

# Matanuska-Susitna Borough

## Public Works Department

### Transportation Infrastructure Program 2023

(TIP23)



**MATANUSKA-SUSITNA BOROUGH**  
**TRANSPORTATION INFRASTRUCTURE PROGRAM 2023**  
**(TIP23)**

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## Executive Summary

### Transportation Infrastructure Program 2023

The Matanuska-Susitna Borough (MSB) has experienced substantial and sustained growth for the last decade resulting in increased traffic volumes, congestion, and safety issues on the existing road network. The MSB Assembly recognized the need to address these issues and directed the Borough Manager to prepare a 2023 Transportation System Package for Assembly consideration through Resolution 22-100 on October 4, 2022.

The MSB's Transportation Infrastructure Program 2023 (TIP-23) is a package of projects that aims to reduce traffic congestion, support economic development, improve connectivity, enhance pedestrian and vehicle safety, increase reliability, and provide transportation choices for residents. Many of these projects are identified in the MSB's Long Range Transportation Plan (LRTP), Official Highway and Streets Plan (OSHP), and Safe Routes to Schools (SRTS).

### Nomination Process

Project nominations for TIP23 came from a variety of sources. In January of 2023 a call for nominations was sent to MSB Departments, the MSB School District, the Local Road Service Area Advisory Board (LRSAAB), the Transportation Advisory Board (TAB), the Planning Commission (PC), and the MSB Assembly. Residents were also provided an opportunity to nominate projects at the Large Road Service Area Advisory Board (LRSAAB) meetings and the public hearings held by the TAB and PC.

### Review, Recommendation, and Approval Process

Following the nomination process, a review, recommendation, and approval process took place. The nominations were processed through a criteria and scoring matrix administered by representatives from various MSB departments and the school district. The scored list of projects was reviewed by the Borough Manager (Mike Brown), the Borough Public Works Director (Tom Adams), the LRSAAB, the TAB, and the PC. For projects that were not scored, such as School Site Traffic and Safety Improvements, the nominators, in this example the School District, were requested to indicate what priorities the projects should be listed in. Other considerations discussed were whether a project was also eligible for other funding sources such as ADOT&PF's Community Transportation Program, ADOT&PF's Highway Safety Improvement Program, federal funding, or other grant sources. The TAB and PC also requested consideration be given to funding TIP 2021 projects that lacked sufficient funding due to increased material or construction costs. The Pre-Design & Engineering Division of the Public Works Department (PD&E) revised the TIP23 list of projects based on all of these recommendations and compiled a final list of TIP23 projects to be presented to the MSB Assembly and MSB residents.

### Project Programming

TIP23 comprises projects divided into phases, scheduled according to the time estimated to accomplish each phase and the funding needed. Each project is broken into five (5) phases as follows:

1. Preliminary Engineering
2. Design
3. Right-of-Way

4. Utilities
5. Construction

**Preliminary Engineering, Phase 1** – This phase includes all engineering and support work necessary for the design phase. The Preliminary Engineering tasks may include the following:

- Identify the problem or deficiency to be solved (Purpose and Need Statement)
- Research and acquire existing data
- Identify and develop alternatives
- Prepare schematic plans as necessary to convey information to support groups, agencies, and the public
- Identify environmental Issues
- Cost estimating
- Public Involvement
- Permitting

**Design, Phase 2** - The design phase outlines a project and, through increasingly detailed steps, refines the project to develop highly specific project plans that construction contractors use to guide their work.

**Right-of-Way, Phase 3** – During the design phase, right-of-way (ROW) staff review plans, appraise the fair market value of land needed, negotiate property acquisitions, relocate displaced persons or businesses, and certify the MSB's ownership or land interest.

**Utilities, Phase 4** – During the utilities phase, adjustments and relocations necessary to avoid utility conflict with the project (which may warrant revising design) are determined. If relocation is required, each utility is responsible for the design of changes to their facilities, preparation of plans and cost estimates that support their relocation agreement. Relocations are typically performed by the utility company or by a contractor managed by the utility.

**Construction, Phase 5** - The construction phase includes all activities involved in building or altering an existing road, path, or structure including clearing land, demolition, excavation, moving material to establish curve and grade, drainage, fill, pavement, erection of bridges, guardrails, traffic signals, lighting, culverts, traffic control, and other related construction activities. Depending on the project and location, it may include temporary detours, steps to prevent or mitigate environmental problems, and landscaping. Construction may take anywhere from a few days or weeks to several years to complete.

The length of each phase will vary from project to project. Some projects require all phases, while others may need only the design and construction phases. If a project is complex, it may consist of several intermediate steps. The life of a project, from identification to completion, may take a few months to many years.

### **Purpose of this Document**

The purpose of this document is to describe the projects, provide the estimated costs, and detail the anticipated schedule for TIP23 projects.



## Estimated Cost Summary

Project Name	Assembly District	Road Service Area (RSA)	Individual Project Cost	50% Match
Edgerton Parks Road – Mtn. Trails Drive Upgrade and Pathway Phase II	1	16	\$2,174,000	\$1,087,000
Hemmer Road Extension South	2	16	\$5,890,000	\$2,945,000
School Site Traffic and Safety Improvements: Pioneer Peak Elementary School	3	16	\$2,256,000	\$1,128,000
Green Forest Drive Reconstruction	4	25	\$6,221,000	\$3,110,500
Museum Drive Extension	4	27	\$6,137,000	\$3,068,500
Burma Road Upgrades and Improvements	5	17,21	\$11,585,000	\$5,792,500
School Site Traffic and Safety Improvements: Shaw Elementary School	6	25	\$18,380,000	\$9,190,000
King Arthur Drive Reconstruction: Parks Highway to No Name Hill Drive	7	Houston	\$6,535,000	\$3,267,500
Yoder Road Reconstruction: Talkeetna Spur to Southfork Road	7	29	\$5,239,000	\$2,619,500
Jolly Creek Drainage Improvements	5	21	\$1,953,000	\$976,500
West Lakes Boulevard Big Lake Trail No. 1 Separated Crossing	5	16	\$2,750,000	\$1,375,000
Inner-Outer Springer Loop Pathway	2	16	\$2,385,000	\$1,192,500
Tait Drive Pavement Rehabilitation: Bogard to Seldon	6	25	\$548,000	\$274,000
Earl Drive, Eek Street Pavement Rehabilitation: Bogard to Finger Lake Elementary School	6	25	\$493,000	\$246,500
Gershmel Loop Pavement Rehabilitation: Fireweed Road to Fireweed Road	2	9	\$647,000	\$323,500
School Site Traffic and Safety Improvements: Finger Lake Elementary School	6	25	\$1,484,000	\$742,000
Big Lake Boat Launch Access and Parking Lot Reconstruction	5	21	\$322,000	\$161,000
<b>Total</b>			<b>\$74,999,000</b>	<b>\$37,499,500</b>

## Edgerton Parks Road – Mtn. Trails Drive Upgrade and Pathway Phase

### II

**Project No.:** 35472-1812

**Assembly District:** 6

**Road Service Area:** No. 16

**Description:** The purpose of the overall project is to improve Edgerton Parks Road to collector standards and provide pedestrian facilities from Palmer Fishhook Road to Government Peak Recreational Area (GPRA). The need for the project is growing populations and development in the area that have increased traffic and use of GPRA, which increases vehicular and pedestrian activity in the area. Rising pedestrian use increases the potential for pedestrian-vehicle conflicts. In addition, Edgerton Parks Road does not currently meet minor collector standards and is showing some longitudinal cracking indicating sub-grade failure.

