

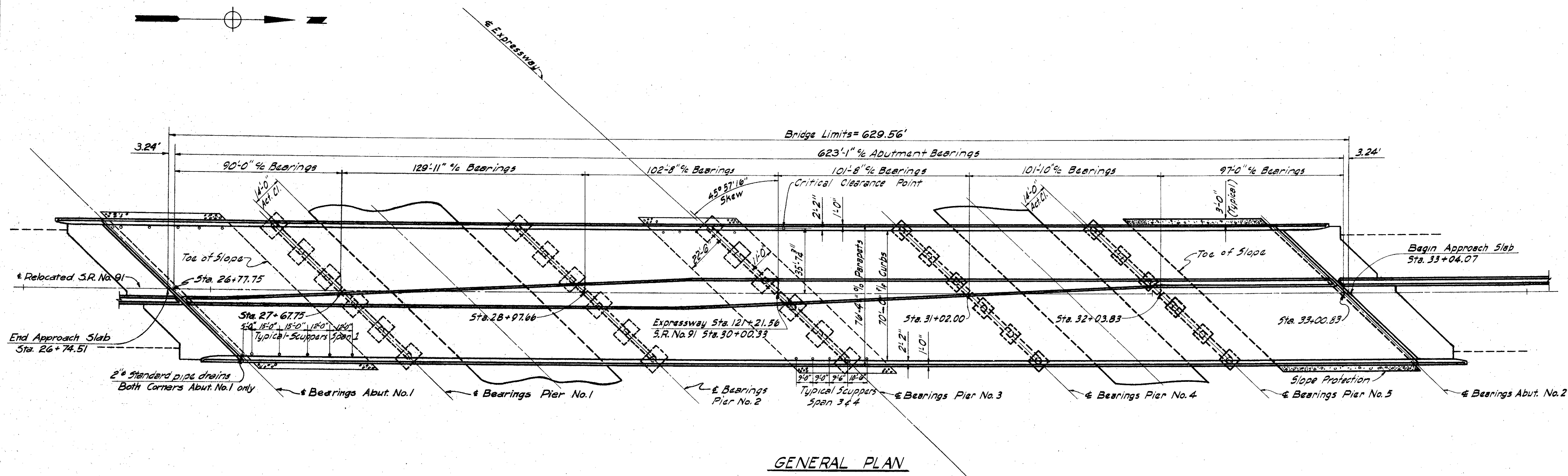
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	I-1103 (19)	

