

The background of the entire page is a close-up, high-resolution image of a wood grain. The lines are curved and concentric, creating a sense of depth and texture. The color is a warm, golden-brown.

# TSAWWASSEN FIRST NATION NEIGHBOURHOOD PLAN AREA DESIGN GUIDELINES

MARCH, 2012



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# CONTENTS

<b>1</b>	<b>INTRODUCTION</b>	<b>2</b>
1.1	Intent of the Guidelines	2
<b>2</b>	<b>BACKGROUND</b>	<b>4</b>
2.1	Land Use Plan Context	4
2.2	Neighbourhood Plan Context	5
<b>3</b>	<b>APPLICATION</b>	<b>6</b>
3.1	Organizing Concepts from the Neighbourhood Plan	7
3.2	Neighbourhood Plan Context Statement	9
3.3	Criteria for Evaluation Related to Guidelines	9
<b>4</b>	<b>EXISTING CONDITIONS – OPPORTUNITIES AND CONSTRAINTS</b>	<b>10</b>
<b>5</b>	<b>SITE PLAN ORGANIZATION</b>	<b>12</b>
<b>6</b>	<b>STREET CATEGORIES</b>	<b>14</b>
<b>7</b>	<b>SITE DESIGN CRITERIA AND BUILDINGS</b>	<b>24</b>
7.1	Sustainability	24
7.2	Residential Site Design Criteria	25
7.3	Village Centre	27
<b>8</b>	<b>LANDSCAPE AND OPEN SPACE</b>	<b>29</b>
8.1	General	29
8.2	Community Gardens	29
8.3	Trails & Greenways	29
8.4	Great Blue Heron Way	29
8.5	Parks	30
8.6	Streetscapes / Boulevards	30
8.7	Setback Zones & Buffers	30
8.8	Front Yards and Side Yards (Private Realm)	30
8.9	The Village Centre	31
8.10	Components of the Public Realm	31
<b>9</b>	<b>COMPONENTS CATALOGUE</b>	<b>32</b>
9.1	Boulevard Trees	33
9.2	Trees Shrubs and Groundcovers	35
9.3	Lighting	38
9.4	Paving	40
9.5	Site Furniture	41
9.6	Colour	43
9.7	Public Art	44
9.8	Signs and way Finding	45
9.9	Fencing and Walls	46
9.10	Custom Components	48

Prepared by:





# 1 INTRODUCTION

These guidelines are to be read in conjunction with other documents, most notably the Tsawwassen First Nation Neighbourhood Plan – Residential / Commercial Enterprise Area dated March 2011 (NP 2011). The following is a summary of other relevant documents:

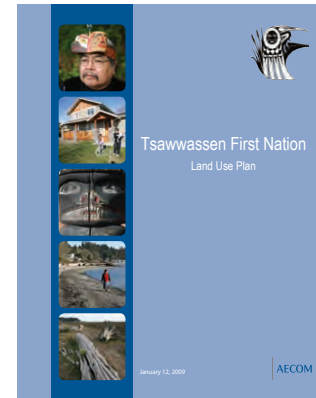
- Tsawwassen First Nation Land Use Plan – January 12, 2009 (LUP 2009)
- TFN Land Use Planning and Development Act, Zoning Regulation
- Area Wide Transportation Study (underway)
- Neighbourhood Transportation Study (underway)
- Bulk Water & Trunk Sanitary Sewer System (underway)
- Integrated Rainwater Management Plan (underway)
- Municipal Servicing Designs (underway)
- Sustainability Program & Guidelines (underway)

The land to which these guidelines apply, Neighbourhood Plan Area, is illustrated on Figure 1.1. The subject site is located north of Highway 17 near the causeway to the BC Ferries Tsawwassen Terminal. Adjacent TFN properties also include industrial, agricultural, and commercial lands to the north and east, residential lands to the south, and a tidal marsh to the west located between Tsawwassen Drive and the Salish Sea (Strait of Georgia).

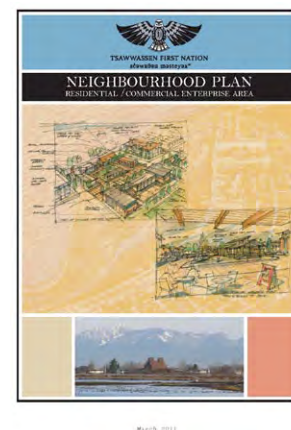
## 1.1 INTENT OF THE GUIDELINES

The intent of this document is to provide a description of the current vision for the lands and to provide guidance to those proposing to develop sites within the Neighbourhood Plan area to ensure that development proposals are responsive to the spirit and intent of the NP 2011. The guidelines are partly prescriptive, to ensure that the aspirations of the plan are fulfilled, and partly non-prescriptive, to allow / encourage innovation and design creativity. They address issues of urban design, buildings, landscape & open space, materials, furnishings, finishes and colour. It should also be noted that all pertinent building codes, regulations and any other regulatory agency requirements are to be followed.

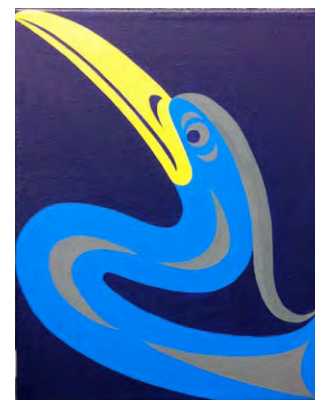
The broad parameters that were set out in the LUP 2009 established the foundation upon which the NP 2011 was created. The goal of the design guidelines is to create a complete community based on principles of sustainability. Included in the NP 2011 is a range of land uses including single and multi-family housing typologies, a village centre that includes a school, retail and community uses, a multi-faceted street network, a system of greenways and parks, and a corridor for the proposed Great Blue Heron Way – a regional trail network that is envisioned to link TFN as host nation with communities on the islands and the mainland. Embedded in the plan is an understanding that the new community will respect and reflect the TFN culture, history and traditions.



Tsawwassen First Nation Land Use Plan  
(January 12, 2009)



Neighbourhood Plan  
(March, 2011)



Great Blue Heron Way Icon



The guidelines address issues pertaining to public – and to a lesser extent – private land. On private land, the guidelines apply only to those areas that are physically or visually accessible to the public. Back yards of single-family lots, for example, are not controlled by guidelines. They do, however, address issues related to edge conditions, screening and transitions between public and private spaces.

The guidelines are intended to ensure that the community will be developed with a sense of unity – not uniformity.



Fig. 1.1 Neighbourhood Plan Area in Local Context

## 2 BACKGROUND

This Design Guidelines document has its origins in two guiding documents: Tsawwassen First Nation Land Use Plan (January 12, 2009; LUP 2009), and Tsawwassen First Nation Neighbourhood Plan (March, 2011; NP 2011).

### 2.1 LAND USE PLAN CONTEXT

LUP 2009 sets out a blueprint for the Tsawwassen First Nation lands through designation of land uses and provision of objectives and policies for such uses. It also illustrates the strategies for roads and servicing, access points, and trail networks in the regional context (Figure 2.1).

The Neighbourhood Plan Area (Figure 1.1) consists of 'commercial enterprise / residential' and some of 'TFN community' designations in LUP 2009. It holds approx. 110 hectares (270 acres) of land.

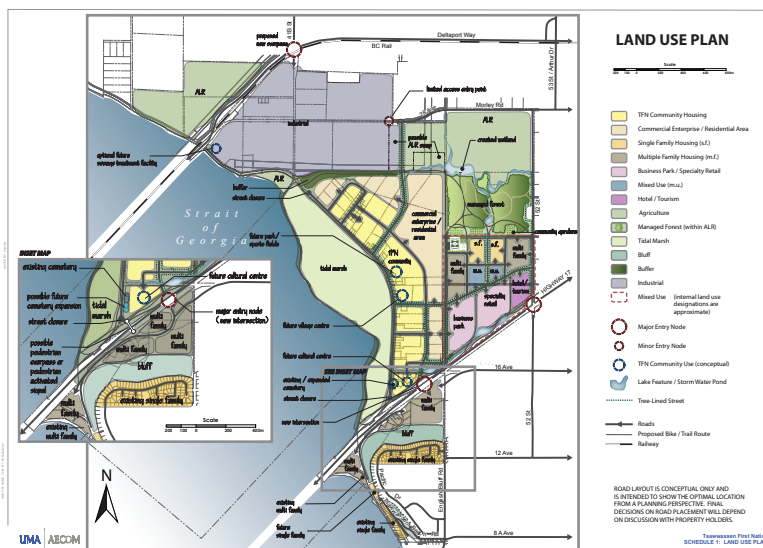


Fig. 2.1 Land Use Plan Map (excerpt from LUP 2009)





## 2.2 NEIGHBOURHOOD PLAN CONTEXT

As stated above, these guidelines are part of the Neighbourhood Plan process. This process has included a progression of steps that started with the determination of broad objectives and parameters for how the land should be developed, then by the creation of an illustrative Preferred Land Use Concept (PLUC; adopted by TFN Legislature March 2011) and land use policies that identified a prototypical physical plan form with a mix of uses, densities, movement systems and infrastructure. The guidelines provide the next level of detail.

Figure 2.2 illustrates the stages of the Neighbourhood Planning process:

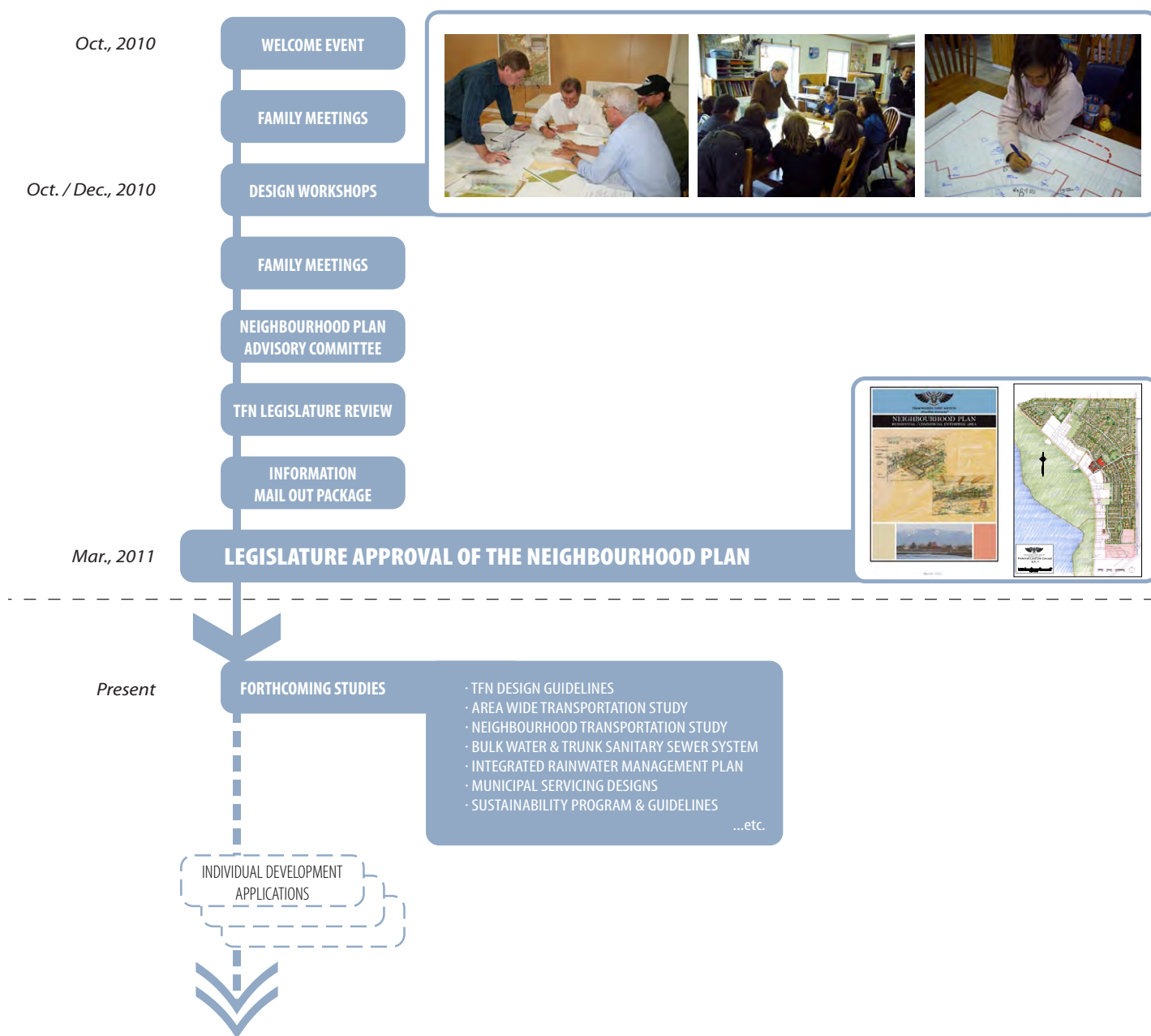


Fig. 2.2 Neighbourhood Planning Process



## 3 APPLICATION

Those proposing to develop land within the Neighbourhood Plan Area will be required to demonstrate conformance with the Neighbourhood Plan and these guidelines both at the general and detail levels. Figure 3.2 illustrates the stages of the review process:

The following Design Principles that are contained within the NP 2011 were set out as a part of the Neighbourhood Planning process and have been endorsed by resolution of the TFN Neighbourhood Plan Advisory Committee:

### Neighbourhood Plan Principles

- *One community infused with celebration of its traditions and heritage*
- *Safe accessible community*
- *Recreational & cultural opportunities are diverse and inviting*
- *Urban design and built-form reflect community identity*
- *Accessible retail/commercial services within the community*
- *Provide a diversity of housing opportunities, by which we mean:*
  - *Apartment, Townhouse and Single Detached options in both the north half and the south half of the plan area*
  - *Single Detached parcels of 308 square meters (3,300 square feet) and up*
  - *Townhouse options are to include ground-oriented, stacked, strata + street-oriented; with a full range of sizes and types*
  - *Up to 5-storey apartments (rental and condo-style)*
  - *Rental opportunities*
  - *Housing appropriate for different ages, different family structures, low-to-upper middle income*
- *Plan bike and major walking routes in concert with major roads – provide links to jobs and community nodes*
- *Plan for a “Great Blue Heron Way” multi-purpose trail*
- *Provide a 5-minute (400m) walking loop opportunity for 90 - 100% of residents*
- *Protect the integrity of the longhouse for traditional uses*
- *Encourage low-impact recreational, educational and traditional plant harvesting uses of the Tidal Marsh within a primary conservation mandate*

In addition, the NP 2011 generally sets out land use policies, densities, yields, amenity-area criteria, roadway design and parking standards.

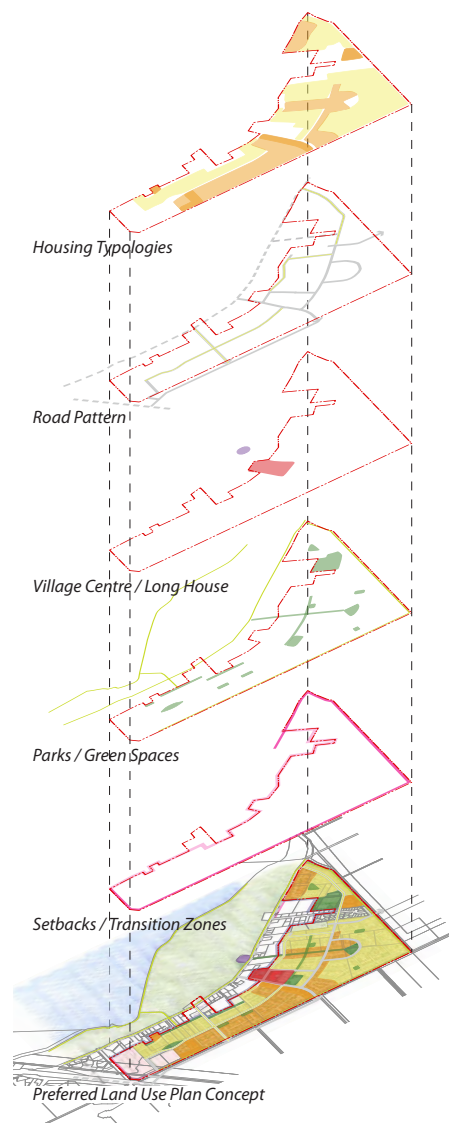
These guidelines also address potential site planning criteria, streets and movement systems, built form, landscape, sustainability measures and specific requirements related to the components of the public and private realms.



