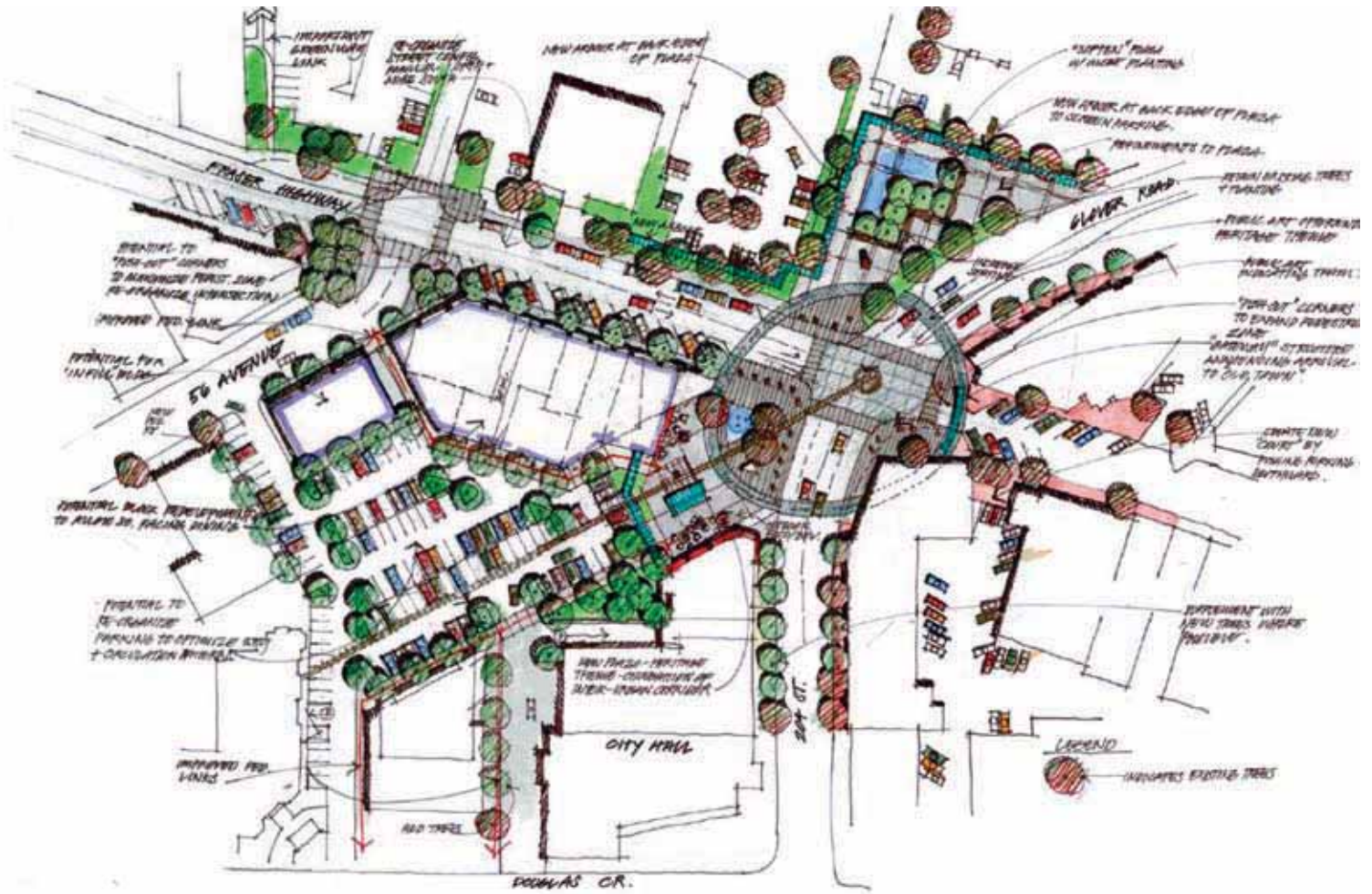


DOWNTOWN LANGLEY MASTER PLAN - PHASE 3

public realm plan: "from grey to green"



JANUARY 11, 2010

CITY OF
LANGLEY



CONTENT

1.0 EXECUTIVE SUMMARY	06
2.0 INTRODUCTION	10
3.0 HISTORY OF LANGLEY	14
4.0 OBSERVATIONS, DESIGN AND SUSTAINABILITY PRINCIPLES	16
4.1 Observations	16
4.2 Public Realm Plan Design Principles	17
4.3 Public Realm Plan Sustainability Principles	19
5.0 DIAGRAMS - "Setting the Table"	20
6.0 "BIG MOVES"	26
7.0 PUBLIC REALM GUIDELINES	28
7.1 "Downtown Core" Area	28
7.2 "Downtown Realm of Influence" Area	44
7.3 "Gateway Streets"	50
7.4 "Greenway Streets"	54
7.5 "Innes Corners-the Heart of Downtown"	60
7.6 "McBurney Lane" Special Design Area	62
8.0 PLANTING	64
8.1 Street Trees	64
8.2 Boulevard and Median Planting	68
9.0 PUBLIC REALM COMPONENTS	70
9.1 Ornamental Street Lights	72
9.2 Banners and Hanging Baskets	74
9.3 Benches, Trash Receptacles, and Bollards	76
9.4 Bicycle Racks	77
9.5 Paving Materials and Tree Grates	78
9.6 Public Art and Feature Elements	80
9.7 Wayfinding and Signs	81
10.0 COSTING	82
10.1 Public Realm Costing	82
10.2 Implementation / Pilot Project Options	82
10.3 Public Realm Costing Data	85
11.0 COMPONENTS APPENDIX	92
11.1 Lights	92
11.2 Benches	94
11.3 Trash Receptacles	94
11.4 Bollards	95
11.5 Paving Materials	95
11.6 Tree Grates	96
11.7 Bike Racks	96

ACKNOWLEDGEMENTS

The consulting team thanks the following individuals who generously contributed their time and expertise to the planning process for the Public Realm Plan.

City of Langley Council

Mayor Peter Fassbender
Councillor Jack Arnold
Councillor Dave Hall
Councillor Teri James
Councillor Gayle Martin
Councillor Rudy Storteboom
Councillor Rosemary Wallace

City of Langley Staff

Francis Cheung, Chief Administrative Officer
Gerald Minchuk, Director of Development Services & Economic Development
Roy Beddow, Deputy Director of Development Services & Economic Development
Len Walters, Parks Operations
Guy Martin, Parks Operations
Gary Vlieg, Director of Engineering
Bob Hummel, Engineering Operations
Dave Lundberg, Engineering Operations

The Community

Residents who took the time to attend the open house and provide valuable feedback to the consulting team.

The Consulting Team

Perry + Associates Landscape Architecture and Site Planning

In Association with
Michael von Hausen, MVH Urban Planning and Design
Don Wuori, Wuori Design Consultants

November, 2009

1.0 EXECUTIVE SUMMARY

The City of Langley is about to move forward with the vision of a sustainable, thriving, pedestrian-oriented mixed-use compact downtown. This document, the Public Realm Plan -Downtown Master Plan Phase 3, supports and reinforces the Downtown Master Plan Phases 1 and 2 by providing a complementary vision and framework specifically for the public realm i.e. all publically accessible land including streets, lanes, sidewalks, boulevards, parks and open spaces.

The Public Realm Plan is a planning, urban design and regulatory document that City staff will utilize when planning or reviewing proposed redevelopment within and adjacent to the public realm. Land owners, developers, architects, landscape architects and other design professionals will also consult the Public Realm Plan.

At its broadest, the Public Realm Plan provides an overall planning concept that anticipates future growth and redevelopment patterns within the downtown. It attempts to identify critical spatial relationships, historic patterns and places, and the gateways and linkages that connect the community to its downtown. At the detailed level, the Public Realm Plan provides guidance for specific streetscape and open space design.

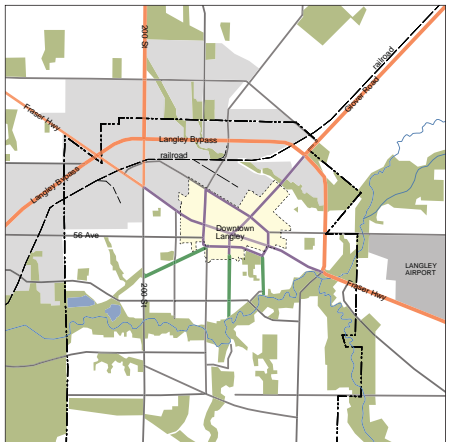
1.1 The Public Realm Plan Process

The Public Realm Plan is the result of consideration and dialogue between City staff, design consultants, City Council and the public. Senior staff and Council reviewed preliminary ideas and principles prior to presentation at a public information meeting. Preliminary ideas were revised and further developed based on valuable public input resulting in a draft document and a subsequent round of reviews.

1.2 Observations and Principles

The Public Realm Plan outlines observations, design and sustainability principles including:

- Transportation forms the original story of Langley. The influence of major roadways and past transportation networks has shaped a unique downtown street and development pattern. Celebrate the convergence of roads, rails and trails.
- It is important to retain and reinforce a traditional small town scale and rhythm through design, colour and materials selection.
- An exciting and rich pedestrian environment can be created through design and public art.
- Pedestrian, bicycle and transit use should be encouraged through traffic calming, comfort, wayfinding and connectivity improvements.
- "From Grey to Green" – planting and sustainable initiatives should be integrated into the downtown streetscapes.



1.3 The Big Moves

With in the Public Realm Plan document, a number of “big moves” to achieve stated design principles and public priorities are outlined. The big moves are intended to create a framework or structure for the downtown that reinforces the Master Plan. The big moves are as follows:

- **Create a Pedestrian-Priority “Downtown Core”.** Define a traffic-calmed “downtown core” with a local transit “Trolley Bus” loop around the entertainment, industrial arts, civic and core (retail) “special design” districts. Expand angled parking, shorten pedestrian crossings, and concentrate a high level of intervention, furniture and pedestrian amenities within the core. Incorporate sustainable initiatives including greening the streets and rain gardens.

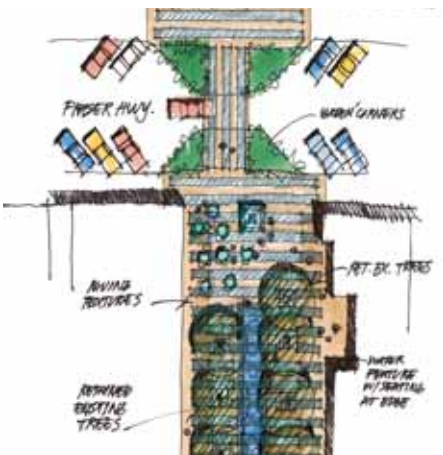
- Enhance the **“Realm of Influence”** – the downtown areas immediately surrounding the Downtown Core. These areas will contain dense mix-use development supporting the Downtown Core. Shorten pedestrian crossings and concentrate a similar, but distinct, high level of intervention, furniture and pedestrian amenities in these areas. Incorporate sustainable initiatives including greening the streets and rain gardens.

- Designate **Gateway Streets** leading to the Downtown. Designate existing arterials in the four cardinal directions as “gateway streets” to assist with wayfinding to the downtown. Provide signs and identifiable public realm elements and improvements, such as banners and iconic lights to introduce downtown character, and create “arrival” nodes at the downtown “threshold”.

- Designate **“Greenway Streets”** extending from downtown southwards to connect with existing residential areas and the Nicomekl River greenbelt. Encourage and facilitate pedestrian and cycle travel to the downtown. Provide greenway links to complete connectivity. In particular develop and theme Michaud Crescent, roughly the historic BC Electric Railway alignment, as the “Interurban Greenway”.

- Reinforce and Redevelop **Innes Corners** as the “Heart” of Downtown. Roads, rails and trails converge at Innes Corners. Celebrate this historic crossroads location with the creation of a new railway themed civic plaza adjacent to City Hall and upgrade the three corners opposite.

- Redevelop **McBurney Lane**. This is an important public open space, which has fallen into disrepair but has the potential to be revitalized and extended as an important pedestrian link from the vital retail shops along Fraser Highway to Spirit Square at Douglas Park.



1.4 Public Realm Guidelines

Specific streetscape designs and treatments are recommended for the revitalization and reinforcement of each downtown area, open space, or special street. Prototypical standard treatments are illustrated as well as specific demonstration plans that illustrate the application of standard treatments to particular case study examples.

1.5 Planting

Street tree infill planting and supplementary boulevard and median planting are recommended as part of the Downtown Public Realm Plan in order to complete streetscape continuity, “green” and beautify the downtown, and reinforce the public realm. “Street bulges” are recommended at intersections to shorten pedestrian crossings and provide “greening”. Where possible street bulges may include “rain gardens” to intercept and detain storm water runoff allowing for infiltration into the subsoil and thus reducing demand on infrastructure.

1.6 Public Realm Components

Over time furniture and materials have worn, the colours gone out of fashion, and mismatched components have been added. The public information meeting determined that residents were in favour of traditional rather than modern street furniture and were in favour of retaining the iconic “New Westminster” ornamental lights.

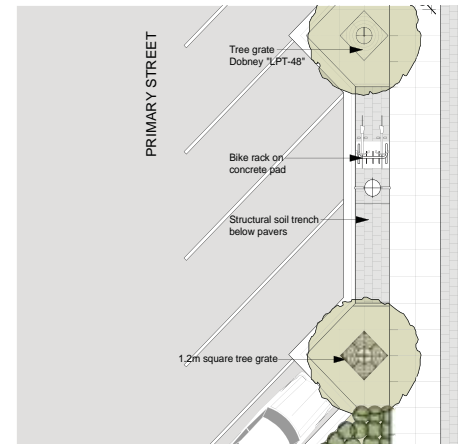
A “family” of furniture for the downtown, in elegant traditional black (RAL9005, semi gloss), has been selected to complement the “New Westminster” lights. This family of furniture, while traditional, is classic in design and will be suitable for existing and future streetscape and open space redevelopment.

1.7 Costing

The Public Realm Plan is intended to be implemented in conjunction with the recommendations of the Downtown Master Plan. With a few exceptions, the realization of public realm improvements will be in conjunction with future adjacent re-development.

To begin implementation of the Public Realm Plan, and to generate interest and momentum, it is recommended that the City consider few specific pilot or demonstration projects. Recommendations and options for some initial projects are provided complete with costing.

Order of magnitude public realm costing is provided for downtown system-wide improvements to lighting and street trees as well as for complete example projects and streetscapes. Unit costs have been extrapolated and applied to each individual downtown street, gateway street and greenway. A summary of all costs is provided for information only.





1.8 Recommended Companion Studies

Companion studies are recommended to build upon and augment the three phases of the Downtown Master Plan.

- **Wayfinding and Sign Plan.** Review and develop a strategy for signs and “way-finding” within the downtown including municipal branding, directional, cultural, heritage, and commercial signs.
- **Update OCP Architectural Guidelines.** Update existing guidelines to ensure that form and materials of future and renovated buildings complement the character and texture of the Downtown, animate the streets and public spaces, reinforce the specifics of the Downtown Master Plan and the Public Realm Plan, and express the eight special design districts.
- **Public Art Plan.** Develop a Public Art Plan for the downtown.
- **Angled Parking Strategy.** Undertake an engineering study to determine opportunities for expansion of angled parking where feasible within the downtown core.
- **Façade Funding Program.** Explore funding options for the improvement of existing building facades within the downtown.
- **Downtown Trolley Bus Study.** Consider the feasibility of a downtown trolley bus.

2.0 INTRODUCTION

The City of Langley is about to move forward with the vision of a sustainable, thriving, pedestrian-oriented mixed-use compact downtown. The Downtown Master Plan Phase 1 (2007) and the subsequent Urban Design and Economic Analysis Phase 2 (2008) set the stage for an exciting future with an action plan and framework to achieve a redeveloped, concentrated and connected downtown featuring eight special design districts. The Public Realm Plan Phase 3 (2010) supports and reinforces the Downtown Master Plan by providing a complementary vision and framework for the creation of a cohesive and exciting public realm.

2.1 The Public Realm Plan

The public realm comprises all publicly accessible land including streets, lanes, sidewalks, boulevards, parks and open spaces. The Public Realm Plan is a planning and urban design document that establishes a broad vision, a framework and specific guidelines for future redevelopment within the public realm. The document provides the City with the tools for creating a cohesive and understandable public realm that can be implemented incrementally over time.

The Public Realm Plan is also a regulatory document that City staff will utilize when planning or reviewing proposed redevelopment within and adjacent to the public realm. It complements policies and guidelines for land use and architectural form as documented in the Downtown Master Plan. Land owners, developers; architects, landscape architects and other design professionals will also consult the Public Realm Plan when planning redevelopment within the downtown in order to determine a strong relationship between new built form and the street. It will be the developer's responsibility to improve the public realm adjacent to his project in accordance with the Plan.

At its broadest, the Public Realm Plan provides an overall planning concept that anticipates future growth and redevelopment patterns within the downtown. It attempts to identify critical spatial relationships, historic patterns and places, and the gateways and linkages that connect the community to its downtown. It determines and concentrates public realm systems and improvements and builds on existing character. At the detailed level, the Public Realm Plan provides guidance for specific streetscape and open space design and determines the components that comprise a suitable design palette, or "kit of parts", that complements and reinforces existing character and structure.



City of Langley - Downtown Master Plan (2007)

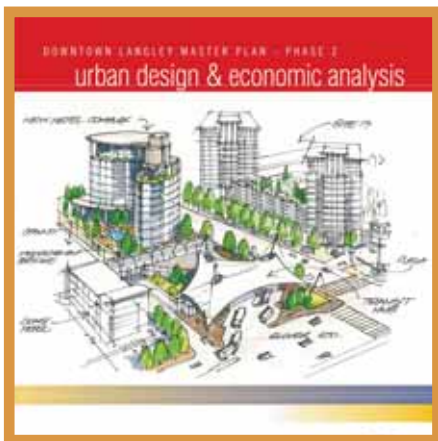


2.2 Relevant Planning Documents

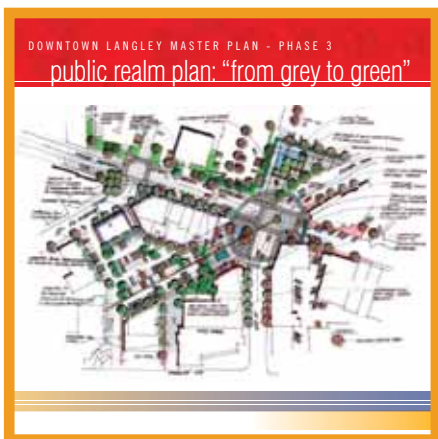
The Public Realm Plan builds upon, and must be read in conjunction with, the Downtown Master Plan. Streetscape improvements alone will not create an exciting and vibrant downtown. It is the relationship between architecture, land use and the street that together creates and animates the public realm.

Relevant planning documents include:

- The City of Langley Downtown Master Plan Phase 1 (2007)
- The City of Langley Downtown Master Plan Phase 2 Urban Design and Economic Analysis (2008)



Downtown Langley Master Plan Phase 2 (2008)



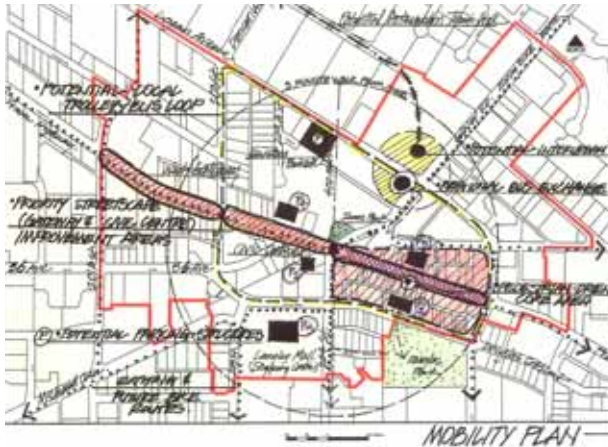
Downtown Langley Public Realm Plan
Downtown Master Plan Phase 3 (2009)

2.3 Key Diagrams from the Downtown Master Plan Phase 2

Within the Downtown Master Plan are three important diagrams, reproduced here, which inform the Public Realm Plan. These diagrams are:

- The Concept Plan
- The Mobility Plan
- The Detailed Development Plan

City of Langley Downtown Master Plan 2007



Concept Plan

- "The Urban Design Concept Plan outlines the important physical components and Special Design Districts that will shape the Downtown landscape."

A Gateways to the Downtown area
 B Activity Nodes in the Downtown
 C Corridors - 5 major street corridors in the Downtown

Mobility Plan

- Pedestrian oriented Core area
- Transform West & Central Fraser Highway into a grand boulevard
- Create new Transit Hub for trains, regional buses & Greyhound
- Establish a free downtown "Trolley Bus" / street car loop
- Expand Bikeways & Pedestrian connectors

Detailed Development Plan Illustration

graphically illustrates 8 special design districts

1. Core Area
2. Civic Centre
3. Entertainment District
4. Festival Park
5. West Gateway Boulevard
6. Transit Hub (Prairie Station)
7. Park Avenue
8. Langley Mall

2.4 Recommended Companion Studies

Companion studies are recommended to build upon and augment the three phases of the Downtown Master Plan.

- **Wayfinding and Sign Plan.**

Review and develop a strategy for signs and “wayfinding” within the downtown including municipal branding, directional, cultural, heritage, and commercial signs.

- **Update OCP Architectural Guidelines.** Update existing guidelines to ensure that form and materials of future and renovated buildings complement the character and texture of the Downtown, animate the streets and public spaces, reinforce the specifics of the Downtown Master Plan and the Public Realm Plan, and express the eight special design districts.

- **Public Art Plan.** Develop a Public Art Plan for the downtown.

- **Angled Parking Strategy.** Undertake an engineering study to determine opportunities for expansion of angled parking where feasible within the downtown core.

- **Façade Funding Program.** Explore funding options for the improvement of existing building facades within the downtown.

- **Downtown Trolley Bus Study.** Consider the feasibility of a downtown trolley bus. Precedents indicate similar “free” downtown trolleys can be highly subsidized by advertising and donations. Translink review and approval would be required.



3.0 HISTORY OF LANGLEY

Historically, roads, rails and trails converged at Langley Prairie, now Downtown Langley. In particular the convergence occurred at Innes Corners – arguably the ‘heart’ of Downtown.

The City of Langley’s story is that of a service and cultural centre developing in the early 20th century around the intersection of Yale Road (Fraser Highway), the BC Electric Railway (the Interurban), Pacific Highway and the Smuggler’s trail.

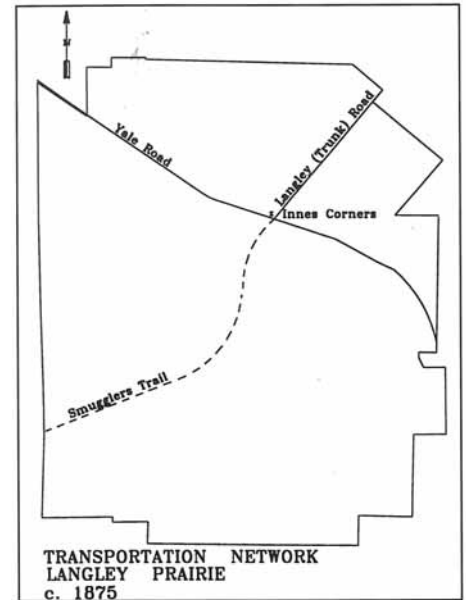
Little remains of the Langley of the early 1900’s that would inform the Public Realm Plan other than the pattern of commercial buildings and their relationship to the street. Historic photos show an animated commercial centre composed of tightly spaced one and two storey clapboard buildings built to the property line. The shops were generally small with wide glass windows, awnings, and shingle signs much like the Fraser Highway retail strip that remains to this day east of Glover Road. The street featured boardwalks initially, with concrete sidewalks by the 1930’s, and diagonal curbside parking, again much like the retail core area of the Fraser Highway of today. The photos show a cheery mix of pedestrians and children on bicycles.

