

# *Bicycle Transportation Plan*

*2014 - 2024*



**CITY OF  
CHILLIWACK**



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# Executive Summary

The primary goal of the City of Chilliwack Bicycle Transportation Plan is to recommend priorities for bicycle related infrastructure improvements to generally facilitate the needs of cyclists, improve safety, make cycling a viable transportation option, and ensure that respect for cyclists improves in the eyes of the motoring public. The City has made huge strides toward achieving these goals over the last few decades but significant enhancements can still be made.

This Plan will provide a vision for bicycle transportation in Chilliwack through 2024. It will focus on Engineering, Encouragement, Education and Enforcement. It is not intended to drive spending or set modal split goals but to recommend improvement priorities so that as funding becomes available it can be focused as effectively as possible to improve bicycle transportation facilities throughout the city.

The Bicycle Transportation Plan working group is composed of representatives from the Parks Operations, Recreation & Culture, Planning and Strategic Initiatives and the Engineering departments, the RCMP, School District, Parent Advisory Committee, Tourism Chilliwack and several cycling enthusiasts.

Technical specifications tend to change every few years so Chilliwack will rely on the most recent edition of the applicable Transportation Association of Canada bicycle facility design standards with minor exceptions as required to meet local conditions.

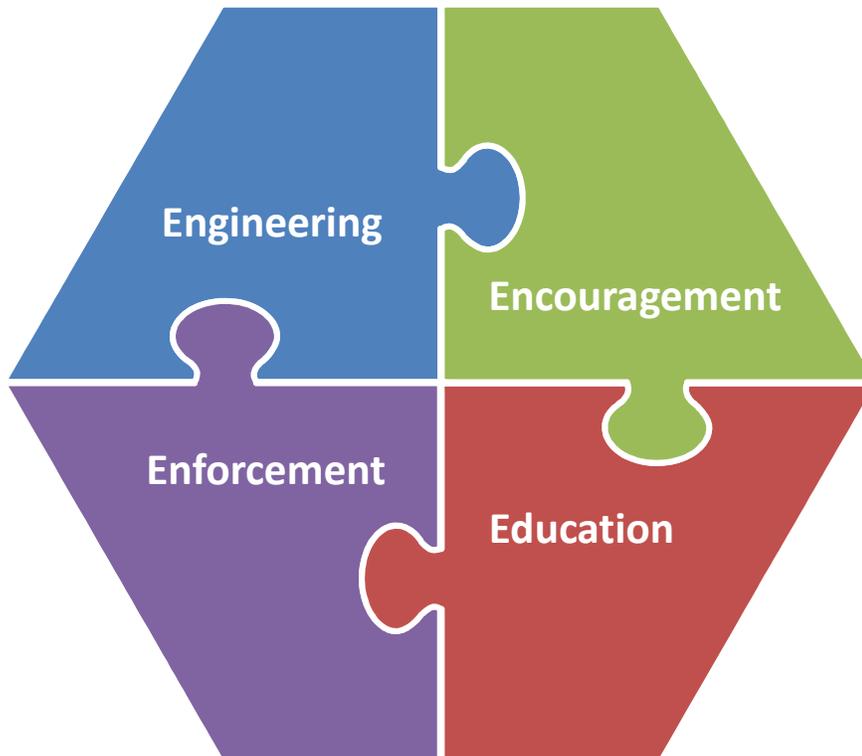
A key component of the Bicycle Transportation Plan is the formalization of a network of bicycle routes. The route network incorporates a combination of on-street routes and pathways connecting all major destinations and all neighbourhoods within the City of Chilliwack, as well as connections to Abbotsford, the FVRD, and local and regional transit services.

The Provincial Cycling Infrastructure Partnerships Plan (CIPP) and other related programs have contributed significantly to the advancement of the paved shoulder and pathway network over the last few decades. This plan updates and formalizes the city's cycling infrastructure goals and will support future applications for funding under Provincial or Federal initiatives.

This plan addresses School, Commuter and Recreational cycling, generally in that order of priority. School cyclists are typically younger and have the fewest transportation options of these three groups. Commuters are generally older, have more advanced cycling skills and often have alternate modes of transportation available to them. Recreational cyclists usually ride when the weather is good and can choose between many alternate routes because they are not limited to the shortest route between their origin and destination.

# INTRODUCTION

Bicycles provide an extremely efficient mode of transportation. In order for cycling to be a viable option for the average person the bicycle infrastructure must provide a feeling of safety and comfort. The role of local government is to provide safe and inviting infrastructure through “**Engineering**”, accommodate bicycle friendly events and provide route signs and mapping for the “**Encouragement**” of cycling, ensure cyclists are operating in a safe manner and motorists are driving with respect for cyclists through “**Enforcement**”, and provide foundational safety information for young people and reminders for adults through “**Education**” in an integrated manner as represented in the graphic below.



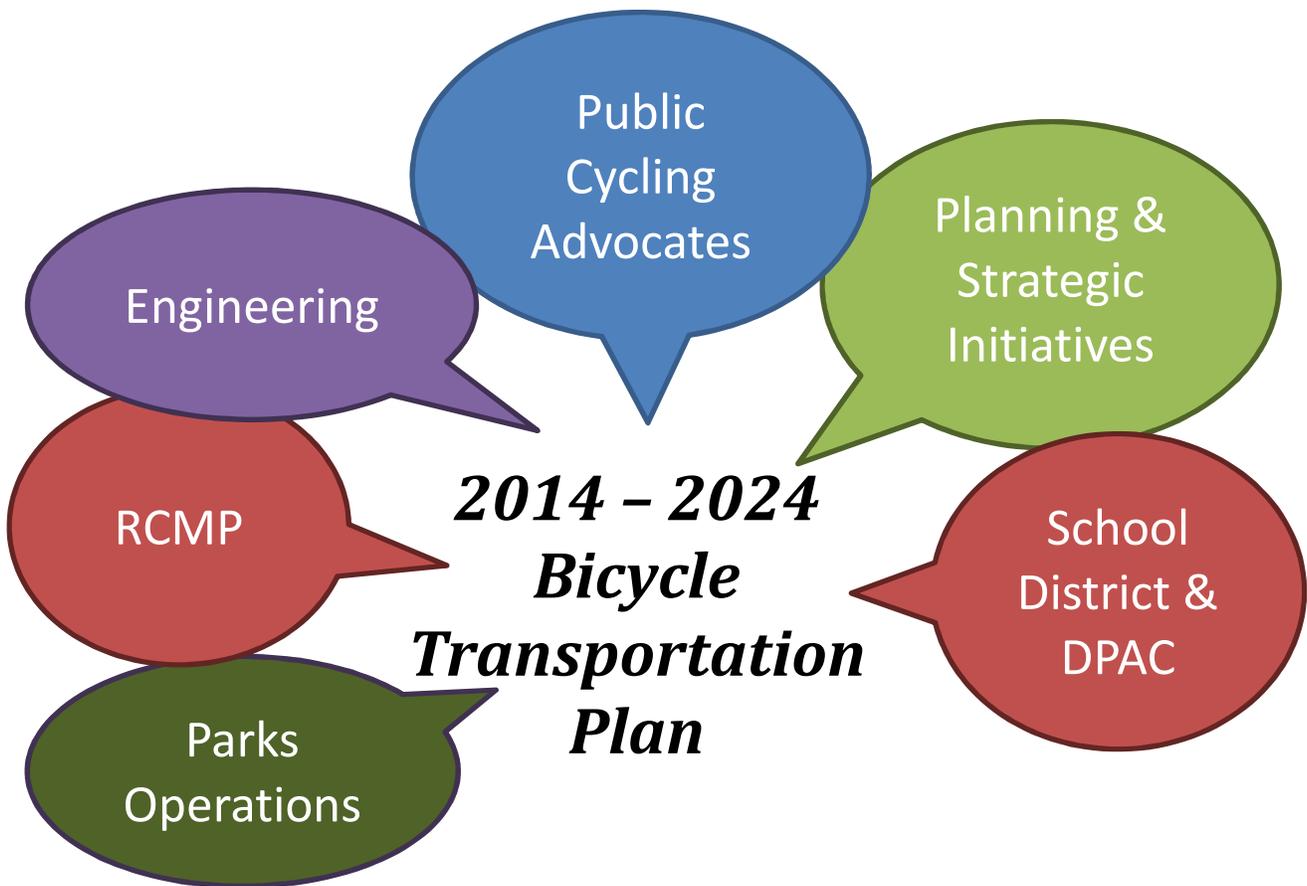
Philosophy regarding the role and operation of bicycles in Canadian cities has been hotly debated for many years. Some cycling advocates promote the concept that a bicycle is a vehicle and should be driven in much the same manner as a motor vehicle; therefore, bicycle specific infrastructure is seldom required. Others believe that cyclists must be completely isolated from motor vehicles so a separate network of bicycle paths is necessary. This Bicycle Transportation Plan attempts to find a middle ground between these extremes by acknowledging that financial realities dictate that cyclists will have to share some roads with motor vehicles while separate bicycle paths may be provided where cycling demand is high and it is cost effective to do so.

The City of Chilliwack has approximately 180 lane kilometers of bicycle lanes and about 1.5 kilometers of paved paths. In order for these facilities to remain attractive to cyclists they must be substantially free of gravel and debris. Sweeping is typically required on a monthly basis. Bicycles are more sensitive to rough asphalt surfaces and even minor sharp dips

or bumps compared to motor vehicles. As a result additional attention must be given to repairing bicycle lanes or the edge of shared vehicle lanes.

All major road re-construction projects should consider accommodation of bicycles whenever possible especially when the road is on a route shown on the “**Bicycle Route Vision Map**” in **Appendix “A”**.

A reassessment of priorities must be done on an ongoing basis. Annual review of the Bicycle Network Vision map in concert with the preparation of the Capital Plan can reveal opportunities for leveraging cycling project funding with other capital project funding.