### 3.1 ORGANIZING CONCEPTS FROM THE NEIGHBOURHOOD PLAN

It is important to note that there is an expectation that each development proposal is to contribute to the overall Neighbourhood Plan objectives and concepts. The following is a summary of core objectives that are embedded in the Preferred Land Use Concept (Figure 3.1):

- A mix of medium-density housing typologies ranging from compact lot single-family to townhomes and apartments
- A fine-grain / multi-faceted road network with streets that are pedestrian/cycling-friendly
- Continuous road pattern with minimal dead end streets and cul de sacs
- A centrally located village centre with retail and community uses including a site for a school
- A system of greenways / green streets that encourage walking and cycling within the community
- Each dwelling unit is to be provided clear and easy access to this green network
- A primary central north-south greenway through the core of the site that provides a walking / cycling route from each neighbourhood to and from the village centre
- An overall community identity, reflective of the TFN culture, with a variety of community spaces within
- A series of parks and green spaces that contain a range of activities and passive areas and are strongly linked to the greenway system
- To the extent possible, the community needs to take advantage of its unique setting on the Salish Sea (Strait of Georgia)
- Setbacks for a range of issues including environmental, geotechnical and other are to be respected
- The transitions between new development areas and existing residential areas are to be sensitively addressed with appropriate setbacks and buffering
- Respect for special nature of the Long House and cultural factors related to its site
- Easy access provided to the Great Blue Heron Way wherever possible





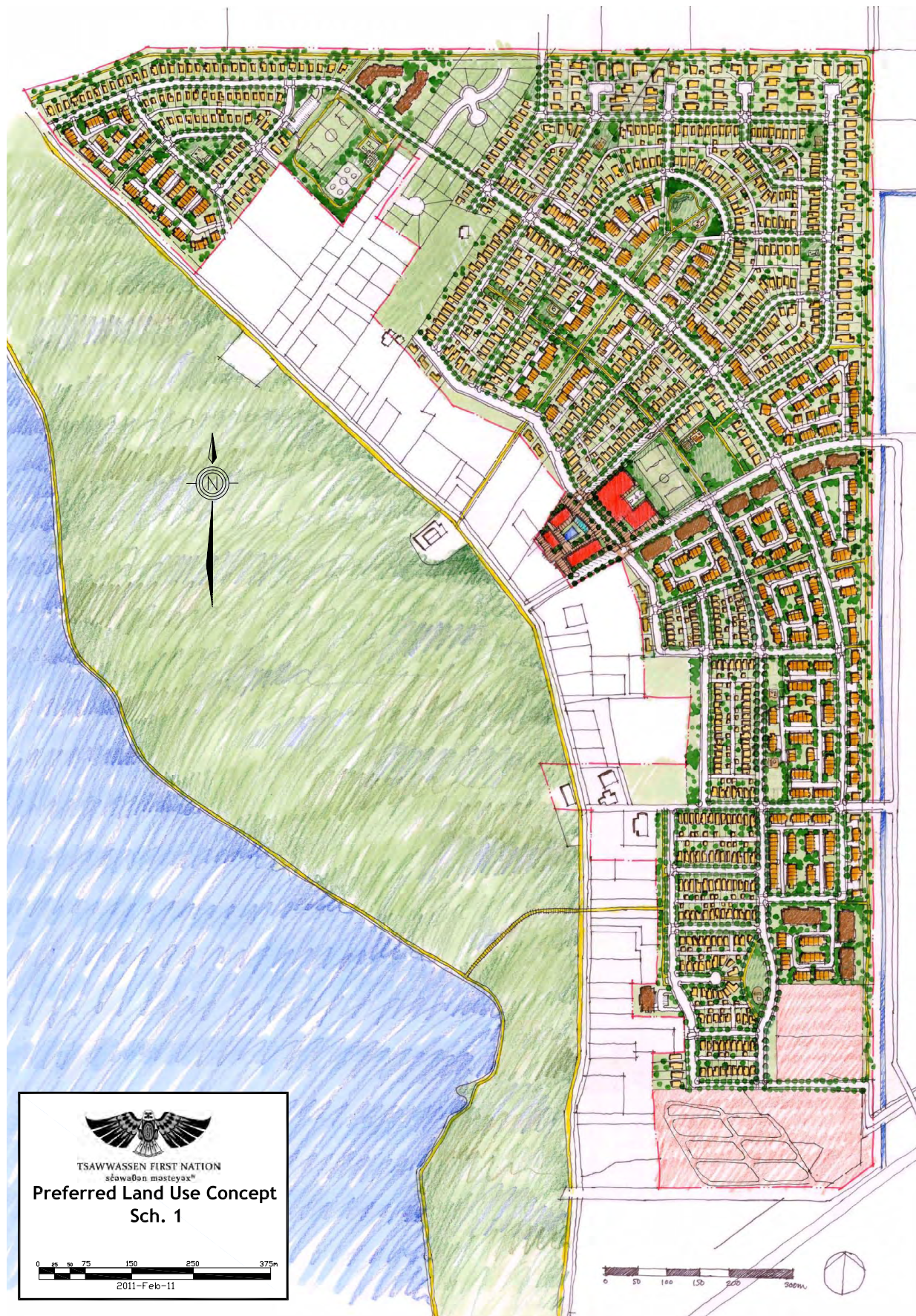


Fig. 3.1 Preferred Land Use Concept (adopted by TFN Legislature March 2011; excerpt from NP 2011)



### 3.2 NEIGHBOURHOOD PLAN CONTEXT STATEMENT

It is important to note that, prior to first subdivision approval, applicants are required to provide a Neighbourhood Plan Context Statement, demonstrating conformance with the policies and schedules of the Neighbourhood Plan, changes, if any, that are proposed from the Preferred Land Use Concept, and a summary of what the community is gaining from the changes, from the applicants perspective. This statement is to include a summary indicating provision of amenity areas, descriptions of how the applicant's area relates to neighbouring properties in terms of compatible land uses, buffering where necessary and linkages for servicing and transportation.

Amendments to the Neighbourhood Plan are to be considered by the same process that is used to consider Zoning Regulation amendments.



### 3.3 CRITERIA FOR EVALUATION RELATED TO GUIDELINES

Development applications will be assessed according to how they respond to or integrate:

- The principles and general intent of the NP 2011
- TFN cultural elements and public art
- TFN's sustainability objectives
- The urban design, architectural, and landscape requirements as outlined within this Design Guidelines document
- The materials, furnishings and finishes as outlined within this Design Guidelines document
- Site planning objectives
- Technical reports / studies / assessments, such as: Environmental, Geotechnical Grading / Filling, Stormwater Management, Traffic, Archaeological, Heritage, Financial, Community, Social, Economic, Agricultural



## 4 EXISTING CONDITIONS – OPPORTUNITIES AND CONSTRAINTS

Figure 4.1 generally illustrate the site context that needs to be taken into consideration by applicants. The land within the Neighbourhood Plan Area is relatively flat with variations in some areas resulting from filling operations that have occurred. Vertical transitions to existing grade will be required in many areas and should be carefully designed to ensure that appropriate relationships to surrounding land uses are created. Developers are required to verify the latest information on existing site grades prior to design and to contact TFN administration to confirm flood plain requirements during the design stage.

General requirements related to habitable space and parking are defined more fully in Section 7. Environmental setback zones will be in effect as determined by qualified environmental professionals on individual applications. Applicants need to take into account land uses on adjacent sites and provide appropriate buffers as required.

Of particular importance is the relationship to the currently occupied properties located along Tsawwassen Drive. Potential points of access through these properties to Tsawwassen Drive, Great Blue Heron Way and the Breakwater Trail have been identified on the Preferred Land Use Concept. Care should also be taken when proposing land uses in the vicinity of the existing Long House as important TFN cultural and ceremonial events take place at this location. Studies recently completed or currently underway, as identified in Section 1, will provide additional information or could result in new requirements or modifications to the information identified in these guidelines. Applicants are required to contact TFN to ensure they are using the most current information.







Fig. 4.1 Site Context  
 \* NOTE: Setback widths conceptual only. To be determined upon further studies.



## 5 SITE PLAN ORGANIZATION

Figures 5.1-5.5 illustrate the important components of the neighbourhood structure embodied in the Preferred Land Use Concept. This plan takes into account the current land ownership, contextual relationships and internal patterns that respond to the site planning principles. Although variations from the Concept could be allowed through provision of a rationale, the overall intent of the plan and its implied structure have to be maintained. As described in Section 3 above, each applicant is required to submit a Neighbourhood Plan Context Statement demonstrating conformance with, and potential changes to, policies and schedules of the Neighbourhood Plan.

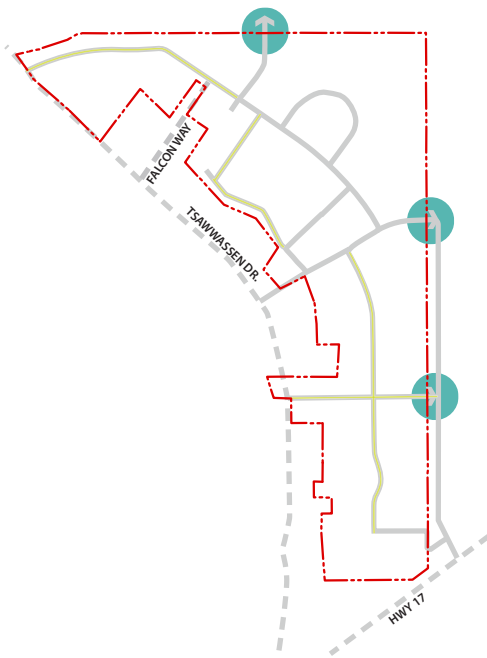


Fig. 5.1 PLUC - Site Access + Road Pattern

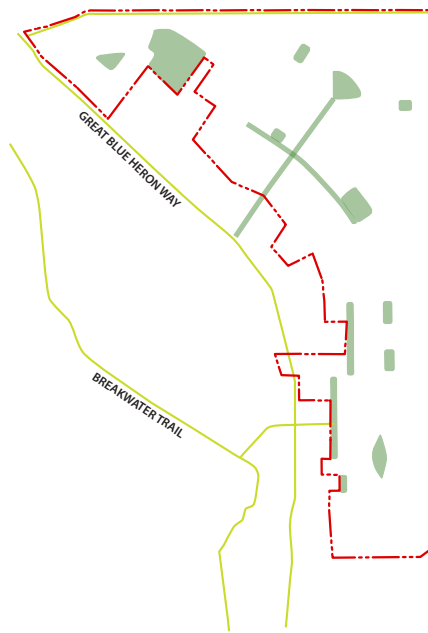


Fig. 5.2 PLUC - Parks + Greenways

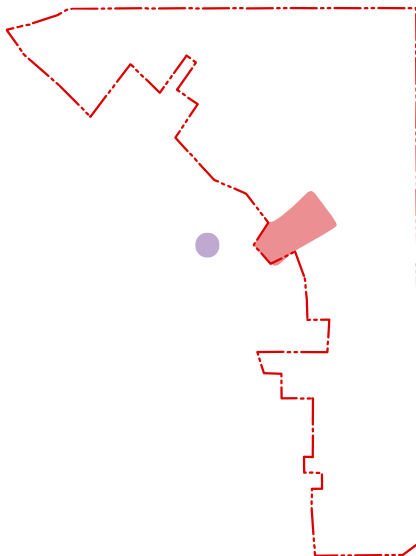


Fig. 5.3 PLUC - Long House + Village Centre

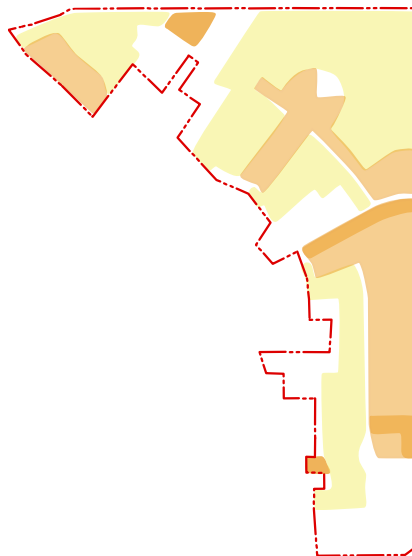


Fig. 5.4 PLUC - Residential Pattern

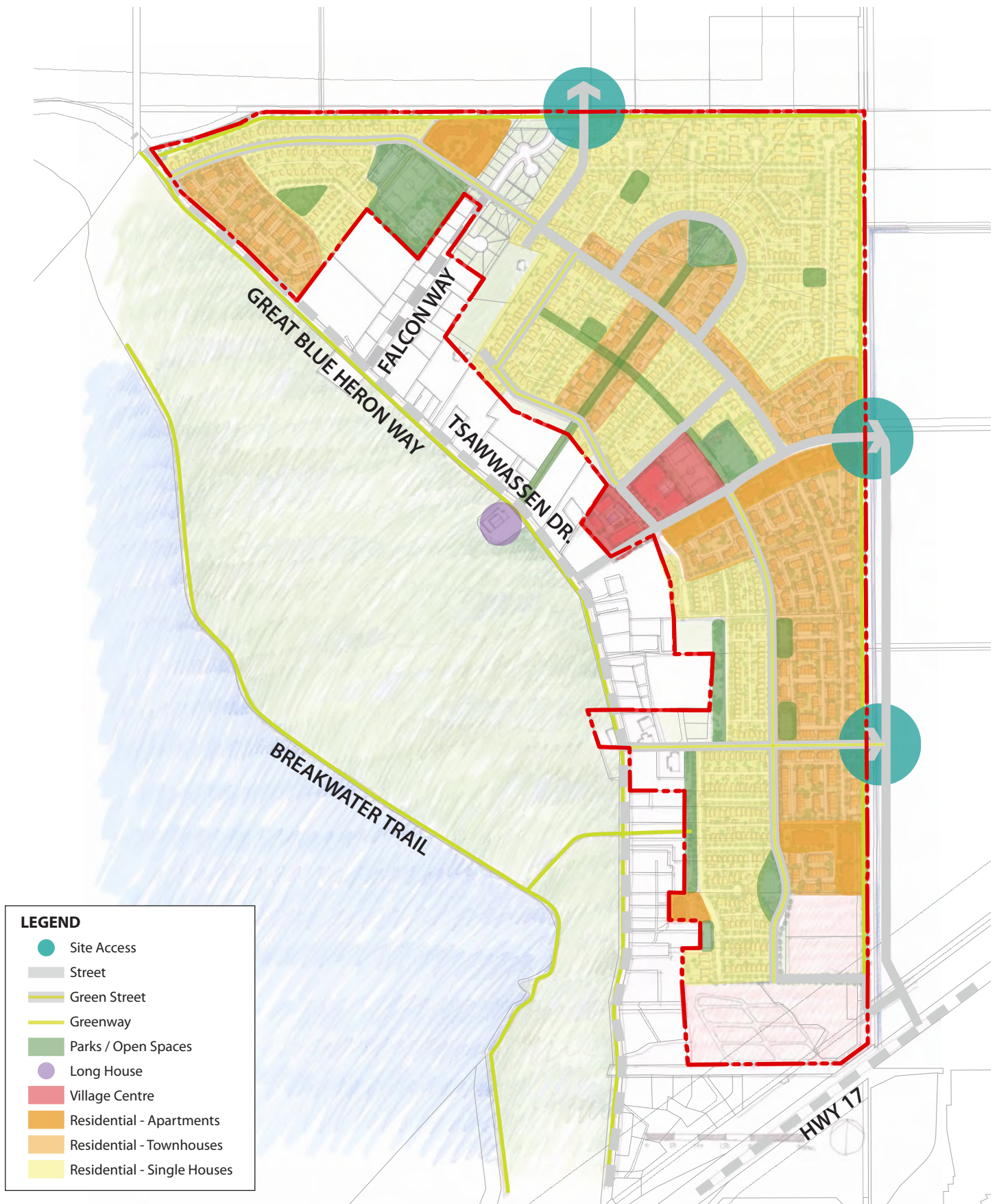


Fig. 5.5 PLUC - Site Plan Organization



## 6 STREET CATEGORIES

The street network, when combined with the greenway and park pattern plays a significant role in defining the character and identity of the community. Streets are designed not just to accommodate vehicles, but also to provide comfortable, safe and enjoyable spaces for pedestrians and cyclists. A hierarchy of streets, ranging from higher volume corridors to smaller neighbourhood-scaled routes and back lanes helps provide diversity within the community allowing for social interaction and human scaled spaces. The inclusion of boulevard trees, low-level planting, and properly scaled sidewalks ensure that the street corridors will be well used by those living within and visiting the community.

Figure 6.1 illustrates the road categories as applied to the Preferred Land Use Concept.

