincerely,

SILVERDALE HILLS GP INC.

Chris Hartman

Vice President, Development

Attachment: Map of Polygon ownership in the Central Neighbourhood



# ATTACHMENT B

Mission On the fraser			POLICY AND PROCEDURE MANUAL			
Category: Land Use	Number: LAN.64(C)		SILVERDALE COMPREHENSIVE PLANNING AREA NEIGHBOURHOOD PLANNING TERMS OF REFERENCE			
Type:		Authority:		Approved By:		
<ul><li>☑ Policy</li><li>☐ Procedure</li></ul>		<ul><li>☑ Council</li><li>☐ Administrative</li></ul>		<ul><li>☑ Council</li><li>☐ Chief Administrative Officer</li><li>☐ Department Head</li></ul>		
Office of Primary Responsibility: Development Services						
Date Adopted: February 18, 2020		Council Resolution No: RC20/106		Date to be Reviewed: As required.		
Manner Issued: Pipeline, Website						

### **BACKGROUND:**

Situated within the District of Mission, and within the District's urban growth boundary, the 1,392 ha. (3440 ac.) Silverdale Comprehensive Planning Area (SCPA) is bordered by Silverdale Creek to the east, rural, agricultural and Kwantlen First Nations lands to the north, Silvermere Lake to the west and the Fraser River and Agricultural Land Reserve (ALR) lands to the south. **See Fig. 1 – SCPA Mission Context**.

# **INTENT:**

As outlined in the OCP, neighbourhood plans are required for areas anticipating growth in density or experiencing development pressures following a collaborative planning process, with technical due diligence, full cost accounting, and all the details for neighbourhood plan structure as outlined in Section 8.2 of the OCP.

As such, the overall intent of SCPA neighbourhood plans are:

- To plan and guide development of the Silverdale area as an "advanced, innovative and livable planned community";
- To prepare neighbourhood plans that are consistent with the vision, guiding principles, and the broad and specific policies of the OCP, including Development Permit Areas; and,
- To prepare realistic plans that are likely to be implemented.

#### **OCP FRAMEWORK:**

Section 8.2 of the District's OCP provides a framework for which neighbourhood planning shall be completed. As such neighbourhood planning must include:

- Collaborative Planning Process: Opportunities for community input into the plan by all residents of Mission; and
- Technical Due Diligence and Full Cost Accounting: Conduct technical and costing studies that identify the costs of infrastructure and servicing and sources of funding, including capital works and maintenance, repair, and replacement over time.

Additionally, the OCP states SCPA neighbourhood plans include:

- Provision of background information required to support planning;
- Provision of 3D realistic visualizations of proposed development; and
- Provision of a financial strategy for appropriate levels of servicing.

In accordance to Section 8.2 of the District's OCP, a neighbourhood plan provides:

- Alignment with the District's OCP;
- Neighbourhood Vision and Rationale;
- Land Use Plan and associated policies;
- Parks, Trails, Recreation and Environmental Networks Plan and associated polices relating to provision of public amenities including leisure centres, schools, parks, and trails (including connections to the broader community);
- Environmental protection policies;
- Street Hierarchy Plan and associated transportation policies;
- Infrastructure planning including water, sanitary and rainwater management plans and associated servicing policies;
- Financial and municipal cost recovery strategies;
- Design and development permit guidelines to manage form and character; and
- Implementation policies.

The District of Mission OCP designates the 1,392 ha (3,440 ac) SCPA for future urban growth and includes the following policy regarding Neighbourhood Plans in the SCPA:

Policy 8.3.8

Prepare neighbourhood plans in accordance with the neighbourhood plan structure in Section 8.2 and the parameters below, considering previous plans and the District of Mission's SCPA Master Infrastructure Strategy (MIS), but based primarily on current conditions and opportunities.

The MIS for the SCPA was initiated as a means to fill the policy gap between the District of Mission OCP and future SCPA Neighbourhood Plans by guiding the development and growth of the community.

In addition to satisfying OCP Policies 8.3.6 and 8.3.7, the MIS aligns with recently completed District Plans, including the Facilities Master Plan, Transportation Master Plan, and the Parks, Recreation, Arts and Culture Master Plan, as well as plan updates currently underway, including the Water, Sanitary and Drainage Master Plans.

The MIS serves to complete the prerequisite infrastructure master planning work for the SCPA, advancing the long-term land use objectives of the OCP. Allowing for an orderly provision of community development and services, the MIS serves as a development planning framework for future neighbourhood planning within the SCPA.

# **POLICY:**

# 1. SCPA Neighbourhood Planning Areas

The following neighbourhood planning areas are identified in the Master Infrastructure Strategy (MIS), and are based on the criteria of geographic characteristics, municipal transportation, and infrastructure servicing areas according to OCP Policy 8.3.7, which states:

Require developers to work with Mission to delineate appropriate land areas for neighbourhood plans based on geographic characteristics, transportation and servicing areas.

The neighbourhood planning areas are provided in logical order from a municipal servicing, transportation, and land use perspective:

- Central Neighbourhood;
- 2. West Neighbourhood; and
- 3. East Neighbourhood.

The three recommended neighbourhood planning areas include an option to partition into smaller plan areas identified as north and south sub-areas that reflect distinct, independent servicing areas. In each neighbourhood planning area, the south portion is required to be completed first in order to provide municipal servicing infrastructure to the north area, as identified in the MIS Summary Document. **See Fig. 2 – Neighbourhood Plan** 

#### Reference Material

The following materials are available for viewing at the District of Mission offices and website, other reference material will be made available as they are completed:

- District of Mission Official Community Plan (OCP) January 2019;
- Silverdale Master Infrastructure Strategy (MIS) + Appendices January 2020;
- District of Mission Recreation, Arts + Culture, Fraser River Heritage Park + Centennial Park Master Plans – June 2018;
- District of Mission Parks, Trail and Bicycle Master Plan August 2009;
- District of Mission Facilities Master Plan August 2018;
- District of Mission Transportation Master Plan June 2016;
- Abbotsford Mission Joint Water Master Plan May 2018;
- Abbotsford Mission Joint Wastewater Master Plan May 2018;
- Transit Future Plan: Abbotsford Mission January 2013;
- District of Mission Development and Subdivision Control Bylaw (#5650-2017); and,
- Metro Vancouver Integrated Stormwater Management Plans: Lesson Learned April 2012.

#### 2. Authorization

Neighbourhood planning commencement is a two-part process. Firstly, Council must authorize, by resolution, to undertake a neighbourhood planning process and then secondly, there is a neighbourhood planning initiation process which can be launched by one of two processes: a) Proponent Application; or b) District Initiative.

#### Step 1: Council Authorization Process

Council may, by resolution, initiate a neighbourhood planning process.