The charm of historic Downtown Langley (Fraser Highway from Glover Road to 206 Street) is the tight pedestrian scale and rhythm of the small shops fronted by tight sidewalks and angled parking that remains to this day. This is in contrast to much of the newer downtown that features overly wide roads and expansive parking lots.

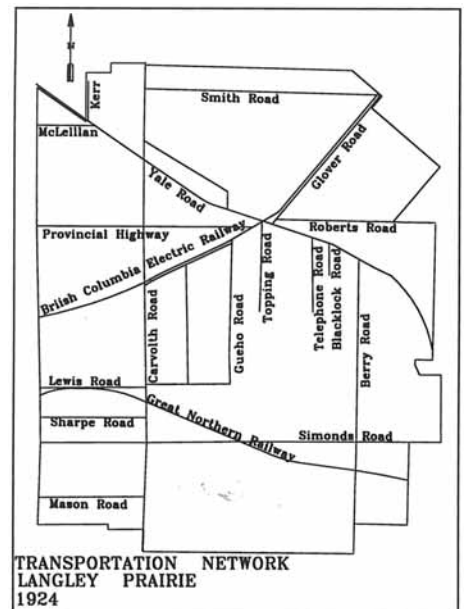
3.1 Lessons for the Public Realm Plan

The Public Realm Plan references the historical significance of the former Langley Prairie and acknowledges the successful scale of the original retail shops and the rhythm of the street. In particular historic references include:

- Reinforcing Innes Corners as the “heart” of Langley and the former location of the BC Electric train station.
- Recognizing the BC Electric train route along Michaud Crescent in the form of an “interurban” themed greenway.
- Retaining and reinforcing small town scale and rhythm.
- Reinstating angled parking and narrowing carriageways where possible.
- Encouraging commercial shingle signs and awnings.
- Encouraging pedestrian and bicycle use through traffic calming measures and connectivity improvements.
- Retaining and retrofitting existing “traditional” light poles and bollards.
- Returning to a more traditional colour scheme for street furniture.



Langley transportation network, c.1875



Langley transportation network, c.1924



B.C. Electric Railway crossing, Langley Prairie



Yale Road, c.1934 - 1939



B.C. Electric Railway depot, Langley Prairie

4.0 OBSERVATIONS, DESIGN AND SUSTAINABILITY PRINCIPLES

A number of observations were recorded and a number of design and sustainability principles were generated early in the process of creating the Public Realm Plan. These observations and design principles informed decision making for the Public Realm Plan both at the broad scale and at the detail level.

4.1 Observations

- Transportation forms the original story of Langley. The influence of major roadways and past transportation networks has shaped a unique downtown street and development pattern.
- The convergence of roads, rails and trails has made Innes Corners the hub of downtown Langley. This convergence should be acknowledged and celebrated.
- Air photos indicate a pattern of “grey to the north and green to the south”. Industrial and large-scale commercial land uses dominate to the north, green space and residential uses dominate to the south. Pedestrian connectivity to the south as far as the Nicomekl River green belt should be emphasized in particular.
- The Langley Bypass to the north diverts traffic around the core of the downtown allowing the traffic-calmed retail section of the Fraser Highway to remain and possibly be expanded westward.
- The Master Plan illustrates a potential downtown trolley route which loops around the core of the downtown area. This route provides an opportunity to strengthen an inner traffic bypass around the downtown core thus allowing for additional traffic calming within the core.
- Public realm improvements are sporadic across Downtown Langley and are concentrated in the east. Many of the streetscape elements are in need of updating or replacement. Furniture tends to be mis-matched and the colour scheme, while unique, is outdated. A large inventory of existing ornamental streetlights makes outright replacement uneconomic. Red tone concrete unit paving is worn and surfaces are irregular.
- McBurney Lane is an important public open space, which has fallen into disrepair recently due to vandalism and wear. It has the potential to become an important pedestrian link from the vital retail shops along Fraser Highway to the new Spirit Square at Douglas Park.



4.2 Public Realm Plan Design Principles

- **Pedestrian priority**
Emphasize a walkable downtown best explored by foot.
Create a pedestrian-priority core that includes bicycles and transit.
Entice people out from their cars (but accommodate vehicles).
- **Concentration**
Concentrate land uses, activities, specialty retail and arts downtown.
- **Connection**
Ensure linked pedestrian, cycle, transit system connectivity within and beyond the downtown as per Langley Master Transportation Plan 2004.
Retain a complementary vehicle and road network.
- **Inclusive design & pedestrian comfort**
Ensure convenient street furniture placement and design. All public realm areas should be barrier-free. Curb drops at pedestrian crossings allow for wheelchair access. Tactile and visual warning elements in the sidewalk surface and acoustic traffic signals create safety for visually impaired pedestrians.
- **Wayfinding**
Create a coherent and navigable downtown utilizing city branding and colour scheme.
Incorporate signs and iconic elements that identify, direct, and assist with understanding and movement.
- **Pedestrian safety**
Design for “eyes on the street” and apply CPTED principles.
Provide safe pedestrian road crossings.
- **Character:**
Celebrate the small town.
Complement the existing distinct Downtown character and scale.
Retain the sense of downtown as a special place.
Design and furnish the public realm with appropriate materials, furniture, signs.
- **Vibrancy:**
Ensure a vibrant downtown community.
Create an exciting and rich pedestrian environment through design and public art.
Create a downtown that is interesting, people friendly and active, artistic and livable.

Allow for the ephemeral – accommodate parades and special events, seasonal change.

- **History:**
Acknowledge the historic convergence of roads, rails and trails.
Overlay and express the layers of history.
Celebrate the special places.
Name and interpret historic places and routes.
- **Sustainability:**
Design for an integrated sustainability.
Integrate storm water management into public realm design.
Utilize permeable paving where appropriate and dark-sky compliant lighting.
Use durable, recycled and recyclable materials.
- **Unified:**
Create a cohesive downtown.
Unify and express the whole of the downtown.
Create an integrated community.
- **Themed:**
Provide for a varied downtown experience.
Reinforce and express the eight special design districts through design.
Celebrate arrival points and transitions between design districts.
- **Arrival and celebration:**
Create a hierarchy of linked public spaces and nodes.
Create a civic “heart” for the downtown.
Celebrate arrival with gateways.
Create distinct places (place making)



4.3 Public Realm Plan Sustainability Principles



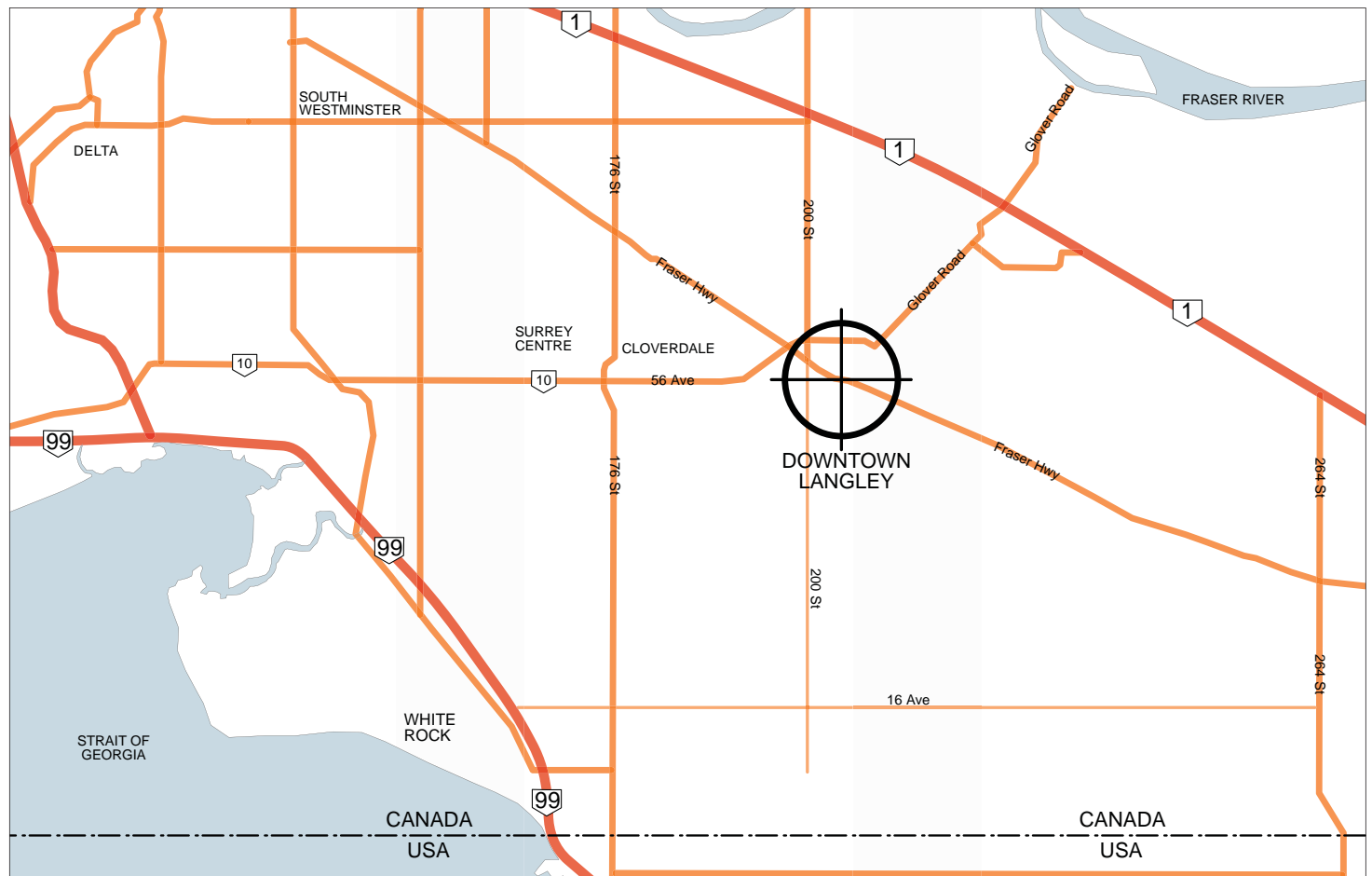
- **Concentrate**
Land uses, activities, retail & civic functions should be tightly spaced to avoid sprawl and encourage walking..
- **Connect**
Provide linked complementary pedestrian, bicycle & transit networks to make using these transportation systems appealing and transitions seamless.
- **Pedestrian Priority**
Emphasize a walkable downtown best explored by foot.
- **Pedestrian Comfort**
Make the walking experience convenient and comfortable by providing benches and safe crossings.
- **Green the Downtown**
Provide new shade trees and shrub planting. Transition the public realm from “grey to green”.
- **Dark Sky compliance and Energy Savings**
Utilize LED or equivalent energy efficient technology & cut-off light fixtures for ‘Dark Sky’ compliance
- **Storm Water Detention**
Create rain gardens & use permeable pavers where practical to slow storm water runoff.
- **Low Water Use**
Utilize drought tolerant plants & minimize irrigation.
- **Recycling**
Utilize materials with recycled content and/or recyclable materials.
- **Local supply**
Source locally manufactured components and materials.

5.0 DIAGRAMS - "Setting the Table"

Patterns of traffic, structure and land use were studied, and observations diagrammed, in order to better understand Downtown Langley in its local and regional contexts. This broad-brush analysis assisted with determining the pattern for broad public realm components such as gateways, arrival points, greenways and traffic-calming potential.

5.1 Context: Location and Traffic

- Downtown Langley is roughly located at the convergence of Fraser Highway & Glover Road.
- The downtown straddles the Fraser Highway.
- Highway 10 bypasses downtown to the north.
- 200th Street provides a major north/south vehicular route west of downtown.
- Highway traffic is largely diverted around the downtown via the Langley Bypass reducing the impact of commuter traffic on the downtown.
- The downtown area is isolated and generally unapparent to highway users.



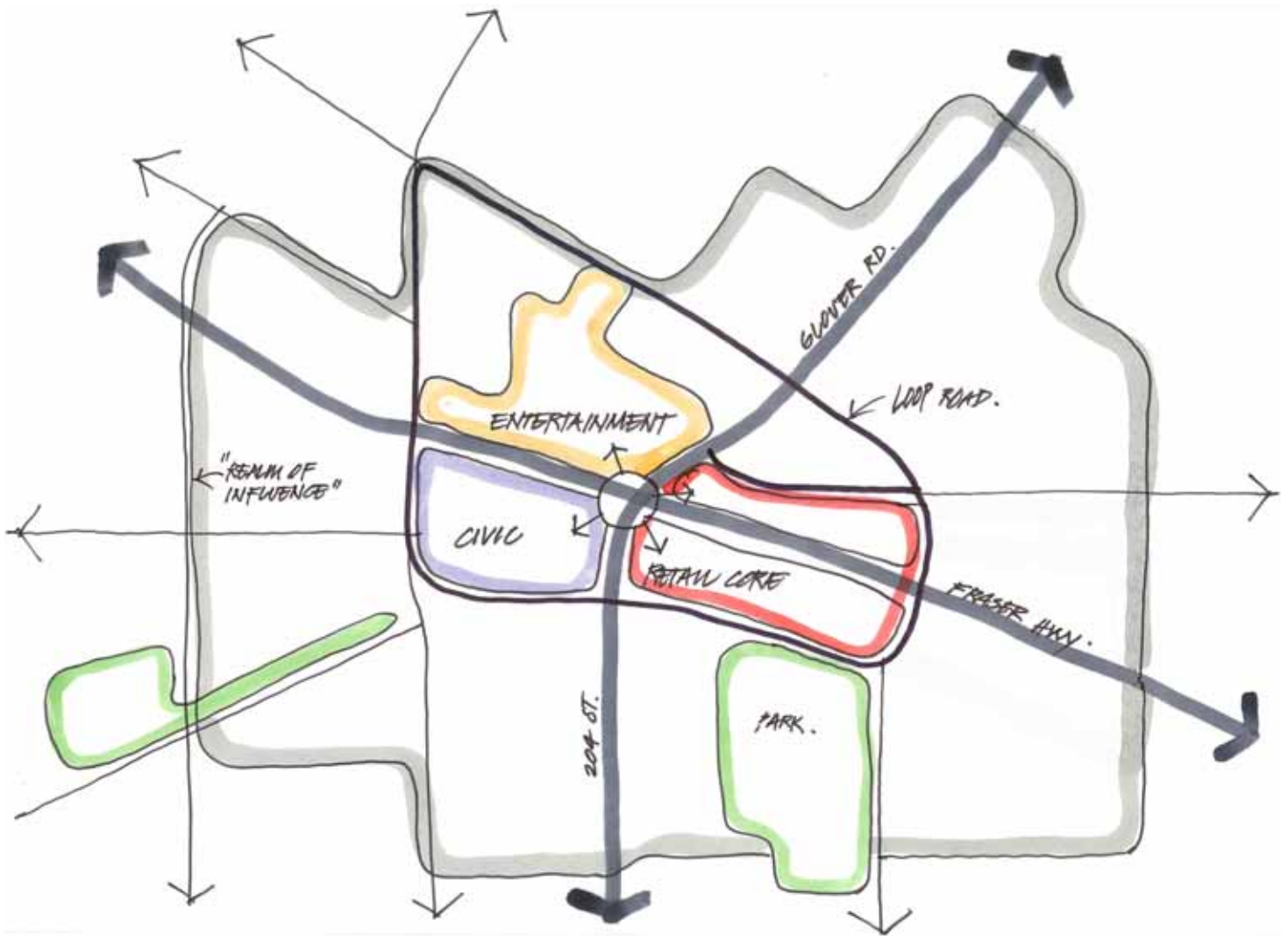
5.2 Context: Roadway and Development Pattern

- Langley's defined downtown area is concentrated geographically.
- The convergence of historic roadways in the downtown is apparent.
- Industrial and large commercial uses predominate to the north of downtown.
- Residential land use & green belts predominate to the south of downtown.



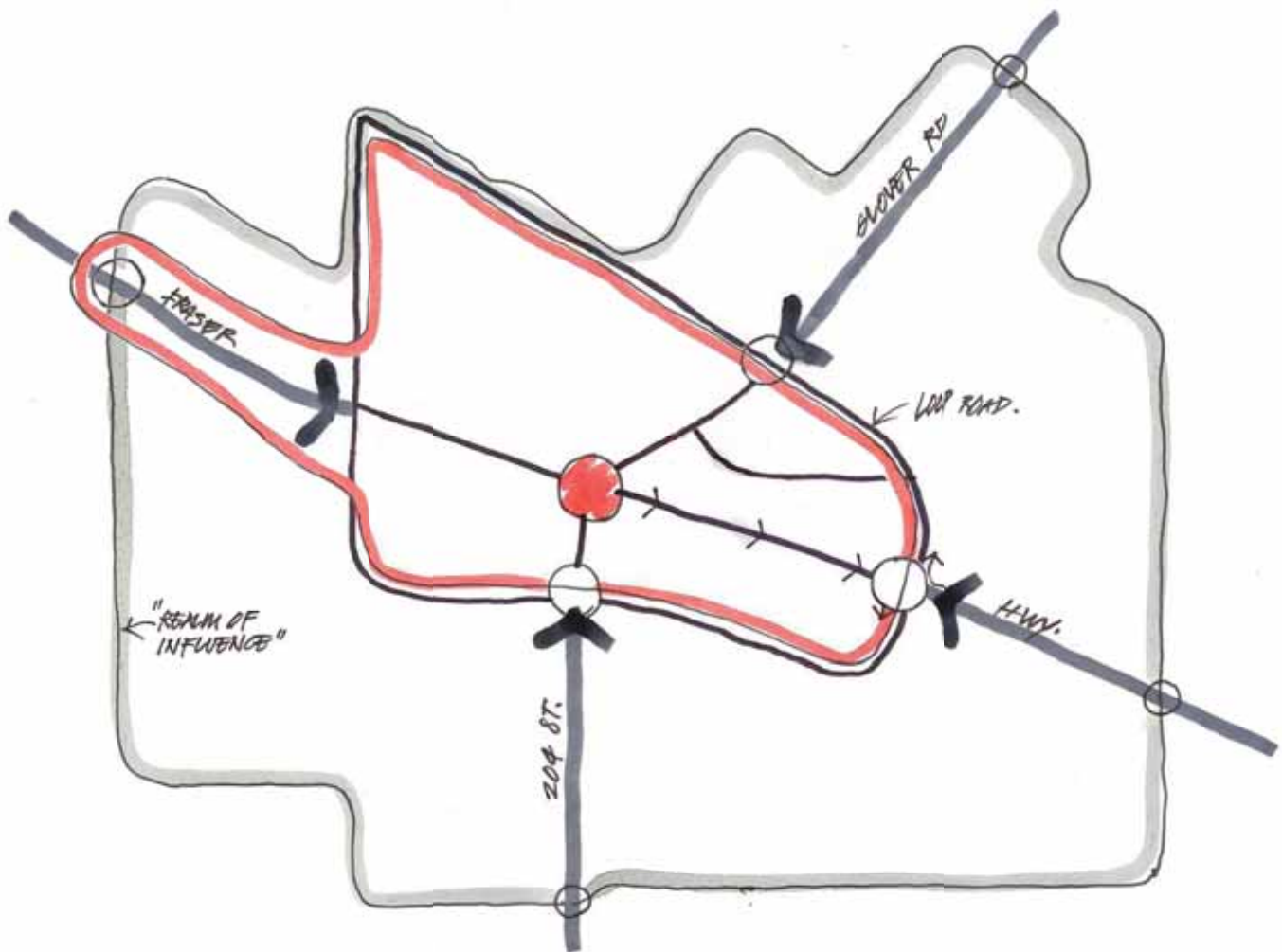
5.3 Downtown "Structure / Realm of Influence"

- Historic roads, rails and trails converge at Innes Corners.
- Master Plan special design districts surround and reinforce Innes Corners as the "heart" of downtown Langley.
- A "realm of influence" (dense mixed-use development) surrounds and further reinforces the Downtown core.
- A traffic-calmed pedestrian priority core is contained within a loop road within the downtown.



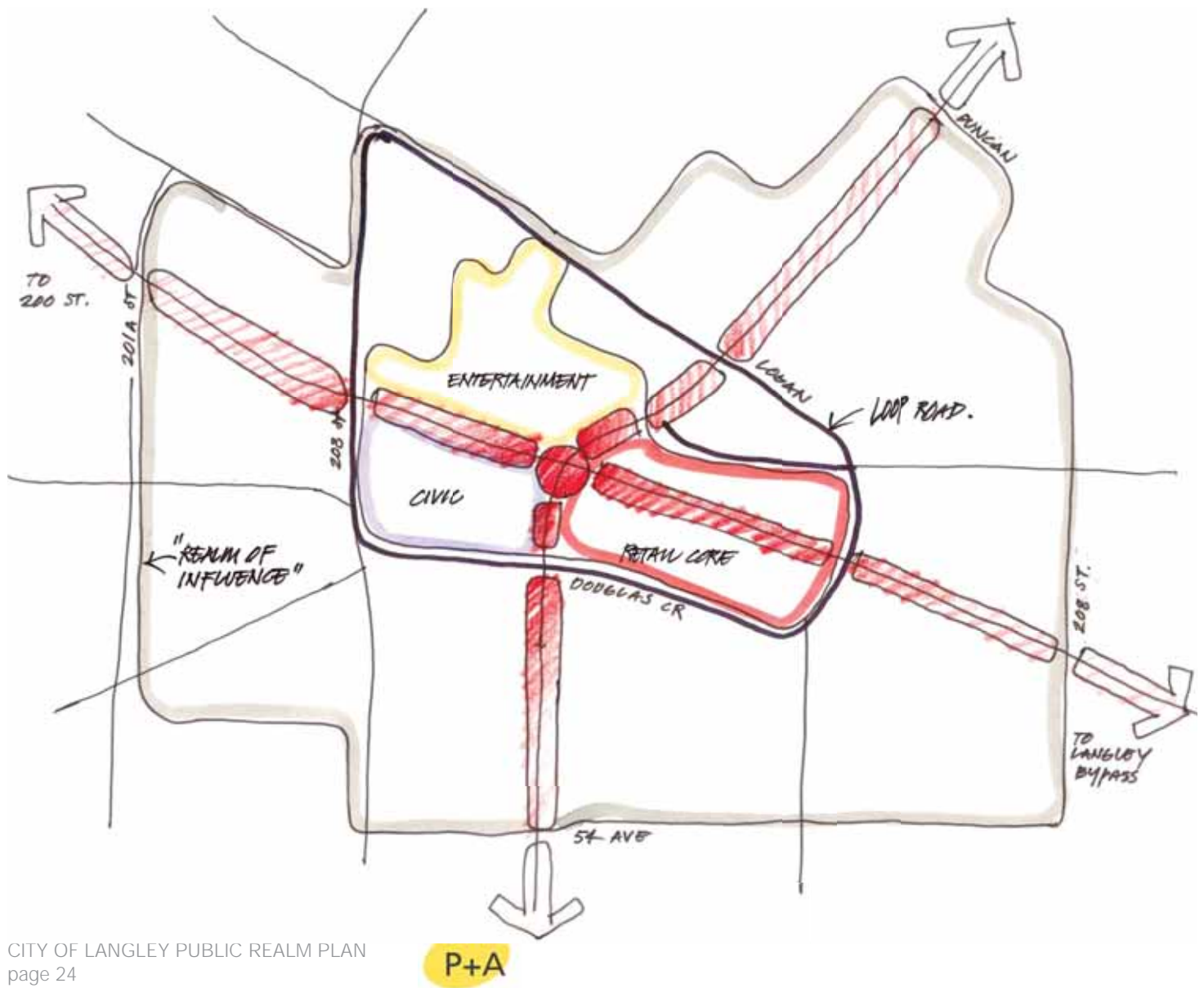
5.4 Downtown "Threshold"

- A loop road contains the Downtown core.
- Arrival at the core of the downtown occurs at the "threshold" where converging roadways meet the loop road.
- Gateway Streets extend in the cardinal directions to major arterials and link the downtown to the region.



