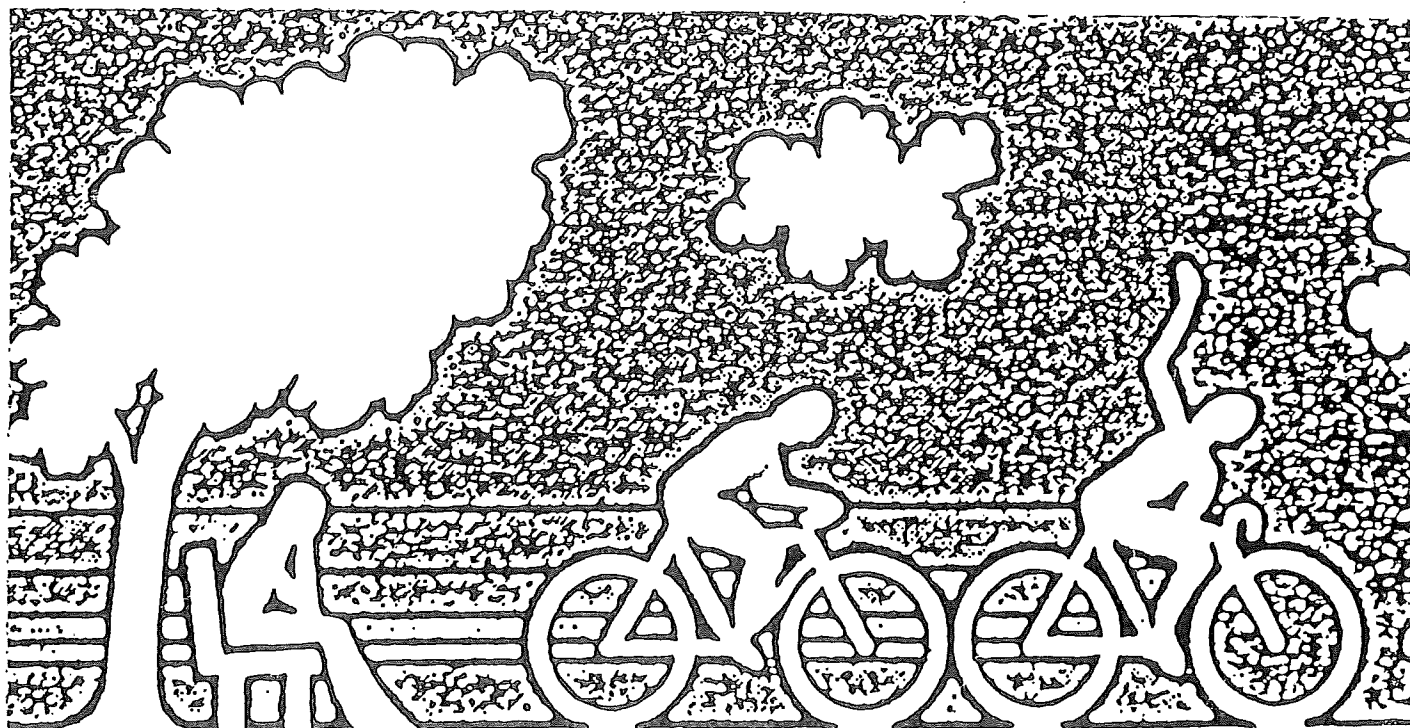


PORT ALBERNI

BICYCLE ROUTE PROPOSAL



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INTRODUCTION

Bicycling has become one of the more popular pastimes in Canada. This is not surprising since increased bicycle use for commuting and recreation can provide enjoyment, improve public health, and reduce air pollution, traffic congestion, energy consumption and the cost of personal transportation. However, Canada greatly lags in the establishment of much needed bikeway facilities. Consequently, conflicts between cars and bicycles sharing the same roads without special provisions constitute a serious safety hazard and the major deterrent to wider use of bicycles.

It is the purpose of this proposal to document the basis for the implementation of a bicycle route system that would satisfy both the utilitarian and recreational needs of cyclists in Port Alberni. Hopefully, this commitment will both encourage bicycle usage and develop improved facilities for bicycle travel.

PLANNING PROCESS

In order to develop a successful bikeway system, a comprehensive planning process outlining each stage was established. The "Bikeway Planning Process For the City of Edmonton" was used as the planning process model.

A comprehensive plan for establishing bikeways in the Port Alberni district will be conceived through three phases.

PHASE I GENERAL

- a) Examination of the State-Of-The-Art
- b) Formulation of Goals, Objectives, and Concept

PHASE II LONG RANGE PLANNING AND REVIEW

- a) Demand Projections
 - i) predicting existing and potential demand
- b) Inventory of Locational Opportunities
 - i) investigating existing and future locational opportunities (e.g. walkways, utility lots, etc.)
 - ii) incorporate bicycle circulation into planning new subdivisions and re-development areas
- c) Establish Design Standards
 - i) define route types
 - ii) define design parameter (e.g. parking standards, clearances, etc.)
 - iii) obtaining authority approval

ALBERNI BIKEWAY PLANNING PROCESS (cont)

PHASE II LONG RANGE PLANNING AND REVIEW (cont)

d) Priority Assignment and Program Formulation

- i) determine route priorities based on demand projections, approved design, and location opportunities
- ii) determine Policy Priorities
 - bicycle registration and legislation
- iii) review route proposals and policy studies to determine a development program phased over a period of time

PHASE III FACILITIES PLAN

Provide a working schedule for program implementation.

a) Conduct route feasibility studies

- i) route alternatives and costs
- ii) prepare an annual budget based on the approved program

b) Annual Program Implementation and Evaluation

- i) incorporate the approved annual program into a 'city wide' work schedule
- ii) determine the overall success of the routes and policy items
 - also identify any policy or concept revisions

PLANNING PROCESS

PHASE I GENERAL OVERVIEW

A. EXAMINATION OF THE STATE-OF-THE-ART

Currently, there are no existing bikeway facilities in Port Alberni. Nor are there any policy guidelines for bicycles. The City's Parks and Recreation Commission has therefore undertaken the development and co-ordination of a proposed bikeway network.

Planning processes and bicycle path design from other North American cities were examined and consulted to find a system that could be adapted for Port Alberni.

No doubt Europe - most noticeably Holland and West Germany, lead the rest of the world in the construction of bikeway network and facilities. In more recent years, the United States and Japan have also recognized the transportation value of the bicycle and have appropriated large sums towards creating thousands of miles of bikeways.

The State of California has prepared a very comprehensive document, "Planning and Design Criteria For Bikeways in California", (1976), with many valid recommendations on general bikeway design criteria.

Canada, though lagging behind in bikeway development, is slowly implementing bikeway facilities in many cities.

Edmonton has won the "Canadian Urban Bikeway Design Competition" for its "Bikeway Planning Process" and has been successfully adopted by Edmonton in the implementation of bikeways.

PLANNING PROCESS

A. EXAMINATION OF THE STATE-OF-THE-ART (cont)

CALGARY - has adopted "A Bicycle Path System", a document prepared by the City Engineering Department

VICTORIA - is experimenting with selected routes

VANCOUVER - has designated bikeways on some existing arterials

OTTAWA - through the National Capital Commission, has produced a manual, "NCC Bikeways", an outline of their experience in establishing bike paths.

B. GOALS AND OBJECTIVES

The goals for bikeway development in Port Alberni are:

1. To provide pleasant and functional cycling routes which will increase the safety of cyclists within the city of Port Alberni.
2. To establish cycling routes to meet both the recreational and utilitarian needs of cyclists in Port Alberni.
3. To establish cycling as a viable, alternative method of transportation.

The objectives for bikeway development are:

1. To serve cyclists commuting to and from various centres in Port Alberni.
2. To provide interconnecting links between major and minor routes to create a network serving the entire community.
3. To establish design standards that are compatible with other B. C. communities.
4. To be compatible with other land uses.
5. To establish a policy for the provision of bicycle support facilities (e.g. parking).
6. To utilize rights-of-way whenever possible.

Long range goals that are not immediate to this report would include:

1. Public education in bike safety
2. Information on cycle routes to the motoring public
3. Encourage cycling as an every day transport
4. Encourage the city to pass policies concerning bicycle legislation and registration

C. THE ROLE OF BIKEWAYS

Establishing bikeways is one effort to improve bicycle safety and convenience.

Off-street bikeways using exclusive corridors can be effective in providing new recreational opportunities, or in some instances, desirable commuter routes. These bikeways, however, cannot possibly meet with all the requirements for bicycle travel.

On-street bikeways much better serve as a bicycle transit system for the travel needs of the bicyclists. This is especially so if other commitments are made in conjunction with the establishment of bikeways. These commitments include:

- elimination of parking or increasing roadway widths
- elimination of surface hazards
- frequent street maintenance (sweeping, resurfacing)
- establishing intersection priority on the bike route street as compared to the majority of cross-streets
- providing education on bicycle safety
- adequately signed or lined bicycle lanes

Once a bicycle facility is constructed, the responsibility does not end. Proper maintenance is important since improper maintenance will curtail the use and effectiveness of any bikeway.

D. CONCEPT PLAN

The potential bikeway routes through Port Alberni will attempt to form links between commercial areas in North and South Port, schools, various community parks, shopping centers, recreational facilities and the main industrial areas in Port Alberni.