**Length:** Road 1.0 mile, Path 1.9 miles

**OSHP 2022 Classification:** Minor Collector

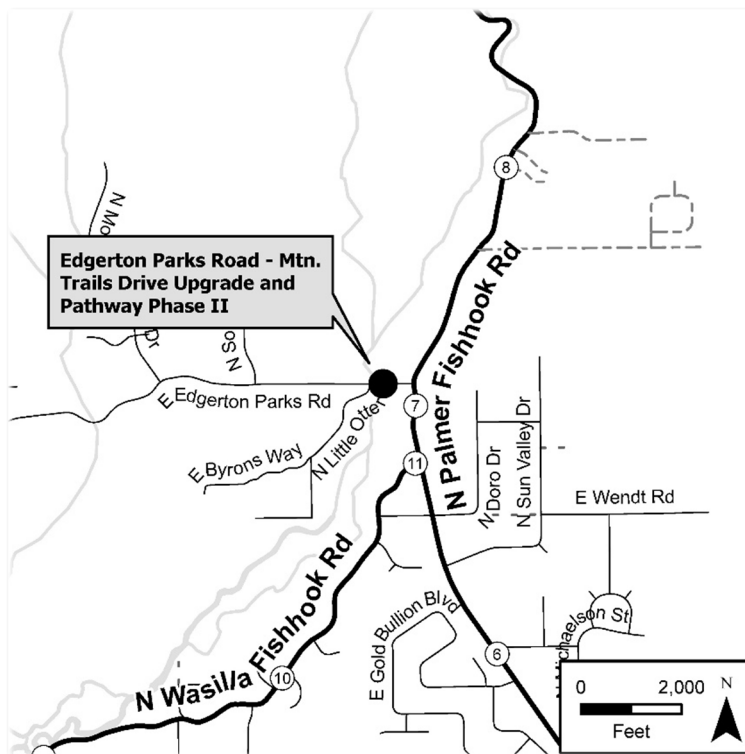
**Designer:** DOWL, LLC

**TIP 21 Estimate:** \$5,317,000

**TIP 23 Estimate:** \$2,174,000 (Funding needed)

**Estimated Total Cost:** \$7,491,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering					
Design					
Right-of-Way					
Utilities					
Construction	\$2,174,000				
Year Totals:	\$2,174,000				



# Hemmer Road Extension South

**Project No.:** 35472-1805

**Assembly District:** 2

**Road Service Area:** No. 16

**Description:** Improve safety and traffic signal access to the Valley Pathways School and a large residential subdivision by extending Hemmer Road South of the Palmer Wasilla Highway.

**Length:** 1.0 mile

**OSHP 2022 Classification:** Major Collector

**Designer:** Lounsbury & Associates, Inc.

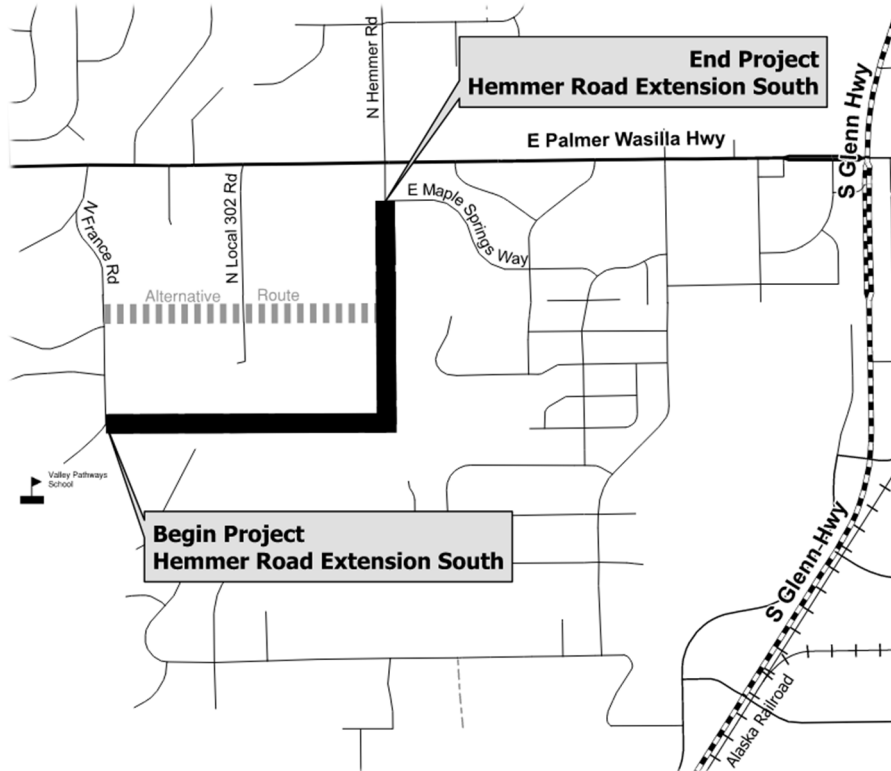
**Contractor:** TBD

**TIP 21 Estimate:** \$516,000 (Design)

**TIP 23 Estimate:** \$5,890,000 (Funding needed)

**Estimated Total Cost:** \$6,406,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering					
Design					
Right-of-Way	\$560,000				
Utilities	\$50,000				
Construction		\$5,280,000			
<b>Year Totals:</b>	<b>\$610,000</b>	<b>\$5,280,000</b>			



# School Site Traffic and Safety Improvements: Pioneer Peak

## Elementary School

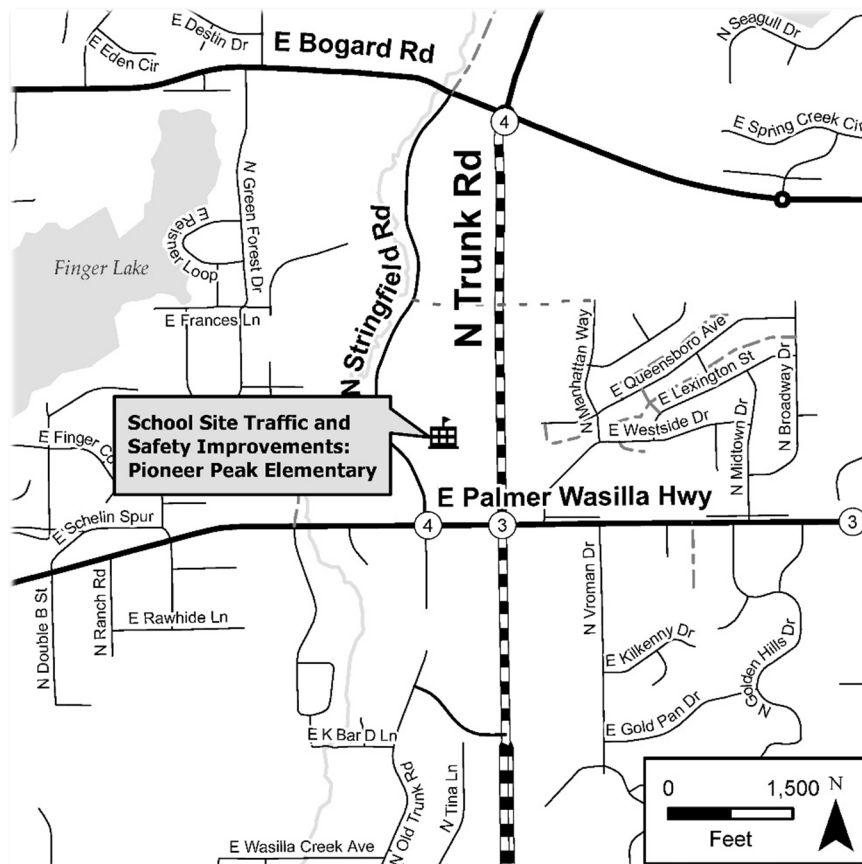
**Assembly District:** 3

**Road Service Area:** No. 16

**Description:** Reconstruct access to Pioneer Peak Elementary School. Improve on-site circulation. This school experiences significant traffic congestion, backing traffic up onto Stringfield Road and the Palmer-Wasilla Highway. The improvements proposed will help alleviate the traffic congestion issue.