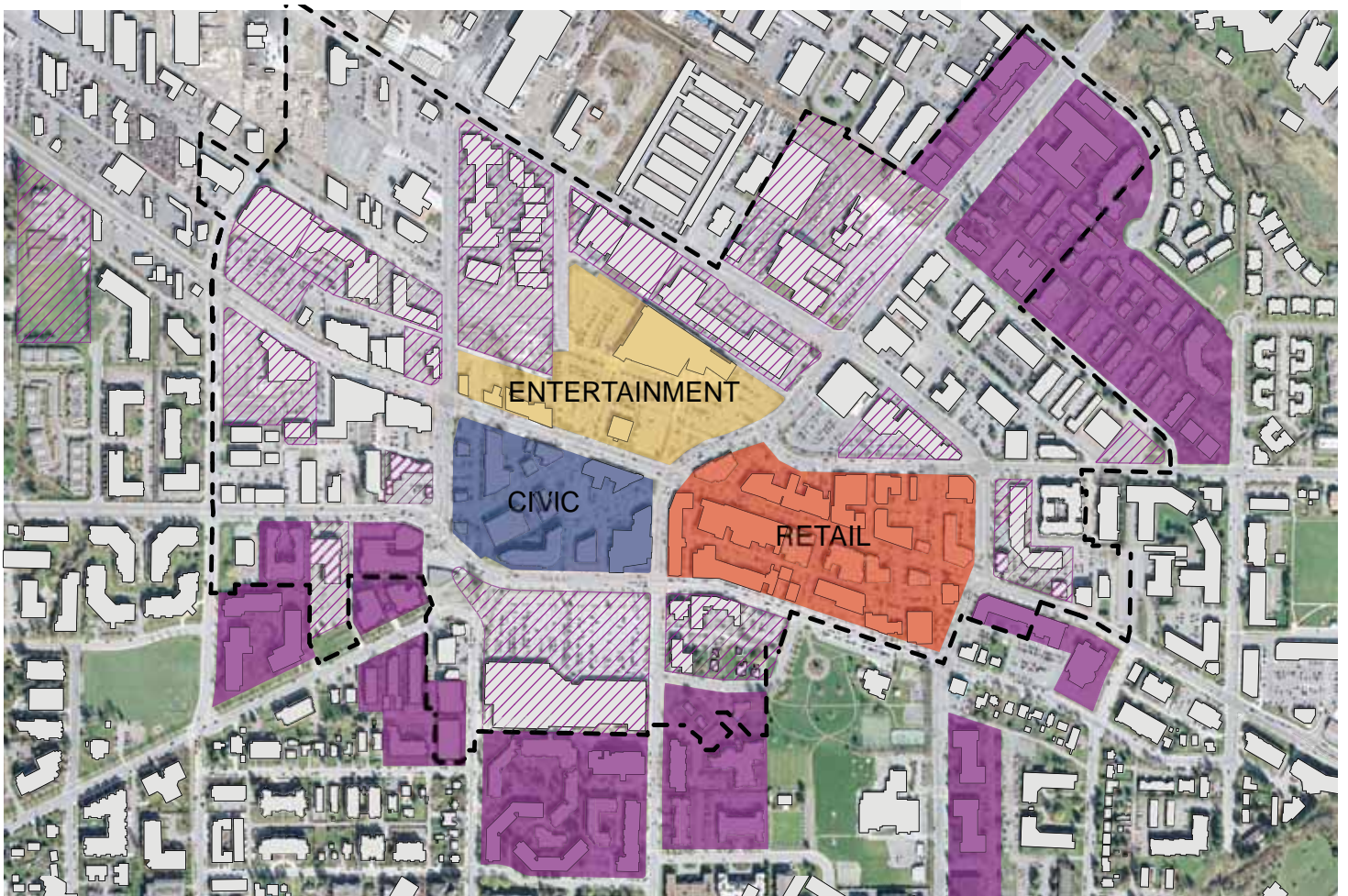
5.5 Downtown "Prominence"

- Main roads converge on the downtown with Innes Corners as the focus.
- The loop road allows for a pedestrian-priority inner core.
- Public Realm components and amenities increase in 'prominence' within the loop.
- Maximum 'prominence' occurs at the heart of downtown - Innes Corners
- Retail, Civic & Entertainment districts reinforce the prominence of converging routes.



5.6 Downtown Land Use/ Density

- Retail, civic and entertainment special design districts form the downtown core.
- Surrounding mixed-use development density contains and supports the downtown core.
- Future development further reinforces the downtown core.

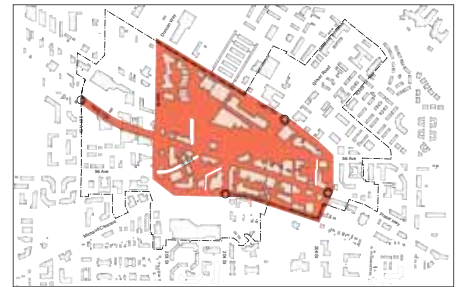


6.0 "BIG MOVES"

The Public Realm Plan recommends six "big moves" in addition to guidelines for the streetscape specifics. The big moves are intended to create a framework or structure for the downtown that reinforces the Master Plan and transitions the public realm from "grey to green". In no particular order the 'big moves' are:

6.1 Pedestrian-Priority "Downtown Core"

- Define a traffic-calmed "downtown core" – the area contained within the proposed local transit "Trolley Bus" loop that comprises the entertainment, industrial arts, civic and core (retail) "special design" districts from the Downtown Master Plan. Provide traffic calming interventions where feasible without impacting transit and left turns. Direct traffic around the downtown core along this loop. Ensure the loop is vehicle-friendly and connected to parking options. Traffic-calm the western Fraser Highway section within the loop by extending angled parking west of the existing section. Shorten pedestrian crossings with curb bulges. Concentrate a high level of intervention, furniture and pedestrian amenities within the pedestrian-priority downtown core area.



6.2 Downtown "Realm of Influence"

- Define the downtown area immediately surrounding the "downtown core" as the "downtown realm of influence". This is the area that is identified in the analysis section as the "realm of influence". This area will contain the dense mix-use development which will support the Downtown Core. It should feature a high level of intervention, furniture and pedestrian amenities in the downtown.



6.3 Gateway Streets to the Downtown

- Enhance existing arterials as "gateway streets" extending from the downtown in the four cardinal directions to assist with wayfinding to the downtown. The gateway streets should extend as far as the next major vehicular intersection (Langley Bypass, 200th Street). Provide signs and identifiable public realm elements and improvements, such as banners and the iconic lights, along the gateway streets to introduce downtown character, and provide "arrival" nodes at the downtown "threshold".



6.4 Greenway Streets to the Downtown

- Enhance existing streets as "greenway streets" extending from downtown southwards to connect with existing residential areas and the Nicomekl River greenbelt trails. Encourage and facilitate pedestrian and cycle travel to the downtown. Provide safe pedestrian and cycle crossings, wayfinding elements and amenities. Provide greenway links to complete connectivity. Introduce some downtown public realm treatments. In particular develop and theme Michaud Crescent, roughly the historic BC Electric Railway alignment, as the "Interurban Greenway".



6.5 Reinforce and Redevelop Innes Corners as the “Heart” of Downtown.



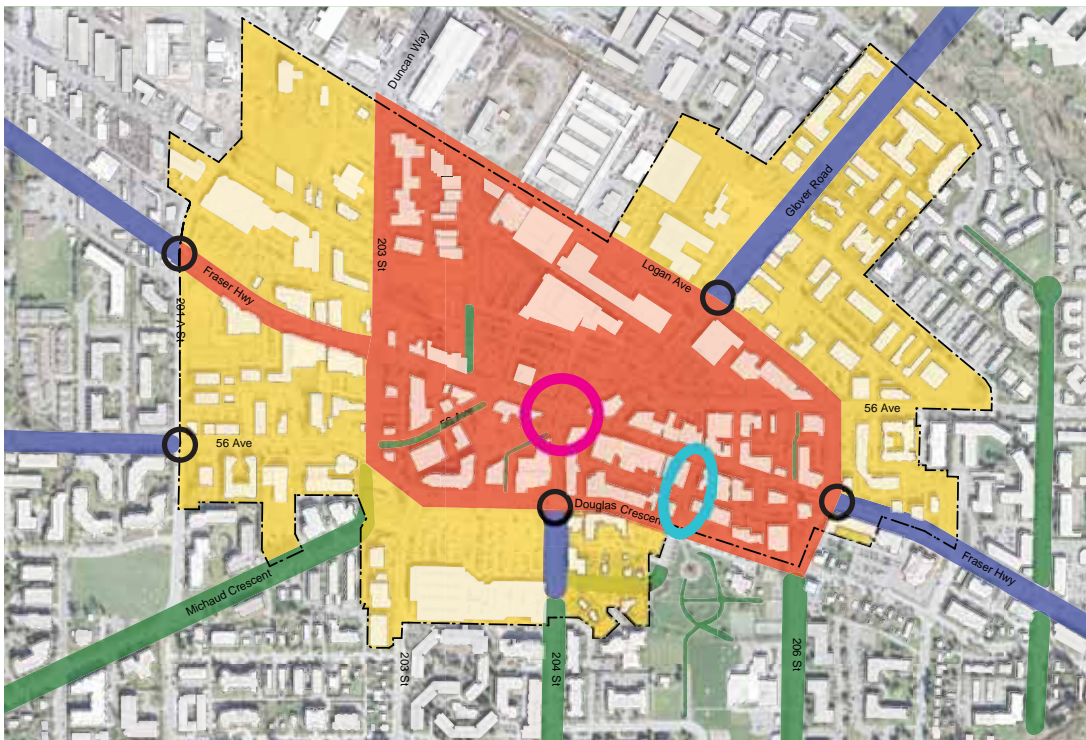
- Roads, rails and trails converge at Innes Corners. Celebrate this historic crossroads location with the creation of a new civic plaza adjacent to City Hall and upgrade the three corners opposite. Provide the highest level of public realm treatments at this location. Integrate a railway theme in recognition of the former BC Electric train station at this location.

6.6 Redevelop McBurney Lane



- McBurney Lane is an important public open space, which has fallen into disrepair recently due to vandalism and wear. It has the potential to become an important pedestrian link from the vital retail shops along Fraser Highway to the new Spirit Square at Douglas Park. Create a revitalized McBurney Lane with a new visual focus, and new public realm upgrades, and extend pedestrian-priority design southwards to Spirit Square.

6.7 Big Moves Summary Diagram



- Downtown Core
- Downtown Realm of Influence
- Gateway Street
- Greenway Street
- Greenway Link
- Arrival
- Innes Corners
- McBurney Lane

7.0 PUBLIC REALM GUIDELINES

Specific streetscape treatments are recommended for the revitalization and reinforcement of each downtown area, open space, or special street identified within the “Big Moves” section. In general, the level of public realm prominence, with related improvements, increases with convergence on the downtown. Prototypical standard treatments are illustrated as well as specific demonstration plans that illustrate the application of standard treatments to particular case study examples.

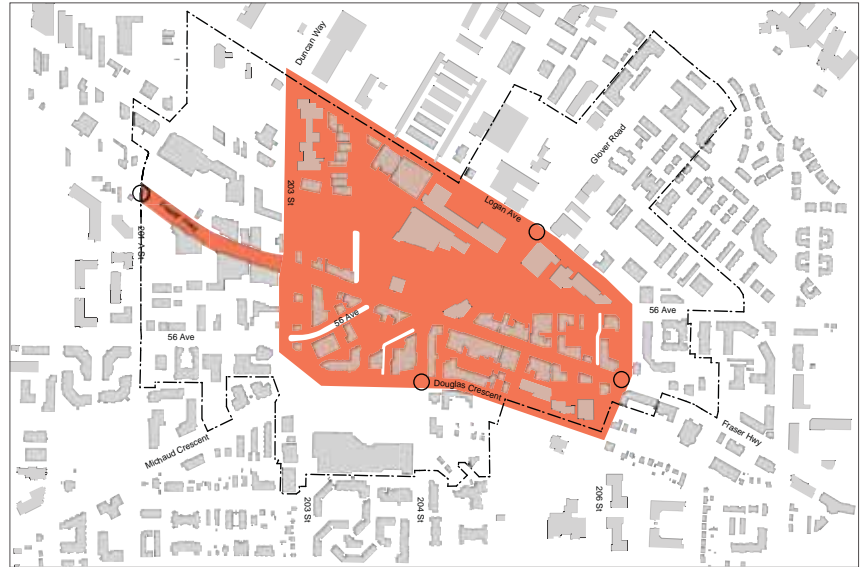
7.1 “Downtown Core” Area

The “downtown core” is roughly defined as the area within the proposed transit “Trolley Bus” route. It comprises the civic, entertainment, industrial arts and core (retail) special design districts described within the Downtown Master Plan. The primary crossroads within this area are the Fraser Highway and Glover Road/204th Street.

Public Realm improvements proposed for this area include:

- Designate the downtown core as pedestrian-priority and design for pedestrian and cyclist safety and comfort. Vehicular traffic is welcome, but speed is decreased and accommodated with extended angled parking in addition to off-street parking improvements.
- Create a new civic boulevard on the Fraser Highway. Extend the existing traffic-calmed angled parking along the Fraser Highway westward to 203 Street. Direct resultant displaced traffic circulation around the proposed “Trolley Bus” route– engineering review and roadway improvements will be required.
- Build upon the existing authentic character of the Fraser Highway (eastern section) retail streetscape through careful selection of materials, street furniture, colour and other elements. Acknowledge that new special design districts within this area will likely be modern in design so public realm improvements must be universal and able to bridge architectural styles.
- Corner bulges are provided to shorten pedestrian crossings and provide opportunity for greening the downtown. Pedestrian nodes will be created that can accommodate benches for pedestrian comfort.
- Existing paving materials, primarily red unit pavers, will be replaced with new paving in grey tones. To minimize future maintenance requirements, unit paving will be used as a highlight material rather than the primary material. Crosswalks and basic sidewalks will be cast concrete.
- The existing furniture colour scheme (teal and maroon) will be replaced with a simple and elegant black (RAL9005, semi gloss) scheme.
- The existing expansive inventory of the iconic “New Westminster” ornamental streetlights will be sandblasted, re-powder coated and upgraded to LED or other equivalent energy efficient source over time. All new lights will be LED or equivalent versions of the same light however the ornate custom bases may be replaced with simple bases in new special design districts.

- An enhanced sign program with enhanced enforcement is recommended to decrease the clutter of sandwich boards signs on the sidewalk while retaining existing character. A separate study is recommended to review all signs types including wayfinding signs.
- Include public art at the threshold arrival nodes as well as throughout the downtown core.



Downtown Core Area

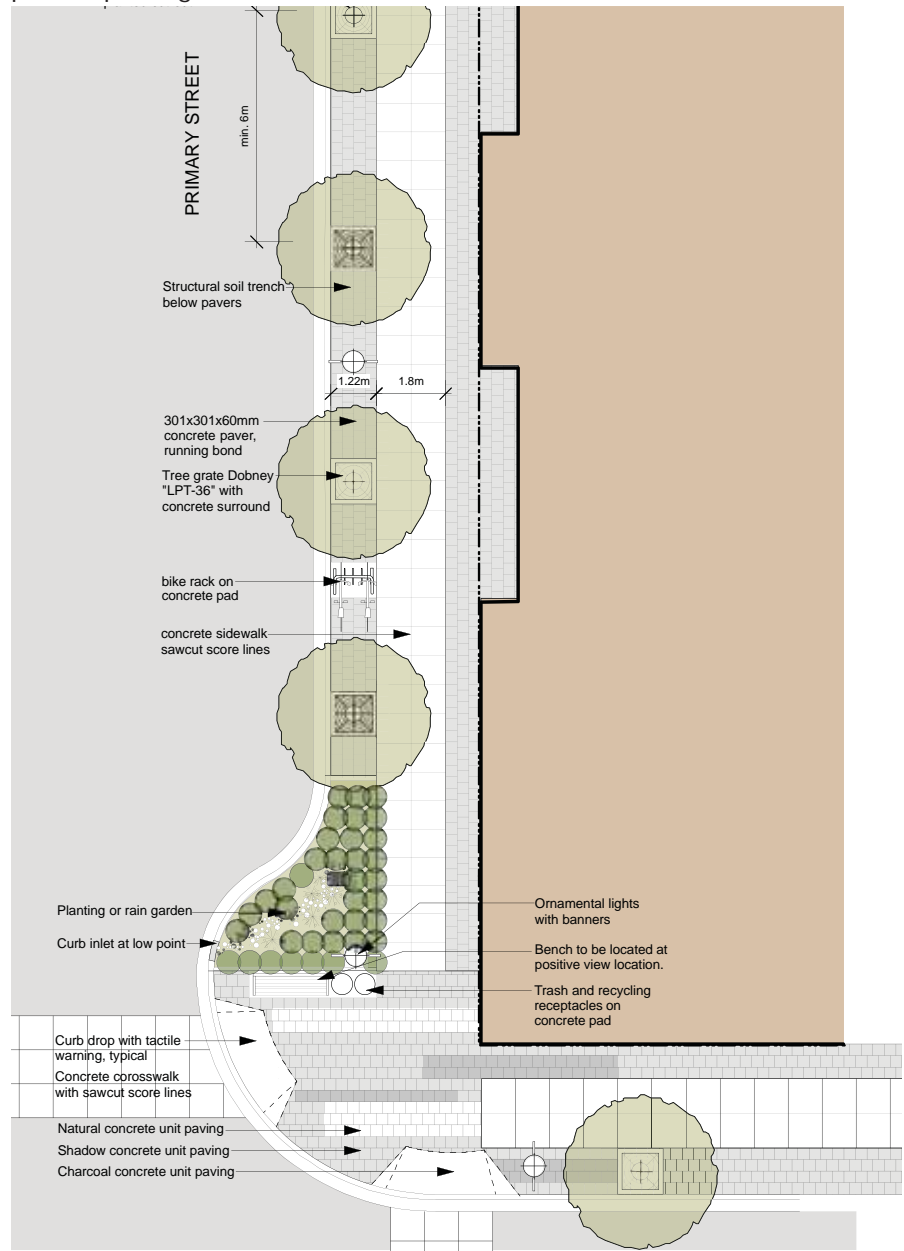


Traffic & Pedestrian Core

7.1.1 Downtown Core Standard Streetscape Treatment

- Defined sidewalks with cast in place concrete walking surface. 1.8m wide clear pedestrian travel lane, sandblast finish, natural colour, saw cut joints in a rectangular pattern. No tooled joints. Width may be decreased to 1.5m where horizontal space is limited.
- Decorative 1.22m wide strip of concrete unit paving at the curb. Abbotsford Concrete Nevada paver, or equal, 305mm square x 60mm thick charcoal colour in running bond pattern. The strip to contain all street furniture and trees. Sandwich signs are permitted within this strip.
- A similar decorative strip is recommended from the back of the sidewalk to the building face although this is optional. Individual developments may extend their materials and pattern across the property line to the back of the sidewalk providing the city approves the materials.
- Decorative pattern of Nevada pavers in an abstract linear running bond pattern, perpendicular to primary street, to be provided at each street corner or mid block crossing node. Paver colours to be a mixture of charcoal, natural and shadow.
- Roadway crossings to be defined with cast in place concrete walking surface. Sandblast finish, natural colour, saw cut joints in a rectangular pattern. No tooled joints.
- Corner planters to be provided at intersections and at mid-block crossings. Corner planters to function as rain gardens where practical, at low points of roadway grading. Planting as per planting section of the Public Realm Plan.
- Ornamental streetlights to be Lumec New Westminster series, or equal, colour black (RAL9005, semi gloss). Custom bases retained east of Glover Road, new simplified bases west of Glover road are acceptable. Provide banner arms for banner program.
- New ornamental lights to be placed in opposite pairs on Fraser Highway west to create a rhythm of iconic elements.
- Bike rack to be Frances Andrew, Loopy Series "L21-BR52".
- Trash and recycling receptacle to be Landscapeforms "Chase Park".
- Bench to be Maglin "MLB300M". Provide benches at each corner or mid-block bulge.
- Bollard to be refurbished existing bollard or Urban Accessories "San Francisco".
- Existing trees are to be root pruned and retained where possible within tree cutouts. All new trees to be planted in ornamental tree grates, Dobney LPT 36, or equal, at a minimum spacing of 6m and a maximum spacing of 10m. Root barriers to be provided at each tree at back of curb and front of sidewalk.
- Structural soil trench to be provided between trees below the decorative strip.

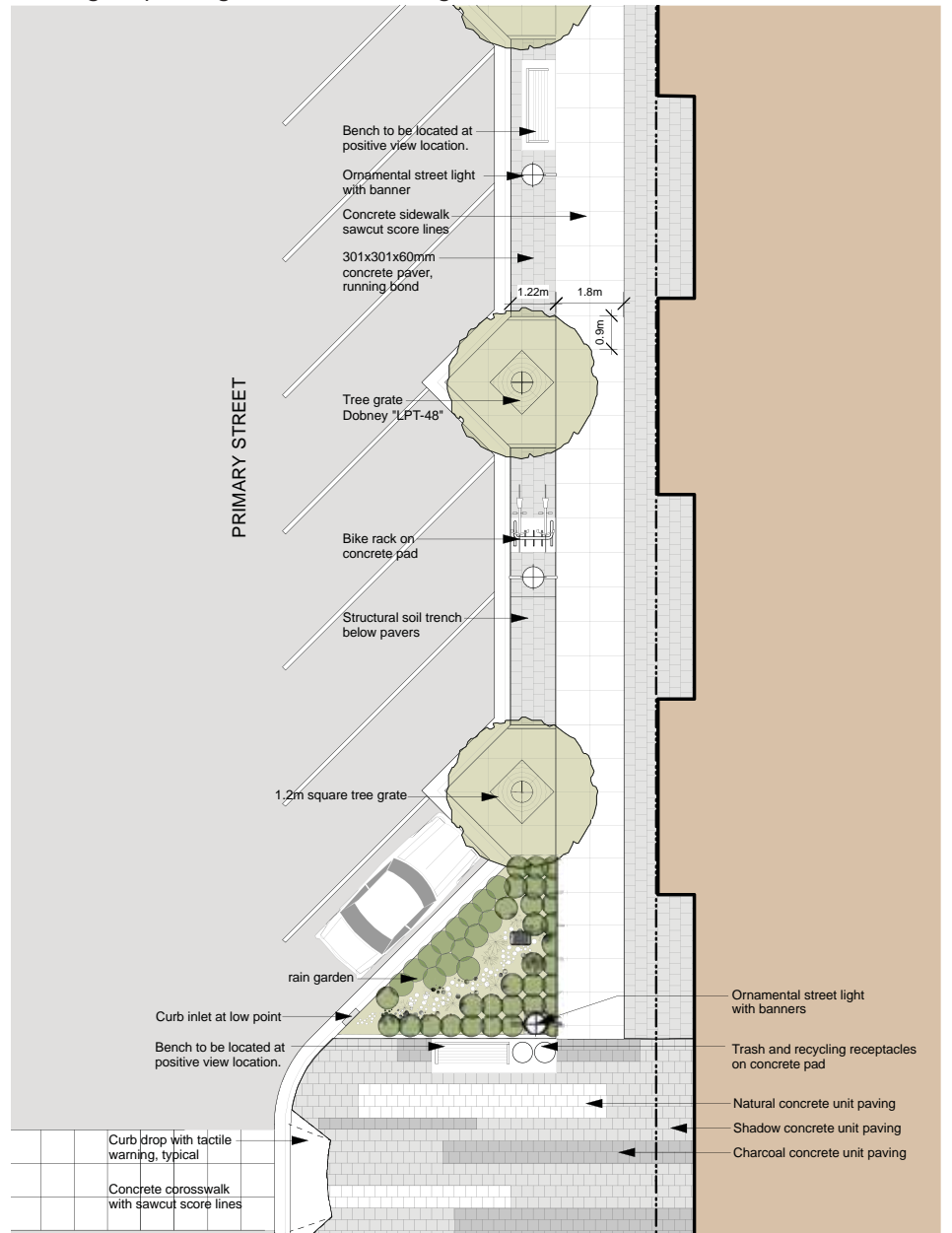
Streetscape treatment: Downtown Core Langley - parallel parking at curb variation.