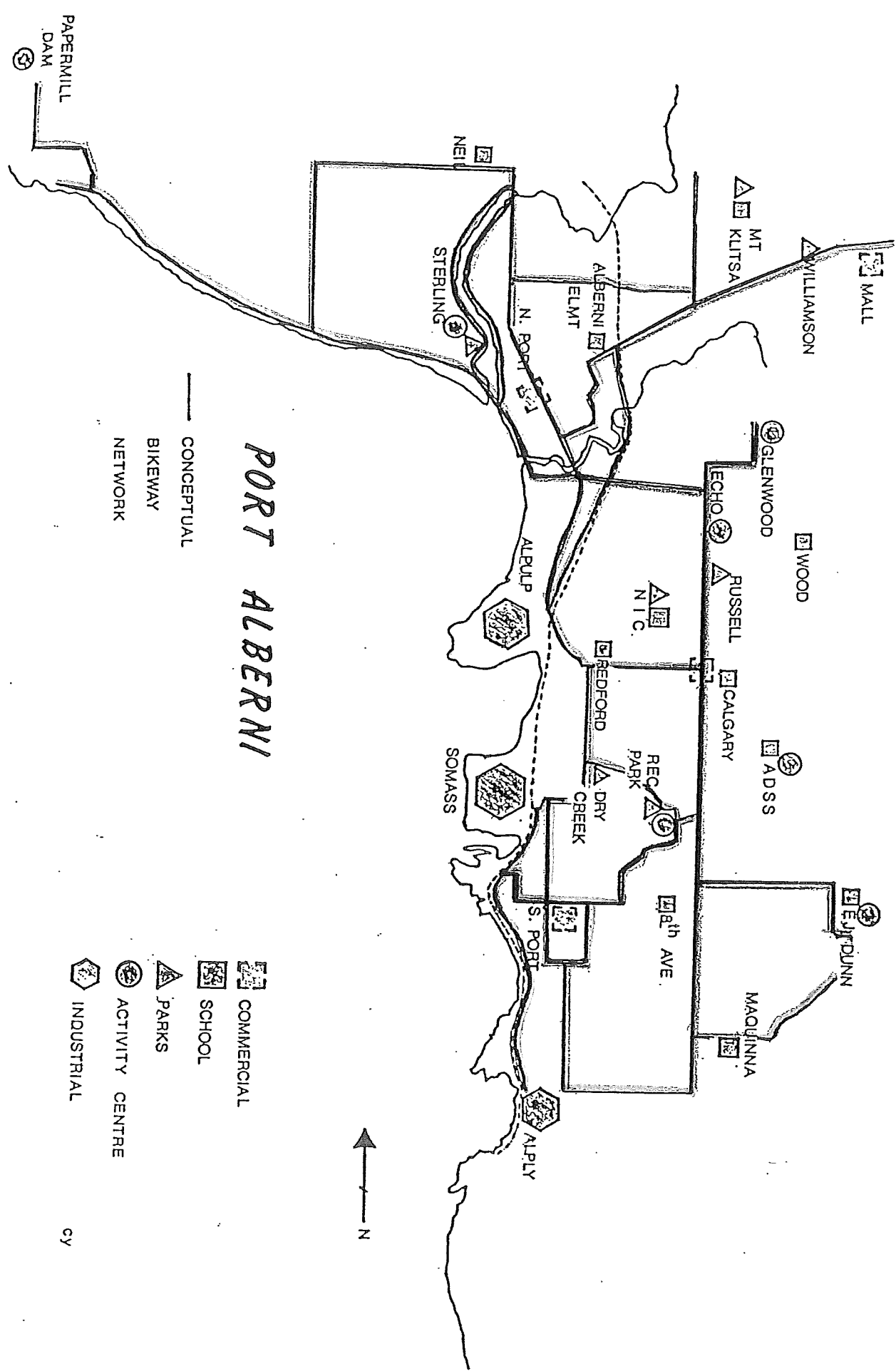
Movements to and from these destinations will be joined by the shortest possible routes. Bicyclists, even more than motorists seek the most direct routes to where they wish to go, particularly those who are using the bicycle for more than casual recreation.

Bike routes should also be made available such that no one has to travel more than $\frac{1}{2}$ mile to reach a cycle route from the major residential areas.

Heavy traffic congestion areas along Third Avenue, Tenth Avenue, Argyle Street, Redford Street, Stamp Avenue, Gertrude Street, Johnston Road, and River Road will be taken into consideration in the planning. An attempt will be made to avoid much of these areas.

The bike routes will incorporate sections of different class bikeways ranging from side roads with provision of signs to newly constructed bike paths. Figure I illustrates the network conceptual plan for the bikeway.

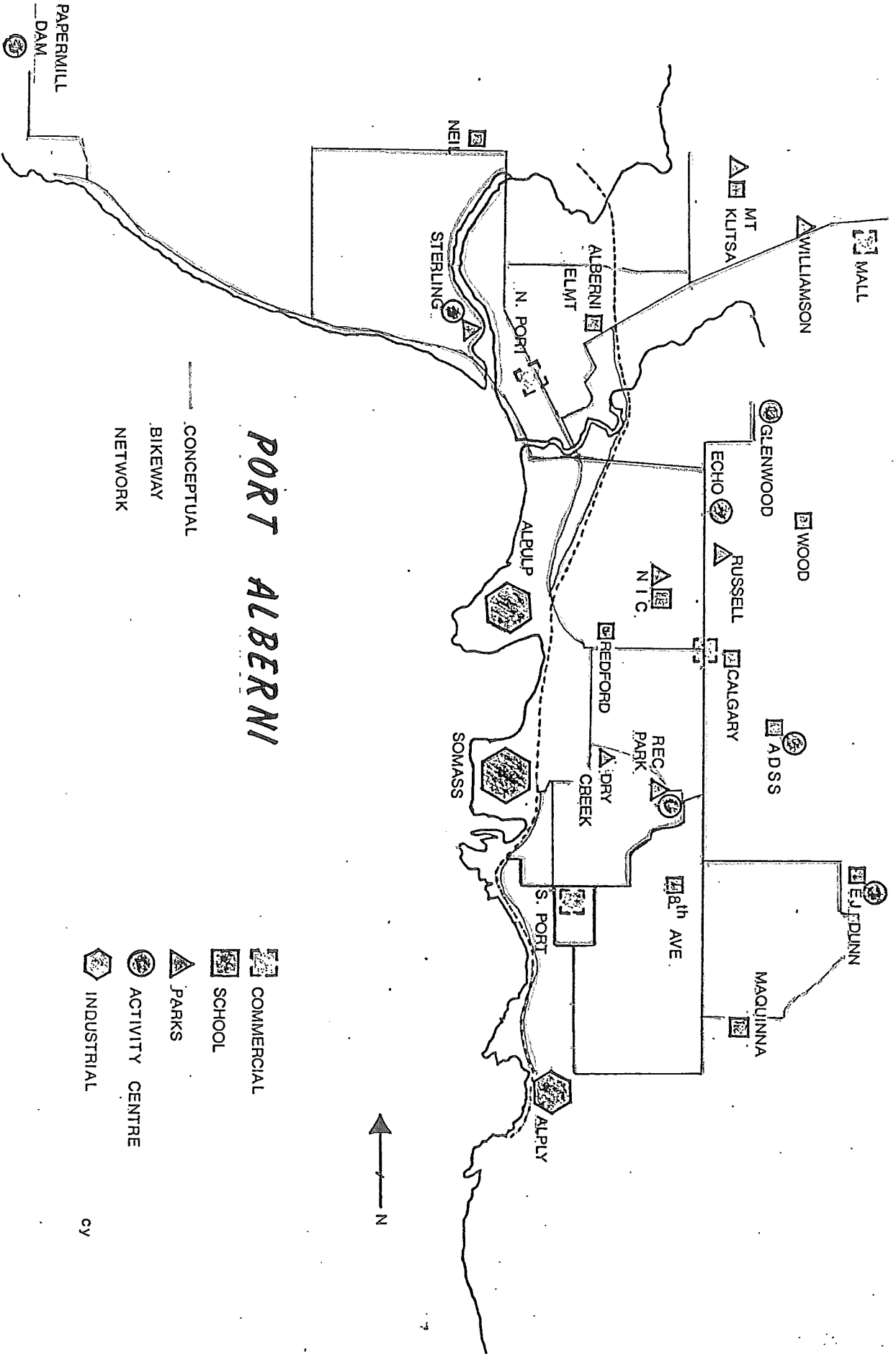
The most important effort that could be undertaken to promote bicycle travel would be improved maintenance and upgrading of existing roads that are used regularly by bicyclists.



— CONCEPTUAL
 BIKEWAY
 NETWORK






- COMMERCIAL
- SCHOOL
- PARKS
- ACTIVITY CENTRE
- INDUSTRIAL





PORT ALBERNI

CONCEPTUAL
BIKEWAY
NETWORK

-  COMMERCIAL
-  SCHOOL
-  PARKS
-  ACTIVITY CENTRE
-  INDUSTRIAL



PHASE II PROGRAM CRITERIA

A. DEMAND PROJECTIONS

In order to plan a successful bike route, some general guidelines must be met.

1. Areas of maximum use in Port Alberni should be linked. They include: the commercial areas, the industries, schools, recreational facilities and the residential areas.
2. Bicycle routes should be multi-purpose and be diverse enough to serve a combination of the above needs.
3. Bicycle routes should be placed so that they can be linked to serve the entire community but yet be free from any traffic conflicts.
4. A set of bicycle facility design standards regarding widths, signs, clearances, etc. should be established to provide an efficient and attractive alternative to car drivers, as well as increasing the safety of cyclists.

B. DEMAND PROJECTIONS

In order to successfully implement a bikeway through the town, we would need more constructive input from the community.

One of the best information source concerning traffic patterns, traffic problem areas, or traffic accidents involving bicycles would be from the local R.C.M.P. contingent.

Another good source on bicyclist needs would be the retail bicycle shop. They would have expertise in bicycle safety, have feedback from local bicyclists, and provide support for the bikeway project.

The best consultation would be from the cyclists and motorists themselves. Random surveys could be carried out to obtain their viewpoints on their needs, route selection, standards or any other pertinent suggestions.

C. ROUTE PRIORITIES & SELECTION

The bikeway will attempt to keep cyclists on the most direct routes to the more travelled destinations. Where this is not possible due either to heavy traffic or unfavorable topography such as steep hills or physical barriers, then more favorable alternate routes will be used.

It has been experienced that routes which are either too hilly or circuitous and sections that prevent fast continuous riding are often avoided. Cyclists wish to travel with the same freedom enjoyed by motor vehicles.