# Vision, Goals & Objectives

## Vision

Chilliwack will become a safer, bicycle friendly community where cycling is not only for recreation but a viable “green” transportation alternative, offering energy conservation and promoting fitness.

## Goals

- To provide an effective mode of alternative transportation that will create a safe and enjoyable bicycle network system
- To integrate cycling into the overarching transportation network
- To accommodate riders of all demographics
- To increase motorist respect for cyclists and encourage responsible bicycle use
- To improve cycling connectivity between neighbourhoods throughout the city
- To provide clear and easily accessible information regarding bicycle routes and paths

## Objectives

- Improve safety through design standards or the provision of alternate routes
- Provide specific on-road facilities to improve the safety of school children
- Work toward the completion of facilities as required on established bicycle routes
- Provide bicycle parking facilities in high use areas
- Improve bicycle trail networks for recreational purposes
- To maintain a dialogue with the public and interdepartmentally to ensure we are working together to meet the most important needs first

# Engineering

## Networks & Routes

It is the expectation that most roads should accommodate bicycles to some degree. Designated Bicycle Routes will be given priority for improvement based on their greater use. These designated roads will form the “Bicycle Network”. Many of the network roads are already suitable for bicycle travel, but some will need improvement. The “Bicycle Network Vision” map is attached as **Appendix “A”**

The “Bicycle Network Vision” map indicates 2 types of routes –Commuter and Recreational in that order of priority. Capital works conducted on any route should be configured to accommodate cycling according to the appropriate design standards. Bicycle routes should receive a higher priority for funding under the annual Shoulder Paving Program. The “**Paved Shoulders & Paths**” (Appendix “B”) map shows existing paved shoulders, asphalt paths.

The “Bicycle Route” designation results in the following:

1. Encourages cyclists to use designated routes that have widths, traffic volumes, signs and/or markings that are conducive to cycling.
2. Increases public awareness of bicycle routes.
3. Improves communications with neighbouring communities or levels of government so trans-border cycling facilities can become seamless.

## School Priorities

Bicycle facilities in the vicinity of schools typically have the highest priority. Special consideration should be given to enhancing school cycling infrastructure by taking the following additional steps:

1. Pave and delineate extra wide shoulders (on Arterial and Collector roads)
2. Construct separated trails or paths
3. Create walkways connecting neighbourhoods so students can stay on Local roads instead of going around large blocks and onto Arterial or Collector roads.



## Commuter Routes

Commuter routes are intended to handle large volumes of cyclists from a broad demographic between common origins and destinations.



## Recreation Routes

Recreation routes are intended to provide cyclists with an outlet to exercise, view scenery and/or proceed at a leisurely pace in a low traffic natural environment. They are not necessarily intended to convey through traffic or provide direct routes to major destinations. Funding generally comes through the Parks Operations, senior government initiatives specifically aimed at recreation, or from service clubs.



## Bicycle Facilities

A bicycle facility is any physical component of the transportation system which facilitates or encourages bicycle travel. The attached **Appendix "B"** shows existing on and off-road bicycle facilities including:

- Delineated bicycle lanes



- Wide traffic lanes



- Paths



- Racks (Typically “Urban Staple Racks”, from Urban Racks for narrow applications or larger racks from Cora Canada)



## Facility Design Standards

Generally bicycle infrastructure should be constructed or upgraded in accordance with Transportation Association of Canada guidelines pertaining to the road classification and traffic volumes.

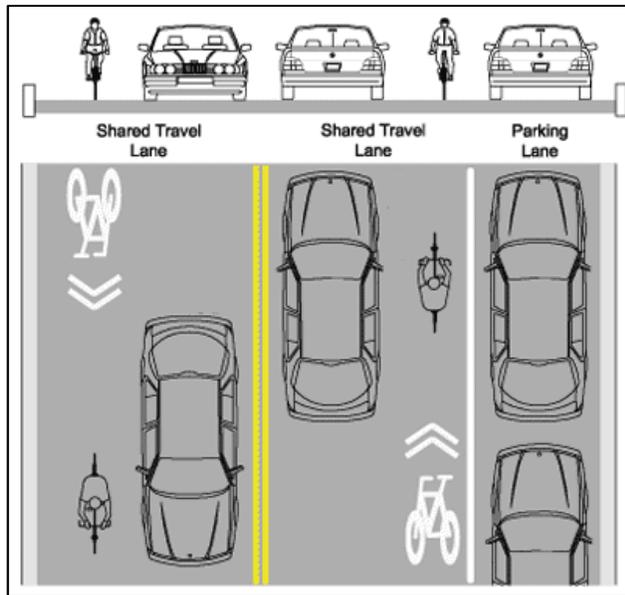
Typical widths for bicycle facilities are as follows:

- “Arterial” and “Collector” roads > 10,000 vehicles per day - 1.5m wide delineated bicycle lane adjacent to 3.5m wide vehicle lane.
- “Arterial” and “Collector” roads < 10,000 vehicles per day – minimum 4.0m wide vehicle lane plus gutter pan
- “Local” roads generally don’t require any facilities except signs for designated Bicycle Routes
- Separated paths - 3.0m wide asphalt or smooth well packed gravel

## Road markings

Markings should generally conform to the most recent edition of the TAC "Guidelines for the Design and Application of Bikeway Pavement Markings".

When a vehicle lane is to be shared with bicycles the road may be marked with "sharrows" as shown below.



Evans Roundabout "Sharrows" marking example



## Pinch Points



Width restrictions that are less than 100m in length may generally be referred to as “pinch points”. They should be eliminated on a priority basis as funds and other practical considerations allow. Signage and map notations warning cyclists of a pinch points allow them to plan alternate routes or be prepared to negotiate a potentially risky site.

## Offset Gates

Offset gates are designed to slow bicycle traffic to a near stop, thereby avoiding conflict with other traffic. They are recommended at the following locations:

1. Entrance to a narrow bridge or tunnel shared by pedestrians
2. Exit of a bicycle trail onto a public road where cyclists could run into the path of vehicular traffic

Gate design is provided in the Master Municipal Construction Documents (2009 MMCD Drawing C10 & C11).



## Bollards

Bollards are installed at the entry to paths to prevent the entry of motor vehicles. They should be installed according to the Master Municipal Construction Documents (2009 MMCD Drawing C12 or update).

## Intersection Traffic Control

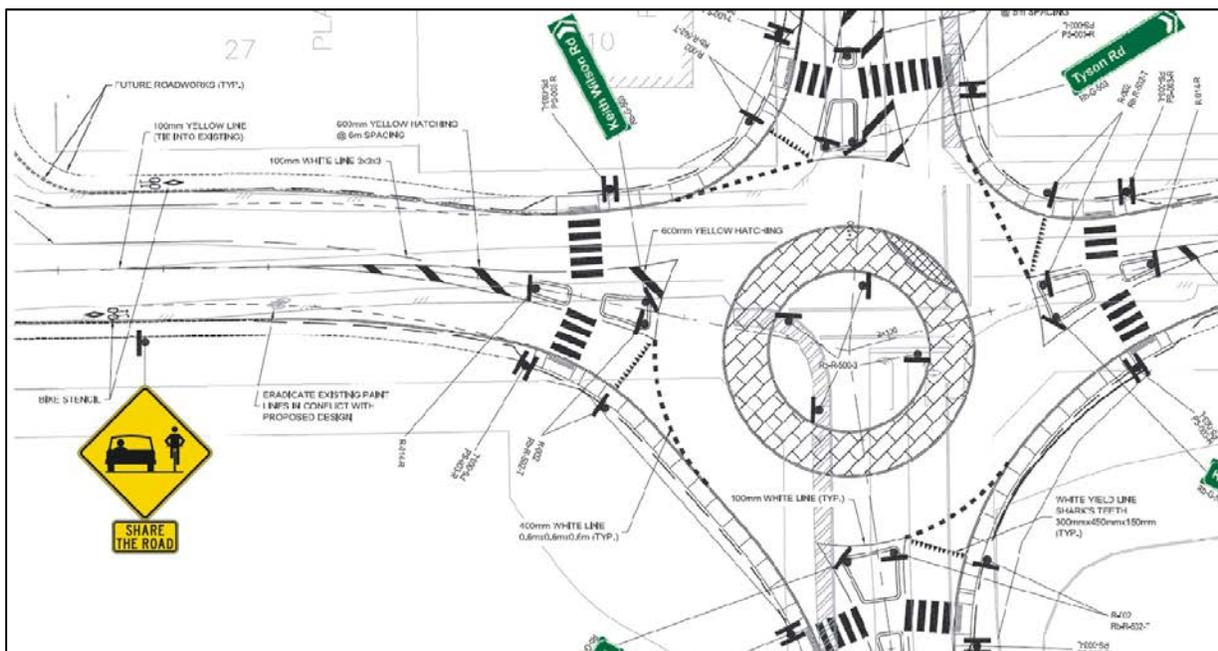
Planning for intersection traffic control should include consideration of cyclists needs. Traffic control signs, traffic signals and roundabouts should be configured to accommodate cyclists.

At stop controlled intersections consideration should be made to minimize stops for bicycles in balance with the vehicle traffic needs.

Traffic signal actuation should be automatic by means of video detection, bicycle detection loops or a readily accessible cyclist push button. Consideration should be made to extend minimum green times when a cyclist is detected, especially when the cyclist must stop on a steep uphill grade. This may be accomplished by initiating the walk signal when a bicycle is detected.



At roundabouts, signs and road markings must communicate to both motorists and cyclists how cyclists are intended to negotiate the intersection.



## Railway Crossings

Bicycle stability can be seriously affected at railway crossings. Whenever possible the orientation of the bicycle travel should be at ninety degrees to the railway tracks and the gap along the rail should be as narrow as possible. Maintenance of crossings is critical to minimize any significant holes or bumps that can pose a hazard to cyclists.