2768
312

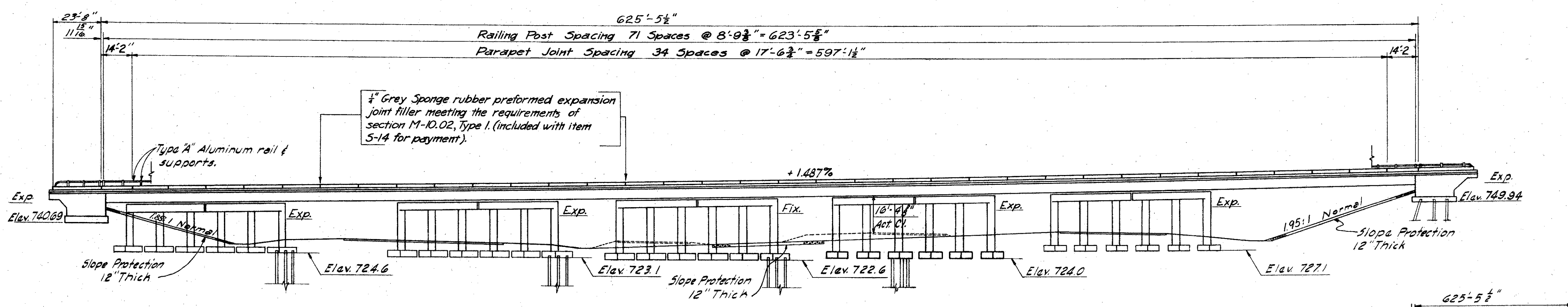
LAKE COUNTY
LAK.-I-216

GENERAL NOTES

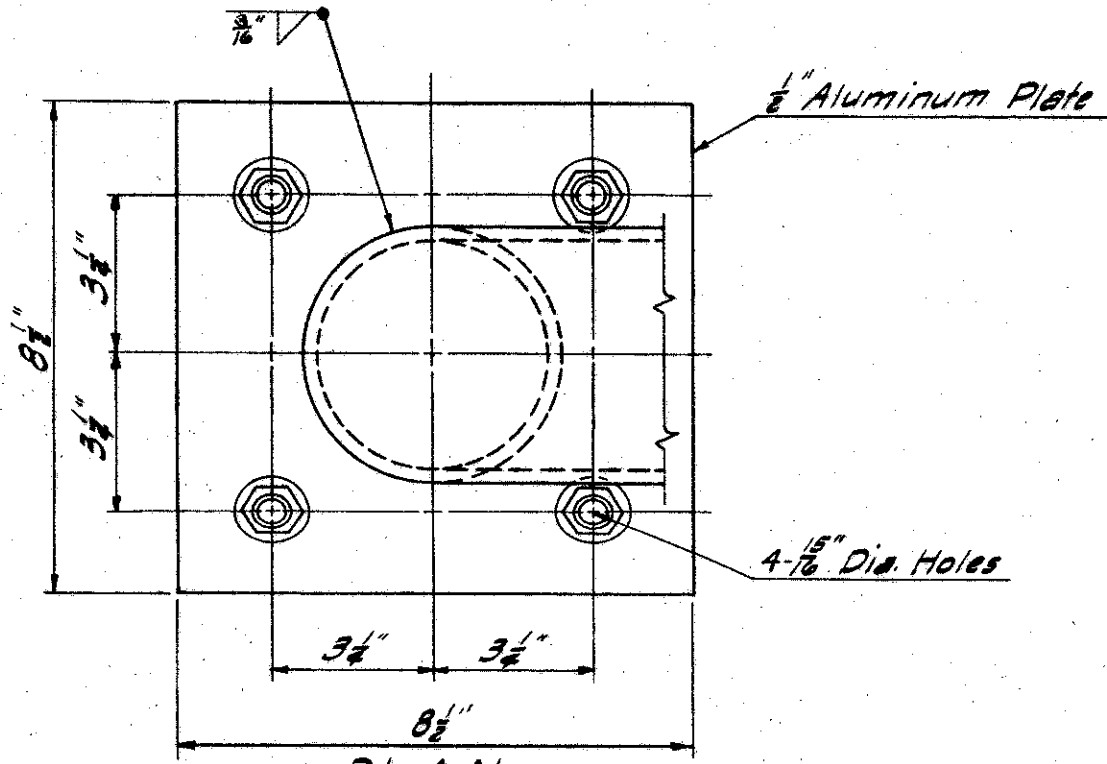
- Reference shall be made to Standard Drawings CSB-2-50, sheets 2&3 of 6, AR-1-57, and RB-1-55 revised 2-2-59.
- Design Specification: This structure conforms to the requirements of "Design Specification for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, revised 2-21-58.
- Loading: C.F.=2000 (57). (Adequate for A.A.S.H.O. alternate loading)
- Welding of structural steel shall be Class "A", except as shown. Any welds shown as field welds may, at the option of the Contractor, be made in the shop.
- Excavation quantity includes the removal of fill material between surface of proposed embankment and bottom of Abutment and the removal of fill material placed at Piers. Backfill behind abutments shall be made with material meeting the requirements of Sec. I-22 and shall be compacted in accordance with requirements for embankment compaction. Payment for backfill shall be included with unclassified excavation.
- Slope Protection shall be provided under the structure as shown in General Plan and Elevation.