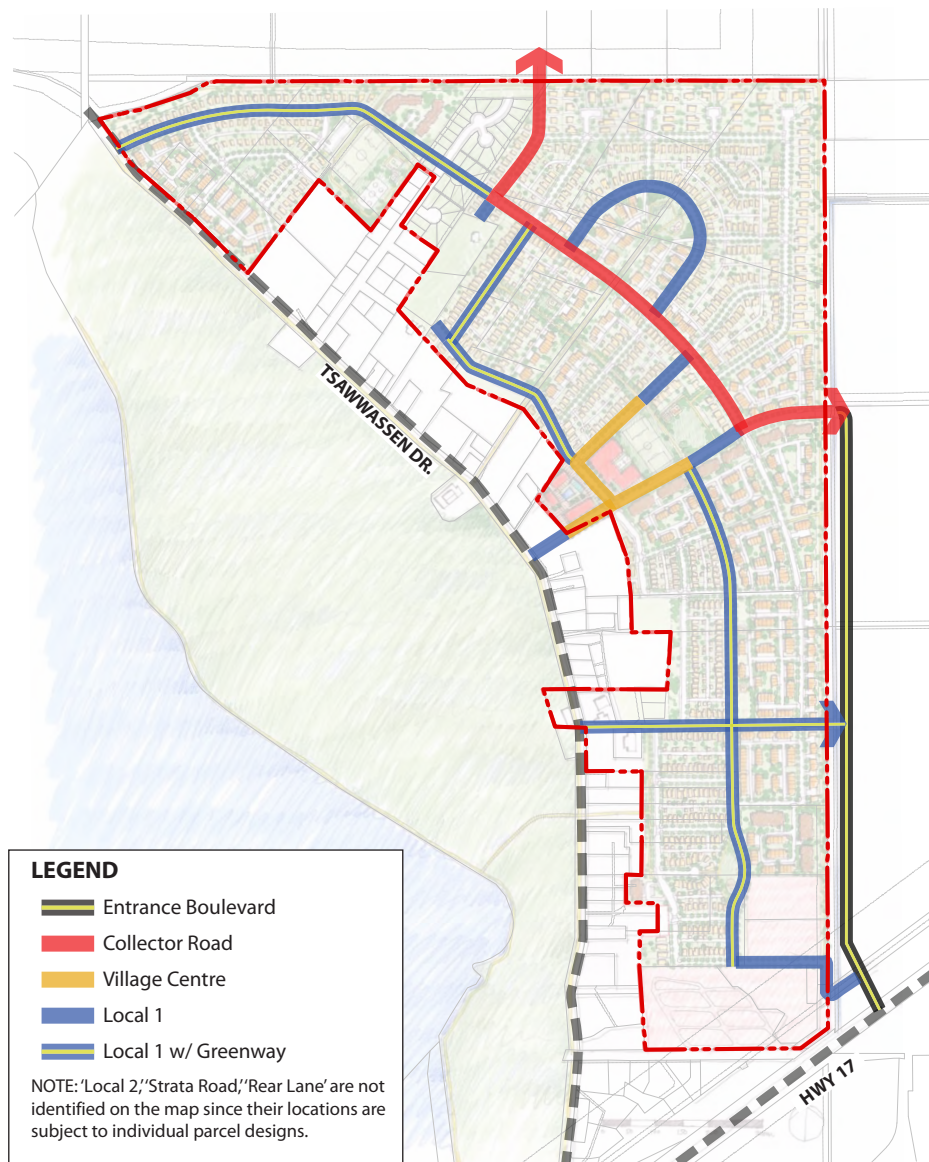


Fig. 6.1 Street Network Diagram

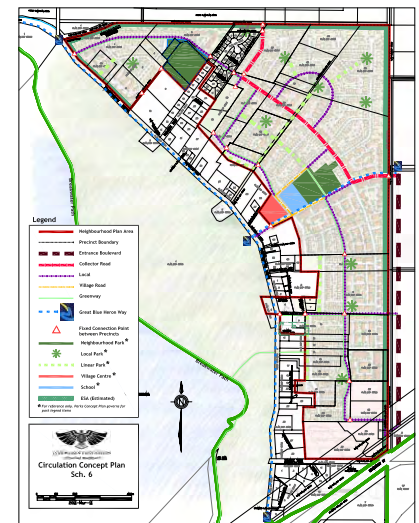


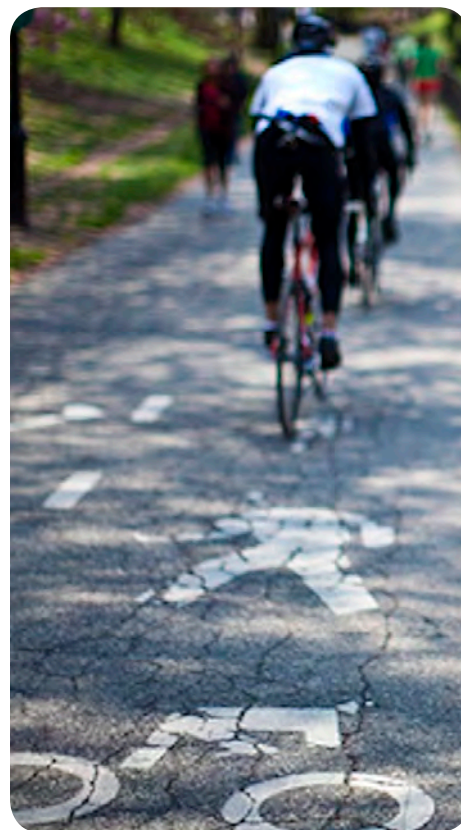
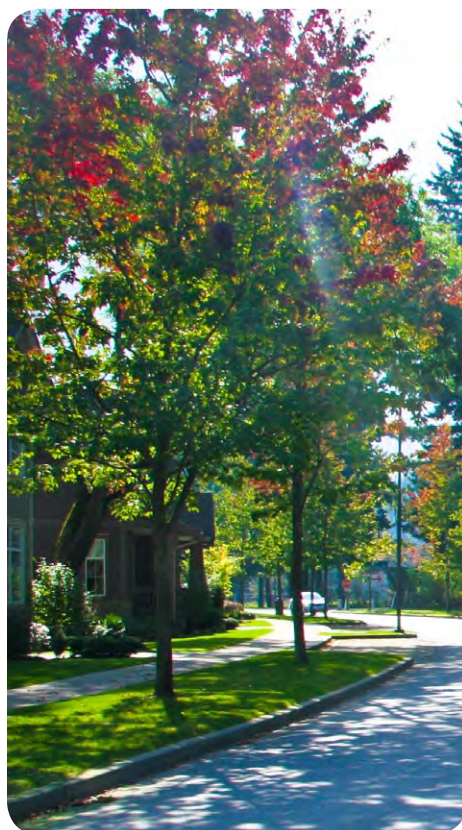
Fig. 6.2 Schedule 6 in Neighbourhood Plan (March, 2011)



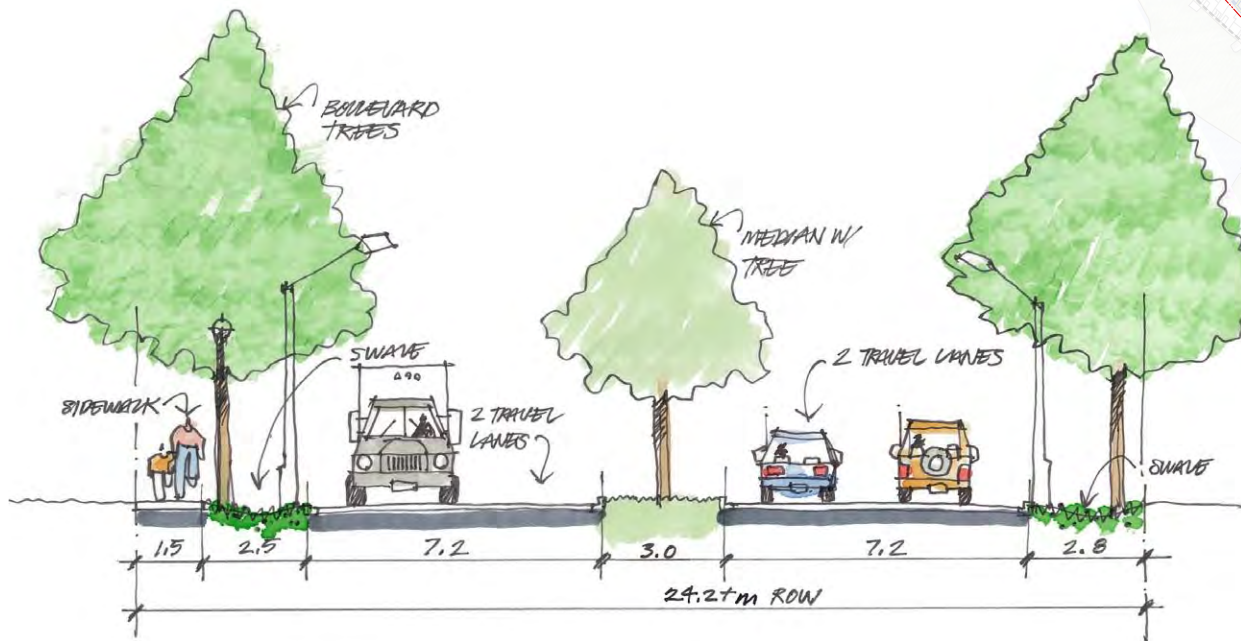
The following plan segments and cross-sections illustrate the road categories:

- Entrance Boulevard
- Collector Road
- Village Centre
- Local 1
- Local 1 with Greenway
- Local 2
- Strata Road (variation of Local 2)
- Rear Lane

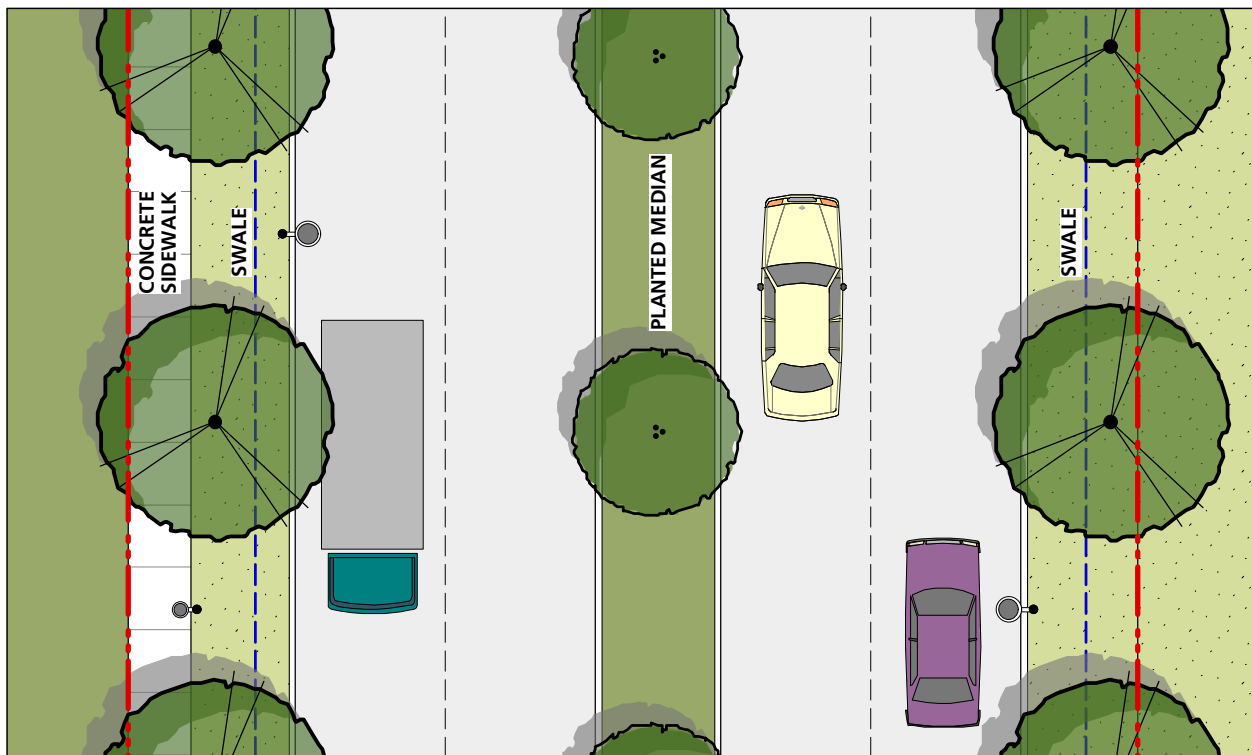
(Note: Variations to be considered if rationale provided and all servicing requirements are proven to be accommodated)



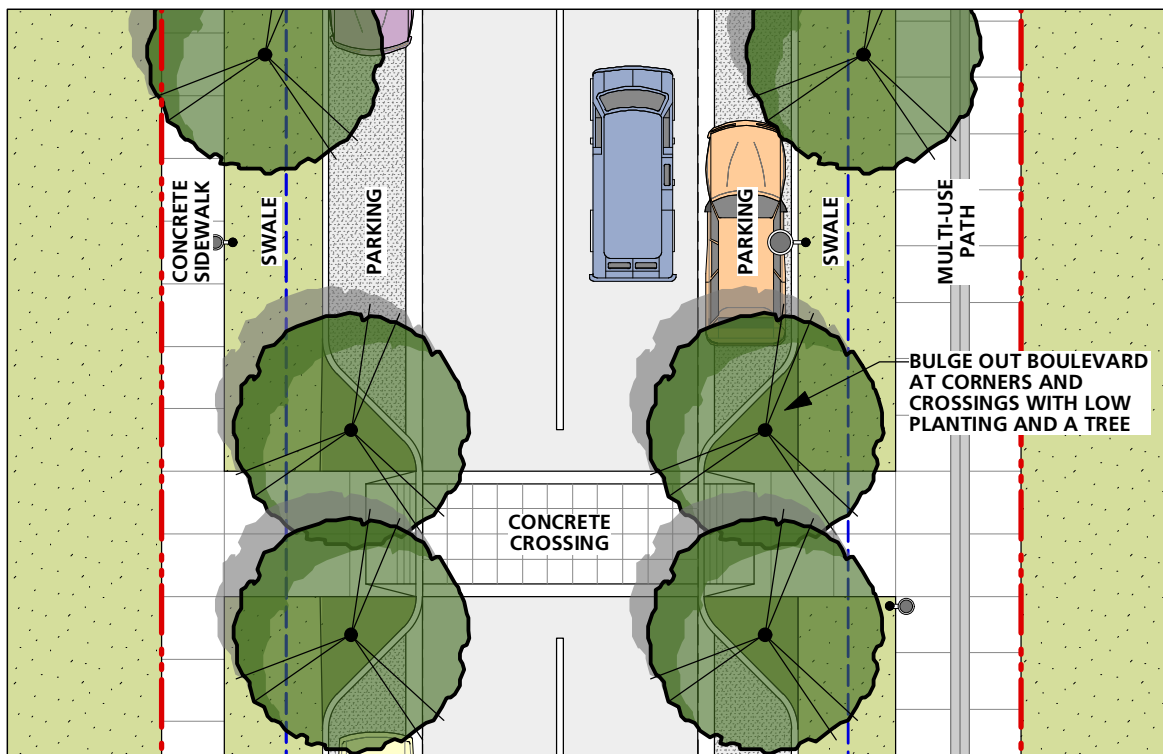
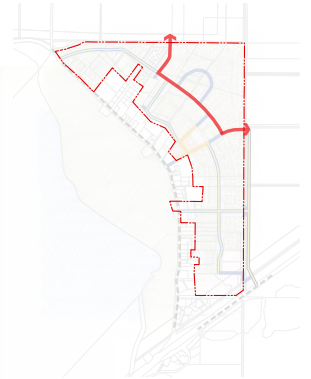
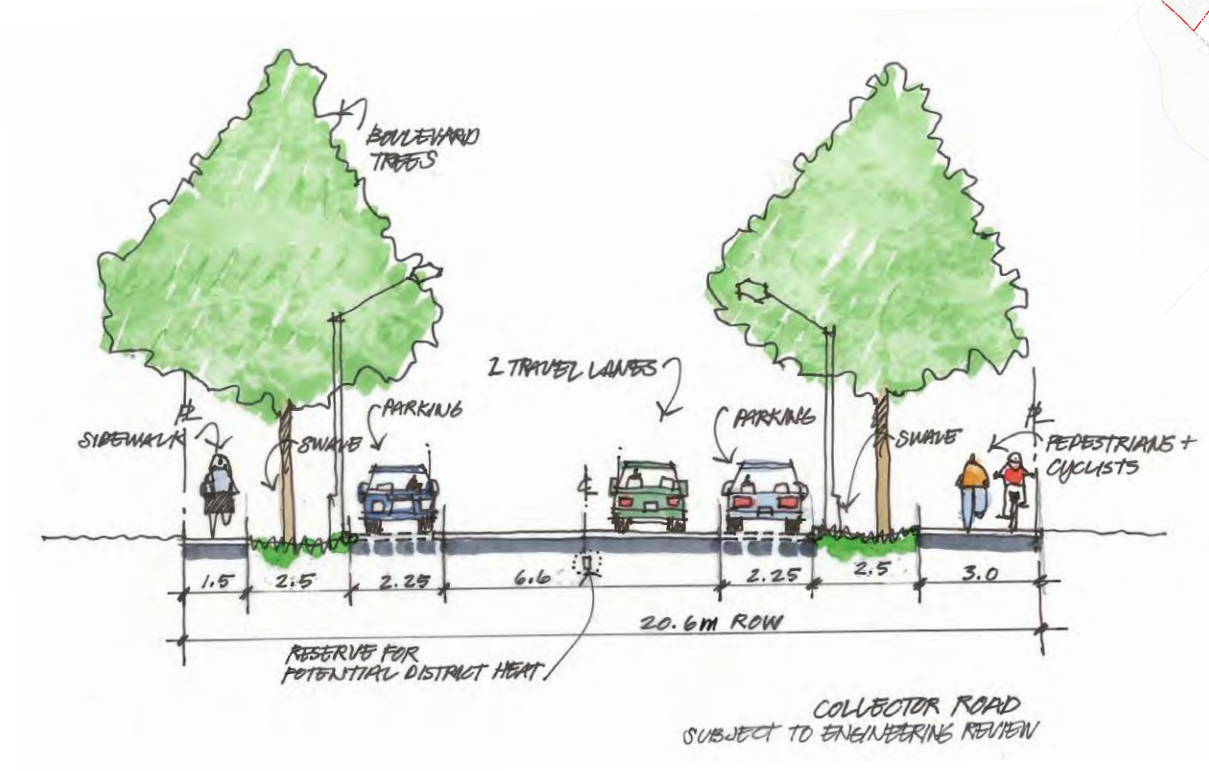
## Entrance Boulevard