7.1.2 Downtown Core Standard Streetscape Treatment – Variation 1 for Angled Parking

- Defined sidewalks with cast in place concrete walking surface. 1.8m wide clear pedestrian travel lane, sandblast finish, natural colour, saw cut joints in a rectangular pattern. No tooled joints. Width may be decreased to 1.5m where horizontal space is limited.
- Decorative 1.22m wide strip of concrete unit paving at the curb. Abbotsford Concrete Nevada paver, or equal, 305mm square x 60mm thick charcoal colour in running bond pattern. The strip to contain all street furniture and trees. Sandwich signs are permitted within this strip.
- A similar decorative strip is recommended from the back of the sidewalk to the building face although this is optional. Individual developments may extend their materials and pattern across the property line to the back of the sidewalk providing the city approves the materials.
- Decorative pattern of Nevada pavers in an abstract linear running bond pattern, perpendicular to primary street, to be provided at each street corner or mid block crossing node. Paver colours to be a mixture of charcoal, natural and shadow.
- Roadway crossings to be defined with cast in place concrete walking surface. Sandblast finish, natural colour, saw cut joints in a rectangular pattern. No tooled joints.
- Corner planters to be provided at intersections and at mid-block crossings. Corner planters to function as rain gardens where practical, at low points of roadway grading. Planting as per planting section of the Public Realm Plan.
- Ornamental streetlights to be Lumec New Westminster series, or equal, colour black (RAL9005, semi gloss). Custom bases retained east of Glover Road, new simplified bases west of Glover road are acceptable. Provide banner arms for banner program.
- Bike rack to be Frances Andrew, Loopy Series "L21-BR52".
- Trash and recycling receptacle to be Landscapeforms "Chase Park".
- Bench to be Maglin "MLB300M". Provide benches at each corner or mid-block bulge.
- Bollard to be refurbished existing bollard or Urban Accessories "San Francisco".
- All new trees to be planted in ornamental tree grates set at 45° angle. Dobney LPT 36 or 48, or equal, at every third stall. Root barriers to be provided at each tree at back of curb and front of sidewalk.
- Structural soil trench to be provided between trees below the decorative strip.

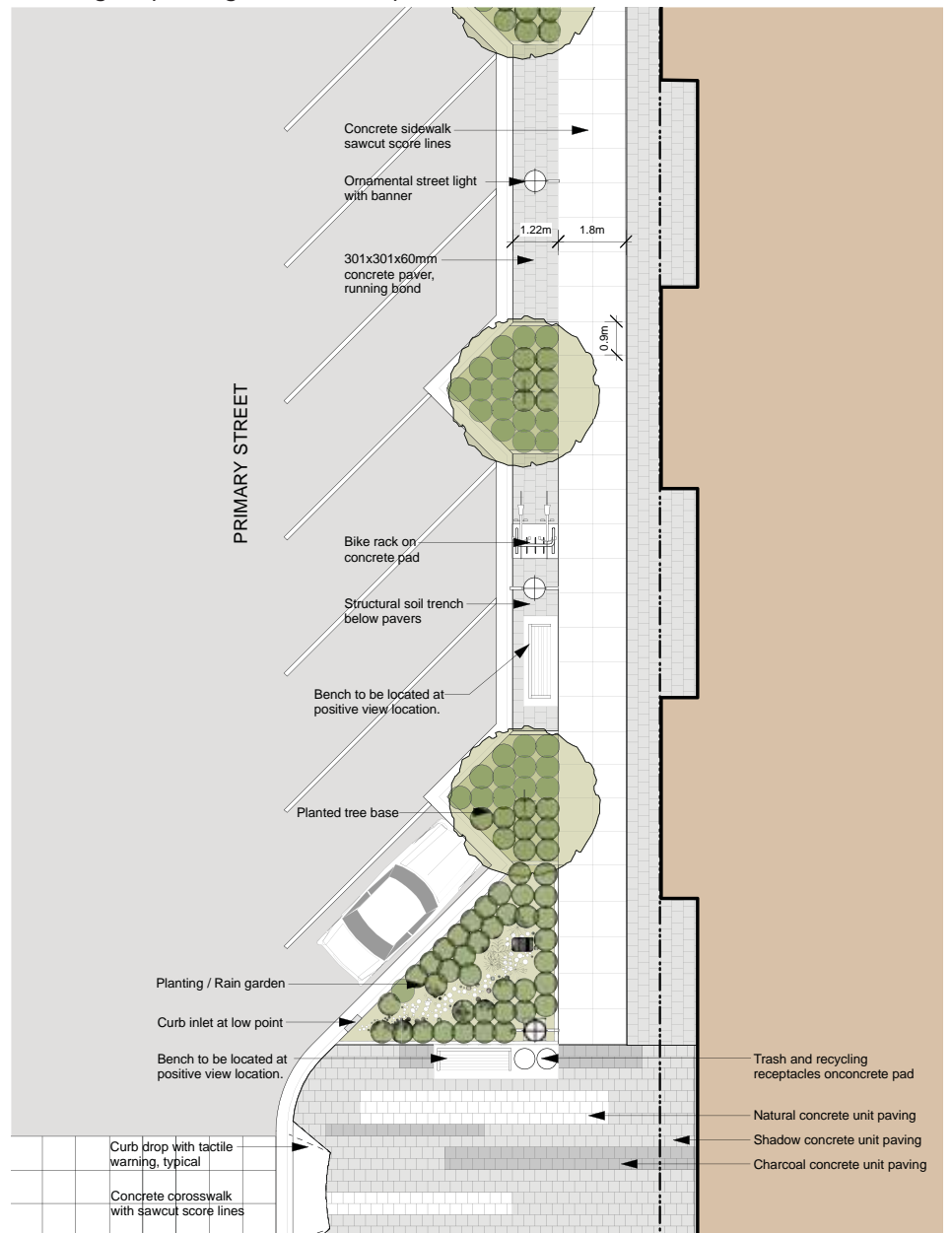
Streetscape treatment: Downtown Core Langley -
45° angled parking at curb with tree grates variation.



7.1.3 Downtown Core Standard Streetscape Treatment – Variation 2 for Angled Parking

- Defined sidewalks with cast in place concrete walking surface. 1.8m wide clear pedestrian travel lane, sandblast finish, natural colour, saw cut joints in a rectangular pattern. No tooled joints. Width may be decreased to 1.5 m where horizontal space is limited.
- Decorative 1.22m wide strip of concrete unit paving at the curb. Abbotsford Concrete Nevada paver, or equal, 305mm square x 60mm thick charcoal colour in running bond pattern. The strip to contain all street furniture and trees. Sandwich signs are permitted within this strip.
- A similar decorative strip is recommended from the back of the sidewalk to the building face although this is optional. Individual developments may extend their materials and pattern across the property line to the back of the sidewalk providing the city approves the materials.
- Decorative pattern of Nevada pavers in an abstract linear running bond pattern, perpendicular to primary street, to be provided at each street corner or mid block crossing node. Paver colours to be a mixture of charcoal, natural and shadow.
- Roadway crossings to be defined with cast in place concrete walking surface. Sandblast finish, natural colour, saw cut joints in a rectangular pattern. No tooled joints.
- Corner planters to be provided at intersections and at mid-block crossings. Corner planters to function as rain gardens where practical, at low points of roadway grading. Planting as per planting section of the Public Realm Plan.
- Ornamental streetlights to be Lumec New Westminster series, or equal, colour black (RAL9005, semi gloss). Custom bases retained east of Glover Road, new simplified bases west of Glover road are acceptable. Provide banner arms for banner program.
- Bike rack to be Frances Andrew, Loopy Series "L21-BR52".
- Trash and recycling receptacle to be Landscapeforms "Chase Park".
- Bench to be Maglin "MLB300M". Provide benches at each corner or mid-block bulge.
- Bollard to be refurbished existing bollard or Urban Accessories "San Francisco".
- All existing or new trees to be located in cutouts with shrubs below new trees. New trees to be located every third stall. Root barriers to be provided at each tree at back of curb and front of sidewalk.
- Structural soil trench to be provided between trees below the decorative strip.

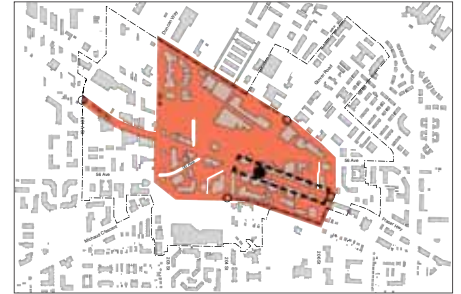
Streetscape treatment: Downtown Core Langley -
45° angled parking at curb with planted tree bases variation



7.1.4 Downtown Core Case Study: East Fraser Highway ((204th St. to 206th St.)

This section of the Fraser Highway is an existing successful specialty retail street that is anticipated to change slowly. The public realm was upgraded in the 1980's and again in the 1990's. It is currently exhibiting signs of wear, the colour scheme is out of date and the sidewalk is cluttered. The new standard streetscape treatments are intended to remedy these issues yet are sympathetic to, and will reinforce, the authentic small town character of this retail strip.

- The standard streetscape treatment, variation 2 for angled parking, is recommended for this street in order to retain the angled parking and the existing trees.
- Existing ornamental lights may be upgraded, repainted and reinstalled reusing existing concrete footings. Existing custom ornamental bases and matching bollards are retained.
- Existing curbs may be retained if deemed to be in good shape, with new sections incorporated as required.
- Horizontal space is limited in some locations so the defined concrete sidewalks may be reduced to the 1.5m width.
- Existing trees are to be pruned and retained so new sidewalk cutouts are required to suit.
- All other treatments are to be per the Downtown Core Standards.
- To minimize clutter and further enhance the appeal of this street, an enhanced sign program for both public and private signs, that builds on the best of the existing signage, is recommended. All sandwich signs must be located within the 1.22m decorative strip at the curb to allow for free pedestrian flow.



existing streetscape

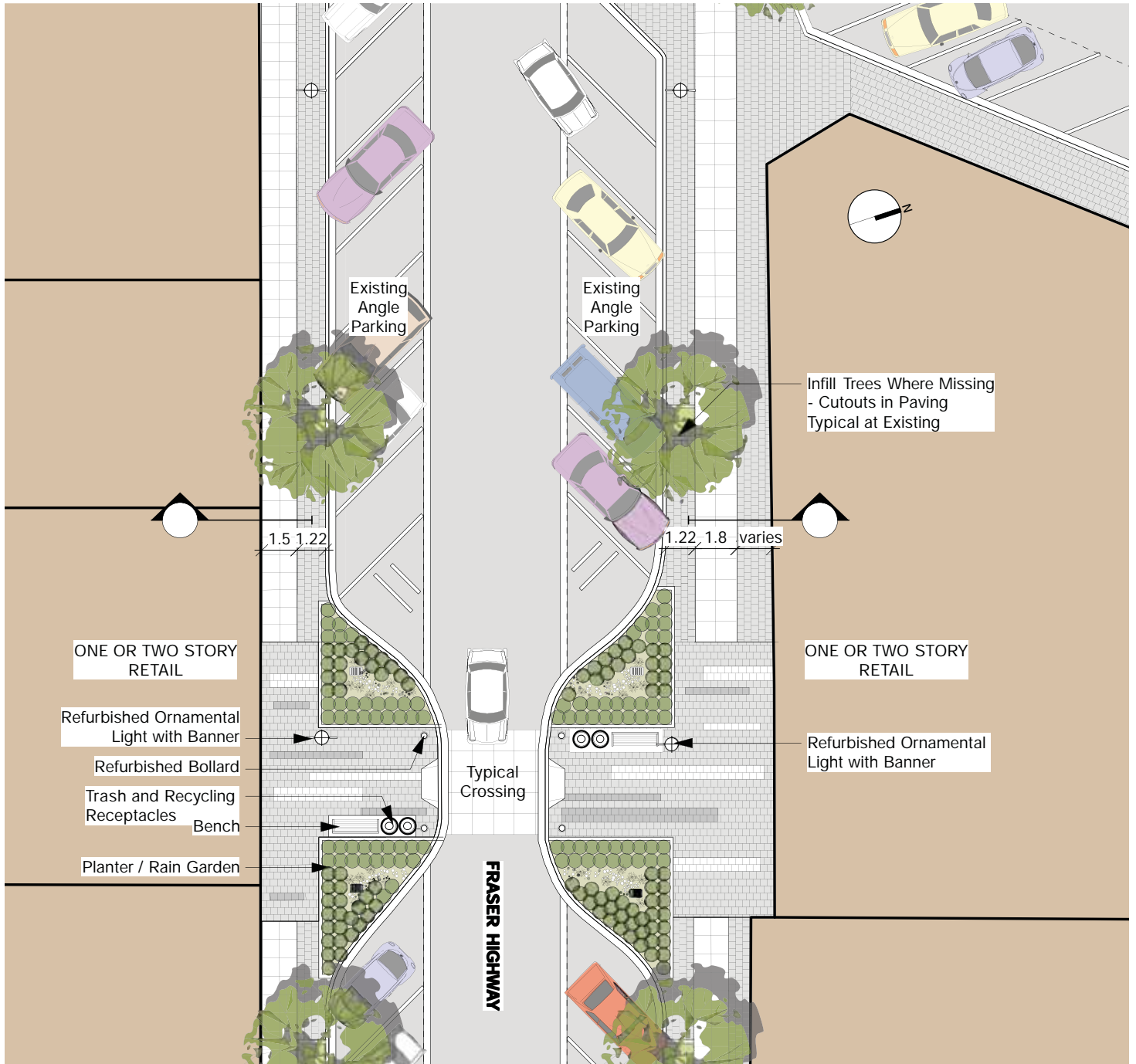
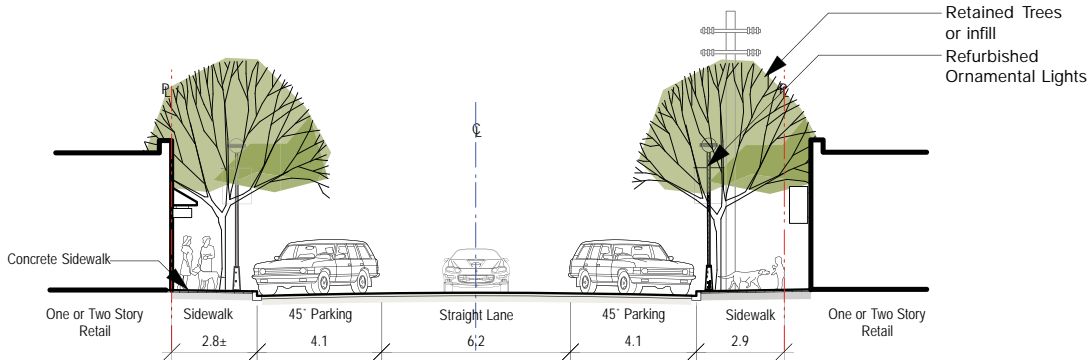


existing sidewalk sign



existing mid block crossing

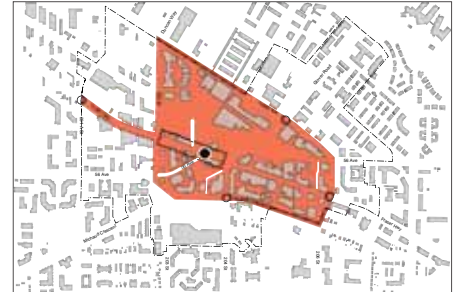
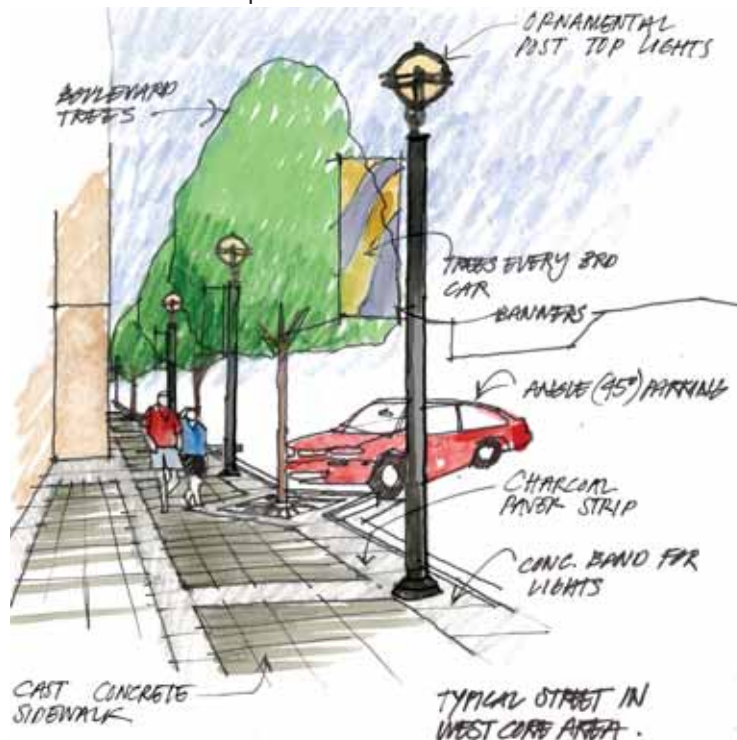




7.1.5 Downtown Core Case Study: West Fraser Highway ((203rd St. to 204th St.)

This section of the Fraser Highway will bridge the new civic and entertainment special design districts within the downtown core. The Fraser Highway is the main spine of the downtown and this section should function as a new “civic boulevard”. It is anticipated that future redevelopment will be extensive in this block and the existing street and roadway will be reconstructed.

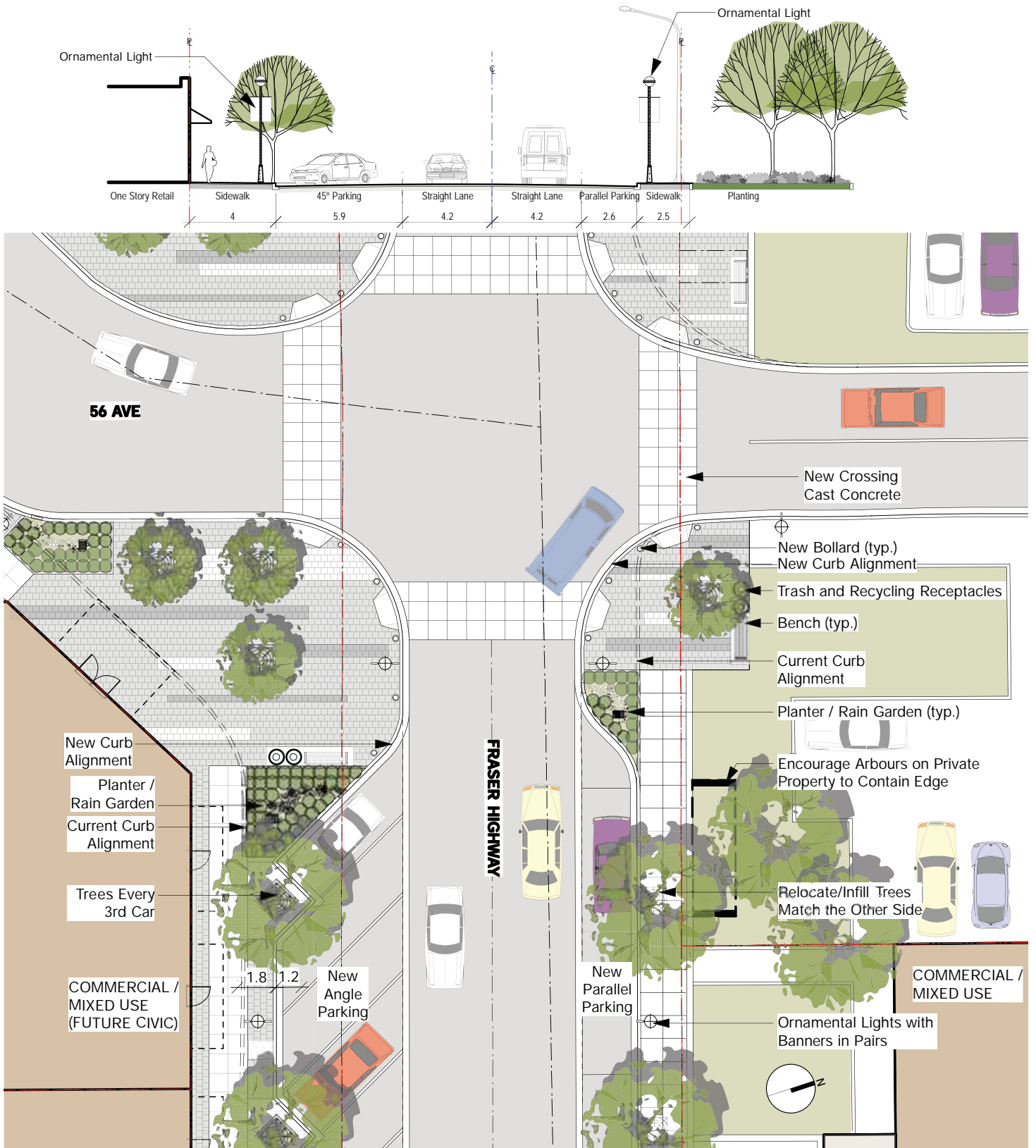
- Extend angled parking along the south side of this section of the Fraser Highway. Revision to the existing carriageway layout will be required. Parallel parking is retained on the north side unless engineering analysis determines angle parking is viable on both sides of the street without compromising transit service.
- The standard streetscape treatment is recommended for the north side of the street with variation 1 for angled parking on the south side.
- Existing ornamental lights may be upgraded and reinstalled. Modern simplified pole bases are recommended for ornamental lights in this area.
- Horizontal space is limited on the north side so the defined concrete sidewalks may be reduced to the 1.5m width.
- Existing trees are to be pruned and retained where possible. Provide new sidewalk cutouts as required to suit. Infill trees will be required.
- As the “civic boulevard”, public art is encouraged.
- Encourage construction of arbour structures on private property on the north side to define the corridor and contain the north edge.
- All other treatments are to be per the Downtown Core Standards.



