McCURDY ROAD TIMBER BRIDGE, Richland County, Ohio



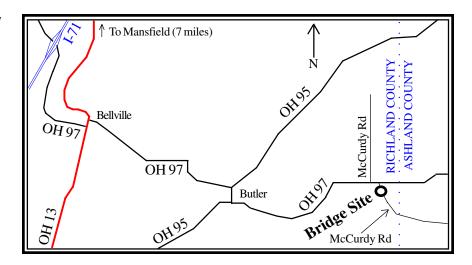


Type: Stress-laminated sawn lumber

County: Richland Owner: Richland County Built in: June, 1995 Fabricator: Decker, Inc.

Engineer: Richland County Engineer Spans over: Unnamed creek Bridge length: 4.9 meters (16'-0") Roadway width: 7.3 meters (24'-0")

Directions: From Butler travel east on OH 97 approximately 4 miles to the intersection of OH 97 and McCurdy Road. Turn right onto McCurdy Road and the bridge site is .1 miles from the intersection.











GEOMETRY

Number of Spans: 2

Out-to-out length: 4.9 meters (16'-0") Center-of-bearing length: 4.6 meters (15'-0")

Skew: 0

Number of lanes: 2

Out-to-out width: 7.9 meters (26'-0") Curb-to-curb width: 7.3 meters (24'-0") Superstructure square footage: 416 sq. ft. Design load: AASHTO HS-20 Averaged daily traffic: 279 (1996) Design by: Richland County Engineer

Abutment material: Wood

Total wood quantity: 10,138 bf Total wood cost: \$27,677 Total project cost: \$61,809 Total superstructure cost: \$32,500 Total superstructure cost/sq. ft.: \$78.00

MATERIAL

DECK BEAMS/STRINGERS (none)

Material: Wood Grade: Structural No. 2 Species: Southern pine

Sizes used: 50x250 mm (2"x10")

Quantity: 3,360 bf Drying method: Kiln Preservative treatment: ACQ

Retention: 0.6 pcf

GUIDERAIL CURB

Material: Wood Grade: Structural No. 2 Species: Southern pine Size: 150x300 mm (6"x12") Quantity: 32 lineal feet

Preservative Treatment: ACO

Material: Wood

Grade: Structural No. 2 Species: Southern pine

GUIDERAIL POSTS

Ouantity: 6 Drying method: Kiln Preservative treatment: ACQ

Retention: 0.6 pcf

GUIDERAIL

Material: Steel (type-V) deep beam Species: Southern pine (backup) Quantity: 32 lineal feet on structure, 96 lineal feet off structure

Preservative treatment: Galvanized

STRESSING STEEL

Grade: A-108

Manufacturer: Dwydag Systems Bar Diameter: 25mm (1") Coating: Galvanized

Quantity: 6

Bearing plate size: 200x200mm (8"x8")

LOCAL IMPACT: McCurdy Road Bridge Project will allow access to all legal vehicles to the south east corner of Richland County. The project restores full capacity to McCurdy Road including agricultural vehicles, fire and safety equipment, school buses and normal commerce vehicles. The bridge also permits access to the Mohican Recreation Area by large RV type vehicles.

BRIDGE PERFORMANCE: The McCurdy Road Bridge replaces a structurally deficient and functionally obsolete concrete bridge which restricted traffic to the general area by severe load limitations. The construction was performed by Force Account using the personnel and equipment of the Richland County Highway Department. Project Management was performed by Gregory Bush, Richland County Bridge Supervisor and General Supervision was by Darryl Wittmer, Richland County Highway Superintendent.

FABRICATION AND ERECTION: Bridge materials were supplied and treated by Decker, Inc. Elmira, NY and McArther Lumber Company, McArther, Ohio. Fabrication was done in the field by the Richland County Highway Department

FUNDING SOURCES: USDA Forest Service: \$24,515; Balance of funding from other sources.

LOCAL CONTACT: Charles A. Hill, P.E., P.S./Chief Deputy Engineer

Richland County Engineer, Thomas E. Beck, P.E., P.S.

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Information provided by Richland County Engineer

WIT Program Proposal Number: NA-032-94-VEH Federal Grant Identifier: NA-94-0121



