PSRC's 2023 Transportation Alternatives Program Application

Application Type

TAP Project Category - Pedestrian and Bicycle Project

General Project Information

Project Title	RTP ID#	Sponsor
6th Street Rechannelization Project	#5595	Bremerton
Co-Sponsor	**Certification Acceptance?**	**CA Sponsor**
	Yes	

Project Contact Information

Name	Phone	Email
Gunnar Fridriksson, P.E.	(360) 535-3357	gunnar.fridriksson@ci.bremerton.wa.us

Project Description

Project Scope: Please provide a clear and concise (300 words or less) description of the individual components of this project. What will be the specific outcome of this project? What will be built, purchased or provided with this grant request? If this is part of a larger project, please be specific as to the portion on which the grant funds will be used.

This project would construct a road diet by rechannelizing 6th Street and a short segment of Kitsap Way. The rechannelization will reduce the existing undivided 4 lane roadway to a single lane in each direction with a center turn lane (3 lanes total). The removed lane will be converted to a buffered bicycle lane in each direction. The project corridor is approximately 8,000 feet long. Right turn pockets will be provided at several intersections within the corridor based on an operations analysis performed during the Preliminary Engineering Phase. Traffic signal heads will be adjusted on existing signal arms to accommodate the rechannelization.

Right turn pockets are required due to the effects of the road diet on intersection level of service (LOS). The reduction of a travel lane in each direction will increase traffic congestion for vehicles are making right hand turns at the busiest intersections. Right hand turn pockets are required to maintain intersection LOS meeting Bremerton standards per the Transportation Comprehensive Plan.

Project Justification, Need or Purpose: Please explain (in 300 words or less) the intent, need or purpose of this project. What is the goal or desired outcome?

The project is prioritized in Bremerton's Non-Motorized Transportation Plan and Comprehensive Plan to increase safety and to support bicycle trips between the Charleston District Center, Downtown Regional Center, surrounding neighborhoods, and the Bremerton Ferry Terminal. Compared with parallel higher-order streets (e.g., Burwell, 4th, and 11th Streets), 6th street experiences lower traffic volumes that can be accommodated safely with fewer travel lanes. The project corridor experiences an accident rate that is 2.5 times the Kitsap County average and is currently very uncomfortable for pedestrians and bicyclists. The road diet proposed by the project is a preferred strategy supported by two separate safety and feasibility studies performed by the City (discussed later in this application).

Project Location

Location	County/Counties
6th Street between Washington Avenue and Kitsap Way and 700' of Kitsap Way.	Kitsap
Beginning Landmark	**Ending Landmark**
Kitsap Way	Washington Avenue

Map and Graphics
f-132-552-18674119_gxdVCP2H_6th_St_Concept_Plan.pdf, f-132-552-18674119_orefk69P_6th_St._Rechan_vic_map.pdf

Plan Consistency

Is the project specifically identified in a local comprehensive plan?
Yes

If yes, please indicate (1) the plan name, (2) relevant section(s), and (3) page number(s) for the relevant sections.
-Bremerton Non-Motorized Transportation Plan, Section 3.2, page 47, and page C-2, document page 144.
-Bremerton Comprehensive Plan Transportation Appendix, Section 4, page 47.
-Bremerton Downtown Sub-Area Plan, page 5-87.
-Bremerton Strategic Road Safety Plan, page 19.

If no, please describe how the project is consistent with the applicable local comprehensive plan, including specific local policies and provisions the project supports. Please include the actual text of all relevant policies or information on where it can be found, e.g. the policy document name and page number.

Federal Functional Classification

Federal Functional Classification	Rural Functional Classification	Urban Functional Classification
		Minor Arterial

Support for Centers

Describe how the project will support the existing and planned housing/employment densities in the center.

The project will provide a connection in the bicycle facility network between Bremerton's Charleston District Center to the west and the Downtown Regional Center to the east. Planned housing/employment densities will be supported by the network connection as opportunities to bicycle to work in either center are increased. Additionally, the 6th Street bicycle corridor will provide a connection to the Bremerton Ferry Terminal, which will support bicyclists commuting to/from Seattle and Port Orchard.

Describe how the project will support the development/redevelopment plans and activities (objectives and aims) of the center

Bremerton's objectives for the centers are to 1) increase employment and population, 2) encourage economic development, 3) protect the natural environment, and 4) promote community health. Providing safe and comfortable bicycle facilities will encourage bicycle use including commute trips to both centers, Seattle and, Port Orchard. An increase in bicycle commuters into the centers will reduce traffic congestion, reduce parking demand, reduce carbon emissions, and increase employee health and well being.

Category-Specific Criteria: Pedestrian and Bicycle Projects

Describe how the project extends or completes a regional or local pedestrian and bicycle system, and/or adds facilities to an existing pedestrian and bicycle system or network.
The project completes a local bicycle network by providing an East/West bicycle lane connection between two legs of the existing bicycle network (Washington Avenue and Kitsap Way). Bicycle lanes were added to Washington Avenue during Bremerton's 2022 Downtown Bicycle-Pedestrian Circulation Improvements project. Bicycle lanes were added to Kitsap Way during Bremerton's 2022 Kitsap Way and Warren Avenue Signal and Multimodal project.

Describe how the project addresses a need in the community and reduces key barriers to use and functionality, i.e. travel distance, a steep slope, a comfort issue, or other identified barrier.
The community needs a safe and comfortable East/West bicycle corridor connecting the Charleston District Center, Downtown Regional Center, surrounding neighborhoods, and Bremerton Ferry Terminal. The lack of a dedicated bicycle corridor is a key barrier that discourages bicycle travel. The existing conditions on 6th Street render it very uncomfortable for bicyclists as attested to by the public comments attached to this application.

Describe the connections to transit stops and stations provided by the project, including bus, rail, ferries, etc.
A key connection to transit stops provided by the project will be the connection to the Bremerton State Ferry Terminal. Bicyclists on 6th Street will be able to access the ferry terminal using the connecting Washington Avenue bicycle improvements.

In addition, Kitsap Transit provides two bus routes through the 6th Street corridor, a park and ride lot, and 20 bus stops. All of these facilities will be accessible to bicyclist using the corridor. A transit route map is attached.

It should be noted that Kitsap Transit currently plans to construct a mixed use transit center at the intersection of Montgomery Avenue and 6th Street (2525 6th Street). The property was purchased in 2020 and construction is planned for the future once funding is secured.

Describe the anticipated level of public usage within the community and how the project will benefit a variety of user groups, including commuters, residents, and/or commercial users.
An increase in bicycle trips is anticipated due to the increase in safety and comfort achieved by the road diet and buffered bicycle lanes. Road diets calm traffic, and reduce vehicle speeds. Buffered bicycle lanes increase horizontal separation between bicyclist and cars. All users groups who desire to walk or bike in the corridor will benefit.

Discuss whether there will be a loss of opportunity if this project is not funded, e.g., development or other economic pressure.
A notable loss of opportunity if the project is not funded consists of the loss of increased bicycle connectivity between Our Lady Star of the Sea Catholic School and the adjacent residential neighborhoods. The school,

located on the 1200 block of 6th Street is progressing towards completion of $3.6M in capital improvements.

Category-Specific Criteria: Equity

Section 1

Identify the population groups to be served by the project, i.e., people of color, people with low-income, older adults, people with disabilities, youth, people with Limited English Proficiency, populations located in highly impacted communities, areas experiencing high levels of unemployment or chronic underemployment, immigrants and refugees, and transit dependent populations.

According to census tract data published by PSRC, the project corridor population is 78% White, 9% Black, 1% American Indian, 5% Asian, and 7% Hispanic.

Washington State Dept. of Health published data characterizes the project corridor population as: 30%-33% minorities, with an environmental health disparities score of 8.5 out of 10 for population living in poverty, 7 out of 10 for unaffordable housing, and 7 out of 10 for unemployment. Risk of death from cardiovascular disease is 7 out of 10.

Identify the disparities or gaps in the transportation system / services for these populations that need to be addressed.

The need addressed by the project is to provide an East/West bicycle corridor connecting the Charleston District Center, Downtown Regional Center, neighborhoods adjacent to the 6th Street corridor, and the Bremerton Ferry Terminal.

Describe how the project addresses those disparities or gaps and benefits the population groups identified under Step 1.

The project benefits the corridor population groups by encouraging walking and bicycling within the corridor. The ability to commute to work by bicycle or on foot reduces transportation costs and decreases parking demands in the residential neighborhoods. Reduction in traffic speed and congestion reduces accidents and increases comfort and overall quality of life. Walking and bicycling is exercise with well established health benefits.

Section 2

Describe the public outreach process that led to the development of the project. This could be at a broader planning level (comprehensive plan, corridor plan, etc.) or for the specific project. Include specific outreach or communication with the population groups identified in the previous section.

Public outreach was performed for each of the comprehensive plans listed in this application. Comments were solicited via public notice and during public meetings. Currently, outreach is being performed for Bremerton's Joint Compatibility Transportation Plan (JCTP), which identifies the 6th Street Road Diet as a priority project. Comments received as a result of the public outreach performed for the JCTP are attached to this application.

Describe how this outreach influenced the development of the project, e.g., the location, scope, design, timing, etc.

The planning process resulted in an extension of the original corridor presented in the Non-Motorized Plan. The

extension consists of adding the roadway segment from Park Avenue to Washington Avenue, a distance of 1,600 feet.

Section 3

Is the project in an area of low, medium, or high displacement risk?

According to the PSRC interactive Displacement Risk map, the project corridor lies within an area of moderate displacement risk. Factors that contribute to this risk include a high rental rate (52.5% of homes), a housing cost burden and lack of affordable rental housing.

This 6th Street Road Diet is not expected to be a significant contributing factor to displacement within the project corridor. This is supported by a study published in July 2021 by Elsevier. The study was conducted by researchers at the University of New Mexico and the University of Colorado who looked at data from 29 U.S. cities over a period of ten years. The study concluded that installation of new bike infrastructure in neighborhoods does not lead to displacement of people of color.

If the project is in an area of medium or high displacement risk, identify the broader mitigation strategies in place by the jurisdiction to address those risks.

Bremerton is currently sponsoring a Homeownership Down Payment Assistance (DPA) Program. The program is designed to provide deferred payment, low-interest subordinate loans that make home buying affordable for eligible home buyers purchasing within the Bremerton City Limits. Funding for this program comes from the City of Bremerton’s HUD allocation of Federal HOME funds and is matched with DPA from other sources provided by Community Frameworks for up to 20% of the purchase price.

In addition, Bremerton has an affordable housing rental assistance program as noted in the Major’s 2023 initiatives. This program is funded through the Bremerton Rental Assistance Program and Bremerton Housing Authority. Residents along the corridor who may be displaced for any reason may be eligible for these programs.

Category-Specific Criteria: Safety and Security

Describe how the project addresses safety and security.

According to the US Federal Highway Administration: "A Road Diet, or roadway reconfiguration, can improve safety, calm traffic, provide better mobility and access for all road users, and enhance overall quality of life....Road Diets can be of particular benefit to nonmotorized road users. They reallocate space from travel lanes– space that is often converted to bike lanes or in some cases sidewalks, where these facilities were lacking previously. These new facilities have a tremendous impact on the mobility and safety of bicyclists and pedestrians as they fill in a gap in the existing network."

Bremerton performed a City-wide safety evaluation and prepared the document "2020 Bremerton Strategic Road Safety Plan", dated February 20, 2023. The 6th Street Road Diet was evaluated and identified as a prioritized countermeasure to address the most pressing current needs. The evaluation concluded that the road diet would reduce the number of annual vehicle accidents involving cars, pedestrians and bicyclists from 38 to 27 (a 29% reduction).

Bremerton performed an follow-on safety study and prepared the report "6th and 11th St Corridor Feasibility

Study", dated July 2020. This study looked specifically at the feasibility and safety of the 6th Street Road Diet. Study authors recommended the road diet on 6th Street because of current crash rates that are 2.5 times the Kitsap County average. In addition to a reduction in vehicle crash rates, pedestrian LOS will be significantly improved. Road diets are the preferred tactic for minor arterials.

Describe how the project helps protect vulnerable users of the transportation system, by improving pedestrian safety and addressing existing risks or conditions for pedestrian injuries and fatalities and/or adding or improving facilities for pedestrian and bicycle safety and comfort.

Pedestrian safety and comfort will be increased by the road diet and addition of buffered bicycle lanes. The increase in comfort and safety results from the additional horizontal separation between pedestrians and cars, reduced traffic speeds, and reduction in accidents.

Does your agency have an adopted safety policy (e.g., Vision Zero, Target Zero, etc.)? How did these policies inform the development of the project?

Bremerton adopted a Complete Streets policy through Ordinance No. 5354 on November 7, 2018. The policy performance objectives include improving the safety of transportation facilities for "bikers and pedestrians".

Describe how the project reduces reliance on enforcement and/or designs for decreased speeds.

Road diets have been demonstrated to reduce traffic speeds. According to the FHWA: "Four lane undivided highways experience relatively high crash frequencies...resulting in conflicts between high-speed through traffic, left turning vehicles and other road users. FHWA has deemed Road Diets a proven safety countermeasure and promotes them as a safety-focused design alternative to a traditional four-lane undivided highway."

PSRC Funding Request

Has this project received PSRC funds previously?	Please provide the project's PSRC TIP ID.
No	

PSRC Funding Request (cont.)

Phase	Year	Amount
PE/Design	2025	$606909
Right-of-Way	2026	$129750
		$

Total PSRC Funding Request: $736659

Total Estimated Project Cost and Schedule

Planning Phase

Fund Type	Fund Source	Funding Status	Amount
			$
			$
			$

			$
			$

Total Planning Phase Cost: $0
Expected year of completion for this phase:

Preliminary Engineering/Design Phase

Fund Type	Fund Source	Funding Status	Amount
Federal	TAP(PSRC)	Unsecured	$606909
Local	Local	Reasonably Expected	$94720
			$
			$
			$

Total Preliminary Engineering/Design Phase Cost: $701629
Expected year of completion for this phase: 2026

Right of Way Phase

Fund Type	Fund Source	Funding Status	Amount
Federal	TAP(PSRC)	Unsecured	$129750
Local	Local	Reasonably Expected	$20250
			$
			$
			$

Total Right of Way Phase Cost: $150000
Expected year of completion for this phase: 2027

Construction Phase

Fund Type	Fund Source	Funding Status	Amount
Federal	TAP(PSRC)	Unsecured	$2913163
Local	Local	Reasonably Expected	$454655
			$
			$
			$

Total Construction Phase Cost: $3367818
Expected year of completion for this phase: 2028

Other Phase

Fund Type	Fund Source	Funding Status	Amount
			$

			$
			$
			$
			$

Total Other Phase Cost: $0
Expected year of completion for this phase:

Project Summary

Total Estimated Project Cost:	**Estimated Project Completion Date (month and year):**
$4219447	December, 2028

Financial Documentation

Please enter a description of your financial documentation in the text box below.
Draft 2024-2029 Capital Funding Plan, Real Estate Excise Tax (REET). The draft funding plan will be provided to the mayor in final form on September 11, 2023 and posted on the City website on October 18, 2023. Budget adjustments are due to City council by November 22, 2023. Final City budget approval (including REET budget) will occur through council action on December 20, 2023.

Please upload supporting documentation demonstrating all necessary matching funds for the phase(s) for which PSRC funds are being requested are secure or reasonably expected.
f-132-346-18674119_PsY4BNil_REET_Projections_Draft_2024-2029_07192023.pdf

Project Readiness

Preliminary Engineering/Design

Are you requesting funds for ONLY a planning study or preliminary engineering?
No

What is the actual or estimated start date for preliminary engineering/design?
October, 2024

Is preliminary engineering/design complete?
No

What was the date of completion (month and year)?
March, 2026

Have preliminary plans been submitted to WSDOT for approval?
No

Are there any other PE/Design milestones associated with the project? Please identify and provide dates of completion. You may also use this space to explain any dates above.
Obligate PE Funds - October 2024

30% PSE - January 2025
60% PSE - June 2025
90% PSE - August 2025
NEPA Approval - October 2025
100% PSE - December 2025
WSDOT Design Approval - March 2026

When are preliminary plans expected to be complete? For non-certified agencies, please enter the expected approval date.
March, 2026

Environmental Documentation

What is the current or anticipated level of environmental documentation required under the National Environmental Policy Act (NEPA) for this project? For more information on NEPA requirements, please refer to WSDOT's Local Agency Guidelines Manual.
Categorical Exclusion (CE)

Has NEPA documentation been approved?
No

Please provide the date of NEPA approval, or the anticipated date of completion (month and year).
October, 2025

Right of Way

Will Right of Way be required for this project?
Yes

What is the actual or estimated start date for right of way (month and year)?
December, 2025

What is the estimated (or achieved) completion date for the right of way plan and funding estimate (month and year)? If federal funds are to be used on any phase of a project, federal guidelines for acquisition of right of way must be followed, including submittal of a right of way plan and funding estimates.
January, 2026

Please describe the right of way needs of the project, including property acquisitions, temporary construction easements, and/or permits. Refer to Chapter 25 of WSDOT's Local Agency Guidelines Manual for more information.
The project will require small property acquisitions to accommodate right turn pockets at three intersections. Temporary construction easements will also be required to construct the right turn pockets.

What is the zoning in the project area?
Low Density Residential
Downtown Subarea Plan
General Commercial

District Center Core

Discuss the extent to which your schedule reflects the possibility of condemnation and the actions needed to pursue this.
Condemnation is not anticipated. However we are assuming an 18 month acquisition schedule to accommodate condemnation if it occurs.

Does your agency have experience in conducting right of way acquisitions of similar size and complexity?
Yes

If not, when do you expect a consultant to be selected, under contract, and ready to start (month and year)?

In the box below, please identify all relevant right of way milestones, including the current status and estimated completion date of each (month and year). For example, these might include: True cost estimate of right of way; Relocation plan; Right of way certification; Right of way acquisition; FTA concurrence; Certification audit by Washington State Department of Transportation Right of Way Analyst; and, Relocation certification, if applicable. Sponsors should assume a minimum of one year to complete the ROW process, longer if there are significant or complex property purchases.
NEPA approval - October 2025
Obligate funding for ROW phase - December 2025
Legal Exhibits and Descriptions - January 2026
Appraisals and Cost Estimate - February 2026
ROW Plan and Project Funding Estimate submitted - March 2026
ROW Plan and PFE approval - May 2026
ROW negotiations complete - May 2027
WSDOT ROW Certification - May 2027

Construction

Are funds being requested for construction?
No

Do you have an engineer's estimate?

Please attach the engineer's estimate.

Identify the environmental permits needed for the project and when they are scheduled to be acquired.

Are Plans, Specifications & Estimates (PS&E) approved?

Please provide the date of approval, or the date when PS&E is scheduled to be submitted for approval (month and year)?

,

When is the project scheduled to go to ad (month and year)?

,

Other Considerations

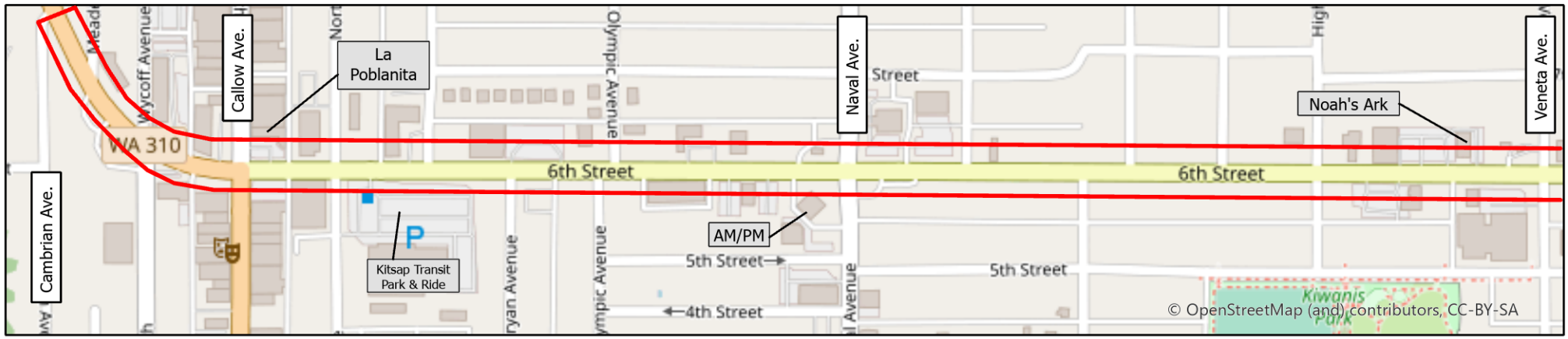
Describe any additional aspects of your project not requested in the evaluation criteria that could be relevant to the final project recommendation and decision-making process.
An East/West bicycle corridor through Bremerton is identified in Kitsap County's Mosquito Fleet Trail Plan as needed to complete a segment of the trail. The plan identifies 4th and 5th streets as potential routes for the trail connection. However, to be consistent with the Non-Motorized Transportation Plan, the bicycle route should be constructed on 6th Street. A copy of this plan is attached.

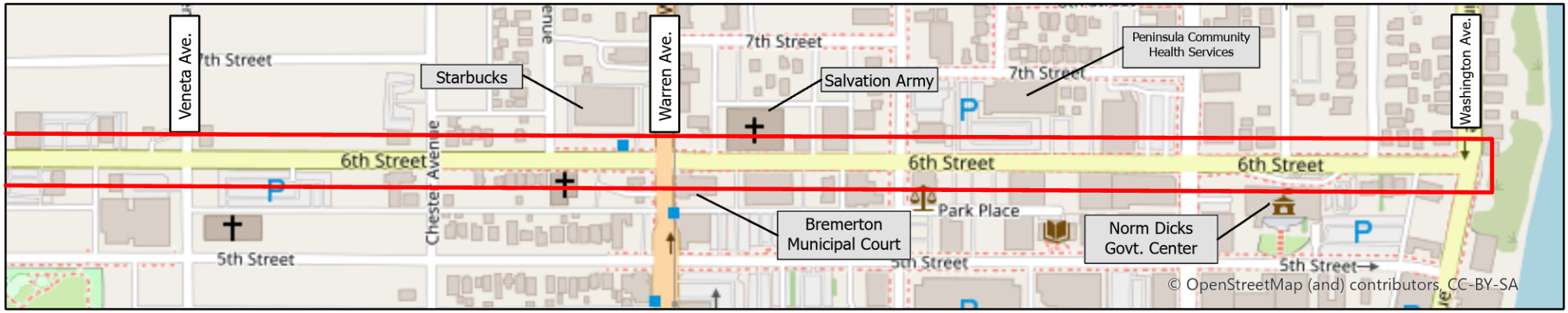
Describe the public review process for the project and actions taken to involve stakeholders in the project's development.
Public outreach was performed for each of the comprehensive plans listed in this application. Comments were solicited via public notice and during public meetings. Currently, outreach is being performed for Bremerton's Joint Compatibility Transportation Plan (JCTP), which identifies the 6th Street Road Diet as a priority project. The JCTP is intended to create a plan to address transportation issues in Bremerton and ensure Bremerton's growth will not impede Naval Base Kitsap – Bremerton (NBK-BR) missions. A total of seven Community Sounding Board and three online public meeting have been held to date. Public comments received from this outreach are attached to this application.

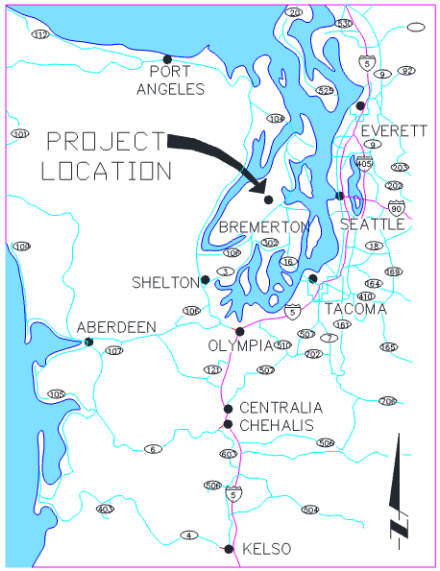
Please upload any relevant documents here, if they have not been uploaded previously in this application.
f-132-480-18674119_gzZCVaCW_200220_Final_Bremerton_Strategic_Safety_Plan.pdf, f-132-480-18674119_zi7gmVIH_6th_St_Rechannelization_comment_Anderson.pdf, f-132-480-18674119_1gozcJky_6th_St_Rechannelization_comment_Parks.pdf, f-132-480-18674119_R3046pX9_6th_St_Rechannelization_comment_Price.pdf, f-132-480-18674119_TE7vTw7W_Complete_Streets_Ordnance_5354.pdf, f-132-480-18674119_NBsTsYeT_Transit_current-system-map.pdf, f-132-480-18674119_NiqLKmpa_mosquito_fleet_plan.pdf, f-132-480-18674119_GyEsOexA_6th_Street_TAP_CE_2023_07_19.pdf, f-132-480-18674119_acKwSinO_2020-07-23_6th_St-11th_St_Corridor_Study.pdf

End of the Application

NOTE: Sponsors may update and resubmit information included in the application until submission deadline. If you need assistance editing an application that has already been submitted, please contact Nick Johnson at njohnson@psrc.org to have it returned to you.







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Drawing Scale
Horiz. 1:7,500

Drawing Name / #

City of Bremerton
Department of Public Works & Utilities
Engineering Division

6th St. Rechannelization and Signage Project
Cambrian Ave. to Washington Ave.

Drawn By BHM Date 5/25/22 | Design By BHM | Checked By VG | Sheet 1 of 1

MATCHLINE - STA: 182+50 SEE BELOW LEFT

Between Cambrian & Wycoff:
Re-channelize Kitsap Way/6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

Kitsap Way/6th ST & Wycoff Intersection:
Re-channelize Kitsap Way/6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.
Modify Existing Bike Boxes.
Modify Traffic Signal bicycle/vehicle detection system, signal head arrangement, and signal timing/coordination improvements.
Perform Operations/Safety evaluation to confirm lane configuration / bicycle lane alignment.

6th St & Callow Intersection:
Re-channelize 6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.
Install Bike Boxes where appropriate.
Modify Traffic Signal bicycle/vehicle detection system, Signal Head arrangement, and signal timing/coordination improvements.
Perform Operations/Safety evaluation to confirm lane configuration / bicycle lane alignment.

Beginning of Project:
Re-channelize Kitsap Way to connect/extend bike lanes.
Install Buffered Bicycle lane where appropriate.
Bicycle Lane/Route Signage.

N. CAMBRIAN AVE

N. WYCOFF AVE

6th STREET

N. CALLOW AVE

181+00
182+00
183+00
184+00
185+00
186+00
187+00
188+00
189+00

Between Wycoff & Callow:
Re-channelize Kitsap Way/6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

Between Callow & Montgomery:
Re-channelize 6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

SPEED FEED BACK SIGN LOCATIONS TO BE DETERMINED IN DESIGN

MATCHLINE - STA: 182+50 SEE ABOVE RIGHT

MATCHLINE - STA: 189+00 SEE SHEET 2

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0 20' 40'
1" = 20'

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REVISIONS			
NO	DESCRIPTION	DATE	BY

0 1" 2"
TWO INCHES AT FULL SCALE
IF NOT SCALE ACCORDINGLY

SCALE
HORIZ. *AS NOTED* VERT. *AS NOTED*

FIELD BOOK

DRAWING NO.

CITY OF BREMERTON
PUBLIC WORKS
TRAFFIC ENGINEERING

DRAWN BY: *ERIC RIVERA*
DATE: May 23, 2022
DESIGN BY: MARIA *TRIBELHORN*
CHECKED BY: *PABLO PARA*

6TH ST RE-CHANNELIZATION AND SIGNAGE PROJECT
(INFRASTRUCTURE PROJECT)
PEDESTRIAN & BICYCLIST PROGRAM
CITY OF BREMERTON, KITSAP COUNTY, WA

P.N.

DWG NO.
CH-01
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1
OF
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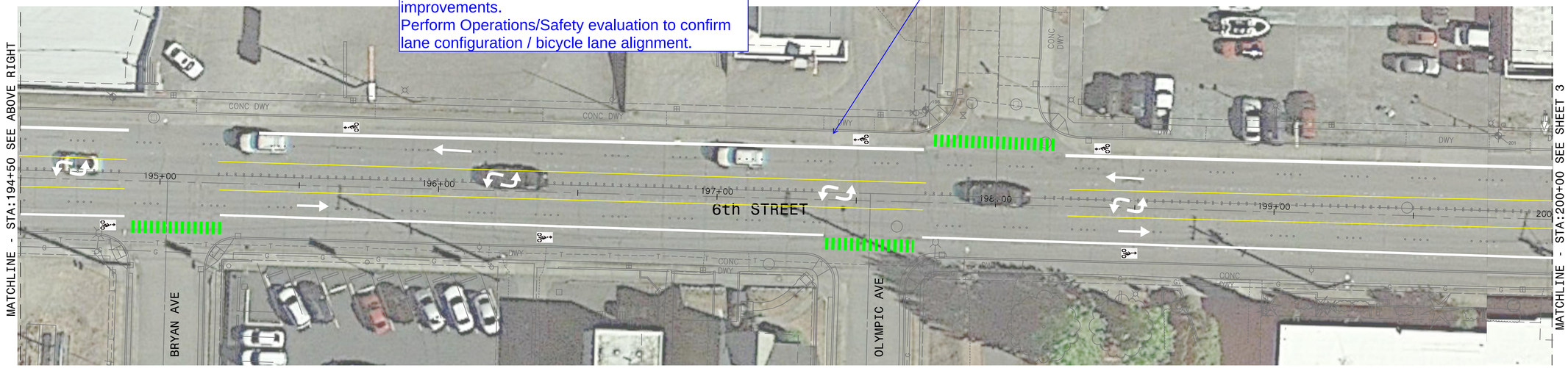
6th St & Montgomery Intersection:
Re-channelize 6th to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.
Install Bike Boxes where appropriate.
Modify Traffic Signal bicycle/vehicle detection system, Signal Head arrangement, illuminated street name signs, and signal timing/coordination improvements.
Perform Operations/Safety evaluation to confirm lane configuration / bicycle lane alignment.

Between Montgomery & Naval:
Re-channelize 6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.



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0 20' 40'
1" = 20'

REVISIONS					
NO	DESCRIPTION	DATE	BY		

0 1" 2"
TWO INCHES AT FULL SCALE
IF NOT SCALE ACCORDINGLY

SCALE
HORIZ. AS NOTED VERT. AS NOTED

FIELD BOOK

DRAWING NO.

CITY OF BREMERTON
PUBLIC WORKS
TRAFFIC ENGINEERING

DRAWN BY: ERIC RIVERA
DESIGN BY: MARIA TRIBELHORN
CHECKED BY: PABLO PARA
DATE: May 16, 2022

6TH ST RE-CHANNELIZATION AND SIGNAGE PROJECT
(INFRASTRUCTURE PROJECT)
PEDESTRIAN & BICYCLIST PROGRAM
CITY OF BREMERTON, KITSAP COUNTY, WA

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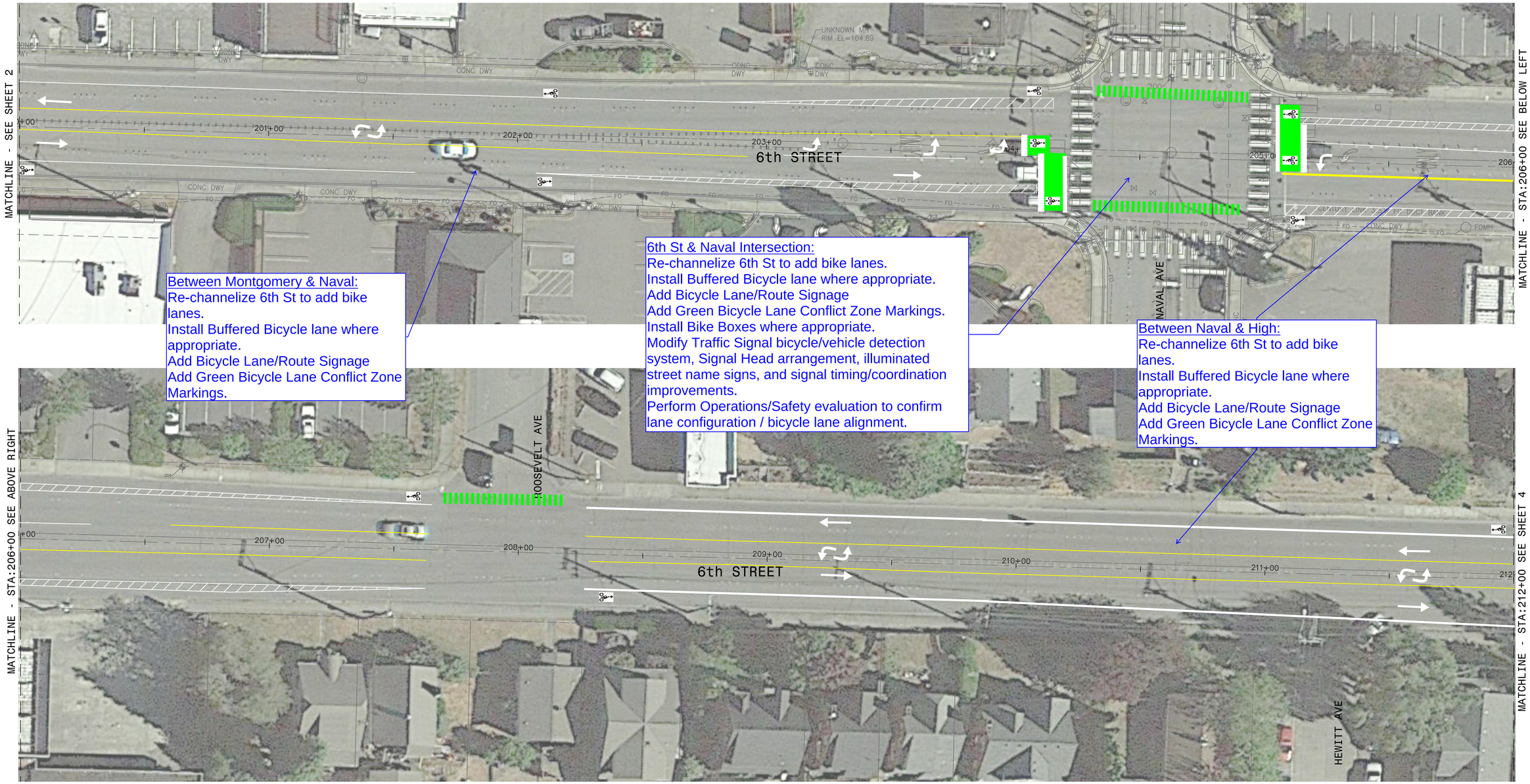

Between Montgomery & Naval:
Re-channelize 6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

6th St & Naval Intersection:
Re-channelize 6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.
Install Bike Boxes where appropriate.
Modify Traffic Signal bicycle/vehicle detection system, Signal Head arrangement, illuminated street name signs, and signal timing/coordination improvements.
Perform Operations/Safety evaluation to confirm lane configuration / bicycle lane alignment.

Between Naval & High:
Re-channelize 6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

N

0 20' 40'
1" = 20'

REVISIONS			
NO	DESCRIPTION	DATE	BY

0 1" 2"
TWO INCHES AT FULL SCALE
IF NOT SCALE ACCORDINGLY

SCALE
HORIZ. AS NOTED VERT. AS NOTED

FIELD BOOK

DRAWING NO.

CITY OF BREMERTON
PUBLIC WORKS
TRAFFIC ENGINEERING

DRAWN BY: ERIC RIVERA
DATE: May 16, 2022
DESIGN BY: MARIA TRIBELHORN
CHECKED BY: PABLO PARA

6TH ST RE-CHANNELIZATION AND SIGNAGE PROJECT
(INFRASTRUCTURE PROJECT)
PEDESTRIAN & BICYCLIST PROGRAM
CITY OF BREMERTON, KITSAP COUNTY, WA

PN:

DWG NO.
CH-03
SHEET
3
OF
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Between Naval & High:
Re-channelize 6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

6th St & High Intersection:
Re-channelize 6th St to add bike lanes.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.
Install Bike Boxes where appropriate.
Modify Traffic Signal bicycle/vehicle detection system, communications/interconnect systems, and signal timing/coordination improvements.
Perform Operations/Safety evaluation to confirm lane configuration / bicycle lane alignment.

