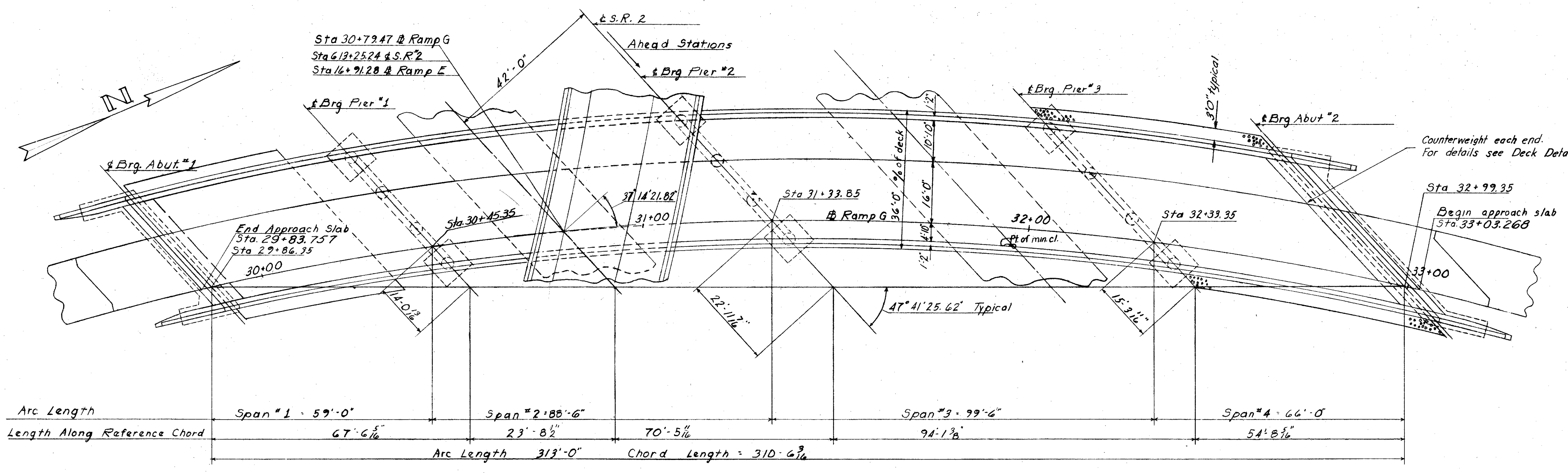
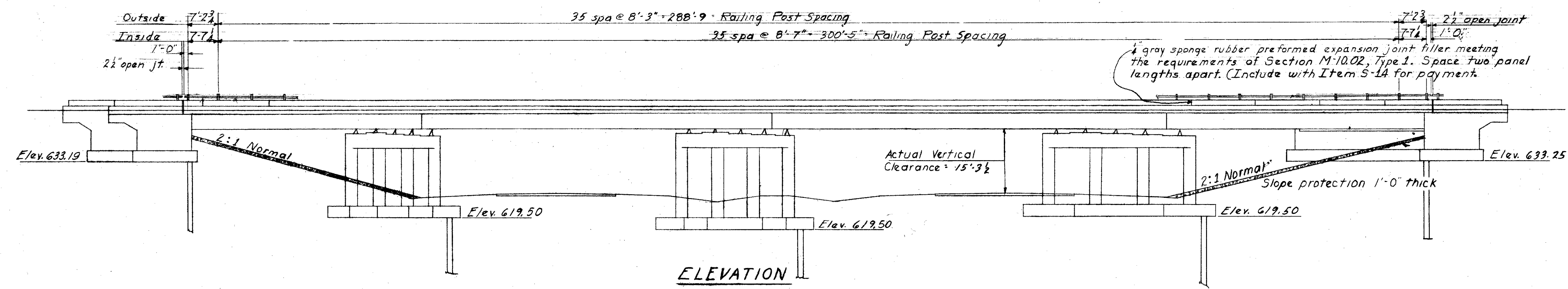


LAKE COUNTY
SEC. LAK-2-10.35



GENERAL PLAN



ELEVATION

Vertical Curve Data
 P.V.I Sta 31+50
 Elev. 650.63
 L.V.C. 700'
 M.O. 3.50'

ESTIMATED QUANTITIES						
ITEM	TOTAL	UNIT	DESCRIPTION	SUPERSTR	ABUTS	PIERS GENERAL
E-2	606	C.Y.	Unclassified Excavation		346	260
S-1	375	C.Y.	Class 'C' concrete, superstructure	375		
S-1	125	C.Y.	Class 'C' concrete, pier caps & columns			125
S-1	150	C.Y.	Class 'E' concrete, abutments above footings		150	
S-1	188	C.Y.	Class 'Z' concrete, footings		104	84
S-4	153,835	Lbs.	Reinforcing Steel	101,985	21,303	30,547
S-7	356,133	Lbs.	Structural Steel	356,133		
S-8	356,133	Lbs.	Field painting of structural steel, as per plan	356,133		
S-14	696	Lin. Ft.	Railing (Aluminum rail and supports, concrete parapets)	620	76	
S-16	Lump	Sum	First test pile			Lump
S-18	4407	Lin Ft	Steel Piles (12 BP 53)		2317	2090
S-29	58	C.Y.	Porous Backfill		58	
I-10	490	Sq Yd.	Crushed aggregate slope protection			490

STEEL: See proposal regarding A-373 Steel.

General Notes
 This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 7-1-57 together with current revisions thereof.

Reference shall be made to standard drawings CSB-2-56 sheets 2-3, at 6 revised 2-2-59, RB-1-55 revised 2-2-59, AR-1-57 revised 2-2-59 and AS-1-54 revised 12-1-54 and Supplemental Specification S-207, dated 4-28-55. Crushed Aggregate Slope Protection I-10.04 one foot thick, extending from the face of the abutments down to the toe of the slopes and transversely three feet beyond the fascia of the structure on each side, shall be provided.

Procedure:
 The embankment for Ramp G&E shall be placed & compacted up to the finished spill-thru slope & to the level of the subgrade for a distance 200 feet back of the abutments, before excavation for the abutment is made, or before piles are driven for piers 1&3.

Steel: See proposal regard A-373 steel.
 Welding of structural steel shall be "Class A" except as shown. Welds shown as field welds may, at the option of the contractor, be made in the shop.

Excavation and Backfill: Excavation quantity includes the removal of fill material between the surface of proposed embankment and the bottom of footings. Backfill behind the abutments shall be made with material meeting the requirements of Sec. I-22 and shall be compacted in accordance with the requirements for embankment compaction. The payment for this I-22 backfill shall be considered as included in the payment for E-2, Unclassified Excavation.

Piles shall be driven with a hammer of not less than 11,000 ft. lbs. per blow 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 attained 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:

For the abutment piles:
 43 tons per pile using a 11,000 ft. lb. hammer
 36 tons per pile using a 15,000 ft. lb. hammer
 For the pier piles:
 48 tons per pile using a 11,000 ft. lb. hammer
 41 tons per pile using a 15,000 ft. lb. 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 35 tons per pile for the abutment piles and 35 tons per pile for the pier pile.

Reference shall be made to Supplemental Specification S-101, dated 12-2-59.

SEC. L-33

PREPARED BY
 CAPITOL ENGINEERING ASSOCIATES, DILLSBURG, PA.
 FOR

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

GENERAL PLAN
 BRIDGE NO. LAK-2-1350
 RELOC. S.R.2 UNDER S.R.44 RAMP G
 LAKE COUNTY

STA. 613+25.24

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATA	REVISED
					3-31-60