ENTRANCE BOULEVARD.  
\* SUBJECT TO ENGINEERING'S REVIEW

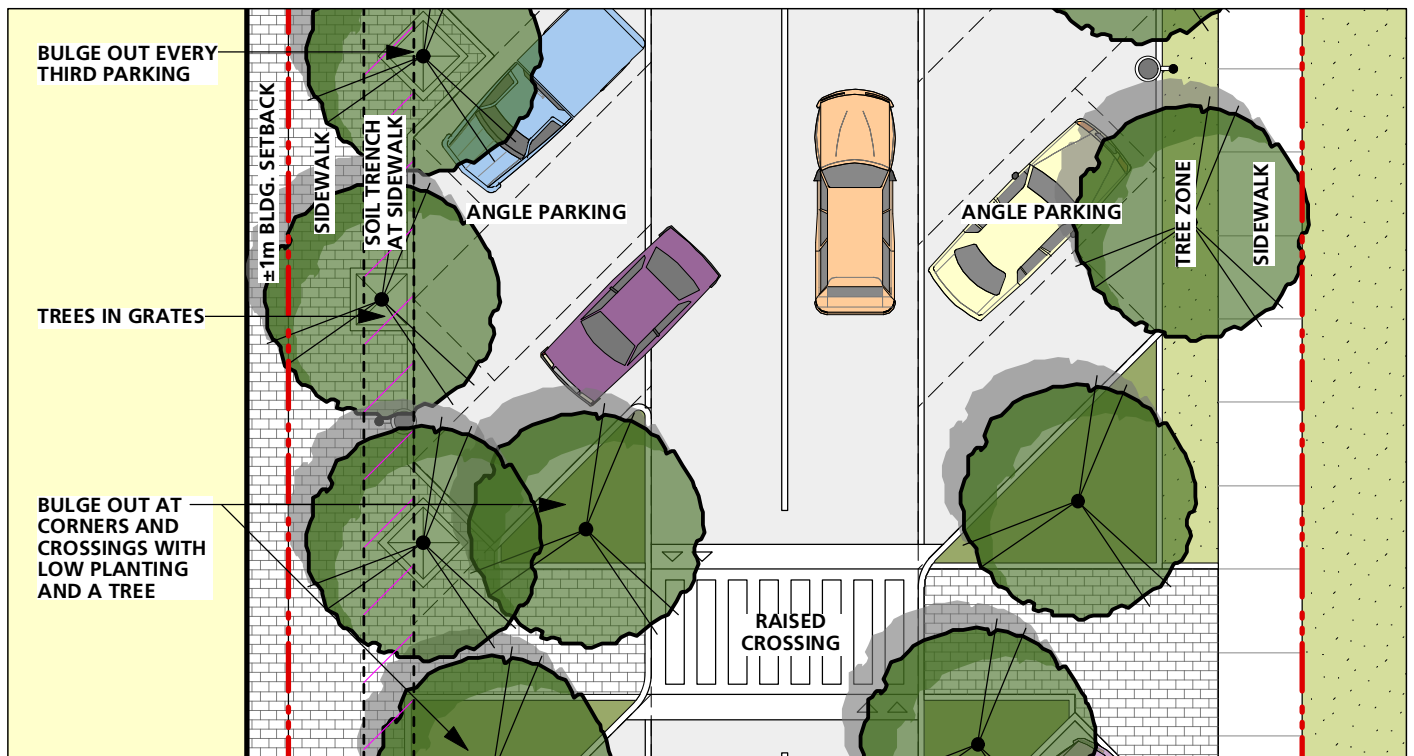
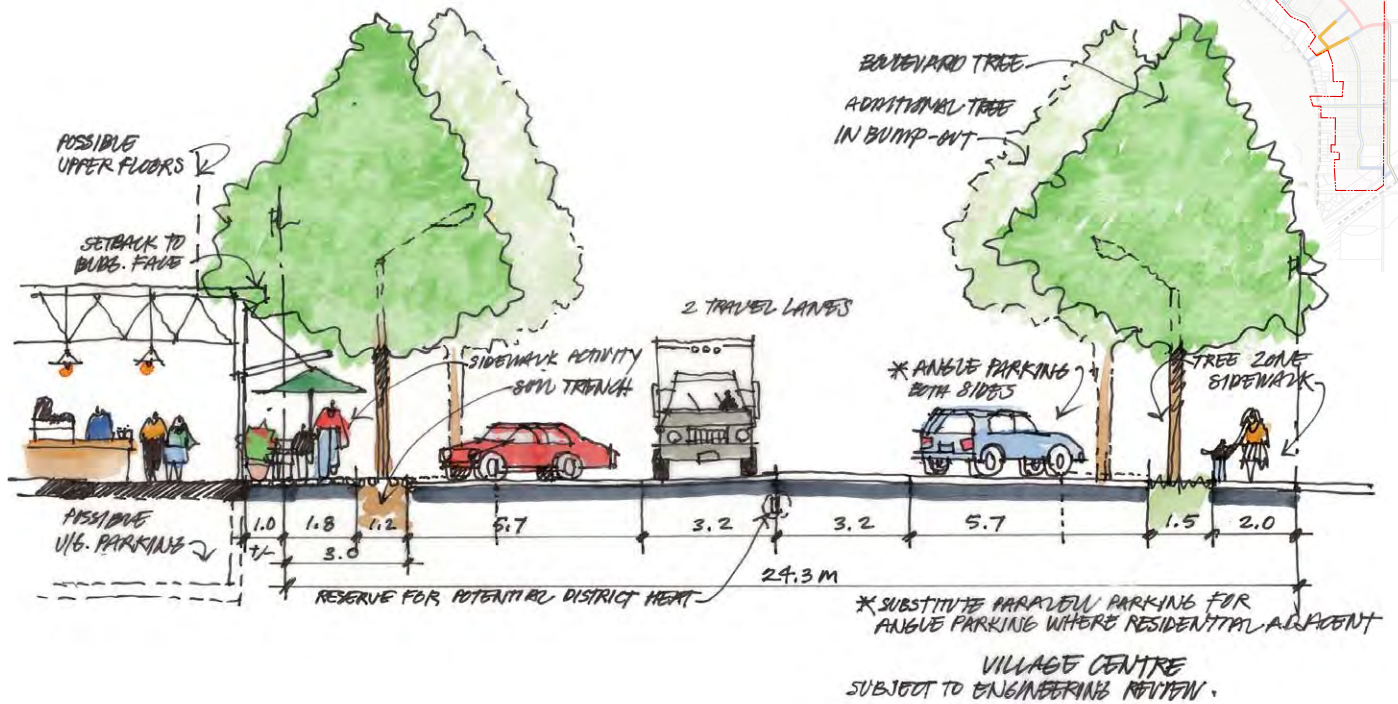


## Collector Road

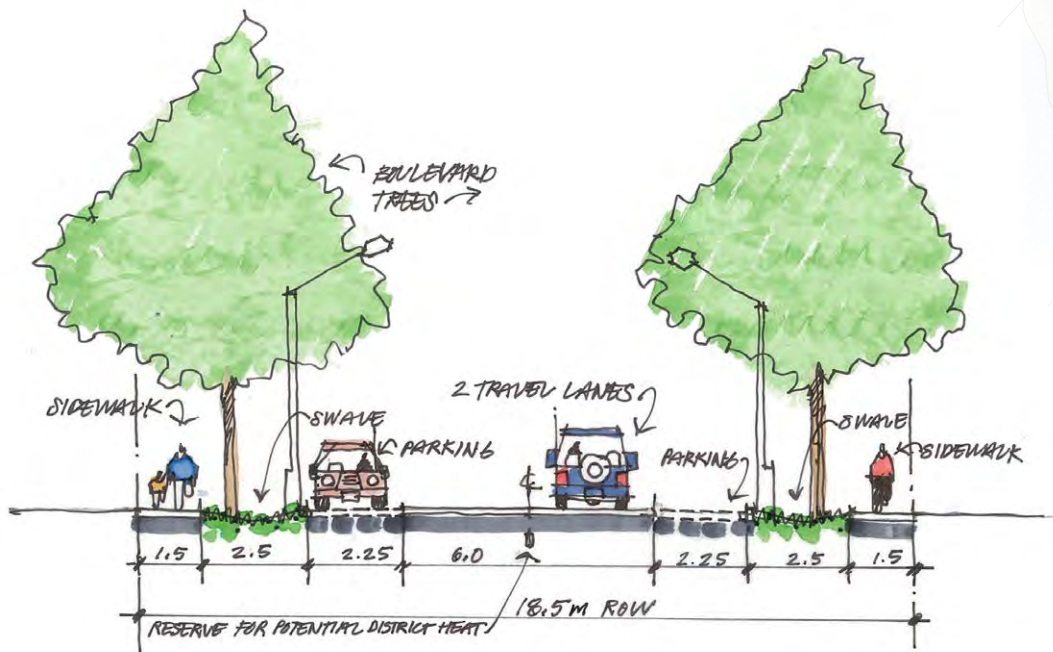




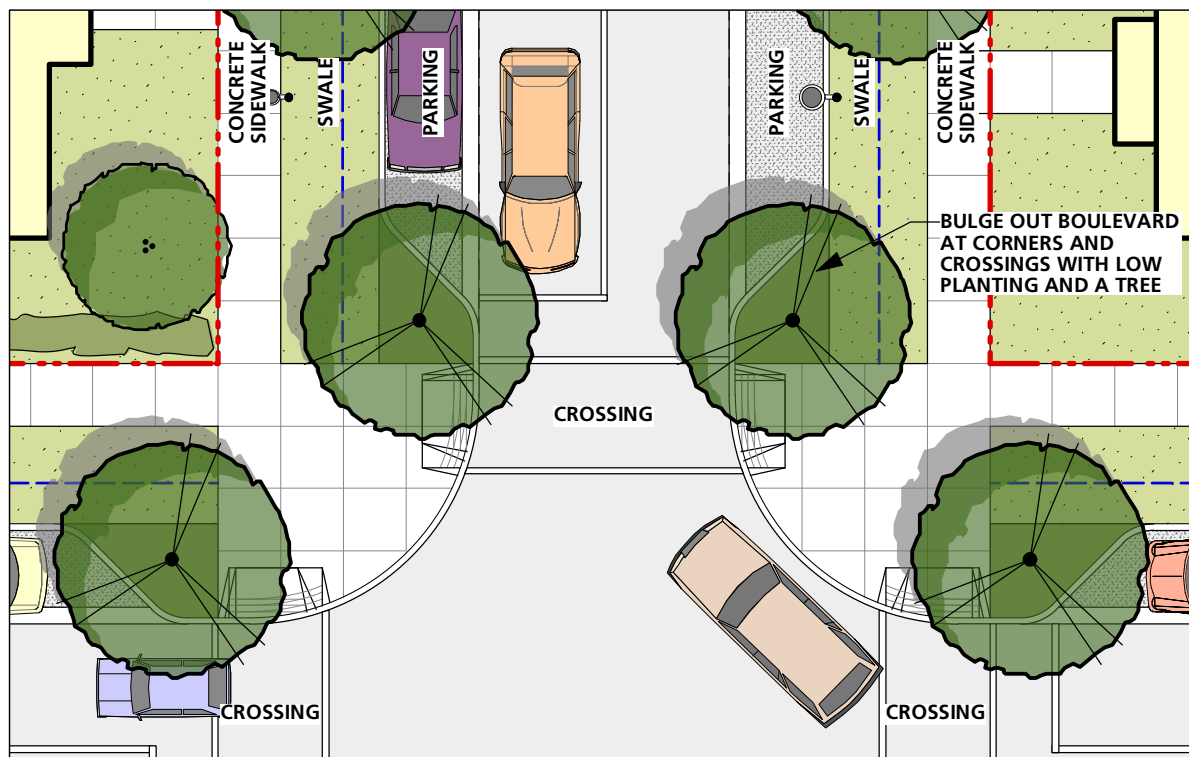
## Village Centre



## Local 1

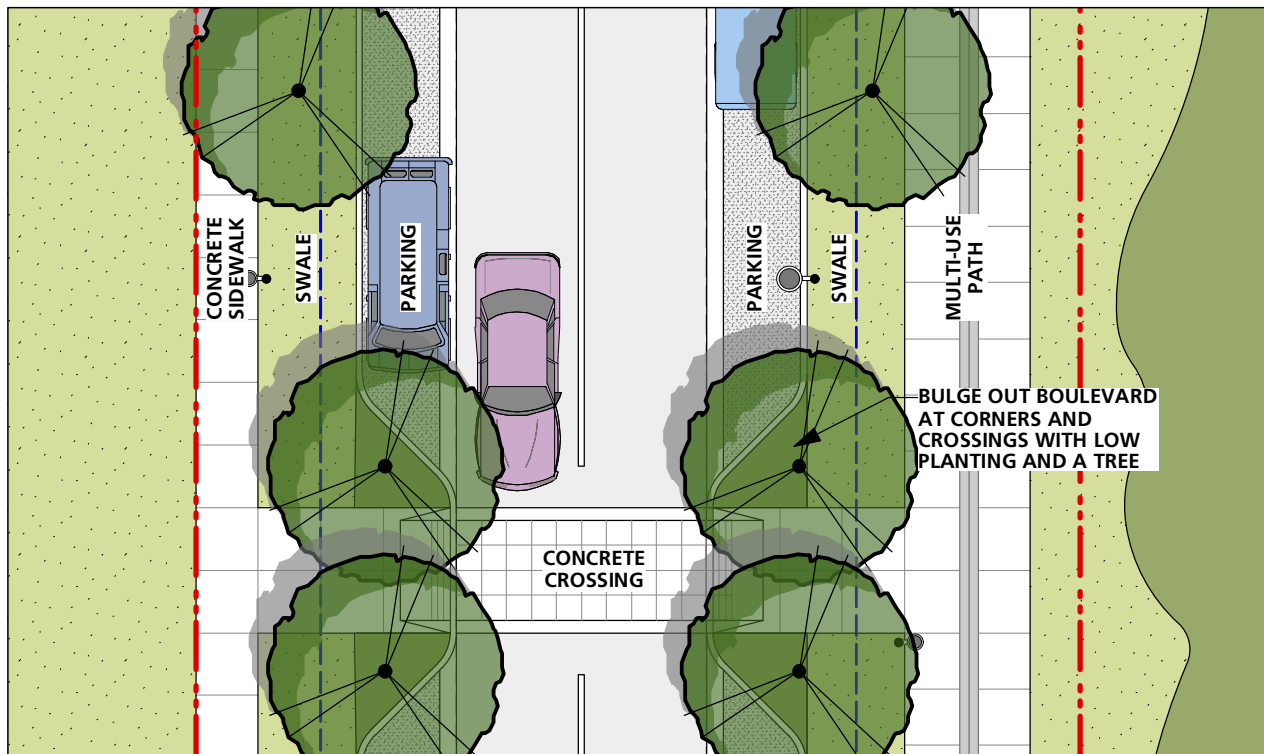
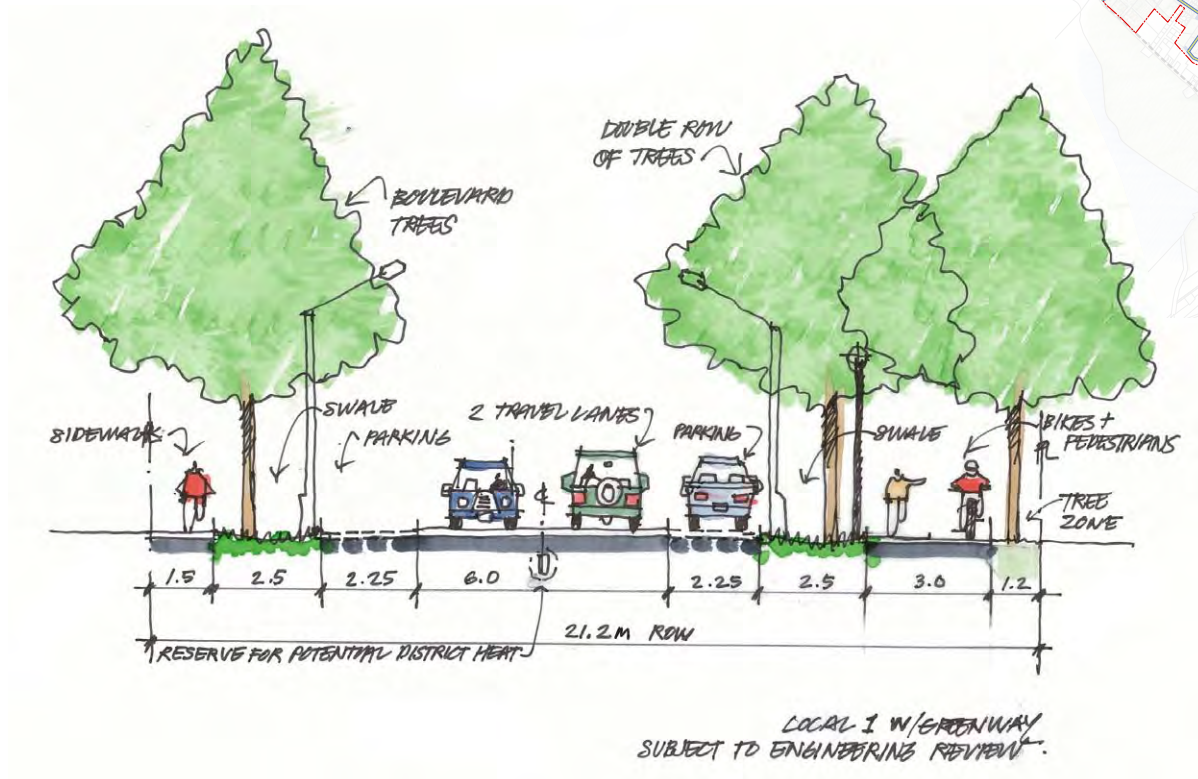


LOCAL 1  
SUBJECT TO ENGINEERING REVIEW.