Council may consider initiating a neighbourhood planning process at either, the request of a developer (or group of developers), a community group, staff, or by council strategic plan/initiative.

# Step 2: Neighbourhood Planning Initiation

Upon resolution to initiate neighbourhood planning, Council must consider resourcing the project. Resourcing includes, but is not limited to, staff time, expertise, project completion timing, prioritization, and costs. Council may initiate neighbourhood planning considering resourcing and timing implications under two possible scenarios. First, by application by a proponent or second, a process led by the District of Mission.

# 1. Option #1: Proponent Application Submission

A proponent driven application submission is a process where the majority of the landowners are ready for re-development, where the majority of the landowners are the applicant, where land is identified as a developable area by the District's OCP, and the District is not fully resourced nor has the capacity to carry out such a process. The following outlines the process for which such an application may occur.

#### a) Application

A complete application with the following components must be submitted to the District for review prior to preparing a report to Council:

- i) SCPA Neighbourhood Plan Application Form and Plan Extents;
- ii) Terms of Reference letter of acknowledgement by Proponent;
- iii) Support 60% of land area ownership;
- iv) Professional Consulting Team Credentials,
- v) Scope of Work with Timelines; and,
- vi) Communications and Public Engagement Strategy

# b) Assessment Criteria

The following criteria will be used by the District of Mission to assess the Neighbourhood Plan Application:

# i) Neighbourhood Plan Boundaries

The proposed neighbourhood plan extents to reflect the required boundaries outlined in the MIS.

### ii) Logic of Sequence

From a planning perspective, is the neighbourhood plan area logical in terms of sequence relative to other completed or ongoing neighbourhood plan's? Can the process for neighbourhood plan preparation proceed or is it dependent upon the prior completion of other supportive planning work?

# iii) Practicality of Sequence

From a servicing perspective, will adequate infrastructure be in place to practically service development in the neighbourhood plan area? Can servicing issues relating to the neighbourhood plan proposal be reasonably addressed without undue burden to the landowners, nearby residents or the District?

#### iv) Level of Commitment of the Landowners

Is there support for the preparation of a neighbourhood plan among a reasonable proportion of the land area represented in this area? (60% of land area ownership)

# v) Adequacy of Process

Given Local Government Act legal requirements, does the proposed planning process adequately address District obligations and typical practices with respect to public consultation? Have the proponents established appropriate timelines to ensure that consultation requirements are addressed?

#### vi) Adequacy of Workplan and Professional Resourcing

Does the proposed Scope of Work adequately address the SCPA Neighbourhood Plan Terms of Reference obligations? Have the proponents established a Professional Consulting Team that meet the requirements to fulfill the needs of the Terms of Reference?

### c) Review

Only a complete application will be reviewed. A report will be prepared and forwarded to Council for consideration and authorization.

Council will review report, consider and provide additional requirements if deemed necessary.

A resolution to prepare of a Letter of Authorization to undertake the publicly sanctioned neighbourhood plan for XXXX neighbourhood according to the SCPA Neighbourhood Plan Terms of Reference and additional identified requirements will be considered by Council.

# d) Resourcing

Resourcing for applicant driven processes is critical to the success of neighbourhood planning. Generally, there are two main components to the resourcing equation: the Professional Consulting Team assembled by the proponent and the District of Mission staffing complement.

#### i) Professional Consulting Team Expertise

A number of professional disciplines are required to work together to develop the SCPA Neighbourhood Plans. At a minimum, the proponent must assemble a consulting team with professional expertise and experience in the following disciplines:

- Master Planning and Urban Design;
- Public Consultation and Facilitation;
- Environmental Assessment and Management;
- Geotechnical Assessment and Management;
- Archaeological Assessment and Management;
- Transportation Engineering;
- Civil Engineering (water, sanitary, rainwater management and street design);
- Market Analysis and Land Economics.

# ii) District of Mission

The District will have central role to play to ensure neighbourhood planning meets the policies and bylaws of the District. Three central components constitute the role of the District in a proponent driven process: municipal departments, referral agencies and Council themselves.

#### District of Mission Departmental Staff:

The District's staff will form a Project Group to liaise with the proponents' Consulting Team to provide professional expertise, feedback and/or direction when necessary. The Project Group will be determined by the scope, scale and complexity of the proponent's application and is likely to include, but not limited to, representation from:

- planning;
- engineering; and,
- parks recreation and culture.

Feedback and expertise advisory roles will be necessary from:

- finance;
- administration;
- fire services; and,
- economic development.

When resourcing is scarce, and capacity to staff the Project Group is challenging or will compromise day to day business, the Project Group may consist of outside expertise. The external assistance will manage the process on behalf of the District and will be staffed by an outside consulting firm with expertise in planning, engineering, and parks and recreation with access to expertise in finance, facilities, environment and geotechnical topics.

The role of District staff is critical to provide input to the process to ensure District interests are being met.

#### Referral Agencies:

In preparing the neighbourhood plan, the District will consult with Provincial agencies and public utility operators to garner feedback.

#### Council:

Council will play a central decision-making role in determining policy, direction, vision and financial outcomes. Regular check-ins with Council will be scheduled at key decision-making points throughout the process.

#### e) Budget

The applicant will be required to pay any application fees associated with the initial application, plus provide a budget to cover the costs the District identifies as necessary to fulfill the requirements of the Terms of Reference.

#### 2. Option #2: District of Mission Process

A District of Mission process is also presented as an option. This process is more of a typical neighbourhood planning process and can be utilized where Council has determined neighbourhood planning should occur, and where capacity exists within the staffing complement at the District. Many similarities exist between a proponent driven process and the District lead one.

# a) Report to Council

A report will be submitted to Council outlining the following:

#### i) Neighbourhood Plan Boundaries

The report will outline the proposed neighbourhood plan boundary extents and should reflect the boundaries as outlined in the MIS.

From a planning perspective, the neighbourhood plan area should be logical in terms of sequence relative to other completed or ongoing neighbourhood plans.

From a servicing perspective, the report will address infrastructure needed to be in place to practically service development in the neighbourhood plan area. Servicing issues relating to

The neighbourhood plan must address any undue burden to the landowners, nearby residents or the District as a whole.

# ii) Communications and Public Engagement Strategy

The report will provide a Communications and Public Engagement Strategy for Council's consideration. At a minimum, the Strategy will address consultation with the public, landowners, referral agencies including the province, and public utilities, and First Nations; will provide a time line with clear Council decision-making responsibilities and check-ins; and a communication and engagement methodology for the above that may or may not include a social media platform.