Ideally, a separate bikeway for cyclists should be built. In Port Alberni the potential opportune places for these bikeways along the planned bike route are: the Kitsuksis Creek Walkway, the E & N right-of-ways, M & B Industrial roads, the Maquinna-Dunn Path, and the Russell Place - Compton Road Link.

The Kitsuksis walkway is ideal for a recreational bike path. Only a few alterations and sign installation is needed to up-grade it to a Class I bikepath.

Use of the E & N right-of-ways and the M & B Industrial roads will require permission from their respective owners.

City planners will have to be contacted as to the possible development of the two paths, between Roseborough Avenue and Bruce Street and the one connecting Russell Place and Compton Road.

The most common type of bikeways in Port Alberni will be Class II routes, those in which cyclists share the road with other vehicles. On roads where there is enough width allowance, a separate bicycle lane will be marked, along with appropriately placed signs, designating the bike lane and bike route. On less travelled roads along the route, the bike route will only be marked with signs, designating the road as a Class III bikeway.

C. ROUTE PRIORITIES SELECTION (cont)

Not only will the bicycle routes be designed to take advantage of the existing locational opportunities but must also accommodate potential cyclists from the existing or planned new sub-divisions, roads, or developments in Port Alberni.

In order to detour the commercial section of North Port, cyclists may use Victoria Quay as a western route. The eastern route entails travelling along Helen, Southgate, Adelaide, and Pemberton Road.

Instead of cycling on busy Argyle and Third Avenue in South Port, bicyclists will utilize Angus, Fourth, Montrose, and Second Avenue as detours.

D. CLASSIFICATIONS

There are three classes of bikeways that can be distinguished.

CLASS I - BIKEWAY - BIKE PATH OR BIKE TRAIL

- provides a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.

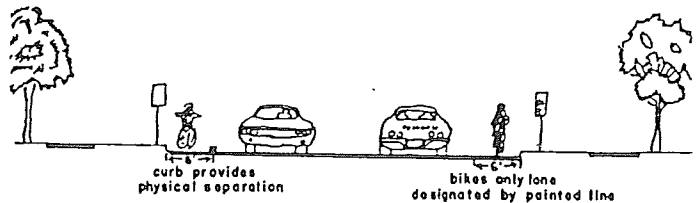
Figure II



CLASS II - BIKEWAY - BIKE LANES

- provides a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians but permitting vehicle parking and pedestrian or vehicle crossflows.

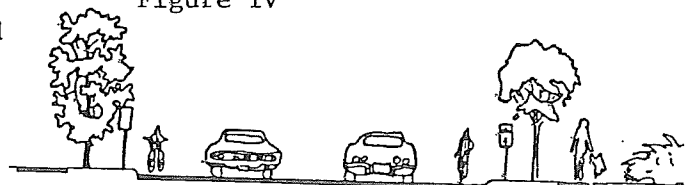
Figure III



CLASS III - BIKEWAY - BIKE ROUTES

- provides a right-of-way designated by signs or permanent markings and shared with pedestrians or motorists.

Figure IV



E. PROPOSED BICYCLE NETWORK

IMPROVEMENTS REQUIRED

CLASS I BIKEWAY (BIKE PATH OR BIKE TRAIL)

In the proposed bicycle network for Port Alberni there are existing opportune locations which would support a separate bikeway, exclusive to cyclist/pedestrian usage.

1. Kitsuksis Creek Walkway

This walkway is ideally suited as a recreational bikeway. Some improvements that would further up-grade this walkway include:

- erecting signs designating this facility as a bikeway
- increase the visibility along the bikeway by pruning any trees or shrubs not meeting with the horizontal or vertical clearance specifications
- construct speed bumps at the exits from the bikeway to regulate the exiting bicyclist's speed

2. Recreation Park

The existing path through the park should be widened and paved to meet the Class I bikeway specification.

Bikeway designating signs and speed bumps are also required to be erected and constructed.

IMPROVEMENTS REQUIRED (cont)

CLASS I BIKEWAY (cont)

3. Dry Creek Park

The proposed bikeway connecting Recreation Park and the Dry Creek Park will require land clearing, path widening, paving, signing, (route, steep hill signs), speed bumps, and guard-rail on the steeper parts of the hill.

4. Compton Road - Russell Place Trail

This bikeway was considered as an alternate route around the traffic congested and poorly constructed intersection between Falls and River Roads. Before Compton Road and Russell Place can be connected, the future of the existing land use and road placement must be considered. Permission from the City Planners must also be obtained.

5. Roseborough Avenue - Bruce Street Trail

This trail is actively being used as a route by neighbourhood school children commuting to either E. J. Dunn or Maquinna Schools. Potential development of this area should be determined before constructing any permanent paved bikeway in this area.

CLASS II BIKEWAYS (BIKE LANES)

The majority of the designated bike route through the city will be one in which bicycles share the road with motor vehicles. Bicycles will be separated from the traffic lane with an additional white painted line and designated with "Bike Lane" signs and pavement lettering.

The width of the bike lane will depend on whether that particular street supports parking, whether parking stalls are marked and whether the curb is vertical or rolled. Illustrations of the bike lane width standards and configurations are appended.

To be of benefit to bicyclists, bike routes should offer a higher degree of service than alternative streets.

Some of the roads or sections of the road along the route need to be widened and paved before they are of the proper width.

Additional width is also needed around railroad tracks so that they can be crossed perpendicularly by cyclists. Asphalt ridge build-ups around the rails should be removed and the pavement maintained.

There is a need to remove or restrict parking along streets that are busy and yet too narrow to support both parking and a bike lane.

Surface hazards to bicycles have to be corrected. For example, pot holes filled, ridge build-ups leveled, roads paved, utility covers and storm drains properly adjusted so that bicycle wheels are not caught in them.

Street maintenance such as sweeping is required on a regular basis to up keep the bike route.

Ensure proper vertical and horizontal clearance is adequate throughout the route.

Installing crosswalks or pedestrian controlled crosswalks on streets where it is too busy for the bicyclists to cross safely.

Signs and markings for the bikeway are detailed in the appendix but in general, "Bike Lane" signs and pavement markings will be placed on the far side of each intersection. "Bike Route" signs are placed at intersections to provide directional and destination signing.

By establishing specific lanes reserved for bicycles, the bicyclists can be more confident that motorists will not stray into their path of travel. Similarly, passing motorists are less likely to swerve towards oncoming traffic now that they are more certain where the bicyclists will be.

Once cyclists and motorists learn how to correctly interpret and use bike lanes, overall road safety will be enhanced.

CLASS III BIKEWAYS (BIKE ROUTES)

The class III bikeway or simply bike route, serve to connect bikelanes through quieter residential streets. Since these streets tend to contain less vehicle traffic and often are in a speed restricted zone, they need only be designated with intermittent "Bike Route" signs.

These bike routes are shared facilities either with cars on the roads or with pedestrians on sidewalks, in either case, the bicycles are secondary users.

In general, bicycle travel on sidewalk is unacceptable. However in cases where the cyclists are allowed to share the sidewalk, opening in the curb will need to be cut, or alternately, a paved ramp constructed leading up to the sidewalk.

Another such instance is on narrow bridges where it is safer for the cyclists to ride on the sidewalk. In this situation, ramps should be installed at the sidewalk approaches and a railing provided for increased safety. It is recommended that "Cyclist Dismount" signs be erected directing the cyclists to walk over the bridge.

Another possibility of developing a Class III bikeway in Port Alberni is to obtain permission to use the Industrial Road connecting the M & B mills.

F. BIKEWAY DESIGN

SIGNS AND MARKINGS

There is no national set of guidelines for bikeway signs or markings in Canada. However, successful signs and markings have been outlined in the manual of the United States National Committee on Uniform Traffic Control Devices and which Port Alberni can adopt.

Appropriate signs that would be used along the bikeways could include:

1. bike route
2. bike lane
3. bicycles only - motor vehicles prohibited
4. bicycles allowed
5. bicycles not allowed
6. bicycle route information tabs
7. turning vehicles yield to bikes
8. bike crossing
9. cyclists dismount
10. cyclists use sidewalk

Illustrations and descriptions of these signs are provided in the Appendix.

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APPENDIX I

BIKEWAY STANDARDS FOR PORT ALBERNI

CLASS I - BIKEWAYS

A. WIDTHS (minimum standards)

1. one way - 5 feet 1.5 meters
2. two way - 8 feet 2.4 meters

B. GRADES

<u>Maximum Grade</u>	<u>Maximum Distance</u>
3%	any distance
6%	1,000 feet 300 meters
8%	300 feet 90 meters
10%	100 feet 30 meters

C. DESIGN SPEED

<u>Grades</u>	<u>Design Speed</u>
+ 3% to -7%	20 mph 32 kmh
less than -7%	30 mph 48 kmh
quarter than +3%	15 mph 24 kmh

D. CLEARANCES (min.)

1. horizontal 2 feet
2. vertical 8 feet

E. CURVES

$$R = 1.25V + 1.4$$

where R = curve radius (ft)
V = design speed (mph)

- use wider lanes on curves

F. INTERSECTIONS

1. curve bikeways to slow cyclists
2. install ramps on curbs either on corner or cut curb

G. STRUCTURES

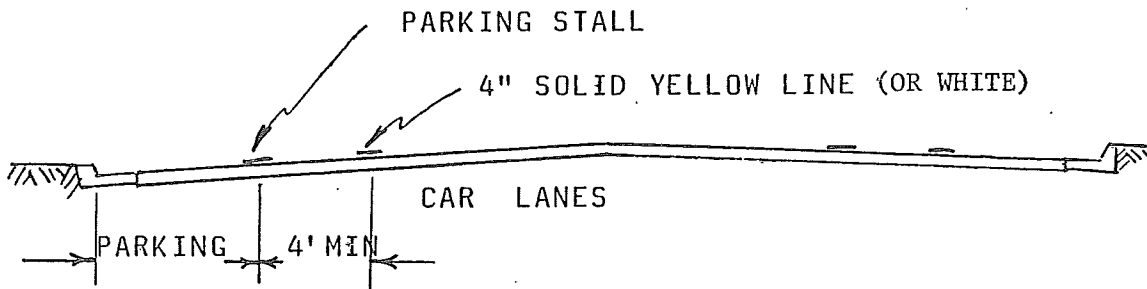
1. guard rails - required on bridges, overpasses, steep slopes
2. bollards, gates - to control speed and discourage motorists

CLASS II - BIKE LANES

A. WIDTHS

1. bike lanes on an urban typed curbed street with marked parking stalls

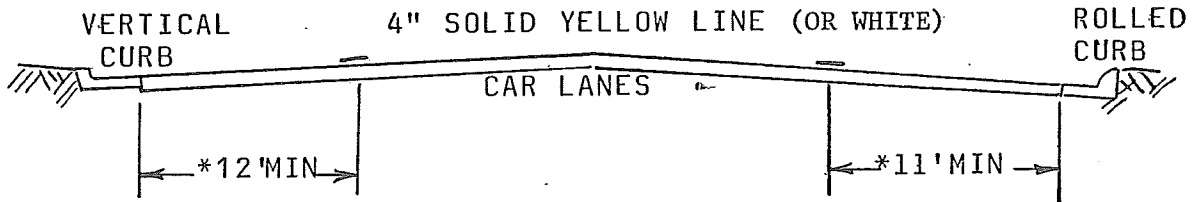
Figure V



- bike lanes are between parking and the car lanes.