## Horizontal Clearance

Whenever a bicycle lane passes a pole there should be a minimum 1.2m clearance and the pole should be cleared of any sharp protrusions that may injure or throw a cyclist off balance if contacted. Adjacent to a continuous structure, like concrete roadside barrier, a minimum bicycle lane width of 1.5m should be maintained.

## Multi-Modal Infrastructure

Obstacles to cycling, like steep hills or long distances, can be overcome by the provision of multi-modal Infrastructure like bicycle racks on buses and bicycle parking and storage facilities at transit exchanges and park and ride facilities. As a reference for long term integration planning the Transit Future Plan is available at [www.chilliwack.com/transit](http://www.chilliwack.com/transit) .



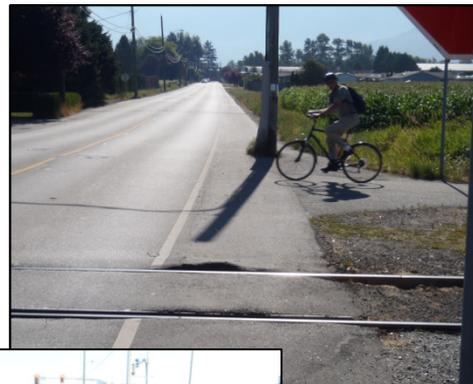
## Bicycle Volume Monitoring

While some senior government funding programs require bicycle counts, the value of dedicated bicycle count projects is questionable because the number of cyclists using any one facility fluctuates wildly depending on weather, community events, school and work schedules. Anecdotal observations of bicycle usage in Chilliwack are generally more valuable than organized counts at specific locations.

## Maintenance

Keeping the existing infrastructure in good condition preserves the investment and keeps the cycling option attractive for riders. Common maintenance items are as follows:

- Trim brush along bicycle paths and lanes & ensure blackberry trimmings are removed
- Maintain smooth road edge and path asphalt (i.e. Patch settled areas around CBs and manholes, overlay worn or uneven surfaces etc.)
- Sweep bicycle lanes and paths
- Repaint road markings
- Clear brush in front of , wash and align bicycle related signs
- Clean, paint and repair bicycle racks
- Clear snow from bicycle facilities (drifting is common on paths)



# Land Development

During the land development approval process bicycle desire paths should be considered and accommodated where practical. The accommodation should take into account features such as:

- Shared walkways
- Road and path grades
- Intersection control
- Road widths to accommodate cyclists
- Smooth bicycle channels beside any staircases

## Funding

### Funding Sources

There are a number of potential funding sources for bicycle infrastructure. The most common are as follows:

1. **City “Shoulder Paving” Program** – The 2013 CMP indicates stable funding of \$240,000 per year through to 2022. This figure assumes 50% of this amount will be sourced from the **Provincial BikeBC, CIPP** (or equivalent) program. If Provincial funding ceases this dollar amount will likely be reduced. Funding applications should be submitted generally in the order shown in **Appendix “C” – “Cost Estimates & Priorities By Class”** for **“Class 2”** facilities.
2. **City Parks Operations** – Funding through this department periodically funds trails or walkways that may stand alone for recreational purposes or be used as connectors for School and Commuter use.
3. **Federal Gas Tax funding** – The City may make application for a portion of the gas tax revenue collected in Chilliwack for transportation related projects.
4. **Green Municipal Fund** – The Government of Canada endowed the Federation of Canadian Municipalities with \$550 million to create the Green Municipal Fund (GMF). Through the Fund, municipalities may be eligible for funding for municipal environmental improvement projects.
5. **Service club contributions** – Local clubs like the Rotary, Kiwanis or Lions clubs may contribute to certain projects (i.e. Vedder Rotary Trail)
6. **ICBC** – Projects that may contribute to insurance claim reductions may be eligible for ICBC Road Improvement Project (RIP) funding. For example, bicycle lanes increase the width of the vehicle recovery zone and are often eligible for RIP funding.

### Evaluation & Prioritization

Many of the top priority projects identified within the Bicycle Transportation Plan are technically or financially challenging to implement. **Appendix “C”** lists projects in order of priority along with budget level estimates. This will allow the selection of the most important projects that can be constructed with available funding.

# Marketing

The success of any cycling plan is largely dependent on how the public responds to the bicycle option. The public needs to “buy into” the plan and support it with action (i.e. to ride a bicycle).

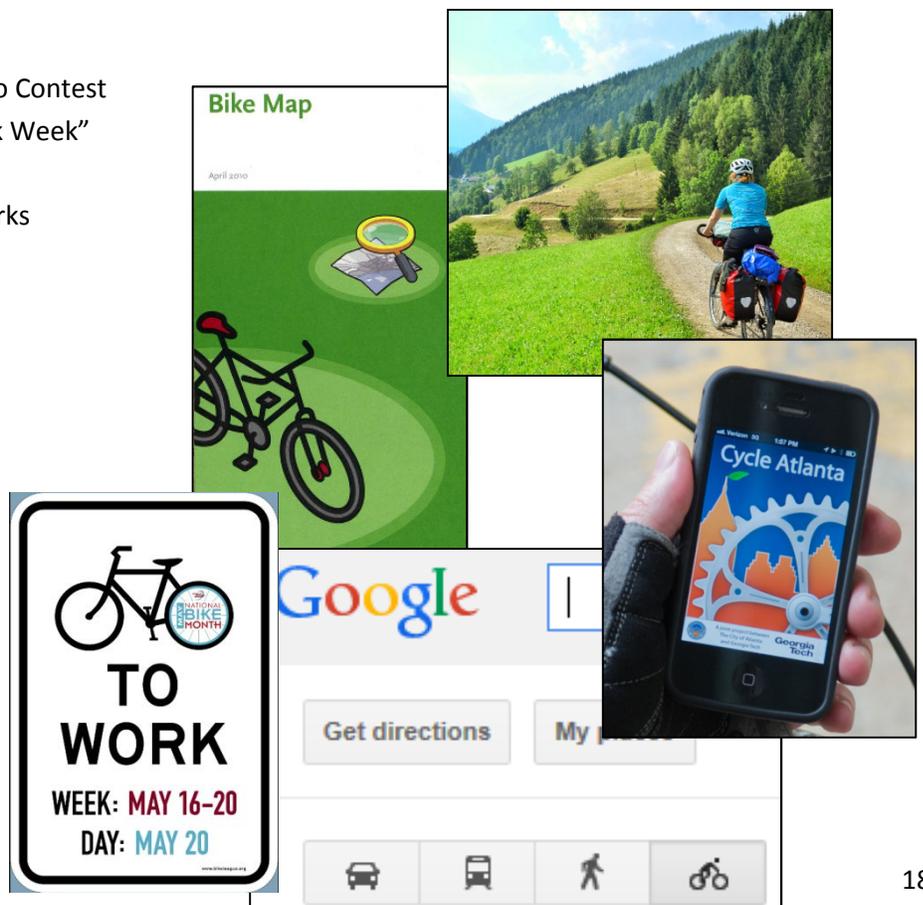
For this to happen:

- Promote practical advantages of riding a bicycle (i.e. lower travel costs, fitness, travel times comparable to other modes)
- Focus attention on safe facilities and practices (i.e. bicycle paths, rumble strips, low volume roads etc.)
- Convenient and secure bicycle parking must be available
- Bicycle use must be supported by the required infrastructure (i.e. paved shoulder, paths, etc.)
- The public must be aware of bicycle routes and infrastructure (i.e. signs, internet & newspaper, etc.)
- The bicycle planning process must include key stakeholders
- Bicycle related business should be encouraged (i.e. Bed & Breakfast, sales & repair)

The popularity of cycling is likely to increase as it becomes more socially accepted and promoted through events like “Bike to Work” week.

Specific strategies to promote bicycle usage in Chilliwack are as follows:

- Advertise safety improvements
- Online Route Map and Information
- Promote Healthy Environment
- Media Splash
- “Cycle Chilliwack” Branding & Logo Contest
- Wider Promotion of “Bike to Work Week”
- Smart Phone App
- Mini-Billboard Maps with Landmarks
- Set Goals & Organize Challenges
- Circle Farm Tour
- Local Business Bike Rally
- Google maps
- Promote Bicycle Tourism
- Regional Connection Map
- “Tear-Off” maps



# Education



In this plan “Education” refers to more formal instructional programs aimed at a particular audience such as students, adult cyclists and motorists. Some bicycle education is provided through service clubs, schools and the RCMP. The Chilliwack Safety Village at Fairfield Park provides opportunities for “hands on” training in a safe environment.

The Chilliwack Safer City website contains educational materials regarding bicycles for both cyclists and motorists at <http://www.chilliwack.ca/main/page.cfm?id=2324> .



# Enforcement

Enforcement should be preceded by awareness and education programs. It should focus on selected infraction targets so as to call public attention to the common causes of accidents. The enforcement program should be designed as “prevention” measure rather than a “penalizing” tool.

Helmets help prevent brain injuries and can increase visibility if they are brightly coloured and reflectorized. Enforcement of helmet laws provides a good reason for all members of a cycling family to wear a helmet which in turn helps train children for lifelong helmet use. Helmet law enforcement also integrates well with the “Broken Window Theory” to help prevent crime.



# TRAIL NETWORK



## 1. Introduction

The *Trail Network Plan* sets out Chilliwack’s vision, goals and objectives to meet the needs of a growing population, which places an increasing value on both fitness and energy conservation.

The *Trail Network Plan* provides the framework to achieve two specific objectives of the ***City of Chilliwack Greenspace Plan***; **accessibility** and **connectivity**.

Trails, walkways and greenways provide **accessibility** to parks and greenspace. Trails also interconnect greenspace, providing **connectivity** to our overall trail network and between neighborhoods and communities.

While topography limits most hillside trails to pedestrian use, other components of the network are available to the cyclist. Several of these trails provide opportunity for non-motorized “active” transportation to and from work, school, shopping and other destinations.

## Network Routes

“Appendix “E”” – Parks and Trails shows the location of parks as well as the existing and proposed trail network. Details of the trail network can also be viewed on line ([inmaps@chilliwack.com](mailto:inmaps@chilliwack.com)). Details of the trail alignment can be viewed online.