# iii) Workplan and Professional Resourcing

A workplan and resourcing plan will be submitted to ensure the District is adequately addressing the SCPA Neighbourhood Plan Terms of Reference. This plan may include a requirement to assemble a Professional Consulting Team to meet the requirements of the SCPA Neighbourhood Plan Terms of Reference.

#### iv) Budget

A budget will be prepared to ensure the process fits within the District's Financial Plan.

#### b) Review by Council

Council will review report and consider any additional requirements.

A resolution to undertake the Neighbourhood Plan for XXXX Neighbourhood according to the SCPA Neighbourhood Plan Terms of Reference and any additional identified requirements will be considered by Council.

#### c) Resourcing

Resourcing is critical to the success of neighbourhood planning. Generally, there are two main components to the resourcing equation: District of Mission staffing complement, and, if required, the consulting expertise needed to complete the plan.

#### i) District of Mission

A District neighbourhood planning process will ensure the policies and bylaws of the District will be met. Three central components constitute the District's approach to a neighbourhood planning process: municipal department support, referral agencies and Council themselves.

#### District of Mission Departmental Staff:

The District's staff will form a Project Group to lead the neighbourhood planning process. The Project Group will be determined by the scope, scale and complexity of the neighbourhood plan area and is likely to include, but not limited to, representation from:

- planning (lead);
- engineering; and,
- parks recreation and culture.

Feedback and expertise advisory roles will be necessary from:

- finance;
- administration:
- fire services; and,
- economic development.

When resourcing is scarce, and capacity to fill the Project Group is challenging or will compromise day to day business operations, the Project Group may seek outside expertise to fill the gaps.

#### Referral Agencies:

In preparing the neighbourhood plan, the District will consult with Provincial agencies and public utility operators to garner any feedback.

#### Council:

Council plays a central decision-making role in determining policy, direction, vision and financial outcomes. Regular check-ins with Council will be scheduled at key decision-making points throughout the process.

# ii) Professional Consulting Team Expertise (if required):

A number of professional disciplines may be required to work together to develop the neighbourhood plan. Professional expertise and experience in the following disciplines may be sought by the District to assist in completing the neighbourhood plan:

- Master Planning and Urban Design;
- Public Consultation and Facilitation;
- Environmental Assessment and Management;
- Geotechnical Assessment and Management;
- Archaeological Assessment and Management;
- Transportation Engineering;
- Civil Engineering (water, sanitary, rainwater management and street design);
- Market Analysis and Land Economics.

### 3. Neighbourhood Plan Process

Following Council's authorization of the neighbourhood plan process, the neighbourhood planning process shall follow a 4-phased approach. Phase 1 | Technical Due Diligence provides an analysis of the opportunities and constraints of the land, Phase 2 | Preliminary Design Options identifies difference land use scenarios within the neighbourhood planning area, Phase 3 | Preferred Option - Engineering and Financial Studies develops the preferred plan and provides engineering and financial analysis to the plan, and Phase 4 | Prepare Neighbourhood Plan Document is the final stage where everything is brought together in a comprehensive neighbourhood plan. See Schedule E: Road Map for a summary of the process.

#### **Project Initiation**

Prior to commencement of the neighbourhood planning process, initiation meetings of the Project Group to review the scope of work, major milestones, schedules, and available resources is necessary.

Digital mapping (including LIDAR and GIS) and technical background information is available to complete any works outsourced to consultants.

# PHASE 1 | Technical Due Diligence: Biophysical Studies

Building on the Biophysical Studies completed by the MIS, Phase 1 of Neighbourhood Planning involves completing technical due diligence regarding the biophysical and cultural attributes of the neighbourhood plan area, including environmental, geotechnical and archaeological. The biophysical studies completed through Phase 1 will provide the analysis for understanding the opportunities and constraints of the land.

### a) Biophysical Assessments

Building on the MIS biophysical analysis and findings, the following studies must be completed as part of the Neighbourhood Plan process:

- Physical: Aerial with Cadastral Overlay, Landform, Slope and Aspect Analysis;
- Environmental: Environmental Baseline report and IRMP data collection;
- Geotechnical: Geotechnical Hazard Assessment; and
- Archaeological: Archaeological Baseline report

to be incorporated into the Summary document.

Refer to Schedule A for further details.

#### b) Planning and Engineering Inventories

The following inventories need to be collected and collated to understand existing conditions of the planning area. This must be completed prior to any land use planning occurs.

- Planning: OCP Designations, Zoning: land use, and Land Ownership plans; and,
- Engineering: public streets, water, sanitary, and stormwater infrastructure plans, as well as all utility infrastructure, rights-of-way and easements.

Refer to Schedule B for further details.

#### **PHASE 1 – Consultation:**

Following the IAP2 (International Association for Public Participation) Spectrum, the following stakeholders should participate in Phase 1 of the neighbourhood plan process as follows:

**Project Group | Involve:** The Project Group will play a central role in developing and ensuring the technical studies are meeting the expectations of the OCP and the community. The Project Group can also assist in facilitating information sharing between consultants and stakeholders if necessary.

# PHASE 1 - Deliverables:

The following deliverables must be completed prior to moving onto the Phase 2 of the process:

- Planning and Engineering Inventory Summary; and
- Environmental Baseline, Geotechnical, and Archaeological Baseline reports with associated GIS mapping; and
- Biophysical Assessment Summary with Opportunities and Constraints Plan.

# PHASE 2 | Preliminary Design Options

The assessments and studies undertaken in Phase 1 will inform the preparation of the preliminary design options which will be presented to Council.

Based on the work completed in Phase 1, multiple land use scenarios will be developed (not less than 2), with corresponding objectives, statistical summary (density and population projections) and associated neighbourhood amenities.

# a) Development of Preliminary Design Options

- Land Use Plan Options
- Retail Demand Study
- Community Facilities Inventory Demand Study

The Preliminary Design Options should include a Visual Impact Assessment in the form of 3D modelling.

The Neighbourhood Plan Preliminary Design Options should be consistent with the MIS findings, respective of biophysical constraints modelling and include Design Principles, Green Network and Housing Distribution Plan.

#### PHASE 2 – Consultation:

Following the IAP2 (International Association for Public Participation) Spectrum, the following stakeholders should participate in Phase 2 of the Neighbourhood Plan Process as follows:

**Project Group | Involve:** The Project Group will work directly with any outside consultants to develop the preliminary design option and present these to Council;

**Landowners | Consult:** The Landowners will be provided with balanced and objective information to assist in them in understanding the studies, analysis, and proposed plan alternatives in order to obtain feedback.

**General Public | Consult:** The public and other stakeholders will be provided with balanced and objective information to assist in them in understanding the studies, analysis, and proposed plan alternatives in order to obtain feedback.

**First Nations / Consult:** First Nations will be provided with balanced and objective information to assist in them in understanding the studies, analysis, and proposed plan alternatives and invited to provide feedback.