**Estimated Total Cost:** \$2,256,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$182,000				
Design	\$121,000				
Right-of-Way	\$200,000				
Utilities	\$61,000				
Construction		\$1,692,000			
<b>Year Totals:</b>	<b>\$564,000</b>	<b>\$1,692,000</b>			



## Green Forest Drive Reconstruction

**Assembly District:** 4

**Road Service Area:** No. 25

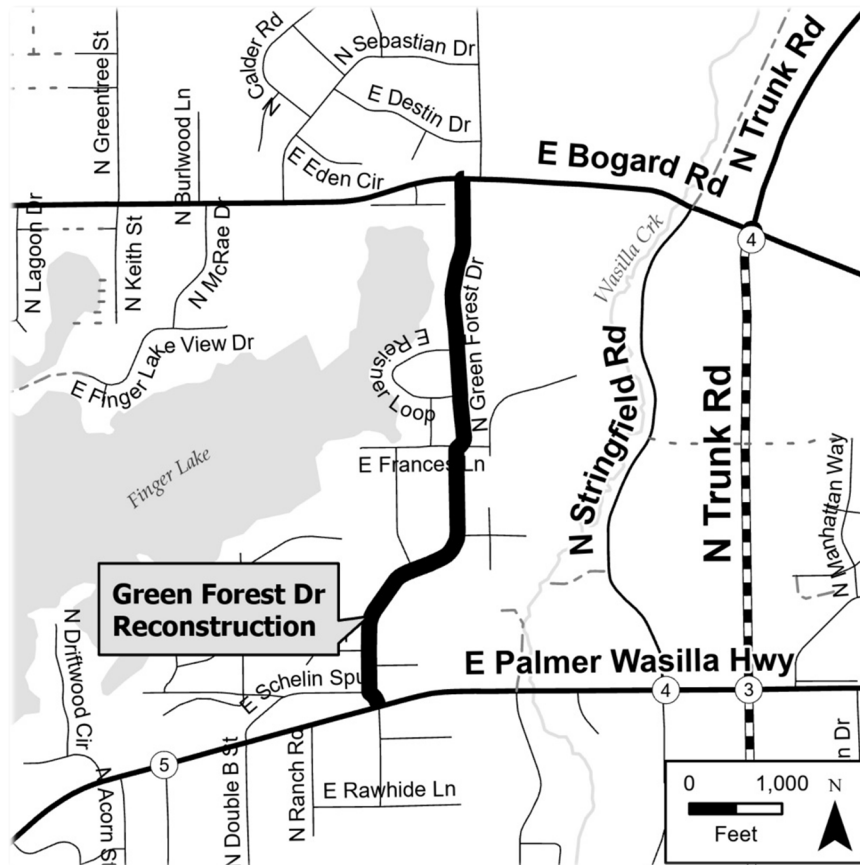
**Description:** Reconstruct Green Forest Drive including grading, drainage, signing, paving, and structural section replacement. This corridor is heavily used by traffic to move between Bogard Road and Palmer-Wasilla Highway. The road was originally constructed as a local residential road, not designed for the current traffic load. The proposed improvements will bring the road to collector standards.

**Length:** 1.2 miles

**OSHP 2022 Classification:** Minor Collector

**Estimated Total Cost:** \$6,221,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$165,000				
Design		\$330,000			
Right-of-Way			\$447,000		
Utilities				\$660,000	
Construction					\$4,619,000
<b>Year Totals:</b>	<b>\$165,000</b>	<b>\$330,000</b>	<b>\$447,000</b>	<b>\$660,000</b>	<b>\$4,619,000</b>



## Museum Drive Extension

**Assembly District:** 4

**Road Service Area:** No. 27

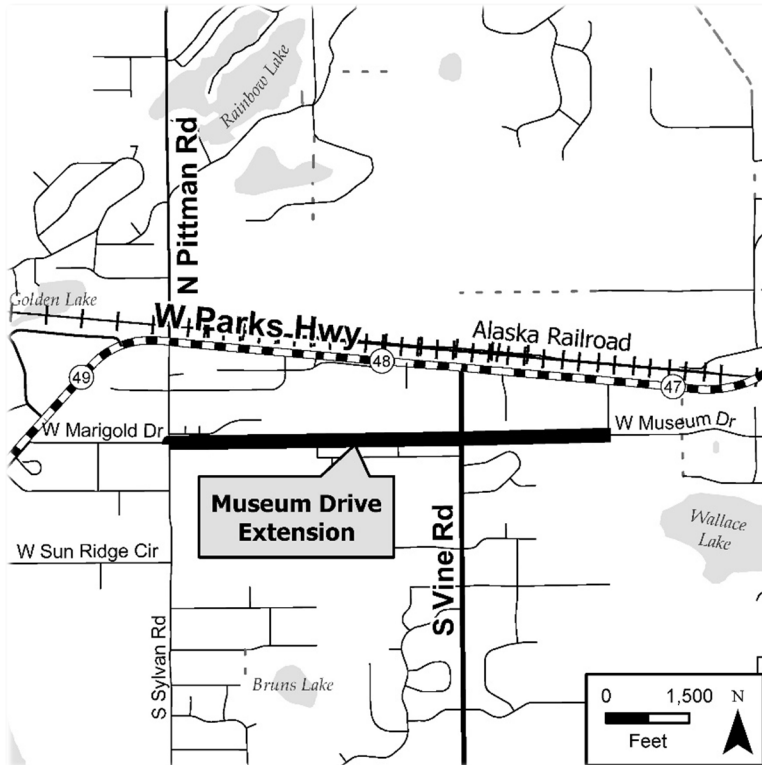
**Description:** Extend Museum Drive from Museum Place to Sylvan Road. Project includes grading, drainage, signing, paving, and structural section replacement. The Parks Highway carries a heavy traffic load that includes local residential traffic, commercial traffic, and pass-through traffic to communities north of Wasilla. This project will improve safety and inter-connectivity by providing an alternate route for the local and commercial traffic. Business development along the proposed Museum Drive Extension corridor is already occurring indicating the need for this project.