## Experience the Fraser (ETF)

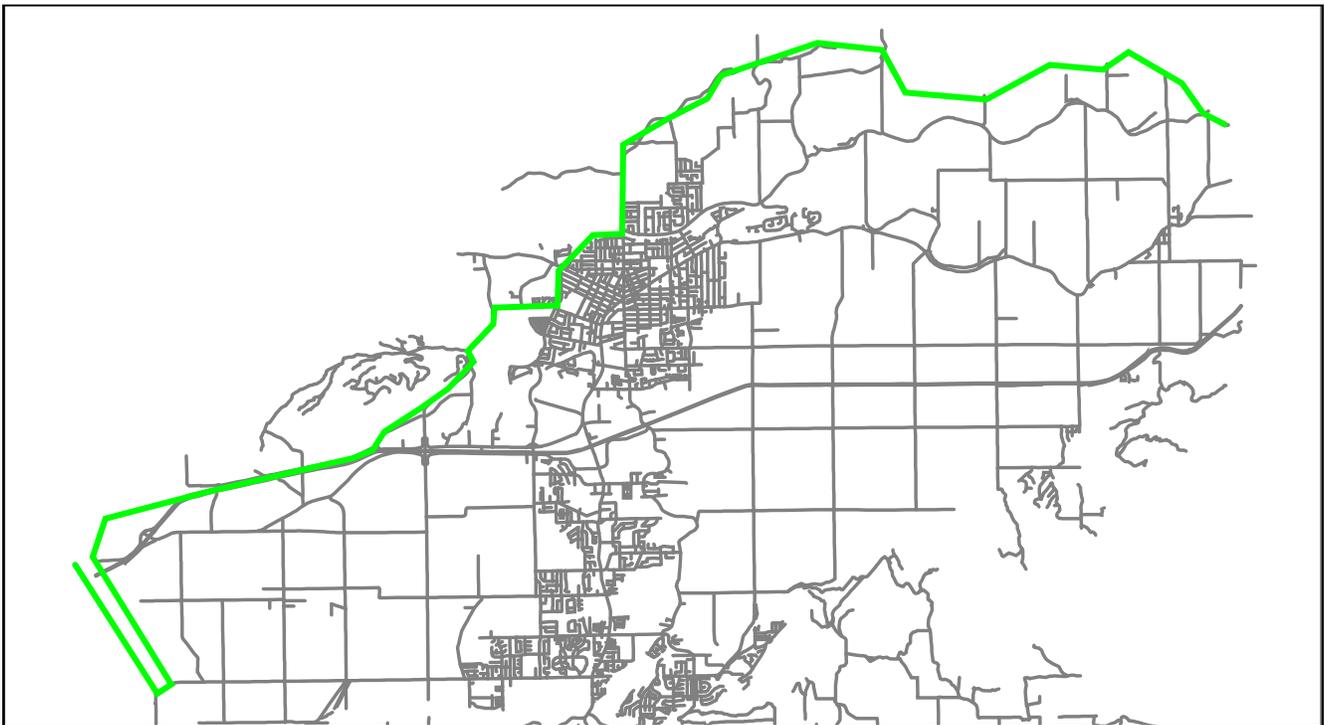
A concept plan for a Fraser River oriented trail system has been prepared by Metro Vancouver and the Fraser Valley Regional District under the name “*Experience the Fraser*”. The stated objective is:

*“to lay out a system of inter-regional trails, land and water based outdoor recreation infrastructure and cultural heritage features on both sides of the Fraser River.”*

The plan, completed in 2012, identifies a series of community nodes and park complexes along the both sides of the Fraser River from Richmond to Hope, connected by the trail system.

Within the City of Chilliwack, much of this route will follow the Fraser River Dyke system, which is nearly continuous for 26km from our western boundary with Abbotsford, at Vedder Canal, to our eastern boundary near Highway No. 9.

While the intent is to have the route consist primarily of trail components, some short sections of dyke are on private lands or occupied by roads, necessitating the use of delineated road shoulders or low traffic roads to provide links or an interim route.

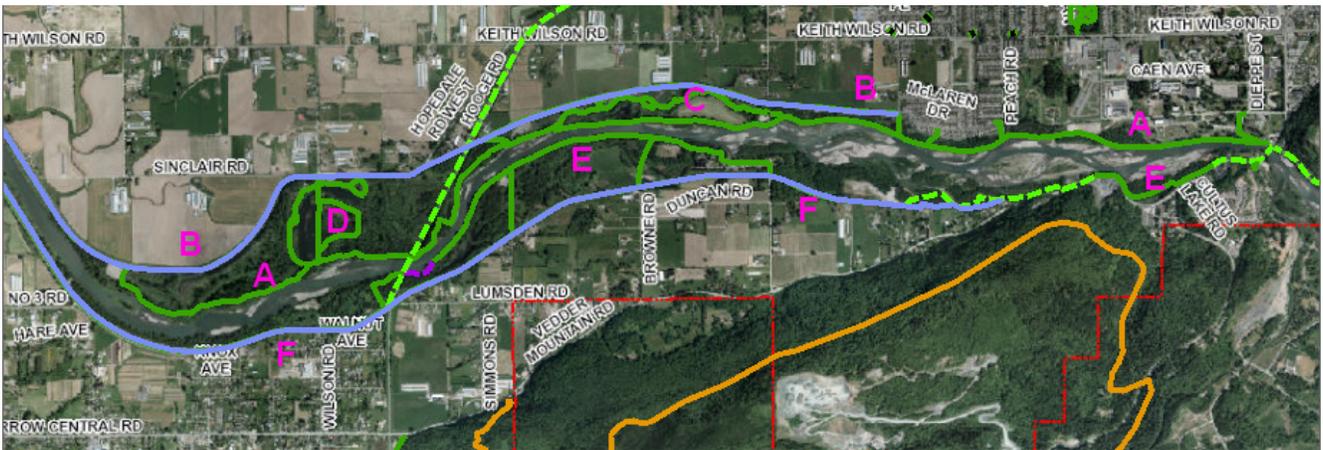


As the dyke is already built, it requires only surface and access improvements. With the exception of a few sections in use as public road or seasonal river access, the corridor is not shared by motor vehicles, making it ideal for a multi-use trail for all classes of non-motorized recreational users.

*As this corridor is, for the most part, several kilometers removed from the urban area, it will likely not serve as a commuter cycle route.*

The Experience the Fraser Trail is essentially “ready to go” when funding becomes available. While long term improvements will make the trail both more attractive and functional, the interim routing would enable it to be functional in the short term.

## Vedder Greenway



The Vedder Greenway extends from upstream of the Vedder Crossing Bridge to the Highway 1 Bridge over the Vedder Canal, consisting of the land and water between the Vedder Canal Dykes, the Vedder River Setback Dykes and lands adjacent to the upper portion of the Vedder River.

The Vedder Greenway contains the most extensive developed trail network in Chilliwack, with more than 30km of developed trails.

### Vedder Greenway - North Side:

#### [A] - Vedder Rotary Trail (8km)

The Vedder Rotary Trail extends 8km from near the Vedder Crossing Bridge to west of the Great Blue Heron Nature Reserve. The trail is not only the most popular walking trail but the most popular recreational venue in Chilliwack with over 160,000 uses per year. The trail will be extended to the east to connect with the Bridlewood Trail.

#### [B] - The Vedder North Dyke Trail (6.5km)

The Vedder North Dyke Trail occupies the north (river right) setback dyke of the Vedder River and Vedder Canal. It is continuous from Webster Road to Highway No. 1.

Between these two trails lies the internal trail system within the Great Blue Heron Nature Reserve.

#### [C] - Peach Creek Rotary Trail (1.7km)

The Peach Creek Rotary Trail extends approximately 1.7km from just east of Lickman Road to the outlet of Peach Creek. The trail, originally constructed under contract with DFO in the 1990's, was improved in 2012 with support of the Chilliwack Rotary Club.

#### [D] – Great Blue Heron Nature Reserve (2km of trails)

Approximately 2km of trails have been developed within the nature reserve.

### **Webster Trail & Bridge (0.1km)**

The Webster connection between the Vedder North Dyke Trail and the Vedder Rotary Trail was constructed in 2011, consisting of approximately 100m of trail and a 9m bridge.

## **Vedder Greenway - South Side**

On the south side of the river, the trail network is less developed with approximately 9 km of trails.

### **[F] - Vedder South Dyke Trail (6.5km)**

The 6.3km Vedder South Dyke Trail extends from the Vedder River Campground at Giesbrecht Road to a segment of the Trans Canada Trail on the Abbotsford side of the Vedder Canal Dyke.