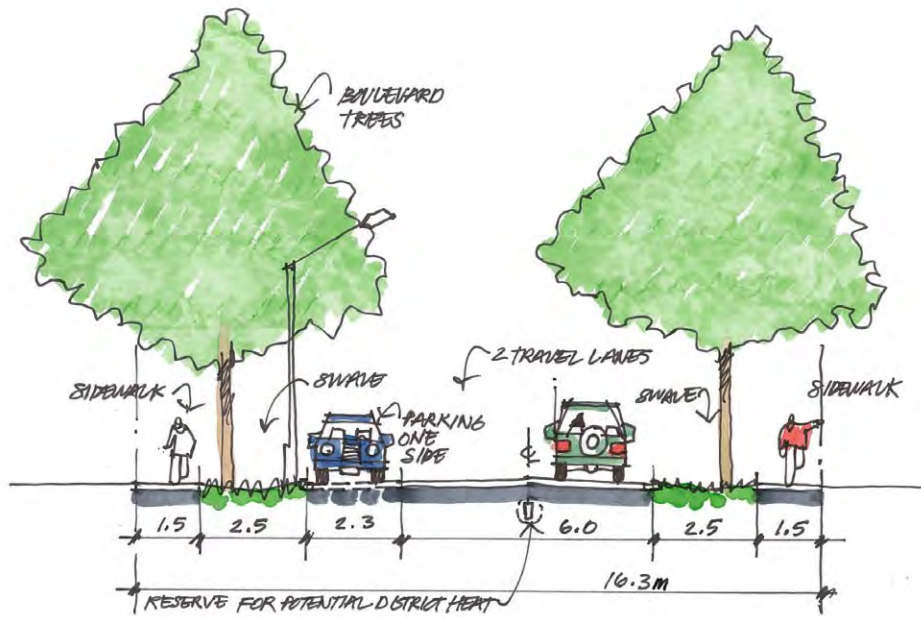




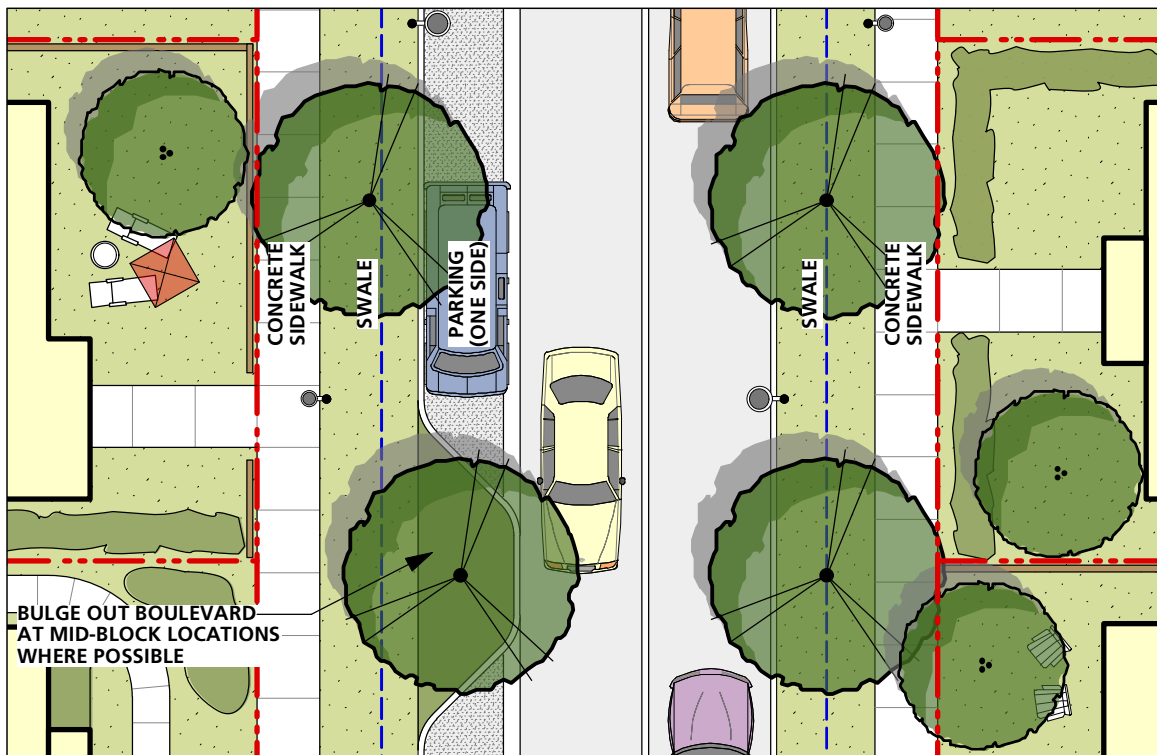
## Local 1 with Greenway



## Local 2

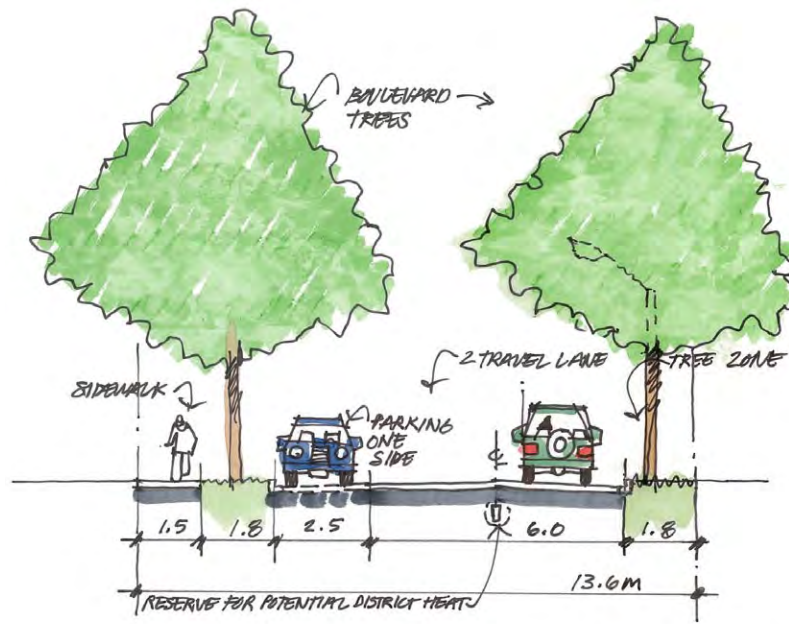


LOCAL 2  
SUBJECT TO ENGINEERING REVIEW.

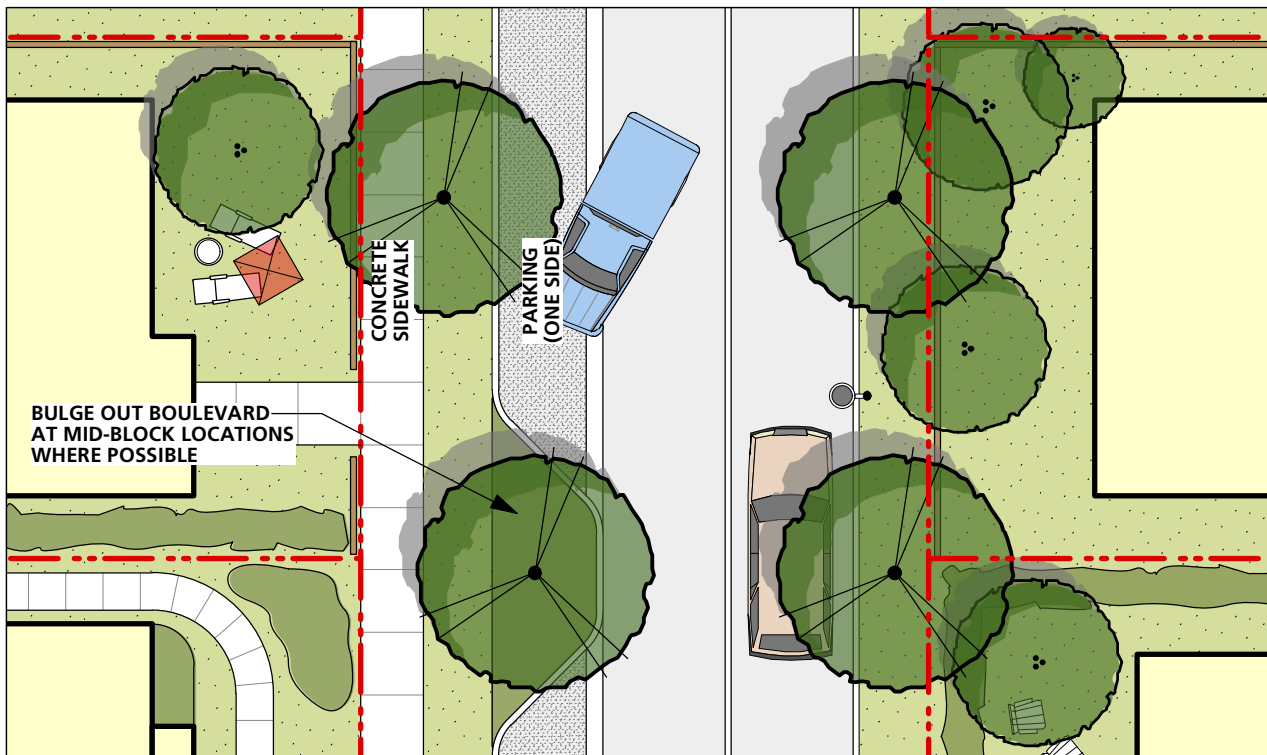




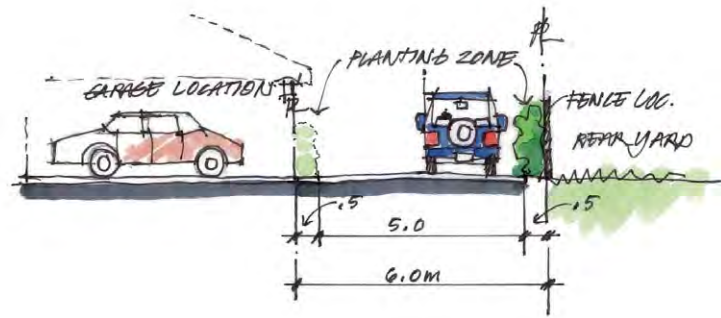
## Strata Road (variation of Local 2)



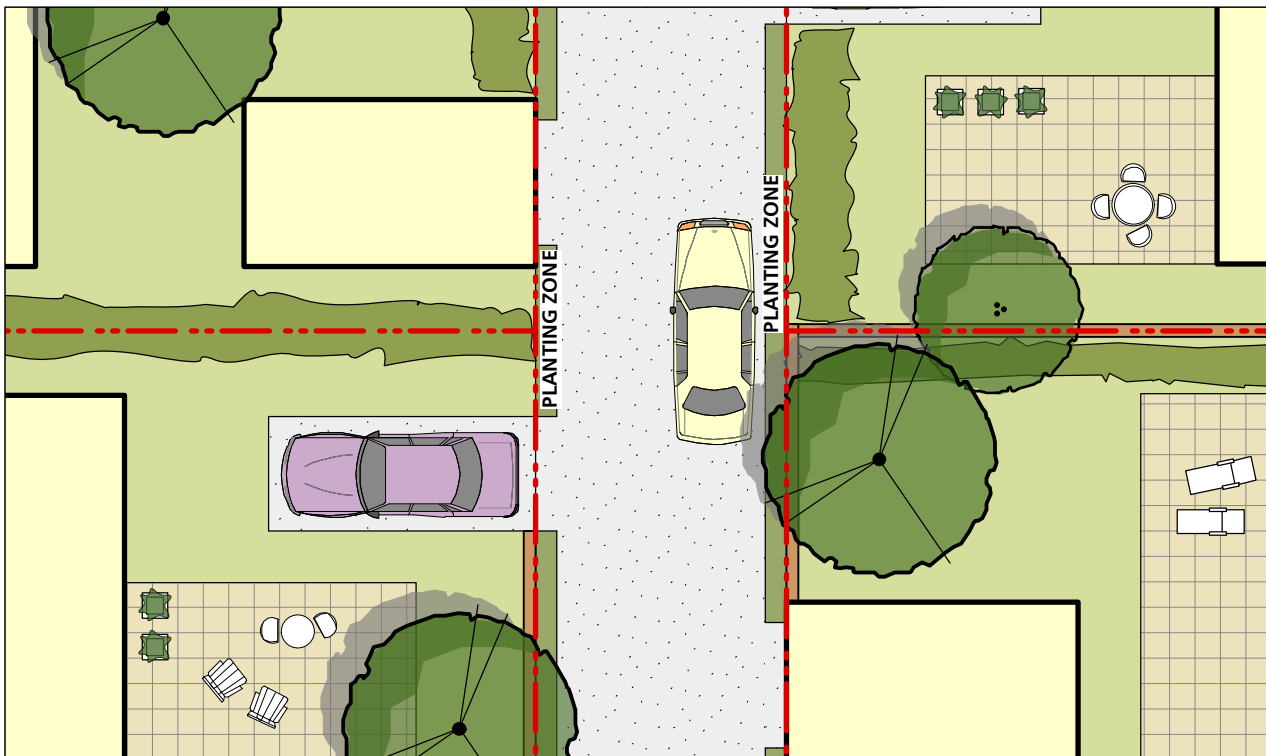
STRATA ROAD  
SUBJECT TO ENGINEERING REVIEW.



## Rear Lane



REAR LANE  
SUBJECT TO ENGINEERING REVIEW.





## 7 SITE DESIGN CRITERIA AND BUILDINGS

This section of the guidelines specifically addresses residential sites and buildings and conceptually addresses public/community, commercial/retail buildings and the future school. The intent is to create a high standard of architectural design incorporating quality finishes and materials. It is also important to note that technical issues will need to be addressed in building design such as responding to the flood control level and geotechnical factors. Buildings are to be designed to respond to the principles and standards outlined in the NP 2011 and in other relevant documents.

### 7.1 SUSTAINABILITY

A separate Sustainability Program & Guidelines has been developed by TFN, describing a framework and a series of initiatives that support balanced growth and continued livability at TFN. Applicants are required to review and demonstrate conformance with any standards described therein. In general, however, the following is a summary of general sustainability objectives that should be considered by all those proposing to develop sites within the Neighbourhood Plan Area:

- A complete community with a variety of uses, a legible layout, a mix of densities and optimized infrastructure
- A multi-faceted green system of paths and parks that integrate with the vehicular road network, address rainwater issues in a passive form, respects natural systems and adds social value
- A road/transportation system that encourages walking and cycling, decreases reliance on motor vehicles, incorporates opportunities for public transit and encourages innovation of alternate forms of travel such as car sharing
- Provides as many opportunities as possible for social interaction with neighbors, members of the community and visitors
- Encourages green building practices with an emphasis on energy performance and water conservation
- Provides for sustainable business practices by creating jobs and facilitating local economic development with an emphasis on TFN and its members
- Create a community that captures the unique context of TFN and that is high quality, and instills pride in TFN, developers, residents and visitors



## 7.2 RESIDENTIAL SITE DESIGN CRITERIA

A range of medium density housing forms and styles are proposed that will reflect the principles and goals of the neighbourhood planning process to date. Three residential housing types have been identified in the NP 2011; small and large lot single family detached, townhouse and apartments. Although minor variations in the site plan dimensions are possible, applicants are encouraged to apply the typical lot dimensions and setbacks for these categories.

### Residential Built Form

The new TFN community will be situated in a particularly prominent and unique location, between the tidal marsh shoreline to the west and farmland to the east. It will be highly visible from BC Ferries causeway and from the higher ground to the south. Its built form and design aesthetic will be perceived at the individual building level, as a streetscape and finally as a prominent feature in the flat landscape of Delta.

With its built form and character inspired by the natural surroundings and cultural and historical context, the new TFN community can become a special place with its own unique identity.

### Massing

Small lot sizes in combination with setbacks are likely to result in relatively simple primary building forms. The variety can be achieved by altering roof forms and slope orientation and by adding projections such as bays, dormers and generous porches at front and back.

Roof expression is important in individual building design, but also will play a significant role in the overall roofscape of the TFN community as perceived from a distance. Simple gable and shed roof geometries, common in coastal first nation long house structures and village settlements and in early fishing communities would be more appropriate than hip roofs, or unnecessary complex elements such as multiple small dormers, ornamental trim, etc. Roof pitches ranging between 5/12 to 8/12 are preferred and flat roofs are to be avoided.

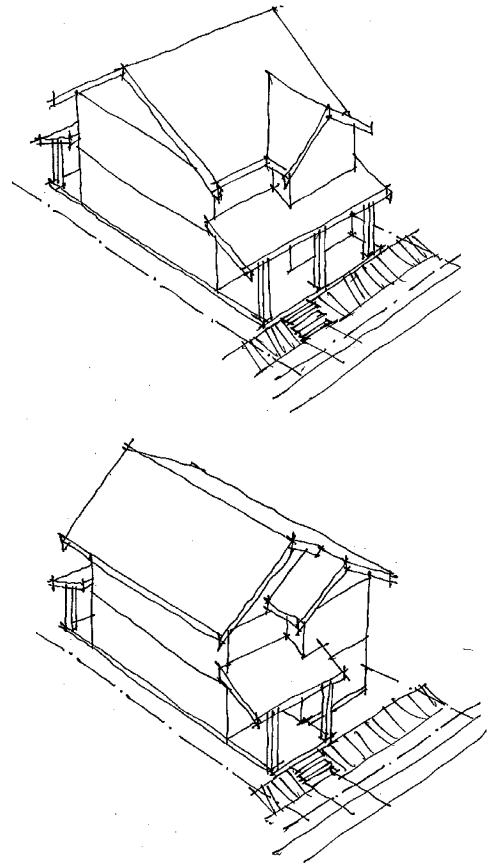
Roof eaves and overhangs should be as generous as is practical, ideally not less than 18". This adds interest to the roof form and provides weather protection, which is particularly important in this exposed location.

In townhouses and apartment buildings it is recommended that roof decks and top floor balconies be roofed over for weather protection and usability during rain.

### Materials and Architectural Character

Natural and rural landscapes surrounding the TFN community, combined with building tradition of First Nation and early fishing and farming communities point to wood as the primary exterior finishing material for use within the new community.

Practicality and cost consideration may result in compromises, where man-made substitutions such as cement board / shingles or vinyl siding can be used. Similarly,



Examples of two building / roof massing options for narrow lot houses. Similar combinations of these roof geometries could be used on other building types at TFN.



traditional roofing cedar shakes or shingles can be substituted with appropriately chosen asphalt shingles. Other materials, such as natural stone may be substituted with cultured stone or vinyl window frames used instead of wood.

Use of materials such as brick, stucco or metal fencing / railings is not compatible with the desired character of the new community and should be limited to areas where it may be necessary.

Building elements such as posts and beams, window trim, barge and fascia boards, wood railings and pickets should be as solid and robust as economically feasible. Use of small-scale ornamental / decorative elements should be avoided.