2. bike lanes on an urban typed curbed street with parking but without marked stalls

Figure VI

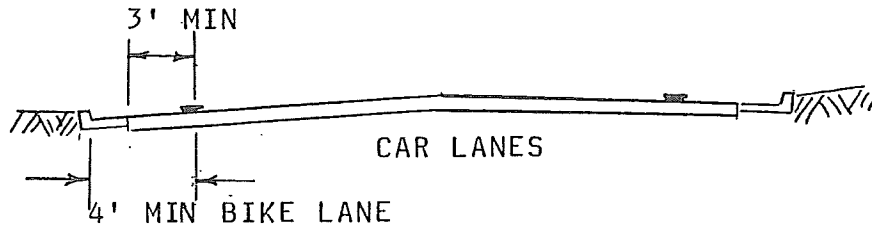


* 13' is recommended on busy commercial areas where there is substantial parking or high turnover of parked cars

A. WIDTHS (cont)

3. bike lanes on an urban typed curbed street with parking prohibited

Figure VII



- where parking is prohibited during certain hours, use special signs to designate the hours bike lanes to be effective

4. bike lanes on roadway in outlying areas

Figure VIII



- wider if speed limit exceeds 40 mph or 65 kmh

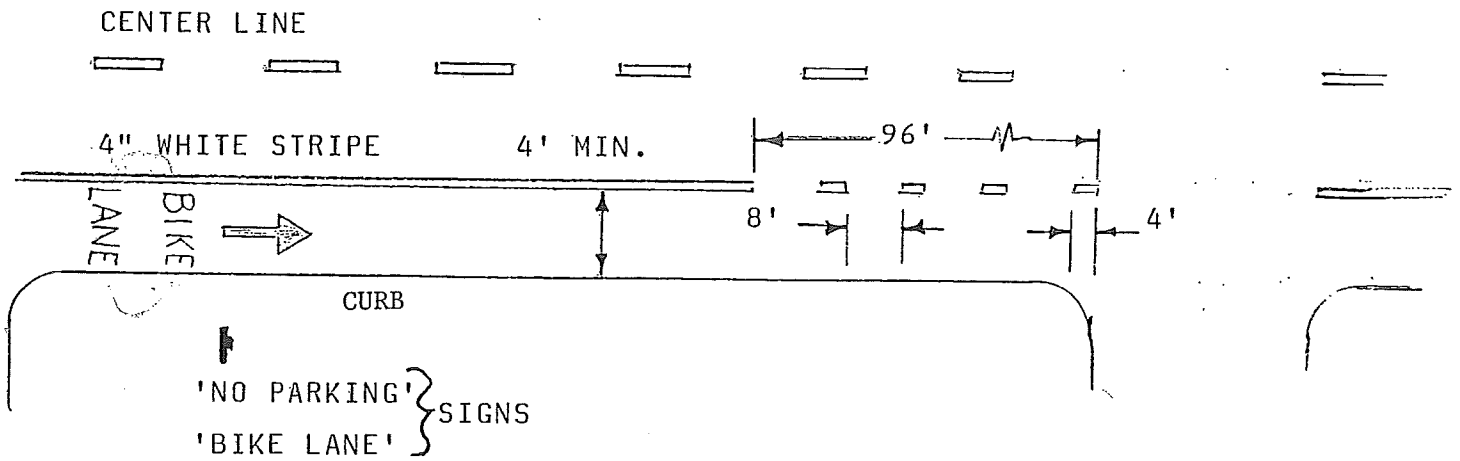
BIKE LANE SIGNS AND MARKINGS

A "bike lane" sign and Bike Lane pavement markings will be placed on the far side of each intersection, and may be placed at other locations as desired.

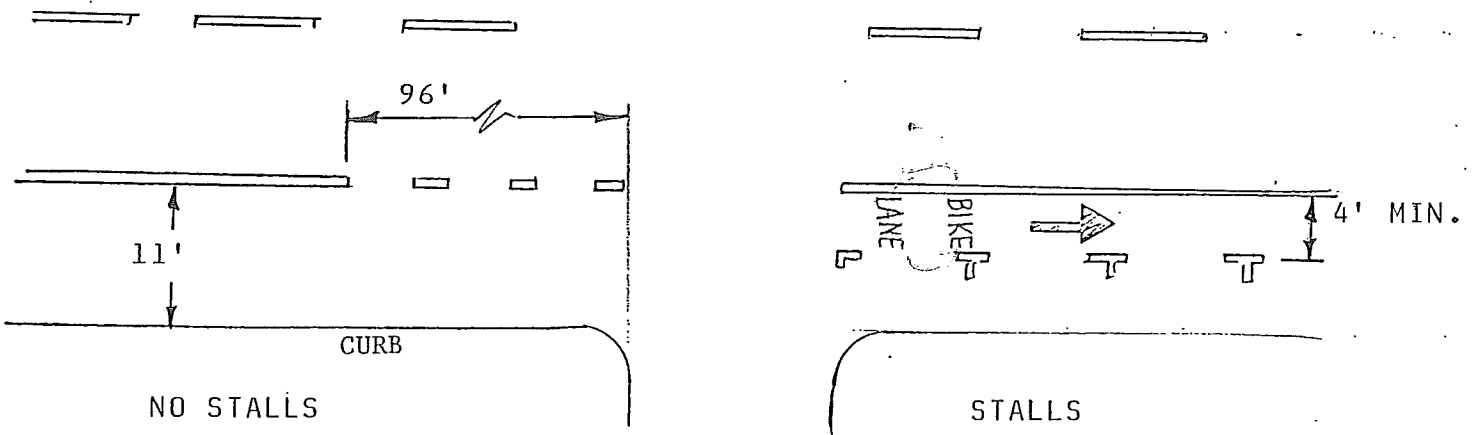
The "bike route" sign may be placed intermitten along the bike lane but its primary use is to provide directional and destination signing.

The Bike Lane line may either be dropped entirely, 96 feet in advance of the intersection, or a dashed line carried to the intersection.

WHERE VEHICLE PARKING IS PROHIBITED



WHERE VEHICLE PARKING IS PERMITTED



Where parking is permitted the minimum lane width is 11 feet from the curb or 5 feet from the parking stalls.

If parking is both permitted and prohibited on the same street, the bike lane line should show a smooth transition in width.

A. WIDTHS (cont)

The typical motor vehicle width next to a bike lane is 12 feet. There are situations where this distance may be reduced to 11 feet. Consideration should be given to speeds, truck volumes, alignment and sight distance.

Bike lanes are not advisable on long steep down grades.

When transition from one type of bike lane to another are necessary, smooth tapers should be provided.

B. ROAD SURFACE SIGNS (see Fig XVIII)

yellow lines - 4 inch, 10 centimeter
bicycle symbols - at intersection 3 feet high
arrows - 5 feet long

C. APPROPRIATE SIGNS (see Appendix I)

1. bicycle route
2. bicycle route information tab
3. bicycles allowed - not allowed
4. bikes crossing
5. turning vehicles yield to bikes
6. cyclists dismount
7. cyclists use sidewalk tab
8. steep hill, slow
9. narrow
10. low
11. bike lane

D. INTERSECTIONS AND SIGNAL DESIGN

Most car/bicycle accidents occur at intersections. A prevalent type of accident involves a car turning right and a cyclist going straight through. Cyclists turning left also have a problem since they must cross the path of cars in both directions. Proficient riders can successfully negotiate the left turn by merging with the vehicular traffic. Less proficient riders or younger children feel more comfortable dismounting and walking using the crosswalk. Allowances for both types of crossing should be considered.

D. INTERSECTIONS (cont)

Right Turns

The painted bike lane should either be dashed or omitted 30 meters before an intersection to allow right turning vehicles to move over to the curb prior to making the turn. Bicyclists must merge with the right turning traffic and both would then behave as at a normal intersection with each waiting in line to make their maneuver at the corner.

This merging maneuver is also the recommended practice at intersections with a right turn only lane.

Bicycle lane lines are not recommended at locations where the inside lane becomes a "right turn only" lane. Bicyclists may assume that because of the painted line, he has the right-of-way and may not check for right turning vehicles.

Experienced bicyclists can successfully maneuver across the right-turn-only lane to a through lane. It is recommended that the inexperienced cyclists stay close to the curb and cross the intersection as a pedestrian. An option is to provide a ramp off the road leading the cyclists to the pedestrian crossing.

Left Turns

In order for the bicyclist to make a left turn he must merge across one or more lanes of through traffic. While experienced cyclists are proficient enough to safely make this maneuver, inexperienced cyclists should not be encouraged to try it. They should either make a two-part left turn by riding a course similar to that followed by a pedestrian or dismounting from their bicycles and walking them across the crosswalks.