Between High & Veneta:
Re-channelize 6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

N
0 20' 40'
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FIELD BOOK
DRAWING NO.

CITY OF BREMERTON
PUBLIC WORKS
TRAFFIC ENGINEERING

DRAWN BY: ERIC RIVERA
DESIGN BY: MARIA TRIBELHORN
CHECKED BY: PABLO PARA
DATE: May 16, 2022

6TH ST RE-CHANNELIZATION AND SIGNAGE PROJECT
(INFRASTRUCTURE PROJECT)
PEDESTRIAN & BICYCLIST PROGRAM
CITY OF BREMERTON, KITSAP COUNTY, WA

PN:

DWG NO. CH-04
SHEET 4 OF 8

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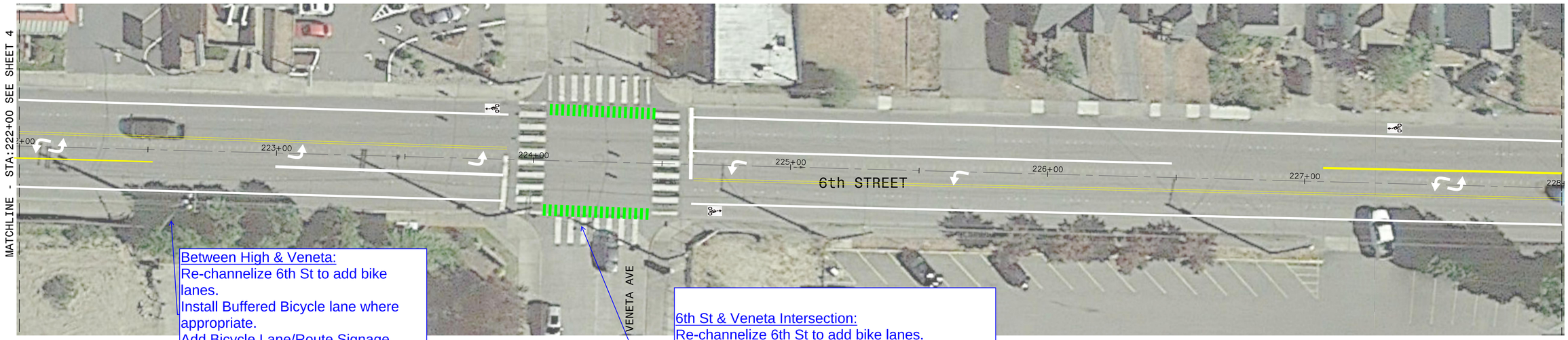
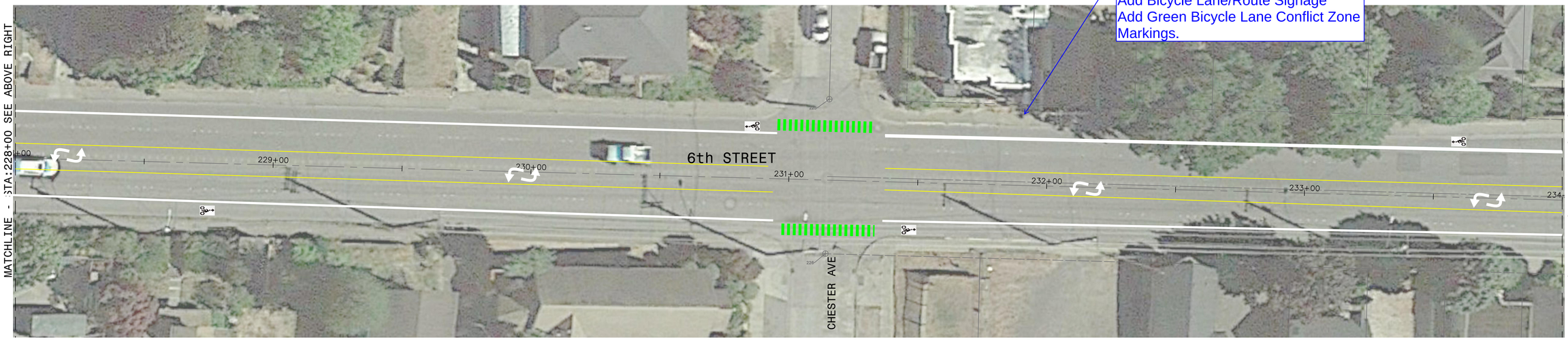


Between High & Veneta:
Re-channelize 6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

6th St & Veneta Intersection:
Re-channelize 6th St to add bike lanes.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.
Modify Traffic signal head arrangements and signal timing/coordination improvements.
Perform Operations/Safety evaluation to confirm lane configuration / bicycle lane alignment.

Between Veneta & Warren:
Re-channelize 6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.



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FIELD BOOK

DRAWING NO.

CITY OF BREMERTON
PUBLIC WORKS
TRAFFIC ENGINEERING

DRAWN BY: ERIC RIVERA
DATE: May 16, 2022
DESIGN BY: MARIA TRIBELHORN
CHECKED BY: PABLO PARA

6TH ST RE-CHANNELIZATION AND SIGNAGE PROJECT
(INFRASTRUCTURE PROJECT)
PEDESTRIAN & BICYCLIST PROGRAM
CITY OF BREMERTON, KITSAP COUNTY, WA

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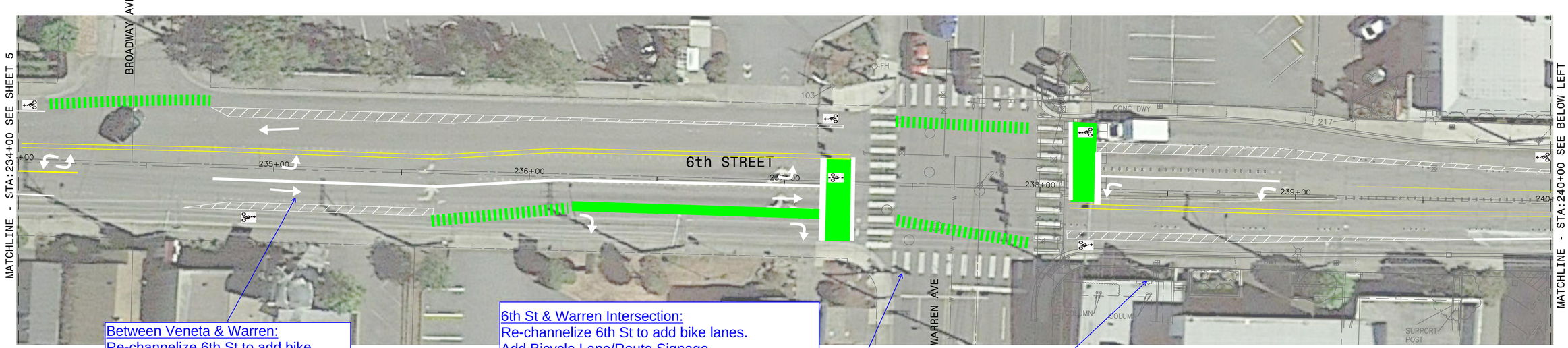
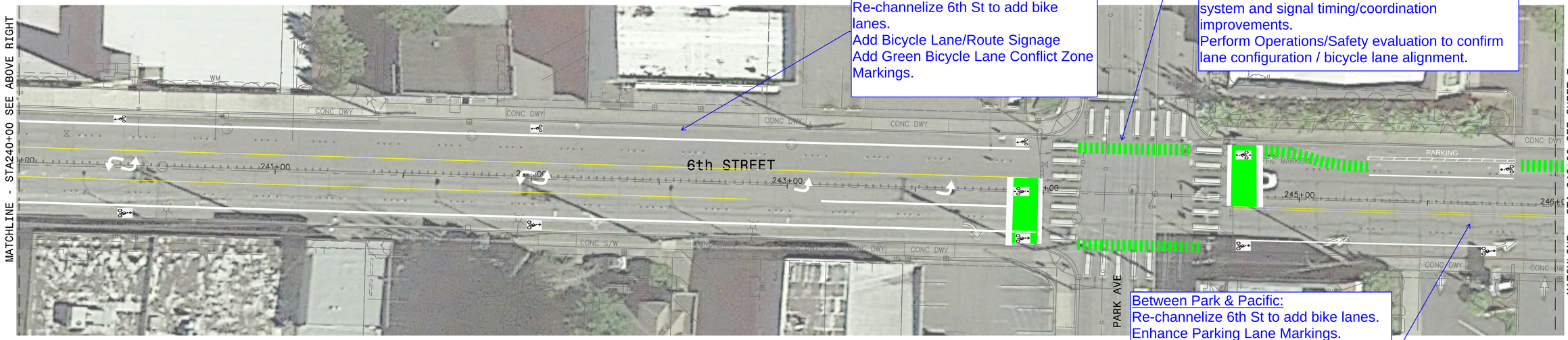


Between Veneta & Warren:
Re-channelize 6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

6th St & Warren Intersection:
Re-channelize 6th St to add bike lanes.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.
Install Bike Boxes where appropriate.
Modify Traffic Signal bicycle/vehicle detection system and signal timing/coordination improvements.
Perform Operations/Safety evaluation to confirm lane configuration / bicycle lane alignment.

Between Warren & Park:
Re-channelize 6th St to add bike lanes.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

6th St & Park Intersection:
Re-channelize 6th St to add bike lanes.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.
Install Bike Boxes where appropriate.
Modify Traffic Signal bicycle/vehicle detection system and signal timing/coordination improvements.
Perform Operations/Safety evaluation to confirm lane configuration / bicycle lane alignment.



Between Park & Pacific:
Re-channelize 6th St to add bike lanes.
Enhance Parking Lane Markings.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

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FIELD BOOK
DRAWING NO.

CITY OF BREMERTON
PUBLIC WORKS
TRAFFIC ENGINEERING

DRAWN BY: ERIC RIVERA
DESIGN BY: MARIA TRIBELHORN
CHECKED BY: PABLO PARA
DATE: May 16, 2022

6TH ST RE-CHANNELIZATION AND SIGNAGE PROJECT
(INFRASTRUCTURE PROJECT)
PEDESTRIAN & BICYCLIST PROGRAM
CITY OF BREMERTON, KITSAP COUNTY, WA

PN:

DWG NO. CH-06
SHEET 6 OF 8

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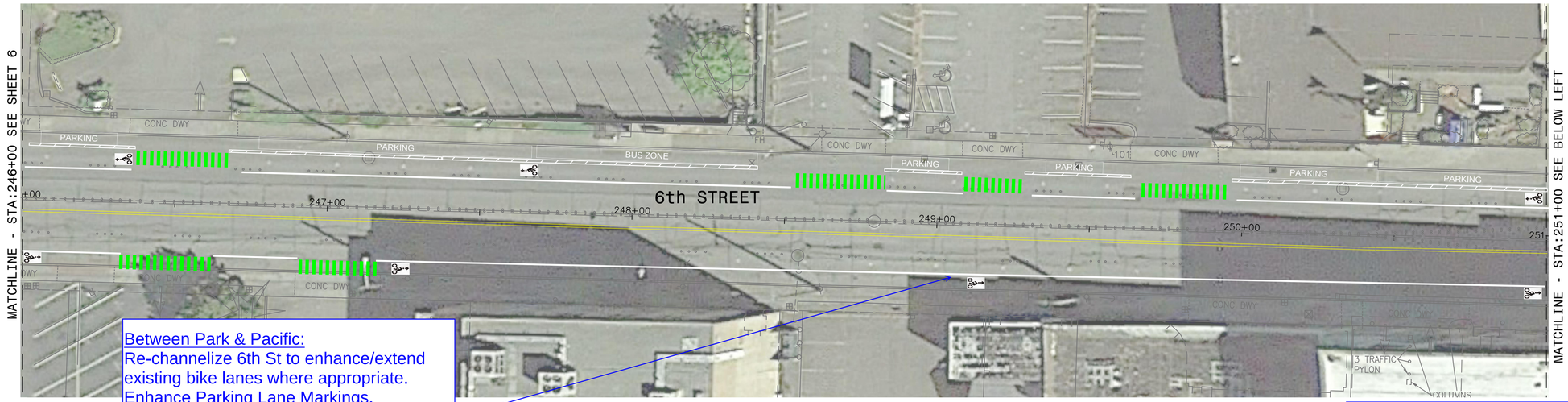

Between Park & Pacific:
Re-channelize 6th St to enhance/extend existing bike lanes where appropriate.
Enhance Parking Lane Markings.
Install Buffered Bicycle lane where appropriate.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

6th St & Park Intersection:
Enhance existing pavement markings.
Green conflict zone markings.

Between Pacific & Washington:
Re-channelize 6th St to enhance/extend existing bike lanes where appropriate.
Enhance Parking Lane Markings.
Add Bicycle Lane/Route Signage
Add Green Bicycle Lane Conflict Zone Markings.

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FIELD BOOK

DRAWING NO.

CITY OF BREMERTON
PUBLIC WORKS
TRAFFIC ENGINEERING

DRAWN BY: ERIC RIVERA
DESIGN BY: MARIA TRIBELHORN
CHECKED BY: PABLO PARA
DATE: May 16, 2022

6TH ST RE-CHANNELIZATION AND SIGNAGE PROJECT
(INFRASTRUCTURE PROJECT)
PEDESTRIAN & BICYCLIST PROGRAM
CITY OF BREMERTON, KITSAP COUNTY, WA

PN:

DWG NO. CH-07
SHEET 7 OF 8

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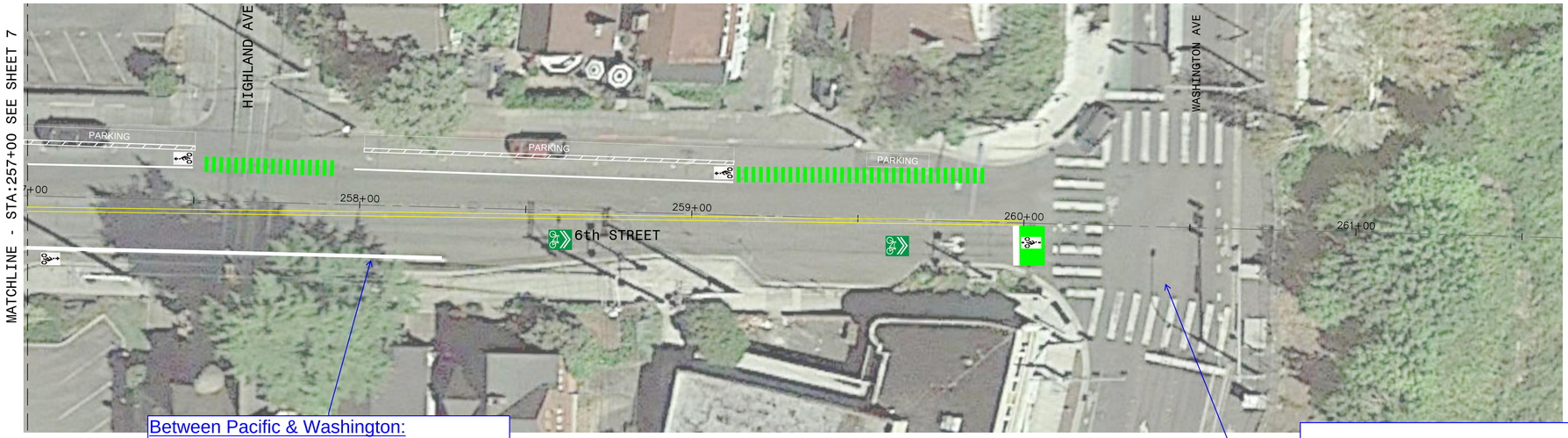

Between Pacific & Washington:
Re-channelize 6th St to add bike lanes.
Install Buffered Bicycle lane where appropriate.
Enhance/extend existing bike lanes where appropriate.
Enhance Parking Lane Markings.
Add Bicycle Lane/Route Signage

6th St & Washington Intersection:
Add Bicycle Lane/Route Signage
Install Bike Boxes where appropriate.
Modify Traffic Signal bicycle/vehicle detection system and signal timing/coordination improvements.
Perform Operations/Safety evaluation to confirm lane configuration / bicycle lane alignment.

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FIELD BOOK

DRAWING NO.

CITY OF BREMERTON
PUBLIC WORKS
TRAFFIC ENGINEERING

DRAWN BY: ERIC RIVERA
DATE: May 16, 2022
DESIGN BY: MARIA TRIBELHORN
CHECKED BY: PABLO PARA

6TH ST RE-CHANNELIZATION AND SIGNAGE PROJECT
(INFRASTRUCTURE PROJECT)
PEDESTRIAN & BICYCLIST PROGRAM
CITY OF BREMERTON, KITSAP COUNTY, WA

PN:

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David Dinkuhn

From: Thomas Knuckey
Sent: Tuesday, June 20, 2023 8:43 AM
To: parks.jake@gmail.com
Cc: Shane Weber; Ned Lever; Jennifer Hayes; Greg Wheeler; City Council; Gunnar Fridriksson; Public Works & Utilities Customer Response
Subject: RE: 6th Street safe for all users

Good morning Jake – your e-mail was forwarded to me by the Mayor to provide an update our 6th Street project.

For background, the re-channelization project generally consists of revising 6th Street between 11th Street and Washington Avenue from 4-lanes to 3-lanes, with one lane each direction along with a center turn lane, and then using the roadway gained to construct bike lanes in each direction. The project has been identified in our non-motorized transportation plan and is one of the projects identified in the "Draft Preferred Alternative" in the Joint Compatibility Transportation Plan (JCTP) that we're currently working with the Navy to complete. Since the 6th Street re-channelization will significantly change how the street functions, we intend to request City Council approval to implement it when we bring the JCTP to Council this summer for approval. A note that completing the JCTP will help make the City competitive for a new source of grant funding to implement the various projects outlined in the plan.

There is a common misconception regarding the level of effort required to re-channelize 6th Street, with most people believing the project would be low-cost and limited to repainting markings on the roadway. This is not true since the traffic signals and lane detection must be revised and retimed, bike signals and bike detection added, and new electrical services installed at each intersection to make the new system functional. Given that 6th Street is one of three major east-west corridors through the City conveying approximately 12,000 vehicles per day, we may also require revisions to the roadway if we find locations where the existing pavement section is insufficient for the final configuration, and may also consider access control revisions to the side streets. It's imperative that the re-channelization be properly designed and constructed to ensure a well-functioning corridor that is accepted by the community, and none of the evaluation or design has been completed yet. We currently estimate the cost to design and construct the re-channelization at $2.5M, and the funding has not yet been secured.

You're likely aware of the pavement overlay projects the City has completed on 6th Street the past several years. These projects have been completed in phases given the limited funds that are available through that grant source, with the final phase (Naval to Warren) scheduled for construction in 2024. A further note that the grant funding that is being used for this work is for "pavement preservation" only, which generally includes the overlay and related work. Since we expected the City Council would support the re-channelization of 6th Street, last year we submitted a grant application to design and construct the re-channelization, with the hope to deliver the work with our pavement preservation project next year. Unfortunately, our application did not score well in the competition, and so we did not receive the grant and as a result the work cannot be delivered with the pavement preservation project next year.

I hope this helps with understanding the status of the 6th Street re-channelization project – to summarize, the project has been identified as a priority for the City, we attempted to secure funding to deliver the work with the pavement preservation project next year but were unsuccessful, and we will continue to look for grant opportunities in the future to implement it. Please feel free to reach out if you have any further questions or concerns.

Take care and have a great day!

Tom Knuckey, P.E.
Director of Public Works & Utilities
City of Bremerton

Desk (360) 473-2376/Cell (360) 710-0039
thomas.knuckey@ci.bremerton.wa.us

From: Jake Parks <parks.jake@gmail.com>
Sent: Monday, June 19, 2023 1:48 PM
To: City Council <City.Council@ci.bremerton.wa.us>; Greg Wheeler <Greg.Wheeler@ci.bremerton.wa.us>
Subject: 6th Street safe for all users

Bremerton City Council and Mayor Wheeler,
I'm writing in support of making 6th Street safe for All users, especially cyclists and pedestrians. Please prioritize a safe 6th Street. Honestly, I thought this was already in the works, and I have been raving to my friends and neighbors about the changes to come, but I guess I was mistaken.
I frequently bike commute on 6th St from my house to the ferry terminal and it is currently one of the most dangerous parts of my ride. I used to bike on the sidewalk to escape the cars that consistently drive faster than the posted 25mph speed limit, but then I would frequently need to yield to pedestrians to ensure their safety on the narrow sidewalks. I am now in the habit of riding in the road and am able to ride about 20mph, but have had frequent close calls with cars behind me going way too fast, merging late to get around me and nearly hitting me and other cars.
I would love to ride my bike from my Charleston Neighborhood downtown for various events, especially First Friday Artwalks, but my family refuses to bike with me on our dangerous streets. We miss the opportunity for a healthier lifestyle, more frequent downtown trips, and additional foot traffic in our downtown.
It is time for a change! Please make every effort to improve 6th Street, the safety of its users big and small need it.
Thank you,

-Jake Parks

David Dinkuhn

From: Thomas Knuckey
Sent: Wednesday, June 21, 2023 1:49 PM
To: luke.don.price@gmail.com
Cc: Greg Wheeler; Ned Lever; Shane Weber; City Council; Gunnar Fridriksson; Public Works & Utilities Customer Response
Subject: RE: 6th St road diet

Good afternoon Luke – the Mayor forwarded me your e-mail to provide some information regarding our 6th Street Re-channelization project. A note that the project is on the City's 6-year TIP.

For background, the re-channelization project generally consists of revising 6th Street between 11th Street and Washington Avenue from 4-lanes to 3-lanes, with one lane each direction along with a center turn lane, and then using the roadway gained to construct bike lanes in each direction. The project has been identified in our non-motorized transportation plan and is one of the projects identified in the "Draft Preferred Alternative" in the Joint Compatibility Transportation Plan (JCTP) that we're currently working with the Navy to complete. Since the 6th Street re-channelization will significantly change how the street functions, we intend to request City Council approval to implement it when we bring the JCTP to Council this summer for approval. A note that completing the JCTP will help make the City competitive for a new source of grant funding to implement the various projects outlined in the plan.

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Take care and have a great day!

Tom Knuckey, P.E.
Director of Public Works & Utilities

City of Bremerton
Desk (360) 473-2376/Cell (360) 710-0039
thomas.knuckey@ci.bremerton.wa.us

From: Luke Price <luke.don.price@gmail.com>
Sent: Wednesday, June 21, 2023 11:48 AM
To: City Council <City.Council@ci.bremerton.wa.us>; Greg Wheeler <Greg.Wheeler@ci.bremerton.wa.us>
Subject: 6th St road diet

Bremerton City Council and Mayor,

I write in support of making 6th Street safe for All users, especially cyclists and pedestrians. Please prioritize a safe 6th Street.

I bike and live near 6th St and it is currently dangerous, with small sidewalks and no rooms for people riding bikes, scooters and wheelchairs. Please make every effort to improve 6th Street. a 6th St road diet should be on our city's 6-year TIP. Let's prioritize Bremerton those who live and move in our city over those who treat our city as a parking lot for the shipyard (I say that as a shipyard worker).

Thank you,
Luke Price

6th Street Rechannelization Project Cost Estimate

By: D. Dinkuhn 07/19/23

COST ESTIMATE SCOPING ITEMS	Total Quantity	Units	Unit Price	Unit Price x Quantity Total
CONSTRUCTION COST ESTIMATE				
Mobilization	1	LS	$ 134,100.00	$ 134,100.00
Training	400	HR	$ 35.00	$ 14,000.00
Removing Paint Line	2500	LF	$ 0.50	$ 1,250.00
Removing Plastic Line	2500	LF	$ 0.75	$ 1,875.00
Removing Plastic Traffic Marking	50	EA	$ 110.00	$ 5,500.00
Removing Plastic Crosswalk Line	1000	SF	$ 6.50	$ 6,500.00
Removing Miscellaneous Traffic Item	1	LS	$ 10,000.00	$ 10,000.00
Temporary Striping	1	LS	$ 25,000.00	$ 25,000.00
Erosion Control and Water Pollution Prevention	1	LS	$ 11,200.00	$ 11,200.00
Curb Ramp	8	EA	$ 4,500.00	$ 36,000.00
Paint Line	4200	LF	$ 0.60	$ 2,520.00
Plastic Line	15000	LF	$ 1.10	$ 16,500.00
Plastic Wide Lane Line	15000	LF	$ 1.50	$ 22,500.00
Plastic Crosswalk Line	1000	SF	$ 8.00	$ 8,000.00
Plastic Stop Line	1400	LF	$ 10.00	$ 14,000.00
Plastic Traffic Arrow	150	EA	$ 150.00	$ 22,500.00
Plastic Traffic Letter	220	EA	$ 110.00	$ 24,200.00
Plastic Bicycle Lane Symbol	60	EA	$ 250.00	$ 15,000.00
Raised Pavement Marker Type 1	40	HUND	$ 325.00	$ 13,000.00
Raised Pavement Marker Type 2	11	HUND	$ 400.00	$ 4,400.00
Permanent Signing	1	LS	$ 45,000.00	$ 45,000.00
Project Temporary Traffic Control	1	LS	$ 150,000.00	$ 150,000.00
Painted Crosshatch Marking	5000	LF	$ 2.50	$ 12,500.00
Plastic Shared Lane Marking	2	EA	$ 325.00	$ 650.00
MMA Green Bike Lane	10000	SF	$ 10.00	$ 100,000.00
Kitsap Way (SR 310) & Wycoff Ave N, Traffic Signal System Complete	1	LS	$ 33,500.00	$ 33,500.00
6th St & Callow Ave (SR 310), Traffic Signal System Complete	1	LS	$ 133,500.00	$ 133,500.00
6th St & Montogmery, Traffic Signal System Complete	1	LS	$ 34,500.00	$ 34,500.00
6th St & Naval Ave, Traffic Signal System Complete	1	LS	$ 258,500.00	$ 258,500.00
6th St & High St, Traffic Signal System Complete	1	LS	$ 86,700.00	$ 86,700.00
6th St & Veneta St, Traffic Signal System Complete	1	LS	$ 10,500.00	$ 10,500.00
6th St & Warren Ave, Traffic Signal System Complete	1	LS	$ 136,000.00	$ 136,000.00
6th St & Park Ave, Traffic Signal System Complete	1	LS	$ 29,500.00	$ 29,500.00
6th St & Washington Ave, Traffic Signal System Complete	1	LS	$ 56,500.00	$ 56,500.00
Speed feedback signs	2	EA	$ 6,000.00	$ 12,000.00
Miscellaneous Costs	1	LS	$ 100,000.00	$ 100,000.00

SUBTOTAL		$ 1,587,395.00
Cost Estimate Subtotal		$ 1,587,395.00
Cost Estimate Contingency	30%	$ 476,219.00
Cost Estimate Grand Total (Construction)		$ 2,063,614.00
PE Design & Environmental City Admin (Between 10% and 30%)	7%	$ 144,453.00
PE Design & Environmental Consultant (Between 10% and 30%)	27%	$ 557,176.00
PE Subtotal		$ 701,629.00
ROW (Consultant and Property Costs)		$ 150,000.00
Construction Management (City)	3%	$ 51,590.35
Construction Management (Consultant)	25%	$ 515,903.50
Project Cost Estimate Total (2023)		$ 3,482,736.85
Total Construction (2023)		$ 2,631,107.85
Total Construction Escalated to 2028 @5%/yr		$ 3,367,818.05
Grant Request (86.5%)		$ 2,913,162.61
City Match (13.5%)		$ 454,655.44

David Dinkuhn

From: Thomas Knuckey
Sent: Wednesday, June 21, 2023 9:29 AM
To: anderson.b@wavecable.com
Cc: Greg Wheeler; Shane Weber; Ned Lever; City Council; Gunnar Fridriksson; Public Works & Utilities Customer Response
Subject: RE: 6th street bicycle lanes

Good morning Beth – your e-mail was forwarded to me by the Mayor for response. Please know that we share your desire to improve non-motorized connectivity in the City, and do see improving 6th Street to accommodate bicycles as a priority that we are actively working to move forward.

For background, the re-channelization project generally consists of revising 6th Street between 11th Street and Washington Avenue from 4-lanes to 3-lanes, with one lane each direction along with a center turn lane, and then using the roadway gained to construct bike lanes in each direction. The project has been identified in our non-motorized transportation plan and is one of the projects identified in the "Draft Preferred Alternative" in the Joint Compatibility Transportation Plan (JCTP) that we're currently working with the Navy to complete. Since the 6th Street re-channelization will significantly change how the street functions, we intend to request City Council approval to implement it when we bring the JCTP to Council this summer for approval. A note that completing the JCTP will help make the City competitive for a new source of grant funding to implement the various projects outlined in the plan.

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You're likely aware of the pavement overlay projects the City has completed on 6th Street the past several years. These projects have been completed in phases given the limited funds that are available through that grant source, with the final phase (Naval to Warren) scheduled for construction in 2024. A further note that the grant funding that is being used for this work is for "pavement preservation" only, which generally includes the overlay and related work. Since we expected the City Council would support the re-channelization of 6th Street, last year we submitted a grant application to design and construct the re-channelization, with the hope to deliver the work with our pavement preservation project next year. Unfortunately, our application did not score well in the competition, and so we did not receive the grant and as a result the work cannot be delivered with the pavement preservation project next year.

I hope this helps with understanding the status of the 6th Street re-channelization project – to summarize, the project has been identified as a priority for the City, we attempted to secure funding to deliver the work with the pavement preservation project next year but were unsuccessful, and we will continue to look for grant opportunities in the future to implement it. Please feel free to reach out if you have any further questions or concerns.

Take care and have a great day!

Tom Knuckey, P.E.
Director of Public Works & Utilities
City of Bremerton
Desk (360) 473-2376/Cell (360) 710-0039
thomas.knuckey@ci.bremerton.wa.us

From: B Anderson <anderson.b@wavecable.com>
Sent: Tuesday, June 20, 2023 1:17 PM
To: Greg Wheeler <Greg.Wheeler@ci.bremerton.wa.us>; City Council <City.Council@ci.bremerton.wa.us>
Subject: 6th street bicycle lanes

Dear Mayor Wheeler and esteemed members of the Bremerton City Council:

As cycling becomes a more important mode of transportation, it has become increasingly evident that the absence of dedicated bicycle lanes on 6th Street poses a significant risk to both cyclists and pedestrians. 6th Street experiences substantial vehicular traffic; but there are other streets that cars can use and few safe routes for cyclists.

Many families live on or around 6th street. My son and his wife live right on 6th street and would benefit from improved safety. Before retiring, my husband tried to ride his bike to PSNS but unsafe conditions forced him to give up. If there were better and safer routes, more cyclists could help alleviate the parking shortage for PSNS and downtown Bremerton. By creating safer conditions for cycling and walking, we can inspire more residents to engage in physical activity which would be good for our community.

My father can't drive and relies on a mobility scooter to get to the bank and grocery store. Although he does not live in Bremerton, his needs have helped me understand how important safer roads are to people who can't drive. Even on the sidewalk, he is often frightened by traffic as he is also on a busy street with no separation from traffic (he lives off of Lund in Port Orchard).

I kindly request you consider prioritizing the addition of dedicated bicycle lanes to 6th Street. By doing so, you would demonstrate your commitment to prioritizing the safety, accessibility, and well-being of all Bremerton residents. I understand that infrastructure improvements require careful planning and consideration, but I believe improving conditions on 6th street for pedestrians and cyclists is needed to prevent future injuries and deaths.

Thank you for your time and attention to this matter.

Warm regards,

Beth Anderson
anderson.b@wavecable.com
360-620-0893

ORDINANCE NO. 5354

AN ORDINANCE of the City Council of the City of Bremerton, Washington, repealing Section 11.12.085 BMC and creating a new chapter, Chapter 11.10 relating to the Complete Streets Program.

WHEREAS, on May 16, 2012, the City of Bremerton adopted Ordinance No. 5184 establishing the City's Complete Streets policy; and

WHEREAS, in order to ensure that the City's Comprehensive Plan vision is implemented, further development of the Complete Streets Ordinance is necessary; and

WHEREAS, the goal of the City is to update the Complete Streets Ordinance to incorporate Smart Growth America's Elements of a Complete Streets Policy guidelines; and

WHEREAS, Bremerton's Complete Streets guiding principle is to design, operate and maintain Bremerton's streets to promote safe and convenient access and travel for all users including pedestrians, bicyclists, transit riders and people of all ages and abilities as well as freight and motor vehicle drivers, and

WHEREAS, Bremerton's Department of Public Works and Utilities will develop and implement Complete Streets Policies to design, operate and maintain the transportation network to improve travel conditions for bicyclists, pedestrians, transit and freight in a manner consistent with, and supportive of, the surrounding community, and

WHEREAS, amending the current Complete Streets Policy into the City of Bremerton Municipal Code also opens up additional funding opportunities and makes the City eligible for additional grant monies; and

WHEREAS, the City Council desires to repeal the provisions of Section 11.12.085 of the Bremerton Municipal Code relating to Complete Streets and create a new chapter, Chapter 11.10, relating to the Complete Streets Program; NOW THEREFORE,

THE CITY COUNCIL OF THE CITY OF BREMERTON, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Section 11.12.085 of the Bremerton Municipal Code entitled "Complete Streets" is hereby repealed in its entirety.

~~**11.12.085 COMPLETE STREETS.**~~

~~(a) The Public Works and Utilities Department will plan for, design and construct all new City transportation improvement projects to provide appropriate accommodation for pedestrians, bicyclists, transit riders, and persons of all abilities, while promoting safe operation for all users, as provided for below.~~

~~(b) The Public Works and Utilities Department will incorporate complete streets principles into: the Department's transportation strategic plan; Bremerton transit plan; pedestrian and bicycle master plans; intelligent transportation systems strategic plan; and other Public Works and Utilities Department plans, manuals, rules, regulations and programs as appropriate.~~

~~(c) Because freight is important to the basic economy of the City and has unique right-of-way needs to support that role, freight will be the major priority on streets classified as major truck streets. Complete street improvements that are consistent with freight mobility but also support other modes may be considered on these streets.~~

~~(d) Except in unusual or extraordinary circumstances, complete streets principles will not apply:~~

~~(1) To street repairs made due to utility activities or pothole repairs;~~

~~(2) To ordinary maintenance activities designed to keep assets in serviceable condition (e.g., mowing, cleaning, sweeping, spot repair and surface treatments such as chip seal and overlay, or interim measures on detour or haul routes);~~

~~(3) Where the Director of the Public Works and Utilities Department issues a documented determination concluding that application of complete streets principles is not necessary:~~

~~(i) Where nonmotorized use is not practical, is contrary to public safety, or is prohibited;~~

~~(ii) The cost of accommodation is excessively disproportionate to the need or probable use; or~~

~~(iii) Where other available means or factors indicate an absence of current or future need.~~

~~(e) Complete streets may be achieved through single projects or incrementally through a series of smaller improvements or maintenance activities over time. It is the Mayor's and Council's intent that all sources of transportation funding be drawn upon to implement complete streets. The City believes that maximum financial flexibility is important to implement complete streets principles.~~

SECTION 2. A new chapter, Chapter 11.10, entitled "Complete Streets Program" is hereby created and added to Title 11 of the Bremerton Municipal Code as follows:

CHAPTER 11.10
COMPLETE STREETS PROGRAM

11.10.010 VISION.

(a) The City of Bremerton's vision for Complete Streets is of a community in which all residents and visitors, regardless of their age, ability, or financial resources, can have access to an affordable, safe, and accessible transportation system that meets or exceeds their travel needs. The City shall seek to create a well-connected, well-balanced, local and regional transportation system for all modes of travel including, but not limited to, walking, biking, driving, riding public transit, delivering goods and services, and emergency response transportation. The City recognizes that safe, comfortable, convenient travel for users of all ages and abilities encourages the use of public rights of way and can improve the environment, encourage physical activity and promote a vibrant, healthy, equitable, and livable community.