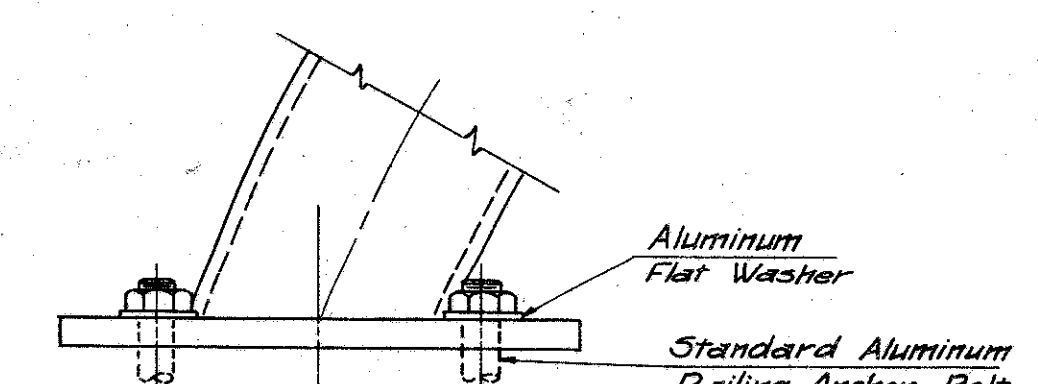
GENERAL PLAN



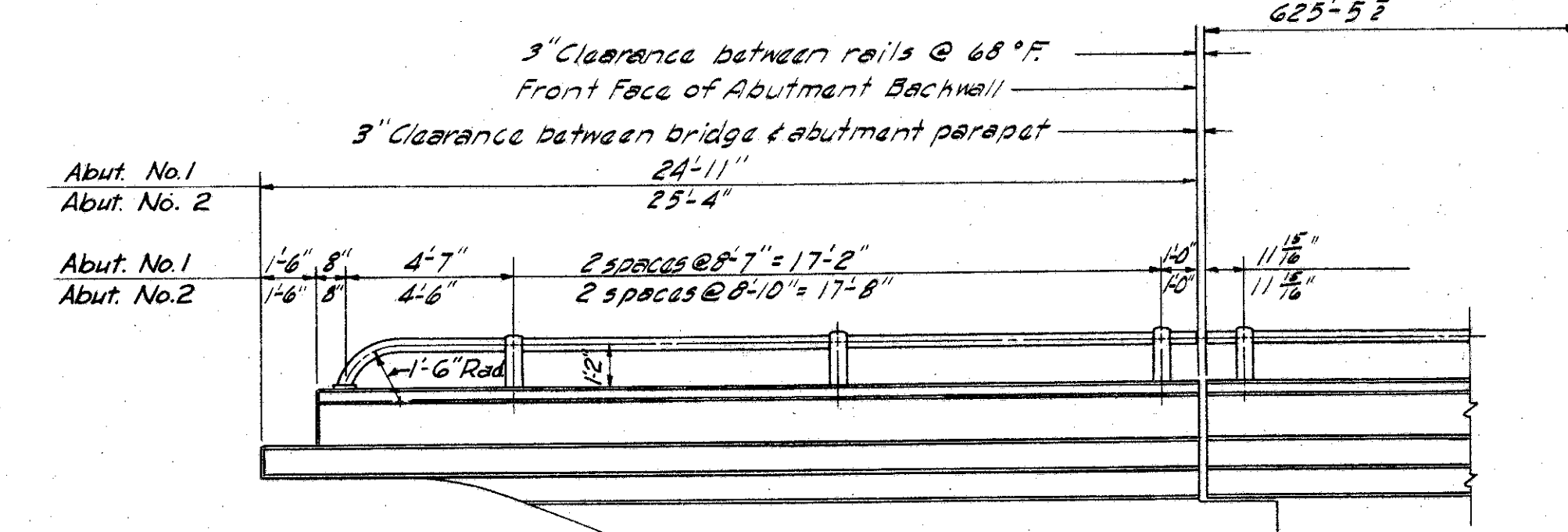
ELEVATION



DETAIL OF RAILING ANCHOR PLATE AT END OF PARAPET



ELEVATION



ABUTMENT RAILING DETAIL

- Embankments shall be placed to subgrade elevation for a distance of approximately 200 feet beyond the bridge limits as early as practical in the construction procedure and before work is begun on Abutments or Piers. Abutments should be placed as late as practical, with a minimum time lapse of 30 days between completion of the embankment and starting of work on the abutments.
- Footings for piers 4&5 shall extend a minimum of 3" into firm shale, but shall not be placed higher than El. 724.0 for Pier 4 or El. 727.1 for Pier 5.
- Foundation Bearing Pressure: Footing for Piers 4&5 are designed for a maximum bearing pressure of 6 tons per sq. ft. The footing for Abut. No. 2 is designed for a maximum bearing pressure of 2.5 tons per sq. ft.
- Piles shall be driven to firm contact with shale with a hammer of not less than 11,000 ft. lbs. per blow for Piers and 7,000 ft. lbs. per blow for Abutments. If the length of penetration is approximately equal to the depth to shale according to the bridge foundation investigation reports, the firm contact shall be considered as attained when the capacity according to the formula in Section 5-1.8.05 is not less than the following value for a pile hammer of the indicated energy rating:
 For the abutment piles:
 28 tons per pile using a 7,000 ft. lb. hammer.
 25 tons per pile using a 11,000 ft. lb. hammer.
 25 tons per pile using a 15,000 ft. lb. or greater hammer.
 For the pier piles:
 30 tons per pile using a 11,000 ft. lb. hammer.
 30 tons per pile using a 15,000 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 25 tons per pile for the abutment piles and 30 tons for the pier piles.

This sheet supersedes sheet 276, 3-24-60.

MICHAEL BAKER JR. CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

**GENERAL PLAN & ELEVATION
BRIDGE NO. LAK-I-0226
UNDER STATE ROUTE NO. 91**

LAKE COUNTY				STA. 121+21.56		
Designed	Drawn	Traced	Checked	Reviewed-Date	Revised	
E.E.W.	R.B.M.	A.C.M.	D.E.D.	H.G.H. 3-22-60	3-22-60	9-21-60