E. RAILROAD CROSSING

The bikeway across a railroad grade crossing should be widened or angled so that bicyclists can cross at right angles to the rails.

The grade of the bikeway should match the cross slope of the tracks.

Also the pavement should be maintained, so that ridge build-up does not occur next to the rails.

F. BICYCLE PATHS ON SIDEWALKS

Combining bicyclists and pedestrians on one path is not recommended but sometimes this may be the only solution. If bicyclists are to share the sidewalk, it should only be where pedestrian and cyclist volumes are low and where the sidewalk is properly designed to handle both.

Riders on the sidewalk must yield to pedestrians and to traffic at intersections. The rider must also obey all traffic signals at signalized intersections.

Generally motorists making right turns are not looking for bicyclists. Bicycle crossing or bicycle route signs should be erected to alert motorists.

A bend in the sidewalk as it approaches the intersection helps slow the cyclists and to give him a better angle to see vehicles approaching from behind.

G. BICYCLE PARKING FACILITIES

The ideal type of parking facility would be a locker-type storage space similar to baggage lockers found at airports. These offer total protection from weather and from theft and damage to frame, wheels and all bicycle accessories.

The more practical type of parking facility consists of a structure that would allow the frame and one or both wheels to be secured. The cyclists are required to carry a chain and lock. Other parts of the bicycle and accessories are not protected. A special structure or existing building overhang or roof would be required to provide weather protection.

Any fixed device to which a bicycle can be locked and chained can also be considered for short term convenience parking.

CLASS III - BIKE ROUTES

These are signed cycling routes utilizing existing roadways where cyclists share the roadway with motor vehicle traffic. They provide direct travel in bicycle demand corridors by connecting discontinuous segments of bike lanes.

Street parking should be restricted or prohibited in width critical areas to improve safety. Also surface hazards such as potholes, utility covers should be corrected.

No other markings other than signs designating the road as a bike route is required since the majority of these Class III routes are on quiet residential streets where there is normally a speed restriction.

Figure IX

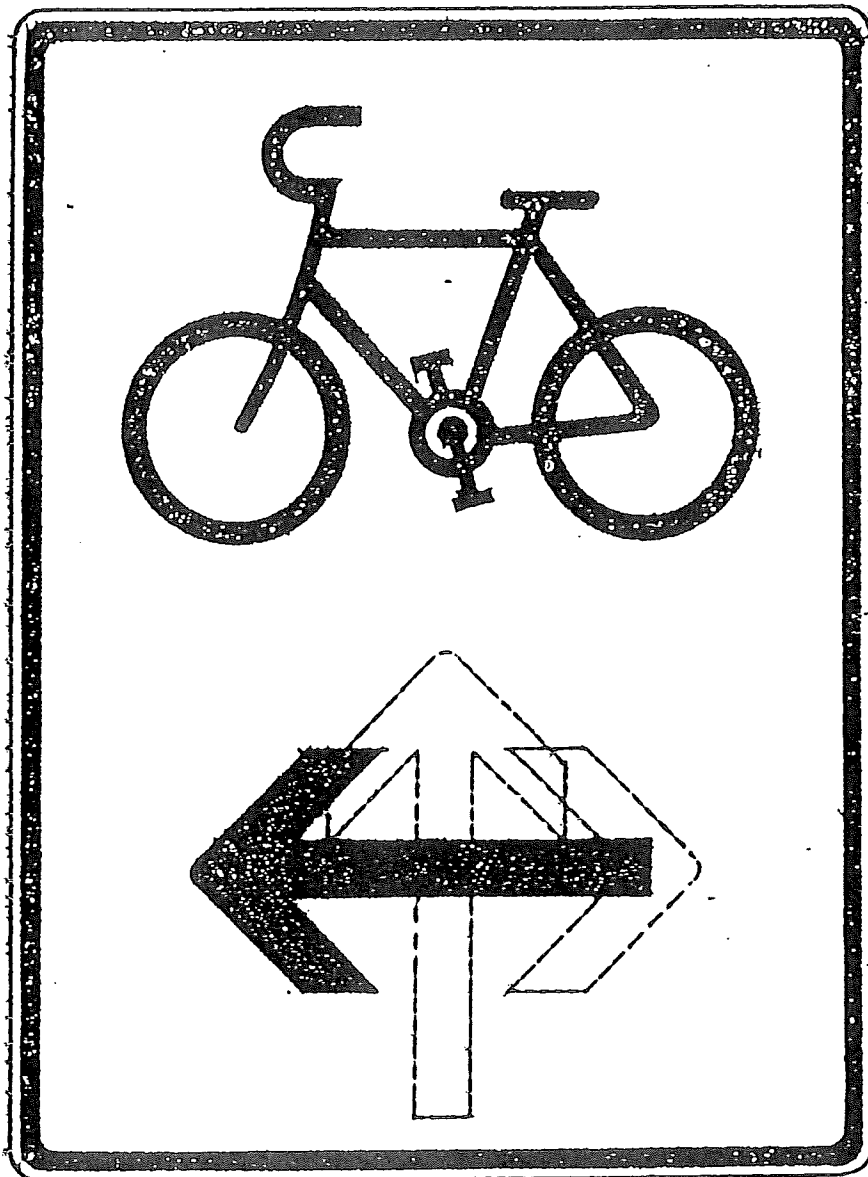


24" X 24"

BIKE LANE

- used to designate a bike lane and regulate bicycle and vehicle traffic

Figure X

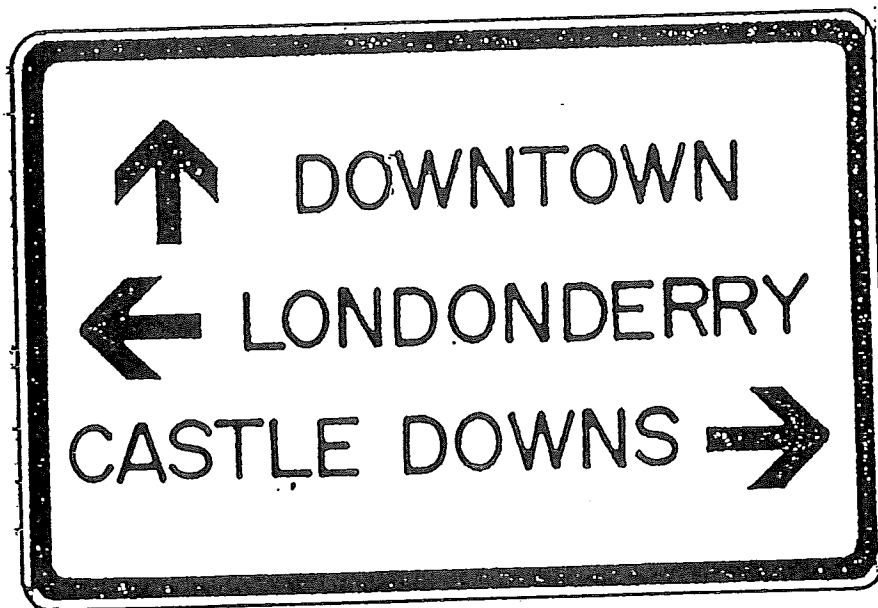


18" X 24"

BIKE ROUTE

- shows the location of a bikeway to guide cyclists along designated route. At turns, the sign will be supplemented by directional arrows

Figure XI



18" X 12"

INFORMATION TABS

- informs cyclists of activity centres located on the bikeway
- used in conjunction with bike route signs

Figure XII



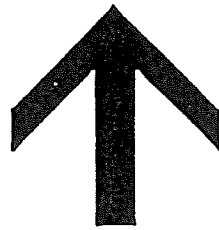
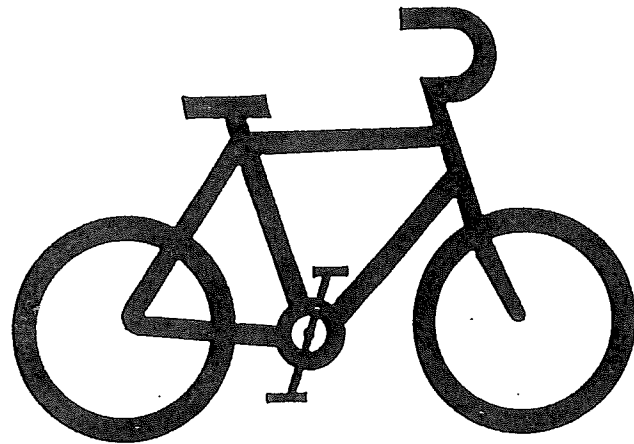
CYCLISTS DISMOUNT

- to direct cyclists to dismount and walk over bridges, sidewalks,
or streets

SIGN SIZE = 18" x 24"

