

MICROFILMED
SEP 18 1986

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

358
394

LAK-2-0.00

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT.	PIERS	GEN'L		
E-2	Lump	Sum	Cofferdams, cribs, and sheeting				Lump		
E-2	1232	Cu. Yds.	Unclassified excavation, including shale		603	629			
S-1	483	Cu. Yds.	Class C concrete, superstructure	483					
S-1	214	Cu. Yds.	Class C concrete, pier caps & columns			214			
S-1	122	Cu. Yds.	Class E concrete, pier footings			122			
S-1	443	Cu. Yds.	Class E concrete, abutments		443				
S-4	226,820	Lbs.	Reinforcing steel	145,343	26,463	55,014			
S-7	386,000	Lbs.	Structural steel	386,000					
S-8	386,000	Lbs.	Field painting of structural steel, as per plan	386,000					
S-9	133	Sq. Ft.	1/2" preformed expansion joint filler				133		
S-14	700.85	Lin. Ft.	Railing (Aluminum rail and supports, and concrete parapets)	581.68	119.17				
S-16	Lump	Sum	First test pile				Lump		
S-18	1370	Lin. Ft.	Steel piles, 12 BP53		1370				
S-29	88	Cu. Yds.	Porous backfill		88				

GENERAL NOTES

MACHINE FINISH: The concrete bridge deck shall be finished as specified in the proposal note "Machine Finishing of Bridge Deck Slabs."

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57.

EXCAVATION QUANTITY includes the removal of fill material between the surface of the proposed embankment and the bottom of the abutment.

PILES shall be driven to firm contact with shale. If the length of penetration is approximately equal to the depth to shale according to the bridge foundation investigation report, the firm contact shall be considered as obtained when the capacity according to the formula in Sec. S-18.05 is not less than the following value for a pile hammer of the indicated energy rating:

- 40 tons per pile using a 7000 ft. lb. hammer.
- 31 tons per pile using a 11000 ft. lb. hammer.
- 29 tons per pile using a 15000 ft. lb. or greater hammer.

If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation. The design load is 22 tons per pile.

PIER FOOTINGS shall extend a minimum of 3' into solid rock or to the elevation shown, whichever is lower.

FOUNDATION BEARING PRESSURE: Pier footings are designed for a maximum bearing pressure of 5 tons per sq. ft.

WELDING of structural steel shall be Class A except as otherwise shown. Welds shown as field welds may, at the option of the Contractor, be made in the shop Class B welds are shown thus: B

PROCEDURE: The embankment shall be placed and compacted up to the finished spill-thru slope and to the level of the sub-grade for a distance of 200 feet back of the abutments, after which excavation may be made for the abutments and piers.

PAINTING: After erection and after the shop coat has been cleaned and, where necessary, repainted in accordance with Sec. 8.04, an additional coat of the same paint as used in the shop shall be applied over the outside face of the outside steel beams and all side of bottom flange.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections, between transverse construction joints which are normal to the centerline of bridge and are located near the center of any span.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

**ESTIMATED QUANTITIES &
GENERAL NOTES**
BRIDGE No. LAK-2-0255 LFR
OVER CAMPBELL ROAD
LAKE COUNTY STA. 234+69.16
236+17.60

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
FFE	FFE	Parker	N.J.B.	BFG	11-28-58	12-9-58 2-20-59 8-11-58