**Council | Empower:** Council will, by resolution, decide on the preferred neighbourhood plan option prior to moving to Phase 3.

# PHASE 2 - Deliverables:

The following deliverables must be completed prior to moving onto the Phase 3 of the process:

- Preliminary Design Options;
- Consultation materials; and,
- Feedback Summary of Consultation Phase 2.

# PHASE 3 | Preferred Option and Technical Due Diligence - Engineering Studies

Based on the decisions made in Phase 2, the Preferred Neighbourhood Plan option will be prepared that is consistent with the guiding principles and strategic policy directions. With the development of the Preferred Neighbourhood Plan option, the required Engineering and Financial Studies will be initiated and finalized as part of Phase 4.

# a) Refine Preferred Option

Based on the feedback and discussion provided during Consultation – Phase 2, the Preferred Neighbourhood Plan Option will be refined.

# b) Engineering Studies

Building on the MIS engineering plans, the following engineering studies are required to support the land uses envisioned in the Preferred Option:

- Civil: Street Hierarchy Plan, Water and Sanitary Engineering Plans;
- Transportation: Transportation Network Plan, Transportation Impact Assessment; and,
- IRMP: Integrated Rainwater Management Plan.

Refer to Schedule C for further details.

#### c) Environmental Assessment

Environment Impact Assessment – Refer to Schedule A for further details.

#### d) Financial Studies

Municipal Cost Recovery Analysis – Refer to Schedule D for further details.

#### PHASE 3 – Consultation:

Following the IAP2 (International Association for Public Participation) Spectrum, the following stakeholders should participate in Phase 3 of the Neighbourhood Plan Process as follows:

**Project Group | Involve:** The Project Group will work directly with any outside consultants to refine the preferred option, assist in providing direction in regards to the engineering studies, financials studies, and present the results to Council;

**Landowners | Consult:** The Landowners will be provided with balanced and objective information to assist in them in understanding the Preferred Neighbourhood Plan in order to obtain feedback.

**General Public | Consult:** The public and other stakeholders will be provided with balanced and objective information to assist in them in understanding the Preferred Neighbourhood Plan in order to obtain feedback.

**First Nations / Consult:** First Nations will be provided with balanced and objective information to assist in them in understanding the Preferred Neighbourhood Plan and invited provide feedback of any potential impacts to first nations interests.

**Franchise Utilities | Involve:** Refer the preferred development concept to affected franchise utility operators including power, communications and natural gas for feedback.

**Council | Empower:** Council will, by resolution, decide to move forward to Phase 4 based on the results of the engineering studies and preferred land use option refinement process.

#### **PHASE 3 - Deliverables**

The following deliverables must be completed prior to moving onto the Phase 4 of the process:

- Preferred Neighbourhood Plan Option Land Use Plan and statistical summary of Land Uses;
- Environmental Impact Assessment
- Visual Impact Assessment;
- Draft Civil, Transportation Network Plan, Transportation Impact Assessment and IRMP Studies;
- Financial Analysis: Retail Market Demand Study, Cost Recovery Analysis;
- Consultation materials; and,
- Feedback Summary of Consultation Stage 3.

# PHASE 4 | Prepare the Neighbourhood Plan Document

Phase 4 requires synthesizing all technical findings to the Preferred Option and preparation of associated figures, schedules and policies in a draft Neighbourhood Plan document for review and Council consideration. The research, analysis and engagement activities carried out in the earlier phases will inform policy directions and implementation actions.

### a) Final Neighbourhood Plan and Technical Studies

Finalize the neighbourhood plan based on feedback received through the consultation processes, as well as potential new findings from Engineering and Financial studies.

Finalize the Engineering and Financial studies to reflect the preferred option and associated statistical summary.

# b) Neighbourhood Plan Document

Prepare the Neighbourhood Plan document with associated figures, schedules and policies according to the content requirements outlined in Section III. B) Neighbourhood Plan Document Content.

#### PHASE 4 - Deliverables

The following deliverables must be completed Council consideration:

- Final Neighbourhood Plan document; and,
- Final Technical Studies formatted as a Technical Appendices to the Neighbourhood Plan.

# 4. Neighbourhood Plan Content

SCPA Neighbourhood Plans are required to include the following:

- 1. Overview
  - 1.1. Rationale for Neighbourhood Plan
  - 1.2. Alignment with RGS, OCP, MIS, and District Master Plans
- 2. Neighbourhood Vision
  - 2.1. A Vision for the Neighbourhood
  - 2.2. Planning Principles
  - 2.3. Neighbourhood Character
- 3. Neighbourhood Land Uses Descriptions and Policies
  - 3.1. Biophysical Constraint Areas: including environmentally sensitive areas (aquatic, terrestrial and natural), Geotechnical Terrain Assessment areas, and where Archeological Impact Assessment will be required
  - 3.2. Residential: Single Family, Multi-Family and Apartment
  - 3.3. Mixed-use
  - 3.4. Commercial
  - 3.5. Industrial
  - 3.6. Institutional Schools, Firehall, Leisure Centre, Public Works, Library, etc.
  - 3.7. Public Parks: Neighbourhood, Community and Natural Parks
- 4. Neighbourhood Infrastructure Descriptions and Policies
  - 4.1. Transportation:
    - 4.1.1. Street Network and Hierarchy
    - 4.1.2. Cycling Network
    - 4.1.3. Pedestrian Network
    - 4.1.4. Transit Network

- 4.2. Servicing:
  - 4.2.1. Water Conceptual Master Plan
  - 4.2.2. Sanitary Conceptual Master Plan
  - 4.2.3. Rainwater Management Conceptual Master Plan
- 5. Development Permit Areas
  - 5.1. Designation of the following Development Permit (DP) areas within the Neighbourhood Plan, including any newly created development permit guidelines:
    - 5.1.1. Intensive Residential
    - 5.1.2. Multi-Unit Residential
    - 5.1.3. Mixed-Use and Commercial
    - 5.1.4. Industrial Development Permit Area
    - 5.1.5. Natural Environment
    - 5.1.6. Fraser River
    - 5.1.7. Geotechnical Hazards
    - 5.1.8. Fire Interface
- 6. Implementation
  - 6.1. Regulatory Requirements
  - 6.2. Conceptual Development Phasing
  - 6.3. Pre and Post Construction regulations.
- 7. Schedules
  - 7.1. Land Use Plan
  - 7.2. Parks and Trails Plan
  - 7.3. Environmental Sensitive Designated Area Plan
  - 7.4. Street Hierarchy Plan
  - 7.5. Cycling Plan
  - 7.6. Pedestrian Plan
  - 7.7. Transit Plan
  - 7.8. Water Engineering Plan
  - 7.9. Sanitary Engineering Plan
  - 7.10. Drainage Engineering Plan
  - 7.11. Development Permit Areas