CYCLISTS DISMOUNT SIGN

Figure XIII



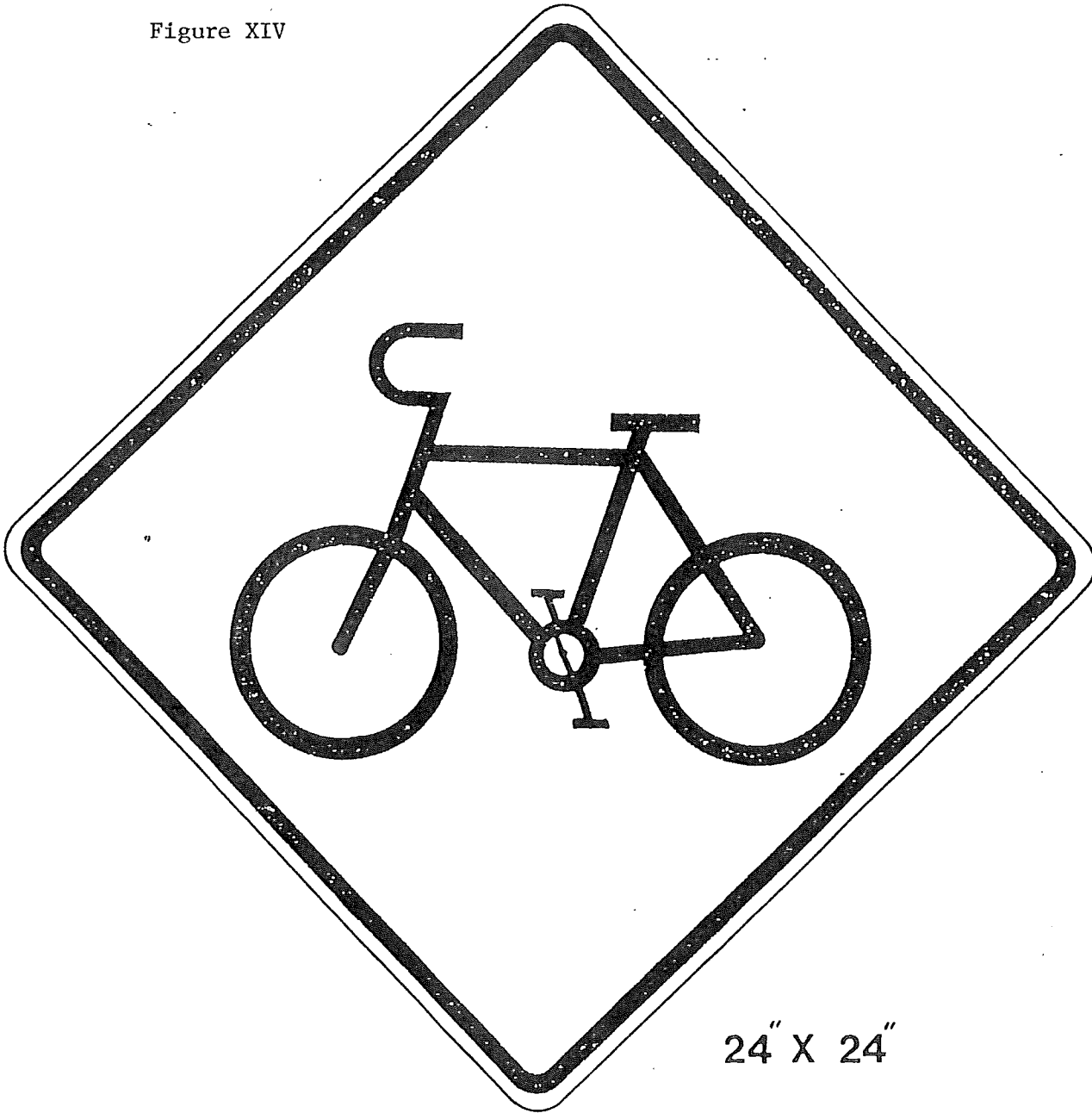
**BIKES USE
SIDEWALK**

to direct cyclists to ride on the sidewalk in locations where it is considered safer than riding on the roadway

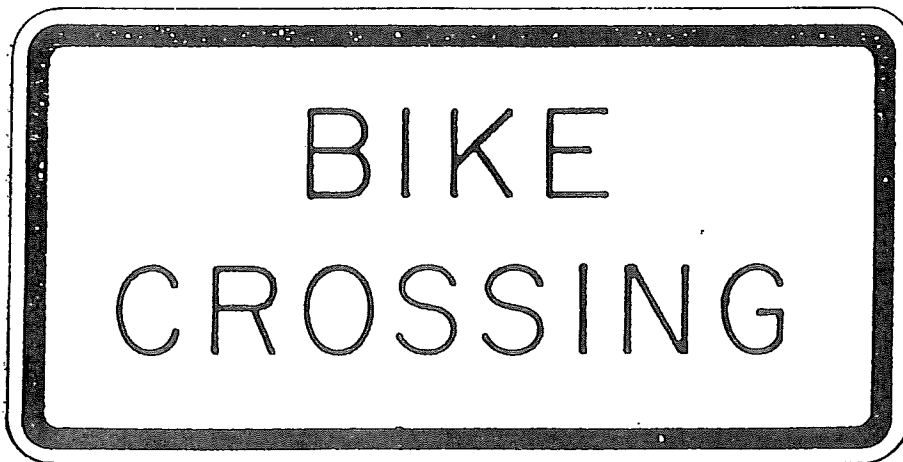
SIGN SIZE = 18" x 24"

BIKES USE SIDEWALK SIGN

Figure XIV



24" X 24"



18" X 12"

Figure XV

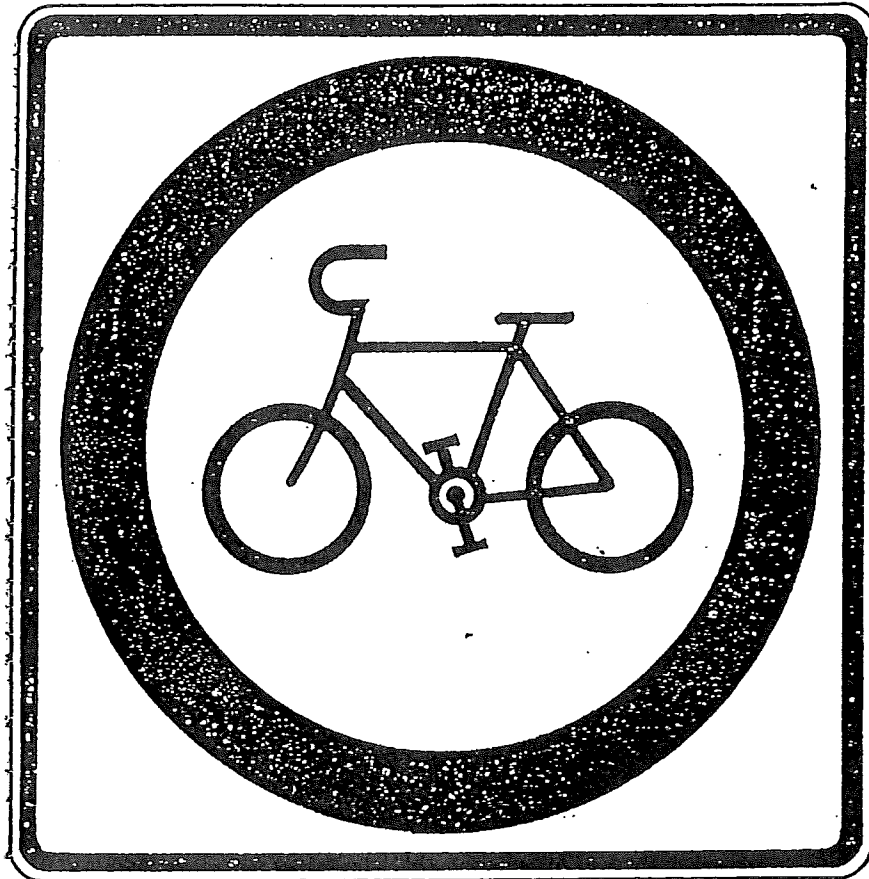


18" X 18"

BIKES PROHIBITED

- restricts cyclists from entering sidewalk or section of roadway

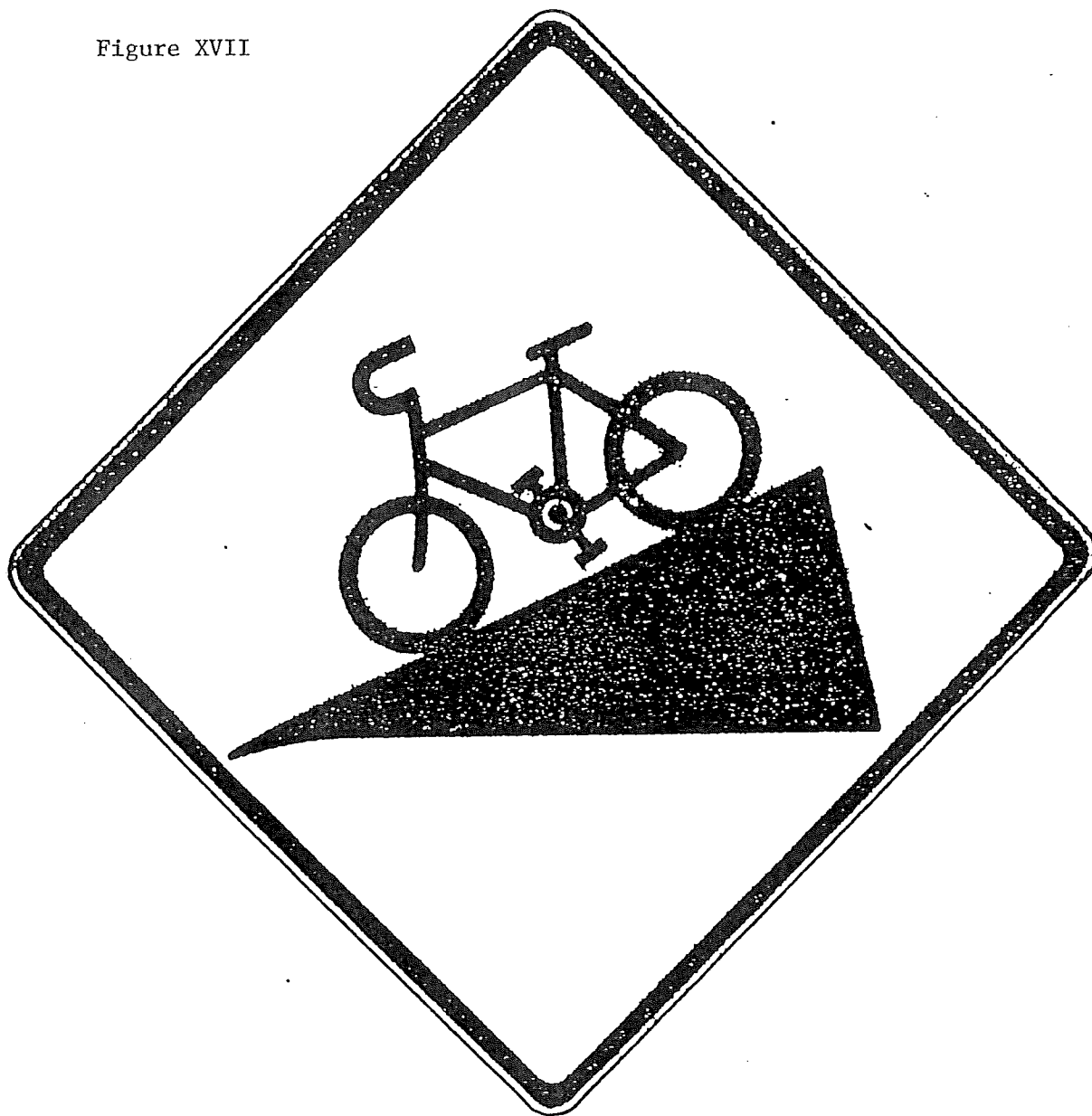
Figure XVI



18" X 18"