**Length:** 1.5 miles

**OSHP 2022 Classification:** Minor Collector

**Estimated Total Cost:** \$6,137,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering					
Design	\$100,000				
Right-of-Way	\$1,156,000				
Utilities	\$169,000				
Construction		\$4,712,000			
<b>Year Totals:</b>	<b>\$1,425,000</b>	<b>\$4,712,000</b>			



## Burma Road Upgrades and Improvements

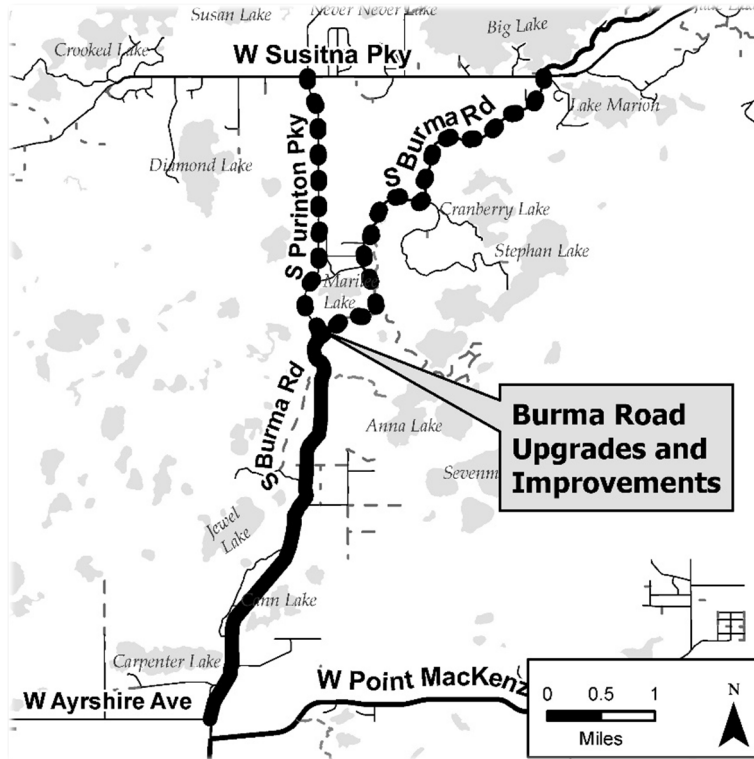
**Assembly District:** 5

**Road Service Area:** No. 17, 21

**Description:** Improve Burma Road including drainage, signing, paving, widening, structural improvements, and realignment.

**OSHP 2022 Classification:** Minor Arterial

**Estimated Total Cost:** \$11,585,000



Note: Dotted lines indicate areas of potential improvement to be considered during preliminary design

## School Site Traffic and Safety Improvements: Shaw Elementary School

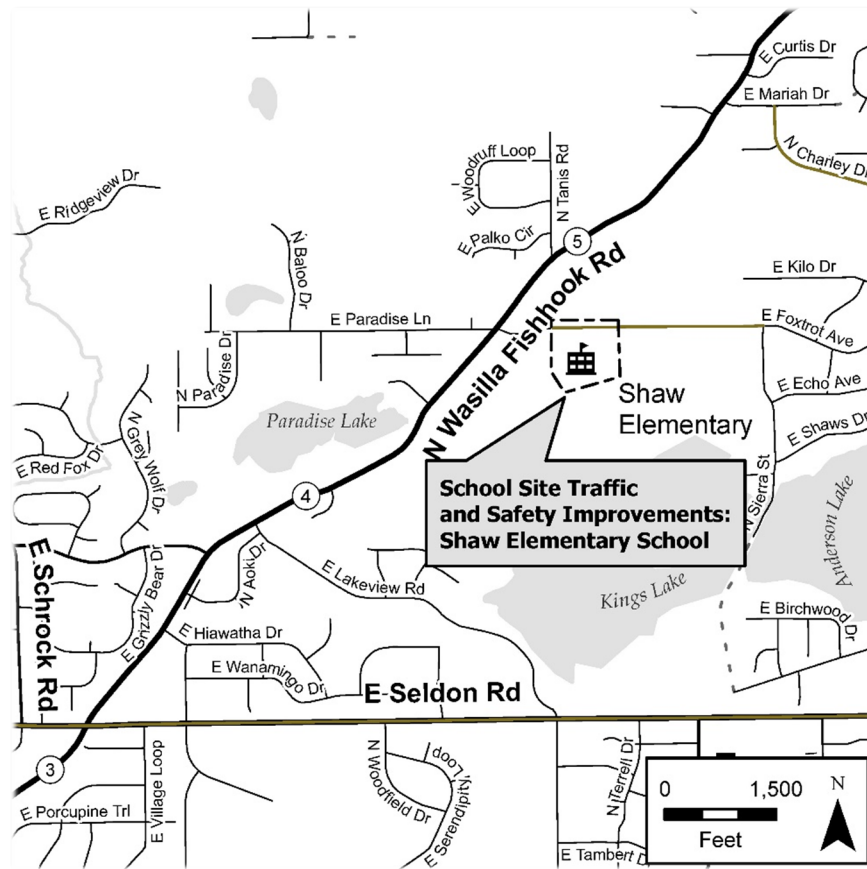
**Assembly District:** 6

**Road Service Area:** No. 25

**Description:** Reconstruct access to Shaw Elementary School. Improve on-site circulation. This school experiences significant traffic congestion backing traffic up onto Wasilla Fishhook Road. The borough property the school is located on is scheduled to be the site of an additional school. The improvements proposed in this project will help to alleviate the traffic congestion issue.

**Estimated Total Cost:** 18,380,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$551,000				
Design	\$1,102,000				
Right-of-Way	\$750,000				
Utilities		\$551,000			
Construction		\$15,426,000			
<b>Year Totals:</b>	<b>\$2,403,000</b>	<b>\$15,977,000</b>			





# King Arthur Drive Reconstruction: Parks Highway to No Name Hill Drive

## Drive

**Assembly District:** 7

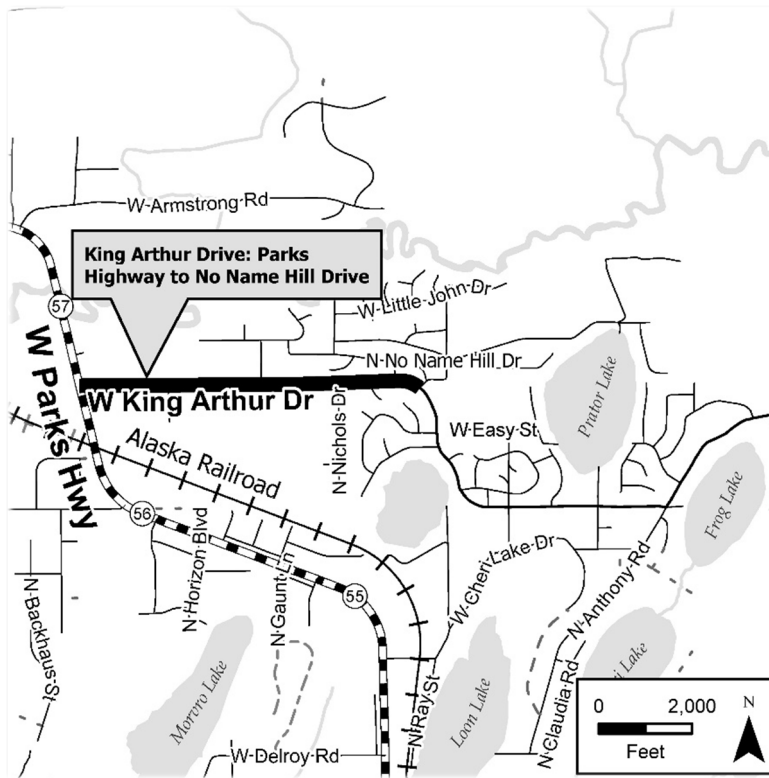
**Road Service Area:** City of Houston

**Description:** Reconstruct King Arthur Drive from Parks Highway to No Name Hill Drive including grading, drainage, signing, paving, shoulder widening, and structural section replacement. King Arthur Drive experienced substantial flooding in 2021 causing significant roadway damage. This corridor is a major east-west link between the Parks Highway and Meadow Lakes, an area experiencing significant growth. This project would repair and improve this import road.