- 8. Figures
  - 8.1. Biophysical Constraints Summary
  - 8.2. Opportunities and Constraints Plan
  - 8.3. Neighbourhood Plan Context;
  - 8.4. Aerial Plan and 3D Model views (Optional);
  - 8.5. Land ownership, including delineation of ownership and parcels boundaries;
  - 8.6. Character images of Neighbourhood Character and Form;
  - 8.7. Illustrative Plan;
  - 8.8. Development Phasing Plan.
- 9. Tables
  - 9.1. Land Use Summary

# RELATED POLICIES, PROCEDURES, AGREEMENTS AND/OR BYLAWS:

\*\*\* END OF POLICY \*\*\*

# **RECORD OF AMENDMENTS/REVIEW**

Policy #	<u>Date</u> <u>Adopted</u>	<u>Date</u> <u>Reviewed</u>	Amended (Y/N)	<u>Date</u> <u>Reissued</u>	Authority (Resolution <u>#)</u>
LAN.64(C)	18 Feb 2020		original		RC20/106

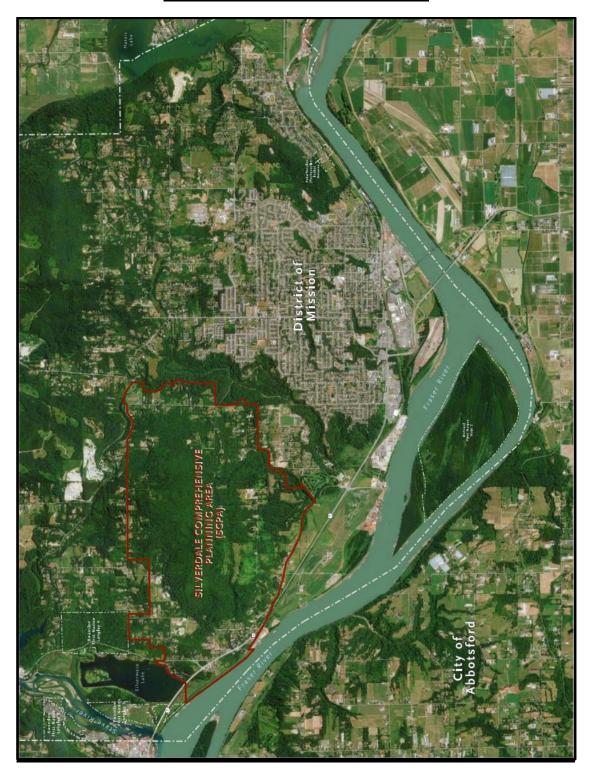
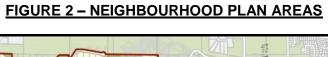
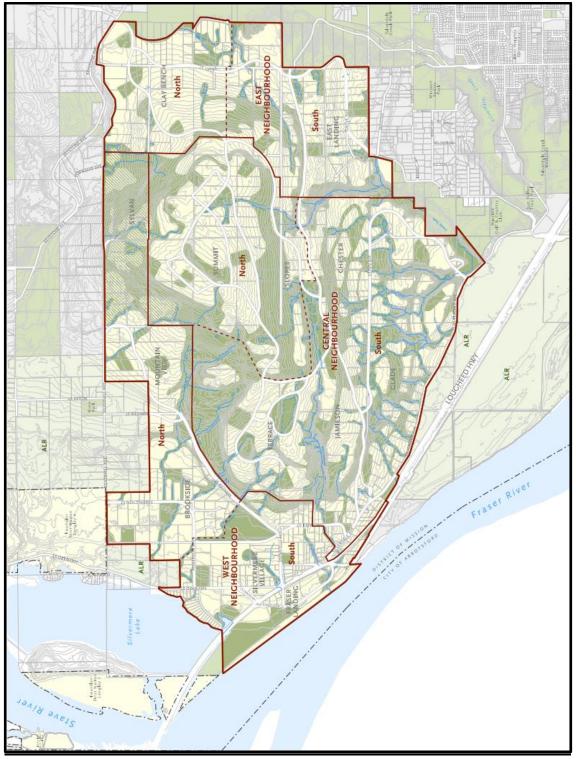


FIGURE 1 - SCPA MISSION CONTEXT





#### SCHEDULE A - BIOPHYSICAL CONTRAINTS

### **Environment**

# 1. 2019 MIS Strategic Environmental Assessment (SEA) and Recommendations

The MIS Strategic Environmental Assessment (SEA) provides science-based recommendations for environmental planning objectives to guide the environmentally responsible development planning and growth of the SCPA. These recommendations are based on an analysis of detailed biophysical information for the SCPA and consideration of the regional context.

As neighbourhood planning proceeds, attention will be needed to refine the detail and precision of the environmental management zone boundaries and identify specific measures to achieve the objectives prescribed in the SEA Report.

# 2. Environmental Baseline Report

Building on the work completed in the MIS Strategic Environmental Assessment (SEA), the neighbourhood plan Phase 1 – Biophysical Constraints, must include an Environmental Baseline Report to provide input into the Opportunities and Constraints Plan (see Deliverables Phase 1). Once land uses are determined, Phase 3 – Preferred Option and technical Due Diligence, greater detail will be required to determine any impacts on environmentally sensitive areas.

#### 3. Environmental Impact Assessment (EIA)

As the Preliminary Design Options are being developed, an Environmental Impact Assessment (EA), undertaken by a Registered Professional Biologist (R.P.Bio), must be completed. Following provincial methodologies and professional standards, the required Environmental Impact Assessment is a process to predict environmental effects of proposed development initiatives before they are carried out and includes:

- Identifying potential adverse environmental effects;
- Proposing measures to mitigate adverse environmental effects;
- Predicting whether there will be significant adverse environmental effects, after mitigation measures are implemented; and,
- A follow-up program to verify the accuracy of the environmental assessment and the effectiveness of the mitigation measures.

The environmental impacts assessment is a planning and decision-making tool, with the objectives of which are to:

- Minimize or avoid adverse environmental effects before they occur;
- Mitigate impacts where possible; and,

Incorporate environmental factors into decision making.