BIKES PERMITTED

Figure XVII

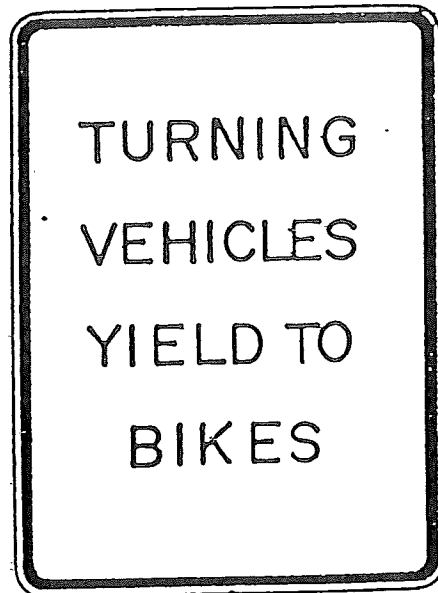


18" X 18"

STEEP HILLS

- cautions cyclists that a steep hill is located ahead

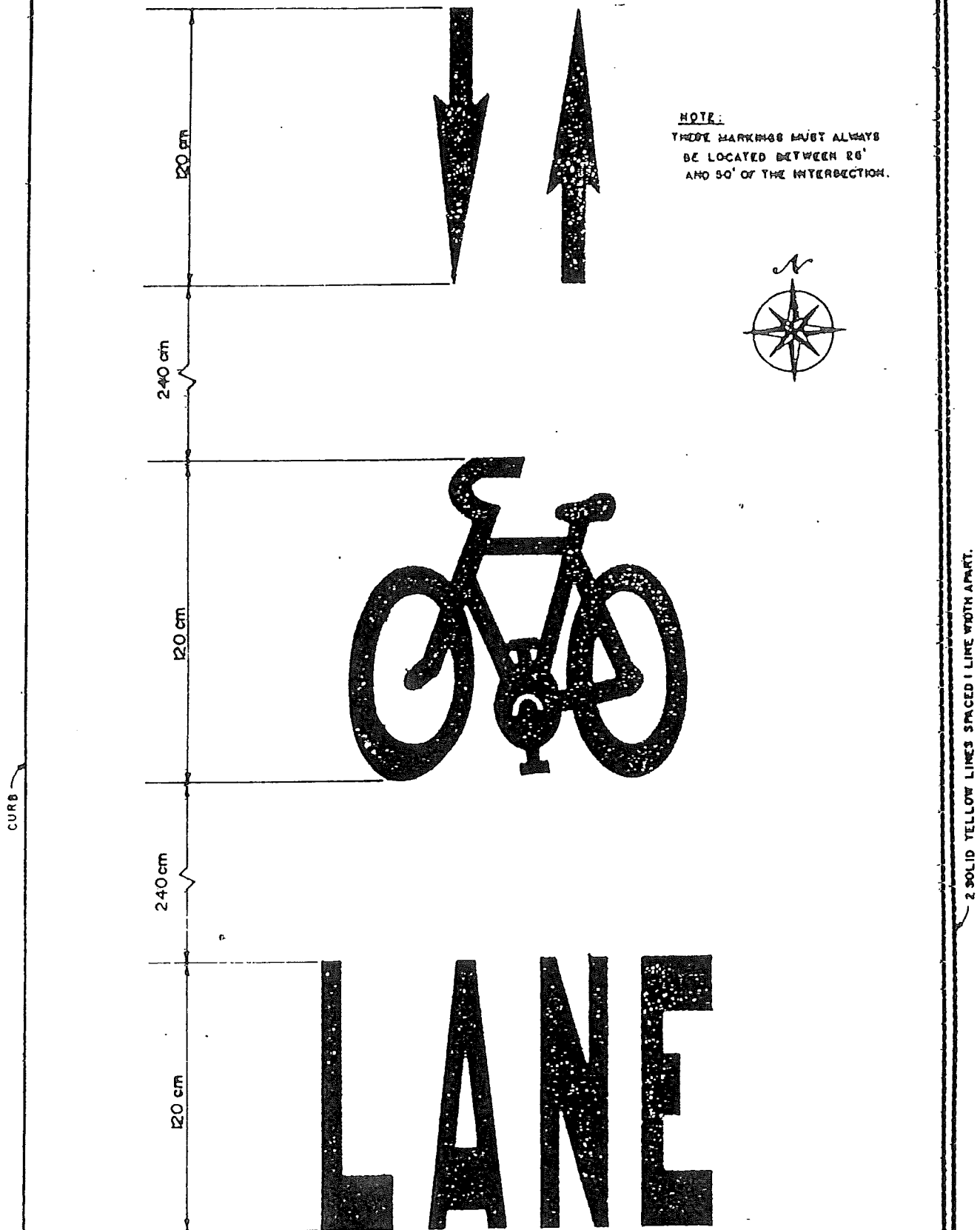
Figure XVII



18" X 24"

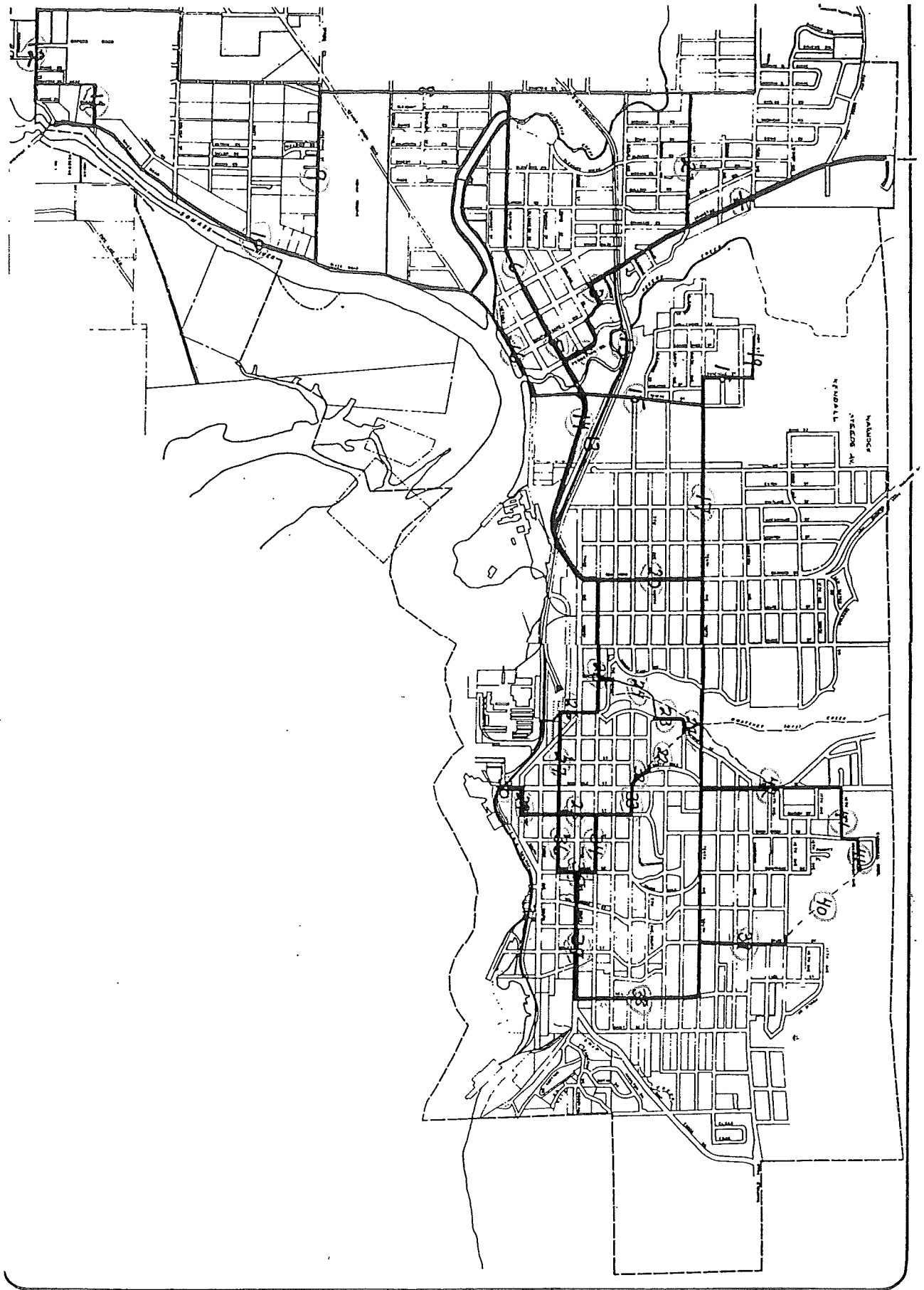
- direct motorists to yield the right of way to cyclists
- generally used for Class II bikeways

Figure XVIII



pavement markings located at each intersection

APPENDIX II



— CITY OF PORT ALBERNI
 STREET MAP 1:20,000+

W. J. BLAIR & ASSOCIATES
 TOWN PLANNING CONSULTANTS LTD. - VANCOUVER

FROM ASSOCIATED ENGINEERING SERVICES LTD. MAP.