Existing Streetscape



Rain garden

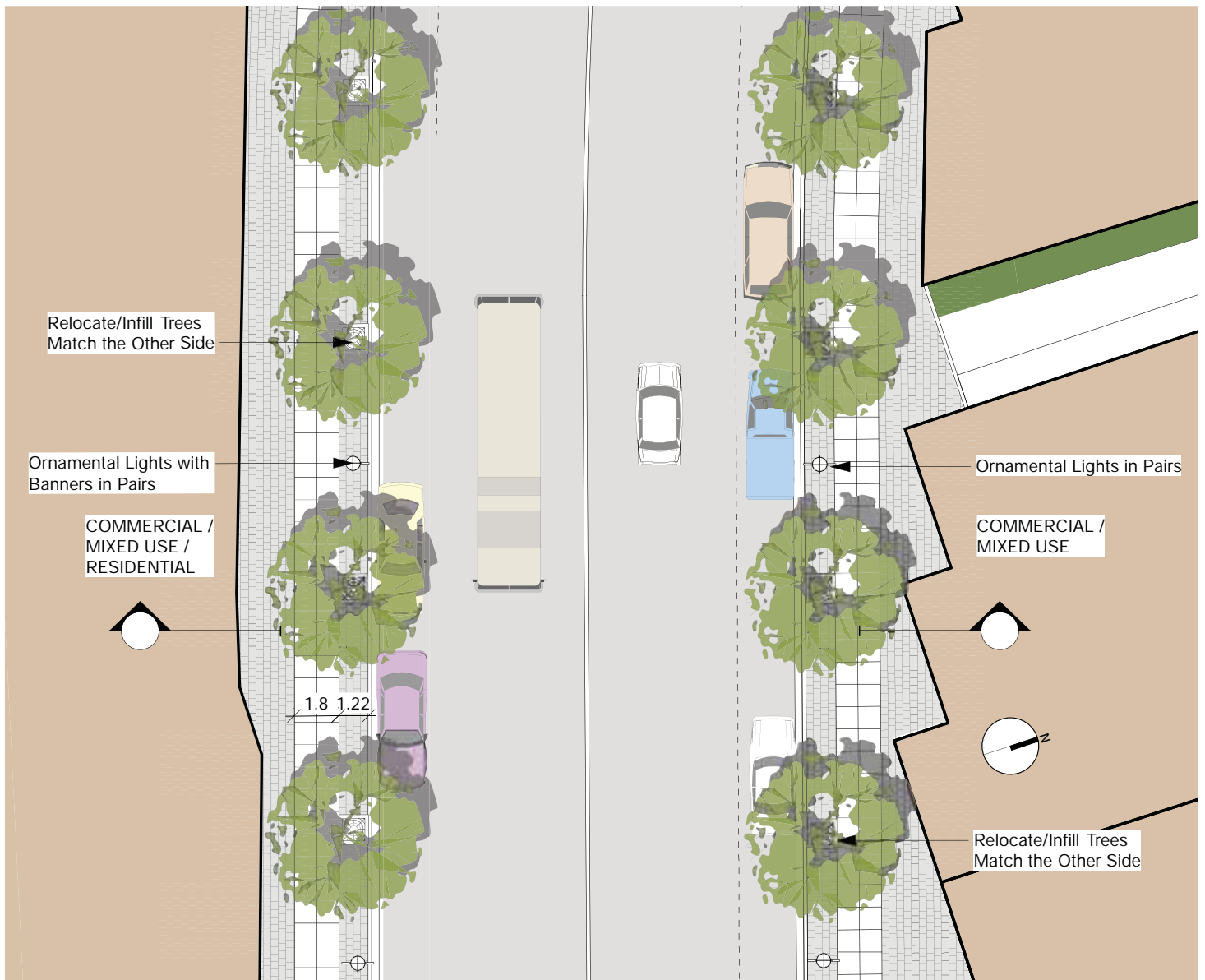
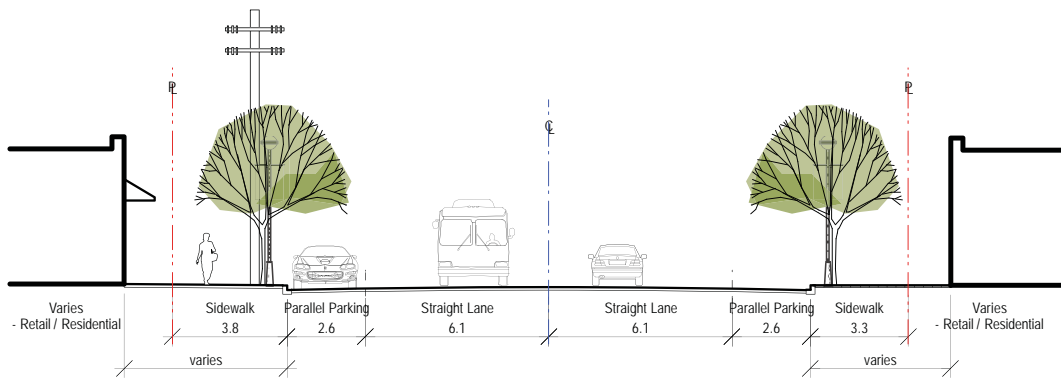


7.1.6 Downtown Core Case Study: West Fraser Highway ((201A St. to 203thSt.)

This section of the Fraser Highway is a westward extension of the Downtown Core area. The street is fronted by a variety of uses including under-developed sites that are likely to redevelop in the near future as mixed-use projects. The first redevelopment is the newly constructed Paddington Station residential complex on Fraser Highway at the corner of 201A Street. This is the western gateway arrival and includes a focal clock element. The public realm has been partially upgraded in the 1990's, however like the other streetscapes in the downtown, the paving is worn and the furniture and colour schemes are out of date. The Downtown Master Plan refers to this block as the West Gateway special design district.



- The standard streetscape treatment is recommended for this street.
- Existing ornamental lights may be upgraded, repainted and reinstalled reusing existing concrete footings. Modern simplified pole bases are recommended for ornamental lights in this area. Locate new lights in pairs.
- Existing curbs may be retained if deemed to be in good shape, with new sections incorporated as required.
- Existing trees are to be pruned and retained where possible, so new sidewalk cutouts are required to suit. Infill trees will be required.
- All other treatments are to be per the Downtown Core Standards.
- To minimize clutter and further enhance the appeal of this street, an enhanced sign program for both public and private signs, that builds on the best of the existing signage, is recommended. All sandwich signs must be located within the 1.22m decorative strip at the curb to allow for free pedestrian flow.

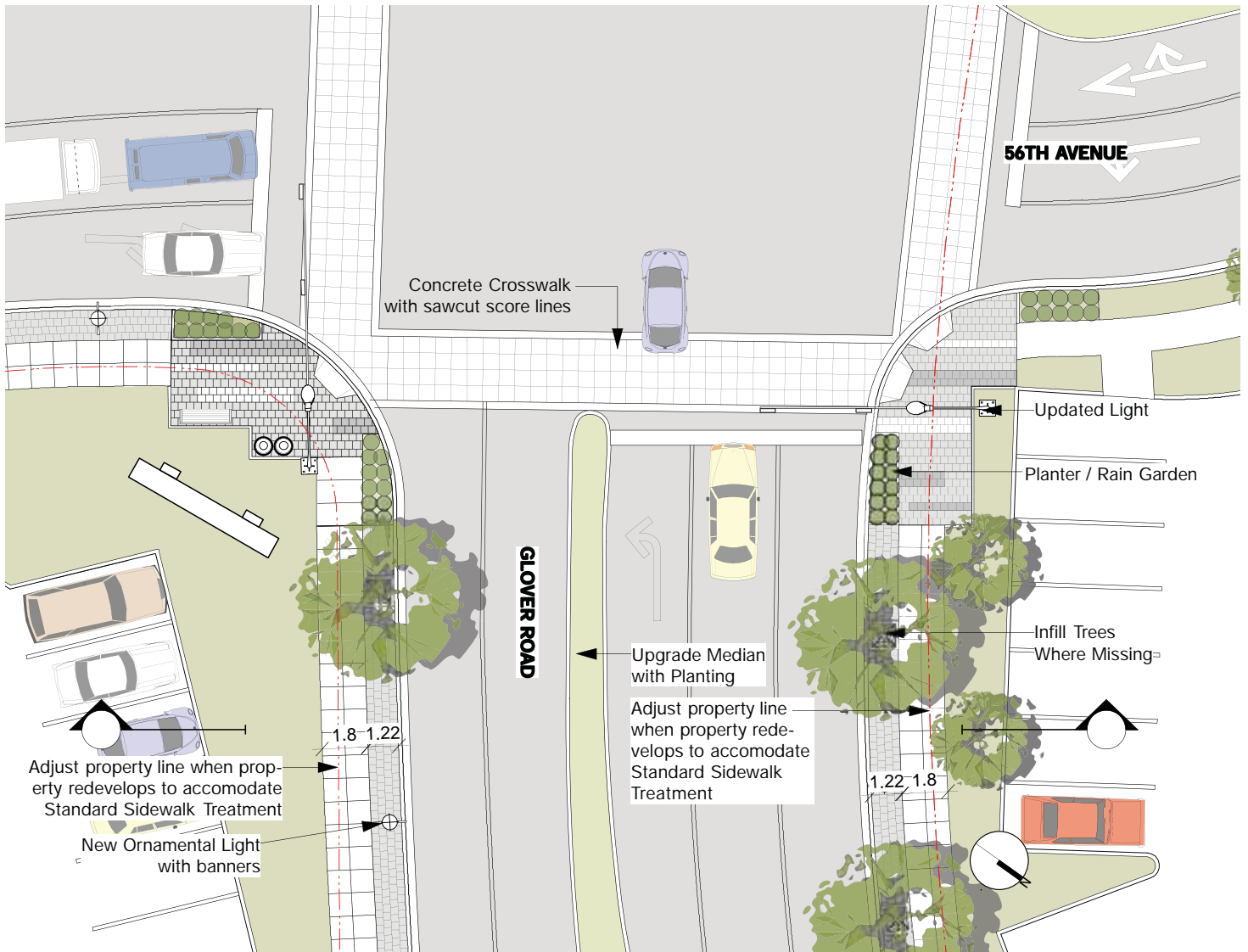
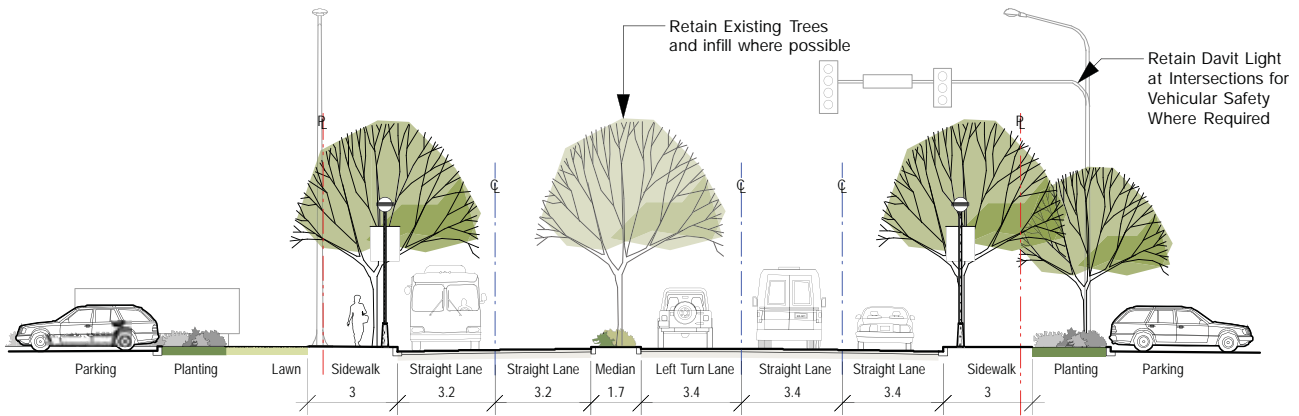


7.1.7 Downtown Core Case Study: Glover Road (Fraser Highway to 56th Avenue).

This section of the Glover Road will bridge the new entertainment and retail (core) special design districts within the downtown core. Glover Road/204th Street is the main north/south spine of the downtown. It is anticipated that future redevelopment would be concentrated on the east side of this block. The public realm has been partially upgraded in the 1990's, however like the other streetscapes in the downtown, the paving is worn and the furniture and colour schemes are out of date.

- The standard streetscape treatment is recommended for this street.
- A traffic median exists at this location providing the opportunity for the addition of colourful feature planting below retained trees.
- Curb bulges may not be practical along this block.
- Horizontal space is limited on the east side so the defined concrete sidewalks may be reduced to fit or additional land dedicated at the time of redevelopment in order to install the standard treatment.
- Existing ornamental lights may be upgraded, repainted and reinstalled reusing existing concrete footings. Additional infill ornamental lights are required. Modern simplified pole bases are recommended for ornamental lights on the west side of the street, custom ornamental bases from elsewhere are suitable for reuse on the east side. Locate new lights in pairs.
- Existing curbs may be retained if deemed to be in good shape, with new sections incorporated as required.
- Existing trees are to be pruned and retained where possible, so new sidewalk cutouts are required to suit. Infill trees will be required.
- All other treatments are to be per the Downtown Core Standards.



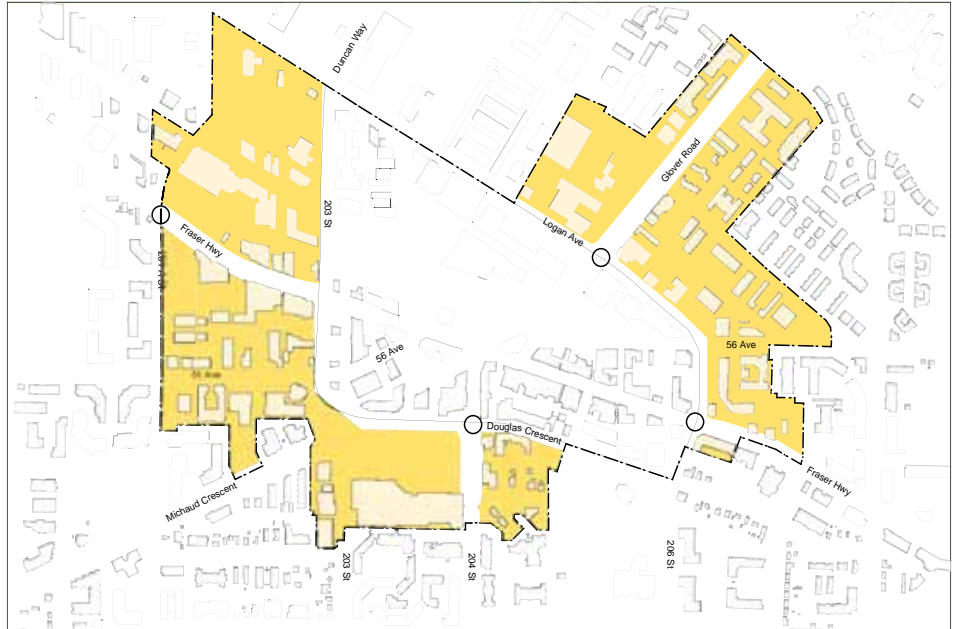


7.2 “Downtown Realm of Influence” Area

The “downtown realm of influence” is roughly defined as the outer downtown area surrounding the downtown core beyond the proposed transit “Trolley Bus” route. This is largely the “area of influence” which will contain much of the future density supporting uses within the core. It should feature a high level of intervention, furniture and pedestrian amenities in the downtown.

Public Realm improvements proposed for this area include:

- Pedestrian-friendly vehicular streets.
- Streetscapes feature materials, street furniture, colour and other elements similar to those proposed for the downtown core but to a lesser standard.
- Where possible, corner bulges are provided to shorten pedestrian crossings and provide opportunity for greening the downtown. Where possible, pedestrian nodes will be created that can accommodate benches for pedestrian comfort.
- Existing paving materials, primarily red unit pavers, will be replaced with cast concrete paving. To minimize future maintenance requirements, unit paving will not be used as a highlight material. Crosswalks and basic sidewalks will be cast concrete.
- The existing furniture colour scheme (teal and maroon) will be replaced with a simple and elegant black (RAL9005, semi gloss) scheme.
- The existing expansive inventory of the iconic “New Westminster” ornamental streetlights will be retained, repainted and upgraded to LED or equivalent source over time. All new lights will be LED or equivalent versions of the same light however the ornate custom bases may be replaced with simple bases in the downtown surround area.
- A separate study is recommended to review all signs types including wayfinding signs.
- Include public art to a lesser extent.

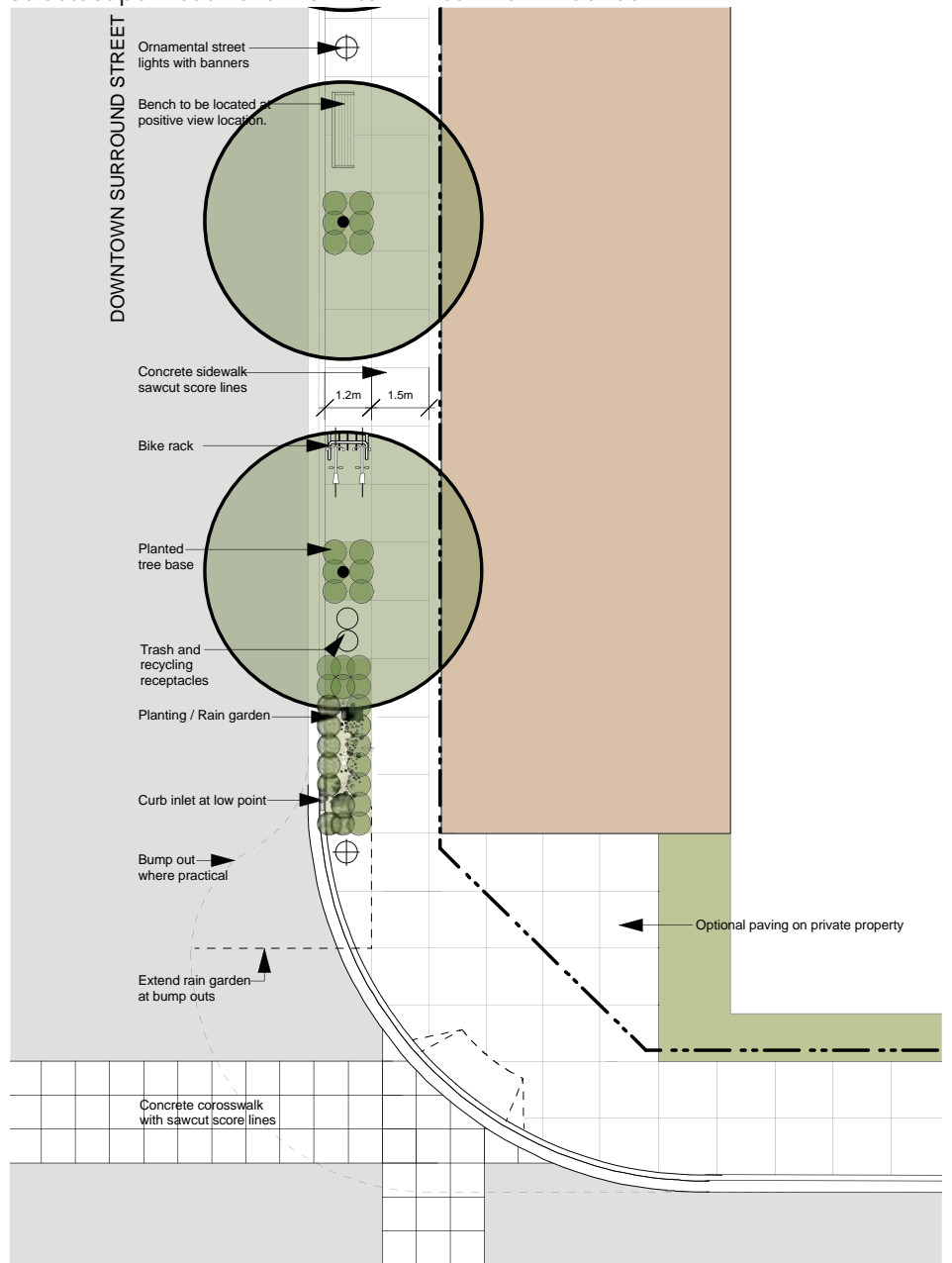


Downtown Realm of Influence Area

7.2.1 Downtown Realm of Influence Standard Streetscape Treatment

- Sidewalks with cast in place concrete walking surface. 1.8 m typical, min. 1.5m, wide clear pedestrian travel lane, sandblast finish, natural colour, saw cut joints in a rectangular pattern. No tooled joints.
- 1.2m wide strip of cast in place concrete at the curb to contain all street furniture and trees. Sandwich signs are permitted within this strip.
- Similar cast concrete paving is recommended from the back of the sidewalk to the building face although this is optional. Individual developments may extend their materials and pattern across the property line to the back of the sidewalk providing the city approves the materials.
- Cast concrete paving to be provided at each street corner or mid block crossing node.
- Roadway crossings to be defined with cast in place concrete walking surface. Sandblast finish, natural colour, saw cut joints in a rectangular pattern. No tooled joints.
- Corner planters to be provided at intersections and at mid-block crossings where practical. Corner planters to function as rain gardens where practical, at low points of roadway grading. Planting as per planting section of the Public Realm Plan.
- Ornamental streetlights to be Lumec New Westminster series, or equal, colour black (RAL9005, semi gloss). New simplified bases are acceptable. Provide banner arms for banner program where indicated.
- Bike rack to be Frances Andrew, Loopy Series "L21-BR52".
- Trash and recycling receptacle to be Landscapeforms "Chase Park".
- Bench to be Maglin "MLB300M". Provide benches at each corner or mid-block bulge.
- Bollard to be refurbished existing bollard or Urban Accessories "San Francisco".
- Existing trees are to be root pruned and retained where possible within tree cutouts. All new trees to be planted in sidewalk tree cutouts at a minimum spacing of 6m and a maximum spacing of 10m. Root barriers to be provided at each tree at back of curb and front of sidewalk.
- Structural soil trench to be provided between trees below the decorative strip.

Streetscape Treatment: Downtown Realm of Influence



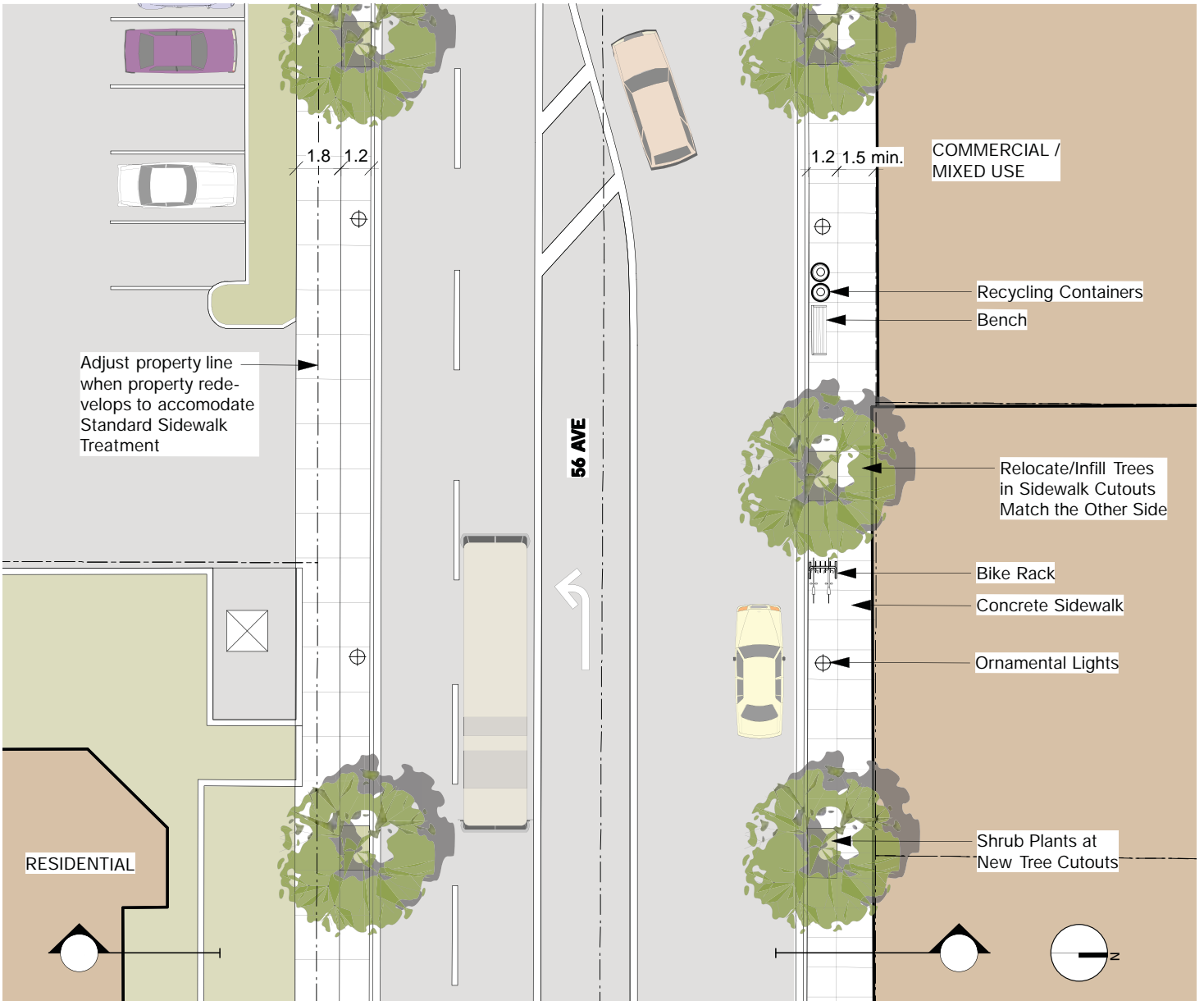
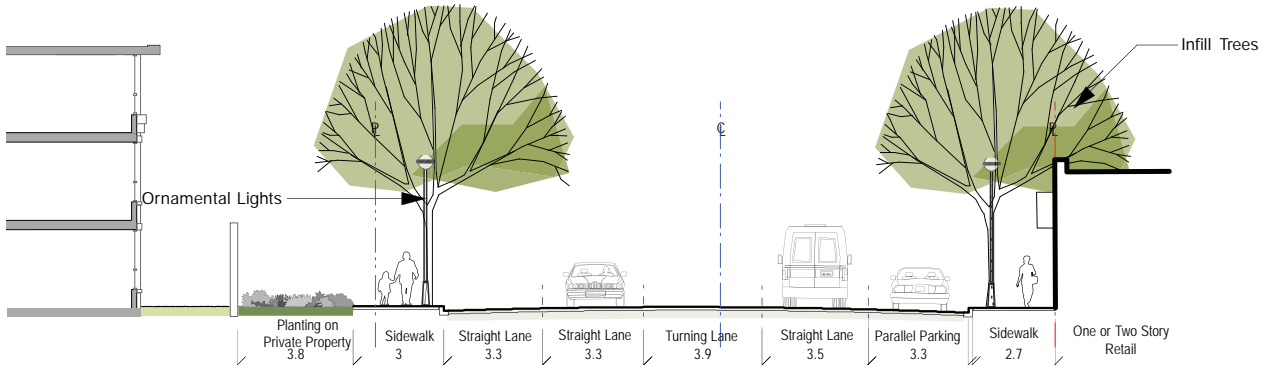
7.2.2 Downtown Realm of Influence Case Study: 56 Avenue near 201A Street

This section of 56 Avenue is currently a mix of commercial and residential uses. It is likely to continue to develop as a denser mixed-use area.