The table below provides a summary of the Environmental work completed as part of the MIS in 2019 and the required mapping, survey and study for all SCPA Neighbourhood Plans:

M.I.S.	N.P.
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Ecosystem Mapping	TEM & SEI	Additional ground truthing and refinements of TEM & SEI
Stream and Waterbody Mapping	2008 mapping and stream classifications:	Water resource assessment: Field surveyed with GPS of
таррту	Refined based on updated lidar and targeted field observations	select priority streams and waterbodies
Riparian Areas	Identify riparian assessment areas for applicable streams	Identify preliminary streamside protection and enhancement areas for water courses
Species at Risk (SAR)	Prioritize ecosystems/habitats that support SAR	Feld survey potential SAR habitat
Study Name	Strategic Environmental Assessment	Environment Impact Assessment
Implementation Strategy	Conservation Framework Plan and guidance for EA for NP	Environmental Management Plan (incl. IRMP) and other commitments in EA

# 4. Water Resource Assessment (WRA)

Working in conjunction with the Civil Engineering consultant, the Environmental Consultant should prepare a Water Resource Assessment to provide the necessary data for the Integrated Rainwater Management Plan (IRMP). See Schedule C for further details.

#### Geotechnical

# 1. 2019 MIS Geotechnical Assessment Report

The MIS Geotechnical Assessment Report presents a high-level geotechnical assessment that identifies major geotechnical limitations throughout the SCPA.

# 2. Neighbourhood Plan Geotechnical Terrain Assessment

The purpose of a Geotechnical Terrain Assessment is to identify and provide a characterization of areas where naturally occurring geologic events, in particular slope instabilities and rockfall hazards, within or adjacent to proposed development areas, have influenced the proposed development in recent history. In addition, areas where anthropologic changes to the natural terrain have created potential geologic hazards should be identified in the assessment. The report should provide guidance to designers for siting

housing and roadways with respect to avoiding the influence areas of identified potential geologic hazards.

#### **Archaeological**

# 1. 2019 MIS Archaeological Overview Assessment (AOA) and Recommendations

The MIS Archaeological Overview Assessment (AOA) presents the archaeological research and methodology, including biophysical and cultural setting context, as well as the results of the fieldwork, assessments of potential archaeological remains and recommendations for future archaeological research for the SCPA.

The AOA recommends that an Archaeological Impact Assessment (AIA) be conducted under a Heritage Inspection Permit issued under Section 14 of the Heritage Conservation Act for the any development encompassing moderate and/or high potential polygons outlined in the AOA. This may be completed during the development application stage.

Consideration must be given to include local First Nations in the development of the AIA. This may include hiring local first nations to complete the AIA itself.

# 2. Archaeological Baseline report

Building on the work completed in the MIS Archaeological Overview Assessment, the neighbourhood plan Phase 1 – Biophysical Constraints, must include an Archaeological Baseline Report to provide input to the Opportunities and Constraints Plan (see Deliverables Phase 1). The Archaeological Baseline Report will include areas of moderate and high potential areas as well as previously recorded archaeologic sites.

Once land uses are determined, Phase 2 – Preliminary Design Options, recommendations regarding required next steps to address any potential impacts on archaeological sites (moderate and high polygons, and known archaeological sites) are required.

#### **SCHEDULE B: PLANNING**

# Industrial, Commercial, Retail Demand

# 1. 2019 MIS Silverdale Retail Demand Analysis Report

The purpose of the Silverdale Retail Demand Analysis is to understand Mission's current market for retail and service commercial space in order to determine the nature and magnitude of retail space that is warranted in the SCPA over the projected buildout of the community.

# 2. Neighbourhood Plan Refined Retail Demand Study

Building on the work completed in the MIS Retail Demand Analysis, the Neighbourhood Plan should include a Refined Retail Demand Study that reflects potential changes in market trends, built commercial nodes and the proposed Neighbourhood Plan design.

The study must allocate the retail areas identified in the MIS between several proposed commercial nodes, within the Neighbourhood Plan area and immediate neighbours. The Study must also comment on the nature of each proposed commercial node including its retail composition, land requirements and building footprint.

# **Community Facilities Inventory**

#### 1. 2019 MIS Community Facilities Inventory

As part of the MIS work, the community facility requirements including, but not limited to, public schools, civic centres, firehall, public works and parkland were identified and positioned within the SCPA precincts.

The MIS provides the community facilities distribution within the SCPA; however, the exact locations, types, configurations and boundaries of the community facilities will be determined through neighbourhood planning.

# 2. Neighbourhood Plan Community Facilities Inventory

Building on the work completed in the MIS Community Facilities inventory, the Neighbourhood Plan must confirm and refine the inventory and required development program with the District of Mission. Working in conjunction with District of Mission staff and School District No 75, the Consulting Team will review, consult and inventory the Community Facilities for the Neighbourhood Plan, including but not limited to public schools, public parks, civic centres, seniors centre, youth centre, day care, libraries, health care facilities, public works and emergency services. In order for the requirements to be incorporated into the Neighbourhood Plan design, the inventory must outline the major program, area requirements, building size, and cost for each of the required facilities.

# **Land Use Plan**

# 1. Neighbourhood Plan – Land Use Plan

Building off of the work completed as part of the MIS, a land use plan will be developed to incorporate the findings of the refined biophysical studies, retail demand analysis and community facilities inventory to balance growth in a sustainable and sensitive manner. The land use plan must incorporate goals and policies to develop livable and vibrant communities, integrate transportation and community planning, reduce energy consumption, conserve and enhance the natural environment.

The goals of each neighbourhood plan will be developed with the following in mind:

- Develop a livable and sustainable vision for the neighbourhood within the broader context of the District of Mission and the Fraser Valley;
- Develop policies and descriptions of differing land uses to create a high quality urban neighbourhood.
- Develop a preferred option for the location, type, and density of future development, including:
  - Residential;
  - Commercial:
  - Mixed use:
  - Industrial;
  - Institutional: schools, firehall, leisure centres, public works facilities, libraries, health care facilitates, etc.
  - Parks; and
  - Protected spaces: geotechnical, archaeological, environmental.
- Develop, if necessary, development permit guidelines to create unique neighbourhoods.

# **SCHEDULE C: ENGINEERING SERVICES**

# **Street Network and Transportation**

# 1. 2019 MIS Transportation Report and Recommendations

As part of the MIS, a Transportation Report was undertaken by Bunt & Associates to provide transportation planning analysis and modelling for the SCPA. The report outlines the transportation planning and engineering considerations, as well as analysis and recommendations toward development of a proposed MIS transportation network.

As neighbourhood planning proceeds, refinement of the street network, alignments and traffic volumes will be required to achieve the objectives described in the Transportation Report. In addition, a more detailed traffic operations assessment of the Lougheed Highway's three signalized intersections is recommended at neighbourhood planning.

SCPA-specific Livable Street Standards will be applied in the SCPA NEIGHBOURHOOD PLAN to reduce the physical, visual and environmental impact of new road construction that better accommodates pedestrian and cycling needs, establishes a positive pedestrian realm, and explores alternative lighting and drainage standards. These new

'Livable Street Standards' will be incorporated into the District of Mission Subdivision and Development Control Bylaw.