11.10.020 COMPLETE STREETS – DEFINITIONS

(a) "All Users," means Transportation facility users of all ages and abilities, including, but not limited to, automobile motorists, pedestrians, bicyclists, transit vehicles and riders, freight providers, people with disabilities, emergency responders, commercial vehicles, delivery/service personnel, and adjacent land users.

(b) "Complete Streets," means streets that are designed and operated to enable safe access for all users of all ages and abilities.

(c) "High Need Area / Community of Need," means:

(1) any census tract in which the median household income is less than eighty percent (80%) of the statewide average median based on the most current census tract-level data from the U.S. Census Bureau American Community Survey, or

(2) an area that has a high number of pedestrian and/or bicycle collisions, or.

(3) areas with the highest risk factors for and cases of chronic disease such as but not limited to high blood pressure, heart disease, diabetes, cancer, stroke and obesity.

11.10.030 COMPLETE STREETS POLICY STATEMENT.

(a) The City of Bremerton will plan for, design, construct, operate and maintain a transportation system that is safe, convenient, and integrated into a network for All Users in a balanced, responsible, and equitable manner consistent with and supportive of the surrounding community.

(b) Complete Streets are intended to benefit users equitably, particularly vulnerable users and the underinvested and underserved communities. Transportation projects will provide safe, convenient, reliable, affordable, accessible, and timely transportation choices regardless of race, ethnicity, religion, income, gender identity, immigrations status, age, ability, languages spoken, or level of access to a personal vehicle.

(c) Transportation facilities that support the concept of complete streets include, but are not limited to, pavement markings and signs; street and sidewalk lighting; sidewalk and pedestrian safety improvements; Americans with Disabilities Act and Title VI compliance; on street parking; transit accommodations; bicycle accommodations including appropriate signage and markings; and appropriate streetscapes, furniture and art that appeal to and promote pedestrian use.

11.10.040 SCOPE AND APPLICABILITY.

(a) The Complete Streets Program shall apply to all phases of City transportation capital projects. Those involved in the planning and design of new transportation projects, reconstruction projects, and retrofit projects within the public right-of-way shall give consideration to All Users and modes of travel from the start of planning and design work though construction. Transportation improvements shall be viewed as opportunities to create safer, more accessible streets for All Users.

(b) Those involved in performing construction, repair, maintenance, and routine operations projects shall accommodate, as practical, the needs of all modes of transportation and All Users during performance of the work.

(c) To the extent feasible, private development projects that require frontage improvements or installation of new and/or retrofitted road construction, to design and construct to the City's Complete Streets requirements.

11.10.050 EXCEPTIONS.

(a) The following activities and projects are exempted from the Complete Streets Program as follows:

(1) Ordinary and routine maintenance activities such as mowing, snowplowing, sweeping, spot repair, joint or crack sealing, pavement patching/potholing, shoulder repair, pavement marking refreshing, and restoration of drainage systems; this exception shall not be applied beyond the scope of that activity;

(2) Emergency utility repair requiring roadway repair or reconstruction;

(b) The Public Works Director may allow an exception from the Complete Streets Program for transportation projects as follows:

(1) If application of this policy would require the accommodation of street uses prohibited by law;

(2) Requires more space than is physically available;

(3) Significantly increases project costs and equivalent alternatives exist within close proximity;

(4) Have adverse impacts on environment resources such as streams, floodplains, wetlands, or on historic structures or sites above and beyond the impacts of currently existing infrastructure;

(5) The cost of accommodation is disproportionate to the current need or probable future use;

(6) Where complete streets elements are not practical, is contrary to public safety, or is prohibited;

(7) Where other available means or factors indicate an absence of current or future need;

(c) The Public Works Director will notify the Public Works Committee of project exceptions to the Complete Streets Program set forth in subsection (b) above, prior to exception being granted to provide the committee opportunity to give advice.

11.10.060 INTERGOVERNMENTAL COOPERATION & PARTNERSHIPS.

(a) The City will cooperate and collaborate with other transportation agencies to encourage those agencies to incorporate the principles and practices of complete streets within those agencies' activities in the City, and to facilitate seamless transportation connections between jurisdictions.

(b) It is the goal of the City to foster partnerships with Washington State transportation funding agencies including the Washington State Department of Transportation (WSDOT), the Federal Highway Administration, Tribes, Kitsap County, Kitsap Transit, Bremerton School District, Olympic College, School and College Districts, Kitsap Public Health District, residents, businesses, interest groups, neighborhoods and other stakeholders to implement the Complete Streets Program.

11.10.070 BEST PRACTICE DESIGN CRITERIA.

(a) The City's design and construction engineering standards and deviations will be used to implement complete streets best practices as identified in BMC 11.12.080 or as amended hereinafter. Additional design resources to be used in developing complete streets standards shall include, but are not limited to, the latest editions of: Institute of Transportation Engineers (ITE) and National Association of City Transportation Officials (NACTO) publications.

11.10.080 COMMUNITY CONTEXT.

(a) The Complete Streets Program implementation shall take into account the City's existing planning documents including the Comprehensive Plan, Non-motorized Transportation Plan, and Subarea Plans in order to identify existing and future community context elements and land use. The surrounding land use and context shall be used to define complete streets projects. Special attention shall be paid to planned buildings, parks and trails, as well as communities' current and expected transportation needs.

(b) Complete streets should provide walkability and other non-motorized transportation routes within and between Centers, neighborhoods, and key locations.

(c) Complete streets should take into account the goal of enhancing the context and character of the surrounding built and natural environments adjacent to a project.

(d) The City shall make efforts to address unintended consequences, such as involuntary displacement due to transportation projects.

11.10.090 PERFORMANCE OBJECTIVES.

(a) The Complete Streets Program will track the performance measures for the following objectives:

(1) Health
- (i) Improve Access to Park and Recreation Facilities;
- (ii) Enhance Infrastructure Supporting Bicycling;
- (iii) Enhance Infrastructure Supporting Walking;
- (iv) Improve Access to Public Transportation;

(2) Access
- (i) Enhance access to transportation facilities for those with disabilities;

(3) Safety
- (i) Improve the safety of transportation facilities for bikers and pedestrians;

(b) The Public Works Director and/or designee shall report to the Public Works Committee on a biennial basis on the performance measures listed above and the extent of which the objectives have been met.

11.10.100 IMPLEMENTATION.

(a) The Public Works & Utilities Department is responsible for implementing the Complete Streets Program with cooperation from other City departments and oversight from the Public Works Committee. The Public Works Director has the authority to create and modify policy to implement the Complete Streets Program in accordance with this Chapter.

SECTION 3. *Severability.* If any one or more sections, subsections, or sentences of this ordinance are held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portion of this ordinance and the same shall remain in full force and effect.

SECTION 4. *Effective Date.* This ordinance shall take effect and be in force ten (10) days from and after its passage, approval and publication as provided by law.

PASSED by the City Council the 7th day of November, 2018.

ERIC YOUNGER, Council President

Approved this 7th day of November, 2018.

GREG WHEELER, Mayor

ATTEST:

ANGELA WOODS, City Clerk

APPROVED AS TO FORM:

ROGER A. LUBOVICH, City Attorney

PUBLISHED the 13th day of November, 2018.
EFFECTIVE the 23rd day of November, 2018.
ORDINANCE NO. 5354.

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Kitsap Sun

PROOF OF PUBLICATION

CITY OF BREMERTON - ENGINEERING

345 6TH STREET, STE 100
BREMERTON, WA 98337

STATE OF WISCONSIN, COUNTY OF BROWN

I, being first duly sworn on oath, deposes and says: That I am now, and at all times embraced in the publication herein mentioned was the principal clerk of the printers and publishers of KITSAP SUN; that said newspaper has been approved as a legal newspaper by order of the Superior Court of the County of Kitsap, in which County it is published and is now and has been for more than six months prior to the date of the publication hereinafter referred to, published in the English language continually as a daily newspaper in Bremerton, Kitsap County, Washington, a weekly newspaper in Kitsap County, Washington and is now and during all of the said time, was printed in an office maintained in the aforesaid place of publication of said newspaper; that the following is a true text of an advertisement as it was published in regular issues (and not in supplement form) of said newspaper on the following date(s), to wit: And on

November 13, 2018

such newspaper was regularly distributed to its subscribers during all of said period.

Legal Clerk

Subscribed and sworn to before on November 13, 2018:

Notary, State of WI, County of Brown

11/9/22

My commission expires

KAZOUA YANG
NOTARY PUBLIC
STATE OF WISCONSIN

Ad#: 2161342
P.O.:
# of Affidavits: 0

ORDINANCE NO. 5354
AN ORDINANCE of the City Council of the City of Bremerton, Washington, repealing Section 11.12.085 BMC and creating a new chapter, Chapter 11.10 relating to the Complete Streets Program.

ORDINANCE NO. 5355
AN ORDINANCE of the City Council of the City of Bremerton, Washington, amending Chapters 3.48 of the Bremerton Municipal Code entitled "Business and Occupation Taxes", Chapter 3.50 entitled "Utility Taxes", and Chapter 3.86 entitled "Administrative Provisions for Taxes".

ORDINANCE NO. 5356
AN ORDINANCE of the City Council of the City of Bremerton, Washington, establishing the amount to be collected in 2019 by taxation on the assessed valuation of taxable property within the City limits of Bremerton and setting the property levy rate.

ORDINANCE NO. 5357
AN ORDINANCE of the City Council of the City of Bremerton, Washington, reestablishing and amending rates and fees for services relating to Animal Control, Bremerton Kitsap Access Television ("BKAT"), Department of Community Development, Department of Financial Services, Fire Department, Gold Mountain Golf Course, Ivy Green Cemetery, Kitsap Conference Center, Municipal Court, Parking, Parks and Recreation Department, Police Department, Public Records, Department of Public Works and Utilities, Tax & License, and Telecommunications.

ORDINANCE NO. 5358
AN ORDINANCE of the City Council of the City of Bremerton, Washington, amending and reestablishing the assessments, rates, fees and charges established in Ordinance No. 5340 regarding rates and fees relating to the Department of Public Works and Utilities for water, wastewater, stormwater and other related services.

PASSED by the City Council on the 7th day of November, 2018.

The full text of this ordinance is available from the City Clerk's Office, 345 Sixth Street, Suite 100, Bremerton, WA 98337.
Nov. 13, 2018 #2161342

The Mosquito Fleet Trail Master Plan

Prepared for Kitsap County Department of Public Works, August 2001

The Mosquito Fleet Trail Master Plan

Prepared for Kitsap County Department of Public Works

Prepared by MacLeod Reckord
Marcia Sinclair
Adolfson Associates

August 2001

Acknowledgements

This plan would not have been possible without the assistance of a great number of individuals. We wish to thank the following people for their time and input:

Kitsap County

Kitsap County Commissioners
Chris Endresen, North District
Jan Angel, South District
Charlotte Garrido, (former) South District
Tim Botkin, Central District

Kitsap County Public Works
Randy Casteel, Director
Bill Zupancic, Project Manager
Doug Bear, Public Information Programs Supervisor
Lisa Moses, Public Works Systems Coordinator
Cindy Keiser, Staff

Kitsap County Department of Community Development
Jason Rice, Planner
Jerry Harless, (former) GIS Manager
Steve Schunzel, GIS Manager
Rick Kimball, SEPA Coordinator

Kitsap County Department of Parks and Recreation
Joseph Coppo, Open Space Coordinator

Kitsap County Port Districts
Port of Bremerton
Port of Brownsville
Port of Kingston
Port of Poulsbo
Port of Silverdale
Port of Waterman

Kitsap County School Districts
Terry Heindle, North Kitsap School District
Ron Lee, North Kitsap School District
Jeannie Schultze, Central Kitsap School District
Dr. Carol Whitehead, Superintendent, Bremerton School District
Jerry Wilson, South Kitsap School District
Roy Devore, South Kitsap School District

City of Bremerton
Chris Gears, (former) Bremerton Parks and Recreation Director
Randy Witt, (former) Bremerton City Engineer

City of Port Orchard
Donna Gross, (former) City Planner
Larry Curles, Port Orchard Public Works

City of Poulsbo
Mary McCluskey, Poulsbo Parks Director
John Stephenson, City Engineer

Suquamish Tribe
Peggy Deam, Cultural Development
Scott Kroll, Planning Director

Organizations/Businesses
Bainbridge Island Bicycle
Bremerton Chamber of Commerce
Bremerton Naval Museum
Horluck Transportation Company, Inc.
Kingston Classic Cycle
Kingston Greater Community Chamber of Commerce
Kitsap County Historical Society Museum
Kitsap Key and Bike Shop
Missing Link Cycles, Inc.
Mt. Constance Mountain Shoppe
Museum of History and Industry
Northwest Bike and Lock
Olympic Bike and Skate
Port Orchard Chamber of Commerce

Poulsbo Chamber of Commerce
Poulsbo Marine Science Center
Puget Sound Maritime Historical Society
Naval Undersea Museum
Sidney Museum
Silverdale Cyclery
Suquamish Clearwater Casino and Bingo
Suquamish Museum
Washington State Horse Council
Washington State Historical Society
West Sound Cycling Club

Consultants

MacLeod Reckord
Terry Reckord, Principal
Vinita Sidhu, Project Manager
Brian Stark, Project Designer
Charlene Bujacich, Graphics Assistant

Marcia Sinclair
Marcia Sinclair, Principal

Adolfson Associates, Inc.
David Wortman, Project Manager
Tina Loucks, Planner

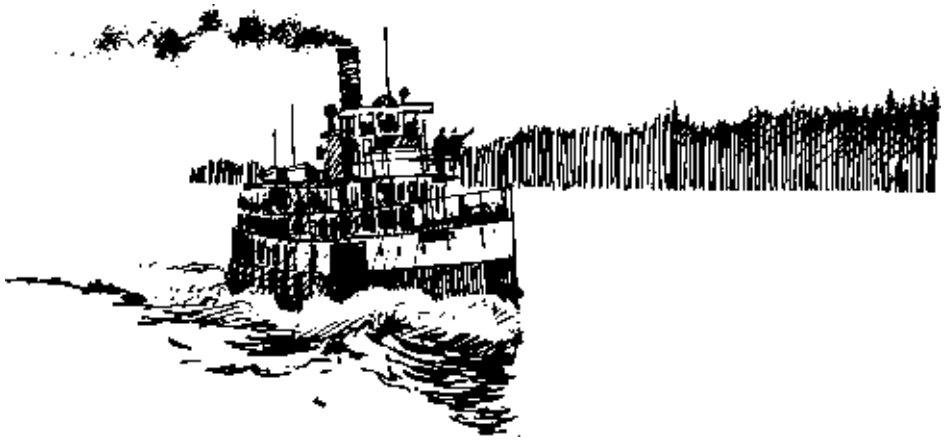
And many thanks to the numerous citizens of Kitsap County who, through e-mails, phone calls, letters and questionnaire responses, contributed their ideas and offered assistance in this planning process.

Cover: *The Kitsap*, Curtis Archives.
Courtesy of the Washington State Historical Society.

Table of Contents

Preface

At the turn of the last century, the Kitsap Peninsula was a land of verdant hills and valleys, fledgling communities and ports. Docks jutted out at regular intervals along its winding shoreline. Its settlers depended on water-based transport, small steamers that buzzed around the Puget Sound so quickly and regularly that they came to be known as the "Mosquito Fleet." One hundred years later, at the forefront of the new millenium, Kitsap County is rapidly urbanizing and more dependent on its extensive road network and the Washington State Ferry System as means of transport.



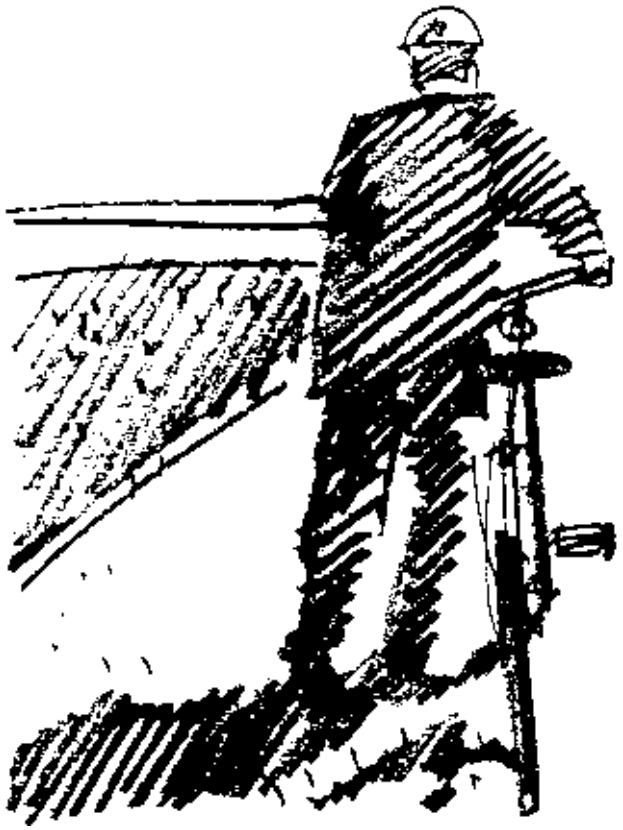
In 1995, the Kitsap County Greenways Plan was completed, proposing a comprehensive system to address transportation and recreation needs, and to protect and enhance natural and scenic resources. Borne out of this plan was the concept for a Mosquito Fleet Trail, which would follow the eastern shoreline of Kitsap County from Hansville to Olalla, connecting historic dock sites and shoreline communities along the way. There were numerous reasons for which the County chose to embark on this trail as a first step in implementation of the Greenway Plan proposals. The trail could serve both recreation and non-motorized transportation needs. It has appeal for both local communities and visitors to the County. It follows scenic corridors and connects significant cultural, historic and scenic sites. It connects all four of the County's cities and seventeen of the County's communities. In the fall of 1999, the County began the planning process for this trail corridor, which included an extensive inventory of the route, and an in-depth public process to insure the development of a master plan that would reflect the needs and concerns of the citizens of Kitsap County.

Executive Summary

Vision

Over the past decade the Puget Sound region has been subject to increased development and its associated side effects, increased traffic and loss of Open Space. Various public agencies have been working to maintain and restore the high quality of life standards associated with this region in years past. One of the greatest needs in Kitsap County is for safe and accessible non-motorized trails, which would link communities to places of work, study, and leisure. These corridors are identified in a combination of planning documents that had their basis in the Kitsap County Greenways Plan. The Greenways Plan identified both non-motorized transportation routes and recreation based off-road trails. Kitsap County Parks and Recreation has addressed the off-road trails portion of the Greenways Plan in the Kitsap County Open Space Plan, adopted in June 2000. Kitsap County Public Works has recently completed the Kitsap County Bicycle Facilities Plan, adopted in August 2001. This plan along with a Pedestrian Facilities Plan will identify a comprehensive system of non-motorized transportation routes.

The Mosquito Fleet Trail Master Plan defines in greater detail a project that is both part of the Kitsap County Open Space Plan and the Kitsap County Bicycle Facilities Plan. The basic concept is that of a trail corridor for use by bicyclists and pedestrians that skirts the eastern shoreline of Kitsap County, connecting historic Mosquito Fleet docks along the way. It is a route for usage by commuters, school children, bicycle touring groups, recreation users, and tourists. It links cultural resources and scenic sites, parks and docks, businesses and schools, transit and public facilities, and communities and cities. When complete, it will improve the quality of life for the citizens of Kitsap County.



Organization

Extensive research and planning were necessary to arrive at the recommendations made in this plan. Parts Two and Three, *Background* and *Alternative Concepts*, describe the process and how it evolved, the existing context along the trail corridor and the various concepts considered for cross section design, routing, and trail facilities.

In Part Four, *Design Recommendations*, design guidelines for the development of facilities are outlined, specific projects along the corridor are identified, and strategies for implementation are suggested. In combination, these recommendations provide the basis for development of the trail corridor.

Design Guidelines Included in the plan are design guidelines specific to the development of the Mosquito Fleet Trail. These include cross section design guidelines, prototypical viewpoint/rest area design, and guidelines for signage and an interpretive program.

Projects The corridor has been divided into ten project areas between Kingston and Southworth based on community and political boundaries. Each project area is mapped and described in detail. The maps identify proposed cross section design for both primary and secondary routes, locate historic mosquito fleet sites and potential viewpoint sites. Following the project area descriptions is a chart of development sized projects based on that prepared for the Kitsap County Bicycle Facilities Plan and arranged in priority order. Included in this chart are preliminary cost estimates, project lengths and locations, and recommended improvements. Other planning projects that overlap with all or portions of the proposed project are also indicated.

Implementation There are various ways the County could proceed to implement the recommendations of this master plan. In this section, funding strategies and partnerships are suggested that could aid the county in bringing the vision of the Mosquito Fleet Trail to reality.

In a separate volume, an Appendix has been compiled that documents essential components of this master plan. First among these is the SEPA Checklist, prepared and submitted to the Kitsap County Department of Community Development for review. This is a programmatic checklist that identifies potential concerns related to the development of the trail corridor and explains how those concerns will be addressed when the trail is developed at the project level. Next is a list of Interpretive Program Resources that identifies potential sources for interpretive material, including historical anecdotes, photographs, maps and other illustrative material. Following this is a complete set of the inventory sheets that were prepared for both the selected and alternative routes. The final component of the appendix is the results of the public survey that was conducted over the Spring and Summer of 2000.

The Mosquito Fleet Trail Master Plan will serve as the basis for the design of the trail at the project level and will be used to secure funding for implementation of the master plan recommendations.

The Process

The planning process for the Mosquito Fleet Trail began with an inventory of existing conditions along the proposed corridor. Through a combination of site visits and a review of previous documentation , a series of inventory sheets was prepared for all potential trail routes along the corridor. Information was gathered and recorded on:

- Previous planning, including recommendations made in county and municipal planning documents such as the Kitsap County Greenways Plan and the Kitsap County Comprehensive Plan.
- Road Data, including a description of the road and right-of-way, data on average daily traffic, approximate grade and traffic conditions.
- Features, including a description of the visual experience, viewpoints, cultural resources and recreation sites along the route.

This inventory, included in the Appendix of this report, served as a resource for determining routes, cross section design and the siting of facilities. Information gathered on the trail corridor is described in more detail in the following section on the existing context (p. 7).

In May 2000 an informational publication was mailed to approximately 4000 adjacent residents, property and business owners within 200 feet of the proposed trail corridor. In addition, the publication was circulated to identified interest groups, including cycling and other recreation groups, port and school districts, chambers of commerce, city and tribal planners.

At the time of the tabulation of the questionnaire results, the county had received 471 responses through mail and e-mail. Among those respondents, 373 live along the proposed route, an additional 10 own property along the route but do not reside there, 55 respondents do not live along the route and 49 own businesses along the route. Following is a summary of the questionnaire responses:

> ***Do you think the trail increases access to scenic and historic areas in the County? Are there parts of the route you would change?*** 333 people believe the trail increases access to scenic and historic areas of the county. 114 people suggested route changes, most were specific to their own neighborhoods. Seven people said the project should be dropped. There did not appear to be consistent opposition to the trail in specific neighborhoods, nor recommendations to reroute the trail away from their homes. In fact, many people welcomed the trail as providing a safer route within the vicinity of their homes. Route suggestions were generally helpful and specific.

Will you use the trail when completed? Describe features you believe would enhance the trail. Describe any concerns that should be considered as the trail is developed. 293 people said they would use the trail when completed, mostly for walking and cycling. Asked what features would enhance the trail, the most common response was "*separate it from traffic*." Other common responses were: "*rest stops*" and "*interpretive markers*", followed by "*drinking fountains*", "*restrooms*", and "*safety*." Asked what concerns should be addressed, "*safety*" was the most common answer, followed by "*separation from traffic,*" and concern for "*rights and privacy of private land owners*."

Do you have photographs or historical information about the Mosquito Fleet or other areas of interest along the trail, or know someone who does? 78 people provided leads on historical information or photographs that might be used for interpretive signs and brochures.

How did you first hear about the Mosquito Fleet Trail? What is the most effective way for you to get information about county projects? 323 people reported receiving their first information about this project through this mailing. Respondents said they prefer receiving project information by mail (258), Bremerton Sun (176), other local newspapers (130) and email (99). Out of all the respondents, 28 preferred public meetings.

Do you know of any neighborhood groups or community organizations in your area? Citizens named 85 community groups with which they are involved. Some of these may be duplicates because people may have used different names for the same organization. These community groups may be helpful means for contacting citizens at the next scale of planning.

Would you like your address to be placed on our mailing list? Nearly 350 people asked to be kept informed, providing their names and addresses for a mailing list.

Of the 212 responses in the General Comments sections, feedback ranged from praise for Kitsap County Public Works Department, to delight over the plans for this project, to expressions of concern for safety on the county's narrow roads. This concern for safety was repeated over and over throughout these responses and is by far the strongest sentiment expressed. 13 people said they did not want the trail.

The questionnaire responses and concerns were incorporated into the next phase of planning, the development of the Draft Master Plan. This plan was reviewed by Kitsap County Public Works staff. Comments received were incorporated into the preparation of this Final Master Plan.

Existing Context

The Mosquito Fleet Trail Master Plan envisions linking together the cities and communities of Kitsap County, connecting transit facilities, commercial centers and schools, following scenic corridors, and providing connections between communities and their cultural and natural resources. Following is a description of the aspects of the existing context that guided decisions on routing and the design of facilities.

Planning Context

In recent years, the development of trails and non-motorized transportation facilities has been a significant concern for both local and regional agencies in the Puget Sound area. Numerous plans were reviewed to ensure concurrency with current countywide planning efforts and to avoid overlap with previous planning efforts.

Kitsap County Greenways Plan (Kitsap County Public Works, 1996) The Kitsap County Greenways Plan was developed over the course of three years with an extensive public planning process to identify corridors that would serve as non-motorized transportation routes and recreation opportunities and that would protect scenic and natural resources throughout the county. The plan was designed to be implemented by various departments in the county and to serve as a guide for the county's incorporated cities.

Kitsap County Bicycle Facilities Plan (Kitsap County Public Works, 2001) The Kitsap County Bicycle Facilities Plan is based on the recommendations made in the transportation component of the Greenways Plan. It proposes the development of bicycle facilities across the county on regional, sub-regional and local road systems. Proposed cross sections range from shared use pathways separated from the roadway, to bicycle lanes and paved shoulders. The plan also includes design guidelines for the development of these bicycle facilities based on the American Association of Highway Transportation Officials' (AASHTO) *Guide to the Development of Bicycle Facilities* (1999). The Mosquito Fleet trail is included in the proposed projects of the Bicycle Facilities Plan and identified as a high priority project. This plan defers to the design guidelines of the Bicycle Facilities Plan for the development of bicycle facilities.

Kitsap County Open Space Plan (Kitsap County Parks and Recreation, 2000) The Kitsap County Open Space Plan combines the recreation and natural resources components of the Greenways Plan into a revised and updated document to serve as an inter-jurisdictional guide for the development of recreation trails and parks and for the protection of sensitive natural resources.

Included in the plan are off-road trails for pedestrians, cyclists and equestrians. These trails link into the on-road bicycle facilities proposed in the Kitsap County Bicycle Facilities Plan. The Open Space Composite Map depicts an interconnected system of trails and open space corridors and includes the Mosquito Fleet Trail as part of that vision.

Kitsap County Subarea Plans The Kitsap County Department of Community Development is in the process of developing Subarea Plans for the Kingston, Poulsbo, Port Blakely and Manchester Sub-Areas. The Suquamish Rural Village Sub-Area Plan (1999) was the first of these documents to be completed. The plans are intended to respond to guidelines established in the Growth Management Act and to develop land use strategies that will guide future development in a manner consistent with each community's needs and desires. Among the topics that the Suquamish Plan addresses are the development of trails, parks and viewpoints, including the opening of public right-of-way for use as viewpoints and rest areas. Mosquito Fleet Trail routes and facilities are located and designed to work with these community goals.

Metropolitan Transportation Plan (Puget Sound Regional Council, 1995) The Metropolitan Transportation Plan (MTP) was prepared as a first step towards the implementation of the policies set forth in Vision 2020, a regional planning document that provides a strategy for decisions related to growth and transportation. The MTP identifies the need to invest in three major program areas:

- Development of a Regional Network of Non-Motorized Transportation Facilities.
- Development of Local Networks for Non-Motorized Travel.
- Development of Transit Access for Pedestrians and Cyclists.

In addition, the MTP includes a map demarcating a Preliminary Regional Non-motorized Network, which includes major separated trails or bikeways and shared use bikeways or walkways. The Mosquito Fleet Trail is included in this map, identifying it as a significant corridor in the Puget Sound region.

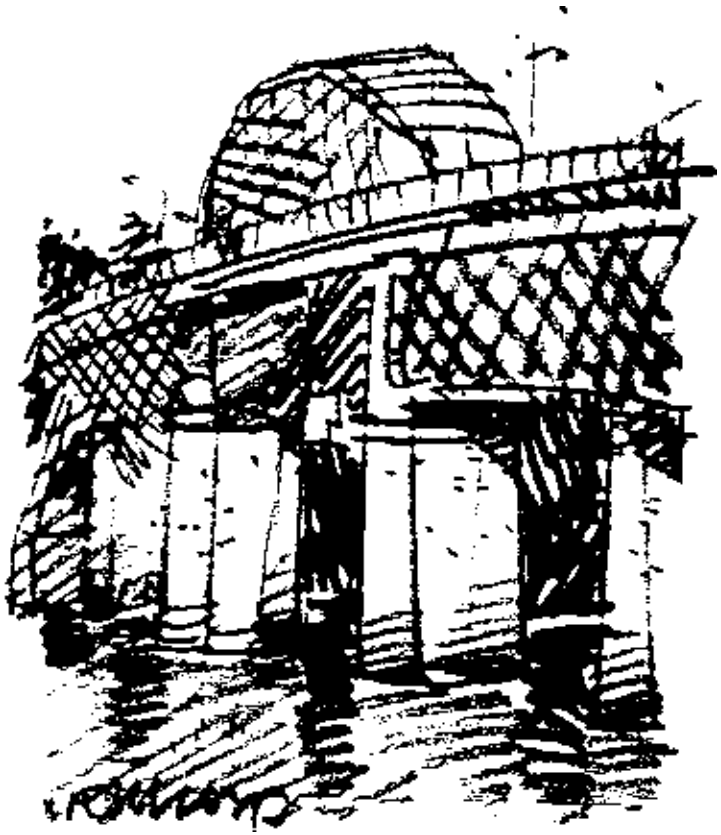
Cultural Resources

Cultural resources along the trail corridor add to the value of the trail experience. They are interesting sites to visit and appropriate subjects for an interpretive program. A number of historical society archives, libraries and museums were contacted to research the history of the Mosquito Fleet and the location of Mosquito Fleet docks. These resources as well as a list of citizen resources are included in the Appendix of this plan and should be contacted when an interpretive program is developed. Following is a summary of the cultural resources along the trail corridor that are identified in the plan for connections and/or interpretation.

Mosquito Fleet In the year 1908 twenty-four docks provided passenger and goods transport between Kingston and Southworth along the eastern shoreline of the Kitsap Peninsula. (Seattle Post-Intelligencer, 1908) The Mosquito Fleet derives its name from the ubiquity of the small steamboats that carried passengers between these docks and across the Puget Sound as common as mosquitoes buzzing through the air. Historians attribute the beginning of the Mosquito Fleet to the year 1853, when the *Fairy* began service between Olympia and Seattle (Clark, p. 48). At the turn of the century, numerous lines competed against each other, vying for both passengers and goods. The emergence of the automobile had disastrous effects on the Mosquito Fleet. By the mid-1930's only the Black Ball Line survived. In 1951, Captain Peabody sold what remained of his fleet to the State of Washington, officially ending the era of the Mosquito Fleet.

Mosquito Fleet dock sites are identified on the project maps in Part Four of this plan. The following table (p. 10-13) lists the twenty-four docks sites between Kingston and Southworth and provides information on some of the historic services that operated out of these docks. Though none of the original docks still exist, there are boat launches and fishing piers at many of these sites, and Washington State Ferry terminals at Kingston, Bremerton and Southworth. In some cases, the right-of-way to the former dock site is privately owned and developed as a residential lot. In other instances, an undeveloped public right-of-way remains and could serve as a rest area for trail users.