**OSHP 2022 Classification:** Major/Minor Collector

**Estimated Total Cost:** \$6,535,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$592,000				
Design	\$395,000				
Right-of-Way					
Utilities		\$25,000			
Construction		\$5,523,000			
<b>Year Totals:</b>	<b>\$987,000</b>	<b>\$5,548,000</b>			



## Yoder Road Reconstruction: Talkeetna Spur to Southfork Road

**Assembly District:** 7

**Road Service Area:** No. 29

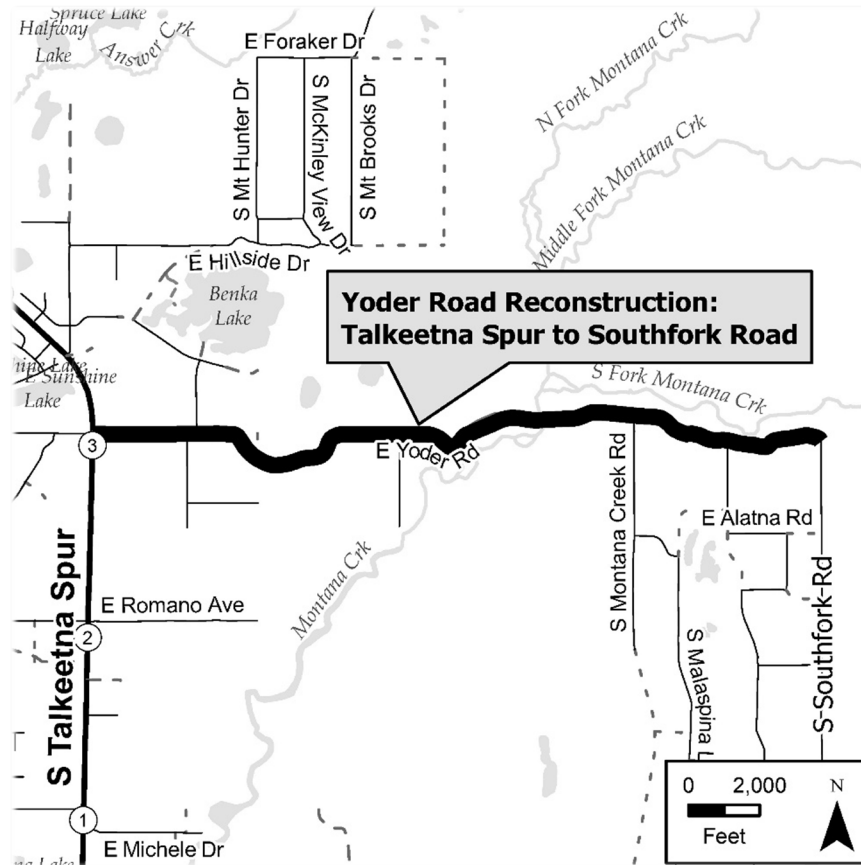
**Description:** Reconstruct Yoder Road from Talkeetna Spur to Southfork Road including grading, drainage, signing, paving, and structural section replacement. This road is in poor condition and serves as the primary access to commercial, residential and recreational property in this area. The proposed project will bring Yoder Road up to collector level standards and provide for safer travelling.

**Length:** 1.2 miles

**OSHP 2022 Classification:** Minor Collector

**Estimated Total Cost:** \$5,239,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$164,000				
Design		\$328,000			
Right-of-Way					
Utilities			\$164,000		
Construction				\$4,583,000	
<b>Year Totals:</b>	<b>\$164,000</b>	<b>\$328,000</b>	<b>\$164,000</b>	<b>\$4,583,000</b>	



## Jolly Creek Drainage Improvements

**Project No.:** 30043-6600-6711

**Assembly District:** 5

**Road Service Area:** No. 21

**Description:** Capture drainage from the Knollwood and Eastern basins that feed into the Jolly Creek drainage and reroute it from the intersection of Hollywood Drive and Klutina Drive west along Hollywood Drive to Jordan Pond, where it will flow into Big Lake and, ultimately, Fish Creek.

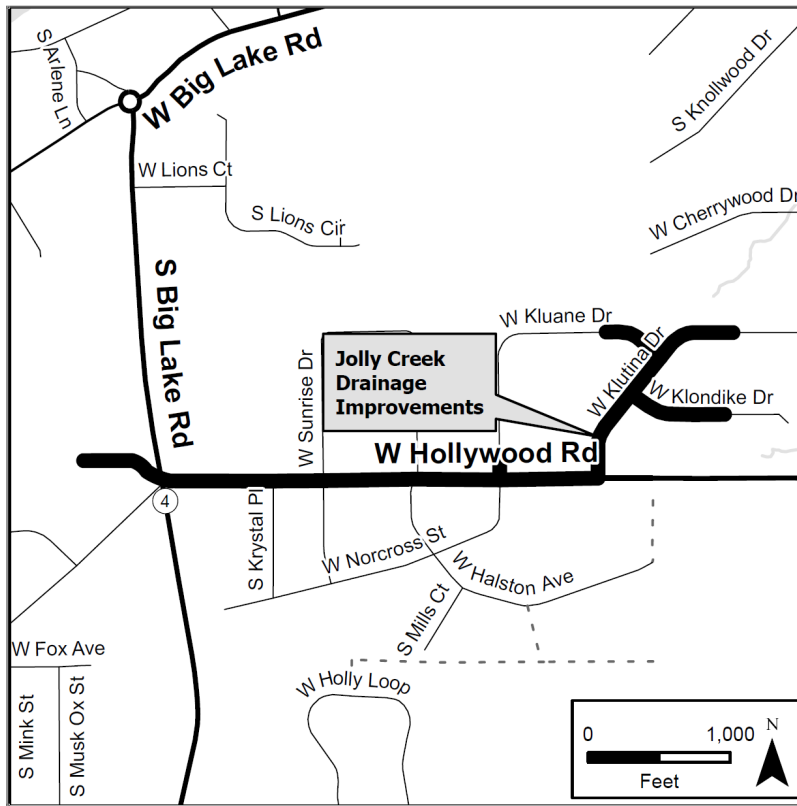
**Length:** 1.25 miles

**OSHP 2022 Classification:** Minor Arterial

**Designer:** HDL

**Estimated Total Cost:** \$1,953,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$28,000				
Design	\$55,000				
Right-of-Way	\$100,000				
Utilities		\$1,000,000			
Construction		\$770,000			
<b>Year Totals:</b>	<b>\$183,000</b>	<b>\$1,770,000</b>			