### **[G] - Vedder River South Trail (3.4km + 0.75 links)**

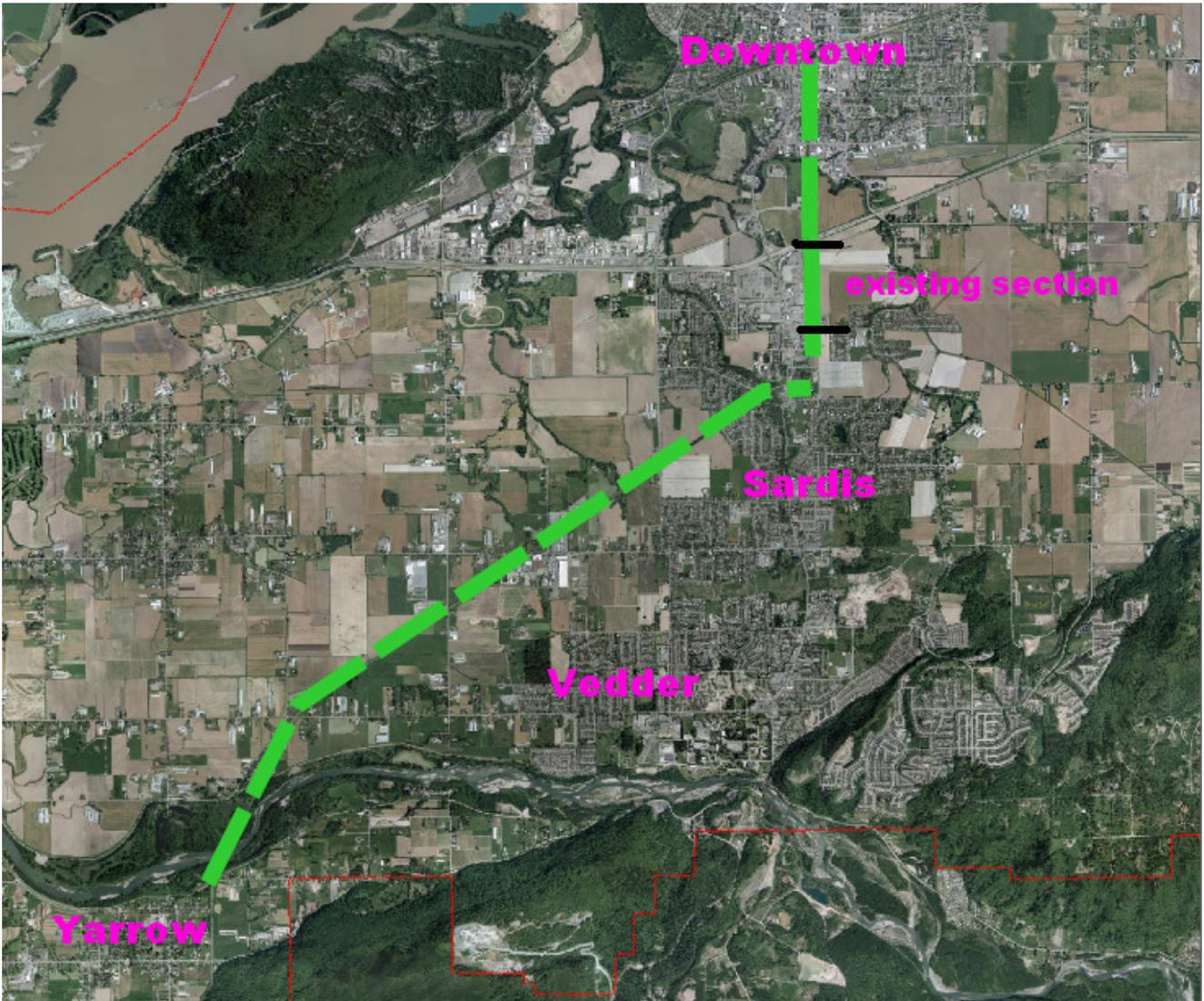
The Vedder River South Trail is presently developed in two separate locations; a 2km section between the Vedder River Campground at Giesbrecht Road and just west of Bergman Road and a 900m section from the townhouses on Vedder Mountain Road to the City rock quarry on Vedder Mountain Road.

Several improvements are planned over the next few years:

- Develop a road shoulder “trail” from present east end to the Vedder Bridge.
- Extend the trail westward along Vedder Mountain Road past private properties; through City and provincial lands to the east end of the Vedder South Dyke Trail
- Extend the Trail westward from Bergman Road, bridging the marsh outlet, to rejoin the Vedder South Dyke Trail and interconnect with the railway bridge.
- Add a cantilevered walkway to the Railway Bridge to connect with the planned “Rail Trail” and trails on the north side of the river.

## B.C. Rail / Southern Railway Corridor (Yarrow to Downtown Chilliwack - 11km)

The Railway Corridor extends from our western boundary with Abbotsford to its interconnection with the CNR in Downtown Chilliwack.



**Rail Trail Overall Route**

The 11km section proposed as a trail corridor would link Yarrow, Greendale, Vedder and Sardis to Downtown Chilliwack, offering a direct non-motor vehicle route.

There is presently a 1.2km section of this trail in use from Webb Avenue to Luckakuck Way.

# PROPOSED RAIL TRAIL

The northern section crossing Highway No. 1 and extending to downtown is presently being designed (see site plans below and at right). The section from Luckakuck to Airport Road is expected to be built by the end of 2015 and the portion from Airport Road to Yale Road may be constructed in 2016 or 2017. Prior to this project proceeding official approval must be received from the Provincial Ministry of Transportation & Infrastructure, BC Hydro, Southern Rail of BC and CN Rail.

## SITE PLAN



## DETAIL





## Downtown Chilliwack

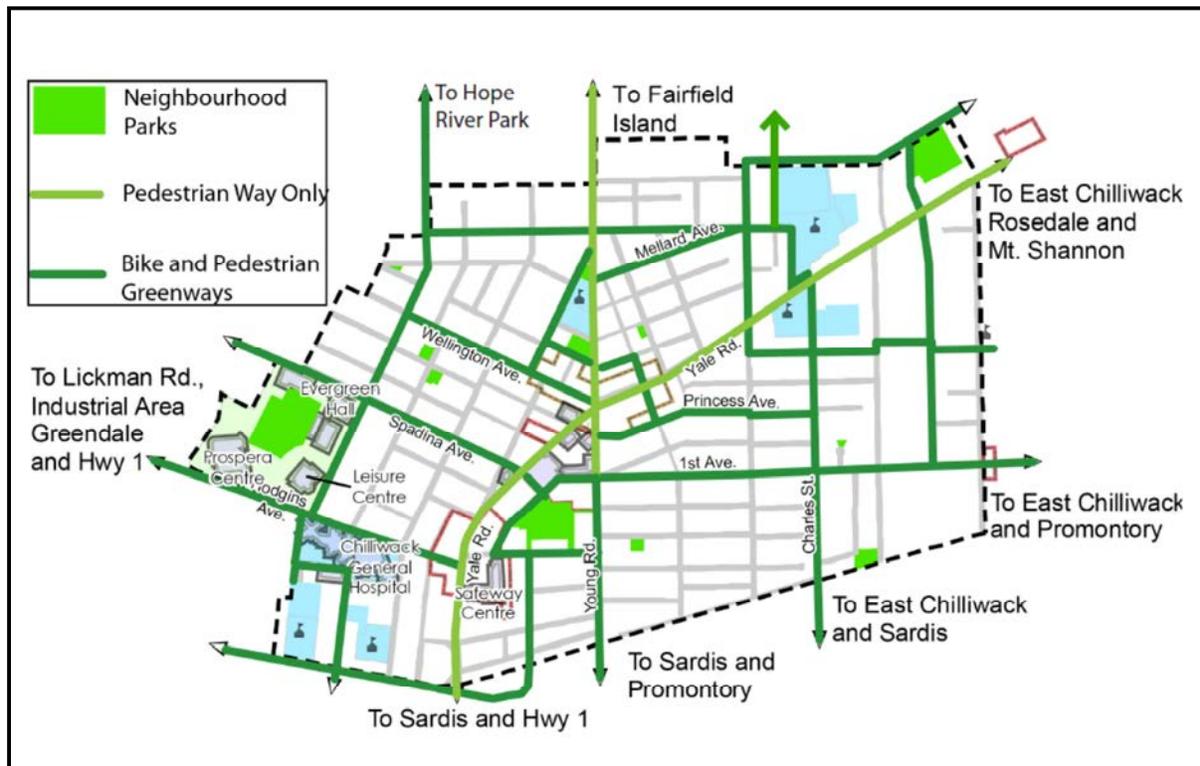
The “Downtown Plan Land Use and Development Plan” proposes a more extensive network of pedestrian and pedestrian / cycle routes within the downtown area. This proposed “greenway” grid would facilitate both recreational use and non-motorized transportation. The main limiting factor to this plan is the lack of roadway width to adequately accommodate separation of user groups.

For a greenway or “green” transportation route to function properly there must be either sidewalks for pedestrians plus a dedicated cycle lane on the roadway OR a multi-use trail separated from the roadway by a landscaped strip OR elimination of the motorized traffic from the road or segment.

Not shown on the “Downtown Plan” is the potential connection from Cheam Avenue to Charles by way of the lane between 3<sup>rd</sup> and 4<sup>th</sup> Avenues which passes 3<sup>rd</sup> Avenue Park. This could be designated as a bicycle and pedestrian use as there are only 5 driveways onto the lane.

This can be accomplished by several means:

- Close roads or sections of roads to vehicular traffic. The best possibilities would be Mill Street and Wellington (Main Street to Five Corners)
- Eliminate through traffic by blocking short sections of road with pedestrian and cycle access only:
- Provide a multi-use trail corridor adjacent to the traffic lanes



**Downtown Land Use and Development Plan  
Parks and Greenways**

# APPENDICES

## **Appendix “A” – “Bicycle Route Vision Map”**

Provides an outline of the vision for a completely developed and linked network of cycling facilities that will ultimately provide uninterrupted linkage for bicycle commuting or recreational purposes between most major origins and destinations on bicycle lanes, paths, major roads with wide shared lanes, or low volume local roads.

## **Appendix “B” – “Paved Shoulders and Paths”**

A mapped inventory of all existing paved shoulders and paths as well as the location of bicycle racks in the downtown core.

## **Appendix “C” – “Cost Estimates & Priorities By Class”**

A set of tables and associated map showing the priority and budget level cost estimates for facilities required to fulfill the goals of the Bicycle Route Vision shown on Appendix “A”.

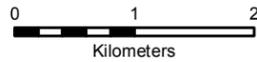
## **Appendix “D” – “Cycling Guide”**

A map intended for public use showing commonly used bicycle routes, the type of facilities available and the general characteristics (i.e. “Neighbourhood Street” or “Major Street”) of each link.