# 2. Transportation Network Plan Design Considerations

As described in the OCP, Transportation plays a significant role in the development and livability of communities. The 2016 Transportation Master Plan (TMP) references the 'Six D's of Land Use and Transportation Planning' (destinations, distance, design, density, diversity, demand management), which in essence provides a framework for supporting sustainable travel modes, developing complete streets, integrating with land uses, and placemaking. The Transportation Network Plan must consider:

#### a) Street Network

Neighbourhoods should be designed to foster easy, convenient and comfortable walking and cycling throughout the community. The street network should be sensitive to topography and have multiple connections with relatively direct routes. With the exception of boulevards, streets should be kept as narrow as possible. Traffic calming should be employed where appropriate.

The pattern of new community streets for the SCPA is reflected in the MIS - Major Street Network, with each street tailored to its purpose and connected as a network to allow choice and flexibility in moving through the community. The proposed Neighbourhood Street Network must:

- Reflect the general MIS Arterial and Collector Streets alignment;
- Provide Local Street alignments;
- Incorporate rear Lanes where possible;
- Adhere to the Livable Street Standards;
- Incorporate cycling and pedestrian routes;
- Consider and incorporate transit networks and circulation;
- Include connections to existing and future neighbourhoods; and
- Include traffic control details signals or roundabouts.

### b) Cycling Network

The neighbourhood street design should reflect a comprehensive network of pedestrian, cycling and multi-use trails that provide an immediate alternative to auto dependency for local neighbourhood trips.

The Cycling Network must take into consideration the natural topography and proposed street grades, as well as the integration of on and off-street bike paths, and location of end-of-trip facilities at major neighbourhood destinations, such as neighbourhood shopping nodes, schools and parks.

#### c) Pedestrian Network

Providing alternatives to auto dependency for local neighbourhood trips, the Neighbourhood Plan should create a positive pedestrian realm through the provision of pathways, street trees, and boulevard landscaping that respond to the topography and celebrate scenic viewscapes.

The Pedestrian Network must take into consideration the natural topography and proposed street grades, and not only include on-street sidewalks, but also provide an off-street network of trails, greenways and multi-use pathways strategically linked to parks, schools, commercial areas, and other destinations.

#### d) Transit Network

Transit Concept Plan must be prepared in consultation with BC Transit and Translink, by which the residents of the neighbourhood plan will be adequately served by future transit services. The plan should identify future bus and train routes, stops and exchanges.

# e) Livable Street Standards

The Street Network must reflect the adopted Silverdale Livable Street Standards.

# 3. Traffic Impact Assessment (TIA)

The consultant must complete a Traffic Impact Assessment (TIA) to determine the impacts of the full development build out of the neighbourhood plan area, on the proposed neighbourhood plan, on the existing road network of the surrounding neighbourhoods, and to update the MIS if needed.

The Development and Subdivision Control Bylaw shall serve as a guide for the TIA.

# <u>Servicing</u>

The MIS includes Conceptual Servicing Plans for the SCPA demonstrating future demand and viability for expansion of urban services. The MIS accommodates the planned servicing demands of the SCPA through strategies that are cost effective, respectful of the environment, and conserve water and energy resources.

As neighbourhood planning proceeds, attention is required to refine the street network alignments, as well as water, sanitary and drainage systems described in the MIS Servicing Report. Additional consideration must be given to franchise utilities including, but not limited to power, communications and natural gas.

As per the MIS and Council's approved direction, a single municipal water and sanitary servicing system is recommended for the SCPA.

All servicing plans must consider, integrate with, and update when necessary, the District's Master Plans for engineering services.

#### 1. Water Engineering Plan

Building on the work completed in the MIS Water Conceptual Master Plan, the Neighbourhood Plan must include a refined Water Engineering Plan that:

- identifies the required upgrading to the overall system to adequately service development of the area to its proposed land use;
- provides a conceptual layout of the local and grid water distribution network including all on and off-site supply mains, reservoirs, booster pump stations and PRV stations;
- provides watermains to the boundaries of the neighbourhood plan area and considers servicing of lands beyond the boundaries;
- in coordination with the District of Mission and the City of Abbotsford, updates the water models to demonstrate adequacy for domestic needs as well as fire protection required by the neighbourhood plan proposed land use;
- provides a schematic pipe network diagram showing for each of the conditions tested, pipe and node numbers, source locations and available/starting heads, demand and residual hydraulic head at each node, together with approved model output and a table

indicating domestic and fire flow requirements and residual pressures available for critical events:

- considers how water supply and distribution systems might be phased, to maintain water quality and chlorine residuals in oversize pipes;
- presents the conceptual layout on a plan consistent in format with the other roads and utility drawings; and
- includes a written summary of the proposed Water Engineering Plan, complete with the
  design parameters, the critical events used to establish the water system and the
  reservoir sizes, along with associated plans and Class C construction cost estimates.

# 2. Sanitary Engineering Plan

Building on the work completed in the MIS Sanitary Concept Master Plan, the neighbourhood plan must include a refined Sanitary Engineering Plan that:

- identifies a conceptual layout of all sewers, pump stations and forcemains required to service the study area and upstream lands adequately, effectively and in conformity with the District of Mission's design standards;
- undertake any and all site reconnaissance necessary to determine more accurately the limits of tributary catchments serviceable by the proposed sewers;
- includes written approval from the Ministry of Transportation and Infrastructure for systems located within the Lougheed Highway road allowance;
- updates the District of Mission sanitary sewer model;
- considers how the sanitary collection system might be phased to provide minimum flow velocities, pump starts, and pump run times;
- presents the conceptual plan on drawings consistent with the format of the other services, identifying catchment boundaries for all sewers and the tributary area and equivalent population for each section; and
- includes a written summary of the proposed Sanitary Engineering Plan, complete with the design parameters, the flow calculations, associated plans, and Class C construction cost estimates.

### 3. Integrated Rainwater Management Plan (IRMP)

Building on the work completed in the MIS Rainwater Management System Plan, the neighbourhood plan must include an Integrated Rainwater Management Plan (IRMP) to provide a design for rainwater management, while ensuring that the hydrologic function of the high value aquatic ecological features in the area is maintained as closely as possible to its current state and enhanced where possible. The IRMP needs to demonstrate that predevelopment surface water, flow regimes, and infiltration of precipitation in these sensitive areas can be maintained as much as possible post-development.

# a) Water Resources Impact Assessment (WRIA) for an IRMP

The first step in creating the IRMP is adequate characterization and understanding of the current hydrology, hydrogeology, and ecological conditions, so that neighbourhood planning can ensure these attributes are maintained through the IRMP. Next, the data are used to identify areas where negative impacts to water resources may occur under certain scenarios.