## West Lakes Boulevard Big Lake Trail No. 1 - Separated Crossing

**Assembly District:** 5

**Road Service Area:** No. 21

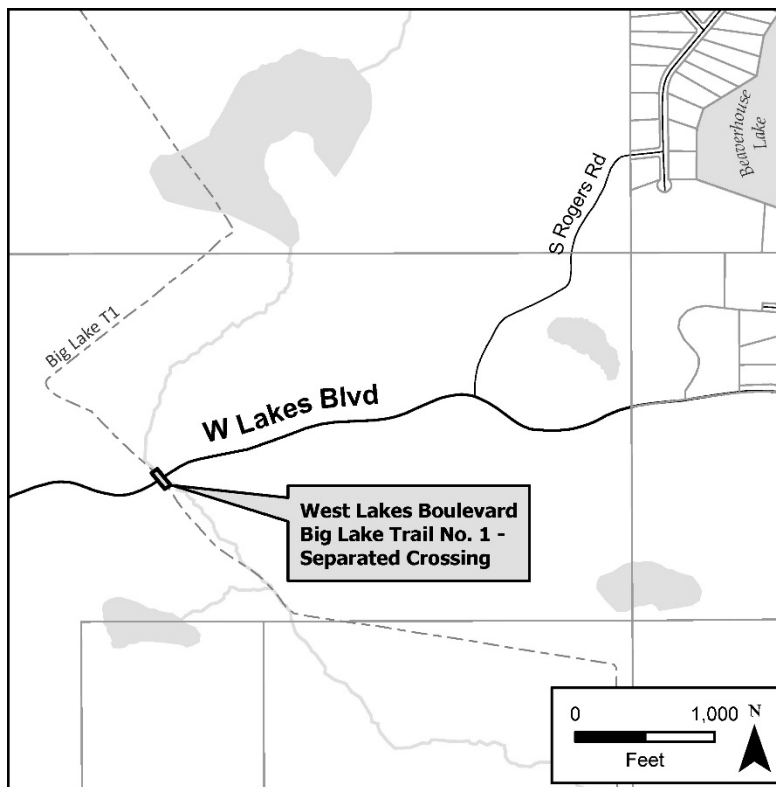
**Description:** Design, acquire any needed right-of-way, relocate utilities and construct a separated trail crossing of West Lakes Boulevard to improve safety of those using the crossing and highway drivers.

**Length:** 0.10 miles

**OSHP 2022 Classification:** Minor Collector

**Estimated Total Cost:** \$2,750,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$84,000				
Design	\$167,000				
Right-of-Way					
Utilities		\$167,000			
Construction		\$2,332,000			
<b>Year Totals:</b>	<b>\$251,000</b>	<b>\$2,499,000</b>			



## Inner-Outer Springer Loop Pathway

**Assembly District:** 2

**Road Service Area:** No. 16

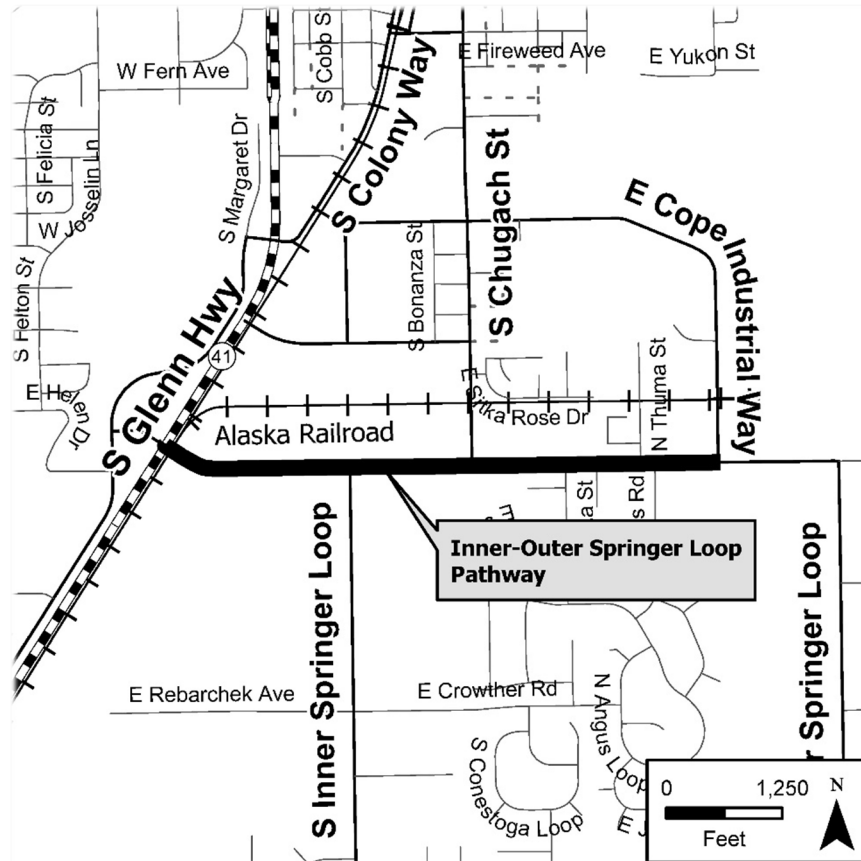
**Description:** Construct a pedestrian pathway along Inner-Outer Springer Loop from Cope Industrial Way to the Glenn Highway.

**Length:** 1.1 miles

**OSHP 2022 Classification:** Major Collector

**Estimated Total Cost:** \$2,385,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$66,000				
Design	\$131,000				
Right-of-Way	\$100,000				
Utilities		\$261,000			
Construction		\$1,827,000			
<b>Year Totals:</b>	<b>\$297,000</b>	<b>\$2,088,000</b>			



## Tait Drive Pavement Rehabilitation: Bogard to Seldon

**Assembly District:** 6

**Road Service Area:** No. 25

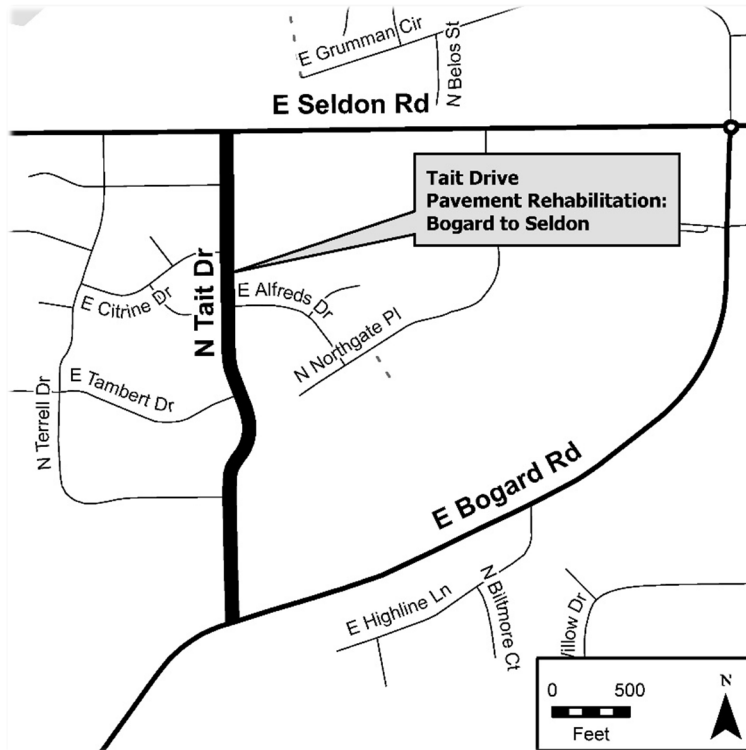
**Description:** Resurface Tait Drive from Bogard Road to Seldon Road including pavement planing, paving, drainage improvements, guardrail, signing, and striping.