PORT ALBERNI CYCLE ROUTES

KEY	STREET	CROSS STREETS	COMMENTS	WORK REQUIRED
1	Johnston Road	Helen St. to Tebo	Class II bikeway to shopping mall	<ul style="list-style-type: none"> - widen road around railroad tracks - remove parking on North and South sides - paint 5' bike lane and signs - bike route sign on Ian Avenue corner
2	Ian Avenue	Johnston to Michigan	Class II bikeway to Mt. Kitsa School and Recreation Complex Development	<ul style="list-style-type: none"> - install bicycle parking at Mall - remove parking - paint 5' bike lane and signs - use Craig Rd as an alternative route to tennis courts and the new fieldhouse) - pave shoulders - paint 5' bike lane and signs
3	Helen St. and Southgate Road	Michigan to Compton	Class II bikeway - detours commercial section of Johnston Road	<ul style="list-style-type: none"> - remove parking - paint 5' bike lane and signs
4	Adelaine and Pemberton		Class III bikeway to Roger Creek Park	<ul style="list-style-type: none"> - erect bike route signs only (within 30 kmh zone)
5	Gertrude	Pemberton to Johnston	Class II bikeway to commercial section of North Port	<ul style="list-style-type: none"> - paint bike lane 11' from curb - erect 'cars yield to cyclists' sign before Johnston Road

KEY	STREET	CROSS STREETS	COMMENTS	WORK REQUIRED
6		Johnston to Burke Burke to Kitsuksis Bridge Kitsuksis Bridge	Class II bikeway to A. W. Neill School and Kitsuksis Creek Walkway	<ul style="list-style-type: none"> - extend bike lane 11' from curb and signs - paint bike lane 11' from curb and signs - erect 'cyclists use sidewalk' sign, & erect guard rails - cut opening in curb - pave shoulders on South West corner of Compton and Gertrude - paint 5' line and sign
7	Kitsuksis Walkway		Class I recreational walkway	<ul style="list-style-type: none"> - two-way pedestrian/cycle path - extend grading to 8' - prune trees for visibility - hazard sign - corner under Kitsuksis Bridge on Gertrude
8	Compton	Gertrude to Josephine	Class II bikeway or Class III	<ul style="list-style-type: none"> - extend and pave shoulders with 4' bike lane - designate bike route with signs - no parking on south side - pave shoulders and erect signs
9	Josephine	Compton to River Road	Class III bikeway	
10	River Road		Class II bikeway	<ul style="list-style-type: none"> - paint bike lane 11' from curb - need paved shoulder on West side of River Road where it narrows before Beaver Creek Road intersection
11	Russell Place and Compton Road West		Class III bikeway to Paper Mill Dam	<ul style="list-style-type: none"> - construct bike path connecting Russell Place and Compton Road West (or go through school) - pave gravel section of Compton Road - erect bike route signs to divert traffic from steep corner of River Road - erect bike crossing signs on hill

KEY	STREET	CROSS STREETS	COMMENTS	WORK REQUIRED
12	Falls Street		Class II or Class III	<ul style="list-style-type: none"> - widen paved shoulders and paint 5' bike lane - erect bike route signs
13	E & N Right of Way	Johnston to Gertrude	Class I bikeway between N. and S. Port	<ul style="list-style-type: none"> - obtain permission to build bikeway - new bridge to cross Roger Creek - construct path to and from bridge
14	Gertrude	Pemberton to Roger	Class I bikeway to Pulp Mill - West side route between N. and S. Port	<ul style="list-style-type: none"> - erect 'cyclist use sidewalk' sign - widen sidewalk on S. side of bridge before Roger - curb cuts - no parking West side of Roger Creek Park - erect guard rails and "cyclists dismount" sign
		Roger to Redford	Class I - shared sidewalk with pedestrians - 2-way traffic	<ul style="list-style-type: none"> - widen sidewalk or construct bike path to accommodate 2-way cyclists and pedestrians - curb cuts for cycles - 'no bicycles' sign on West side of Third Avenue from Stamp to Redford - erect 'cars yield to cyclist' sign for cars turning right from Third on to Roger

KEY	STREET	CROSS STREETS	COMMENTS	WORK REQUIRED
15	Roger Street	10th to Stamp Avenue	Class II detours busy commercial section of Johnston	<ul style="list-style-type: none"> - paint 11' bike lane with parking - improve road around rail crossing - erect 'cars yield to cyclists' sign for cars turning right from Roger on to Third - start lane well away from intersection
16	Victoria Quay	Roger Ave. to Johnston Rd. Johnston to River Road	Class II bikeway	<ul style="list-style-type: none"> - widen paved shoulders, busy road - 'no parking' signs - 4' bike lane and signs - pave road on approach to bridge over Roger Creek - erect 'cyclists use sidewalk' sign over bridge - 11' bike lane from bridge to Johnston - change angle parking to parallel parking on east side - 'no parking', 4' bike lane - 'cyclists use sidewalk' sign - curb cuts for entry and exit - 'yield to cyclist' sign for cars turning right on to Beaver Creek - 'bike crossing' sign on Beaver Creek before River Road - erect guard rail and "cyclists dimount" sign

KEY	STREET	CROSS STREETS	COMMENTS	WORK REQUIRED
17	10th Avenue	Rosewood to Redford	Class II	<ul style="list-style-type: none"> - paint 11' bike lane and signs - 'yield to cyclist' sign before Redford
		Redford to Bute	Class II	<ul style="list-style-type: none"> - paint 4' bike lane
		Bute to North Park Drive		<ul style="list-style-type: none"> - paint 11' bike lane and signs
		Dip	Class I with shared side-walk with pedestrians	<ul style="list-style-type: none"> - construction of shared ped/cycle sidewalk on East side of Tenth (fill, shoring) - 'cyclists use sidewalk' signs
		Dip to Neil		<ul style="list-style-type: none"> - paint 11' bike lane and signs
18	Rosewood	10th to Vimy	Class III	<ul style="list-style-type: none"> - Class III signs
19	Vimy	Vimy to Glenwood	To Fairgrounds	<ul style="list-style-type: none"> - Class III signs

KEY	STREETS	CROSS STREETS	COMMENTS	WORK REQUIRED
20	Redford Street	10th to 3rd	Class II	<ul style="list-style-type: none"> - 'no parking' signs on N. and S. side - paint 4' lane and signs - 'bike route' sign pointing to 4th Av
21	Dunbar	10th to 9th	<ul style="list-style-type: none"> - shorten steep uphill climb on tenth - access to Rec. Park 	<ul style="list-style-type: none"> - widen paved shoulders and paint 4' lane
22	Recreation Park		<ul style="list-style-type: none"> - shared ped/cycle path through Park 	<ul style="list-style-type: none"> - erect bike route sign to path through park - widen and pave path
23	Dunbar	9th to 7th	to Dry Creek	<ul style="list-style-type: none"> - widen paved shoulders and paint 4' lane
24	Dry Creek Park		Class I (proposed)	<ul style="list-style-type: none"> - pave path - new bridge over creek - pave road through camp grounds
		Napier Street	Class III to 4th Avenue	<ul style="list-style-type: none"> - signs

KEY	STREET	CROSS STREETS	COMMENTS	WORK REQUIRED
25	4th Avenue	Dunbar to Redford	Class II - West side route between N. and S. Port	- widen paved shoulders between Dunbar and Burde - 11' bike lane and signs
26	Dunbar Street	4th to 2nd Avenue	Access to Somass - detours steep 4th Ave. and busy 3rd Ave.	- paint 4' lane and signs - install either controlled crossing or flashing amber light on 3rd
27	2nd Avenue	Angus to Dunbar	Class II	- paint 11' lane and signs
28	Angus Street	6th to 5th	Class II to downtown core-off-busy Argyle	- widen paved shoulders on N. side - 'no parking' - 4' lane
		5th to 4th		- widen paved shoulders on S. side
		4th to Kingsway		- 11' bike lane
29	Kingsway	Angus to Argyle	Class II	- 11' bike lane

KEY	STREET	CROSS STREETS	COMMENTS	WORK REQUIRED
30	Argyle	Kingsway to Industrial Rd.	Class II to proposed Harbor Park Development	<ul style="list-style-type: none"> - 11' bike lane - Hazard sign for rail crossing
31	E & N Right of Way	Industrial Road from Alply to Somass	Class I 2-way bike path	<ul style="list-style-type: none"> - ask for permission for use - construction of bike path
32	North Crescent	7th to 6th Avenue	Class III	<ul style="list-style-type: none"> - signs only
33	6th Avenue	North Cres. to Angus	Class II	<ul style="list-style-type: none"> - 11' bike lane - 'bike crossing' sign on Argyle - move center line on 6th from Argyle to Angus
34	4th Avenue	Angus to Montrose	Class II	<ul style="list-style-type: none"> - 11' bike lane - construct bike parking at Woodward's parking lot - widen paved shoulders from Mar to Montrose
35	Montrose	2nd to 4th	Class II to Weaver Park	<ul style="list-style-type: none"> - widen paved shoulders - 11' bike lane

KEY	STREET	CROSS STREETS	COMMENTS	WORK REQUIRED
36	2nd Avenue	Montrose to Mar	Class II	- widen paved shoulders - 11' bike lane
37	3rd Avenue	Montrose to Neil	Class II	- widen paved shoulders - paint 11' bike lane
38	Neil Street	3rd to 10th	Class II entry to APD	- bicycle parking at APD - paint 11' bike lane
39	Bruce St.	10th to Anderson Anderson to 15th	Class II to Maguinnna School	- paint 11' bike lane - 'bike crossing' sign on Anderson - widen paved shoulders - 11' bike lane

KEY	STREET	CROSS STREETS	COMMENTS	WORK REQUIRED
40	Bike Path	Dunn to Bruce	Class I path	<ul style="list-style-type: none"> - determine future development of area from city - construct path; requires one bridge, one culvert and paving
41	Roseborough	18th Avenue	Class III	<ul style="list-style-type: none"> - signs only
42	Argyle	18th to 10th	Class II	<ul style="list-style-type: none"> - paint 11' bike lane - eliminate 2-lane traffic from Anderson to 10th
43	Bute	15th to 10th	Class II to ADSS	<ul style="list-style-type: none"> - paint 11' bike lane - eliminate parking