Other Cultural Resources There are numerous other cultural resources along the corridor relating to the history of Kitsap County and the Suquamish nation. These resources are identified in the project descriptions in Part Four of this plan. Some of the most noteworthy of these cultural resources include Chief Sealth's grave, Old Man House State Park, the U.S.S. Turner Joy, and the torpedo warehouse at Manchester State Park



Dock	Location	Existing Services	Selected Historic Services*
Kingston	Central St. terminus	Washington State Ferry, Kingston Marina	*S.S. Dode* ran the Seattle-Kingston-Hood Canal route in the 1900's/ *May B* ran from Kingston to Ballard/*S.S. State of Washington* ran from Kingston to Port Gamble until its retirement in 1912/ May 16, 1923 - first car ferry, the *City of Edmonds*, ran from Edmonds to Kingston/ In 1929, the Black Ball Line ran auto ferries on the Edmonds-Kingston route
Indianola (Kitsap)	Indianola Rd. terminus	fishing pier & boat launch at Indianola Rd.	In 1926, the Kitsap Line ran auto ferries on the Seattle-Indianola-Suquamish route
Suquamish	South St. terminus	fishing pier & boat launch at South St.	In 1908, the *Kitsap* ran from the Colman Dock in Seattle for Suquamish-Lemolo-Poulsbo-Scandia-Pearson-Keyport/ In 1926, the Kitsap Line ran auto ferries on the Seattle-Indianola-Suquamish route/ In 1939, the Black Ball Line ran auto ferries on the Seattle-Indianola-Suquamish route
Lemolo	Indigo Lane/ Norum Rd. NE intersection	property in private ownership	In 1908, the *Kitsap* ran from the Colman Dock in Seattle for Suquamish-Lemolo-Poulsbo-Scandia-Pearson-Keyport/ In 1926, the Kitsap Line ran passenger ferries from Lemolo to Seattle
Poulsbo	Hostmark St. terminus	Poulsbo Marina, Liberty Bay Park	In the early 1900's, the *Hyak* and the Liberty Bay Transportation Company's *Athlon* competed for passengers on the Poulsbo-Seattle run/ In 1908, the Kitsap ran from the Colman Dock in Seattle for Suquamish-Lemolo-Poulsbo-Scandia-Pearson-Keyport/ In 1926, the Kitsap Line ran passenger and freight ferries from Pier 3 in Seattle on the Port Madison-Keyport-Poulsbo route
Scandia	Scandia Ln. terminus	property in private ownership	In 1908, the *Kitsap* ran from the Colman Dock in Seattle for Suquamish-Lemolo-Poulsbo-Scandia-Pearson-Keyport/ In 1926, the Kitsap Line ran passenger ferries from Scandia to Seattle
Pearson	Pearson Pt. Rd.	property in private ownership	In 1908, the *Kitsap* ran from the Colman Dock in Seattle for Suquamish-Lemolo-Poulsbo-Scandia-Pearson-Keyport/ In 1926, the Kitsap Line ran passenger ferries from Pearson to Seattle

Dock	Location	Existing Services	Selected Historic Services*
Virginia	Liberty Loop Rd. NE	property in private ownership	In 1926, the Kitsap Line ran passenger ferries from Virginia to Seattle
Keyport	Historic site on Navy property, existing dock at terminus of Wash-ington Ave.	Naval Undersea Engineering Station, boat launch & marina at Washington Ave.	In 1908, the *Kitsap* ran from the Colman Dock in Seattle for Suquamish-Lemolo-Poulsbo-Scandia-Pearson-Keyport/ In 1926, the Kitsap Line ran passenger and freight ferries from Pier 3 in Seattle on the Port Madison-Keyport-Poulsbo route
Brownsville	Ogle Rd. NE terminus	boat launch, marina	In 1908, the *Sentinel* ran from Colman Dock in Seattle to Brownsville and other ports/ In 1926, the Kitsap Line ran auto ferries from Marion St. in Seattle on the Brownsville-Fletcher Bay route/ In 1926, the Kitsap Line ran passenger and freight ferries from Pier 3 in Seattle on the Illahee-Brownsville-Manzanita route/ In 1939 the Black Ball Line ran auto ferries on the Brownsville-Fletcher Bay route
Gilberton	Washington St. terminus	public R.O.W. existing, no facilities	In 1926, the Kitsap Line provided passenger service from Gilberton to Seattle
Illahee	Oceanview Blvd./ Illahee Rd. NE intersection	fishing pier, marina	In 1926, the Kitsap Line ran passenger and freight ferries from Pier 3 in Seattle on the Illahee-Brownsville-Manzanita route
Enetai	Enetai Beach Rd.	property in private ownership	In 1908, the *Norwood* ran from Seattle to Waterman, Enetai, Manette and Bremerton
Manette	Trenton Ave./ Shore Dr. intersection	Bachmann Park	In 1908, the *Norwood* ran from Seattle to Waterman, Enetai, Manette and Bremerton/ In 1908 the *City of Manette* Launch ran from Bremerton to Manette/ From 1916 to construction of Manette Bridge, Harry Hansen family ran the *Pioneer* from Manette to Bremerton

Dock	Location	Existing Services	Selected Historic Services*
Bremerton	1st St. terminus and 2nd St. terminus	Washington State Ferry, Horluck Ferry	*Bailey Gatzert* ran the first route to the Kitsap Peninsula between Seattle and Bremerton in 1890/ In 1899, *A.R. Robinson* ran the Seattle-Port Orchard-Bremerton route/ In 1908 the *Athlon, Inland Flyer, Telegraph* and *Tourist* ran the Bremerton-Port Orchard-Charleston-Navy Yard City route bound for Pleasant Beach/ In 1908, the *Monticello Jr.* ran between Bremerton and Port Orchard/ In 1908, the Norwood ran from Seattle to Waterman, Enetai, Manette and Bremerton/ In 1908, the Port Blakely Transportation Co. ran the *Favorite* on the Bremerton-Charleston-Port Orchard route/ In 1908, the *Magnolia* ran the Bremerton-Tacoma route/ In 1926, the Blackball Line ran ferries from the Colman Dock in Seattle to Bremerton/ The Black Ball Line ran the *Kalakala* from 1935 to 1967 in the Puget Sound mainly on the Seattle-Bremerton Route
Navy Yard City	Wycoff Ave. terminus	U.S. Navy Shipyard	In 1908 the *Athlon, Inland Flyer, Telegraph* and *Tourist* ran the Bremerton-Port Orchard-Charleston-Navy Yard City route bound for Pleasant Beach
Charleston	SR 304 at S. Charleston Ave. terminus		In 1908, the Port Blakely Transportation Co. ran the *Favorite* on the Bremerton-Charleston-Port Orchard route/ In 1908 the *Athlon, Inland Flyer, Telegraph* and *Tourist* ran the Bremerton-Port Orchard-Charleston-Navy Yard City route bound for Pleasant Beach
Port Orchard (Sidney)	Sidney Ave. terminus at waterfront	Horluck Ferry service, marina, fishing pier, boat launch	*Leif Erickson* ran from Seattle to Sidney until destroyed by fire in 1888/ In 1899, *A.R. Robinson* ran the Seattle-Port Orchard-Bremerton route/ In 1908, the *Monticello Jr.* ran between Bremerton and Port Orchard/ In 1908 the *Athlon, Inland Flyer, Telegraph* and *Tourist* ran the Bremerton-Port Orchard-Charleston-Navy Yard City route bound for Pleasant Beach/ In 1908, the Port Blakely Transportation Co. ran the Favorite on the Bremerton-Charleston-Port Orchard route/ In 1926, the Blackball Line ran ferries from the Colman Dock in Seattle to Port Orchard
Annapolis	Retsil Rd. terminus at Bay St.	Horluck Ferry service, boat launch, Annapolis Park	
Waterman	Beach Drive	fishing pier	In 1908, the *Norwood* ran from Seattle to Waterman, Enetai, Manette and Bremerton

Dock	Location	Existing Services	Selected Historic Services*
Manchester	Main St. terminus	boat launch, marina	In 1908, the *May B.* and the *Reliance* ran the Harper-Colby-Manchester route from Seattle/ In 1929, the Black Ball Line ran auto ferries on the Alki-Manchester route/ In 1939, the Black Ball Line ran auto ferries on the Seattle-Manchester route
Colby	SE Cole Loop	public R.O.W. existing, no facilities	In 1908, the *May B.* and the *Reliance* ran the Harper-Colby-Manchester route from Seattle/ In 1908, the *Lovera* launch ran from Madison St. in Seattle to Colby
South Colby	Anderson St. terminus	public R.O.W. existing, no facilities	
Harper	Southworth Dr.	fishing pier	In 1908, the *May B.* and the *Reliance* ran the Harper-Colby-Manchester route from Seattle/ In 1926, the Kitsap line ran auto ferries from Seattle and Fauntleroy on the Vashon Island-Harper route/ In 1939, the Black Ball Line ran auto ferries on the Fauntleroy-Vashon-Harper route

***** *Selected Historic Services* presents particular Mosquito Fleet ships which are known to have operated out of these docks in particular years in the early part of the twentieth century. This is not meant to be a comprehensive list of services provided by these docks nor does it indicate the extent of time over which these docks were in operation.

Sources for Locations:

Kroll Map Company, Inc. *Atlas of Kitsap County*. Seattle, WA: Kroll Map Co., 1926.
Metsker, Chas F., Civil Engineer. *King & Kitsap Counties*. Tacoma, WA: Metsker Maps, Sept. 1926.
War Department Corps of Engineers. *Port Gamble Quadrangle*, 15 minute series. Washington: U.S. Army, 1937.
_____. *Port Orchard Quadrangle*, 15 minute series.

Sources for Selected Historic Services:

Black Ball Line. *Auto Ferry and Steamer Schedules*. Seattle: Black Ball Line, 1929.
Black Ball Line. *Puget Sound Auto Ferries, Winter Schedule 1939*. Seattle: Black Ball Line, 1939.
Kitsap County Transportation Company. *Summer Schedule – Kitsap Line*. Eliot: Kitsap Co. Transportation Company, May 1926.
Osborne, Harold F. *Little City By the Sea*. Kingston, WA: Apple Tree Press, 1990.
Seattle Post-Intelligencer. "Routes of the Puget Sound Fleet: Water Transportation Reaches Hundreds of Prosperous Communities – List of Vessels and Operating Companies." Seattle Post-Intelligencer (August 22, 1908).

Public Facilities

Across the length of the trail corridor there are eighty-nine public facilities for recreation, community and transit usage. The trail provides access to these facilities and connections between them.

Recreation Facilities Recreation facilities along the corridor are managed by Washington State Parks, Kitsap County Parks & Recreation, the Port Districts and Municipal Parks Departments. There are three state parks along the corridor, Manchester State Park, Illahee State Park, and Old Man House State Park and numerous county parks, including, Wynn-Jones County Park, Arness County Park, and Keyport Saltwater Park. The cities of Poulsbo, Bremerton and Port Orchard all have parks along the corridor and each has a waterfront park located at their respective Mosquito Fleet dock sites.

The Ports of Kingston, Poulsbo, Brownsville, Bremerton, and Waterman operate boat launches, marinas and piers along the corridor, all of which are former Mosquito Fleet dock sites. Other recreation interests along the corridor include fish hatcheries at Grover's Creek and Cowling Creek. Undeveloped park lands, street ends and planned off-road trails add a layer of future recreation opportunities. Parks that have been planned along the corridor include Kingston Village Green Park, Poulsbo's Nelson Park Historic Farm and Annapolis Park.

Community Facilities Community facilities include schools, community centers, libraries, and county and municipal offices. These facilities with the exception of schools are typically located in commercial and urban areas such as Augusta Avenue in Suquamish and Bay Street in Poulsbo. The corridor passes by eleven schools between Kingston and Southworth and is within close proximity to several others.

Transit Facilities Transit facilities along the corridor are provided by Kitsap Transit, the Horluck Ferry Company and Washington State Ferries. Kitsap Transit in combination with the Horluck Ferry system provides public transportation connections throughout the county. Bus routes that are accessible from the Mosquito Fleet Trail corridor include the 33, 42, 90, 91 and 92 in north Kitsap, the 11, 15, 20, 25, 26, and 29 in Central Kitsap and the 7, 81, and 86 in South Kitsap. The Horluck Ferry system provides passenger and bicycle ferry connections between Annapolis, Port Orchard and Bremerton. In addition there are nine Park-and-Ride lots along or in close vicinity to the trail corridor. Bicycle facilities provided by Kitsap Transit include racks on buses and bicycle lockers at select Park-and-Ride lots.

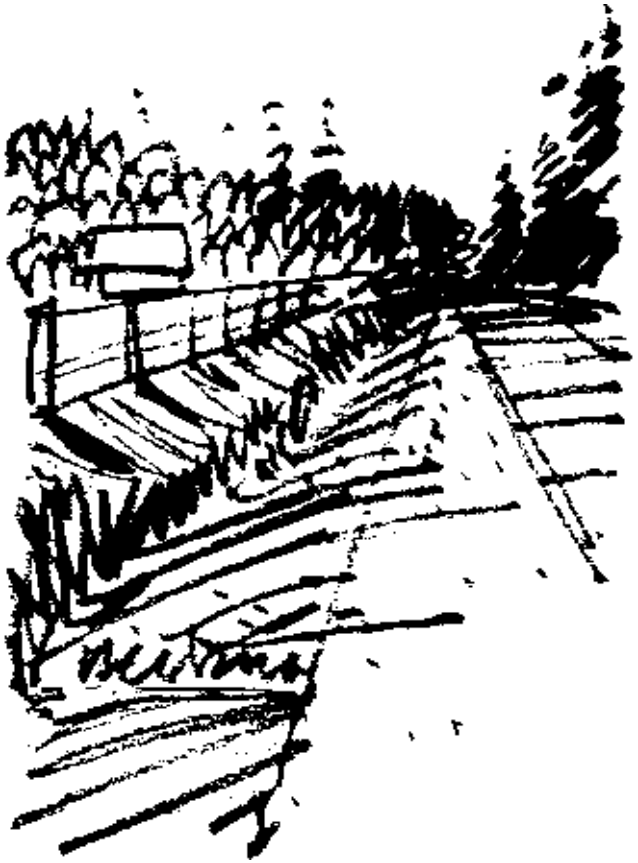
Washington State Ferries provides passenger and auto ferry service on the Kingston-Edmonds, Bremerton-Seattle and Southworth-Fauntleroy routes and passenger only service from Bremerton to Seattle. These are all potential access points to the trail corridor. A connection to the Winslow ferry terminal in Bainbridge Island via SR 305 provides a fourth point of access and linkage to the Bainbridge Island Bike

Barn operated by Kitsap Transit. The Bike Barn offers bike lockers, repair services, bicycle rentals and sales. Bicycles are accommodated on all the ferries and bicycle lockers and/or racks are located at ferry terminals.

Scenic Resources

The Mosquito Fleet trail follows scenic corridors and connects scenic sites and viewpoints, passing through the rural village communities of Kingston, Suquamish, and Manchester and the scenic urban "Main Streets" of Poulsbo and Port Orchard, following scenic drives such as Beach Drive and Lemolo Shore Drive and connecting historic and scenic places, including the Indianola Dock and Manchester State Park. Views include expansive vistas of water and mountains beyond, rural scenes of fields and farmhouses, and forested hillsides. These views and scenic corridors add immeasurably to the identity and value of the trail corridor.

In the Kitsap County Greenways Plan, roadside scenic resource corridors were identified for protection along roads selected for the addition of bicycle and pedestrian facilities. These corridors were categorized as one of four types, scenic rural resource zones, streetscape improvement zones, scenic resource zones and scenic resource districts. In the Greenways Plan, each of these types was associated with suggested protection measures due to the scenic value of the roadside landscape. With a few exceptions, each part of the Mosquito Fleet trail corridor falls into one of these categories. These categories are noted in the "previous planning" section of the inventory sheets (see Appendix).



Natural Resources

Natural resources include streams, wetlands, shorelines, and steep slopes. The *Environmental Checklist* included in the Appendix of this plan lists and maps stream crossings, 100-year floodplains, geologic hazards, National Wetland Inventory (NWI) wetlands and Flood Insurance Rate Map (FIRM) floodways and floodplains. It also describes measures that would be taken during construction of the trail to avoid impact to these resources as well as to plant and animal species. Some of the most sensitive natural resources along the corridor include Blackjack Creek, a Type 1 stream crossing Bay Street in Port Orchard, shoreline areas along Beach Drive, Fjord Drive and Gorst, and unstable slopes along State Routes 3 and 16.

There are a number of opportunities along the Mosquito Fleet trail to appreciate and observe wildlife and native plants. At numerous stream crossings, salmon can be seen spawning in the Fall, walks at Illahee State Park pass through old-growth forest, and a nature trail at Manchester State Park identifies native plant species. At the Sinclair Inlet Wildlife viewing area in Gorst, Great Blue Herons mingle with Bald Eagles and other birds as they search for food at the mouth of Gorst Creek. Connections from the trail to these sites is suggested in the plan recommendations.

Criteria

The identification of potential trail routes began with a review and inventory of the shoreline trail corridor proposed in the Kitsap County Greenways Plan. Bicycle facilities in the Greenways Plan were selected based on countywide needs for non-motorized transportation, not all of which are relevant to the vision of the Mosquito Fleet trail. The following criteria were developed and used as the basis for the selection of routes and the design of cross sections and trail amenities. While all these criteria bore significant weight on planning decisions, it was agreed that first and foremost the trail when built needed to provide a safe experience for all user groups.

Safety
The proposed facilities should provide a safe trail experience.

Accessibility
The trail should serve the needs of the maximum number of user groups possible, both commuters and recreational users, young and old, pedestrians and cyclists.

Continuity
The trail should be continuous from Kingston to Southworth, clear and easy to follow.

Linkage
The trail should link population centers, historic and cultural interests, recreation facilities, and transportation nodes along the eastern shoreline of Kitsap County.

Trail experience
Proposed facilities should maximize the trail experience, proposing in order of most desirable to least desirable the following cross sections: off-road trail, separated path, bicycle lanes, paved shoulders, shared roadway and shared sidewalk.

Waterfront experience
The proposed facilities should take advantage of opportunities to connect with or follow the shoreline between Kingston and Southworth.

Scenic experience
Proposed facilities should take advantage of opportunities to follow scenic corridors and connect with scenic resources.

Sensitivity
Proposed facilities should be designed to respect and avoid harm to wildlife corridors and other sensitive landscapes.

Concurrency
Proposed facilities should be concurrent with other county, municipal or regional non-motorized planning efforts.

Routing

After an initial survey of the trail corridor, it became clear that the existing conditions did not lend themselves to the development of a simple trail route. In order to connect to Mosquito Fleet sites, and to take advantage of waterfront opportunities while still providing a continuous, safe and direct route between shoreline communities, a trail network concept was developed, consisting of three parts, a primary corridor, a secondary corridor and connections. All three types of facilities intend to provide a safe and scenic trail experience that maximizes opportunities to connect to the waterfront and link public facilities and resources. These facilities differ in terms of the user groups they serve and the experience they provide.

Primary Corridor The primary corridor is based on the shoreline route proposed in the Kitsap County Greenways Plan. It provides a direct and continuous route between Kingston and Southworth that is clear and easy to follow. For this reason, it has appeal for commuters, tourists and recreational trail users. Physical improvements in the primary corridor in order of most to least desirable include separated pathways, bicycle lanes, paved shoulders, shared roadways and shared sidewalks.

Secondary Corridor The secondary corridor provides alternate routes and loop opportunities, beginning and ending at the primary corridor. The secondary corridor follows less traveled, less direct roadways that provide an experience that is alternative to the primary corridor. It links resources and facilities that would otherwise be bypassed by the primary corridor. Examples include a loop to the Indianola dock that leaves the primary corridor at West Kingston Road and returns to it at Miller Bay Road, and a loop through the Scandia Farms area. As in the primary corridor, proposed physical improvements in order of most to least desirable include separated pathways, bicycle lanes, paved shoulders, shared roadways and shared sidewalks.

Connections These are short segments of trail that serve to link the primary or secondary corridor to points of interest, resources, and off-road trails. Examples include connections to Manchester State Park and Old House State Park in Suquamish, and connections to Mosquito Fleet dock sites. Connections may include physical improvements such as the addition of bicycle lanes or paved shoulders or they may simply require directional signage that points users from the Mosquito Fleet Trail to an adjacent facility or off-road trail.

Cross Sections

The Mosquito Fleet Trail is intended to primarily serve cyclists and pedestrians and where possible, equestrians as well. When designing cross section alternatives it was necessary to balance the needs of particular user groups against the constraints of the existing conditions. In addition federal funding sources require that facilities for pedestrians and cyclists meet certain minimum standards. With these considerations in mind, six cross section alternatives were considered as described below. Specific guidelines for cross section design are addressed in Part Four of this plan.

Off-Road Trail This cross section applies to segments of the corridor that are not associated with road right-of-way. The design of the trail is wide enough to accommodate two-way shared usage by bicyclists and pedestrians (10' minimum, 12' preferred). Surfacing options include asphaltic concrete, Portland cement, gravel, or soft surface. The latter is preferred if equestrian usage of the trail is expected. To some extent this cross section is an anomaly as the trail corridor is road related along its whole length. However, there are opportunities to connect to and cross through open space, park land, and planned unit developments. Examples include the planned golf course residential development in the Indianola area, Nelson Park in Poulsbo, and Annapolis Park in the Port Orchard area.

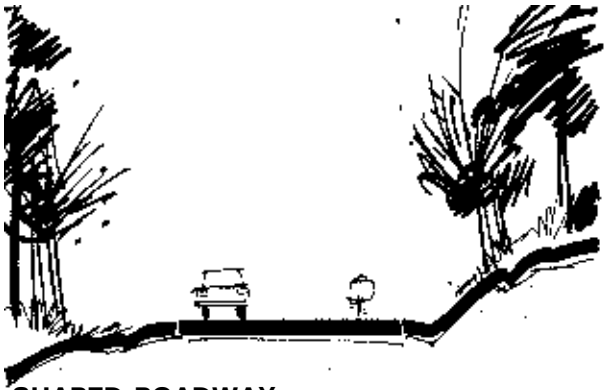
Certain off-road trails may be designed to accommodate pedestrian usage only. In the Gorst area, the opportunity exists to develop a trail on the water side of the existing buildings. Due to the sensitivity of this marsh landscape, a boardwalk trail for pedestrian usage is likely to be the most viable solution. For cyclists, these are opportunities to get off their bicycles and appreciate the views at a slower pace.

Separated Trail In areas where the road right-of-way is wide enough, a two-way separated path for shared usage is possible. As with the off-road trail cross section, surfacing options include asphaltic concrete, Portland cement, gravel, or soft surface. Separated trails are typically preferred by less skilled cyclists, who do not feel comfortable maneuvering along traffic. Often bicycle commuters and more skilled cyclists prefer to use on-road bicycle facilities due to the predictability of traffic and the desire to ride at higher speeds. For this reason, the separated trail cross section includes the provision of paved shoulders alongside the roadway.

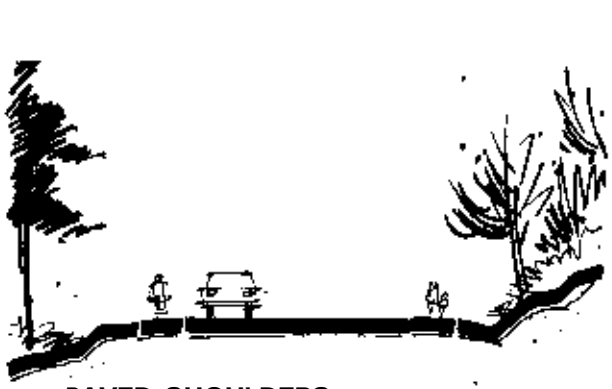
Roadways are rarely located in the center of road right-of-way. Without a survey of the corridor, it is difficult to determine in the field how much right-of-way is available on either side of the roadway. In some instances, accommodating a separated trail could involve shifting the road centerline to one side or the other. To maximize the waterfront experience, a separated trail is preferred on the waterside of the roadway where the corridor is adjacent to the shoreline.

Bicycle Lanes The bicycle lanes cross section accommodates cyclists in a designated striped lane and pedestrians either in the shoulder or on a sidewalk in the case of a curbed roadway. For reasons of safety, bicycle lanes are always one-way facilities traveling in the direction of traffic designated for exclusive use by bicyclists.

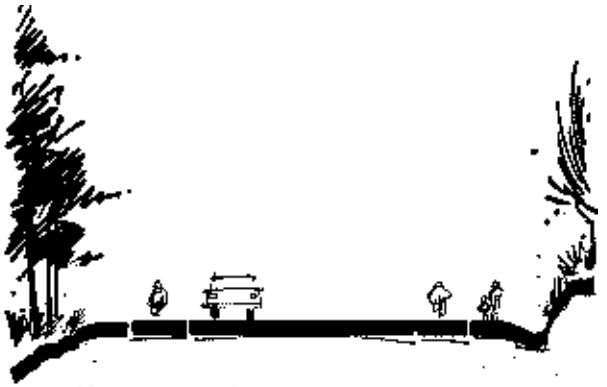
Paved Shoulders Paved shoulders are for shared usage by bicyclists and pedestrians. In traffic situations shoulders are often used by stopped vehicles and for emergency uses. Even so, a paved shoulder goes a long way to enhancing the corridor for use by bicyclists and pedestrians.



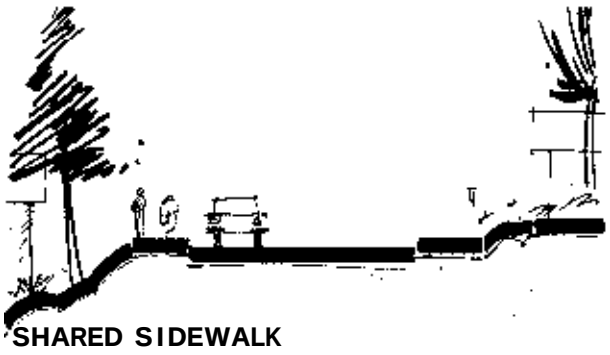
SHARED ROADWAY



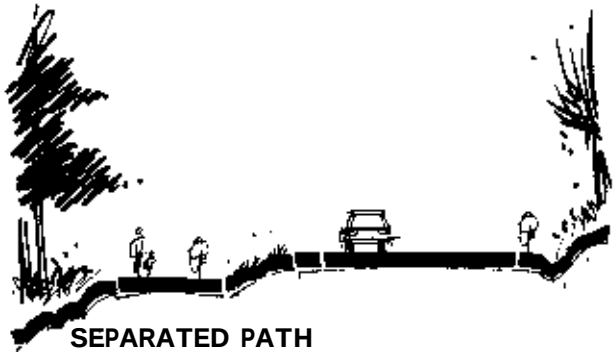
PAVED SHOULDERS



BICYCLE LANES



SHARED SIDEWALK



SEPARATED PATH

OFF-ROAD TRAIL

Shared Roadway When right-of-way widths and existing roadway conditions prohibit the addition of bicycle facilities, a roadway can be designated for shared use by motorists and bicyclists. Typically, this design solution is used on roadways with low traffic speeds and low levels or traffic or with wide curb lanes.

Shared Sidewalk A shared sidewalk cross section allows cyclists to share the sidewalk with pedestrians. This cross section was considered as a last resort solution in isolated situations such as across bridges and along high speed and high trafficked roadways, which lack adequate right-of-way for the provision of bicycle lanes, but have existing sidewalks. On sidewalks, bicyclists are expected to yield to pedestrians and walk their bicycles if sidewalks are particularly narrow.

Both the shared roadway and shared sidewalk cross sections are included among the alternatives as means to fill in gaps at difficult locations along the primary trail corridor. Neither is considered an optimum solution and both are avoided where possible.

Additional Facilities and Amenities

The development of alternative concepts for additional facilities and amenities considered ways to enhance the trail experience and accommodate user needs. In the questionnaire sent out to residents and businesses along the corridor and posted on the County's website, respondents were asked to *Describe features that would enhance the trail*. Comments were helpful and specific. Among the most common responses, were requests for rest areas/viewpoints, interpretive signage and historic markers, benches, picnic tables, drinking fountains, safety measures, a separated wide trail, and restrooms. A complete listing of these answers is included in the Appendix of this report.

The first phase of trail development typically focuses on providing a safe trail experience. This is accomplished by proper cross section design as addressed in the previous section and through signing and striping. The later addition of amenities at rest areas and viewpoints adds to the overall enjoyment of the trail experience.

Signing & Striping Typically signing and striping are selected and located to serve three basic needs; they should provide direction as users move along the corridor; they should warn users of upcoming hazards; and they should advise users and motorists of the rules of the road. Signing can also serve educational needs by providing interpretation of historical sites, interesting features and resources. Suggested signing and striping are described and illustrated in the Design Guidelines in Part Four of this plan.

Rest Areas/Viewpoints Amenities at rest areas and viewpoints can include seating, water, bicycle parking, interpretive signage, informational kiosks, picnic shelters and restrooms. The Mosquito Fleet trail corridor is routed to connect with existing facilities, including parks, marinas and docks, which include amenities such as restrooms, water, picnic areas, and camping. Through coordination between Kitsap County Public Works, Kitsap County Parks and Recreation and the Port Districts, small parks and docks along the corridor that are lacking facilities could be improved to greater serve trail user needs by the addition of bicycle parking, benches, water and interpretive signage.

As trail use increases, Kitsap County Public Works should look into developing street end right-of-ways including abandoned Mosquito Fleet dock sites as viewpoints and rest areas. Suggested locations are indicated in the mapping and project descriptions in Part Four of this plan and preliminary designs are illustrated in the Design Guidelines.

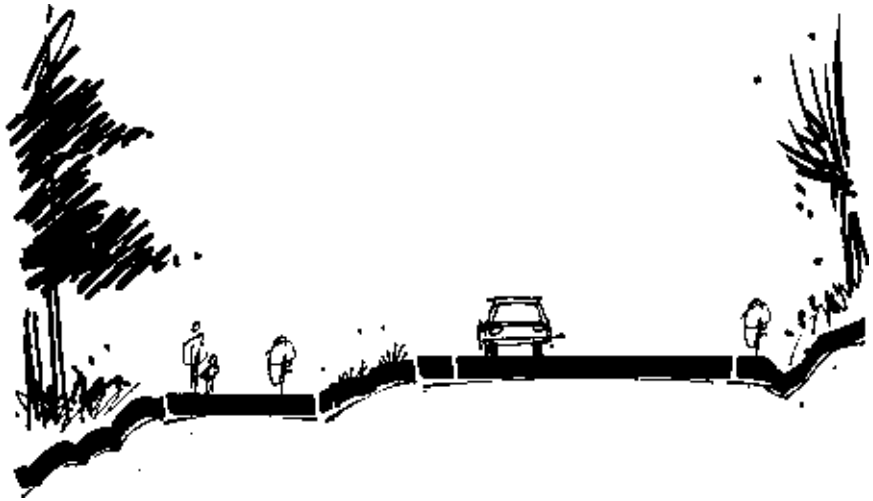
Design Guidelines

Following are guidelines for trail design and for additional facilities and amenities. These serve as the basis from which to develop the trail at the project level. Guidelines for bicycle facilities are based on standards set by the Federal Highway Administration in its *Guidelines for the Development of Bicycle Facilities* (AASHTO, 1999).

Off-Road Trail A two-way multi-use trail is recommended for the off-road trail cross section. Multi-use trails should be 10 feet wide in areas of anticipated low usage and 12 feet wide in areas of high volume usage. A paved surface (asphaltic concrete or Portland cement) is recommended for both reasons of durability and to accommodate road bikes. If equestrian use is expected, a soft surface is preferred.

There may be opportunities along the corridor to develop an off-road trail that would not be able to accommodate bicycles due to site constraints such as steep slopes and hydric soils. In these instances a soft surface or boardwalk pedestrian only trail is recommended with bicycle parking located at the trailhead.

FACILITY	WIDTH	SHOULDER	HORIZONTAL CLEARANCE	VERTICAL CLEARANCE	GRADE	CROSS SLOPE	DESIGN SPEED	CURVE RADIUS
2-way Multi-Use Off-Road Trail	10' minimum (low volume) 12' preferred (high volume)	2' graded	2' minimum	8' minimum 10' preferred	5% maximum 2% preferred	2%	20 mph (30 mph for grades > 4%)	$\frac{R=v^2}{15\ (e+f)}$ (95 R. @ 20 mph)

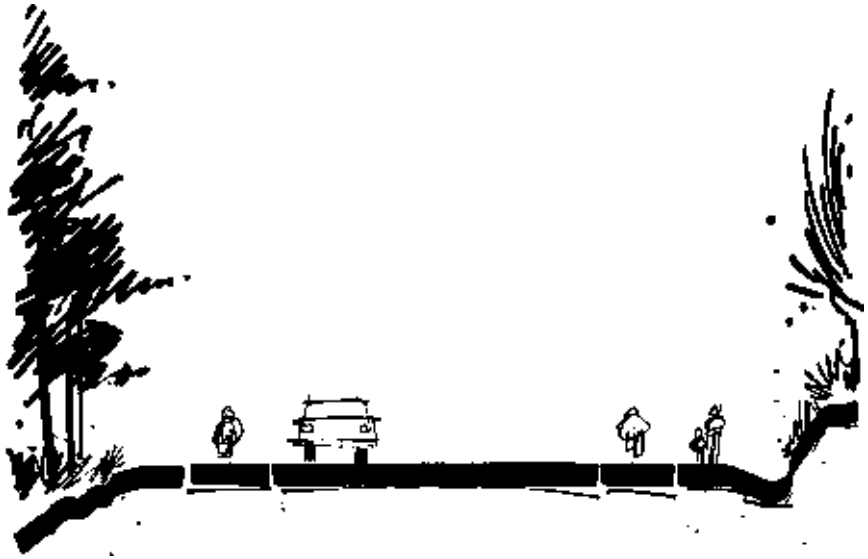


Separated Path Separated paths are two-way facilities for shared use by bicyclists and pedestrians, and if desired, equestrians as well. The recommended width for a 2-way multi-use path is 10 feet for areas of anticipated low usage and 12 feet for areas of high volume usage. The recommended spacing between the road edge and the edge of path is 5 feet (6 feet is preferred). Planting in the separation should be selected for its appropriateness within the local landscape, using native species as much as possible, and should not interfere with sight distance and visibility. A paved surface (asphaltic concrete or Portland cement) is recommended for both reasons of durability and to accommodate road bikes. If equestrian use is expected, a soft surface is preferred. Refer to the *Kitsap County Bicycle Facilities Plan* (December 2000) for specific design guidelines on separated pathways.

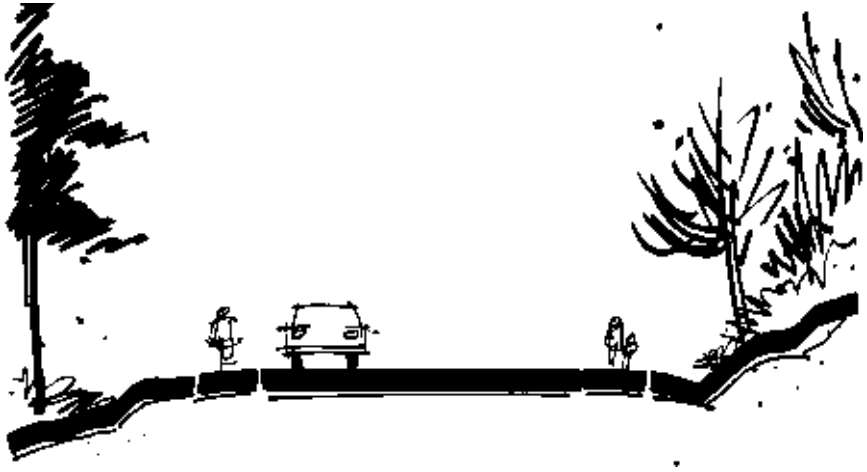
A separated path should not replace on-road bicycle facilities. Portions of the trail corridor that have a separated path, should include either bicycle lanes (4 to 5 feet) or paved shoulders (2 to 4 feet) along the roadway.

FACILITY	WIDTH	SEPARATION FROM MOTOR VEHICLES	SHOULDER	HORIZONTAL CLEARANCE	VERTICAL CLEARANCE	GRADE	CROSS SLOPE	DESIGN SPEED	CURVE RADIUS
2-way Bicycle/ Pedestrian Path	10' minimum (low volume) 12' preferred (high volume)	5' minimum 6' preferred	2' graded	2' minimum	8' minimum 10' preferred	5% maximum 2% preferred	2%	20 mph (30 mph for grades > 4%)	$\underline{R=v^2}$ 15 (e+f) (95 R. @ 20 mph)

Bicycle Lanes Bicycle lanes are always one-way facilities that move in the same direction as motorized vehicles. For safety reasons, bicycle lanes are designated for exclusive use by bicyclists and should not be used by pedestrians. Pedestrians should be provided with sidewalks in urban areas. Along rural roads and in less developed areas, pedestrians should be provided with a 3' gravel or paved shoulder outside the bicycle lane. On one-way streets the bicycle lane should be located on the right hand side of the roadway. Refer to the *Kitsap County Bicycle Facilities Plan* (December 2000) for more detailed information on the design of bicycle lanes.



FACILITY	WIDTH	SHOULDER	HORIZONTAL CLEARANCE	VERTICAL CLEARANCE	CROSS SLOPE
1-way bicycle lane with curb, pedestrians use sidewalk	5' minimum (4' minimum to gutter edge)	NA	2' minimum	8' minimum 10' preferred	2%
1-way bicycle lane without curb, pedestrians use shoulder	4' minimum, 5' recommended (if posted speed over 35 mph)	1' graded (3' minimum for pedestrian use)	2' minimum	8' minimum 10' preferred	2%

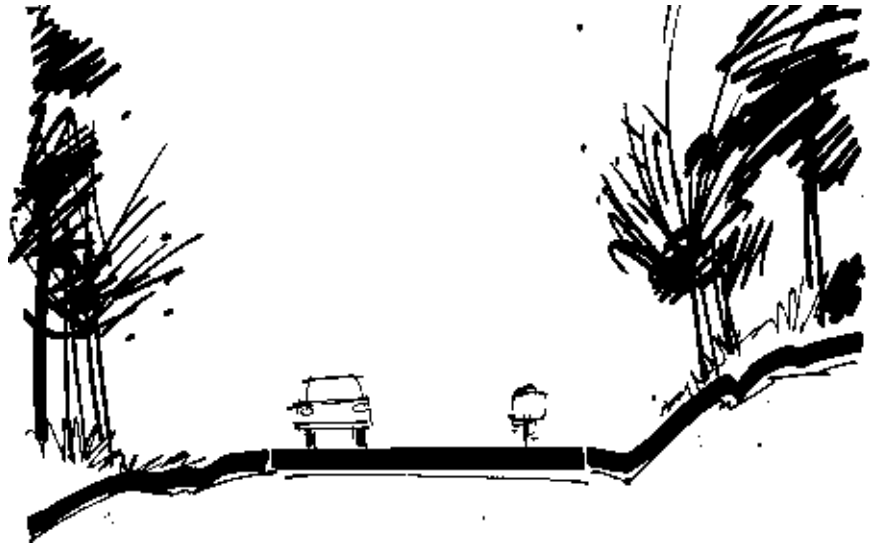


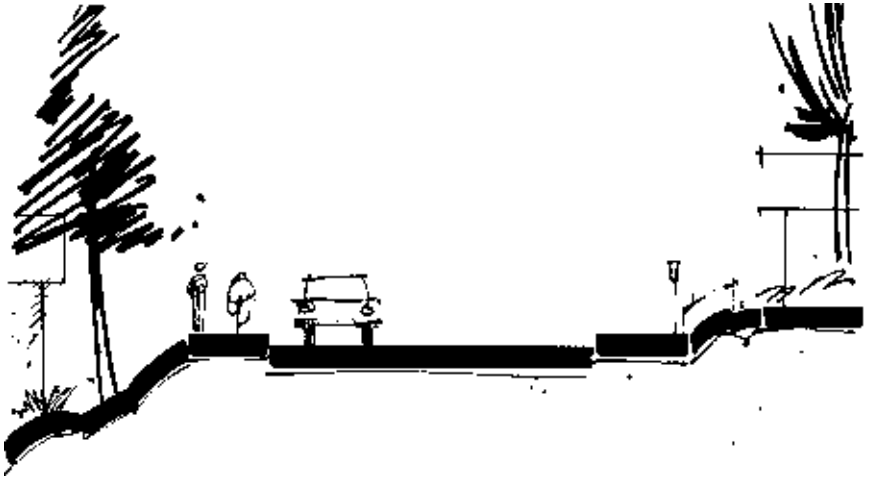
Paved Shoulders Bicyclists should use paved shoulders as they would bicycle lanes, traveling one-way in the same direction as motorized vehicles. Along roadways without curbs, paved shoulders are intended for shared usage by bicyclists and pedestrians. To pass slower traveling pedestrians, cyclists should signal and merge into the travel lane. Along roadways with curbs, pedestrian travel should be accommodated on sidewalks.