## **Appendix “E” – “Parks and Trails”**

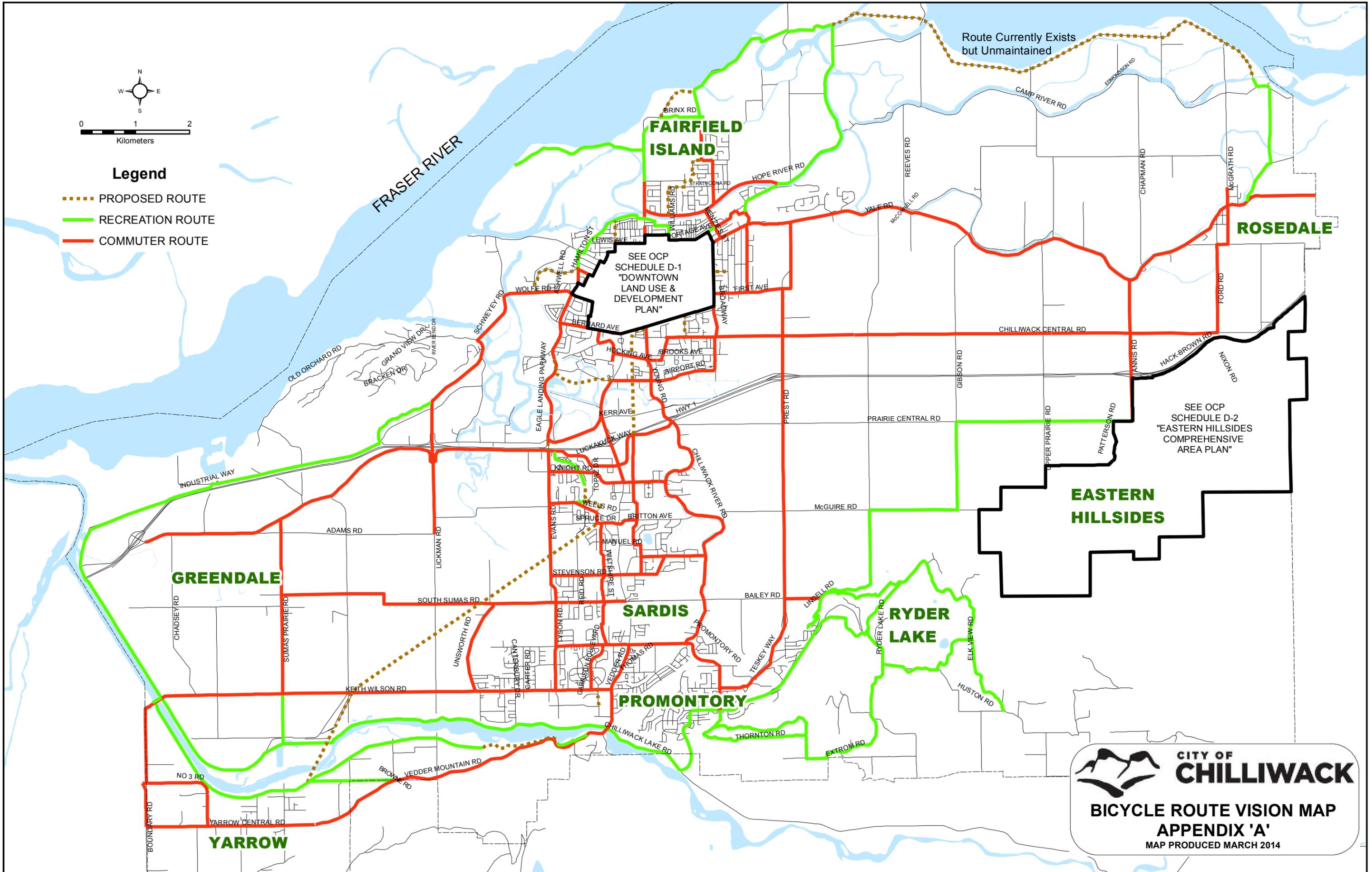
Maps showing the location of parks, trails and proposed trail connections.

# **APPENDIX “A”**



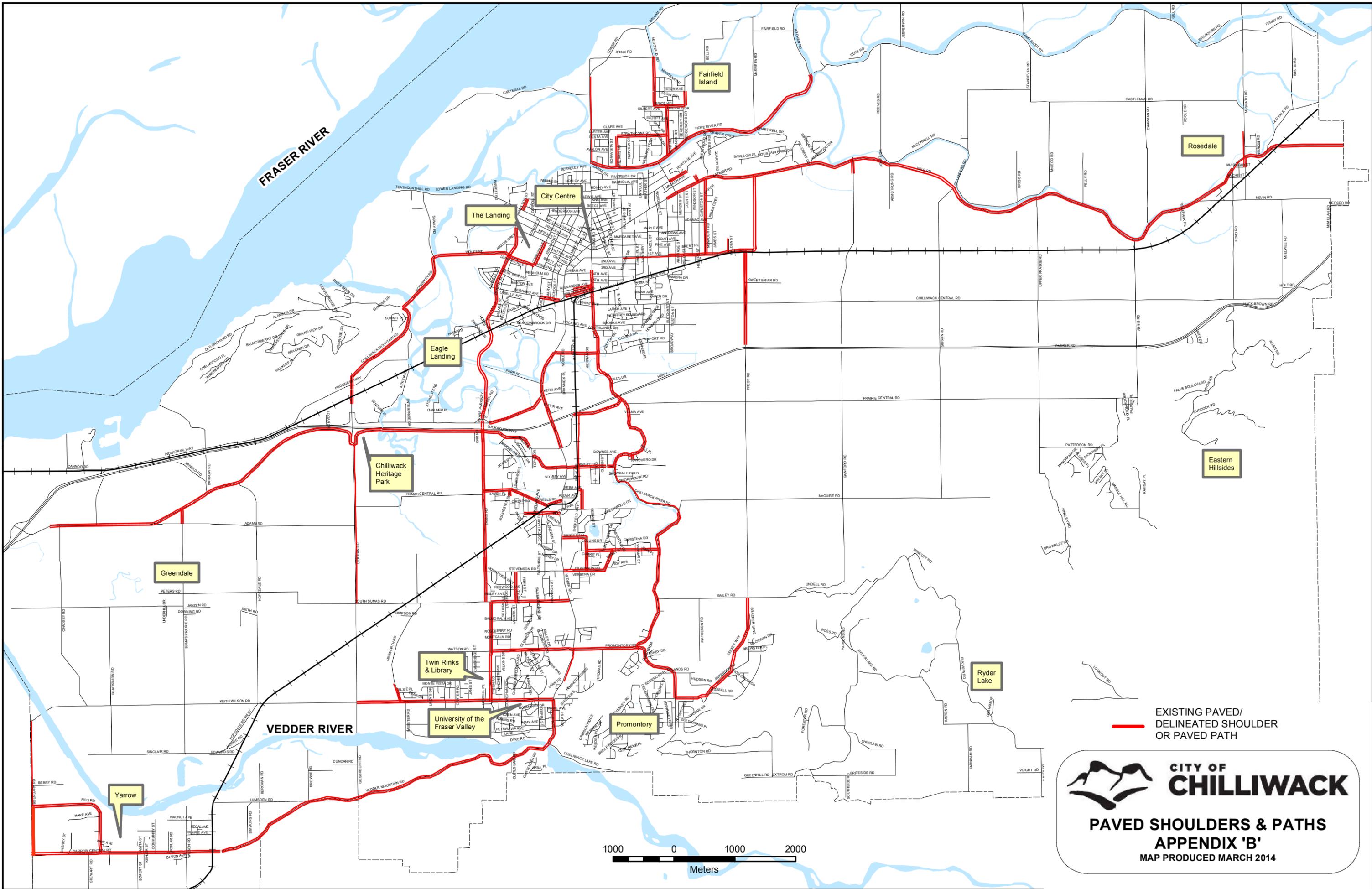
### Legend

- ..... PROPOSED ROUTE
- RECREATION ROUTE
- COMMUTER ROUTE



**CITY OF CHILLIWACK**  
**BICYCLE ROUTE VISION MAP**  
**APPENDIX 'A'**  
MAP PRODUCED MARCH 2014

## **APPENDIX “B”**



EXISTING PAVED/  
DELINEATED SHOULDER  
OR PAVED PATH



**CITY OF CHILLIWACK**

**PAVED SHOULDERS & PATHS**  
**APPENDIX 'B'**  
MAP PRODUCED MARCH 2014

## **APPENDIX “C”**

## Upgrade Priority & Cost Estimates

Proposed bicycle facilities upgrades have been broken into three classes as follows:

- **Class 1** – Minor road marking and sign installation.
- **Class 2** – Construction of paved and delineated bicycle lanes. Typical construction in this class requires road base preparation, paving, road marking and bicycle route signs. These projects are generally the top priorities for applications for shared funding under the Provincial Cycling Infrastructure Partnerships Program (CIPP).
- **Class 3** – Bicycle lane or paved path construction that requires major construction. Typically these projects will require ditch piping or relocation, overpass or bridge construction, right-of-way purchase, utility pole relocation etc. These projects are most likely to proceed as part of larger reconstruction projects.