**Length:** 0.61 miles

**OSHP 2022 Classification:** Minor Collector

**Estimated Total Cost:** \$548,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$27,400				
Design	\$54,800				
Right-of-Way					
Utilities		\$27,400			
Construction		\$438,400			
<b>Year Totals:</b>	<b>\$82,200</b>	<b>\$465,800</b>			



# Earl Drive, Eek Street Pavement Rehabilitation: Bogard to Finger Lake Elementary School

**Assembly District:** 6

**Road Service Area:** No. 25

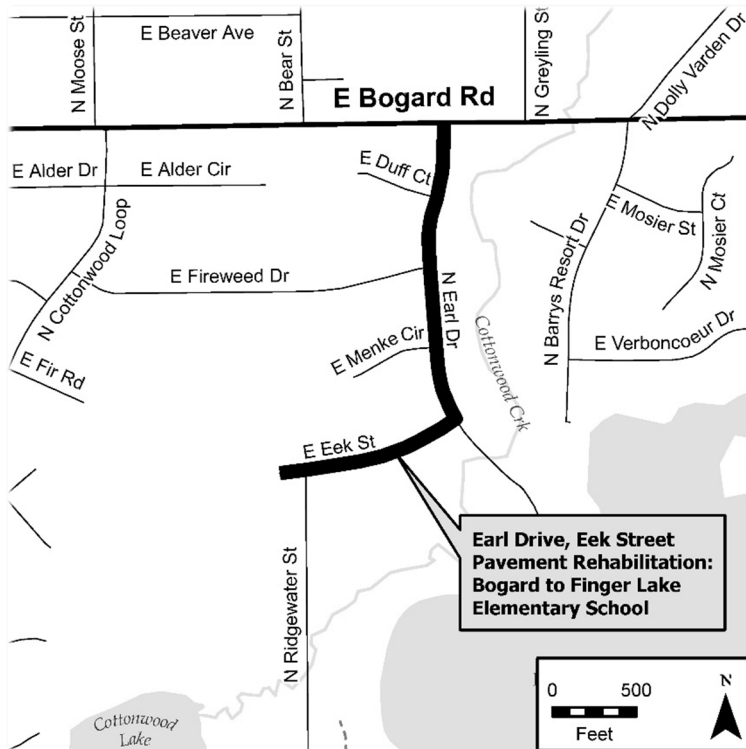
**Description:** Resurface Earl Drive and Eek Street from Bogard Road to Finger Lake Elementary School including pavement planing, paving, drainage improvements, guardrail, signing, and striping.

**Length:** 0.55 miles

**OSHP 2022 Classification:** Local Road (School Access)

**Estimated Total Cost:** \$493,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$24,650				
Design	\$49,300				
Right-of-Way					
Utilities		\$24,650			
Construction		\$394,400			
<b>Year Totals:</b>	<b>\$73,950</b>	<b>\$419,050</b>			



# Gershmel Loop Pavement Rehabilitation: Fireweed Road to Fireweed Road

**Assembly District:** 2

**Road Service Area:** No. 9

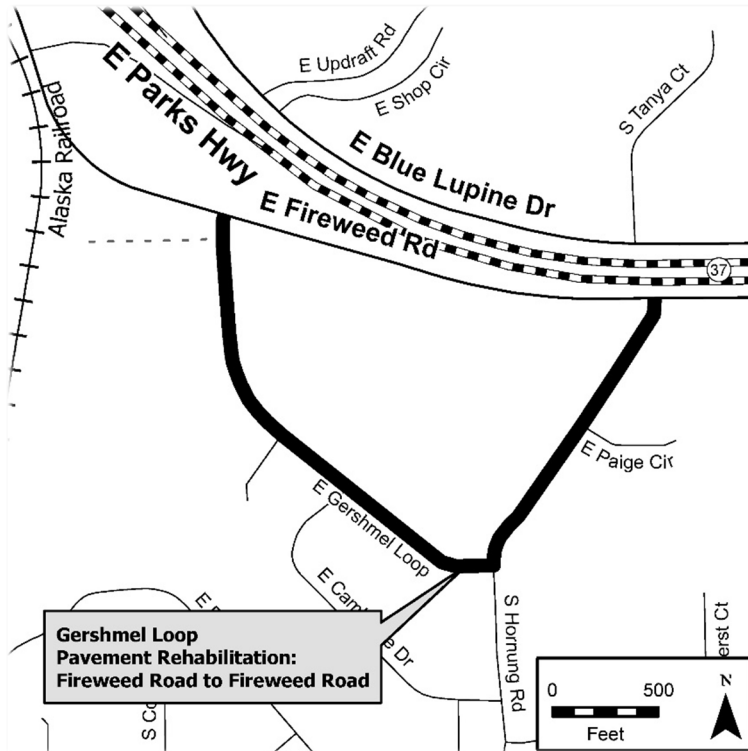
**Description:** Resurface Gershmel Loop from Fireweed Road to Fireweed Road including pavement planing, paving, drainage improvements, guardrail, signing, and striping.

**Length:** 0.72 miles

**OSHP 2022 Classification:** Minor Collector

**Estimated Total Cost:** \$647,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$32,350				
Design	\$64,700				
Right-of-Way					
Utilities		\$32,350			
Construction		\$517,600			
<b>Year Totals:</b>	<b>\$97,050</b>	<b>\$549,950</b>			





# School Site Traffic and Safety Improvements: Finger Lake Elementary School

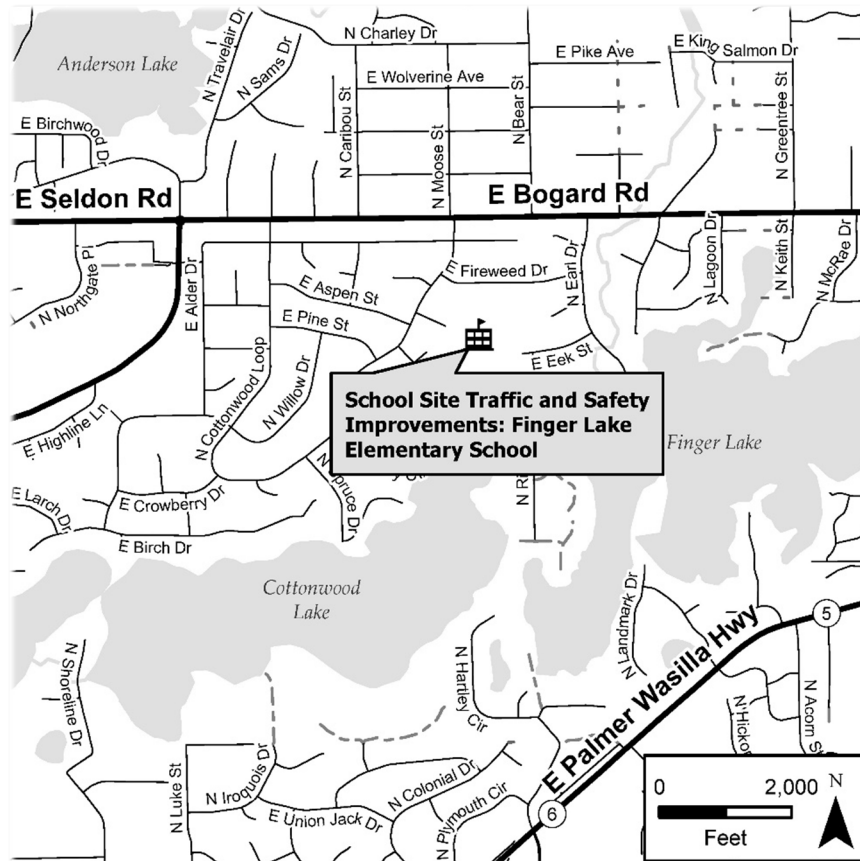
Assembly District: 6

Road Service Area: No. 25

Description: Reconstruct access to Finger Lake Elementary School. Improve on-site circulation.