Paved shoulders are differentiated from bicycle lanes because they are not designated for exclusive use by bicyclists. Stopped and emergency vehicles may use the shoulder area and can thereby hinder continuous travel by bicyclists and pedestrians. Recommended widths for paved shoulders are 4’ on roads without curbs and 5’ on roads with curbs. In high traffic situations or along roadways with posted speeds of over 50 mph, additional shoulder width is recommended. If adequate right-of-way prohibits the development of a 4 to 5 feet shoulder, then paving a 2 to 3 feet shoulder is recommended. Even this much additional shoulder will substantially improve the safety of the roadway for use by bicyclists and pedestrians.

FACILITY	WIDTH	HORIZONTAL CLEARANCE	VERTICAL CLEARANCE	CROSS SLOPE
1-way shoulder with curb	3' minimum 5’ recommended	2' minimum	8' minimum 10' preferred	2%
1-way shoulder without curb	2’ minimum 4’ recommended	2' minimum	8' minimum 10' preferred	2%

Shared Roadway Shared roadways are defined as roadways with shared usage by motor vehicle and bicycle travel (American Association of Highway Transportation Officials, 1999). The most serious concern with shared roadways is the available width for these two modes of transportation. In order to safely sign a shared roadway as a bicycle route, it is preferred that the roadway have paved shoulders (2 feet minimum) or wide curb lanes (14 to 15 feet). Shared roadways are only recommended as a way to fill a gap in the trail corridor where right-of-way widths and existing road conditions preclude the development of facilities for bicyclists. Along curbed roads, pedestrians are expected to use the sidewalk. On rural roads, pedestrians should use the shoulder or graded area at the edge of the roadway.





Shared Sidewalk The shared use of a sidewalk by bicyclists and pedestrians is undesirable and recommended only in limited circumstances:

- On long, narrow bridges where there is not enough width to accommodate bicycle lanes or paved shoulders and where traffic volumes and speed limits are high enough to preclude shared usage of the roadway.

- In order to close gaps along the trail corridor in areas where (as above) there is not enough width to accommodate bicycle lanes or paved shoulders and where traffic volumes and speed limits are high enough to preclude safe shared usage of the roadway.

In order to facilitate safe shared usage of sidewalks, curb cuts should be flush with the street.

Viewpoints/Rest Areas Viewpoints and rest areas should be spaced along the corridor at regular intervals to serve the needs of local and regional trail users. The following sites are appropriate locations for the addition of Mosquito Fleet trail amenities and facilities:

- There are eight small **docks and fishing piers** between Kingston and Southworth that were once Mosquito Fleet docks. These sites provide spectacular views and are appropriate locations for interpretive signage, seating and bicycle parking. Kitsap County Public Works should work with the Port Districts to locate these facilities.

- **Washington State Ferry terminals** are major points of access to the trail corridor. Bicycle tourists and commuters may access the corridor via the Kingston, Bremerton and Southworth terminals. Washington State Ferries provides restroom and picnic facilities at Bremerton and Kingston, both former Mosquito Fleet dock sites, and bicycle parking at all its terminals. To guide trail users to the corridor and to provide orientation, directional signage should be located in the unloading areas of these terminals.

- **Waterfront parks** along the corridor are logical places for trail users to rest and picnic. Poulsbo, Port Orchard and Manette all have parks at Mosquito Fleet dock sites, which are appropriate locations for interpretive signage. Other parks are operated by Washington State Parks, Kitsap County Parks and Recreation and the municipal park departments. Directional signage from the trail to these facilities is suggested.

- Undeveloped **street end right-of-ways** dot the shoreline of Kitsap County. These sites, in a number of instances former Mosquito Fleet dock sites, could be developed as small parks or viewpoints. Clearing a small area for a bench or picnic table is suggested to serve as a rest area and place from which to view the waterfront. Directional signage and/or interpretive signage is suggested at these sites.

Signing Recommended signing fits into four categories, directional, interpretive, regulatory, and warning. Appropriate and adequate signage and pavement marking is paramount to safe bicycle and pedestrian facilities. Guidelines for signage and pavement marking can be found in the *Manual on Uniform Traffic Control Devices* (Federal Highway Administration, 1988).

- **Directional** signing is intended to guide the trail user through the primary and secondary trail corridors and to direct trail users via connections to public facilities and resources. Directional signs include orientation panels that are part of the interpretive signage program, as discussed below, and trail markers. A trail logo on directional signs that is graphic and easily recognized can aid trail users as they travel along the corridor. A countywide competition for the design of a trail logo is one way to garner support and raise enthusiasm for the trail.

- **Interpretive** signing consists of a combination of historic markers, orientation panels, interpretive panels and kiosks. Orientation panels or kiosks should be located at major access points to the trail corridor and at major rest areas/viewpoints. Suggested locations include the trail termini at the Southworth and Kingston ferry terminals. Historic markers or interpretive panels should be located at Mosquito Fleet dock sites such as the Indianola and Waterman docks and at the Kingston and Bremerton ferry terminals.

  Though the theme of this trail is the Mosquito Fleet, topics on interpretation should not be limited to Mosquito Fleet themes. Interpretation of the environment, of the natural and cultural history of the Kitsap Peninsula, and of interesting features and views from the trail will add richness to the overall interpretive program and appeal to a wider audience.

- **Regulatory** signs inform bicycle facility users and motorists of traffic laws or regulations. These signs should be located where the regulation applies and should be easily legible and visible to facility users and/or motorists.

- **Warning** signs should be used when it is necessary to alert trail users or motorists of an existing or potentially hazardous condition. Warning signs should be located preceding the upcoming hazard. Signs should be clear and kept to a minimum. The excessive use of signs can lead to total disregard for signs by trail users and motorists.

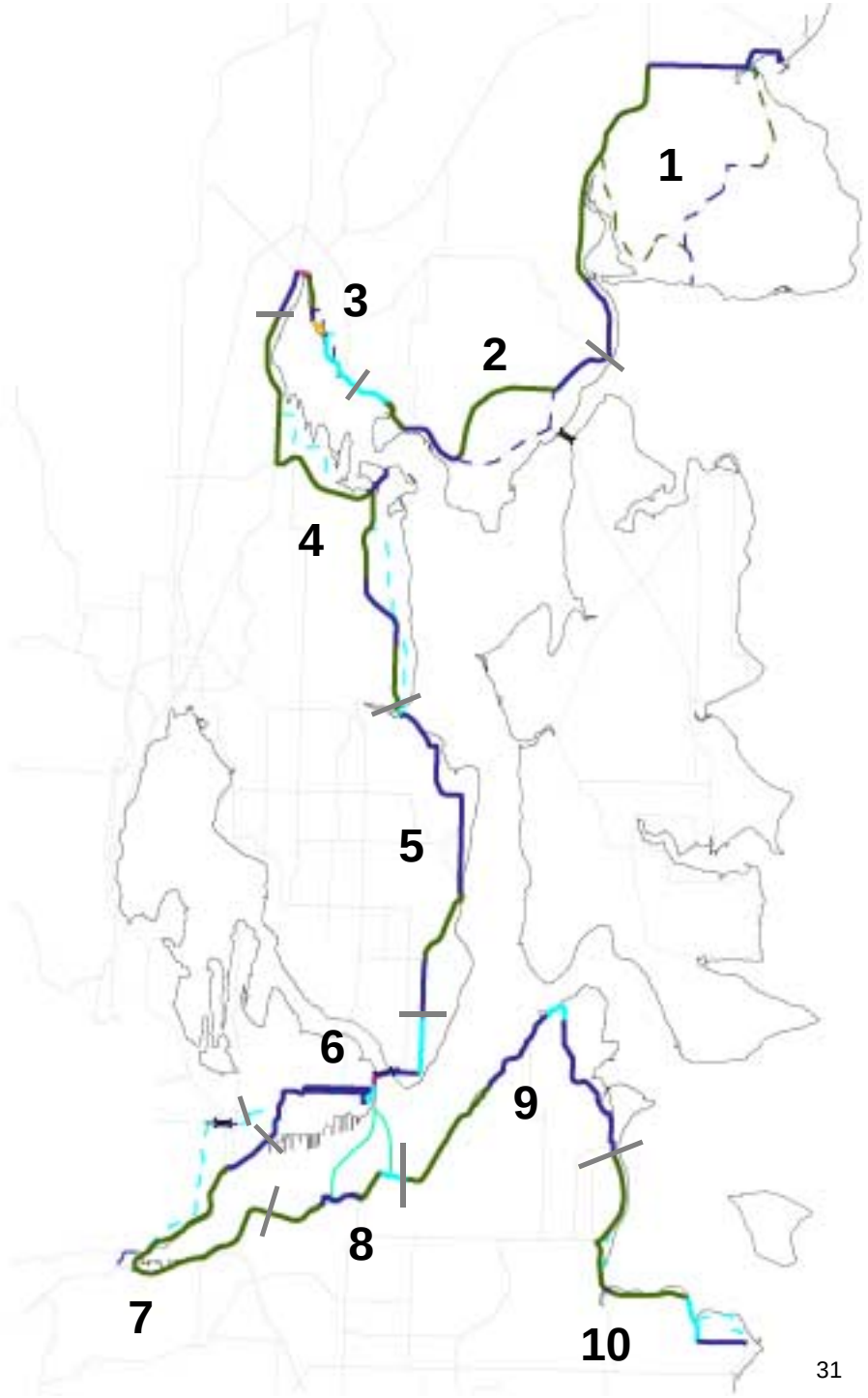
Key to the Maps

X-Sections	Primary Route	Secondary Route
Separated Path		
Bicycle Lanes		
Paved Shoulders		
Shared Roadway		
Shared Sidewalk		

Viewpoints/Rest Areas

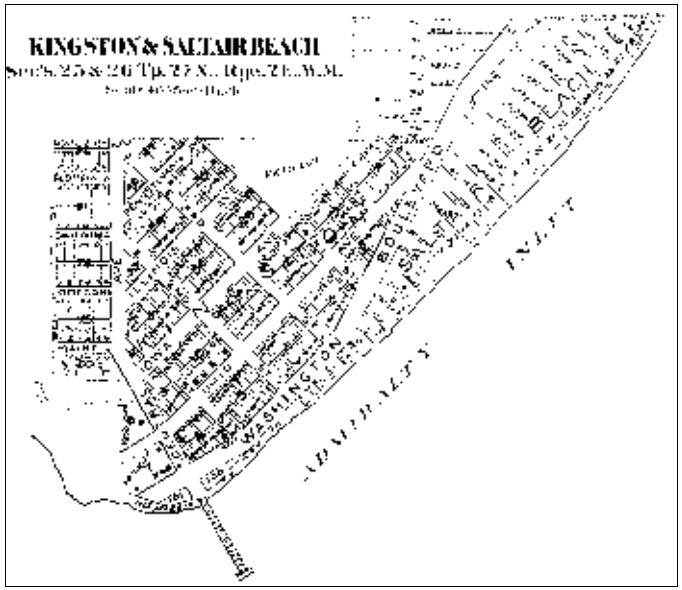
Historic Locations of Mosquito Fleet Docks

Connections

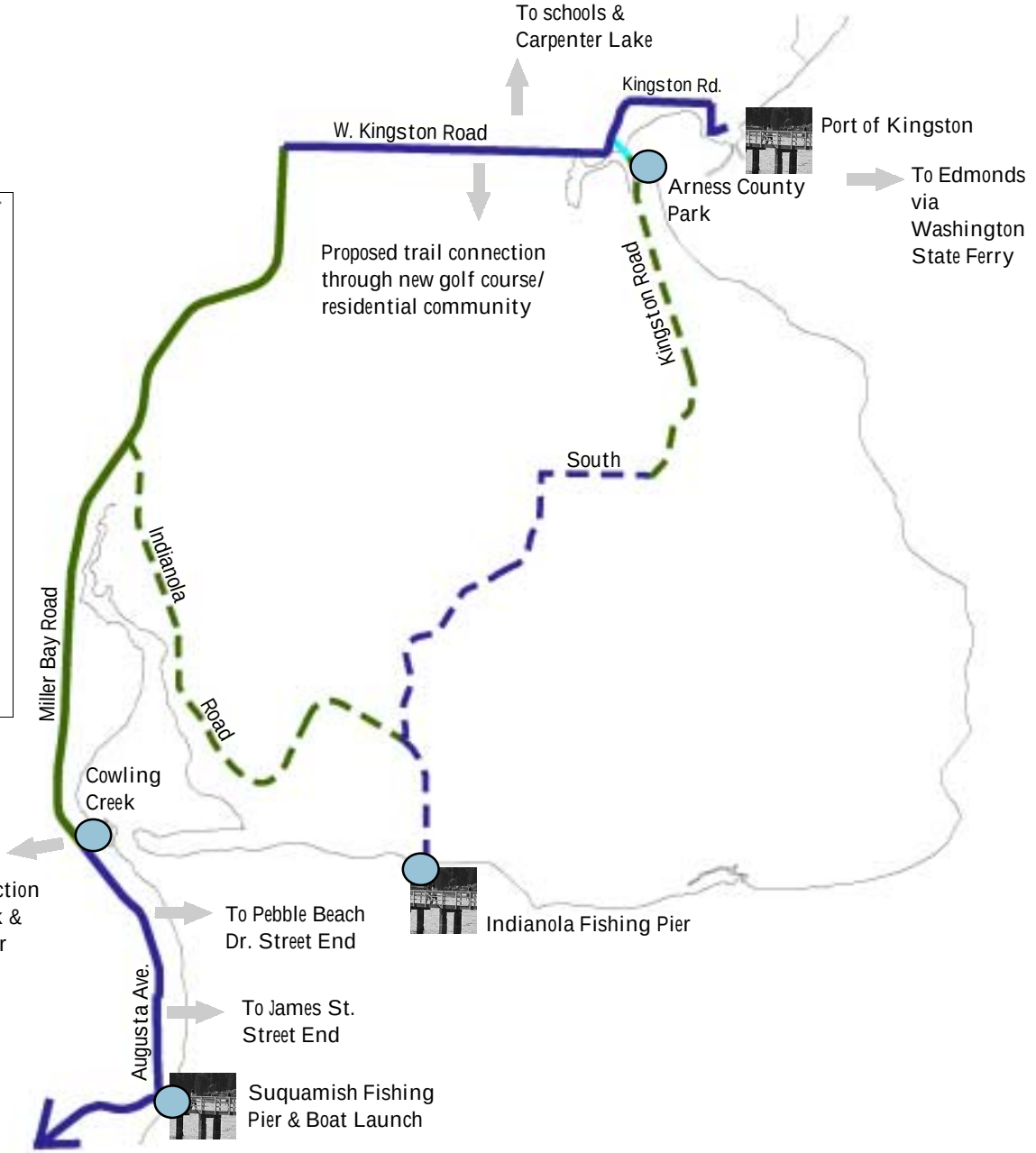


GIS data provided by Kitsap County Department of Community Development. Maps prepared by MacLeod Reckord, December 2000.

Project 1: Kingston to Suquamish



Map of Kingston and Saltair Beach.
From *Atlas of Kitsap County*, 1926.



This portion of the trail corridor passes through three communities, Kingston, Indianola and Suquamish, all of which had active docks in the Mosquito Fleet days. It is an important section of the corridor not only for the linkage of these communities and cultural sites, but also because it provides a connection to the Washington State Ferry Terminal, thereby providing a safe route for commuters and bicycle touring groups.

Primary Route The primary route begins at the Washington State ferry terminal and follows the ferry entrance/exit bicycle route via existing bicycle lanes and sidewalks along Washington Boulevard and Central Street. From there the route continues along Kingston Road and West Kingston Road. Kitsap County Public Works has already developed construction drawings for these roads that includes bicycle lanes and a sidewalk on the north side of the road. The county has applied for a grant to begin development of this project.

As the trail continues on Miller Bay Road there is the opportunity to develop a separated path for shared two-way use by cyclists and pedestrians. Near Cowling Creek the right-of-way narrows. Bicycle lanes are proposed from here to the Suquamish "slab area" along Miller Bay Road and Augusta Avenue.

Secondary Route In order to provide a connection to the waterfront community of Indianola and to the Indianola fishing pier, a secondary route is proposed along South Kingston Road and Indianola Road. Beginning at West Kingston Road, the route begins with a paved shoulder cross section across the Appletree Cove bridge. South of the bridge the right-of-way widens. From here to Arness Road, a separated pathway is proposed. The route continues to the Indianola Pier, connecting to Indianola Road with bicycle lanes along this whole stretch. From South Kingston Road to Miller Bay Road a separated pathway is proposed along Indianola Road. The combination of the primary and secondary route provides a loop trail of approximately 9 miles beginning and returning to West Kingston Road via South Kingston Road, Indianola Road and Miller Bay Road.

Connections There are a number of possibilities to connect to future off-road trail corridors and undeveloped street ends in this area. A trail corridor first proposed in the Kitsap County Greenways Plan connects the schools along West Kingston Road with Kingston Nike Park and Carpenter Lake, terminating at Barber Cutoff Road. South of West Kingston Road a proposed residential and golf course development is an opportunity to develop off-road trail connections to Indianola Road and Miller Bay Road. A third route identified as a wildlife corridor in the Kitsap County Greenways Plan follows Cowling Creek from the hatchery at Miller Bay Road to the Place of Bear, an undeveloped park property, then continues across Totten Road and SR 305 to the outlet of the creek. In the Suquamish Rural Village Subarea Plan this corridor is identified for protection through conservation easements and suggested as a possible trail link.

The Suquamish plan also identifies a number of public right of way road ends which are potential public access points to the shoreline. Both Pebble Beach Drive and James Street provide connections from Augusta Avenue to the waterfront and are potential sites for viewpoints or rest areas.

Cultural Resources Cultural resources along this portion of the corridor include former Mosquito Fleet Dock sites at Kingston, Indianola and Suquamish, the old Kingston Schoolhouse in Kingston Village Green Park, and the Cemetery off of W. Kingston Road.

Public Facilities Following are the public facilities that the Mosquito Fleet Trail will serve between Kingston and Suquamish.

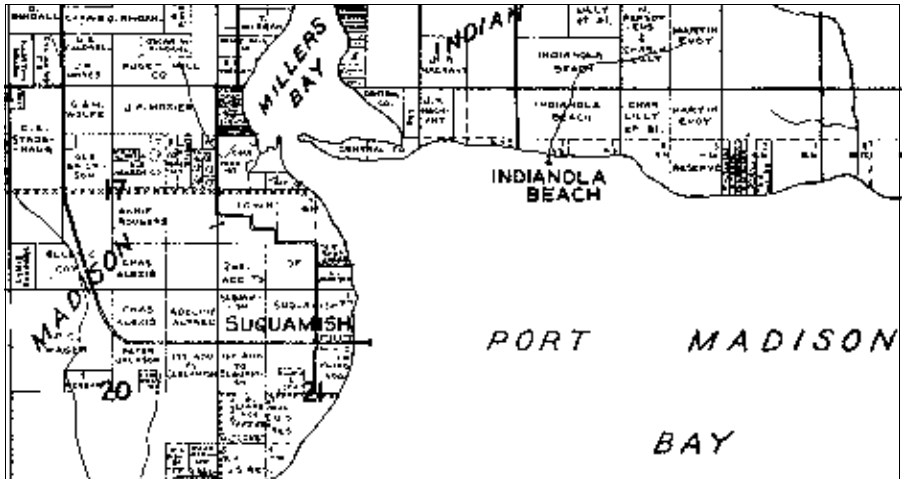
Recreation Facilities: Mike Wallace Park, Kingston Marina, Kingston Village Green, Carpenter Lake, Arness County Park, Indianola Dock, Greater Peninsula Conservancy Open Space, Grover's Creek Salmon Hatchery, Cowling Creek Salmon Hatchery, Suquamish Nature Preserve, Pathway Park, Pat Brandt Park, Suquamish Dock

Community Facilities: Port of Kingston, Richard Gordon Elementary School, Spectrum Alternative School, Kingston Junior High School, Suquamish Elementary School

Transit Facilities: Washington State Ferry Terminal, Park & Ride at Barber Cut-off Rd./W. Kingston Rd., Bayside Community Church, Park & Ride at Division St. and Geneva, Suquamish Community Congregational United Church

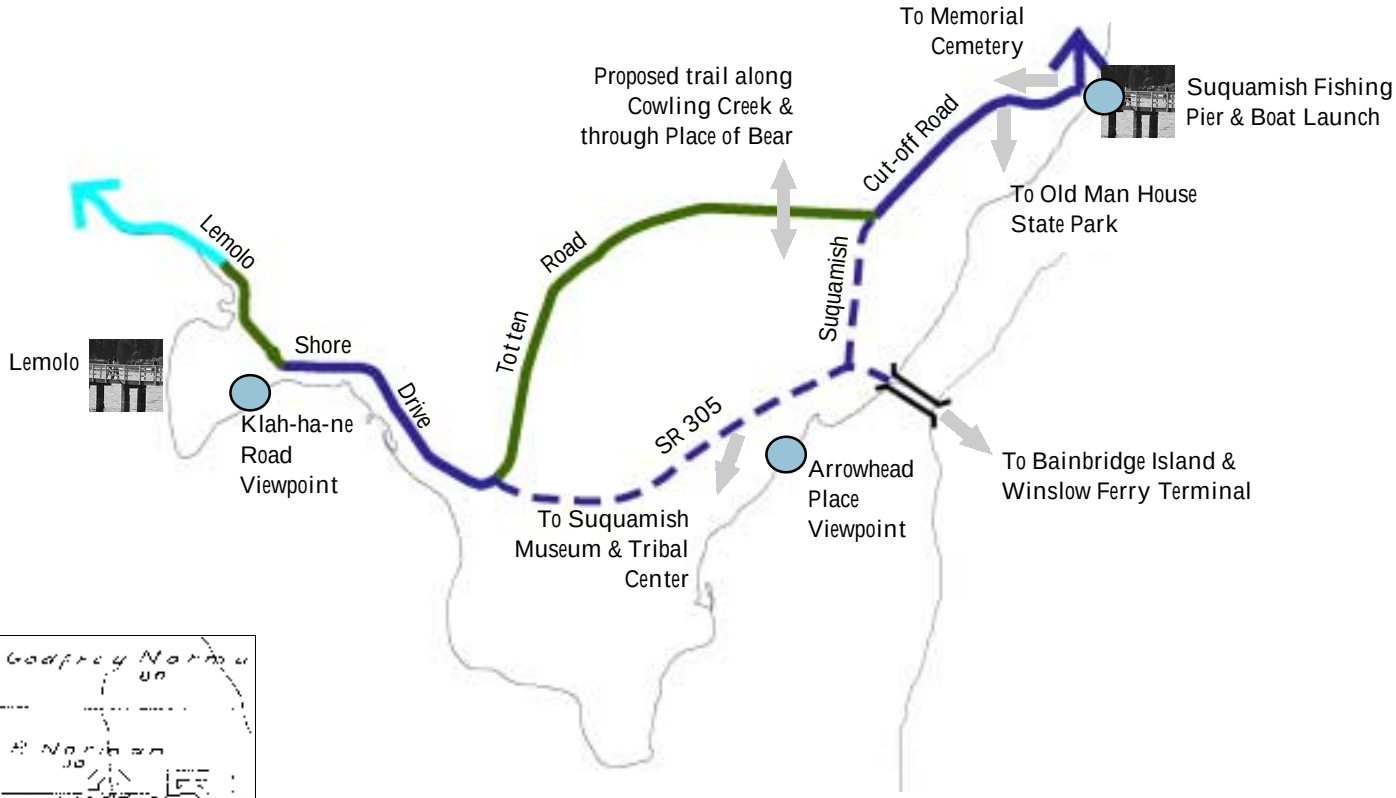
Viewpoints/Rest Areas A number of sites lend themselves to the development of viewpoints and rest areas. In Kingston, Arness County Park offers a public beach with expansive views of Appletree Cove. The Indianola and Suquamish Fishing Piers are appropriate sites for viewpoints both because of their connection to Mosquito Fleet history and because of the scenic value of the sites.

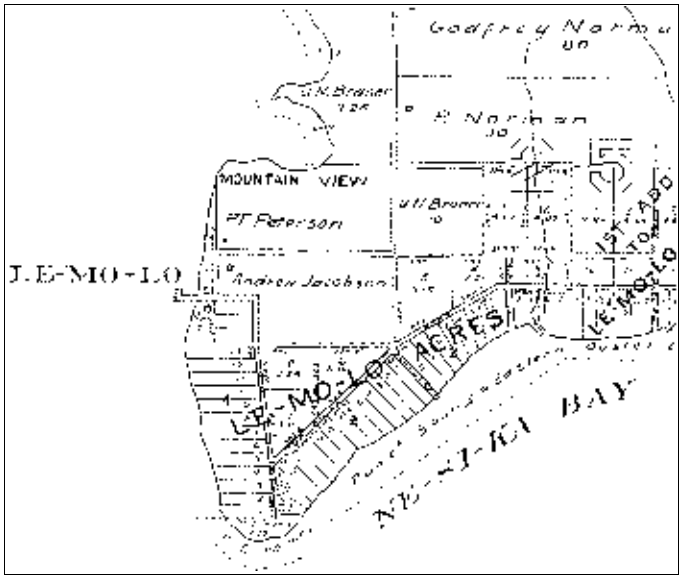
In the Suquamish Rural Village Subarea Plan rest areas and viewpoints are proposed along their bicycle routes. Two of these are also appropriate for this plan, the first is a rest area off of Miller Bay Road at the Cowling Creek Fish Hatchery and the second is at the Suquamish Fishing Pier (referred to as the "Slab Area" in the Suquamish Plan), as mentioned previously.



Map of the Indianola and Suquamish Areas.
Chas. F. Metsker, 1926.

Project 2: Suquamish to Poulsbo





Map of Lemolo Area and Dock.
From *Atlas of Kitsap County*, 1926.

This portion of the corridor connects Suquamish to Poulsbo and the Kitsap Peninsula to Bainbridge Island. Through the combination of a primary and secondary route, a connection to the Agate Pass Bridge and Bainbridge Island is possible, as well as a more scenic wooded alternative route.

Primary Route The primary route begins at the Suquamish slab area with a bicycle lane cross section along Suquamish Cut-off Road. At the intersection with Totten Road, the primary route turns onto Totten while a secondary route continues on Suquamish Cut-Off Road. A separated pathway for shared use is proposed all along Totten Road. This portion of the corridor is primarily wooded and much less trafficked in comparison to Suquamish Cut-Off Road and SR 305 and could provide a true off-road trail experience.

At the intersection with SR 305 the primary corridor crosses the highway and continues on Lemolo Shore Drive to Poulsbo. From SR 305 to Tukwila Road, bicycle lanes are proposed. Continuing from here to Johnson Way, the right-of-way widens and a separated pathway is proposed. In preliminary Mosquito Fleet studies, a separated pathway was proposed along Lemolo Shore Drive from Tukwila Road to 6th Avenue in Poulsbo. In Summer 2001, the City of Poulsbo is planning to construct a path along Lemolo Shore Drive and Fjord Drive from Hostmark Street in Poulsbo to Johnson Way. Their survey indicates that there is not enough right-of-way along this portion of the corridor to develop a separated shared use pathway for use by bicyclists and pedestrians. Instead the City is proceeding with the development of a paved shoulder pathway adjacent to the roadway on the water side of the road. While this will provide an adequate pathway for pedestrians, it leaves cyclists forced to share the roadway with traffic. A preferable solution would provide bicycle lanes or paved shoulders on both sides of the roadway.

Secondary Route The secondary route consists of bicycle lanes along Suquamish Cut-Off Road and SR 305 from Totten Road in Suquamish to the Agate Pass Bridge and from there to Lemolo Shore Drive. This route provides a commuter and bicycle tourist connection to Bainbridge Island. Much of SR 305 already has wide shoulders that could be converted to bicycle lanes with relative ease.

The main difficulty along this portion of the corridor is the Agate Pass Bridge. A combination of steep and narrow sidewalks, narrow travel lanes, and high speed traffic make it difficult to cross as a cyclist. Improvements are sorely needed to provide a safe connection between Bainbridge Island and the Kitsap Peninsula. In the Kitsap County Bicycle Facilities Plan, two potential solutions are suggested. The first solution removes the sidewalks and replaces them with paved shoulders for shared use by pedestrians and cyclists. The second solution hangs an additional structure off of the bridge for shared two-way usage. The feasibility of this option will require further engineering studies to determine the bridge's capacity to support such a structure.

Connections Suggested connections link the trail to cultural resources, recreation sites, and Bainbridge Island. Cultural resources to connect to include Memorial Cemetery, the site of Chief Sealth's grave, Old Man House State Park Heritage Area and the Suquamish Museum and Tribal Center. There is a possibility to connect to an undeveloped park site called the Place of Bear via an off-road trail. The Suquamish Rural Village Subarea Plan identifies Cowling Creek as a wildlife corridor and suggests that it could provide a possible trail route from the Hatchery at Cowling Creek through the Place of Bear, across Totten Road and SR 305 to its outlet.

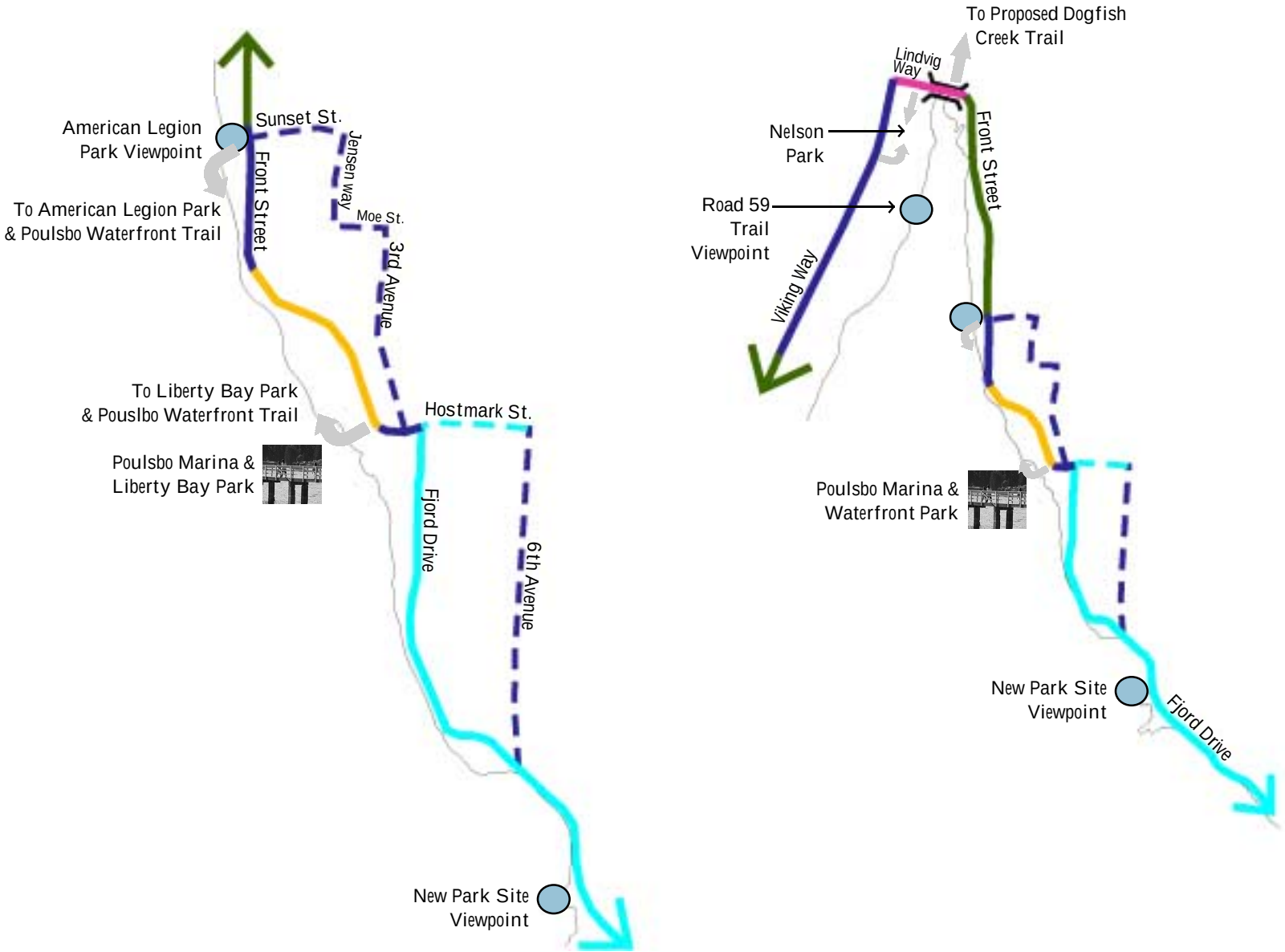
A connection to Bainbridge Island via the Agate Pass Bridge, as described previously, is an important link to sites and facilities in Bainbridge Island, as well as to the Washington State Ferry terminal in Winslow. Connections are also suggested to the Arrowhead Place and Klah-Ha-Ne Road street ends, suggested viewpoint sites described below.

Cultural Resources From Suquamish to Poulsbo there are a number of cultural resources of significance in Suquamish history, including Chief Sealth's Grave at Memorial Cemetery, Old Man House State Park Heritage Area, and the Suquamish Museum and Tribal Center. Other resources include the Agate Pass Bridge, dedicated on October 1949, the Lemolo Market, a Lemolo community landmark, and the site of the Lemolo Mosquito Fleet dock.

Public Facilities Public facilities between Suquamish and Poulsbo include three parks, Story Pole Park, Place of Bear (undeveloped), and Old Man House State Park, and a park & ride facility at the Agate Pass Bridge.

Viewpoints/Rest Areas Two undeveloped street ends are potential locations for use as viewpoints and rest areas. Arrowhead Place NE lies to the south of SR 305 and the Agate Pass Bridge and provides views of Agate Passage. Klah-Ha-Ne Road is on the Lemolo Peninsula and looks out over Ne-Si-Ka Bay. Old Man House State Park also provides excellent views and picnic facilities. A connection to this park will add to the richness of the Mosquito Fleet trail experience.

Project 3: Poulsbo



The City of Poulsbo offers interesting features and resources and a picturesque waterfront. Its narrow urban roadways pose difficulties in terms of the development of bicycle facilities. The combination of the primary and secondary corridor offers a safer upland route and a more scenic but constrained shoreline route.

Primary Route The City of Poulsbo is currently planning the construction of a paved shoulder pathway for pedestrian usage along Fjord Drive and Lemolo Shore Drive from Hostmark Street to Johnson Way. Along stretches of this corridor, the City is planning to shift the road centerline inland in order to accommodate a paved shoulder pathway on the waterfront side of the roadway. In some instances this will eliminate the existing shoulder on the inland side of the roadway, causing cyclists to share the roadway with traffic. A preferable solution would provide paved shoulders or bicycle lanes on both sides of the road. The secondary corridor provides an alternate route to Fjord Drive for trail users who are not comfortable sharing the roadway.