A Water Resources Impact Assessment must be developed by an Environmental Consultant prior to the preparation of the IRMP to inform the selection and design of appropriate rainwater management. Ultimately, the Water Resources Impact Assessment will support the IRMP to explain how rainwater management can be undertaken while maintaining the integrity of the creeks and wetlands.

The Water Resources Impact Assessment must collect data regarding climate data, surface hydrology, watercourse and wetlands ecology, to address impacts on downstream water courses, wells and waterbodies (Silvermere Lake).

The pre-development water balance is the one deliverable for the baseline data collection of the IRMP; another includes recommendations related to diversion of base flows to the creek system.

# b) Integrated Rainwater Management Plan (IRMP)

Led by a Civil Engineer, an IRMP must incorporate the WRIA analysis and identify how the lands can develop in a manner which mitigates the effects on peak, volume, and quality of runoff from small, medium, and large rainfall events. The Neighbourhood Plan must include a refined IRMP that:

- provides a conceptual layout of all major and minor drainage systems required to service the study area in conformity with the District of Mission's design standards;
- includes a computer model of the pre-development conditions of each watershed in the Neighbourhood Plan area, extending beyond the area boundaries as applicable, using rainfall, creek flows, and groundwater flow data from the WRIA. Determines the pre-development flow rates for the modelled creek systems for the 6-month, 2year, 10-year, 25-year, and 100-year events;
- includes computer models of the post-development land-use scenarios for each parcel and watershed identifying permeable and impermeable surfaces, infiltration and detention systems, and flow control structures, for the same design events;
- summarizes the impact of the proposed land use on the existing drainage system and evaluates options available to mitigate impacts on peak flows, runoff volumes and runoff water quality;

- uses the WRIA to establish the portion of flows directed to the creek systems and portion of flows to the diversion sewers. Includes proposed pipe sizes and alignments for that sewer from the plan area to the outlet, as applicable;
- determines culvert sizes, and for lands draining through the Chester Creek or Cooper Road pump stations, determines if capacity upgrades are necessary;
- presents the conceptual layout on a plan consistent in format with the other roads and utility drawings; and
- includes a written summary of the proposed, detailing the modelling parameters
  used, the pre-development, post-development, and "managed" flow rates at key
  points in the NP area. Details the conveyance systems, diversion structures,
  detention facilities, and infiltration systems. Includes associated plans, calculations
  and sketches, and Class C construction cost estimates.

#### 4. Franchise Utilities

Franchise utilities, including but not limited to gas, electricity, and telecommunications are an important part of servicing a neighbourhood, local area, and community. They provide residents and business owners with essential services that are necessary to operating a home, business, or community service. During the planning process it will be important to consult with service providers to ensure that interruptions in service are avoided, services can be extended to new growth areas, and associated costs can be mitigated. in addition to the local distribution systems, planners should consider corridors for trunk gas mains, feeder plants for BC Hydro, trunk fiber optic lines, and cellular tower locations.

#### SCHEDULE D: FINANCIAL ANALYSIS

### 1. 2019 MIS Infrastructure Cost Recovery Analysis (DCC's)

As concluded in the Infrastructure Cost Recovery Analysis completed by Rollo + Associates, new phased development will pay for Silverdale's required municipal servicing infrastructure through financial tools available to Mission, including the Development Cost Charge (DCC) program.

Civic facilities planning is part of the MIS, as reflected in the inventory and recommended distribution of public schools, civic centres, firehall and public parks. Civic facilities are accounted for within the Infrastructure Cost Recovery Report by Rollo + Associates by assuming an amenity contribution of \$2,815 per residential unit, in line with the District of Mission current CAC policy. While Public Schools are funded by the School District, the per unit amenity contribution is in addition to the direct contribution of park and community lands as identified in the MIS.

#### 2. 2020 MIS Public Facilities and Taxation Analysis

As an update to the 2019 MIS Infrastructure Cost Recovery Analysis, Rollo + Associates provided the District additional financial analysis including additional infrastructure costs not covered in the 2019 report; estimates of costs not recoverable through DCC program which includes, but is not limited to, park improvements and community facilities with their associates timing of construction in relation to demand; historical data on total taxation rates within the District; an estimate of the District's annual "maintenance shortfall"; the estimated cost of municipal operations in and resulting from development in the SCPA; and an estimate of service fees to supplement tax revenue to cover costs.

The purpose of this report is to determine any cost shortfalls resulting from development is the SCPA and how to mitigate impact on current taxation in the District of Mission.

#### 3. Cost Recovery Analysis

Working off both the 2019 and 2020 financial studies, the Neighbourhood Plan will include the preparation of a refined Financial Model to reflect increased accuracy and resolution in terms of cost, phasing, and absorption. Information relating to the following must be calculated to reflect any changes to refine the financial analysis:

- DCC's: Select eligible DCC projects, estimate associated costs, and calculate DCCs values on a per unit basis to be added to any District-wide or Regional DCC projects;
- CAC's: Select Community Amenity Contributions projects and improvements (i.e.: community facilities, park improvements) to be included in an updated CAC cost recovery plan; and
- SERVICE FEES: Update the service fees required to service the neighbourhood to update overall district fee schedules.

 TAXATION: Additional tax revenue by phase, compared to expenses of new development, accounting for emergency services, operations, and replacement funding.

The information provided by the updated Cost Recovery Analysis shall provide information to update the District's Financial Plan to determine any tax implications and/or costs (shortfalls), in regards to timing, phasing and demand for new infrastructure, equipment, facilities and personnel. The Analysis shall also recommend tools available to the District to cover any costs or shortfalls including, but not limited to, Phased Development Agreements, Front Ender Agreements, Late Comers Agreements, or Volunteering Agreements.

# **SCHEDULE E: ROAD MAP** Preparation of final Resolution: Adopt NP Bylaw: OCP. Amend Provincial Agencies | Consult document Per OCP Amending Bylaw: General Public | Consult Project Group | Involve First Nations | Consult Council | Empower Utilities | Consult Engineering Studies Financial Studies Refine Preferred Resolution: Endorse Draft Plan General Public | Consult First Nations | Consult Utilities | Involve Option Project Group | Involve Landowners | Consult Council | Empower PHASE III Develop Land Use Resolution: Endorse LU Option General Public | Consult First Nations | Consult Project Group | Involve Landowners | Consult Options Council | Empower Planning Inventory Engineering Inventory Assessment Biophysical Project Group | Involve **PHASE I** Resolution: Start NP Process ROJECT INITIATION NP Boundary Resourcing Council | Empower Budget Options Consultation Framework (IAP2 Spectrum) Stakeholder | Participation Level Community Group Resolution: To Prepare Report Strategic Plan Developer Council | Empower • Staff

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