## Colours

Natural colours of wood and stone are desirable, in combination with warm, earthy colour stains, paints and material finishes. Selective use of stronger, more vivid and rich primary colours derived from First Nation art is encouraged as accent elements or on selected wall surfaces.

White paint / finishes on trim, fencing or windows should be avoided.



Example of traditional structures with simple roof forms using natural local materials



Strong and simple massing elements with low pitch roof, entry wall and trim colours. Brick would be less appropriate at TFN.



Example of heavily accented trim colour against natural colours / textured background. Good low pitch roof massing.



Modest narrow lot home with well sized trim and massing composition consisting of simple and strong elements. Good roof geometry but lower pitch would be preferred. Warm and earthy colour scheme with deep red accent door colour.



Wider lot home with good roof geometry, porch and appropriate colour selection



This is **not encouraged**  
Overly busy building form, detailing and inappropriate colour scheme

### 7.3 VILLAGE CENTRE

The Village Centre is anticipated to be the hub of activity and social interaction for the community. As such, it has been centrally located within the Neighbourhood Plan and is directly connected to primary pedestrian/cycling routes and the road system. It is also directly linked to the primary site access from Highway 17. Uses are anticipated to include commercial/retail, community facilities, flexible spaces, a future school site and active & passive park areas. Early design sketches that were prepared as part of the preliminary workshops are included to provide a general indication of potential spatial organization and design concepts (See Figures 7.1-7.2). The following, is a summary of the important elements that will be incorporated into the Village Centre:

- Linkages to greenways and Great Blue Heron Way
- Commercial/Retail Space
- Community/Civic/Arts Space
- A school with gymnasium, play fields, hard and soft surface play areas and servicing
- Public gathering space in the form of a plaza or “village green”
- Smaller linked courts
- Traffic calming measures including angle parking, corner bulges, raised intersections, textured paving, pedestrian crossings
- Public art installations with TFN focus
- A “community shelter” – an open air structure for community events

#### Village Centre Buildings

Buildings within the Village Centre are to be designed to reflect the TFN and Coast Salish heritage and culture.

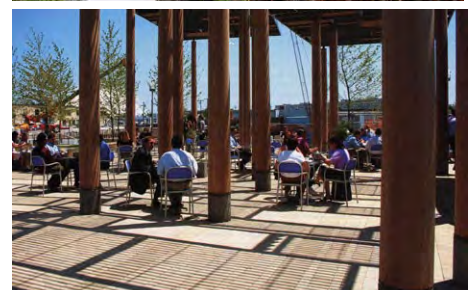






Fig. 7.1 Village Centre Concept Plan (January 20, 2011; Conceptual Only)



Fig. 7.2 Village Centre Concept Sketches



## 8 LANDSCAPE AND OPEN SPACE

### 8.1 GENERAL

The new community will have a strong identity determined in large part by a connected series of parks, greenways and corridors that combine to form a landscaped open space network within the public realm. This green network will express the structure of the community, the TFN culture, and the emphasis on sustainability by forming part of the rainwater management system for the lands. The property has a north/south orientation and the Village Centre is centrally located. The intent is for each resident to have easy access to a system of trails that connects directly to the Village Centre, Great Blue Heron Way and to shopping on the adjacent lands to the east. A new connection is also proposed to the breakwater trail in the southern part of the site via an elevated boardwalk over the tidal marshlands to the west of Tsawwassen Drive. The emphasis is to be on walking and cycling. The goal is to reduce reliance on vehicular use to the extent possible.

### 8.2 COMMUNITY GARDENS

There is great potential for community gardens to be included within the public green spaces such as parks, trails and greenways. This use is to be encouraged as the plans develop for these spaces. It is anticipated that a policy will be established by TFN to guide the development of potential community gardens..

### 8.3 TRAILS & GREENWAYS

In some areas, trails are to be located adjacent to roadways. An alternate trail system, independent of the roadway network is also proposed. These greenway trail corridors are to be wide enough to include a shared path for pedestrians and cyclists, planting zones and, in some cases, rainwater swales. The system will also include an interpretive sign program focused on TFN history and culture.

### 8.4 GREAT BLUE HERON WAY

This regional pedestrian/cycling trail, to be located adjacent to Tsawwassen Drive, is envisioned to be the first stage of a regional trail network that will link to other communities, with an emphasis on First Nations, in the Lower Mainland. The close proximity to the Tsawwassen Ferry Terminal provides an opportunity to also link to locations on Vancouver Island. TFN will be a host nation for this regional trail network.





## 8.5 PARKS

Parks are identified as Neighbourhood Parks, Local Parks and Linear Parks. Neighbourhood Parks are larger, providing space for active play, play fields, and Host Nation events. Two locations for these parks have been identified. Local Parks are to be a minimum of 1,200 m<sup>2</sup>, located in conjunction with the trail network and are to be distributed throughout the community within a 5-minute walking distance of residents. They primarily serve a social function, providing space for smaller groups to congregate by including play areas and flexible space for informal activities. Linear Parks are to be a minimum of 10m wide and provide a range of functions by adding to the green network, buffering between different uses and allowing for social interaction, community gardens and trails.



## 8.6 STREETSCAPES / BOULEVARDS

Streetscapes, as described in Section 6, are also an important part of the open space network. Boulevard trees and low-level planting provide visual relief, shade, colour, seasonal change and clarity to the structure of the community. Rainwater channels are to be incorporated into designated areas that will form part of the rainwater management strategy for the project.



## 8.7 SETBACK ZONES & BUFFERS

Landscaped setback zones related to environmental and other regulations are required at many of the perimeter areas of the site. Specific requirements are described more fully in the Environmental Summary Report. Setbacks have also been included to accommodate grade transitions from recently filled areas to existing grade where no new development is occurring. These areas also provide opportunities for planting, trails, community gardens and rainwater channels. In some cases, buffers are required to screen views, provide privacy or create a separation between new and existing development. These zones are generally identified in Figure 8.1.

## 8.8 FRONT YARDS AND SIDE YARDS (PRIVATE REALM)

The intent is to include a range of landscape treatments for residential front and side yards to ensure a rich and varied environment for residents and visitors. For this reason, the guidelines have been expanded to apply to these categories of the private realm. A range of hard and soft landscape options is provided. Applicants are to select from this palette of options for fencing, paint colour, plant material, paving materials and patterns etc. These basic “building blocks” are to be used in different combinations to create a varied appearance. Refer to Section 9: Components Catalogue.

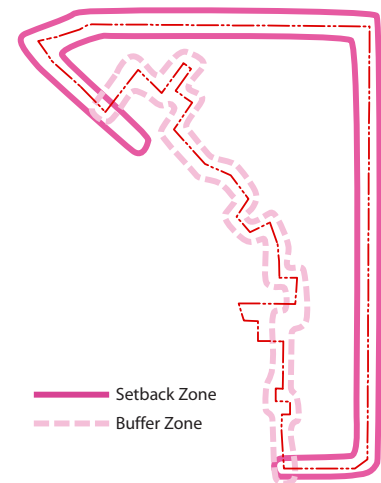


Fig. 8.1 Setback Zones & Buffers



## 8.9 THE VILLAGE CENTRE

It is anticipated that it could be quite some time before the Village Centre moves forward. At this stage, it is anticipated that it would include various community uses, a modest amount of local retail space and a school with playfield and related uses. As the heart of the community, it is envisaged that the Village Centre would include high quality materials, custom detailing, public art, a public plaza and a range of hard and soft-surfaced social spaces.

## 8.10 COMPONENTS OF THE PUBLIC REALM

The following landscape components of the public realm, and certain categories of the private realm are addressed within these guidelines in Section 9:

- Boulevard Trees
- Trees Shrubs and Groundcovers
  - Public Realm
  - Private Realm
- Lighting
- Paving
- Site Furniture
- Colour
- Public Art
- Signs and Way Finding
- Fencing and Walls





## 9 COMPONENTS CATALOGUE

The components catalogue includes a range of hard and soft landscape elements that are to be incorporated into the planning and design of specific projects and the public realm. The landscape will become the primary device for ensuring overall site unity and expression of the TFN / Coast Salish themes of the community. A measured amount of standardization of products and designs also has an added cost benefit related to operations and maintenance. Designers are encouraged to specify materials that fall within the parameters of this catalogue. It is important to note, however, that it is not the intention of the authors of these guidelines to be so prescriptive as to stifle creativity and a high level design in certain special cases. If variations are considered to have merit, they will be considered as part of the Development Permit review and approval process.

Planting techniques shall follow current best practices and the BCSLA/BCLNA Standard, latest edition. These practices will include the use of tree root barriers adjacent to walks and extent of structural soil beneath paving where trees otherwise have limited available soil volumes.

Native plants are emphasized however adapted plants may also be used. Species selection should consider drought tolerance and hardiness. Specific species requirements for soil moisture, shade tolerance etc. must be considered when arranging plants. Plants with high seasonal interest – flowering or striking winter form - should be utilized especially at arrival points and areas of concentrated pedestrian gathering.



## 9.1 BOULEVARD TREES

Boulevard trees serve multiple purposes. They support the structure of the development pattern, provide vertical scale articulation, express seasonal change, and add delight through flowering, fall colour, texture and shade. Larger canopy trees planted on primary streets reinforce the prominence of those corridors. Trees with high visual impact such as bold fall colour or showy flowers help to emphasize important places such as the village centre, site arrival points and parks. Preferred boulevard tree species have been identified in Section 9 that are considered to be hardy, disease tolerant and suited to different situations. Final choices will be based on availability and other factors at the time of planting.

The following is the list of recommended street tree species for this site. Street trees should be straight in form and free of disease. Generally deciduous trees should be used for street trees. These trees should be non aphid-bearing species. Their locations are identified in Figure 9.1.

- |   |                              |
|---|------------------------------|
| • <i>Acer rubrum</i> fastigate varieties      | Columnar Red Maple varieties |
| • <i>Acer rubrum</i> 'Red Sunset'             | Red Sunset Maple             |
| • <i>Carpinus betulus</i> 'Fastigiata'        | Pyramidal European Hornbeam  |
| • <i>Cercis canadensis</i>                    | Eastern Redbud               |
| • <i>Cornus</i> 'Eddie's White Wonder'        | Eddie's White Wonder dogwood |
| • <i>Fraxinus americana</i>                   | White Ash                    |
| • <i>Gleditsia triacanthos</i> varieties      | Honeylocust varieties        |
| • <i>Liquidambar styraciflua</i> 'Worplesdon' | Worplesdon Sweet Gum         |
| • <i>Nyssa sylvatica</i>                      | Sour Gum                     |
| • <i>Pyrus calleryana</i> 'Chanticleer'       | Chanticleer Pear             |
| • <i>Styrax japonica</i>                      | Japanese Snowbell            |
| • <i>Zelkova serrata</i>                      | Japanese Zelkova             |



*Carpinus betulus* 'Fastigiata'



*Cercis canadensis*



*Styrax japonica*



*Nyssa sylvatica*



*Zelkova serrata*



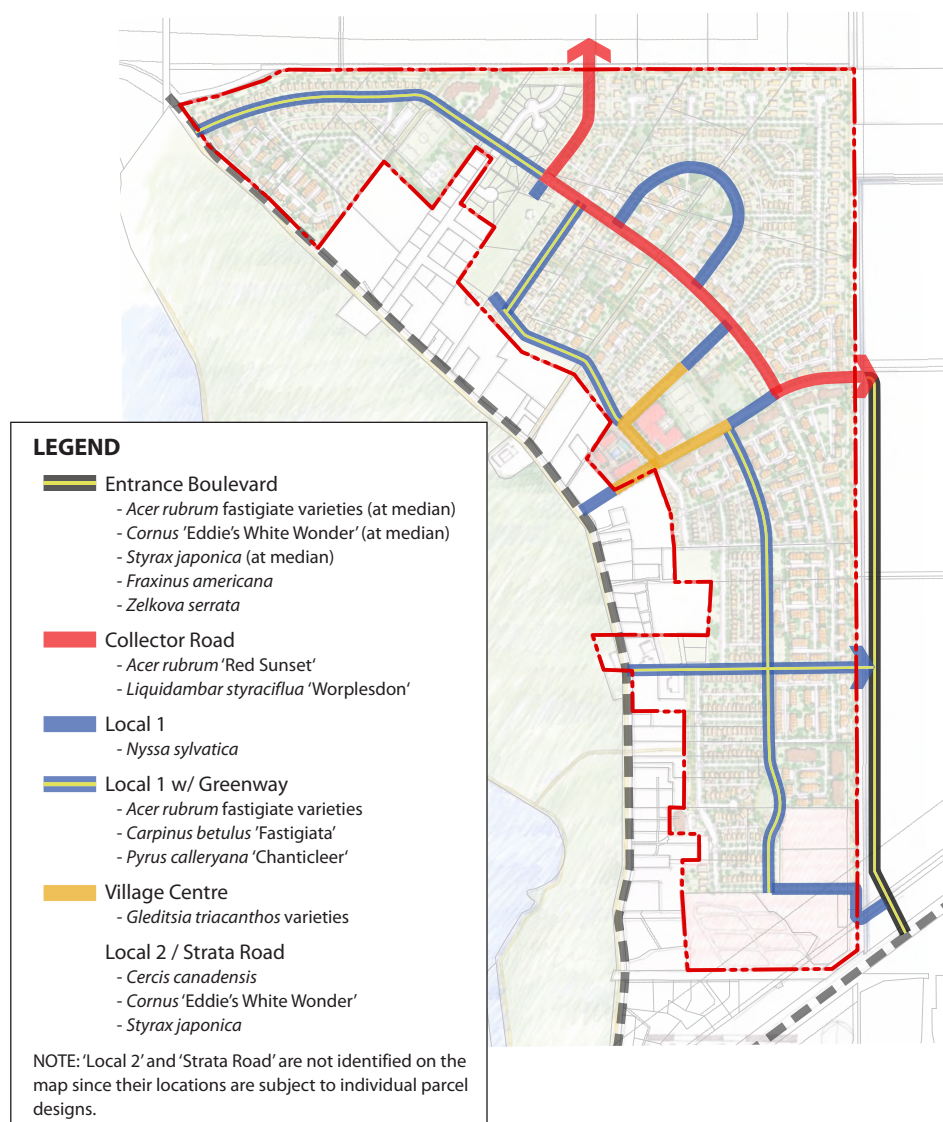


Fig. 9.1 Street Trees



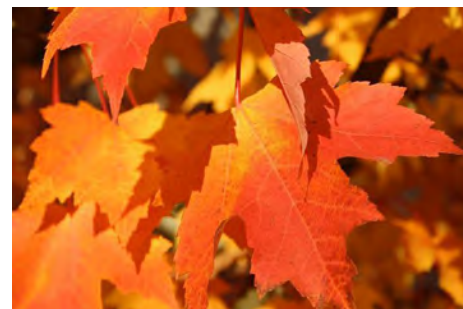
*Gleditsia triacanthos* varieties



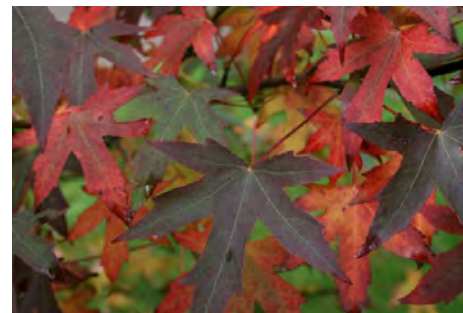
*Fraxinus americana*



*Cornus* 'Eddie's white wonder'



*Acer rubrum* varieties



*Liquidambar styraciflua* 'Worplesdon'



*Pyrus calleryana* 'Chanticleer'



## 9.2 TREES SHRUBS AND GROUNDCOVERS

### Public Realm (Other than Boulevard Trees)

Planted areas of the public realm include road rights of way, site arrival points, easements, greenways & green corridors, and areas within the Village Centre. Different plant categories with recommended species are identified. While it is not required that final plant selections conform to these lists, it is recommended that landscape designers use them as a guide to inform plant selection. Plant material characteristics should reflect relative site prominence and land use. Plants with higher visual impact should be used in important areas such as site arrival points, parks and the Village Centre. Use of traditional species is also to be encouraged.

### Private Realm

Private realm planting areas include residential front yards, side yards when fronting a street, and lanes. Also included is the Village Centre. It is important that landscape designers consider the relationship to planting within adjacent public realm areas such as street corridors, green corridors and parks so that a seamless relationship is created.