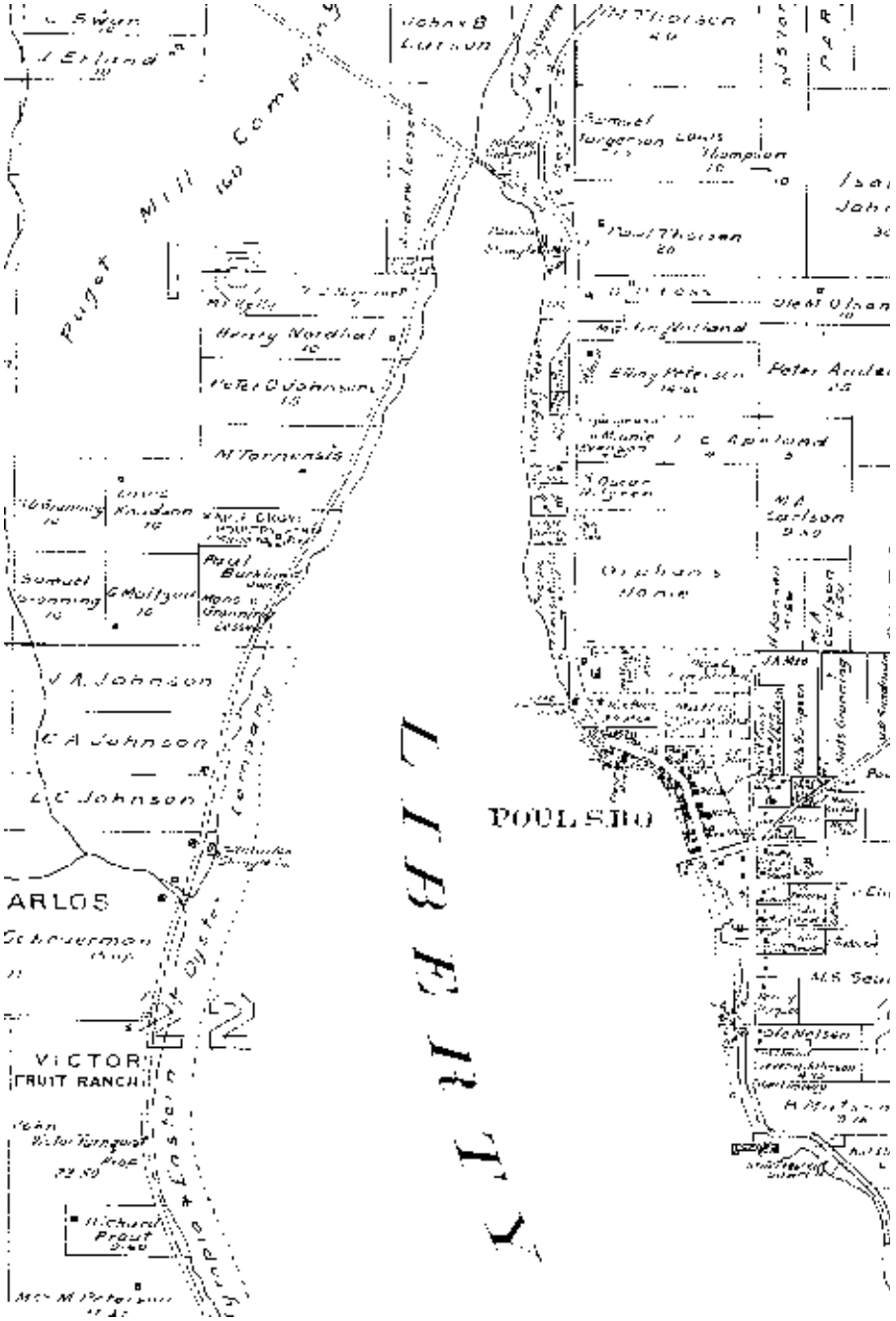
From Fjord Drive, the primary corridor continues on Hostmark Street with bicycle lanes and sidewalks. At Front Street, the available roadway narrows due to wide sidewalks and curb cuts for parallel parking on one side of the road. Cyclists will have to share the roadway with traffic from Hostmark Street to just north of King Olav Vie. Continuing along, the available right-of-way widens, accommodating bicycle lanes to Sunset Street and a separated path from Sunset Street to Lindvig Way. It is possible that the separated path can start farther south if park land on the west side of the roadway is utilized.

Lindvig Way is a five-lane roadway with sidewalks on either side crossing over Dogfish Creek. The existing structure can not accommodate improvements for bicycles. If in the future, the City rebuilds this roadway, bicycle lanes should be included in the cross section. At present it is recommended that bicyclists share the sidewalk with pedestrians. From Lindvig, the primary corridor continues along Viking Way where the City of Poulsbo has just completed improvements that include bicycle lanes and sidewalks.

Secondary Route Two secondary routes offer bicyclists alternatives to sharing the roadway with motorists. The first begins at Fjord Drive on 6th Avenue with a bicycle lane cross section to Hostmark Street. From 6th Avenue and Hostmark Street to the intersection of Fjord Drive and Hostmark Street paved shoulders are recommended. The second route connects Hostmark Street to Front Street via 3rd Avenue, Moe Street, Jensen Way, and Sunset Street. Bicycle lanes are proposed along this whole stretch. There are sidewalks on at least one side of the road along all the secondary routes in Poulsbo.

Connections Connections in Poulsbo offer trail users the opportunity to connect to off-road trail systems that are closer to the shoreline. The Poulsbo waterfront trail begins at the Poulsbo Waterfront Park and connects to American Legion Park via a combination of a paved pathway and boardwalk. In the West Poulsbo Master Plan, the City of Poulsbo proposed the development of a trail along Dogfish Creek. A connection from Lindvig Way to this trail will offer opportunities to watch spawning salmon. The City is also planning to develop a park at the Nelson Farm property at Lindvig and Viking Ways. Connections are suggested from Lindvig Way and from Viking Way via Edvard Street into the park. A connection to the Road 59 trail and viewpoint from Viking Way via Liberty Road is also suggested.

Map of Poulsbo and Liberty Bay.
From *Atlas of Kitsap County*, 1926.



Cultural Resources The City of Poulsbo has a number of cultural resources, including the Poulsbo Marine Science Center, the historic Lutheran Church, and Nelson Farm. In Mosquito Fleet days, ships docked at what is now the Poulsbo Marina. The historic center of the city with its pristinely maintained buildings is also a valuable resource.

Public Facilities In the Poulsbo area, the trail corridor connects to and links the following public facilities:

Recreation Facilities: Poulsbo Yacht Club, Lion's Municipal Park, Liberty Bay Park, Poulsbo Marina & Boat Launch, Poulsbo Waterfront Trail, Moe St. trail, American Legion Park, Nelson Park, Road 59 Trail

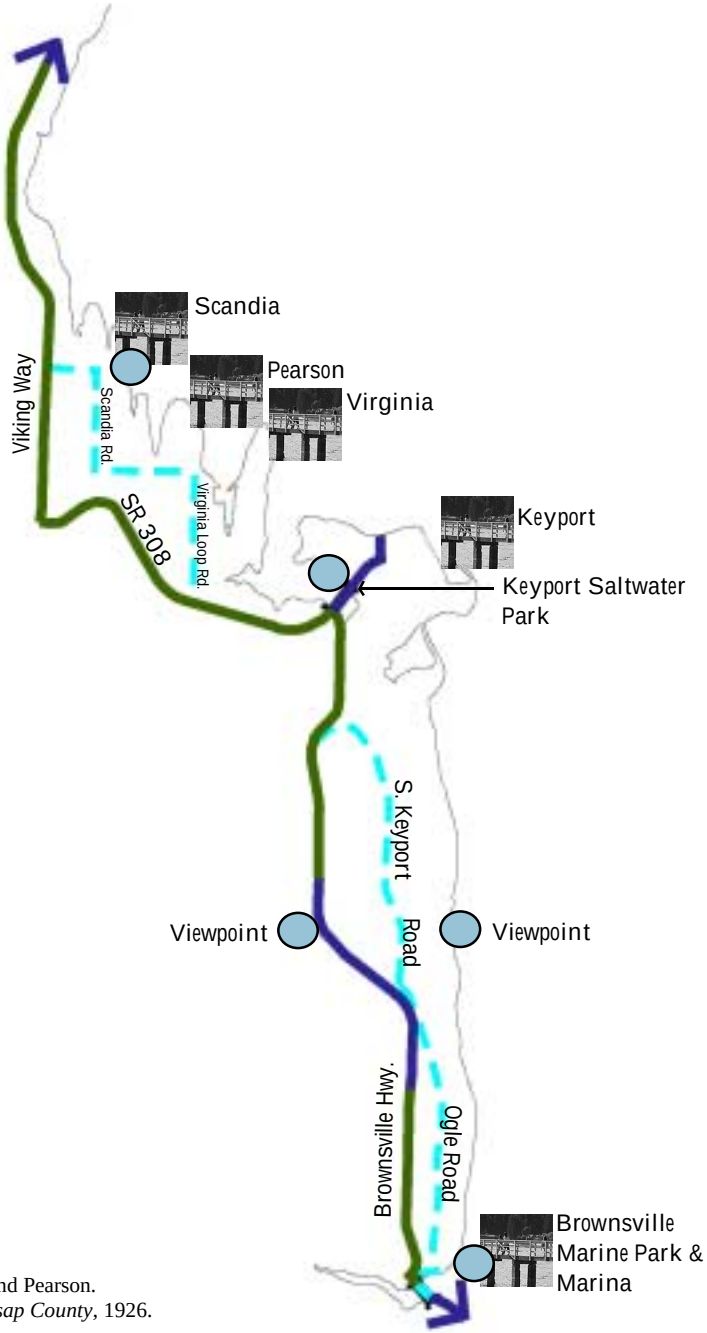
Community Facilities: Poulsbo Community Center, Poulsbo City Hall

Transit Facilities: Park & Ride at Hostmark St./8th Ave., Christ Memorial Church, Park & Ride at Viking Way/Lindvig Way, Poulsbo Junction

Viewpoints/Rest Areas There are two existing viewpoints along this portion of the trail corridor. One is off of Front Street at American Legion Park and the other is at the Road 59 trail terminus at the end of Liberty Road. An undeveloped park property along Fjord Drive could serve as an additional rest area or viewpoint in the future.

Project 4: Poulsbo to Brownsville

Map of Scandia and Pearson.
From *Atlas of Kitsap County*, 1926.



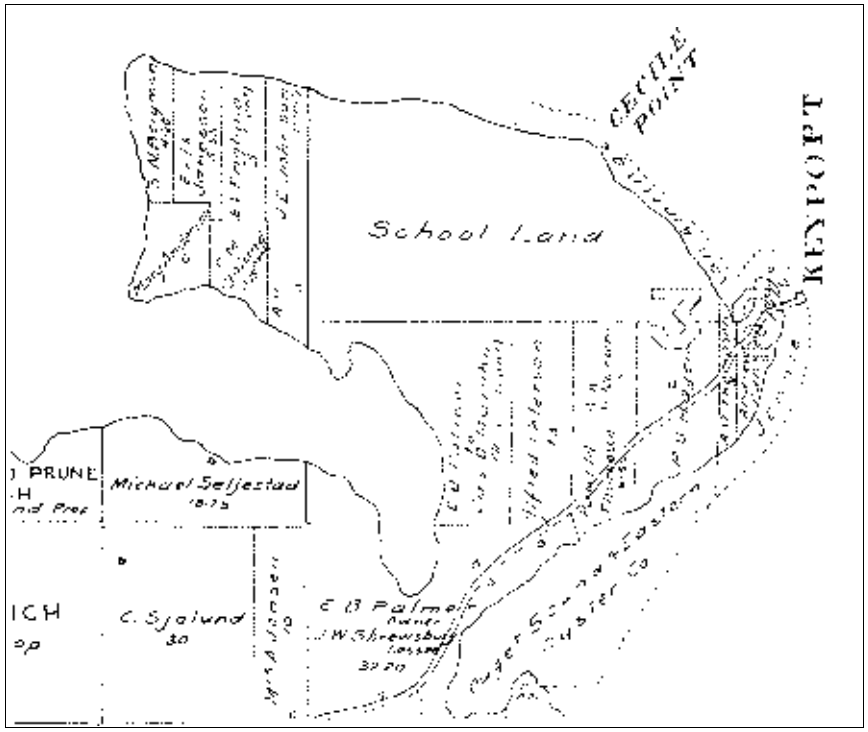
From Poulsbo to Brownsville, the corridor passes through scenic rural and forested neighborhoods. In Mosquito Fleet times, the sinuous shoreline in the Scandia area lent itself to the development of numerous small docks. Though most of these have been replaced with private residences, there are other opportunities to connect to the shoreline and enjoy the scenic bay views.

Primary Route The primary corridor begins at the Poulsbo city limits on Viking Way with a separated path cross section, continuing on SR 308 and Washington Avenue to the Keyport Marina. A separated path is also recommended for SR 308 from Viking Way to Brownsville Highway. Across Dogfish Bay and through the Keyport Peninsula, the cross section changes to bicycle lanes.

The corridor continues from Keyport to Brownsville along the Brownsville Highway. Here the right-of-way width can accommodate a separated path section for most of the way. Along the center section bicycle lanes are suggested. Due to the wide right-of-way widths of Viking Way, SR 308 and Brownsville Highway, this is one of the longest stretches along the corridor where a continuous separated path cross section is possible.

Secondary Route The secondary corridor travels through small farms and rural residential neighborhoods. The first loop links Viking Way to SR 308 via Scandia Road and Virginia Loop Road. The second forms a loop with Brownsville Highway, following South Keyport Road and Ogle Road. As these are narrow rural roads, a paved shoulder cross section is recommended for all the secondary routes.

Connections Suggested connections link the secondary corridor to two potential viewpoint sites, both of which are undeveloped street ends. The first is in the



Map of the Keyport area.
From *Atlas of Kitsap County*, 1926.

Scandia area at the end of Scandia Road and the other is right-of-way off of South Keyport Road, just south of Lonetree Court.

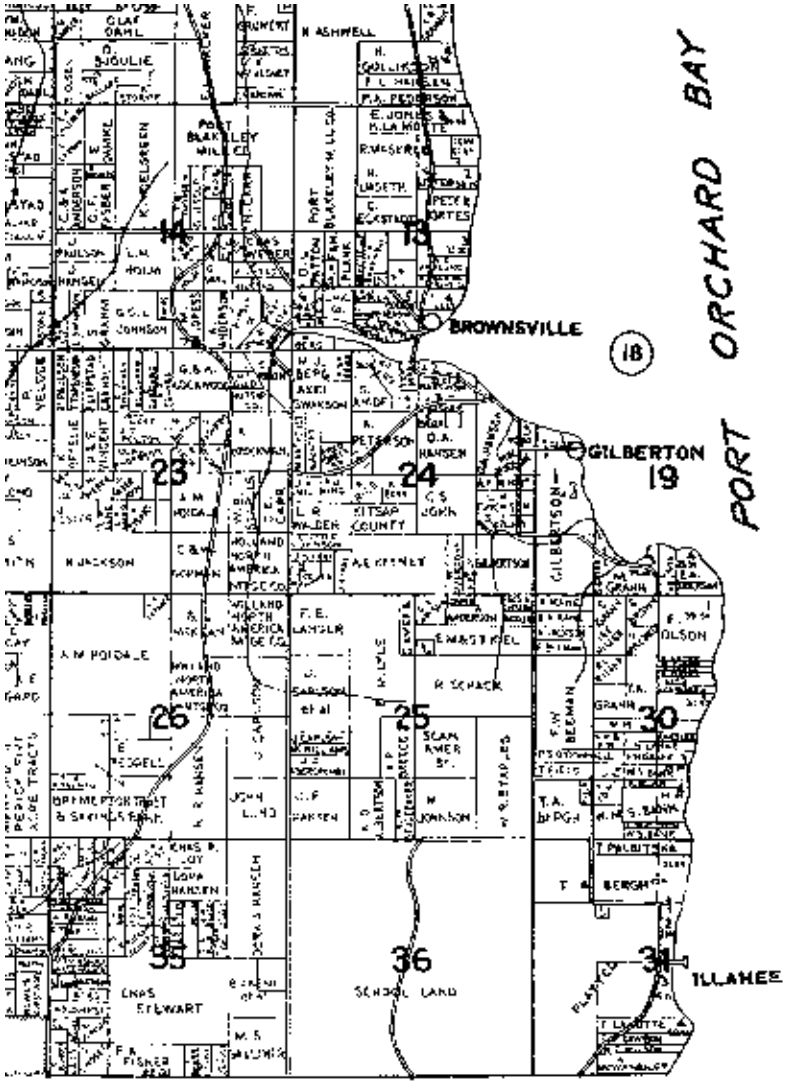
Cultural Resources Cultural resources include five Mosquito Fleet dock sites and the Naval Undersea Museum in Keyport. Among the Mosquito Fleet sites, only Brownsville still has public access.

Public Facilities Public facilities between Poulsbo and Brownsville include the Keyport Saltwater Park, the Keyport and Brownsville Marinas, the Brownsville Marine Park, Hilder Pearson Elementary School and a Park & Ride at Viking Way/ SR 308.

Viewpoints/Rest Areas Five sites are suggested for viewpoints and rest areas, two of which are existing facilities. The first of these is the Keyport Saltwater Park, situated on Dogfish Bay adjacent to SR 308, which would be a good location for a Mosquito Fleet rest area. The second is the Brownsville Marine Park, which has existing picnic and restroom facilities and would be an appropriate location for a Mosquito Fleet interpretive sign and orientation panel.

Two undeveloped street ends and an open space property along Brownsville Highway would add needed viewpoints along segments of the corridor that are lacking facilities. The first street end is off of Viking Way at the end of Scandia Road and the second is off of South Keyport Road just south of Lonetree Court.

Project 5: Brownsville to Bremerton



Map of Brownsville, Gilberton and Illahee.
Chas. F. Metsker, 1926.

From Brownsville to Bremerton the trail corridor travels along scenic roads close to the shoreline, offering open and screened views of Port Orchard Bay.

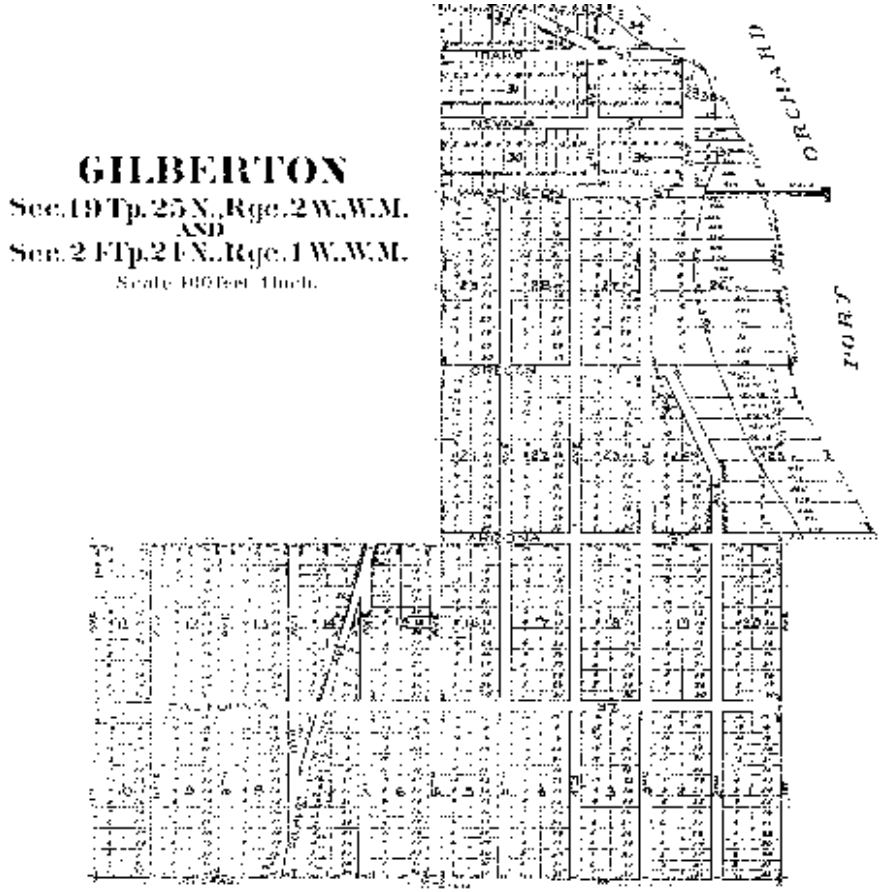
Primary Route Beginning in Brownsville, the primary route follows Illahee Road, crossing over a short bridge just south of Brownsville and then continuing through Gilberton and Illahee to Trenton Avenue. The bridge has existing paved shoulders. If the bridge is rebuilt at some point in the future, bicycle lanes and sidewalks are recommended. Bicycle lanes are recommended from the bridge to slightly south of the Illahee Dock. From there to Sylvan Way, the right-of-way widens allowing room for a separated path. The route continues to Bremerton on Trenton Avenue with bicycle lanes.

Connections Suggested connections link the corridor to the Gilberton Mosquito Fleet dock site via Utah Street and to Illahee State Park via Sylvan Road. A recommended bicycle route in the *Kitsap County Bicycle Facilities Plan* (December 2000) connects Illahee Road to the Rollin Hills Golf Course via Oceanview Boulevard and McWilliams Road.

Cultural Resources Cultural resources include Mosquito Fleet dock sites at Gilberton and Illahee.

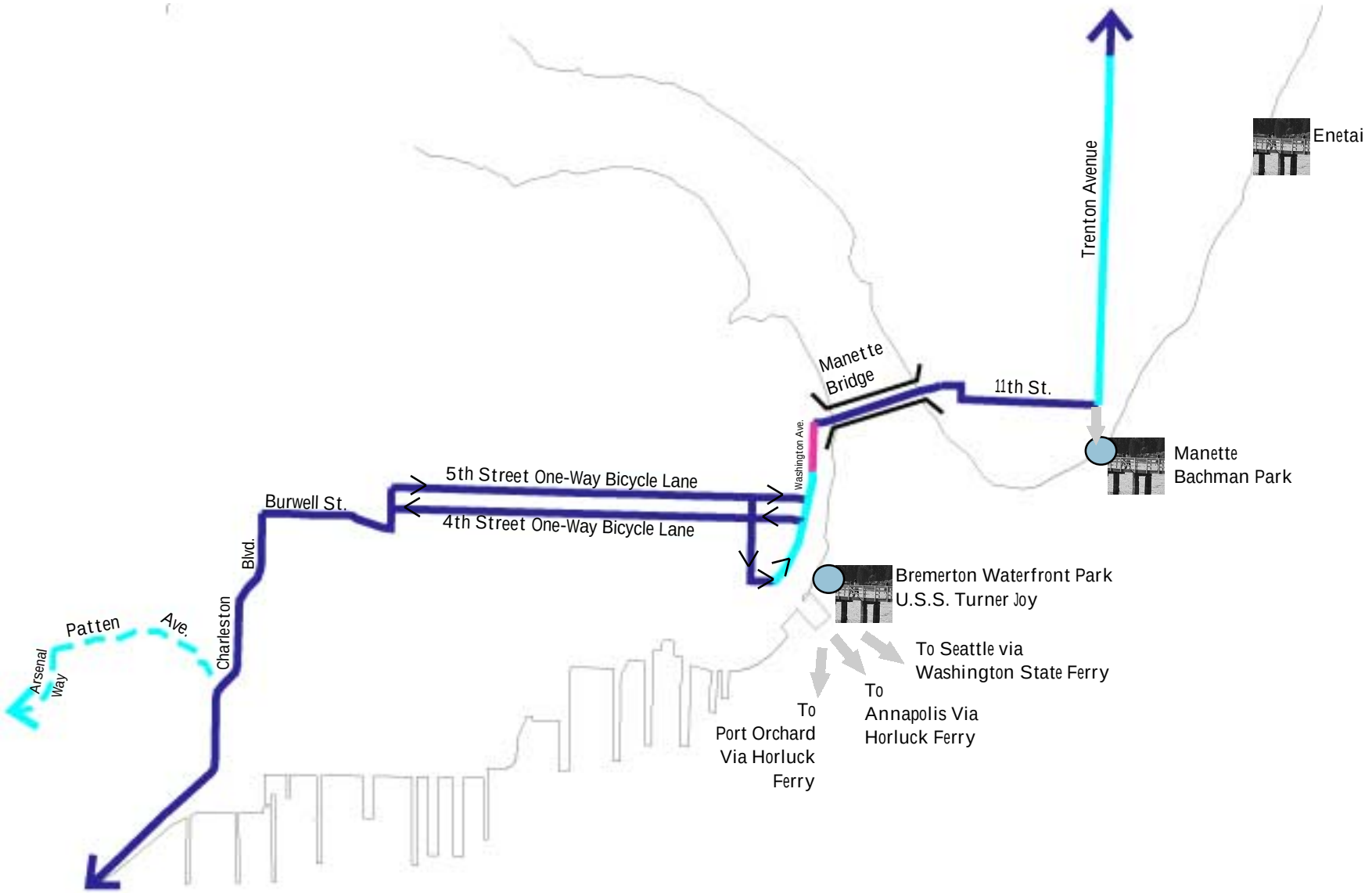
Public Facilities Public facilities along Illahee Road include the Brownsville Elementary School, the Illahee Dock and Illahee State Park. Facilities within the vicinity of the corridor include the Rollin Hills Golf Course and Esquire Hills Elementary School.

Viewpoints Two viewpoints are suggested along Illahee Road. Both are Mosquito Fleet dock sites and potential sites for interpretive signage or historic markers. The first is an undeveloped street end off of Utah Street. The remnants of the Gilberton dock can still be seen jutting out of the water. The second is the Illahee Dock, which offers facilities for fishing and diving. Illahee State Park can also serve as a rest area for trail users. It offers numerous facilities, including a campground, picnic area and boat launch.



Map of Gilberton.
From *Atlas of Kitsap County*, 1926.

Project 6: Bremerton



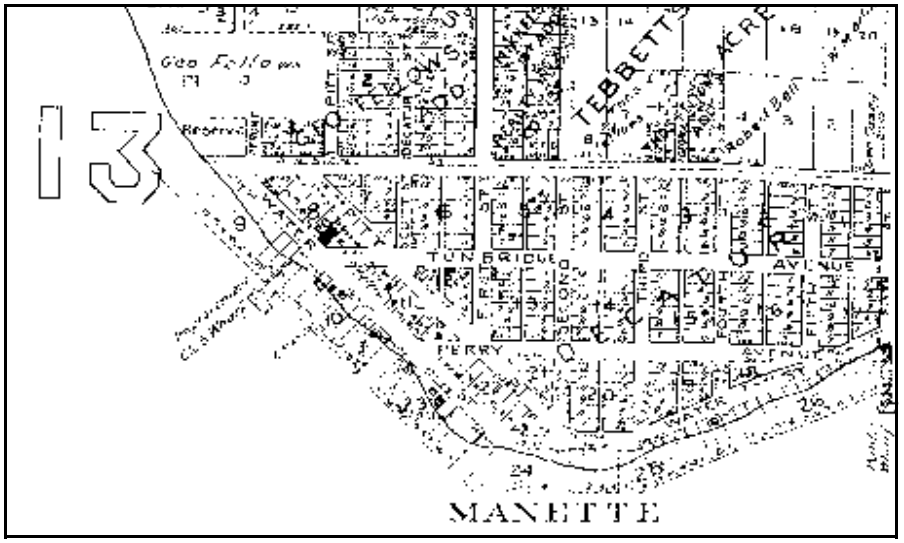
Map of the Bremerton Wharf area.
From *Atlas of Kitsap County*, 1926.

The City of Bremerton is a major access point to the Mosquito Fleet trail corridor for trail users accessing the corridor via ferry and for city residents and workers at the Naval Shipyard and other Bremerton businesses. Though there are sidewalks on most city streets, Bremerton is sorely lacking in terms of adequate facilities for bicyclists and could benefit greatly from this trail.

Primary Route Bremerton's narrow and highly traveled urban roads pose challenges for the development of a safe trail corridor. Throughout this stretch of the primary corridor, pedestrians are accommodated on existing sidewalks. Beginning on Trenton Avenue, paved shoulders are proposed from Sylvan Way to 11th Street. From here to the Manette Bridge, bicycle lanes are recommended on 11th Street, Pitt Street, and Harkins Street. The existing Manette Bridge has a narrow sidewalk on one side of the bridge and no facilities for bicyclists. The Washington State Department of Transportation (WSDOT) is planning the construction of a new bridge that will include sidewalks and bicycle lanes. In the meantime, bicyclists are advised to walk their bicycles on the sidewalk.

After crossing the Port Washington Narrows, the trail picks up on Washington Avenue. From the bridge to 6th Street, the existing roadway already maximizes the available right-of-way. Due to a change of grade in the middle of the road, it would be difficult to realign the roadway for bicycle facilities. Along this stretch, bicyclists should share the sidewalk with pedestrians. From 6th Street to 1st Street, paved shoulders are recommended.

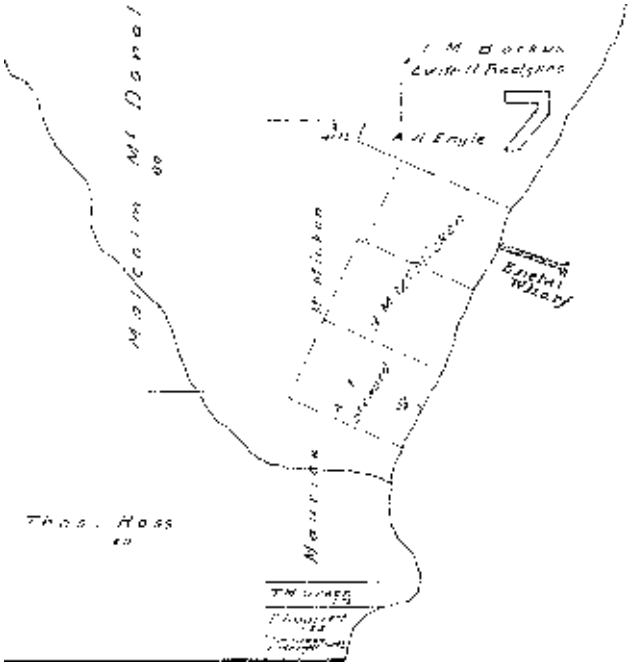
In order to coordinate with the ferry entrance and exit routes and with existing one-way streets, a system of one-way bicycle lanes located on the right hand side of the roadway are proposed. The westbound bicycle lane follows 4th Street from Washington Avenue to Naval Avenue and the eastbound lane follows 5th Street between



Map of the Manette Area.
From *Atlas of Kitsap County*, 1926.

the same cross streets. The one-way bicycle lane entrance onto the ferry is via Pacific Avenue and 1st Street. The one-way bicycle exit is via Washington Avenue.

From 5th Street/4th Street, the route continues on Naval Avenue, Burwell Street and Charleston Boulevard. Bicycle lanes are recommended on all these roads. On Naval Avenue and Burwell Streets, adding bicycle lanes will require removing one lane of traffic. Naval Avenue is currently a five lane roadway and Burwell street has four travel lanes. The City of Bremerton recently restructured the eastern por-



Map of the Enetai Wharf area.
From *Atlas of Kitsap County*, 1926.

tion of Burwell to remove one travel lane and add bulbed out sidewalks, street trees and parallel parking. It is recommended that on the western part of Burwell, bicycle lanes be added instead of bulb outs and parallel parking.

The City is currently constructing Charleston Boulevard, which is replacing houses and existing roads to create a tree-lined gateway into Bremerton. The City's original design included bicycle lanes. Recent discussion has considered removing the bicycle lanes in lieu of parking. This would create a huge gap in the trail corridor for bicyclists and is strongly discouraged.

Secondary Route An upland route is proposed as a secondary corridor between Bremerton and Gorst. In the event that a separated path is not feasible along State Routes 3 and 304, an upland route would be a safer alternative to using the shoulders of these highways. This route begins at Charleston Boulevard at the Patten Avenue exit and follows Patten and Arsenal Way with a paved shoulder cross section.

Connections A connection is suggested to Bachman Park, a small neighborhood park and former Mosquito Fleet dock site, via Trenton Avenue from 11th Street. As an alternative to riding around Gorst, trail users can opt to take the Horluck Ferry from the Bremerton ferry terminal to Port Orchard and Annapolis.

Cultural Resources There are a number of cultural resources in Bremerton, including the Enetai, Manette and Bremerton Mosquito Fleet dock sites, the Manette Bridge, dedicated on June 21, 1930, the U.S.S. Turner Joy, the Kitsap County Historical Museum, and the Missouri Gate.

Public Facilities Public facilities in the City of Bremerton adjacent to the trail corridor include:

Recreation Facilities: Bachman Park, Bremerton Waterfront Park, Kiwanis Field Park

Community Facilities: Olympic View Elementary School, Mountain View Middle School, Bremerton Library, Bremerton City Hall, Community Center

Transit Facilities: Washington State Ferry Terminal, Westside Park & Ride at 6th and Montgomery, Kitsap Transit Terminal

Viewpoints Bachman Park in the Manette neighborhood and the Bremerton Waterfront Park are suggested as Mosquito Fleet rest areas. Both are Mosquito Fleet dock sites and appropriate locations for interpretive signs.

Project 7: Bremerton to Port Orchard

Map of the Charleston and Navy Yard City docks.
From *Atlas of Kitsap County*, 1926.

The Sinclair Inlet is one of the most scenic stretches of the corridor. It is also the least safe part of the corridor for pedestrians and bicyclists. Cooperation between Kitsap County Public Works, the City of Bremerton, the Arizona and California Pacific Railroad, the U.S. Navy and the Washington State Department of Transportation (WSDOT) is needed to provide a safe and enjoyable trail experience between Bremerton and Port Orchard.

Primary Route Beginning near the Missouri Gate, the primary corridor skirts the shoreline of Sinclair Inlet between Bremerton and Gorst, following state routes for most of the way. State Route 304 is part of the City of Bremerton's gateway project. Bicycle lanes and sidewalks were included as part of the planned improvements to the roadway. The city has been considering replacing the bicycle lanes with parallel parking. This is not recommended as it would cause a major gap in the trail corridor and force bicyclists to either share the roadway with traffic or share the sidewalk with pedestrians.

A separated path cross section is recommended along State Routes 3 and 16 and along Bay Street from State Route 304 to Port Orchard. The Arizona and California Pacific Railroad parallels State Route 3 for most of its length, then turns inland and crosses over the highway at the intersection with Sherman Heights Road. In January 1998, the City of Bremerton prepared the *SR 3/304 Transportation Improvement Project Pedestrian Access Study* to look at alternatives for the development of pedestrian facilities from Gorst to the Missouri Gate. The study cited a number of constraints, including separation requirements from the edge of the railroad (15 feet) and from the edge of the highway (concrete barrier required if adjacent to the road edge, a 6 feet high fence if separated). In addition, WSDOT would like to widen State Route 3 from four to eight travel lanes, and add a twenty-two feet wide median and ten feet outside shoulders. The study concluded that bicyclists should be accommodated in the roadway shoulders and a five feet wide pathway should be constructed for pedestrian use only between the railroad and the highway.

This plan recommends that WSDOT consider narrowing the median width (or add fewer travel lanes) and consider shifting the centerline of the roadway when improvements are made to the highway to accommodate a two-way multi-use trail between the edge of roadway and the railroad. In the future, should the railroad cease operations on this line, this corridor would be a great opportunity for a rail to trail conversion project.

Along State Routes 16 and Bay Street, the development of a separated path is met with fewer constraints. WSDOT is also interested in increasing the number of travel lanes along State Route 16. When this is studied in more detail, it is advised that the design of a separated path be included in WSDOT's studies. Developing a separated path may require shifting the road centerline and erosion control measures along State Route 16's steep slopes.