The public realm has been partially upgraded. Similar to the downtown core, this area is currently exhibiting signs of wear, and the colour scheme is out of date. The new standard streetscape treatments are intended to remedy these issues yet are sympathetic to, and will reinforce, the overall public realm downtown improvements.

- Existing ornamental lights may be upgraded, repainted and reinstalled reusing existing concrete footings. Existing custom ornamental bases may be replaced with simplified bases and the ornamental bases re-used elsewhere.
- Existing curbs may be retained if deemed to be in good shape, with new sections incorporated as required.
- Horizontal space is limited in some locations so the defined concrete sidewalks may be reduced to the 1.5m width.
- Existing trees are to be pruned and retained so new sidewalk cutouts are required to suit.
- All other treatments are to be per the downtown surround standards.
- All sandwich signs must be located within the 1.2m decorative strip at the curb to allow for free pedestrian flow.





7.3 "Gateway Streets"

Existing arterial streets extending from the downtown should be enhanced as "gateway streets" to assist with wayfinding to the downtown. The gateway streets should extend as far as the next major vehicular intersection (Langley Bypass, 200th Street). These are primarily vehicular streets and should be enhanced for the motorist as well as for the pedestrian.

Land uses along the gateway streets vary. They are currently a mix of commercial and residential uses. The public realm has been sporadically improved along these streets. The Gateway Streets are likely to continue to develop with infill projects.

Public Realm improvements proposed for these streets include:

- Provide signs and identifiable public realm elements and improvements, such as banners and the iconic lights, along the gateway streets to introduce downtown character and guide movement towards the downtown.
- Streetscapes feature ornamental lights, colour, banners and infill trees similar to those proposed for the downtown core and the downtown realm of influence. Street furniture is minimized however if introduced should reflect the downtown realm of influence palette.
- Sidewalks will be cast concrete to minimize future maintenance requirements. Where possible, sidewalk widths for pedestrian comfort are to be provided.
- Where possible, corner bulges are provided to shorten pedestrian crossings and provide opportunity for greening the downtown. Where possible, pedestrian nodes will be created that can accommodate benches for pedestrian comfort.
- Opportunities to replace painted traffic medians with planted medians are to be explored. Planting upgrade is required at existing medians. Locate lights and banners in medians.
- The existing inventory of the iconic "New Westminster" ornamental streetlights will be retained, repainted and upgraded to LED or equivalent source over time. An infill pattern of new similar lights is proposed. New lights will be LED or equivalent versions of the same light however the ornate custom bases may be replaced with simple bases on the gateway streets.
- The existing furniture colour scheme (teal and maroon) will be replaced with a simple and elegant black (RAL9005, semi gloss) scheme for the ornamental lights.
- A separate study is recommended to review all signs types including wayfinding signs.



West Gateway - existing condition



East Gateway - existing condition



North Gateway - existing condition

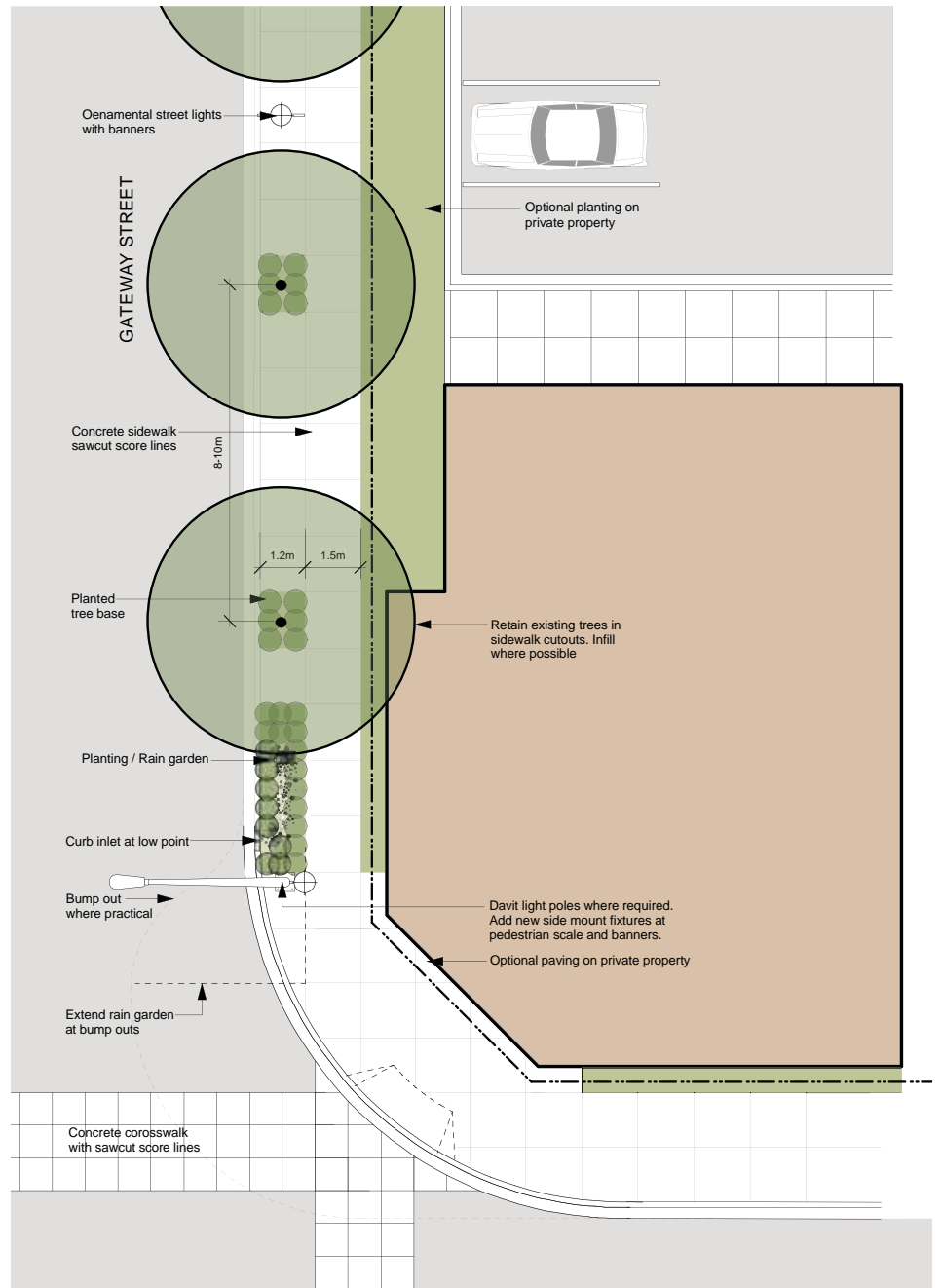


Gateway Streets

7.3.1 Gateway Streets Standard Streetscape Treatment

- Sidewalks with cast in place concrete walking surface. 1.8m typical, min. 1.5m, wide clear pedestrian travel lane. Finishes to be standard broom finish concrete, natural colour, tooled joints in a rectangular pattern.
- Ornamental streetlights to be Lumec New Westminster series, or equal, colour black (RAL9005, semi gloss). New simplified bases are acceptable. Provide banner arms for banner program. Add New Westminster side mount fixtures at davit lights.
- Where possible, corner bulges are provided to shorten pedestrian crossings and provide opportunity for greening the downtown.
- Existing trees are to be root pruned and retained where possible within tree cutouts. All new infill trees to be planted in sidewalk tree cutouts, with supplemental shrub planting, at a minimum spacing of 6m and a maximum spacing of 10m. Root barriers to be provided at each tree at back of curb and front of sidewalk.
- Structural soil trench to be provided between trees.

Streetscape Treatment: Gateway Street



7.4 "Greenway Streets"

Existing residential streets linking the Nicomekl greenbelt trails to the downtown should be traffic-calmed and enhanced as "greenway streets" to encourage pedestrian and cyclist travel and to assist with wayfinding to the downtown. These are primarily low volume vehicular streets which can easily be upgraded to provide increased interest, safety and comfort for the pedestrian and cyclist. In addition greenway "links" should be provided in specific locations to assist with pedestrian connectivity.

Public Realm improvements proposed for these streets include:

- Provide safe pedestrian and cyclist crossings at intersections. Provide pedestrian controlled signals where deemed necessary. Major crosswalks to be cast in place scored concrete.
- Corner bulges are provided to shorten pedestrian crossings, calm traffic by narrowing the carriageway, and provide opportunity for greening of the streets. Pedestrian nodes will be created that can accommodate benches for pedestrian comfort. Rain gardens may be integrated at low points in carriageway grading as a sustainability initiative.
- Additional planted mid-block bulges will assist with traffic calming and greening.
- Encourage the planting and maintenance of bulges and boulevards by residents.
- Provide a special Interurban-themed greenway on Michaud Crescent to celebrate the (approximate) alignment of the historic BC electric railway. The oversized existing boulevard provides the opportunity to create a feature multi-use trail along this alignment.
- 204 Street could be themed as it follows the approximate alignment of the historic "Smuggler's Trail".
- Bicycle travel typically remains on the roadways except where a separate multi-use trail is recommended (Michaud Crescent). Bicycle pavement markings are recommended however dedicated bike lanes are not necessary in most applications.
- Existing concrete sidewalks can generally be retained as is, and upgraded over time if required.
- Existing lights should be retained. Ornamental lights may be added at pedestrian nodes.
- New street furniture to the downtown standard should be provided at pedestrian nodes.
- An enhanced sign program is recommended. A separate study is required to review all signs types including greenway identification, trail head markers, and directional signs, and bicycle glyphs
- Public art, including integrated art is strongly encouraged.



existing trail system at Nicomekl River



existing trail system at Nicomekl River



5.4 Greenway Streets and Links



Greenway sign example



Greenway sign example



trail head icon example



trail sign examples



bicycle pavement markings

7.4.1 Greenway Streets Standard Streetscape Treatment

- Sidewalks with cast in place concrete walking surface. 1.8 m typical, min.1.5m, wide clear pedestrian travel lane. Finishes to be standard broom finish concrete, natural colour, tooled joints in a rectangular pattern. Note: multi-use trail at Michaud Crescent is an exception to this standard.
- Major crosswalks to be cast in place scored concrete.
- Corner and mid-block bulges are provided to shorten pedestrian crossings and provide opportunity for greening the downtown.
- Ornamental streetlights may be added at select pedestrian nodes. Ornamental lights to be Lumec New Westminster series, LED, or equivalent. New simplified bases are acceptable.
- Bike rack to be Frances Andrew, Loopy Series "L21-BR52".
- Trash and recycling receptacle to be Landscapeforms "Chase Park".
- Bench to be Maglin "MLB300M".
- Bollard to be refurbished existing bollard or Urban Accessories "San Francisco".
- Existing trees are to be pruned and retained where possible within planted boulevards. All new infill trees to be planted in boulevards, with supplemental shrub planting, at a minimum spacing of 6m and a maximum spacing of 10m. Root barriers to be provided at each new tree at back of curb and front of sidewalk.
- Public art, including integrated art is strongly encouraged.

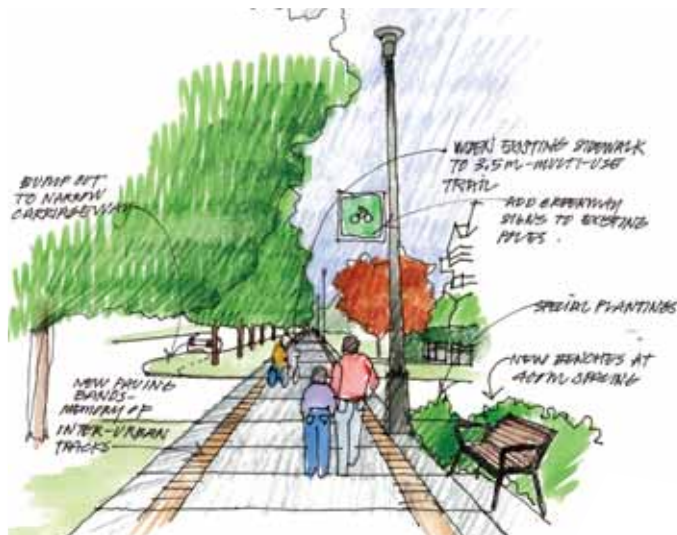


Greenway Street examples

7.4.2 Greenway Street Case Study: Michaud Crescent Interurban Greenway

Michaud Crescent roughly follows the diagonal alignment of the historic BC Electric Railway line. It is a strong greenway candidate as it is a wide tree lined street that links residential land use with the downtown and with the Nicomekl greenbelt trails. The road right of way is generous on the north side, providing horizontal space to incorporate a shared multi-use trail for pedestrians and recreational cyclists below mature deciduous trees. This corridor is identified as a bike route in the Langley Transportation Plan 2004.

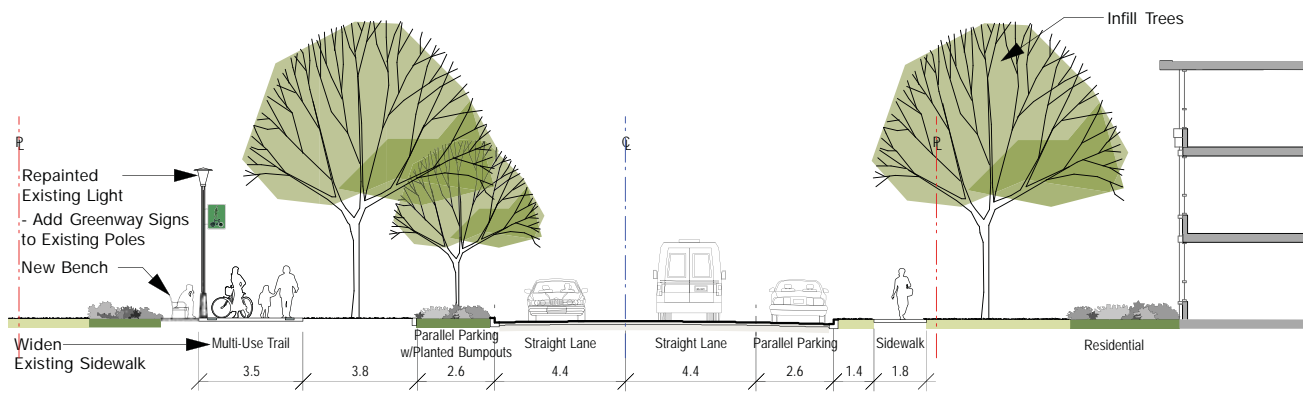
- Provide a shared 3.5m wide multi-use trail to TAC standards on the north side of the street. Simulate train tracks in the paved surface with linear bands of unit pavers set in mortar.
- South sidewalk to remain as cast-in-place concrete walking surface.
- Corner and mid-block bulges are provided to shorten pedestrian crossings and provide opportunity for greening the downtown.
- Ornamental streetlights may be added at select pedestrian nodes. Ornamental lights to be Lumec New Westminster series.
- Retain existing light poles.
- Existing trees are to be pruned and retained where possible within planted boulevards. All new infill trees to be planted in boulevards, with supplemental shrub planting, at a minimum spacing of 6m and a maximum spacing of 10m. Root barriers to be provided at each new tree at back of curb and front of sidewalk.
- Existing curbs may be retained if deemed to be in good shape, with new sections incorporated as required.
- Railway themed public art is strongly encouraged.
- All other treatments are to be per the greenway street standards.



Michaud Crescent - Sketch



existing Michaud Crescent





arbour edge



public weekend market

- Integrate a railway theme in recognition of the former BC Electric train station at the southwest corner location.
- Provide special themed art and a focal water feature.
- Consider the inclusion of a new information kiosk.
- Provide the highest level of public realm treatments at this location. Utilize additional highlight paving, furniture and lighting.
- Over time, integrate the civic plaza with new civic development including reorganized parking.
- Animate the plaza with careful selection of retail uses at grade within adjacent future civic development (cafes, special arts-related retail).
- Design for ephemeral events such as parades or a weekend market.
- Extend a pedestrian circulation route along the historic railway line to the west. And carefully consider all pedestrian linkages.
- “Push out” all four intersection corners to reduce asphalt, expand pedestrian zones, shorten pedestrian crossings and calm traffic.
- “Ring” and contain the four corners within a feature band of special paving. Consider special infill paving across the intersection within the ring.
- Upgrade the existing northeast plaza through additional greening and refinement of paving; create a new edge utilizing arbour structures to help “define” the space. Retain existing trees.
- All other treatments are to be per the Downtown Core standard.



Innes Corners - sketch

7.6 "McBurney Lane" Special Design Area

McBurney Lane is an important public open space, which has fallen into disrepair recently due to vandalism and wear. It has the potential to become an important pedestrian link from the vital retail shops along Fraser Highway to the new Spirit Square at Douglas Park.

Public Realm improvements proposed for this special design area include:

- Create a revitalized McBurney Lane Plaza with a new visual focus, new public realm upgrades, and extend pedestrian-priority design southwards to Spirit Square and Douglas Park.
- Provide special themed art and a focal water feature.



Mc Burney Lane - existing condition



Mc Burney Lane - illustrative plan

8.0 PLANTING

Street tree infill planting and supplementary boulevard and median planting are recommended as part of the Downtown Public Realm Plan in order to complete streetscape continuity, “green” and beautify the downtown, and reinforce the public realm. Planting of trees and shrubs provides both aesthetic and environmental benefits. Trees improve the apparent scale of a streetscape by narrowing wide roadway corridors, they frame buildings and views, and they define and reinforce character areas, open spaces and gateways. Street trees ameliorate climate by providing summer shade. Trees and shrubs help scrub air pollutants and generate oxygen. “Street bulges” are recommended at intersections to shorten pedestrian crossings and provide “greening”. Where possible street bulges may include “rain gardens” to intercept and detain storm water runoff allowing for infiltration into the subsoil and thus reducing demand on infrastructure.

8.1 Street Trees

Typically street trees are deciduous trees pruned on a “standard” (a trunk limbed to 2m height). Preferably street trees are planted at the curb or in a roadway median. Where space constraints or existing conditions do not allow for planting at the curb, planting behind the sidewalk if possible is recommended.

Street trees recommended in the Downtown Public Realm Plan are selected for specific locations based on their ultimate form, leaf density, and suitability to climatic and site conditions. In addition, disease resistance and litter drop are selection considerations.

Recommended street tree species and spatial arrangements contained within the Downtown Public Realm Plan have been vetted with the City of Langley Parks Operations. Existing trees are recommended for replacement only if the trees are failing or causing major problems that cannot be resolved through tree management techniques such as pruning and pest management. It is recommended that all robust mature trees be retained and accommodated during public realm improvement projects.





Cercidiphyllum japonicum



Cercidiphyllum japonicum



Styrax japonica



Acer rubrum



Acer rubrum



Carpinus betulus



Liquidambar styraciflua



Magnolia kobus



Fraxinus angustifolia

8.1.1 Street Tree Selection and Installation Requirements

- Final selection, supply and installation of all street trees shall be to the satisfaction of the City of Langley Parks Operations.
- Where recommended tree species are not available at the time of planting, substitutions of species with similar attributes, selected from the approved street tree list shall be considered.
- All trees and tree installations shall be per the BCNLA/BCSLA Landscape Standard (latest edition).
- To balance visual continuity yet avoid diseases related to monocultures, street tree species shall change at a minimum of every city block. Alternating species tree by tree is not recommended for visual continuity reasons.
- All street trees shall be on a "standard" with clear view lines below the crown.
- A continuous trench of "structural soil" between street trees, with a cross sectional area of approximately 1.2m² shall be provided at all new sidewalk construction. A growing medium trench of a similar cross sectional area shall be provided between street trees at all new medians or lawn boulevards.
- New trees of a similar species in a linear arrangement shall be matching in form and caliper.
- Commercial root barriers shall be provided at each new tree and located each side of the soil trench parallel to the curb. The root barriers shall be 450mm deep and 3 metres long centred on the tree trunk.
- Tree caliper at time of planting shall be a minimum of 6cm. diameter.
- Tree spacing shall be a minimum of 6m centre to centre for fastigiate trees to a maximum of 11m centre to centre for spreading trees.
- Tree spacing shall be consistent excepting conflicts with services and other obstructions.

8.1.2 Recommended Street Tree List

Note: the recommended street tree list is based on City experience with these common species. Consideration of other trees species is subject to City review.

Botanical Name	Common Name
Acer cappadocicum	Coliseum Maple
Acer griseum	Paperbark Maple
Acer platanoides var.	Norway Maple
Acer rubrum var.	Red Maple
Acer truncatum	Truncatum Maple
Carpinus (new varieties)	Hornbeam
Catalpa (select locations)	Indian Bean
Cercidiphyllum Japonicum	Katsura
Davidia involucrata	Dove Tree
Fagus var.	Beech
Fraxinus var. excluding Pennsylvanica	Ash
Ginkgo biloba Princeton Sentry	Maidenhair Tree
Liquidambar styraciflua Worplesdon	Sweetgum
Nyssia sylvatica	Sour Gum
Parrotia Persica (upright varieties)	Persian Ironwood
Quercus var.	Oak
Zelcova serrata	Japanese Zelcova

8.1.3 Street Trees to Avoid

Note: the “street trees to avoid” list is based on local City experience with these common species.