Example species that are appropriate for this site include:

#### Trees

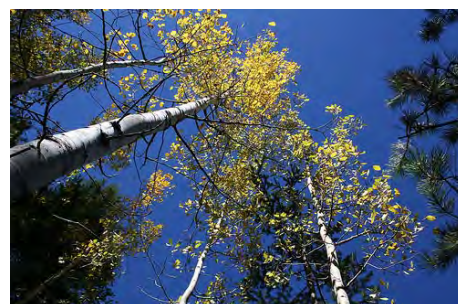
- |   |                           |
|---|---------------------------|
| • <i>Abies grandis</i>                        | Grand Fir                 |
| • <i>Acer circinatum</i>                      | Vine Maple                |
| • <i>Acer rubrum</i> varieties                | Red Maple varieties       |
| • <i>Alnus rubra</i>                          | Red Alder                 |
| • <i>Amelanchier alnifolia</i>                | Saskatoon                 |
| • <i>Chamaecyparis nootkatensis</i>           | Nootka Cypress            |
| • <i>Cornus</i> 'Eddie's White Wonder'        | White Wonder Dogwood      |
| • <i>Cornus florida</i> 'Rubra'               | Pink Dogwood              |
| • <i>Cornus kousa</i> varieties               | Kousa Dogwood varieties   |
| • <i>Cornus nuttallii</i>                     | Pacific Dogwood           |
| • <i>Crataegus douglasii</i>                  | Black Hawthorne           |
| • <i>Fraxinus americana</i>                   | White Ash                 |
| • <i>Gleditsia triacanthos</i> varieties      | Honeylocust varieties     |
| • <i>Liquidambar styraciflua</i> 'Worplesdon' | Worplesdon Sweet Gum      |
| • <i>Magnolia soulangeana</i> varieties       | Saucer Magnolia varieties |
| • <i>Malus fusca</i>                          | Pacific Crabapple         |
| • <i>Populus balsamifera</i>                  | Balsam Poplar             |
| • <i>Populus tremuloides</i>                  | Trembling Aspen           |
| • <i>Picea sitchensis</i>                     | Sitka Spruce              |
| • <i>Pinus contorta</i> ssp. <i>contorta</i>  | Shore Pine                |
| • <i>Pseudotsuga menziesii</i>                | Douglas Fir               |
| • <i>Pyrus calleryana</i> 'Chanticleer'       | Chanticleer Pear          |
| • <i>Quercus garryana</i>                     | Garry Oak                 |
| • <i>Thuja plicata</i>                        | Western Red Cedar         |
| • <i>Tsuga heterophylla</i>                   | Western Hemlock           |



*Alnus rubra*



*Magnolia soulangeana* variety



*Populus tremuloides*



*Tsuga heterophylla*

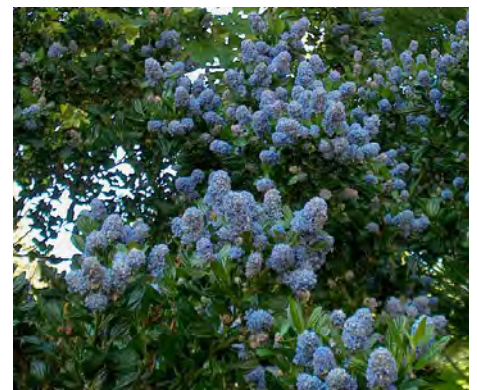


## Shrubs

- *Amelanchier alnifolia*
  - *Arctostaphylos uva-ursi*
  - *Ceanothus* species
  - *Cornus sericea*
  - *Corylus cornuta*
  - *Gaultheria shallon*
  - *Holodiscus discolor*
  - *Juniperus communis*
  - *Kalmia microphylla* ssp. *occidentalis*
  - *Ledum groenlandicum*
  - *Lonicera involucrata*
  - *Mahonia aquifolium*
  - *Mahonia nervosa*
  - *Menziesia ferruginea*
  - *Pachystima myrsinites*
  - *Paxistima myrsinites*
  - *Philadelphus lewisii*
  - *Physocarpus capitatus*
  - *Potentilla fruticosa* varieties
  - *Rhododendron macrophyllum*
  - *Ribes sanguineum*
  - *Rosa nutkana*
  - *Rubus parviflorus*
  - *Rubus spectabilis*
  - *Salix* species
  - *Sambucus racemosa*
  - *Sorbus sitchensis*
  - *Spiraea densiflora*
  - *Spiraea douglasii*
  - *Symphoricarpus alba*
  - *Vaccinium* species
  - *Viburnum edule*
- Saskatoon
  - Kinnickinnick
  - California Lilac species
  - Red Osier Dogwood
  - Beaked Hazel
  - Salal
  - Ocean Spray
  - Common Juniper
  - Western Bog-laurel
  - Labrador Tea
  - Black Twinberry
  - Oregon Grape
  - Low Oregon Grape
  - False Azalea
  - Oregon Box
  - Oregon boxleaf
  - Mock Orange
  - Pacific Ninebark
  - Cinquefoil varieties
  - Pacific Rhododendron
  - Flowering Currant
  - Nootka Rose
  - Thimbleberry
  - Salmonberry
  - Willow shrub species
  - Red Elderberry
  - Sitka Mountain-ash
  - Mountain Spiraea
  - Hardhack
  - Snowberry
  - Huckleberry/Blueberry species
  - Squashberry



*Menziesia ferruginea*



*Ceanothus* species



*Rubus spectabilis*





**Groundcovers, Grasses, Ferns, Perennials**

- *Blechnum spicant*
  - *Calamagrostis canadensis*
  - *Carex obnupta*
  - *Carex sitchensis*
  - *Carex stipata*
  - *Cornus canadensis*
  - *Deschampsia caespitosa*
  - *Dicentra formosa*
  - *Echinacea purpurea*
  - *Elymus glaucus*
  - *Epilobium angustifolium*
  - *Festuca idahoensis*
  - *Festuca rubra*
  - *Fragaria chiloensis*
  - *Fragaria vesca*
  - *Glyceria grandis*
  - *Hemerocallis* 'Stella d'Oro'
  - *Hosta* species
  - *Juncus balticus*
  - *Juncus effusus*
  - *Juncus ensifolius*
  - *Maianthemum dilatatum*
  - *Oenanthe sarmentosa*
  - *Pennisetum alopecuroides* 'Little Bunny'
  - *Polystichum munitum*
  - *Rudbeckia fulgida* 'Goldsturm'
  - *Scirpus cyperinus*
  - *Scirpus microcarpus*
  - *Scirpus validus*
  - *Solidago canadensis*
  - *Spiraea Douglasii*
  - *Typhja latifolia*
- Deer Fern
  - Bluejoint
  - Slough Sedge
  - Sitka Sedge
  - Owlfruit sedge
  - Bunchberry
  - Tufted Hair Grass
  - Pacific Bleeding Heart
  - Coneflower
  - Blue wildrye
  - Fireweed
  - Idaho Fescue
  - Red Fescue
  - Beach Strawberry
  - Woodland Strawberry
  - American Mannagrass
  - Yellow Daylily
  - Hosta species
  - Baltic Rush
  - Soft Rush
  - Swordleaf Rush
  - False Lily-of-the-Valley
  - Water Parsley
  - Dwarf Fountain Grass
  - Sword Fern
  - Goldsturm Coneflower
  - Wool Grass
  - Panicled Bulrush
  - Soft stemmed Bulrush
  - Canada Goldenrod
  - Hardhack
  - Common Cat Tail

*Cornus canadensis**Echinacea purpurea**Hosta* species*Pennisetum alopecuroides* 'Little Bunny'

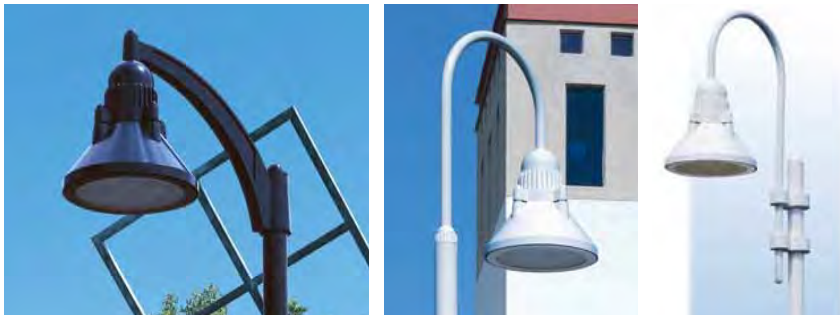


### 9.3 LIGHTING

Lighting categories of the public realm include post-top (vehicular and pedestrian scaled), bollard, and feature. The intent is to design a pattern of light distribution that creates a pleasing nighttime environment while also meeting safety and security standards. It is important to avoid lamps with output that is too high or that results in excessive glare. The source of light should also minimize the affect of colour distortion of adjacent landscapes or building features. Low-level bollard lighting can be used in smaller-scaled areas such as small parks, courts or the Village Centre. Feature lighting is encouraged to provide drama and emphasis to important elements. Care is to be taken to avoid light pollution.

The following is the description of the post top and bollard light fixtures appropriate for the site.

#### Post Top Light



*Product Name:*

Era

*Manufacturer:*

KIM Lighting

*Local Supplier:*

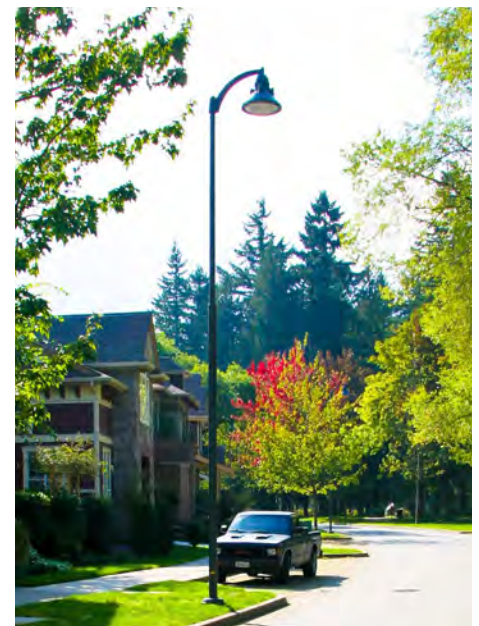
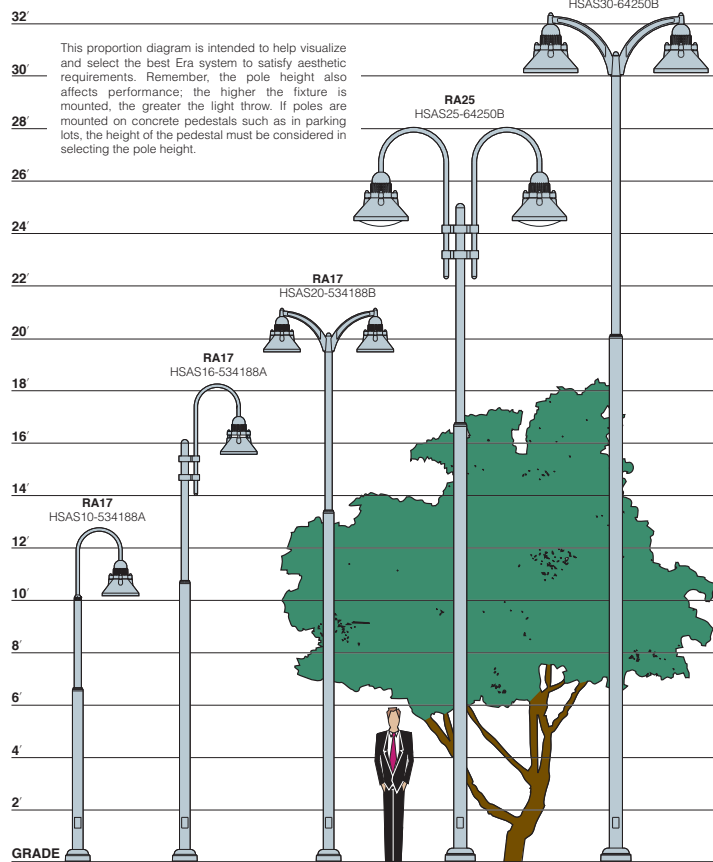
Symmetry Lighting

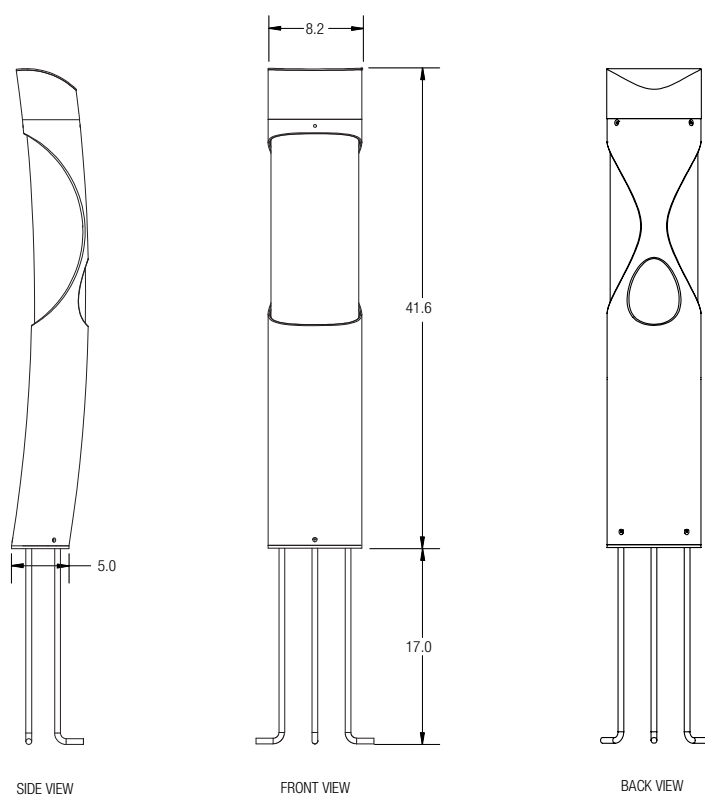
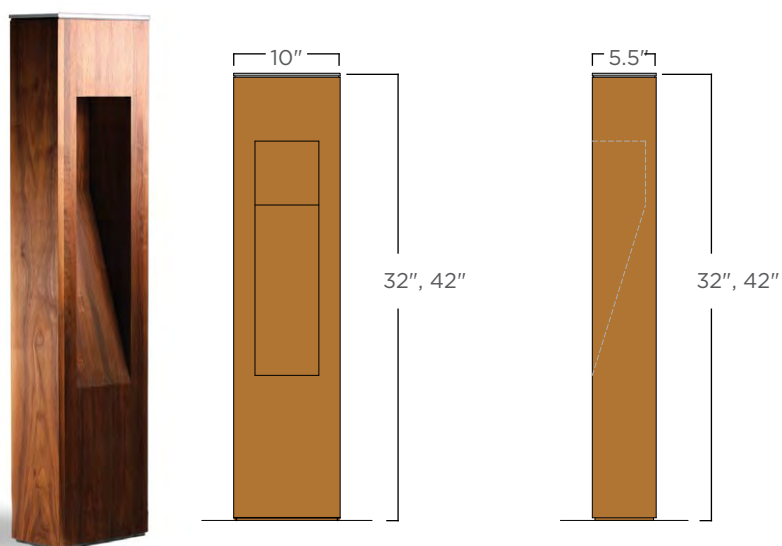
*Colour:*

RAL 7031 (Blue Grey), no powdercoating

*Note:*

Vehicular / pedestrian scale pole height to be subject to electrical engineers' recommendation. For optional banner arms, adjust pole height to suit.



**Bollard Light - Option A***Product Name:***Joker Line / Joker P***Manufacturer:***Forms + Surfaces***Material:***Aluminum and UV-stabilized white acrylic lens***Colour:***Aluminum Texture****Bollard Light - Option B***Product Name:***Mac LED Bollard***Manufacturer:***Structura Inc.***Local Supplier:***SLS Lighting***Material:***Wood and Metal***Colour:***RAL 7031 (Blue Grey)**



## 9.4 PAVING

A range of paving treatments is identified including asphalt, granular surfaces, cast concrete and a range of modular products. The materials and patterning is one of the most highly visible aspects of the open space system. Higher quality materials, patterns, and colours serve to emphasize areas of prominence while utilitarian materials such as cast concrete are to be used in lower profile areas such as local roads.

The following palette of paving materials is appropriate for the site. Any other products or designs that are proposed should be compatible in materials and character. Stamped concrete or stamped asphalt paving are not recommended. Cast concrete score lines should be sawcut not trowelled.

### Unit Pavers

A variety of concrete or brick pavers should be incorporated in the shared streets and nodes. Patterns and colours may vary, though grey tones are preferred.

### Concrete

Cast concrete score lines should be sawcut not tooled. Score pattern varies. Stamped concrete paving is not recommended.

### Granular

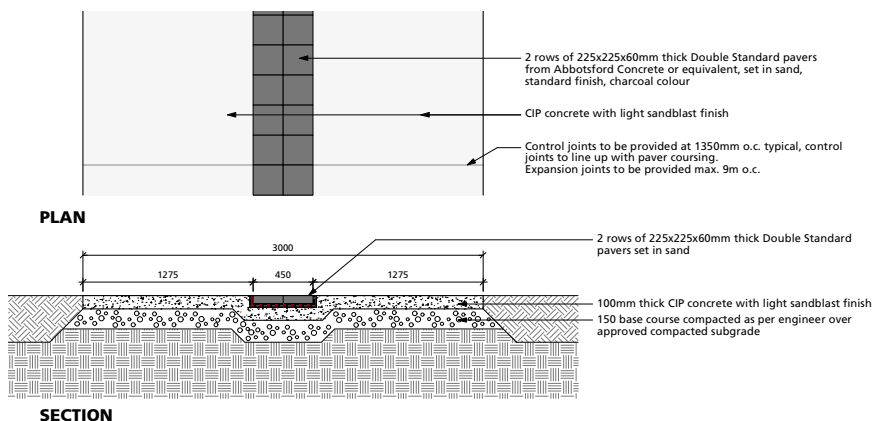
Natural landscaped areas, riparian corridors and some paths in parks may use gravel paths consisting of 100mm Crusher Dust over 150mm base course. Granular may be restrained with a concrete band or by pressure treated lumber.

### Stone

Stone may be used in small quantities to highlight areas of the highest priority. In these instances, either Basalt or Granite are encouraged.

### Special Paving at Multi-Use Paths

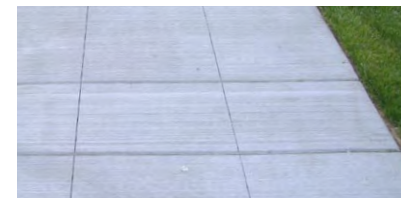
Multi-use paths at Collector Road and Local 1 street with Greenway to be 3.0m wide cast concrete with 225x225mm Double Holland concrete paver band in charcoal colour. See Section 6 of this document for location and details of street categories.