Estimated Total Cost: \$1,484,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$131,000				
Design	\$88,000				
Right-of-Way					
Utilities	\$44,000				
Construction		\$1,221,000			
<b>Year Totals:</b>	<b>\$263,000</b>	<b>\$1,221,000</b>			



## Big Lake Boat Launch Access and Parking Lot Reconstruction

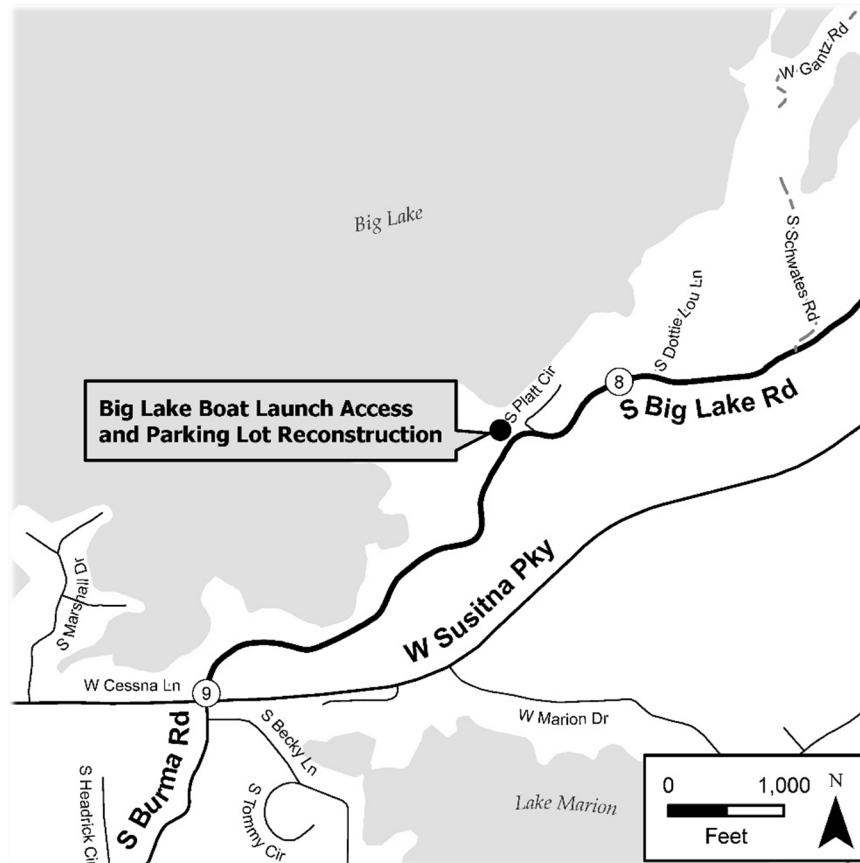
Assembly District: 5

Road Service Area: No. 21

Description: Reconstruct Big Lake Boat Launch access and parking lot.

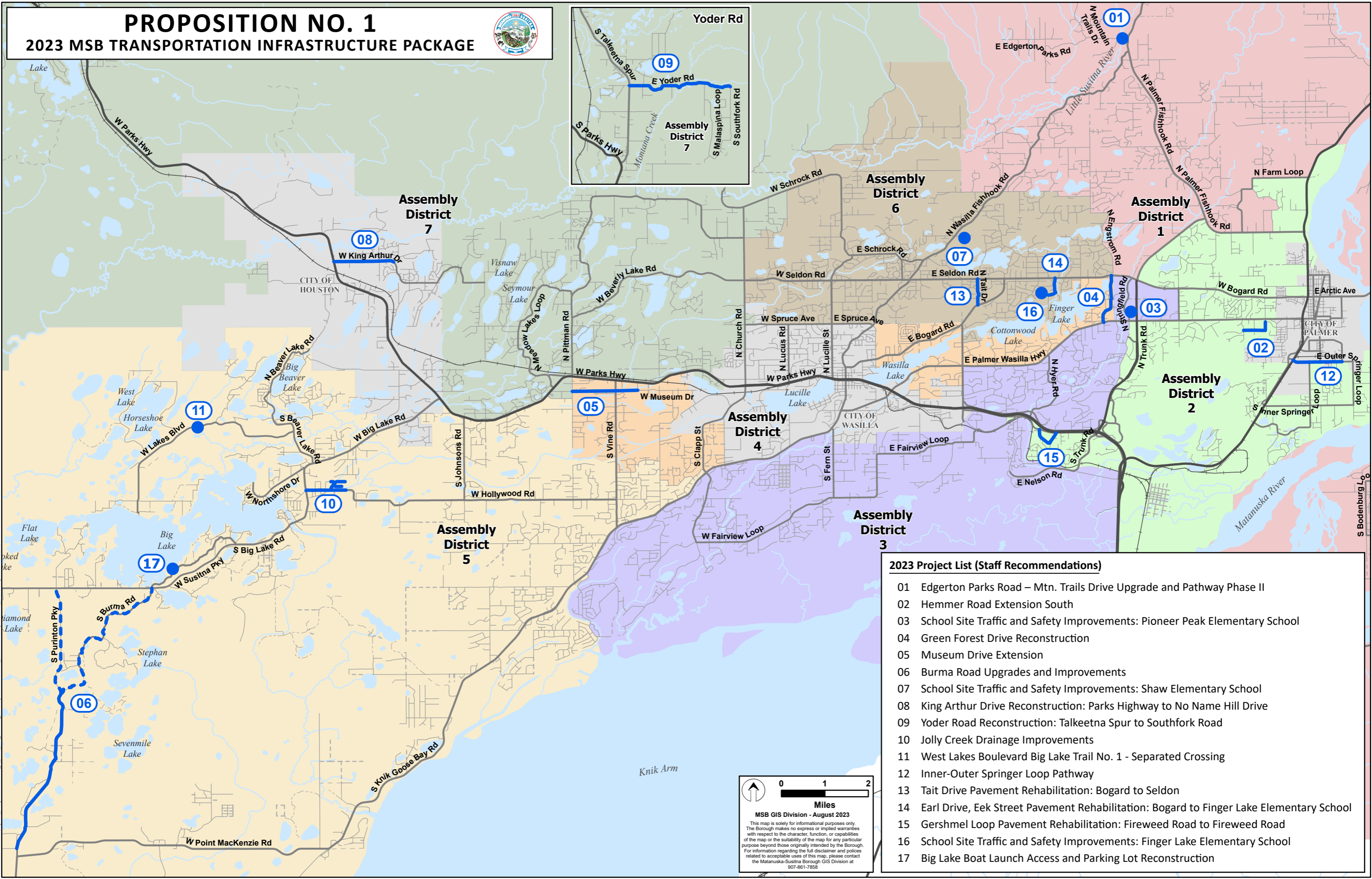
Estimated Total Cost: \$322,000

Phase	2024	2025	2026	2027	2028
Preliminary Engineering	\$25,000				
Design					
Right-of-Way					
Utilities					
Construction	\$297,000				
Year Totals:	\$322,000				



# PROPOSITION NO. 1

## 2023 MSB TRANSPORTATION INFRASTRUCTURE PACKAGE



- 2023 Project List (Staff Recommendations)**
- 01 Edgerton Parks Road – Mtn. Trails Drive Upgrade and Pathway Phase II
  - 02 Hemmer Road Extension South
  - 03 School Site Traffic and Safety Improvements: Pioneer Peak Elementary School
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MSB GIS Division - August 2023

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