Botanical Name	Common Name
Acer campestre	Hedge Maple
Acer saccharinum var.	Silver Maple
Acer ginella	Amur Maple
Betula var.	Birch
Cercis canadensis	Redbud
Cornus var.	Dogwood
Fraxinus Pennsylvanica	Ash
Gleditsia triacanthos var.	Honey Locust
Koelreuteria paniculata	Goldenrain Tree
Liriodendron var.	Tulip Tree
Magnolia kobus	Magnolia
Platanus acerifolia	Plane Tree
Prunus var.	Cherry
Pyrus var.	Pear
Robinia pseudoacacia	Black Locust
Sorbus var.	Mountain Ash
Stewartia var.	Stewartia
Styrax var.	Japanese Snowbell
Tilia var.	Linden

8.2 Boulevard and Median Planting including Rain Gardens

New shrub and perennial planting is recommended in the downtown for aesthetic and environmental reasons. In particular shrub and perennial planting in the public realm is encouraged at intersections and at mid-block pedestrian crossings. The implementation of new medians in the roadway and the re-planting of existing medians create additional opportunities for “greening” the downtown.

Boulevard and median planting in the Downtown should include a combination of evergreen and deciduous materials, preferably tolerant of drought conditions. Final selection and arrangement of species should be based on criteria including size, texture, colour, shade tolerance, drought tolerance, disease resistance and seasonal interest. The use of native plant materials is encouraged where appropriate. The planting of ground covers is not recommended, as required maintenance levels are substantial.

Perennials, including ornamental grasses, should be incorporated into planting arrangements for seasonal interest however they should be used as accents. High efficiency irrigation is recommended for the medians in particular. Sight lines for traffic and pedestrian safety should be carefully considered when designing planting arrangements.

Rain garden plantings should be complimentary with other shrub plantings however the species selection will tend towards native species adapted to specific conditions.

8.2.1 Shrub Selection and Installation Requirements

- Final selection, supply and installation of all shrubs, including perennials and ornamental grasses, shall be to the satisfaction of the City of Langley Parks Operations.
- Where recommended species are not available at the time of planting, substitutions of species with similar attributes shall be considered.
- All shrubs and shrub installations shall be per the BCNLA/BCSLA Landscape Standard (latest edition).
- All shrubs shall be of a maximum mature height of 1m to ensure clear view lines for traffic and pedestrian safety.

8.2.2 Recommended Shrub and Perennial List

Note: consideration of other species or varieties is subject to City review. The following species may require specific conditions such as shade or irrigation and these requirements should be considered during the design process.



median planting



rain garden example

Botanical Name

Common Name

Shrubs

Abelia Edward Goucher
Azalea Japonica var.
Buxus microphylla (dwarf var.)
Cistus x corbaiensis
Cornus sericea Kelseyi
Daphne burkwoodii Carol Mackie
Euonymus alatus Compacta
Gaultheria shallon
Hebe buxifolia
Lavendula angustifolia Munstead
Lonicera pileata
Mahonia nervosa
Menziesia ferruginea

Pink Abelia
Japanese Azalea var.
Boxwood var.
Rock Rose
Dwarf Redtwig Dogwood
Daphne
Dwarf Burning Bush
Salal
Box Hebe
Lavender
Privet Honeysuckle
Longleaf Mahonia
False Azalea

Pinus mugo Pumilio
Potentilla fruticosa var.
Prunus Otto Luyken
Rhododendron (dwarf var.)
Rosa Meidiland var.
Sarcococca humilis
Senecio greyi Sunshine
Spirea Japonica var.
Symphoricarpos albus
Viburnum Davidii

Dwarf Mugo Pine
Shrubby Cinquefoil var.
Otto Luyken Laurel
Rhododendron var.
Meidiland Rose var.
Sweet Box
Sunshine Senecio
Japanese Spirea var.
Common Snowberry
David Viburnum

Perennials, Ferns and Grasses

Bergenia cordifolia
Blechnum spicant
Echinaceae purpurea
Festuca ovina Glauca Elijah Blue
Hemerocallis Stella D'Oro
Helictotrichon sempervirens
Miscanthus sinensis Little Kitten
Pennisetum alopecuroides Hamelyn
Pennisetum alopecuroides Little Bunny
Polystichum munitum
Rudbeckia goldsturm
Sedum Autumn Joy

Heartleaf Berginia
Deer Fern
Purple Coneflower
Blue Fescue
Gold Day Lilly
Blue Oat Grass
Dwarf Maiden Grass
Dwarf Fountain Grass
Miniature Fountain Grass
Western Sword Fern
Black Eyed Susan
Autumn Joy Stonecrop

Rain Gardens (note: plants noted below are suitable for rain garden bottom surfaces; plants included in the list above may be considered for rain garden upper side slopes.

Carex var.
Deschampsias var.
Iris douglasiana
Juncus var.
Scirpus var.

Sedge var.
Tufted Hair Grass
Douglas Iris
Juncus var.
Bullrush



rain garden example

A "family" of furniture for the downtown, in elegant traditional black, has been selected to complement the iconic "New Westminster" lights. This family of furniture, while traditional, is classic in design and will be suitable for existing and future streetscape and open space redevelopment. Lights and furniture are to be powdercoated black - RAL 9005, semi gloss- neutral and elegant. Paving materials are selected in cool tones to match varying architectural styles. Cast concrete is used extensively for durability and resistance to settling with unit paving used as highlights.



9.1 Ornamental Street Lights

The existing iconic Lumec “New Westminster” lights may be refurbished for LEED and dark-sky compliance with new LED or equivalent drivers and internal shields, re-powdercoated black (RAL 9005, semi gloss) and reinstalled. Over time the entire inventory may be upgraded, however in the short to mid term, the lights can simply be painted. New LED or equivalent source New Westminster Lights are added where infill is required or new development dictates. The existing lights have a custom pole skirt that is expensive to reproduce. It is recommended that the custom pole skirts be retained in existing retail areas and new “off-the-shelf pole skirts be utilized in areas of extensive redevelopment. Other existing ornamental lights within the downtown may be partially reused (pole and base) and retrofitted with the New Westminster fixture.

At the proposed Civic Boulevard, it is recommended that new fixtures be paired up across the carriageway in a regular pattern in order to create a rhythm for the street.

It is recommended that this iconic light be identified with the downtown and not used beyond the defined downtown area except along the gateway street approaches.



existing twin head Pace luminaire



existing New Westminster



existing New Westminster teal & maroon







existing Carriage lights

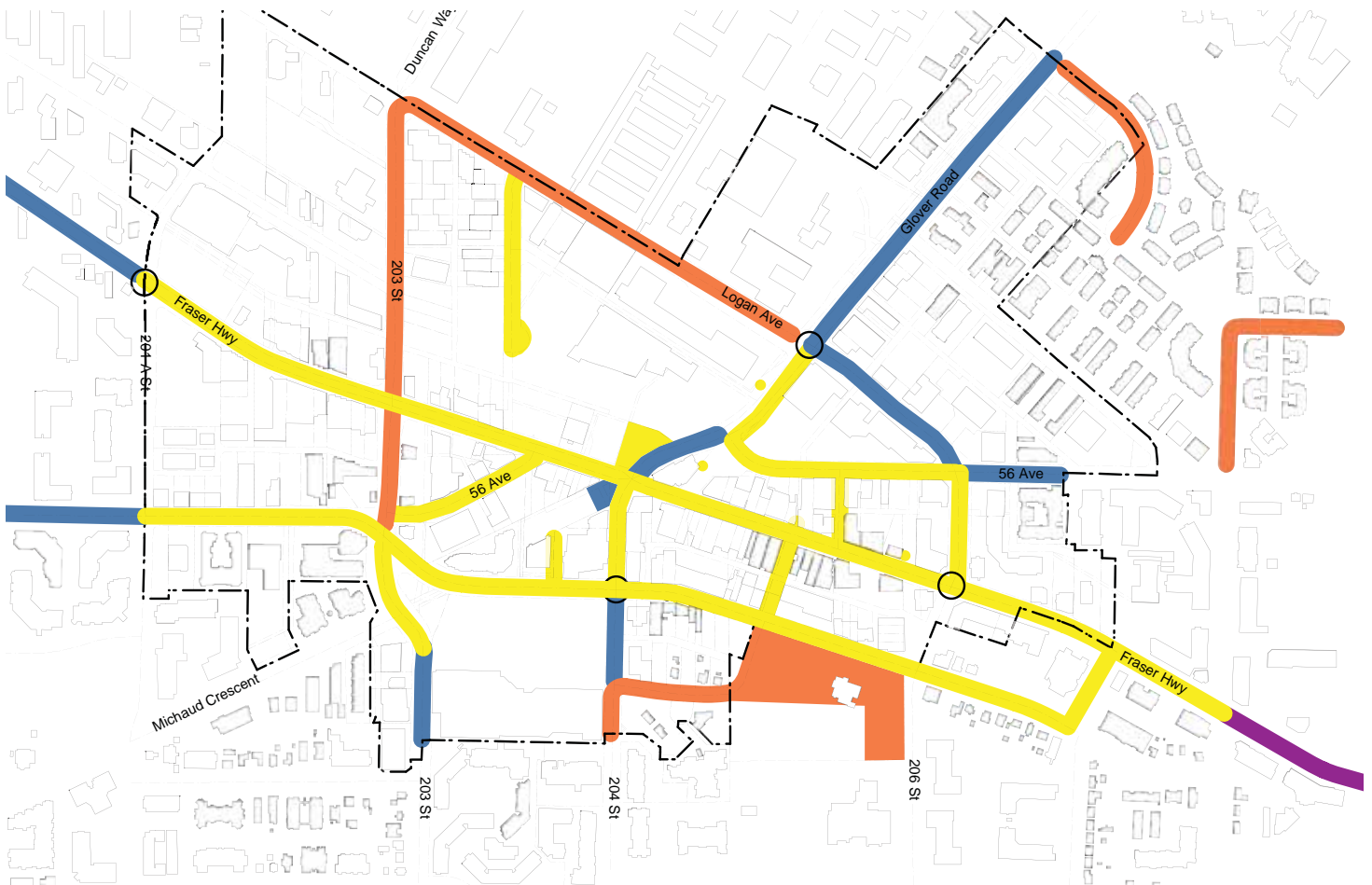


Lumec 'New Westminster' Light

9.1.1 Proposed Decorative Street Light Plan

The pattern of existing and proposed areas of ornamental streetlights is illustrated in this diagram. Infill lighting is not illustrated.

-  existing single head Lumec 'New Westminster' luminaire on octagonal pole with decorative base to be retrofitted
-  existing single head square luminaire on octagonal pole with no decorative base to be retrofitted
-  existing twin or triple head Pace luminaire on octagonal pole with decorative base to be retrofitted
-  proposed areas of new Lumec single head "New Westminster" luminaire



9.2 Banners and Hanging Baskets

Banners are integral for announcing and animating the public realm. They provide a medium for seasonal change, and the announcement of special events. They provide colour and interest. Hanging baskets further green the downtown, and add charm and colour however maintenance is labour intensive. Together they provide a palette for the ephemeral. It is suggested that the banner program stay “on theme”; that messages be limited to one message on the gateways and maximum one other message on downtown core streets. It is suggested that the hanging basket program be limited within the downtown core only.

Practically, it is difficult to provide both banners and baskets on the same ornamental pole without visual overlap. It is recommended that baskets and banners occur on alternating poles. Single banners at sidewalks or double banners in medians are acceptable depending on available horizontal space. Single hanging baskets at the curbside are recommended except at nodes where double baskets designate a “special place”.

Although popular, flower basket maintenance is labour intensive. Limiting the basket program to areas and locations of highest impact only is recommended. Encouraging merchants to provide flowering pots at grade would supplement a reduced hanging basket program.

Banner arms and basket hangers should be powdercoated black (RAL 9005, semi gloss) and be integral with the poles rather than attached with banding.



hanging basket example



banner example for gateway median



existing hanging basket



existing banner






existing banner

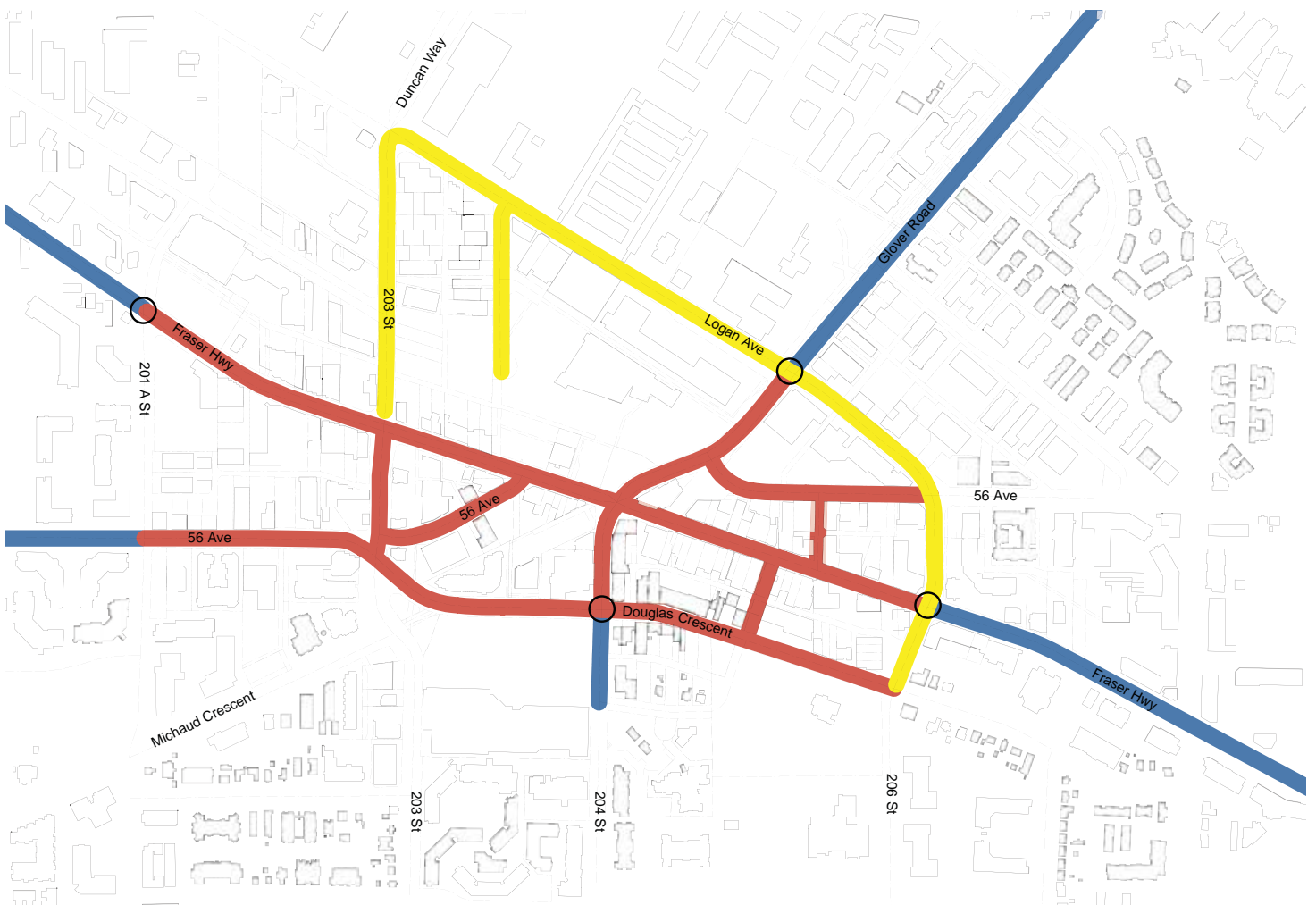


existing banner

9.2.1 Banners and Hanging Flower Basket Plan

The pattern of proposed banners and baskets is illustrated in this diagram. Flower baskets are optional.

-  Downtown Core banner Type A, Flower Baskets optional
-  Downtown Core banner Type A, no Flower Baskets
-  Gateway Street banner Type B, no Flower Baskets



9.3 Benches, Trash Receptacles, and Bollards

A family of street furniture is illustrated. The bench is the Maglin “MLB300M”, the trash receptacle is the Landscapeforms “Chase Park” with the optional matching recycling container for cans and bottles, and the bollard is either the refurbished custom bollard for reuse in existing retail areas or the new Urban Accessories “San Francisco” bollard for areas of extensive redevelopment. All furniture is powdercoated black (RAL9005, semi gloss).



Maglin MLB300MH



Landscapeforms “Chase Park” with recycling option



existing trash receptacle



existing bench



existing trash receptacle



existing bollard



existing bollard



refurbished custom bollard



Urban Accessories “San Francisco”

9.4 Bicycle Racks

Bicycle Racks are the Frances Andrew “Loopy” series. These racks come in a variety of lengths to suit various applications. All furniture is powdercoated black (RAL9005, semi gloss).



Frances Andrew “Loopy”



existing bike rack

9.5 Paving Materials and Tree Grates

Paving materials are selected in cool tones to match varying architectural styles. Existing red tone unit paving is to be removed and replaced over time. Cast concrete with a sandblast finish and saw cut pattern is used extensively for durability and resistance to settling with unit paving used at pedestrian nodes and as highlights at the curb. A new concrete unit paver module (301mm x 301mm) in three colours is illustrated. Special highlight paving in granite or other premium materials is recommended for special open spaces.



Concrete Unit Paving



Feature Paving



CIP Concrete Sidewalk



Concrete Unit Paving



existing paving



existing paving

An elegant tree grate from Dobney Foundry, the "LPT" series, in two sizes is selected for use in the downtown core and in special open spaces. This is a highly detailed and elegant grate in an ornate traditional pattern.



Dobney Foundry 'LPT48'



existing tree grate



Dobney Foundry 'LPT'

9.6 Public Art and Feature Elements

Public art is strongly recommended for downtown Langley. It can strengthen or create a sense of place, tell a story, engage and possibly challenge the public. Significant public art is recommended for the four gateway arrival nodes. These pieces should be iconic and of a scale that can be read by both pedestrians and drivers. Existing wood sculptures may require relocation. Consider phasing wood sculptures out over time in lieu of public art constructed of more durable materials.

Art for Innes Corners, the "Interurban" and the "Smugglers' Trail" Greenways in particular should be integrated and themed. In addition, pedestrian scale or integrated art should be incorporated throughout the downtown and along the greenways wherever possible. Public participation in the creation of art especially along the greenways is encouraged.

Integrated art could be in the form of custom furniture, special paving patterns or materials, embedded metal medallions or custom cast manhole covers. The commissioning of a companion Public Art Plan is recommended for the Downtown.



feature element example



public art example



public art example



public art example



public art example



existing public art

9.7 Wayfinding and Signs

Signs, banners and iconic or repeated elements should be incorporated into the public realm that identify, direct, and assist with understanding and movement in order to create a coherent navigable downtown.

Existing signs of all types should be reviewed and a strategy developed for all signs including branding, directional, cultural, heritage, interpretive, wayfinding and commercial signs.

The commissioning of a companion Wayfinding and Sign Plan is recommended for downtown Langley.



existing sign



parking lot sign - example



wayfinding element



existing character sign



city directory example



wayfinding signs

10.0 COSTING

10.1 Public Realm Costing

The Public Realm Plan is intended to be implemented in conjunction with the recommendations of the Downtown Master Plan. With a few exceptions, the realization of Public Realm improvements will be in conjunction with future adjacent re-development.

The purpose of the Public Realm Plan is to provide the City with the tools for creating a cohesive and understandable public realm that can be implemented incrementally over time. Public realm investment is undertaken almost exclusively by the private sector as part of the redevelopment of property. (For example the Weststone Project; Douglas Crescent/Park Avenue). However, to begin implementation of the Public Realm Plan and to further generate interest and momentum in Downtown Langley, the City may consider implementing a specific “pilot or demonstration project/s” in consultation with the Downtown Langley Merchants Association BIA.

Possible Financing Options Include:

Option A: Assumes a 100% cost of the debt by the Downtown Specified Area starting in year one, amortized over a 10 year period.

Option B: Assumes a 50%-50% cost sharing of the debt cost between the Downtown Specified Area and the general tax base starting in year one, amortized over a 10 year period.

Option C: Assumes a 100% cost funded by the City through the Capital Improvement Plan.

10.2 Implementation / Pilot Project Options

To begin implementation of the Public Realm Plan, and to generate interest and momentum, it is recommended that the City consider few specific pilot or demonstration projects. Recommendations and options for some initial projects are provided below. As opportunities for implementation of additional streetscape segments arise with proposed development or utilities projects, the Public Realm Plan will gradually be realized. In the short term there may be a mosaic of improvements within the Downtown.

Note that pilot project options that include streetscapes fronting future developments may be premature as streetscapes cannot be realistically implemented without a complementary architectural context. In addition, should the public realm be upgraded prior to adjacent development, there may be construction-related damage in the future.



Option 1: Mc Burney Lane

- McBurney Lane \$1,200,000
- Douglas Cres. at Weststone development Developer

Discussion: this option allows for the full build-out of a public realm open space that will showcase the new palette of materials and furniture. McBurney Lane is an important open space, which has fallen into disrepair recently due to vandalism and wear. It has the potential to become an important pedestrian link from the vital retail shops along Fraser Highway to the new Spirit Square at Douglas Park. The adjacent Weststone development provides the opportunity for the implementation of a representative segment of the proposed new streetscape including implementation of new angled parking on Douglas Crescent.

Total Cost **\$1,200,000**



Option 2: Mc Burney Lane / Fraser Highway East

- McBurney Lane \$1,200,000
- Fraser Highway East (204 Street to 206 Street) \$1,500,000
- Douglas Cres. at Weststone development Developer

Discussion: this option allows for the full build-out of both a public realm open space and a mixed-use street that will showcase the new palette of materials and furniture. McBurney Lane is an important open space, which has fallen into disrepair recently due to vandalism and wear. It has the potential to become an important pedestrian link from the vital retail shops along Fraser Highway to the new Spirit Square at Douglas Park. The adjacent Weststone development provides the opportunity for the implementation of a representative segment of the proposed new streetscape including implementation of new angled parking on Douglas Crescent. This eastern section of Fraser Highway is a successful retail street however the streetscape is exhibiting wear.

This is a particularly good demonstration option as all three projects are contiguous.

Total cost **\$2,700,000**



Option 3: Fraser Highway West and East / McBurney Lane

• Fraser Highway West (201A St. to 203 St.)	\$1,300,000
• Fraser Highway West (203 St. to 204 St.)	\$1,500,000
• Fraser Highway East (204 Street to 206 Street)	\$1,500,000
• McBurney Lane	\$1,200,000
• Douglas Cres. at Weststone development	Developer

Discussion: this option allows for the full build-out of the downtown section of the Fraser Highway, with a linked public realm open space to showcase the new palette of materials and furniture. The western section of Fraser Highway is largely underdeveloped, with infrequent streetscape improvements, and will be undergoing much transformation in the future as outlined in the Downtown Master Plan. The eastern section of Fraser Highway is a successful retail street however the streetscape is exhibiting wear. McBurney Lane is an important open space, which has fallen into disrepair recently due to vandalism and wear. It has the potential to become an important pedestrian link from the vital retail shops along Fraser Highway to the new Spirit Square at Douglas Park. The adjacent Weststone development provides the opportunity for the implementation of a representative segment of the proposed new streetscape including implementation of new angled parking on Douglas Crescent.

This is an interesting demonstration option as it completes the entire downtown section of the Fraser Highway – the important east/west axis, and links it to Spirit Square via McBurney Lane. The downside of this pilot project is that it may be premature prior to Fraser Highway West redevelopment.