### Class 1

Priority #	On	From	To	Length (m)	# Sides	Cost/lane-m	Estimate	Notes
1	Sumas Prairie	Elementary school	South Sumas (South)	435	2	\$10	\$8,700	Consider vehicle parking needs.
2	Stevenson	Evans	Vedder	1,275	2	\$10	\$12,750	Consider vehicle parking needs.
3	Airport & Broadway	Young Road	Chilliwack Central	1,800	2	\$10	\$36,000	Consider vehicle parking needs.
4	Broadway	Chilliwack Central	First Avenue	800	2	\$10	\$16,000	Consider vehicle parking needs.
5	First Avenue	Charles Street	Young Road	700	2	\$10	\$14,000	Consider vehicle parking needs.
6	Menzies	Yale	Hope River Road	560	2	\$10	\$11,200	Consider vehicle parking needs.
7	Bernard	Crescent (East)	Ashwell Road	600	2	\$10	\$12,000	Consider vehicle parking needs.
8	Spadina	Mary	Ashwell Road	840	2	\$10	\$16,800	Consider vehicle parking needs.
9	First	Charles	Woodbine	400	1	\$10	\$4,000	Consider vehicle parking needs.
10	Chilliwack Central	Young	Broadway	1,250	2	\$10	\$12,750	Consider vehicle parking needs

### Class 2

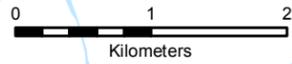
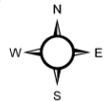
(CIPP or equivalent application priorities)

Priority #	On	From	To	Length (m)	# Sides	Cost/lane-m	Estimate	Notes
1	Chilliwack Lake Road	Vedder Road	City Boundary	1,200	2	\$125	\$300,000	
2	Sumas Prairie	Adams Road	north end of asphalt S/W	380	2	\$125	\$95,000	
3	Sumas Prairie	north end of asphalt S/W	elementary school	510	1	\$125	\$63,750	Widen East side. 80m ditch conflict. West side needs markings only.
4	First	Woodbine	Broadway					
5	Bailey	Prest	Elk View	660	2	\$125	\$165,000	Build all new structure on north side and shift road centerline. Promontory Pedestrian Path Related.
6	South Sumas	Evans	Unsworth	1,100	2	\$125	\$275,000	
7	Sumas Prairie	South Sumas (South)	Keith Wilson	1,600	2	\$125	\$400,000	

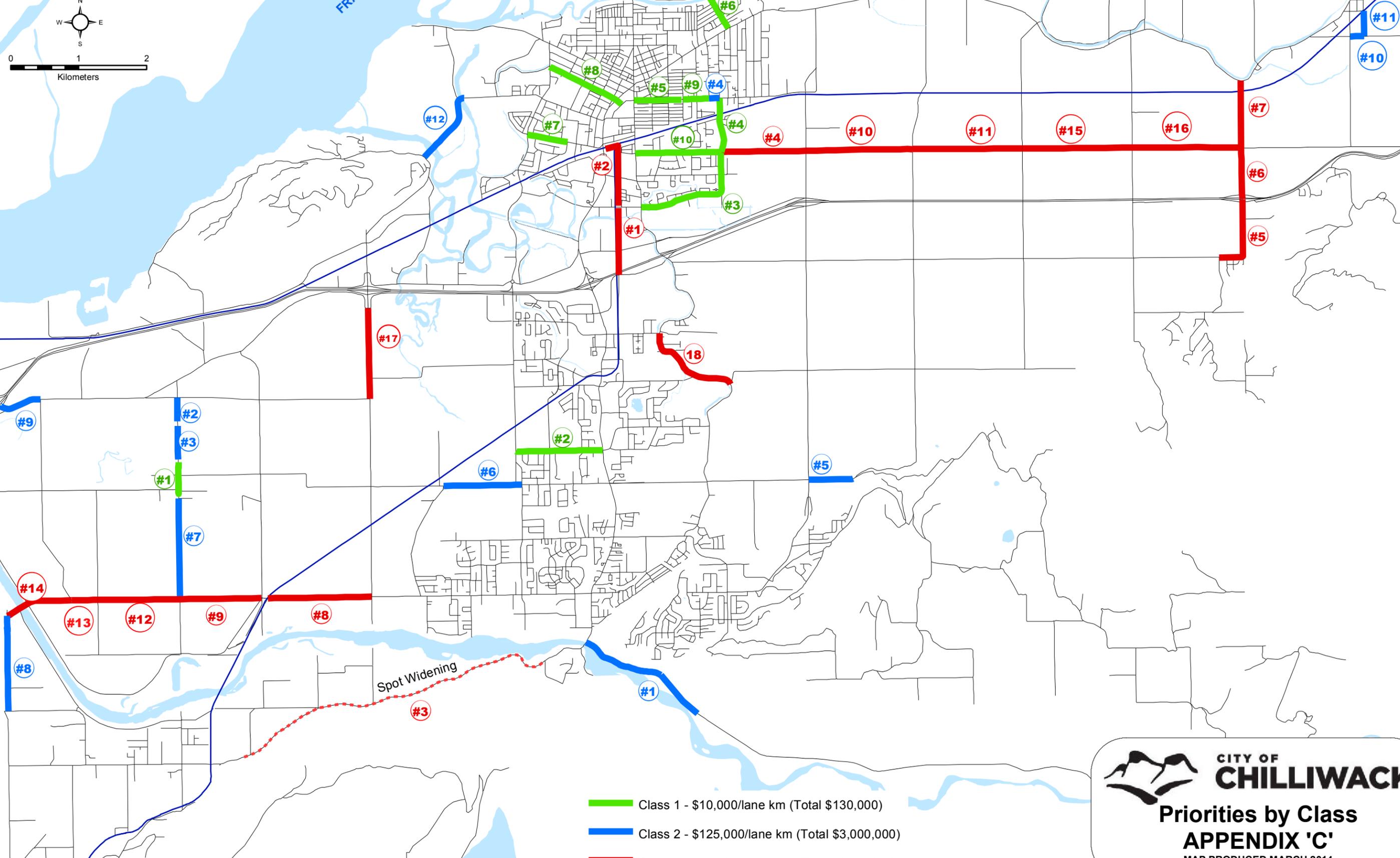
8	Boundary	Keith Wilson	No. 3	1,400	2	\$125	\$350,000	
9	Yale	Chadsey	base of TCH Overpass	400	2	\$125	\$100,000	
10	Nevin	Ford	McGrath	210	2	\$125	\$52,500	
11	McGrath	Nevin	Sache	380	2	\$125	\$95,000	
12	Schweyey	Chilliwack Mtn.	Wolfe	300	2	\$60	\$36,000	Widen shoulders on curve at Wolfe Rd. and at Chilliwack Mtn. Rd. intersection.

### Class 3

<u>Priority #</u>	<u>On</u>	<u>From</u>	<u>To</u>	<u>Length (m)</u>	<u># Sides</u>	<u>Cost/lane-m</u>	<u>Estimate</u>	<u>Notes</u>
1	SBC RR	Luckakuck	Airport	1,100	n/a	\$900	\$1M	Bicycle Path including overpass.
2	SBC RR	Airport	Yale	1,100	n/a	\$350	\$400,000	Bicycle Path.
3	Vedder Mtn.	Cultus Lake	Yarrow Central	300	1	200	\$60,000	Two spot widenings of existing paved shoulders.
4	Chilliwack Central	Broadway	Prest Road	1,240	2	\$125	\$510,000	Bridge widening and ditch support required.
5	Prairie Central & Annis	Patterson	Trans-Canada Hwy.	840	2	125	\$210,000	
6	Annis	Trans-Canada Hwy.	Chilliwack Central	520	2	125	\$130,000	
7	Annis	Chilliwack Central	Yale	970	2	300	\$582,000	Ditch relocation or cantilivered structure
8	Keith Wilson	Lickman	Hopedale	1610	2	300	\$966,000	Ditch relocation or cantilivered structure
9	Keith Wilson	Hopedale	Sumas Prairie	1210	2	400	\$968,000	Ditch relocation or cantilivered structure
10	Chilliwack Central	Prest	Banford	1560	2	300	\$936,000	Ditch relocation or cantilivered structure
11	Chilliwack Central	Banford	Gibson	1620	2	300	\$972,000	Ditch relocation or cantilivered structure
12	Keith Wilson	Sumas Prairie	Blackburn	1200	2	400	\$960,000	Ditch relocation or cantilivered structure
13	Keith Wilson	Blackburn	Chadsey	380	2	400	\$304,000	Ditch relocation or cantilivered structure
14	Keith Wilson	Chadsey	Boundary	650	2	300	\$390,000	Ditch relocation or cantilivered structure
15	Chilliwack Central	Gibson	Upper Prairie	1620	2	300	\$972,000	Ditch relocation or cantilivered structure
16	Chilliwack Central	Upper Prairie	Annis	1590	2	300	\$954,000	Ditch relocation or cantilivered structure
17	Lickman	Luckakuck	Adams	1340	1	300	\$402,000	R/W acquisition and pole relocation.
18	Chilliwack River Rd	McGuire	Knight	1436	1	300	\$430,800	First Nations Reserve, Utility Pole and Watercourse issues



