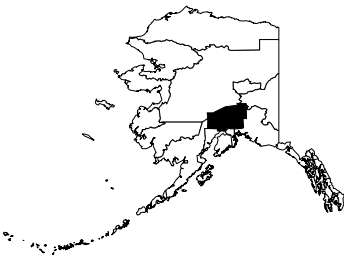
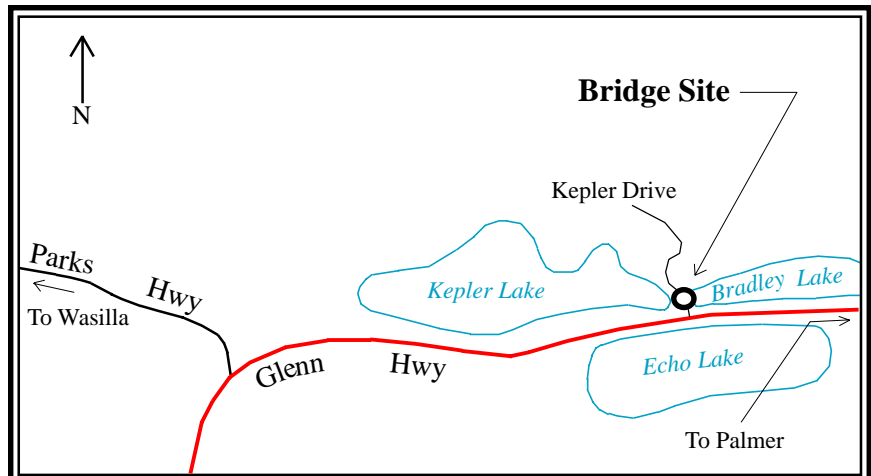


# KEPLER-BRADLEY LAKES BRIDGE, Matanuska-Susitna Borough, Alaska



**Type:** Stress-laminated deck  
**Borough:** Matanuska-Susitna  
**Owner:** Matanuska-Susitna Borough  
**Built in:** 1998  
**Fabricator:** Alaska Forest Products  
**Engineer:** George Strother  
**Spans over:** Unnamed stream  
**Bridge length:** 16'-0"  
**Roadway width:** 12'-0"

**Directions:** From Wasilla, travel east on the Parks Highway to the intersection of Parks Highway and the Glenn Highway. Take the Glenn Highway east towards Palmer and travel 1.5 miles to the intersection of the Glenn Highway and Kepler Drive. Turn left onto Kepler Drive. The bridge site is visible from the highway.



USDA Forest Service



**GEOMETRY**

Number of Spans: 1  
 Out-to-out length: 16'-0"  
 Center-of-bearing length: 15'-0"  
 Skew: 0 degrees  
 Number of lanes: 1  
 Out-to-out width: 16'-6" (includes walkway)  
 Curb-to-curb width: 12'-0" (roadway)  
 Superstructure square footage: 240

Design load: AASHTO HS-20  
 Averaged daily traffic: 20  
 Design by: Peratrovich, Nottingham & Drage, Inc.  
 Abutment material: Wood  
 Abutment wood quantity: 2760 bf

Total wood quantity: 6,990 bf  
 Total project cost: \$58,735  
 Superstructure wood quantity: 4230 bf  
 Total superstructure cost: \$19,940  
 Total superstructure cost /sq. ft.: \$83 (includes walkway)

**MATERIAL****DECK**

Material: Wood  
 Grade: #1  
 Species: Alaska white spruce  
 Sizes used: 2" x 12" x 16'  
 Quantity: 3000 bf  
 Drying method: Air dry  
 Preservative treatment: Copper sulfate & sodium fluoride  
 Method: Double diffusion

**BEAMS/STRINGERS (none)****GUIDERAIL/HANDRAIL POSTS**

Material: Wood  
 Grade: #1  
 Species: Alaska white spruce  
 Quantity: 340 bf  
 Drying method: Air dry  
 Preservative treatment: Copper sulfate & sodium fluoride  
 Method: Double diffusion

**GUIDERAIL CURB**

Material: Wood  
 Grade: #1  
 Species: Alaska white spruce  
 Size: 10" x 10"  
 Quantity: 450 bf  
 Preservative Treatment: Copper sulfate & sodium fluoride

**HANDRAIL**

Material: Wood  
 Species: Alaska white spruce  
 Preservative treatment: Copper sulfate & sodium fluoride

**STRESSING STEEL**

Grade: ASTM A722  
 Manufacturer: Dywidag  
 Bar Diameter: 1"  
 Coating: Galvanized  
 Quantity: 90 lf  
 Bearing plate size: 9" x 12"

**FUNDING SOURCES:** USDA Forest Service: \$26,635; Balance of funding from Mat-Su Borough and Mat-Su RC&D Council

**LOCAL CONTACT:** Rhoda Portis, Coordinator  
 Mat-Su Resource Conservation & Development Council  
 351 W. Parks Hwy.  
 Wasilla, AK 9954  
 Phone: 907-373-1062

Information provided by Mat-Su RC&D Council

WIT Program Proposal Number: R10-03-95

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