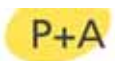
Total cost **\$5,500,000**

Option 4: McBurney Lane and Fraser Highway East / Douglas Crescent Loop

• McBurney Lane	\$1,200,000
• Fraser Highway East (204 Street to 206 Street)	\$1,500,000
• Douglas Crescent East (204 Street to 206 Street)	\$1,900,000
• 206 St. South (Fraser Hwy to Douglas Cres.)	\$ 400,000
• Douglas Cres. at Weststone development	Developer

Discussion: this option allows for the full build-out of a public realm open space and two connected mixed-use streets that will showcase the new palette of materials and furniture. McBurney is an important open space, which has fallen into

disrepair recently due to vandalism and wear. It has the potential to become an important pedestrian link from the vital retail shops along Fraser Highway to the new Spirit Square at Douglas Park. The adjacent section of Douglas Crescent including the Weststone development provides the opportunity for the implementation of a representative segment of the proposed new streetscape including implementation of new angled parking on Douglas Crescent.



The short section of 206 Street completes a potential pedestrian loop. This eastern section of Fraser Highway is a successful retail street however the streetscape is exhibiting wear.

This is also a particularly good demonstration option as all four projects are contiguous and provide a complete pedestrian loop.

Total cost	\$5,000,000
-------------------	--------------------

10.3 Public Realm Costing Data

Order of magnitude public realm costing is provided for downtown system-wide improvements to lighting and street trees as well as for complete example projects and streetscapes. Please note that the public realm plan does not include finalized designs or finalized costing. Plans and detailed costing are required prior to implementation. Unit costs have been extrapolated and applied to each individual downtown street, gateway street and greenway. A summary of all costs is provided for information only - there is no expectation that the City would attempt to implement the Public Realm improvements as a whole.

Note: all costs are less taxes and based on estimated 2009 values.

1. Example System-wide Cost.

Overall downtown ornamental lighting upgrade.

Note: does not include ornamental lighting for Gateway Streets or Greenway Streets.

• Upgrade all existing “New Westminster” luminaires to new LED driver, repaint.	
• est. 238x\$2600:	\$618,000
• Replace all existing “Carriage” and “Pace” luminaires with new LED driver New Westminster luminaires (note some double and triple arm poles), repaint, new custom skirts, retained poles.	
• Est. 110 singles x \$4300:	\$473,000
• Est. 16 double x \$6500:	\$104,000
• Est. 3 triples x \$8400:	\$25,200
• Complete downtown area ornamental lighting. Infill with new LED driver New Westminster luminaires, poles, custom skirts, concrete bases, conduit, trenching, wiring.	
• Est. 160 singles x \$7800:	\$1,248,000
Sub total cost	\$2,469,000
Rounded sub total	\$2,500,000
Design / Contingency 20%	\$500,800
Total Cost	\$3,000,000*

*Upgrading existing luminaires to new LED technology offers a 60% energy cost savings and a projected 18 years of no maintenance requirements. The LED light engine is BC Hydro approved and may be eligible for a Power Smart rebate thus reducing capital costs. Based on energy savings, an investment payback length of approximately 7 years on the capital investment is anticipated. The LED luminaires are LEED compatible.

If funds for full upgrades are not available, then repainting existing ornamental lights may be an effective short-term measure, with LED upgrades gradually implemented over time. All new lighting however should have the LED light engine and be LEED/Dark Sky compliant.

2. Example System-wide Cost. Overall downtown street tree upgrade.

Note: supply and installation of new trees excludes tree grates or surrounds.
Note: does not include new trees for Gateway Streets or Greenway Extensions.

• Removal of failed trees, est. 50 x \$ 300:	\$15,000
• Prune existing trees. 217 x \$100 average:	\$21,700
• New infill trees supply and install downtown, • Est. 147 x \$500:	\$73,500
Sub total cost	\$110,200
Rounded sub total	\$110,000
Design / Contingency 20%	\$22, 00
Total Cost	\$132,000

3. Example Project Cost. Downtown core: Fraser Highway east (204 Street to 206 Street)

• Civil curbs and asphalt (assume retention, select repairs):	\$20,000
• Civil services: assume upgrade relative to rain gardens (est. 8):	\$40,000
• Civil street bulge demo/new curbs (est. 2):	\$40,000
• Demolition of existing unit paved sidewalks, 3300m2x\$25:	\$ 82,500
• Special gateway treatment (206 St.), public art allowance:	\$150,000
• Roadway demolition/prep for crosswalks, 140m2x\$50:	\$7,000
• Roadway crosswalks, cast concrete, 140m2x\$100:	\$14,000
• Site preparation 3800m2x\$20:	\$76,000
• Unit paving sidewalk 2200m2x \$120:	\$264,000
• Cast concrete paving sidewalk, 1100m2x\$100:	\$110,000
• Ornamental street lights retrofit existing, 24x\$2600:	\$62,400
• Ornamental street lights new, 4x\$7800:	\$31,200
• Additional feature lights allowance:	\$20,000
• Benches, 16x\$2000:	\$32,000
• Trash cans, 10x\$1000:	\$10,000
• Cast edger at retained trees, 28x\$600:	\$16,800
• Bike racks, est. 4x\$1500:	\$6,000
• Bollards new custom, est. 8x\$2000:	\$16,000



• Bollards, existing repainted, 12x\$500:	\$6,000
• Upgrade existing overhead lane signs (4) allowance:	\$16,000
• Banners, 24x\$500:	\$12,000
• Baskets, 24x\$250:	\$6,000
• Tree preparation prune and retain existing, 26 x \$500:	\$13,000
• New infill trees, est. 2x\$500:	\$1,000
• Structural soil trench, 500m3x\$80	\$40,000
• Planting inc. rain gardens, 180m2x\$80:	\$14,400
• Irrigation allowance:	\$20,000
• Wayfinding signs allowance:	\$10,000
Sub total	\$1,136,300
Rounded sub total	\$1,200,000
Design / Contingency 30%	\$360,000
Total Cost	\$1,560,000
(summary unit cost: 370 linear metres of street ROW @ \$4000)	

4. Example Project Cost. Downtown core: Fraser Highway west (203 Street to 204 Street)

Note: includes roadway reconstruction for angle parking.

• Civil curbs (south side, partial north, bulges) 525 lin. m x\$100:	\$52,500
• Civil asphalt (assume new curb/curb) 4400m2x\$30:	\$132,000
• Civil services: assume upgrade relative to rain gardens (est. 6):	\$30,000
• Civil services: new catch basins (est. 10)	\$50,000
• Demolition of existing unit paved sidewalks, 1800m2x\$25:	\$45,000
• Demolition (partial) of existing asphalt roadway, 400m2x\$25:	\$10,000
• Site preparation 2400m2x\$20:	\$48,000
• Public art allowance (Civic area):	\$100,000
• Roadway demolition/prep for crosswalks, 140m2x\$50:	\$7,000
• Roadway crosswalks, cast concrete, 140m2x\$100:	\$14,000
• Unit paving sidewalk 1300m2x \$120:	\$156,000
• Cast concrete paving sidewalk, 900m2x\$100:	\$90,000
• Ornamental street lights retrofit existing, 5x\$2600:	\$13,000
• Ornamental street lights new, 15x\$7800:	\$117,000
• Additional feature lights allowance:	\$20,000
• Benches, 8x\$2000:	\$16,000
• Trash cans, 5x\$1000:	\$5,000
• Tree grates, 29x\$2000:	\$58,000
• Cast edger at retained trees, 5x\$600:	\$3,000
• Bike racks, est. 4x\$1500:	\$6,000
• Bollards new custom, est. 18x\$2000:	\$36,000
• Banners, 20x\$500:	\$10,000
• Baskets, 20x\$250:	\$5,000
• Tree preparation prune and retain existing, 5 x \$100:	\$500
• Tree removal, 13 x \$300:	\$3,900
• New infill trees, est. 29x\$500:	\$14,500



• Structural soil trench, 350m3x\$80	\$28,000
• Planting inc. rain gardens, 120m2x\$80:	\$9,600
• Irrigation allowance:	\$15,000
• Wayfinding signs allowance:	\$10,000
Sub total	\$1,105,000
Rounded sub total	\$1,100,000
Design / Contingency 30%	\$330,000
Total Cost	\$1,430,000

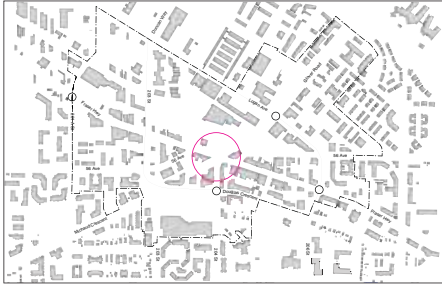
(summary unit cost: 280 linear metres of street ROW @ \$5100)

5. Example Project Cost. McBurney Lane (Fraser Highway to lane south of Douglas Cres.)

• Civil curbs demo / new curbs:	\$24,000
• Civil services: assume upgrade	\$20,000
• Demolition of existing unit paving, 700m2x\$25:	\$17,500
• Demolition of existing asphalt paving, 1200m2x\$25:	\$30,000
• Site preparation 2300m2x\$20:	\$46,000
• Public art allowance:	\$50,000
• Roadway demolition/prep for crosswalks, 120m2x\$50:	\$6,000
• Roadway crosswalks, cast concrete, 120m2x\$100:	\$12,000
• Unit paving plaza/roadway 2000m2x \$120:	\$240,000
• Cast concrete paving misc bands, 200m2x\$100:	\$20,000
• Water feature complete	\$200,000
• Ornamental street lights retrofit existing, 10x\$2600:	\$26,000
• Ornamental street lights new, 4x\$7800:	\$31,200
• Additional feature lights allowance:	\$20,000
• Benches, 12x\$2000:	\$24,000
• Trash cans, 8x\$1000:	\$8,000
• Tree grates 10x\$2000:	\$20,000
• Bike racks, est. 4x\$1500:	\$6,000
• Bollards repaint and relocate exist 20x\$400:	\$8,000
• Upgrade existing overhead lane sign (1) allowance:	\$4,000
• Banners, 14x\$500:	\$7,000
• Baskets, 14x\$250:	\$3,500
• Tree preparation prune and retain existing, 8 x \$500:	\$4,000
• New infill trees, est. 14x\$500:	\$7,000
• Structural soil trench, 90m3x\$80	\$7,200
• Planting 200m2x\$80:	\$16,000
• Irrigation allowance:	\$10,000
• Wayfinding signs allowance:	\$5,000
Sub total	\$872,400
Rounded sub total	\$900,000
Design / Contingency 30%	\$270,000
Total Cost	\$1,170,000

(summary unit cost: 2300m2 of open space@ \$500)





6. Example Project Cost. Innes Corners (Fraser Highway at Glover) first phase plaza.

Note: includes improvements to intersection and existing plaza opposite. Innes Corners would be constructed to a design standard equivalent to McBurney Square. Costs are based on a m2 cost of \$500/m2 determined for McBurney Square.

• First phase corner plaza complete 1400m2x\$500:	\$700,000
• Upgrade existing plaza across/ intersection ring, allowance:	\$200,000
 Sub total	 \$900,000
Design / Contingency 30%	\$270,000
Total Cost	\$1,170,000



7. Example Project Cost. Michaud Crescent Interurban Greenway (200 Street to 203 Street)

- Civil services: assume upgrade relative to rain gardens (est. 8): \$40,000
- Civil street bulge demo/new curbs (est. 20): \$60,000
- Demolition of existing concrete north sidewalk, 720m2x\$25: \$18,000
- Corner park at 203 St. 800m2 x \$250 complete: \$200,000
- Pedestrian controlled crossing improvements: t.b.c.
- Site preparation bump outs/trail. 2500m2x\$20: \$50,000
- Cast conc. paving trail one side / inset bands, 1800m2x\$120: \$216,000
- Ornamental street lights new: t.b.c.
- Benches, 6x\$2000: \$12,000
- Trash cans, 3x\$1000: \$3,000
- Bike racks, est. 2x\$1500: \$3,000
- Tree preparation prune and retain existing, allowance: \$10,000
- New infill trees, est. 20x\$500: \$10,000
- Planting inc. rain gardens, 400m2x\$80: \$32,000
- Irrigation allowance: \$20,000
- Public art allowance: \$50,000
- Wayfinding signs allowance: \$10,000

Sub total	\$734,000
Rounded sub total	\$750,000
Design / Contingency 30%	\$225,000
Total Cost	\$975, 000

(summary unit cost: 600 linear metres of street ROW @ \$1500)

8. Overall Costing Summary.

Downtown area including special projects, plus gateway street extensions and greenway extensions).

Note: ornamental lighting and tree costs are embedded in the following estimates. Costs are based on unit costs extrapolated from example detailed costing for pilot projects outlined above and include allowances for design and contingency. These costs are intended for preliminary budgeting purposes only.

Downtown Core Streets

East/West Axis (Fraser Highway)

• Fraser Hwy west (201A St. to 203 St.) 320 lin. m x \$4000:	\$1,280,000
• Fraser Hwy west (203 St. to 204 St.) see above:	\$1,436,500
• Fraser Hwy east (204 St. to 206 St.) see above:	\$1,477,190

North/South Axis (Glover Rd/204 Street)

• Glover north (Logan Ave. to Fraser Hwy) 260 lin. m x \$4000:	\$1,040,000
• 204 St. south (Fraser Hwy to Douglas Cres.) 115 lin. m x \$4000:	\$460,000

Downtown Core Loop

• Logan Avenue west (203 St. to Glover Rd.) 560 lin. m x \$3000:	\$1,680,000
• Logan Avenue east (Glover Rd. to 206 St.) 235 lin. m x \$3000:	\$705,000
• 203 St. north (Logan Ave. to Fraser Hwy) 355 lin. m x \$3000:	\$1,065,000
• 203 St. south (Fraser Hwy to Douglas Cres.) 150 lin. m x \$3000:	\$450,000
• Douglas Crescent west (203 St. to 204 St.) 290 lin. m x \$3000:	\$870,000
• Douglas Crescent east (204 St. to 206 St.) 368 lin. m x \$5100:	\$1,876,800
• 206 Street north (56 Ave. to Fraser Hwy) 138 lin. m x \$3000:	\$414,000
• 206 St. south (Fraser Hwy to Douglas Cres.) 107 lin. m x \$3000:	\$321,000

Other Downtown Core Streets

• 203A St. (Logan Ave. south) 213 lin. m x \$2000:	\$426,000
• 56 Ave. west (203St. to Fraser Hwy) 180 lin. m x \$4000	\$720,000
• 56 Ave. east (Glover Rd. to 206 St.) 265 lin. m x \$3000:	\$795,000

Sub total \$15,016,490

Rounded sub total \$15,000,000

Gateway Streets

• Fraser Hwy West (200 St. to 201A St.) 380 lin. m x \$1500:	\$570,000
• Fraser Hwy East (206 St. to Lang. Bypass) 600 lin. m x \$1000:	\$600,000
• Glover North (Lang. Bypass to Logan Ave.) 800 lin. m x \$1500:	\$1,200,000
• 204 St. South (Douglas Cres. to Park Ave.) 140 lin. m x \$1000:	\$140,000
• 56 Ave. west (200 St. to 201A) 290 lin. m x \$1500:	\$435,000

Sub total \$2,945,000

Rounded sub total \$3,000,000

Downtown Realm of Influence Streets

• 56 Ave. west (201A Ave. to 203 St.) 275 lin. m x \$2000:	\$550,000
• 56 Ave. east (206 St. to Eastleigh Cres.) 218 lin. m x \$2000:	\$436,000
• Eastleigh Cres. (Glover Rd. to 56 Ave.) 410 lin. m x \$2000:	\$820,000
• Industrial Ave. (201A Ave to 203 St.) 240 lin. m x \$2000:	\$480,000
• 203 St. south (Douglas Cres. to 54A St.) 240 lin. m x \$2000:	\$480,000
• Park Ave. (204 St. to lane) 160 lin. m x \$2000:	\$320,000
• 201A St. north (Indust. Ave. to Fraser Hwy) 140 lin. m x \$2000:	\$280,000
• 201A St. south (Fraser Hwy to 55A Ave.) 270 lin. m x \$2000:	\$540,000
<u>Sub total</u>	<u>\$3,906,000</u>
<u>Rounded sub total</u>	<u>\$4,000,000</u>

Special Projects

• Innes Corners Plaza Phase 1, see above:	\$1,170,000
• McBurney Lane, see above:	\$1,134,120
<u>Sub total</u>	<u>\$2,304,120</u>
<u>Rounded sub total</u>	<u>\$2,300,000</u>

Greenways

• Michaud Cres. (200 St. to Douglas Cres.):	\$954,200
• 204 St. (Nicomekl Park to Park Avenue) 600 lin. m x \$1000:	\$600,000
• 206 St. (Nicomekl Park to Douglas Cres.) 350 lin. m x \$1000:	\$350,000
• 208 St. (Nicomekl Park to 57 Ave.) 650 lin. m x \$1000:	\$650,000
<u>Sub total</u>	<u>\$2,554,200</u>
<u>Rounded sub total</u>	<u>\$2,600,000</u>
<u>Grand total full implementation of Public Realm Plan*</u>	<u>\$26,725,810</u>
<u>Rounded grand total full implementation of Public Realm Plan*</u>	<u>\$26,900,000</u>

*Please note that the grand total is "order of magnitude" costing and is for information only. The budget estimate cannot anticipate all related carriageway and underground service upgrades that may be required. All costs are less taxes and based on estimated 2009 values. Actual costs will vary based on inflation, market conditions and materials costs.

11.0 COMPONENTS APPENDIX

11.1 Lights

11.1.1 Refurbish Existing "New Westminster" Ornamental Lights

Refurbish existing Lumec "New Westminster" fixture and pole
Note: existing "New Westminster" fixture and pole are upgraded to LEED compliant

Strip and re-powdercoat existing pole and fixture cage black (RAL9005, semi gloss)
New 82W LED retrofit kit (LEED compliant)
Retain and reuse existing conc. base
Labour

Est. cost per light (based on 10 @2009 \$) installed \$2600

Discussion : LED replacement system is LEED compliant. Est. life of LED system is 70,000 hours (16 years). Possible Hydro Power Smart rebate.
Note : the above assumes re-use of poles and fixtures from existing City inventory. For new installations add cost for concrete base, wiring.
Available: Lumec Langley 604.626.4711

11.1.2 Convert Existing "Carriage" and "Pace" Lights to "New Westminster" Lights

Refurbish existing poles and replace "Carriage" and "Pace" luminaires with "New Westminster" luminaires

Strip and re-powdercoat existing pole black (RAL9005, semi gloss)
New LED driver Lumec "New Westminster" luminaire
Powdercoat black (RAL9005, semi gloss)
New skirt
Retain and reuse existing conc. base
Labour

Est. cost per light (based on 10 @2009 \$) installed \$4300

Discussion : LED fixture is LEED compliant. Est. life of LED system is 70,000 hours (16 years). Possible Hydro Power Smart rebate.
Note : the above assumes re-use of poles from existing City inventory.
Available: Lumec Langley 604.626.4711





11.1.3 New "New Westminster" Ornamental Lights

Install new Lumec "New Westminster" luminaires and poles

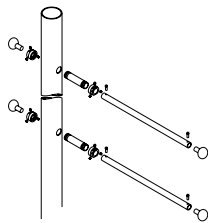
- New Lumec "New Westminster" luminaires and poles
- Powdercoat black (RAL9005, semi gloss)
- 82W LED driver (LEED compliant)
- Skirt
- Conc. base
- Conduit, trenching, wiring
- Labour

Est. cost per light (based on 10 @2009 \$) installed \$7800

Discussion : LED fixture is LEED compliant. Est. life of LED system is 70,000 hours (16 years). Possible Hydro Power Smart rebate.
Available: Lumec Langley 604.626.4711

BAS(2) / BAD(2) > BANNER ARMS

> shown here on a straight round pole



BAS(2)XX > Single banner arm



11.1.4 Banner Arms

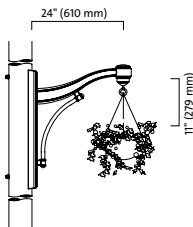
- New Lumec BAS(2) single banner arms kit
- Powdercoat black (RAL9005, semi gloss)
- Labour

Est. cost per pole (based on 10 @2009 \$) installed
 add to existing pole \$325
 add to new pole \$300

Available: Lumec Langley 604.626.4711

PSVCS / PSVCD > PLANT SUPPORT

EPA: 0.6 sq.ft. Weight: 9.6 lbs. (4.4 kg)



PSVCS > Single plant support



> Maximum weight of 100 lbs (45.4 kg) on each side.

11.1.5 Hanging Basket

- New Lumec PSVCS single plant support kit
- Powdercoat black (RAL9005, semi gloss)
- Labour

Est. cost per pole (based on 10 @2009 \$) installed
 add to existing pole \$325
 add to new pole \$300

Available: Lumec Langley 604.626.4711

11.2 Benches

11.2.1 MAGLIN "MLB300M" Bench

Black (RAL9005, semi gloss) with back and arms, steel seat & back, aluminum ends, surface mount.
Est. cost per bench (based on 10 @2009 \$) installed \$1100
Available: Maglin Site Furniture Inc. Calgary 888 271 8666



11.3 Trash Receptacles

11.3.1 Landscapeforms "Chase Park"

aluminum, black (RAL9005, semi gloss) top or side opening (40 / 36 gallons)

Est. cost per bin (based on 10 @2009 \$) installed \$1500
Available: Landscapeforms North Vancouver 604.987.7461



11.3.2 Landscapeforms "Chase Park" Recycling Litter with signage

aluminum, black (RAL9005, top opening (40 gallons)

Est. cost per bin (based on 10 @2009 \$) \$1600
Available: Landscapeforms North Vancouver 604.987.7461





11.4 Bollards

11.4.1 Refurbish Existing Custom Bollards

Strip and re-powdercoat existing bollard black (RAL9005, semi gloss)
Retain and reuse existing conc. base

Est. cost per bollard (based on 10 @2009 \$) re-installed \$300

11.4.2 Urban Accessories "San Francisco" Bollard

cast aluminum with powdercoat finish, semi gloss black (RAL9005, semi gloss)

Est. cost per bollard (based on 10 @2009 \$) installed \$1100
Available: Architecreation Seattle 206 932 4730



11.5 Paving Materials

11.5.1 Concrete Unit Pavers

Abbotsford Concrete Products "Nevada" concrete unit pavers

natural, shadow, charcoal, running bond pattern

Est. cost per m² (based on 10 @2009 \$) installed \$120
Available: Abbotsford Concrete Products 1 800 663 4091

11.5.1 Concrete Unit Pavers

- cast concretesandblast finish, sawcut

Est. cost per m² (based on 10 @2009 \$) installed \$100

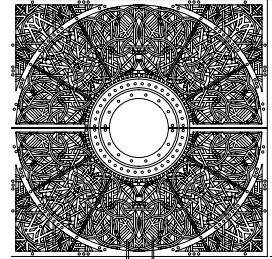


11.6 Tree Grates

11.6.1 Dobney Foundry "LPT-48"

tar finish gray iron

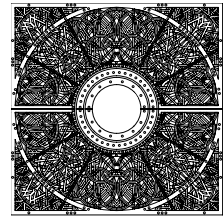
Est. cost per grate,
incl. frame w/curb attachment (based on 10 @2009 \$) installed \$800
Available: Dobney Foundry Surrey 604.596.7407



11.6.2 Dobney Foundry "LPT-36"

tar finish gray iron

Est. cost per grate,
incl. frame w/curb attachment (based on 10 @2009 \$) installed \$600
Available: Dobney Foundry Surrey 604.596.7407



11.7 Bike Racks

11.7.1 Frances Andrew Site Furnishings Loopy series "L21-BR52"

powdercoated steel, black (RAL9005, semi gloss)

Est. cost per bike rack (based on 10 @2009 \$) installed \$500
Available: Frances Andrew Site Furnishings Surrey 604 888 3712



Learn more about our Downtown Master Plan
and discover redevelopment opportunities
in the City of Langley. www.city.langley.bc.ca

CITY HALL
20399 Douglas Crescent
Langley, BC Canada V3A 4B3
Phone. 604 514 2800
Fax. 604 514 2322
www.city.langley.bc.ca