FRASER RIVER

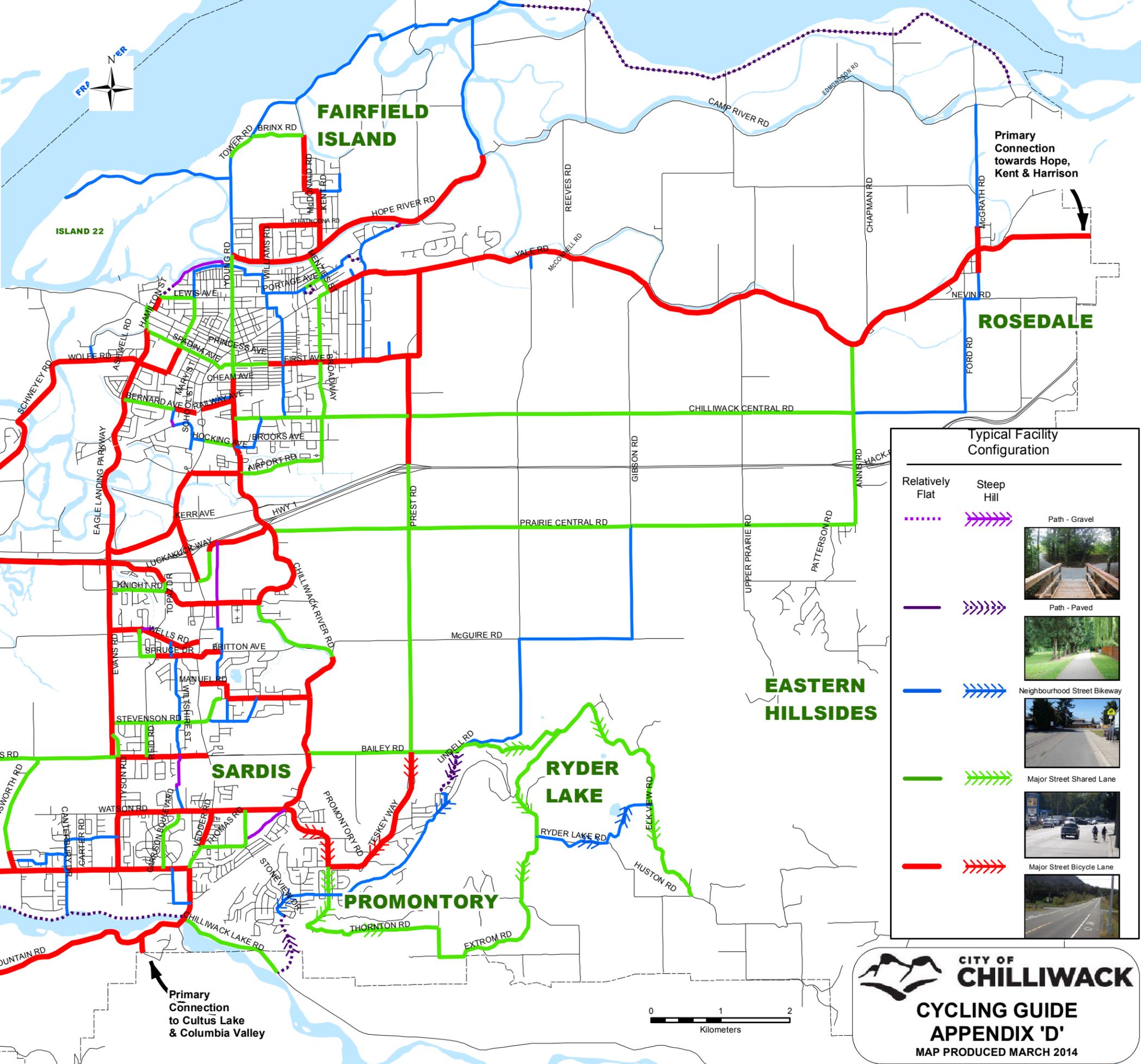
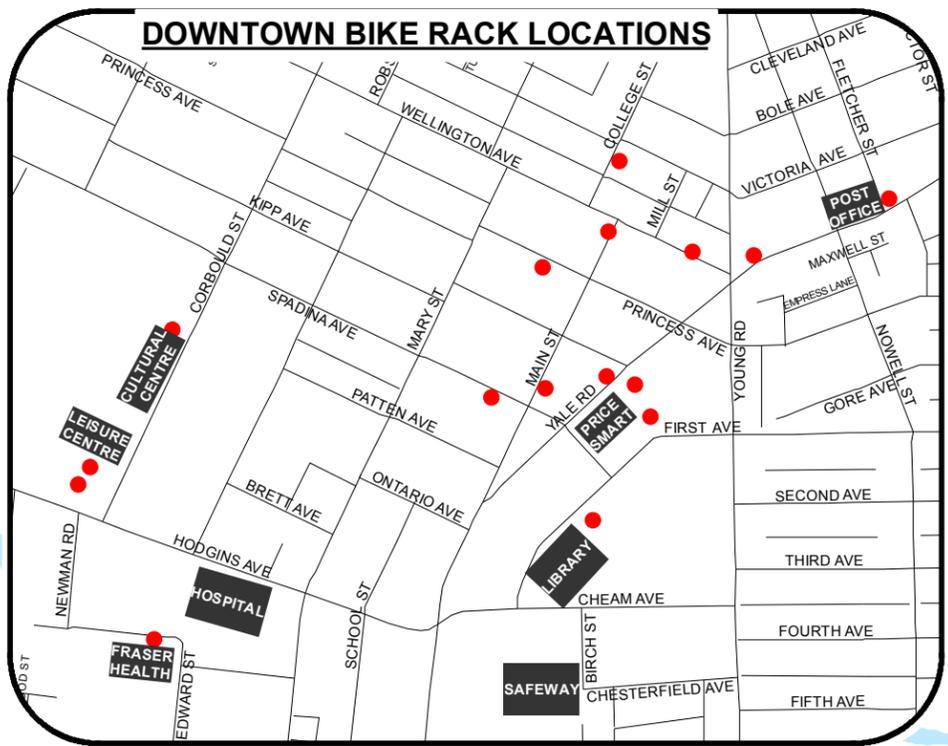


- Class 1 - \$10,000/lane km (Total \$130,000)
- Class 2 - \$125,000/lane km (Total \$3,000,000)
- Class 3 - \$300,000/lane km (Total \$24,000,000)

**CITY OF CHILLIWACK**  
**Priorities by Class**  
**APPENDIX 'C'**  
MAP PRODUCED MARCH 2014

# **APPENDIX “D”**

**DOWNTOWN BIKE RACK LOCATIONS**



Primary Connection towards Hope, Kent & Harrison

**ROSEDALE**

**EASTERN HILLSIDES**

**GREENDALE**

**SARDIS**

**RYDER LAKE**

**PROMONTORY**

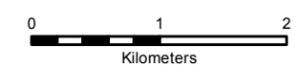
**YARROW**

Primary Connections to Abbotsford

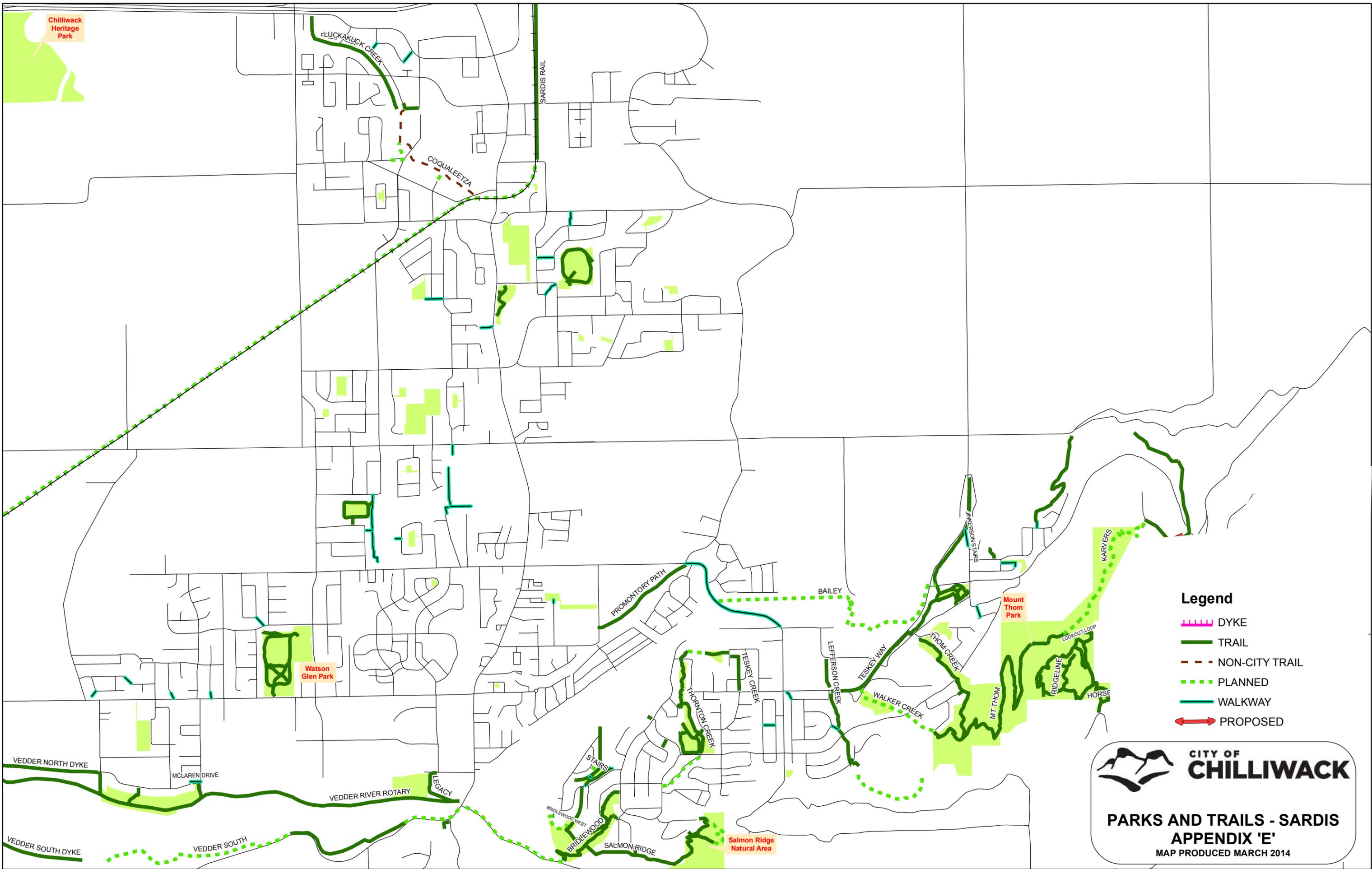
Primary Connection to Cultus Lake & Columbia Valley

**Typical Facility Configuration**

Relatively Flat	Steep Hill	
		Path - Gravel 
		Path - Paved 
		Neighbourhood Street Bikeway 
		Major Street Shared Lane 
		Major Street Bicycle Lane 



# APPENDIX “E”

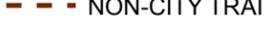


Chilliwack  
Heritage  
Park

Watson  
Glen Park

Mount  
Thom  
Park

Salmon Ridge  
Natural Area

- Legend**
-  DYKE
  -  TRAIL
  -  NON-CITY TRAIL
  -  PLANNED
  -  WALKWAY
  -  PROPOSED



**CITY OF CHILLIWACK**

**PARKS AND TRAILS - SARDIS  
APPENDIX 'E'**

MAP PRODUCED MARCH 2014