Secondary Route The secondary corridor from Bremerton to Gorst is recommended as an alternative trail route in the event that safe bicycle and pedestrian facilities are not developed along State Routes 304 and 3. This route picks up at the intersection of Arsenal Way and Loxie Eagans Boulevard and follows Loxie Eagans on a bridge over State Route 3 to Werner Road. Paved shoulders are recommended for the east part of Loxie Eagans and bicycle lanes are recommended across the bridge and on Werner Road. The route continues with paved shoulders along Union Avenue, 3rd Avenue, Kent Avenue and Sherman Heights Road, connecting to the primary corridor at State Route 3.

As an alternative route around Gorst, bicycle lanes are proposed on Old Belfair Valley Road, Sam Christopherson Avenue, and Frontage Road.

Connections Over the past year preliminary planning has begun for the development of an off-road trail through the Gorst Area that would utilize public open space land at the Sinclair Inlet Wildlife Viewing Area and trail easements offered by local businesses. The trail would be located on the waterside of the existing buildings, including a car dealership, church and garden center. Due to the sensitivity of these tidelands, construction of a boardwalk or soft surface trail for pedestrians only is recommended.

One of the properties the trail will pass through has been identified as a brownfields site. Kitsap County has recently received a Brownfields Assessment Demonstration Pilot Grant that will provide funds for site assessment, remediation planning, and community involvement. The property owner has agreed to fund the cleanup of the property, the development of recreational facilities, and the restoration of shoreline habitat.

Cultural Resources There are two Mosquito Fleet dock sites along State Route 304, Charleston and Navy Yard City. The former site is now in railroad right-of-way and the latter is within the Naval Shipyard.

Public Facilities The following public facilities are adjacent to the trail corridor between Bremerton and Port Orchard:

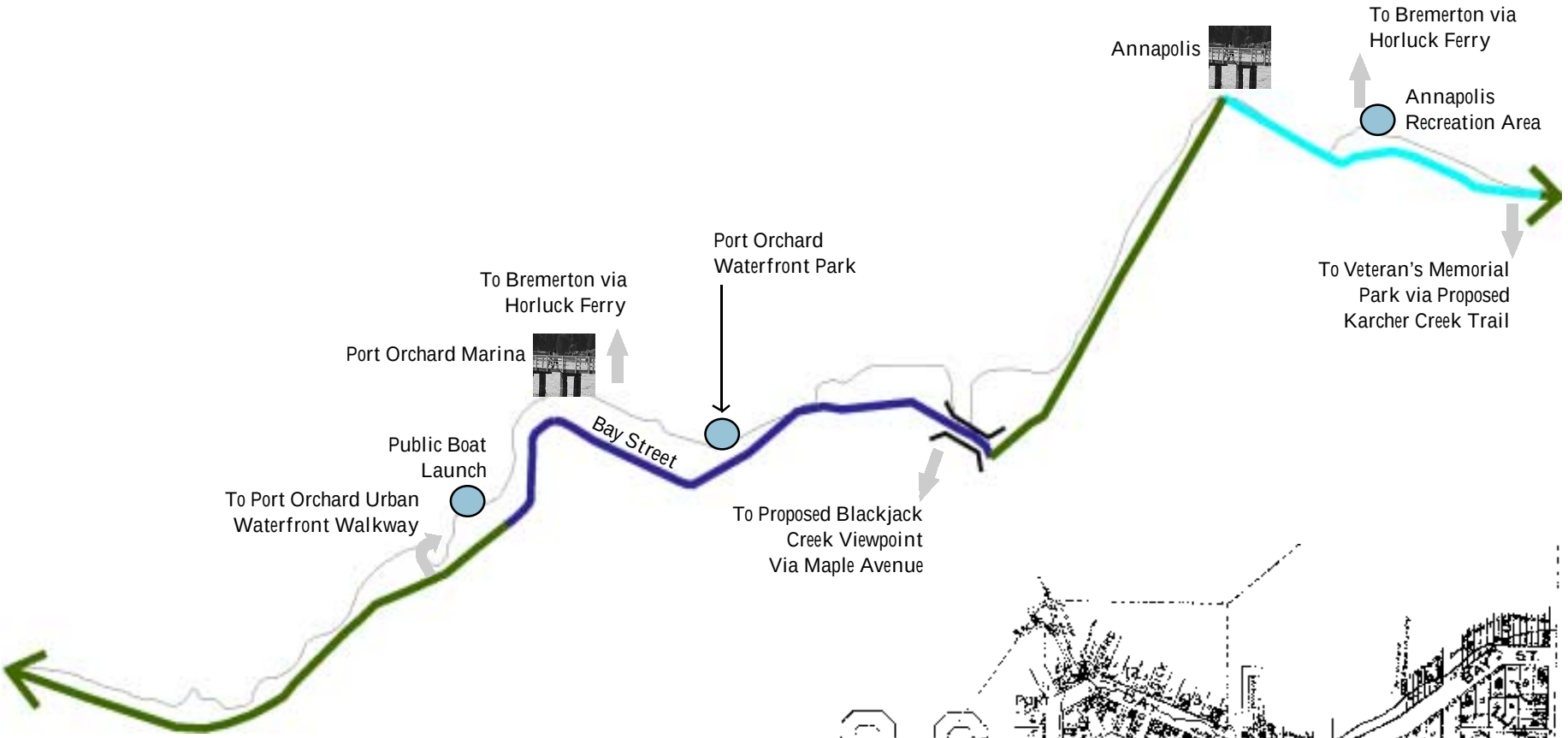
Recreation Facilities: Pixie Park, Prendergast Regional Park, West Side Viewpoint, Sinclair Inlet Wildlife Viewing Area, Ross Point Tidelands, Kitsap Marina

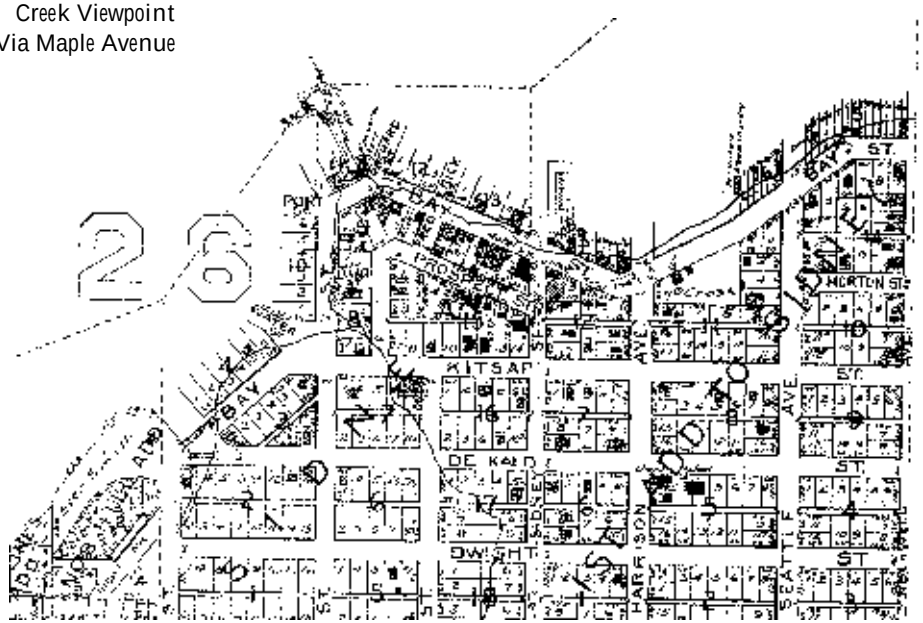
Community Facilities: West Hills Elementary School

Transit Facilities: Full Gospel Assembly church Park & Ride at Gorst/Belfair Valley Road

Viewpoints There are spectacular views all around the Sinclair Inlet of wildlife, mountains, ships and water. Two existing viewpoints are adjacent to the corridor. The West Side Viewpoint, located just above State Route 304 in the City of Bremerton, provides facilities for picnicking. The Sinclair Inlet Wildlife Viewing Area along State Route 16 is a scenic location from which to observe native birds feeding in the tidelands. A third site, an undeveloped roadside beach area at Ross Point, is recommended for the development of an additional Mosquito Fleet rest area.

Project 8: Port Orchard

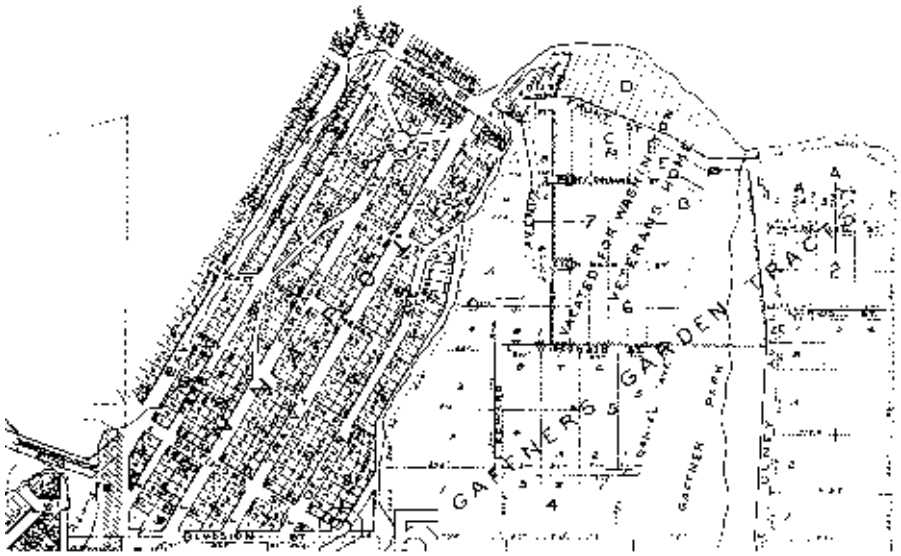




Right and Opposite:
Maps of Sidney (now Port Orchard) and Annapolis.
From *Atlas of Kitsap County*, 1926..

Port Orchard offers numerous opportunities to connect to scenic sites and off-road trails. Suggested facilities reflect proposed trails and viewpoints included in Port Orchard's *Comprehensive Parks Plan* (1994).

Primary Route The primary corridor follows Bay Street through the City of Port Orchard, hugging the shoreline for much of the way. From Dogwood Hill Road to Kitsap Street, a separated path cross section is proposed on the waterside of the roadway. From Kitsap Street to Bethel Avenue, bicycle lanes are recommended. Through the downtown portion of Port Orchard (from Orchard Avenue to Harrison Avenue) the provision of bicycle lanes will require eliminating either the center turn lane or parallel parking from one side of the street.



From Sidney Avenue to Mitchell Point, a separated path cross section is recommended on the waterside of the road. The corridor narrows at Mitchell Point. Continuing from here to Olney Avenue, paved shoulders are recommended. Through coordination with Kitsap County Parks and Recreation, a separated path cross section could be developed from Retsil Road to Olney Avenue, by utilizing property at the Annapolis Recreation Area.

Connections There are a number of opportunities in Port Orchard to connect to planned off-road trails and viewpoints. The Port Orchard Urban Waterfront Walkway was first planned in 1985 and has since been adopted as part of Port Orchard's *Comprehensive Parks* Plan (1994). It proposes a 6 feet wide multi-use trail from the DeKalb Street Pier to the Retsil Veteran's Home. This is a substandard width for a shared use path. A re-evaluation of this walkway that integrates recommendations made in this plan is advised.

The *Blackjack Creek Comprehensive Management Plan* (1987) recommended development of a viewpoint along Blackjack Creek, a connection to this via Maple Avenue is suggested.

Recently there has been interest expressed by South Kitsap residents to develop a trail along Karcher Creek. Should this be pursued, it would provide a link between South Kitsap Community High School, Veteran's Memorial Park, the Annapolis Recreation Area and the Mosquito Fleet trail.

As an alternative to traveling around Gorst, the Horluck Ferry provides connections from the Annapolis Recreation Area and the Port Orchard Marina to downtown Bremerton. This is also an opportunity for trail users to travel on a real Mosquito Fleet ship, the Carlisle II, built in the San Juan Islands around 1917, and part of the Horluck Fleet since 1934.

Cultural Resources Cultural resources in Port Orchard include two museums, the Sidney Museum and Log Cabin Museum, both located on Sidney Avenue, a short distance from the trail corridor. The Sidney Museum, has exhibits on Kitsap County's history including a permanent display of Mosquito Fleet routes. The Log Cabin Museum also has exhibits related to Kitsap history, displayed in an authentic log cabin. There are also two Mosquito Fleet dock sites, Port Orchard (now the Port Orchard Marina) and Annapolis, located at Mitchell Point.

Public Facilities Public Facilities in the City of Port Orchard include the following:

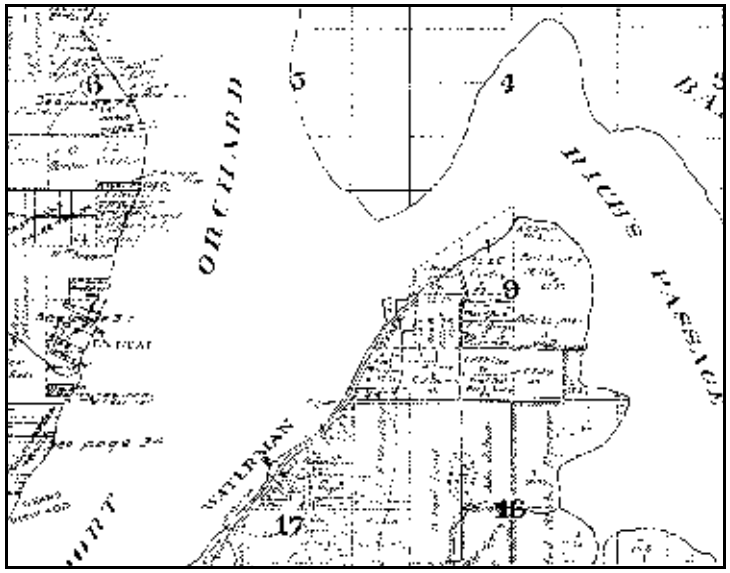
Recreation Facilities: De Kalb Street Pier, Port Orchard Boat Launch, Port Orchard Marina, Port Orchard Waterfront Park & Boardwalk, Annapolis Recreation Area

Community Facilities: Port Orchard City Hall, Port Orchard Library

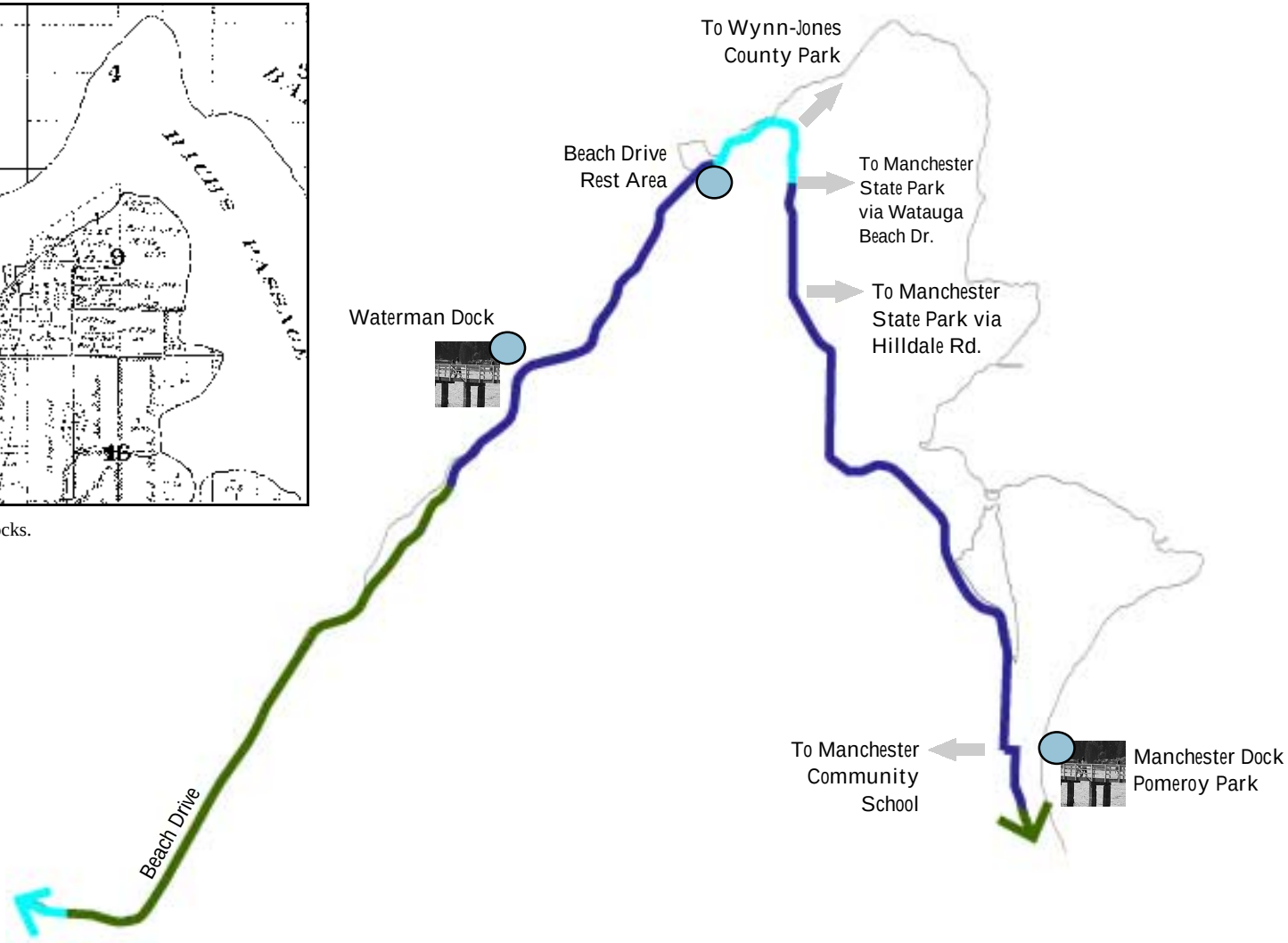
Transit Facilities: Horluck Ferry Terminals at Port Orchard and Annapolis, Kitsap Transit Terminal

Viewpoints/Rest Areas There are existing facilities at all three of the suggested viewpoint and rest area sites in Port Orchard. The Public Boat Launch, just east of the DeKalb Street Pier, is the site of a viewpoint proposed in the *Port Orchard Urban Waterfront Walkway* study. The Port Orchard Waterfront Park, managed by the Port of Bremerton, has restroom and shower facilities, picnic tables and a picnic shelter. A third site is the Annapolis Recreation Area. This site currently consists of a large parking area and a Horluck Ferry dock. Improvements to this site, including an interpretive sign, planting and seating would provide a scenic rest area for Mosquito Fleet trail users.

Project 9: Port Orchard to Manchester



Map showing the Enetai and Waterman docks.
From *Atlas of Kitsap County*, 1926.

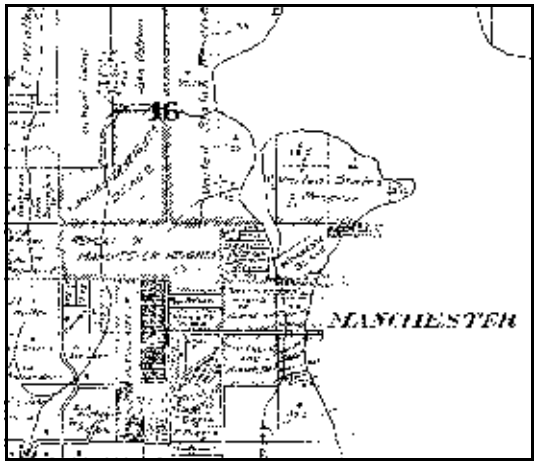


From Port Orchard to Manchester, the route winds along the shoreline and through forested and rural neighborhoods. Beach Drive has long been a favorite route for bicyclists and pedestrians for its scenic views and is identified as a priority project for the development of trail facilities in both the *Kitsap County Bicycle Facilities Plan* and *The Kitsap County Open Space Plan.*

Primary Route The primary corridor follows scenic Beach Drive to Main Street in Manchester and continues out of Manchester on Colchester Drive. The county is currently working on a survey of Beach Drive to determine the exact width of road right-of-way available for the development of a trail. Preliminary studies for this plan indicate that a separated path cross section is possible from the Annapolis Recreation Area to Hillcrest Drive. From Hillcrest to Lighthouse Drive, bicycle lanes are recommended. Continuing to Watauga Beach Drive, paved shoulders are recommended due to the narrowness of the available right-of-way. On the rest of Beach Drive and through Manchester via Main Street and Colchester Drive, bicycle lanes are proposed.

Connections On-road connections are suggested to Wynn Jones County Park via Wynn Jones Road, to Manchester State Park, via Watauga Beach Drive and Hilldale Road, and to the Manchester Dock via Main Street. The Watauga Beach Drive connection requires entering the park from the north. This is not an existing park entrance. Coordination with Washington State Parks and Recreation to add this second entrance to the park would allow for a loop opportunity from Beach Drive through the park.

Cultural Resources Cultural resources along this stretch of the corridor include Mosquito Fleet dock sites at Waterman and Manchester, and Fortress Mitchell, now Manchester State Park. Three structures at Manchester State Park are on the National Historic Register, a torpedo warehouse, a mining casemate and Battery Robert Mitchell.



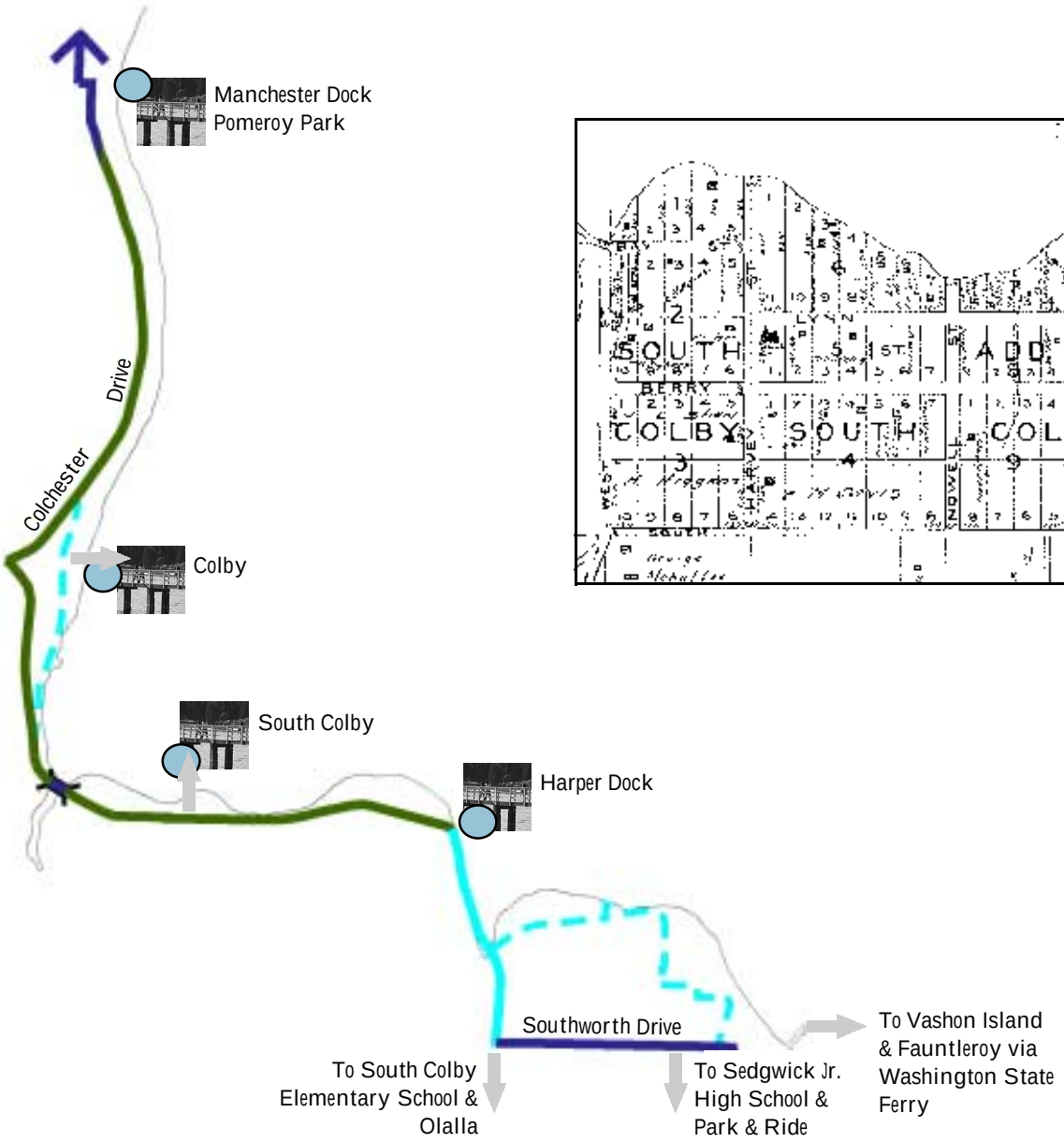
Map of Manchester.
From *Atlas of Kitsap County*, 1926.

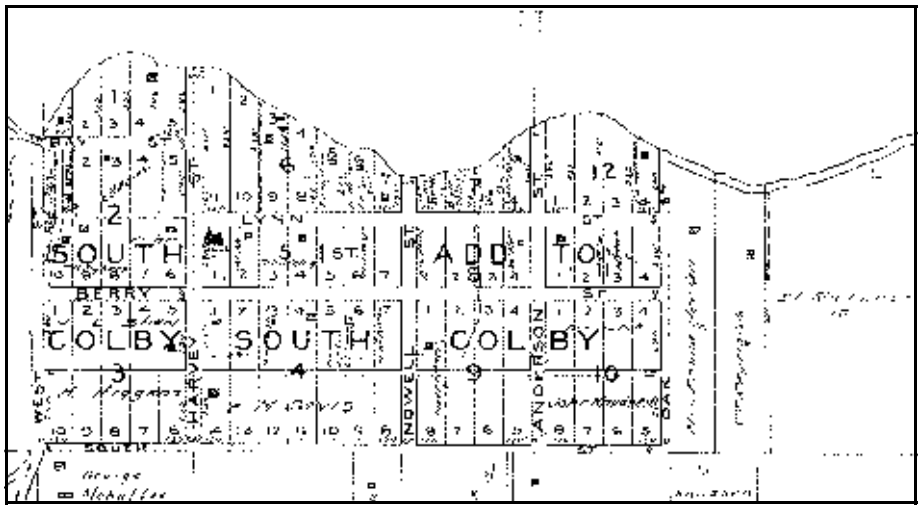
Public Facilities There are a number of recreation facilities along Beach Drive, including the Waterman Dock, Wynn-Jones County Park, Manchester State Park, Kitsap County South Little League Ballfields, and Pomeroy County Park. Facilities in Manchester include the Manchester Library and Manchester Dock.

Viewpoints The first official Mosquito Fleet rest area was recently constructed along Beach Drive at its intersection with Rich Cove Lane. The site includes a picnic shelter, trash receptacle and planting within the road right-of-way. In addition,

the Mosquito Fleet dock sites of Waterman and Manchester could serve as viewpoints. At Waterman there is a public pier for fishing and a gravel beach. Facilities at Manchester include a boat launch and boat moorage.

Project 10: Manchester to Southworth





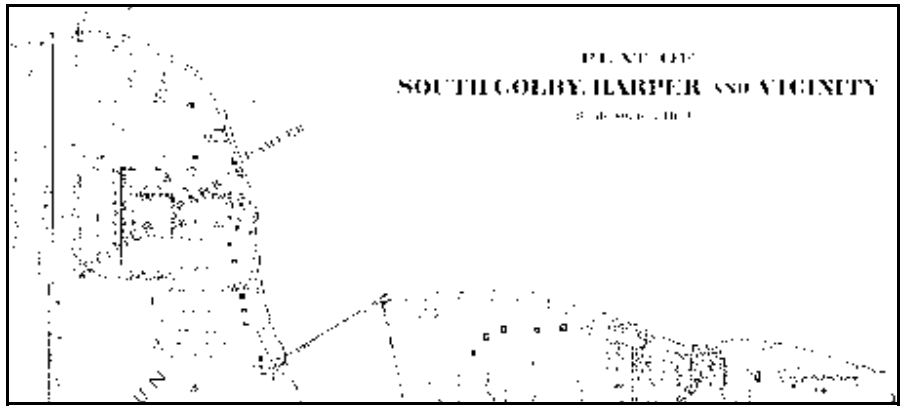
Map of the South Colby Area.
From *Atlas of Kitsap County*, 1926..

This southern most segment of the Mosquito Fleet trail corridor follows scenic shoreline roads and connects to the Harper Dock, once a heavily trafficked facility for connections to Seattle via Mosquito Fleet steamers. These days commuters and travelers pass in and out of south Kitsap through the Southworth ferry terminal, a major access point to this trail corridor.

Primary Route The primary route follows Colchester Drive out of Manchester, connects with and continues along Southworth Drive to the Southworth Ferry Terminal. A separated path cross section is proposed from Hemlock Street in Manchester to the Harper Dock, with the exception of the bridge across Curley Creek. Kitsap County is planning to replace this bridge with a new concrete bridge that will include bicycle lanes and sidewalks. From the Harper Dock to Stohlton Road, paved shoulders are recommended due to the narrowness of the road right-of-way along this stretch. From Stohlton Road to the ferry terminal, bicycle lanes are recommended

Secondary Route Two secondary routes are proposed. The first, Yukon Harbor Drive, is a short diversion from the primary corridor that brings trail users closer to the waterfront and connects to the Colby Mosquito Fleet dock site. The other begins near the Southworth Ferry Terminal and follows Olympiad Drive and Cherry Street, both scenic, rural roadways popular with bicycle tourists. Paved shoulders are recommended for both routes.

Connections Proposed connections link the primary and secondary trail corridors to Mosquito Fleet dock sites, public facilities and to south Kitsap shoreline communities. The Southworth ferry provides services to Vashon Island and Fauntleroy. Directional signs should be located in the terminal area to guide ferry riders to the trail.



Plat of South Colby, Harper and Vicinity.
From *Atlas of Kitsap County*, 1926.

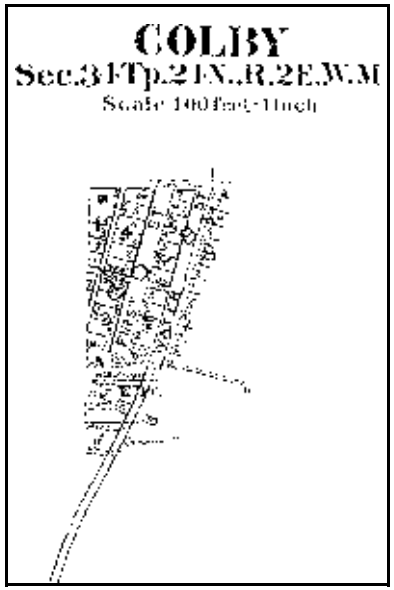
Other public facilities to connect to include the South Colby Elementary School, accessed via Banner Road and the Park & Ride at the Harper Free Evangelical Church, accessed via Wilson Creek and Sedgwick Roads. Banner Road is a bicycle route proposed in the *Kitsap County Bicycle Facilities Plan*. Continuing past the elementary school, Banner Road also provides a connection to the community of Olalla and the Olalla Boat Launch, a Mosquito Fleet dock site on scenic Colvos Passage.

Short connections are also recommended to proposed viewpoints at Colby and South Colby from Yukon Harbor Drive and Southworth Drive respectively.

Cultural Resources Cultural resources include Mosquito Fleet dock sites at Colby, South Colby and Harper.

Public Facilities Recreation facilities between Manchester and Southworth include the Harper Dock, Harper County Park, and a small undeveloped park along Colchester Drive. Other public facilities in the vicinity of the corridor include South Colby Elementary School, the Washington State Ferry Terminal at Southworth, and a Park & Ride at Sedgwick/Wilson Rds.

Viewpoints/Rest Areas Viewpoints are suggested at Colby, South Colby and Harper, all Mosquito Fleet dock sites. Harper has existing facilities, including restrooms, a public fishing pier and public beach. Colby and South Colby are in undeveloped public right-of-way. In addition, a small park property along Colchester Drive can serve as a fourth rest area.



Map of Colby.
From *Atlas of Kitsap County*, 1926.

Priorities

On the following pages the Mosquito Fleet Trail corridor has been divided into a list of project size segments. These segments are listed in prioritized order from 1 through 39. For each segment, information has been provided on the following:

- Project location
- Project length
- District (North, Central, or South)
- Public agency managing the project right-of-way (Kitsap County Public Works, Washington State Department of Transportation, City of Bremerton, City of Port Orchard, or City of Poulsbo)
- Proposed cross section (Separated Path, Bicycle Lanes, Paved Shoulders, Shared Roadway or Shared Sidewalk
- Project status (proposed or in development)
- Project overlap with other planning documents (County or municipal planning documents, including transportation plans)
- Estimated cost for the project

As each segment of this trail corridor is also part of the *Kitsap County Bicycle Facilities Plan* (December 2000), this master plan uses the same priority order used in that plan. Note that the entire Mosquito Fleet Trail project is in the High Priority category of the Bicycle Facilities Plan and then ranked among the high priority projects. For a detailed explanation of how priorities were determined, refer to the Bicycle Facilities Plan.

#	Street/R.O.W.	From	To	Length	District	R.O.W. Management	Facility Type	Proposed Cross Section	Project Status	Overlap with Other County & Municipal Plans	Estimated Cost*
1	Bay St.	Port Orchard City Limits	Kitsap St.	0.7	S	City of Port Orchard	Primary	Separated Path	Proposed	KC Greenways Plan	
		Kitsap St.	Bethel Ave.	0.8				Bicycle Lanes			
		Bethel Ave.	Mitchell Point	0.5				Separated Path			
		Mitchell Point	Port Orchard City Limits	0.2				Paved Shoulders			
2	Beach Dr.	Port Orchard City Limits	E. Ahlstrom Rd.	0.3	S	KCPW	Primary	Paved Shoulders	Proposed	KC Greenways Plan, KC Bicycle Facilities Plan, KC 1995 to 2000 6 yr. T.I.P., KC 2012 T.I.P. (from Retsil Rd. to Ahlstrom)	37
		E. Ahlstrom Rd.	E. Hillcrest Dr.	2				Separated Path			232
		E. Hillcrest Dr.	Lighthouse Dr. E.	1.5				Bicycle Lanes			249
		Lighthouse Dr. E.	Watauga Beach Dr.	0.6				Paved Shoulders			48
		Watauga Beach Dr.	Hilldale Road	0.4				Bicycle Lanes			42
3	Old Belfair Valley Rd./Sam Christopherson Ave. W/ W. Frontage Rd.	SR 3	SR 16	0.5	S	KCPW	Secondary	Bicycle Lanes	Proposed	KC Greenways Plan, KC Bicycle Facilities Plan	26
4	SR 16 (including interchange)	Frontage Rd.	Bay St. Inter-change	1.1	S	WSDOT	Primary	Separated Path	Proposed	KC Greenways Plan, 2012 Transportation Needs on State Facilities, State Hwy. System Plan (1998), KC Bicycle Facilities Plan	128

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Lengths for project segments are rounded to the nearest tenth of a mile.

