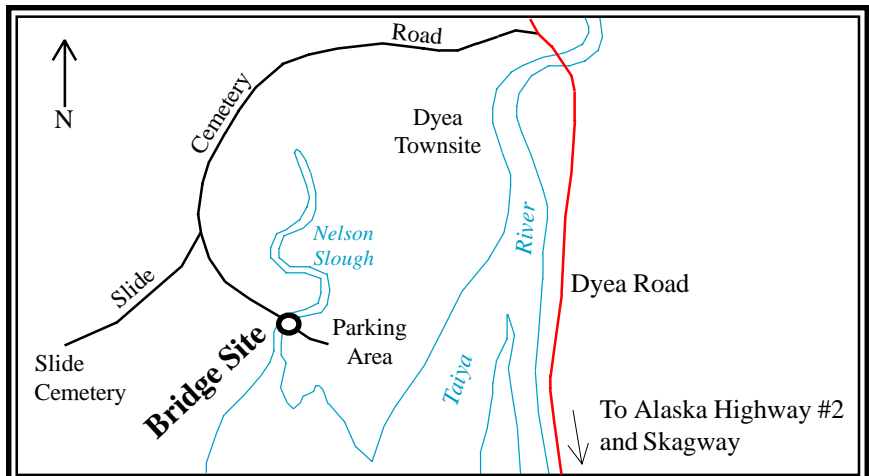


NELSON SLOUGH BRIDGE, Skagway, Alaska



Type: Stress-laminated deck
Owner: City of Skagway
Built in: 1998
Fabricator: Hamilton Construction Co.
Engineer: Frank W. Muchmore, P.E.
Spans over: Nelson Slough
Bridge length: 76'-0" (3 spans)
Roadway width: 14'-4"

Directions: From Skagway, take State Highway #2 north 2.3 miles to the intersection of Dyea Road and State Highway #2. Turn left onto the Dyea Road and after crossing the Taiya River, turn left onto Slide Cemetery Road (which is approximately 7.4 miles from the intersection of State Highway #2 and Dyea Road). From the intersection of the Dyea Road and Slide Cemetery Road proceed approximately .5 miles to a fork in the road and take the left fork, which takes you to the bridge site.



USDA Forest Service

The National Wood In
Transportation Program



GEOMETRY

Number of Spans: 3
 Out-to-out length: 76'-0"
 Center-of-bearing length: 75'-0"
 Skew: 0 degrees
 Number of lanes: 1
 Out-to-out width: 16'-3"
 Superstructure square footage: 1090
 Curb-to-curb width: 14'-4"

Design load: AASHTO HS20-44
 Design by: Muchmore Engineering, Int'l.
 Abutment material: Rock filled gabion
 baskets

Total wood quantity: 28.7 mbf
 Total wood cost: \$24,007
 Total steel quantity: 4750 lbs
 Total project cost: \$139,474
 Total superstructure cost: \$33,171
 Total superstructure cost /sq. ft.: \$30.43
 (excludes cost of wood materials)

MATERIAL**DECK**

Material: Wood
 Grade: No. 1
 Species: Alaska yellow-cedar
 Sizes used: 3"x13"x16'-0"
 Quantity: 23.1 mbf
 Drying method: Air
 Preservative treatment: None, decay-resistant
 species

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

Material: Wood
 Grade: No. 2
 Species: Alaska yellow-cedar
 Quantity: 3.4 mbf
 Drying method: Air
 Preservative treatment: None, decay-
 resistant species

GUIDERAIL CURB

Material: Wood
 Grade: No. 2
 Species: Alaska yellow-cedar
 Size: 6"x12"
 Preservative Treatment: None, decay-resistant
 species

GUIDERAIL

Material: Steel
 Size: Thrie-beam & w-beam
 Preservative treatment: Galvanized

STRESSING STEEL

Grade: ASTM A722
 Manufacturer: Dywidag
 Bar Diameter: 5/8"
 Coating: Galvanized
 Quantity: 720 lineal ft.
 Bearing plate size: 7"x3/4"x12"

FUNDING SOURCES: USDA Forest Service: \$37,000; Balance of funding from the City of Skagway and other sources.

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