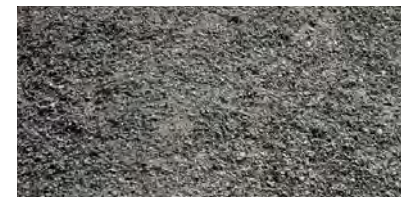
Multi-Use Path Typical Detail



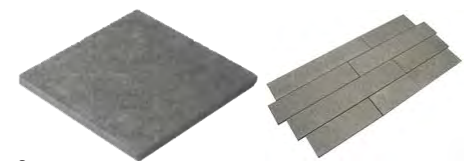
Unit Pavers



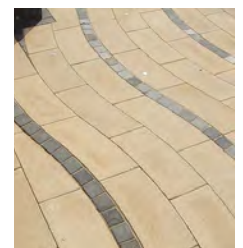
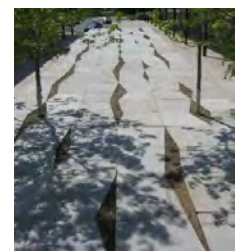
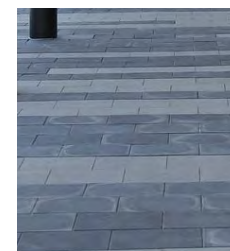
Cast Concrete



Crusher Dust



Stone



Examples of Special Paving

## 9.5 SITE FURNITURE

Site furniture within the public realm includes a combination of standard catalogue items and custom-designed components. The intent is to reinforce the TFN and Coast Salish themes of the community. Wood is used as a prominent element and earth tones are to be used extensively with colourful highlights. Site furniture is to be durable, easily maintainable and readily available.

The following palette of site furniture is appropriate for the site. Any other products or designs that are proposed should be compatible in materials and character.

### Catalogue Bench



*Product Name:*

**Knight™**

*Manufacturer:*

**Forms + Surfaces**

*Material:*

**Wood with Metal Frame**

*Colour:*

**RAL 7031 (Blue Grey)**

*Options:*

**Backless Option / Optional Armrests**



### Trash Receptacle



*Product Name:*

**Chase Park**

*Manufacturer:*

**Landscape Forms**

*Material:*

**Metal**

*Colour:*

**RAL 7031 (Blue Grey)**

*Product Style:*

**Top-opening / Side-opening**

*Options:*

**Recycling Option**





## Bicycle Rack



Boa Bike Rack from Dobra Design

*Product Name:*

**Boa Series**

*Manufacturer:*

**Dobra Design**

*Colour:*

**RAL 7031 (Blue Grey)**



Examples of Custom Bike Rack

## Planter



*Product Name:*

**Plaza Planter**

*Manufacturer:*

**Landscape Forms**

*Product Style:*

**Jarrah Side Panels**

*Colour:*

**Wood / RAL 7031 (Blue Grey)**

*Dimensions:*

**36" x 32" x 36"**

## 9.6 COLOUR

Colour serves to enliven and animate public spaces, helping to create an exciting and vibrant environment. The approach is to provide a grounding of subdued colour to basic components in public realm, upon which brighter colours can be applied in the form of private components such as buildings, signage, furniture, planting, etc. The paving palette also provides for a combination of charcoal and grey tones as a base colour while encouraging use of accent colour and richer materials in prominent areas.

### GROUNDING COLOUR SAMPLES

"Natural" Paver Colour

"Charcoal" Paver Colour

RAL 7031: Colour for Site Furniture

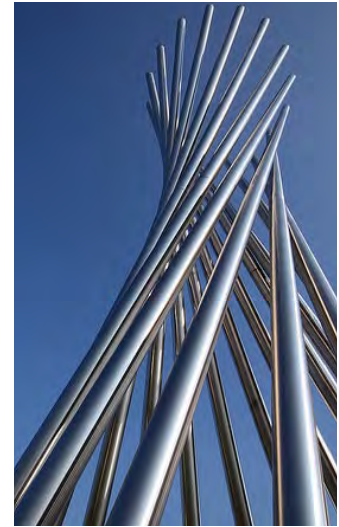




## 9.7 PUBLIC ART

It is anticipated that a Public Art Plan will be prepared that will set out the policies and procedures for integration of art works into the public realm. Public art installation should reinforce and aspirations for the project by including a strong TFN / Coast Salish focus with direct involvement by TFN artists. It is expected that the public art process will address issues such as location, scale and form of proposed art works. It is expected that public art will be prominently included within the Village Centre and the green network (including the Great Blue Heron Way) & parks.

The following are some examples of placed and integrated art.





## 9.8 SIGNS AND WAY FINDING

This category requires a more fully developed plan that will become a supplement to these guidelines. The intent is to strongly express the TFN / Coast Salish themes of the project by incorporating images and iconic elements from the TFN culture. There is to be a strong relationship between the sign system and public art program. Signs within the public realm fulfill two functions, namely, project identity and way finding. Project identity signs are to be located at the site arrival points. They serve to welcome residents and visitors to the community. The form and use of materials and colour should take into consideration the other elements of the public realm so that a consistent design vocabulary is achieved. The way finding system provides orientation information to those visiting the community. This could include themed street signs, directional signs, maps and other elements.

















## 9.9 FENCING AND WALLS

Fencing design is to be controlled through these guidelines in order to avoid use of a wide range of varying styles. Variations are, however, allowed with Executive Board approval as long as a rationale is provided by the applicant within the Neighbourhood Plan Context Statement. In residential areas, the intent is to achieve a variety of fence treatments by altering design, pattern and colour along a street or lane. Hedging is allowed as an alternate treatment. Fencing can be omitted in areas where privacy is not a concern or to create variety within the streetscape. In some cases, retaining walls are likely to be required. Free-standing walls are also allowed in place of fencing to create the desired variety of streetscape treatments. Where walls are proposed, visible surfaces are to be stone or textured concrete. In some cases where not exposed to public view, modular wall systems will be considered but are not encouraged.





Fence Design Palette	
1	<p>Wood Fence</p> <ul style="list-style-type: none"> <li>horizontal slats</li> <li>height max. 1.2m [4'] for front, max. 1.8m [6'] for side and back</li> <li>max. 100mm [4"] slat spacing</li> <li>various slat thicknesses allowed</li> <li>earthy tones only (brown, black, grey)</li> <li>metal posts allowed</li> <li>no lattice panels allowed</li> </ul>    
2	<p>Metal Fence</p> <ul style="list-style-type: none"> <li>vertical pickets</li> <li>height max. 1.2m [4'] for front, side, and back</li> <li>max. 100mm [4"] picket spacing</li> <li>various slat thicknesses allowed</li> <li>earthy tones only (brown, black, grey)</li> <li>no vinyl panels allowed</li> </ul>    
3	<p>No Fence Option</p> <ul style="list-style-type: none"> <li>lawn/low shrub planting</li> <li>hedge <ul style="list-style-type: none"> <li>height max. 1.2m [4']</li> <li>recommended species: <i>Buxus</i> species, <i>Prunus</i> species, <i>Taxus x media</i> 'Hicksii' (male form), <i>Thuja occidentalis</i> 'Smaragd'</li> </ul> </li> <li>walls <ul style="list-style-type: none"> <li>textured concrete walls</li> <li>stone walls</li> <li>modular walls are discouraged</li> </ul> </li> </ul>    



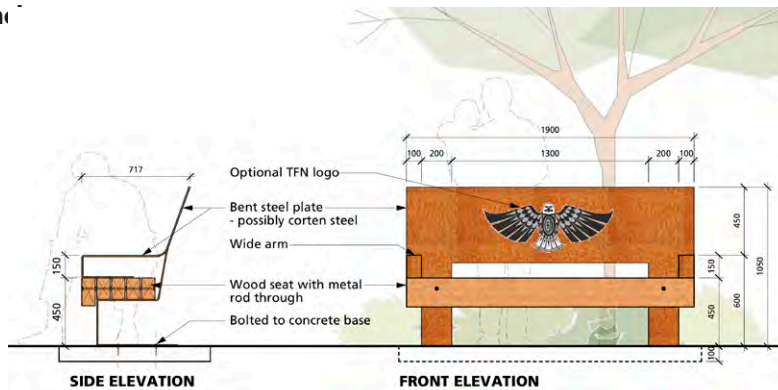
## 9.10 CUSTOM COMPONENTS

Following are custom components that are required to be introduced at key places within the community, such as the community entry, neighbourhood entries, and various public spaces. These components reflect the TFN culture. The use of these components throughout the neighbourhoods will help to support the objective of creating a unified community that reflects TFN culture.

Cedar wood combined with the blue colour of the TFN logo is to be the main material for these elements to reflect the TFN culture. In addition to public art elements in section 9.7, these custom components will also serve as opportunities to incorporate works of TFN artists.

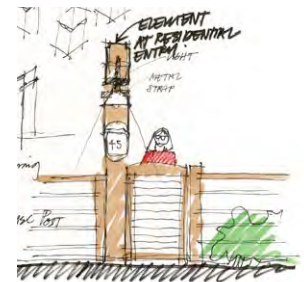
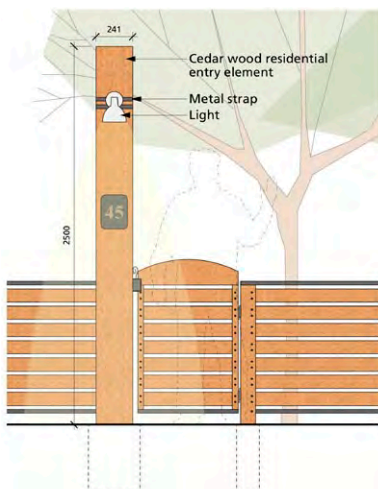


Ben



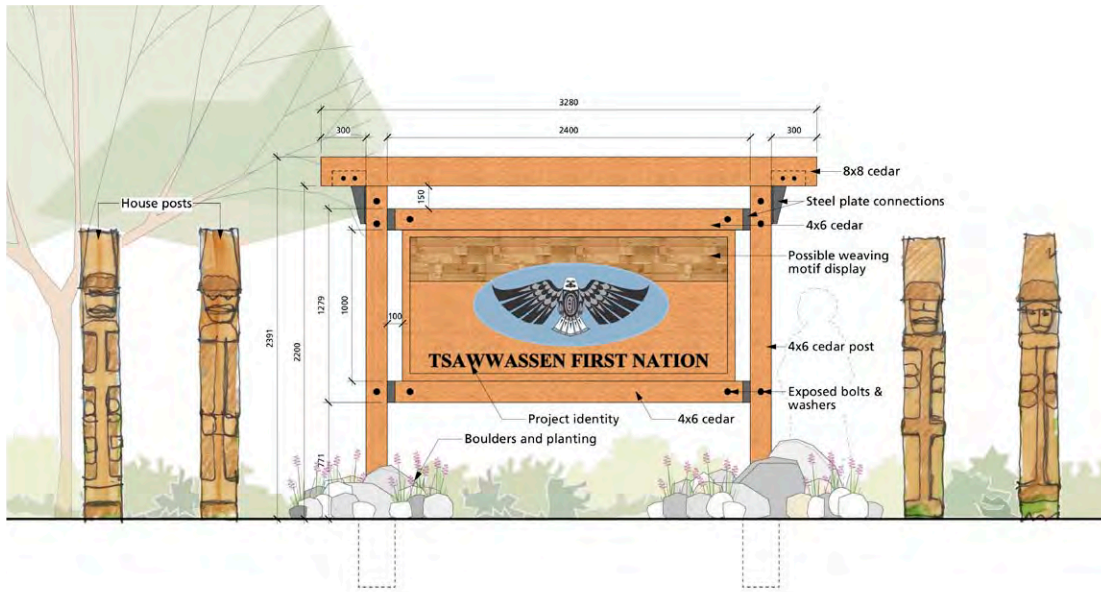
Earlier Sketch - Custom Bench

### Residential Entry



Earlier Sketch - Residential Entry

## TFN Site Entry Sign

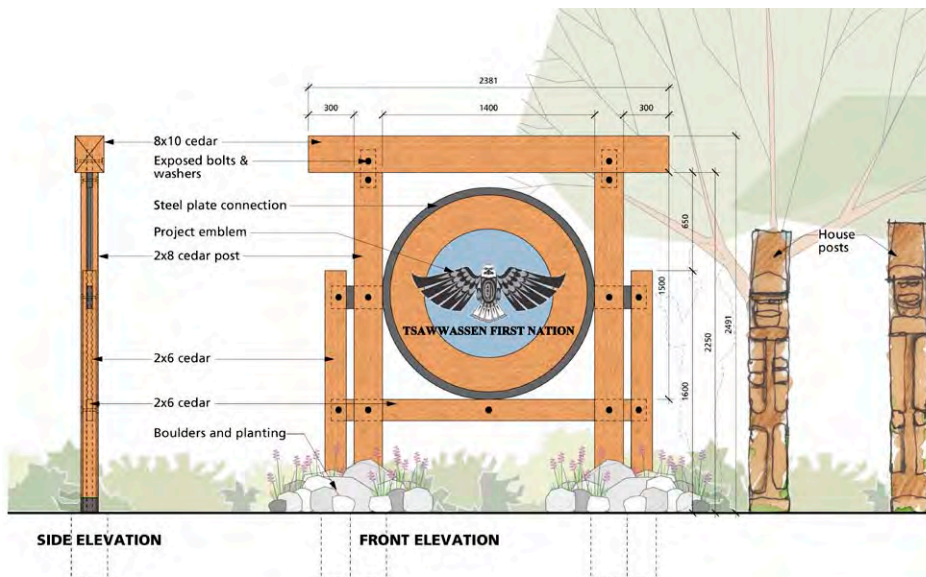


Earlier Sketch - TFN Site Entry Sign



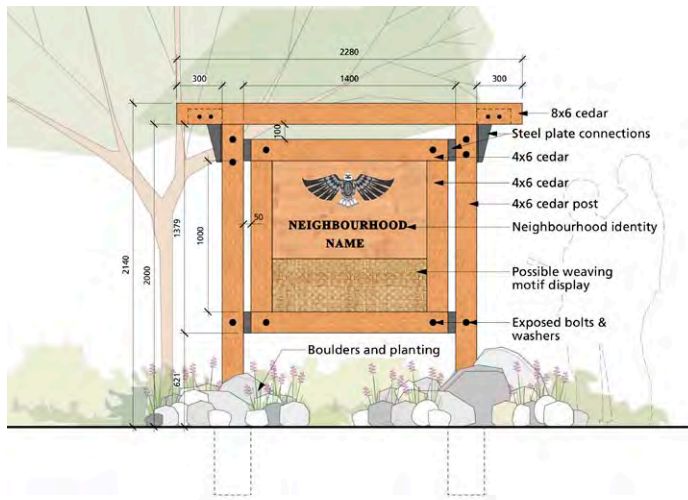
Earlier Sketch - TFN Site Entry Sign Alternative

## TFN Site Entry Sign Alternative



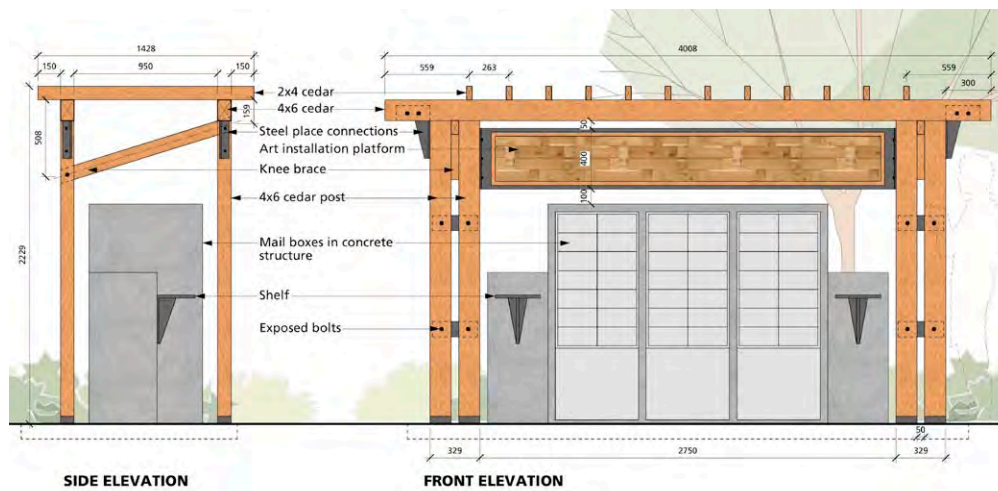


## Neighbourhood Entry Sign



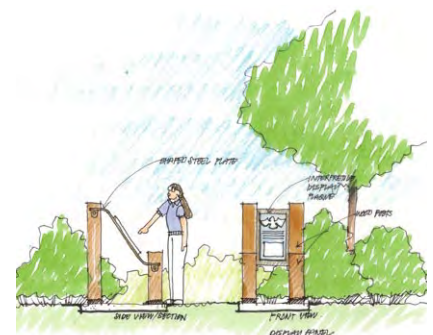
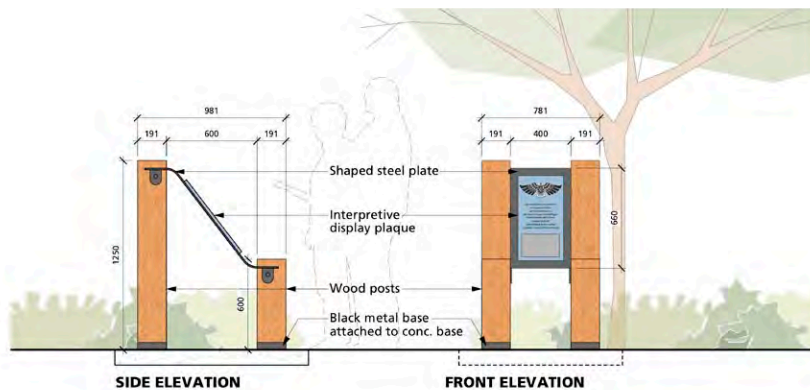
Earlier Sketch - Neighbourhood Entry Sign

## Mail Boxes Structure



Earlier Sketch - Mail Boxes Structure

## Display Panel



Earlier Sketch - Display Panel