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#	Street/R.O.W.	From	To	Length	District	R.O.W. Management	Facility Type	Proposed Cross Section	Project Status	Overlap with Other County & Municipal Plans	Estimated Cost*
5	Bay St.	Bay St./SR 16 Interchange	Port Orchard City Limits	1.6	S	KCPW	Primary	Separated Path	Proposed	KC Greenways Plan, KC Bicycle Facilities Plan	186
6	Beach Dr./Main St./Colchester Dr.	Hilldale Rd.	Hemlock St.	2.1	S	KCPW	Primary	Bicycle Lanes	Proposed	KC Greenways Plan, KC 1995-2000 6 yr. T.I.P., KC Bicycle Facilities Plan	222
		Hemlock St.	Mile Hill Dr.	1.5				Separated Path			174
7	Trenton Ave./11th St./Pitt St./Harkins St.	Manette Bridge (SR 304)	Trenton Ave./11th St. intersection	0.4	C	City of Bremerton	Primary	Bicycle Lanes	Proposed	KC Greenways Plan, City of Bremerton 1995 Comprehensive Transportation Plan Bicycle and Pedestrian Facilities	
		Trenton Ave./11th St. intersection	Bremerton City Limits	0.9				Paved Shoulders			
8	Trenton Ave.	Bremerton City Limits	Sylvan Way	0.8	C	KCPW	Primary	Bicycle Lanes	Proposed	KC Greenways Plan, City of Bremerton Comprehensive Transportation Plan Bicycle and Pedestrian Facilities, KC Bicycle Facilities Plan	44
9	SR 3	SR 304	SR 16	2.3	S	WSDOT	Primary	Separated Path	Proposed	KC Greenways Plan, City of Bremerton Comprehensive Transportation Plan Bicycle and Pedestrian Facilities, KC 1997 to 2002 T.I.P., Gorst to Bremerton Ferry Study, KC Bicycle Facilities Plan, State Hwy. System Plan (1998)	225

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#	Street/R.O.W.	From	To	Length	District	R.O.W. Management	Facility Type	Proposed Cross Section	Project Status	Overlap with Other County & Municipal Plans	Estimated Cost*
10	Manette Bridge (SR 304)	Washington Ave.	Harkins St.	0.4	C	WSDOT	Primary	Bicycle Lanes (1)	WSDOT has prepared construction drawings for a new bridge.	KC Greenways Plan, City of Bremerton 1995 Comprehensive Transportation Plan Bicycle and Pedestrian Facilities, WSDOT is planning the construction of a new bridge	
11	SR 305	Totten Rd. NE	Agate Pass Bridge	1.7	N	WSDOT, KCPW	Secondary	Bicycle Lanes	Proposed	KC Greenways Plan, KC 2000 to 2005 T.I.P., KC Bicycle Facilities Plan	391
12	Viking Way	SR 308	Poulsbo City Limits	2.4	N	KCPW	Primary	Separated Path	Proposed	KC Greenways Plan, KC 2012 T.I.P., KC 2000 to 2005 T.I.P., KC Bicycle Facilities Plan	278
13	Illahee Rd. NE/Brownsville Hwy.	Oceanview Blvd. (Illahee Dock)	Brownsville Bridge	3.1	C	KCPW	Primary	Bicycle Lanes	Proposed	KC Greenways Plan, KC 1999 to 2004 T.I.P., KC Bicycle Facilities Plan	327
		Brownsville Bridge	Paulson Rd. NE	0.2				Separated Path			23
14	Brownsville Bridge	Illahee Rd.	Brownsville Hwy.	0.1	C	KCPW	Primary	Paved Shoulders	Proposed	KC Greenways Plan, KC Bicycle Facilities Plan	17**

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(1) WSDOT is planning the construction of a new bridge to include bicycle lanes. In the interim cyclists are advised to walk their bicycles on the sidewalk due to the narrowness of the existing travel lanes and to high traffic speeds.

#	Street/R.O.W.	From	To	Length	District	R.O.W. Management	Facility Type	Proposed Cross Section	Project Status	Overlap with Other County & Municipal Plans	Estimated Cost*
15	Hostmark St./Front St./Lindvig Way	Fjord Dr.	Front St./ Hostmark St. intersection	0.1	N	City of Poulsbo	Primary	Bicycle Lanes	Proposed	City of Poulsbo is planning improvements to Front St., KC Greenways Plan	
		Front St./ Hostmark St. intersection	Just north of King Olav Vie	0.3				Shared Roadway			
		Just north of King Olav Vie	Sunset St.	0.2				Bicycle Lanes			
		Sunset St.	Lindvig Way / Front St. intersection	0.5				Separated Path			
		Lindvig Way / Front St. intersection	Viking Way	0.2				Shared Sidewalk			
16	Lemolo Shore Dr./Fjord Dr.	Hostmark St.	NE Johnson Way	1.6	N	City of Poulsbo, KCPW	Primary	Shared Roadway/ Paved Shoulder Pathway (2)	Construction of Paved Shoulder Pathway slated for summer 2000	KC Greenways Plan, KC Bicycle Facilities Plan, City of Poulsbo is planning a paved shoulder pathway to be constructed summer 2000.	
17	Lemolo Shore Dr.	NE Johnson Way	NE Tukwila Rd.	0.5	N	KCPW	Primary	Separated Path	Proposed	KC Greenways Plan, Suquamish Rural Village Subarea Plan, KC Bicycle Facilities Plan	58
		NE Tukwila Rd.	SR 305	1				Bicycle Lanes			166

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(2) The City of Poulsbo is planning the construction of a paved shoulder pathway (4' to 8' wide) on the water side of the road for 2-way pedestrian travel. Cyclists are expected to shared the roadway with traffic. This development is not consistent with the design guidelines of this plan and is not advised.

#	Street/R.O.W.	From	To	Length	District	R.O.W. Management	Facility Type	Proposed Cross Section	Project Status	Overlap with Other County & Municipal Plans	Estimated Cost*
18	Washington Ave	Manette Bridge (SR 304)	6th St.	0.1	C	City of Bremerton	Primary	Shared Sidewalk	Proposed	KC Greenways Plan, City of Bremerton 1995 Comprehensive Transportation Plan Bicycle and Pedestrian Facilities	
		6th St.	Bremerton Ferry Terminal	0.3				Paved Shoulders			
19	4th St./ 5th St.	Washington Ave.	Naval Ave.	2.1	C	City of Bremerton	Primary	One-Way Bicycle Lanes (heading west on 4th St., heading east on 5th St.)	Proposed	KC Greenways Plan	
20	Naval Ave./Burwell St.	5th St.	Charleston Blvd.	0.4	C	City of Bremerton, WSDOT	Primary	Bicycle Lanes	Proposed	KC Greenways Plan, City of Bremerton 1995 Comprehensive Transportation Plan Bicycle and Pedestrian Facilities	
21	Pacific Ave./1st St.	5th St.	Bremerton Ferry Terminal	0.3	C	City of Bremerton	Primary	Bicycle Lanes	Proposed		
22	Illahee Rd. NE	Sylvan Way	NE Roosevelt St.	1.2	C	KCPW	Primary	Separated Path	Proposed	KC Greenways Plan, KC 1999 to 2004 T.I.P., KC Bicycle Facilities Plan	127
		NE Roosevelt St.	Oceanview Blvd. (Illahee Dock)	0.2				Bicycle Lanes			23

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#	Street/R.O.W.	From	To	Length	District	R.O.W. Management	Facility Type	Proposed Cross Section	Project Status	Overlap with Other County & Municipal Plans	Estimated Cost*
23	Brownsville Hwy.	SR 308	1.3 miles from SR 308	1.3	C	KCPW	Primary	Separated Path	Proposed	KC Greenways Plan, KC Bicycle Facilities Plan	151
		1.3 miles from SR 308	NE Madison Rd.	1.2				Bicycle Lanes			127
		NE Madison Rd.	Paulson Rd. NE	0.8				Separated Path			93
24	Charleston Blvd./SR 304	Burwell St.	SR 3	1.6	C	City of Bremerton, KCPW, WSDOT	Primary	Bicycle Lanes	Under construction	KC Greenways Plan, KC Bicycle Facilities Plan, City of Bremerton Gateway Project (currently under construction)	
25	Southworth Drive	Mile Hill Dr.	West end of Curley Creek Bridge	0.7	S	KCPW	Primary	Separated Path	Proposed	KC Greenways Plan, KC 2000 to 2005 T.I.P. (Curley Creek bridge replacement), KC Bicycle Facilities Plan	232
		West end of Curley Creek Bridge	East end of Curley Creek Bridge	0.1				Bicycle Lanes	County is planning to replace bridge		
		East end of Curley Creek Bridge	Harper Dock	1.3				Separated Path	Proposed		
		Harper Dock	Stohlton Rd. SE	0.7				Paved Shoulders			55
		Stohlton Rd. SE	Southworth Ferry Terminal	1				Bicycle Lanes			106
26	W. Kingston Rd.	Miller Bay Rd.	Kingston Rd.	2.7	N	KCPW	Primary	Bicycle Lanes	Construction pending availability of funds	KC Greenways Plan, KC Bicycle Facilities Plan, KC 2000 to 2005 T.I.P., Kingston Design Study	

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#	Street/R.O.W.	From	To	Length	District	R.O.W. Management	Facility Type	Proposed Cross Section	Project Status	Overlap with Other County & Municipal Plans	Estimated Cost*
27	SR 308/Washington Ave. NE	Street End (Keyport Dock)	Brownsville Hwy.	0.5	N	KCPW, WSDOT	Primary	Bicycle Lanes	Proposed	KC Greenways Plan, KC Bicycle Facilities Plan	53
		Brownsville Hwy.	Viking Way	1.8				Separated Path			209
28	Miller Bay Rd./Augusta Ave./Suquamish Cut-off Road	SR 305	Cowling Creek	2.9	N	KCPW	Primary, Secondary	Bicycle Lanes	Proposed	KC Greenways Plan, Suquamish Rural Village Subarea Plan, KC Bicycle Facilities Plan	519
		Cowling Creek	Indianola Rd. NE	2				Separated Path			232
29	Miller Bay Rd.	SR 104	Indianola Rd. NE	2.7	N	KCPW	Primary	Separated Path	Proposed	KC Greenways, Suquamish Rural Village Subarea Plan, KC 2000 to 2005 T.I.P.	550
30	Kingston Rd.	W. Kingston Rd.	Central St.	0.8	N	KCPW	Primary	Bicycle Lanes	Construction pending availability of funds	KC Greenways, KC 2000 to 2005 T.I.P., Kingston Design Study, KC Bicycle Facilities Plan	162
31	Indianola Rd.	Miller Bay Rd.	S. Kingston Rd. NE	2.7	N	KCPW	Secondary	Separated Path	Proposed	KC Greenways Plan, Suquamish Rural Village Subarea Plan, KC 1997 to 2002 T.I.P., KC Bicycle Facilities Plan	313
		S. Kingston Rd. NE	Street End	0.6				Bicycle Lanes			63
32	Totten Rd. NE	SR 305	Suquamish Cut-off Rd. NE	2.2	N	KCPW	Primary	Separated Path	Proposed	KC Greenways Plan, Suquamish Rural Village Subarea Plan, KC Bicycle Facilities Plan	251

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#	Street/R.O.W.	From	To	Length	District	R.O.W. Management	Facility Type	Proposed Cross Section	Project Status	Overlap with Other County & Municipal Plans	Estimated Cost*
33	S. Kingston Rd. NE	West Kingston Rd.	End of Bridge	0.2	N	KCPW	Secondary	Paved Shoulders	Proposed	KC Greenways Plan, Kingston Design Study, KC Bicycle Facilities Plan	25
		End of Bridge	NE Arness Rd.	1.5				Separated Path			174
		NE Arness Rd.	Indianola Rd. NE	2.1				Bicycle Lanes			349
34	Patten Ave./ Arsenal Way/ Loxie Eagans Blvd./ Werner Rd./ Union Ave. W./ 3rd Ave. W./ Kent Ave. W./ W. Sherman Heights Rd.	Charleston Blvd. (Gateway Project)	National Ave.	0.8	S	City of Bremerton, KCPW	Secondary	Paved Shoulders	Proposed	KC 1997 to 2002 T.I.P., Bremerton Ferry/Gorst Study, City of Bremerton 1995 Comprehensive Transportation Bicycle and Pedestrian Facilities, KC Bicycle and Pedestrian Facilities	
		National Ave.	Werner Rd. /Union Ave. intersection	0.5				Bicycle Lanes			
		Werner Rd. /Union Ave. intersection	SR 3	2.4				Paved Shoulders			
35	6th Ave./ Hostmark St./ 3rd Ave./ Moe St./ Jensen Way/ Sunset St.	Fjord Dr.	Hostmark St./6th Ave. intersection	0.4	N	City of Poulsbo	Secondary	Bicycle Lanes	Proposed	KC Greenways Plan	
		Hostmark St./6th Ave. intersection	3rd Ave./ Hostmark St. intersection	0.1				Paved Shoulders			
		3rd Ave./ Hostmark St. intersection	Front St.	0.6				Bicycle Lanes			
36	SE Olympiad Dr./Cherry St.	Southworth Dr.	Southworth Dr.	1.2	S	KCPW	Secondary	Paved Shoulders	Proposed		183
37	Yukon Harbor Dr.	Southworth Dr.	Colchester Dr.	0.8	S	KCPW	Secondary	Paved Shoulders	Proposed		125

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38	S. Keyport Rd. NE/Ogle Rd. NE	Brownsville Hwy.	Brownsville Hwy.	3.2	C	KCPW	Secondary	Paved Shoulders	Proposed		183
39	NW Scandia Rd./Virginia Lp. Rd. NE	Viking Way	SR 308	1.9	N	KCPW	Secondary	Paved Shoulders	Proposed		290

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Implementation

The Mosquito Fleet Trail Master Plan envisions 78 miles of trail and 30 rest areas and viewpoints between Kingston and Southworth. Inter-agency cooperation, public and private partnerships, and creative thinking are necessary to bring this vision to reality. Following is a suggested timeline for implementation of the Master Plan, and suggested means and resources for trail development and protection, including recommended partnerships, funding sources, tax incentives, and public awareness measures.

Timeline Development of the trail corridor is best accomplished within a multi-dimensional timeline. After adoption of this master plan, it is recommended that the following goals be addressed within a short time frame. Some of these tasks can be completed within the first project year while others will be ongoing for a number of years to come:

- Establish a trail protection policy.
- Form trail partnerships, including a Trail Friends Group or Trail Foundation.
- Secure funding. Apply for grants for trail development and for trail amenities.
- Design trail at the project specific level and begin construction of segments of the trail as funds become available.
- Increase public awareness of the trail, hold a trail logo contest.
- Develop an interpretive program and begin to install interpretive signs at viewpoints and rest areas.
- Add additional facilities and amenities at viewpoints and rest areas.
- As segments of the trail corridor are completed, mark milestones with dedication ceremonies and organized trail walks & rides.

Trail Protection Establishing a trail protection policy is advised as a way to insure that the trail corridor will be protected from future developments that might encroach into the trail corridor or disrupt trail use. Because the Mosquito Fleet Trail is proposed within road-right-of-way for most of its length, the threat exists that at some point in the future, there will be interest to widen various roadways along the corridor, thereby eliminating separated paths and bicycle lanes. A trail protection policy should include a list of compatible trail uses and incompatible trail uses and should be adopted by the County as part of this master plan.

Partnerships Public and private partnerships can be effective means for trail development and maintenance. The following partnerships are recommended for this project:

Mosquito Fleet Trail Friends Group/Trail Foundation The public process portion of this master plan revealed that numerous citizens are interested in volunteering their time and labor towards the development of this trail. A list of these citizens is included in the Public Process Documentation in the Appendix of this plan. Increased public awareness will likely uncover even more advocates and potential volunteers. A Friends Group or Trail Foundation can serve many purposes, including raising funds for trail development and amenities, organizing trail walks/rides, and developing an interpretive program. Volunteer efforts that could be overseen by this organization include an adopt-a-trail program for trail maintenance and trail work parties for the construction of facilities at viewpoints and rest areas.

Inter-Agency Partnerships The Mosquito Fleet trail corridor is within right-of-way managed by county, state and municipal agencies. It is identified as a priority project by both Kitsap County Public Works and Kitsap County Parks and Recreation. In order to complete this trail it will be necessary for there to be interagency cooperation and agreement on trail design standards and on a trail protection policy.

Private Partnerships Private property owners along the trail corridor could provide support for the trail corridor in a number of ways. Planned unit developments, such as the proposed golf course residential development in Indianola, are opportunities to develop off-road trails. As development occurs along undeveloped portions of the trail corridor, it may be possible to work with developers to develop trail connections that link into the system. Adjacent property owners and businesses could adopt planting strips to design and maintain along separated pathways.

Funding Sources Funding sources for recreational trails, non-motorized transportation and scenic and heritage corridors should all be targeted as potential sources for Mosquito Fleet trail funding. The following organizations provide funding for trails:

The *Interagency Committee for Outdoor Recreation* provides funding for recreation and habitat conservation through various grant programs. Potential grants that could be applied for include the *Washington Wildlife Recreation Program* (WWRP), which has an Outdoor Recreation Account for local parks, state parks, trails and water access; the *National Recreational Trails Program* (NRTP) provides funding for a variety of off-road trail related projects, including the maintenance and restoration of existing trails and trail facilities, and the development of trail facilities and trail linkages; and the *Federal Land and Water Conservation Fund* (LWCF), which provides funding for the creation of outdoor recreation facilities for state and local governments.

TEA-21 or the *Transportation Equity Act for the Twenty-First Century* was passed on June 9, 1998. It is the extension and continuation of the *Intermodal Surface Transportation Efficiency Act* of 1991. It provides funding for highway, highway safety, transit and surface transportation programs, including the *National Scenic Byways Program* through the year 2003.

The *National Scenic Byways Program* offers funding for the development of facilities and trails along federal or state designated scenic byways. State Routes 3, 305 and 104 in Kitsap County have been designated by the Washington State Department of Transportation as Scenic and Recreation Highways and therefore qualify for funds from this program.

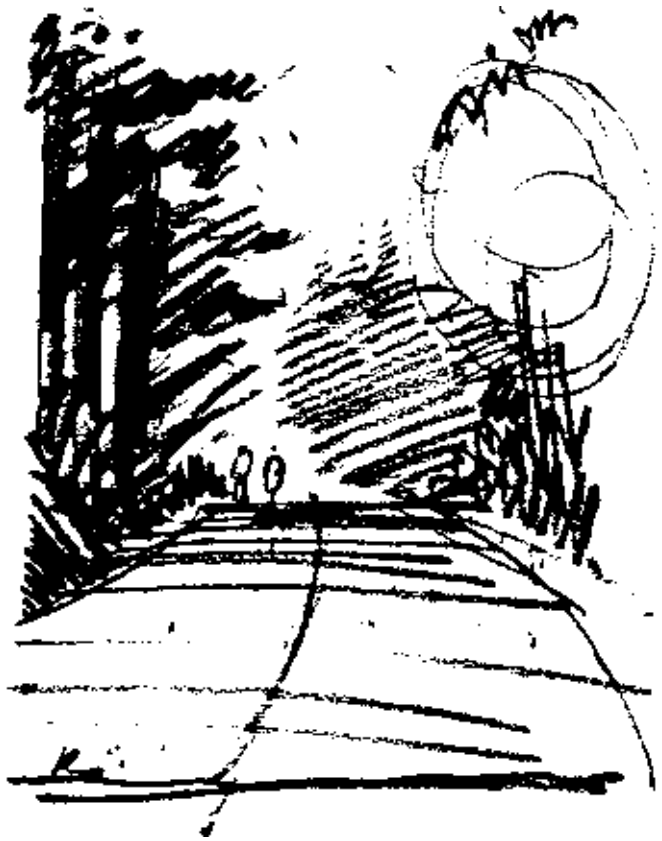
The *Heritage Corridors Program* is administered by the Washington State Department of Transportation (WSDOT) to preserve scenic corridors and fund the construction of safety rest areas and viewpoints, signs, markers and interpretation programs. In *Defining Washington's Heritage Corridors Program* (1995), WSDOT listed as one of its recommendations, the desire to "Expand the designation process to provide opportunities for eligible publicly owned routes, including non-motorized, to receive official state recognition as Scenic Byways or Local and Regional Byways." (p. v) Thus opening up the potential for the entire Mosquito Fleet Trail corridor to become a Scenic Byway.

Tax incentives Tax benefits exist for private property owners who wish to donate full or partial ownership (conservation or trail easements) of their property for trail, viewpoint or rest area uses. A number of offers resulted from the questionnaire sent out as part of the mailing to residents and businesses along the trail corridor. Increasing public awareness on trail plans and difficult gap areas, may lead to more offers of trail easements and rest areas.

Public Awareness To increase funding opportunities and trail visibility, it is important to garner public support for the trail. Increasing public awareness, through

education and outreach, is an important means for obtaining public support. Keeping a permanent web page on the County's website that is updated regularly to mark progress on trail development is another way to continue public interest. At key milestones in the trail's development, for example when a segment of trail is completed, events such as dedication ceremonies and organized trail walks/rides introduce Kitsap citizens to the trail and can rally support for completing remaining gaps in the trail corridor.

Involving citizens in the development of trail amenities can be another way to increase public awareness. Possible programs include a contest for a trail logo design open to middle and high school students. Citizens could also be involved in the development of interpretive signs, brochures and other programs.



Bibliography

County, Regional and State Planning Documents

City of Bremerton. *SR 3/304 Transportation Improvement Project Pedestrian Access Study*. Bremerton, WA: City of Bremerton, January 1998.

City of Bremerton. *Bremerton Comprehensive Plan Transportation Element*. Bremerton, WA: City of Bremerton, Adopted April 5, 1995.

City of Poulsbo. *West Poulsbo Master Plan*. Poulsbo, WA: City of Poulsbo.

Department of Public Works. *City of Port Orchard Comprehensive Parks Plan*. Port Orchard, WA: 1994.

Fishpro, Inc. *Blackjack Creek Comprehensive Management Plan*. Port Orchard, WA: The City of Port Orchard, June 1987.

Kasprisin Design Group. *City of Port Orchard Urban Waterfront Walkway*. Port Orchard, WA: City of Port Orchard, 1985.

Kitsap County. *Kitsap County Comprehensive Plan*. Kitsap County, May 7, 1998.

Kitsap County Department of Community Development. *Suquamish Rural Village Subarea Plan*. Port Orchard, WA: KCDCD, April 19, 1999.

Kitsap County Department of Parks and Recreation. *Kitsap County Open Space Plan*, adopted June 19, 2000. Kitsap County: Department of Parks and Recreation, June 2000.

Kitsap County Department of Public Works. *Kitsap County Bicycle Facilities Plan*. Kitsap County: Department of Public Works, December 2000.

_____. *Kitsap County Greenways*. Kitsap County: Department of Public Works, June 1996.

Puget Sound Regional Council. *1995 Metropolitan Transportation Plan*. Seattle, WA: Puget Sound Regional Council, May 1995.

_____. *1998 Progress Report on the 1995 Metropolitan Transportation Plan*. Seattle, WA: Puget Sound Regional Council, May 28, 1998.

_____. *Vision 2020, 1995 Update*. Seattle, WA: Puget Sound Regional Council, Adopted May 25, 1995.

WSDOT. *Defining Washington's Heritage Corridors Program*. Washington State Department of Transportation, April 1995.

_____. *Local Agency Guidelines*. Olympia, WA: Washington State Department of Transportation, Revised July 1, 1999.

_____. *Washington's Transportation Plan 1997-2016*. Olympia, WA: Washington State Department of Transportation, April 1996.

Kitsap County

Jaklewicz, Greg. "Sharing the Road." The Sun, July 30, 2000.

Mueller, Marge and Ted. *Middle Puget Sound & Hood Canal Afoot & Afloat*. Seattle: The Mountaineers, 1990.

Mosquito Fleet

Alexanader, Carmela and Kirk, Ruth. *Exploring Washington's Past: A Road Guide to History*. Seattle: University of Washingtin Press, 1990.

Birkeland, Captain Torger. *Echoes of the Puget Sound: Fifty Years of Logging and Steamboating*. Caldwell, ID: The Caxton Printers, Ltd., 1960.

Clark, Earl. "The Mosquito Fleet Chuffed You There from Here," American West vol. XXIII, no. 3 (May/June 1986): 49-53.

Dorpat, Paul and McCoy, Genevieve. *Building Washington: A History of Washington State Public Works*. Seattle: Washington Chapter of the American Public Works Association, 1998.

Department of Highways in cooperation with the USDA. *Kitsap County Washington*, 3 sheets. January 1, 1944.

Gore, William J. and Shipman, Evelyn. *Commuters vs. the Black Ball Line*. University, AL: University of Alabama Press, 1959.

Hitt, Henry C. *Historical Map of Kitsap County*, 1st ed. Bremerton, WA: Kitsap County Historical Association, 1951.

Kroll Map Company, Inc. *Atlas of Kitsap County*. Seattle, WA: Kroll Map Co., 1926.

Metsker, Chas. F., Civil Engineer. *King & Kitsap Counties*. Tacoma, WA: Metsker Maps, Sept. 1926.

Newell, Gordon R. *Pacific Steamboats*. Seattle: Superior Publishing Company, 1958.

_____. *Ships of the Inland Sea: the Story of the Puget Sound Steamboats*. Portland, OR: Binfords & Mort, 1960.

Seattle Post-Intelligencer. "Routes of the Puget Sound Fleet: Water Transportation Reaches Hundreds of Prosperous Communities – List of Vessels and Operating Companies." Seattle Post-Intelligencer (August 22, 1908).

Sidney Museum. "Puget Sound Mosquito Fleet Routes." Port Orchard, WA: Sidney Museum.

The Skeeter News. "Virginia II: Competition on the Tacoma/Seattle West Pass Route," The Skeeter News vol. 24, no. 1 (Winter 1999): 3.

War Department Corps of Engineers. *Port Gamble* Quadrangle, 15 minute series. Washington: U.S. Army, 1937.

_____. *Port Orchard Quadrangle*, 15 minute series. Washington: U.S. Army, 1937.

Washington State Historical Society. *Historic Ports of the Puget Sound*, Pacific Northwest Historical Pamphlet, No. 5. Tacoma: Washington State Historical Society, April 1967.

Trail, Greenway and Non-motorized Transportation Design

AASHTO. *Guide for the Development of Bicycle Facilities 1999*. Washington, DC: American Association of State Highway and Transportation Officials, 1999.

Barnett, Stephen T., PhD and Sparks, Donald L., PhD. *Examining the Economic Impacts of Bicycle Tourism: a Case Study of Coastal South Carolina*. Santa Barbara, CA: Pro Bike/Pro Walk 98, Sept. 1998.

Bicycle Federation of America. *Resource Book: Pro Bike Pro Walk 98, Santa Barbara, CA*. Washington, DC: Bicycle Federation of America, 1998.

Burgess, Bruce, Moe, Peter, Wilkinson, Bill, and Williams, John. *Implementing Bicycle Improvements at the Local Level*, Pub. No. FHWA-RD-98-105. McLean, VA: USDOT, Turner-Fairbank Highway Research Center, Sept. 1998.

Erickson, Donna L. and Louisse, Anneke F. *Greenway Implementation in Metropolitan Regions: a Comparative Case Study of North American Examples*. Brecksville, OH: Rivers, Trails & Conservation Assistance Program, National Park Service, Jan. 1997.

Federal Highway Administration. *Manual on Uniform Traffic Control Devices*. Washington, D.C.: Federal Highway Administration, National Advisory Committee on Uniform Traffic Control Devices, 1988.

Forester, John. *Bicycle Transportation: a Handbook for Cycling Transportation Engineers*, 2nd ed. Cambridge, MA: The MIT Press, 1994.

Harkey, David L., Reinfart, Donald W. and Sorton, Alex. *The Bicycle Compatibility Index: a Level of Service Concept, Implementation Manual*, Pub. No. FHWA-RD-98-072. McLean, VA: Office of Safety and Traffic Operations Research & Development, Federal Highway Administration, Dec. 1998.

Hottenstein, Aaron, Shunk, Gordon, PE and Turner, Shawn, PE. *Development of a Methodology to Estimate Bicycle and Pedestrian Travel Demand, Project Summary Report 1723-S*. Austin, TX: Research and Technology Transfer Office, Texas Department of Transportation, June 1997.

Hoyle, Cynthia L., AICP. *Traffic Calming*. Chicago: American Planning Association, July 1995.

National Cooperative Highway Research Program. *Planning and Implementing Pedestrian Facilities in Suburban and Developing Rural Areas Research Report.* Washington, DC: Transportation Research Board, National Research Council, June 1987.

National Park Service. *Economic Impacts of Protecting Rivers, Trails and Greenway Corridors*. Rivers, Trails, and Conservation Assistance, 1991.

Oregon Department of Transportation. *Oregon Bicycle and Pedestrian Plan: an Element of the Oregon Transportation Plan* Salem, OR: Bicycle Pedestrian Program, ODOT, 1995.

OTAK. *Pedestrian Facilities Guidebook: Incorporating Pedestrians into Washington's Transportation System.* Kirkland, WA: OTAK, Sept. 1997.

Pinsolf, Suzan Anderson and Musser, Terri, AICP. *Bicycle Facility Planning: a Resource for Local Governments*. Chicago: American Planning Association, Oct. 1995.

Rails-to-Trails Conservancy and Association of Pedestrian and Bicycle Professionals. *Improving Conditions for Bicycling and Walking*. Washington, DC: Federal Highway Administration, Jan. 1998.

Ryan, Karen-Lee, ed. *Trails for the Twenty-First Century.* Washington, D.C.: Island Press, 1993.

Shafer, C. Scott, Stewart, William P., and Turner, Shawn M. *Bicycle Suitability Criteria for State Roadways in Texas.* Austin, TX: Research and Technology Transfer Office, Texas Department of Transportation, June 1997.

The Traffic Institute. *Program of Instruction for the Bicycle Facility Design Workshop, State of Washington*. Northwestern University: Evanston, IL, Oct. 10, 1996.

2024-2029 Capital Funding Plan

Transportation Capital By BARS CODE

Project ID	Project Title	Total External Funding Budget	PY(s) Actuals	2023 Budget	PY Carryover	Mid-Year Adj	YE Estimate	2023 Adjusted	2024	2025	2026	2027	2028	2029	Total
Secured															
397.0308	**Transfers-In (REET)**														
TR00005	6th Street Phase III	986,162	56,344	37,299				37,299	892,519	-	-	-	-	-	986,162
TR00055	Anderson Cove Sidewalks	40,000	-	-				-	-	-	-	-	-	-	-
TR00151	Belfair Valley Road Subgrade Repair & Overlay	150,000	104,006	150,000				150,000	-	-	-	-	-	-	254,006
TR00071	Burwell Street Adaptive Signals	-	-	-				-	-	-	-	-	-	-	-
TR00105	City Street Lighting	230,000	-	-	-	70,000	-	70,000	70,000	70,000	20,000	-	-	-	230,000
	TR00105.3 LED (PSE) Lighting Conversion	230,000	-	-	-	70,000	-	70,000	70,000	70,000	20,000	-	-	-	230,000
TR00001	E11th Street and Perry Avenue Reconstruction	1,220,621	52,039	913,582	-	255,000	-	1,168,582	-	-	-	-	-	-	1,220,621
TR00024	East/West Corridor Diet (6th Street)	585,000	-	-				-	-	100,000	15,000	15,000	455,000	-	585,000
TR00011	HSIP III-Kitsap Way Bike Lane/Warren Signal	103,000	103,000	-				-	-	-	-	-	-	-	103,000
TR00056	Matan & Lillian & James Sidewalk Connector	40,000	-	-				-	-	-	-	-	-	-	-
TR00010	Naval Avenue Road Diet	1,708,600	55,584	-	257,016	50,000	-	307,016	168,000	-	540,000	540,000	-	-	1,610,600
	TR00010.1 Phase I - 11th to 15th	32,600	55,584	-	257,016	-	-	257,016	-	-	-	-	-	-	312,600
TR00020	Oyster Bay Avenue Improvements	593,346	-	-				-	-	-	-	-	43,776	549,570	593,346
TR00002	Quincy Square on 4th Street	-	-	1,706,161	-	(1,345,032)	(361,129)	-	-	-	-	-	-	-	-
TR00143	Sidewalk Program	-	4,020	300,000	-	-	(200,000)	100,000	-	-	-	125,000	125,000	125,000	479,020
	TR00143.1 Sidewalk Repair/Rehab including ADA Curb Upgrades	-	-	150,000	-	-	(100,000)	50,000	-	-	-	62,500	62,500	62,500	237,500
	TR00143.2 New Construction and In-fill (Gap)	-	-	150,000	-	-	(100,000)	50,000	-	-	-	62,500	62,500	62,500	237,500
	TR00143.3 Trip Hazard Reduction	-	4,020	-				-	-	-	-	-	-	-	4,020
TR00142	Signage and Pavement Marking Maintenance	150,000	20,000	150,000				150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,070,000
	TR00142.1 Pavement Hot-Applied Markings and Striping	150,000	20,000	150,000				150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,070,000
TR00068	Signal System Upgrades	100,028	-	-				-	-	-	-	-	-	-	-
TR00159	SR 303 Adaptive Signals (Sheridan to Riddell)	451,770	-	-	-	131,770	-	131,770	-	60,000	260,000	-	-	-	451,770
TR00029	SR 303 Warren Ave Bridge Multimodal Improvements	-	-	-				-	-	-	-	-	-	-	-
TR00139	Streets Preservation and Maintenance Program	130,000	16,301	-	50,000	-	-	50,000	-	-	-	-	-	-	66,301
	TR00139.1 Chip Seal - Arterial and Collectors	130,000	-	-				-	-	-	-	-	-	-	-
	TR00139.3 Overlay > 2" - Arterials and Collectors	-	16,301	-	50,000	-	-	50,000	-	-	-	-	-	-	66,301
TR00149	Systemic Pedestrian Treatments Bundle - RRFB	8,707	8,707	7,293	-	-	(7,293)	-	-	-	-	-	-	-	8,707
TR00043A	View Ridge Elementary (Almira SRTS) Phase 1	750,000	-	50,000				50,000	33,750	233,750	432,500	-	-	-	750,000
TR00006	Washington Avenue Roundabout	379,200	79,200	-	-	300,000	-	300,000	-	-	-	-	-	-	379,200
TR00064	Wayfinding Signage	300,000	51,942	150,000	98,058	-	-	248,058	-	-	-	-	-	-	300,000
	397.0308 Subtotal	**7,926,434**	**551,143**	**3,464,335**	**405,074**	**(538,262)**	**(568,422)**	**2,762,725**	**1,314,269**	**613,750**	**1,417,500**	**830,000**	**773,776**	**824,570**	**9,087,733**
397.0308a	**Transfers-In (REET) - Residential**														
TR00143	Sidewalk Program	400,000	-	100,000	-	-	(188,117)	(88,117)	-	-	-	-	-	-	(88,117)
	TR00143.1 Sidewalk Repair/Rehab including ADA Curb Upgrades	300,000	-	75,000	-	-	(94,058)	(19,058)	-	-	-	-	-	-	(19,058)
	TR00143.2 New Construction and In-fill (Gap)	100,000	-	25,000	-	-	(94,059)	(69,059)	-	-	-	-	-	-	(69,059)
	397.0308a Subtotal	**400,000**	**-**	**100,000**	**-**	**-**	**(188,117)**	**(88,117)**	**-**	**-**	**-**	**-**	**-**	**-**	**(88,117)**
	Secured Subtotal	**8,326,434**	**551,143**	**3,564,335**	**405,074**	**(538,262)**	**(756,539)**	**2,674,608**	**1,314,269**	**613,750**	**1,417,500**	**830,000**	**773,776**	**824,570**	**8,999,616**

Project ID	Project Title		Total External Funding Budget	PY(s) Actuals	2023 Budget	PY Carryover	Mid-Year Adj	YE Estimate	2023 Adjusted	2024	2025	2026	2027	2028	2029	Total
Pending																
397.0308	**Transfers-In (REET)**															
TR00150	11th Street / Callow Avenue Intersection Improvements		-	-	-				-	-	-	-	-	-	-	-
		397.0308 Subtotal	**-**	**-**	**-**				**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
397.0308a	**Transfers-In (REET) - Residential**															
TR00143	Sidewalk Program		-	-	-				-	-	-	-	-	-	-	-
	TR00143.1	Sidewalk Repair/Rehab including ADA Curb Upgrades	-	-	-				-	-	-	-	-	-	-	-
	TR00143.2	New Construction and In-fill (Gap)	-	-	-				-	-	-	-	-	-	-	-
		397.0308a Subtotal	**-**	**-**	**-**				**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
		Pending Subtotal	**-**	**-**	**-**				**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
		Grand Total	**8,326,434**	**551,143**	**3,564,335**	**405,074**	**(538,262)**	**(756,539)**	**2,674,608**	**1,314,269**	**613,750**	**1,417,500**	**830,000**	**773,776**	**824,570**	**8,999,616**