

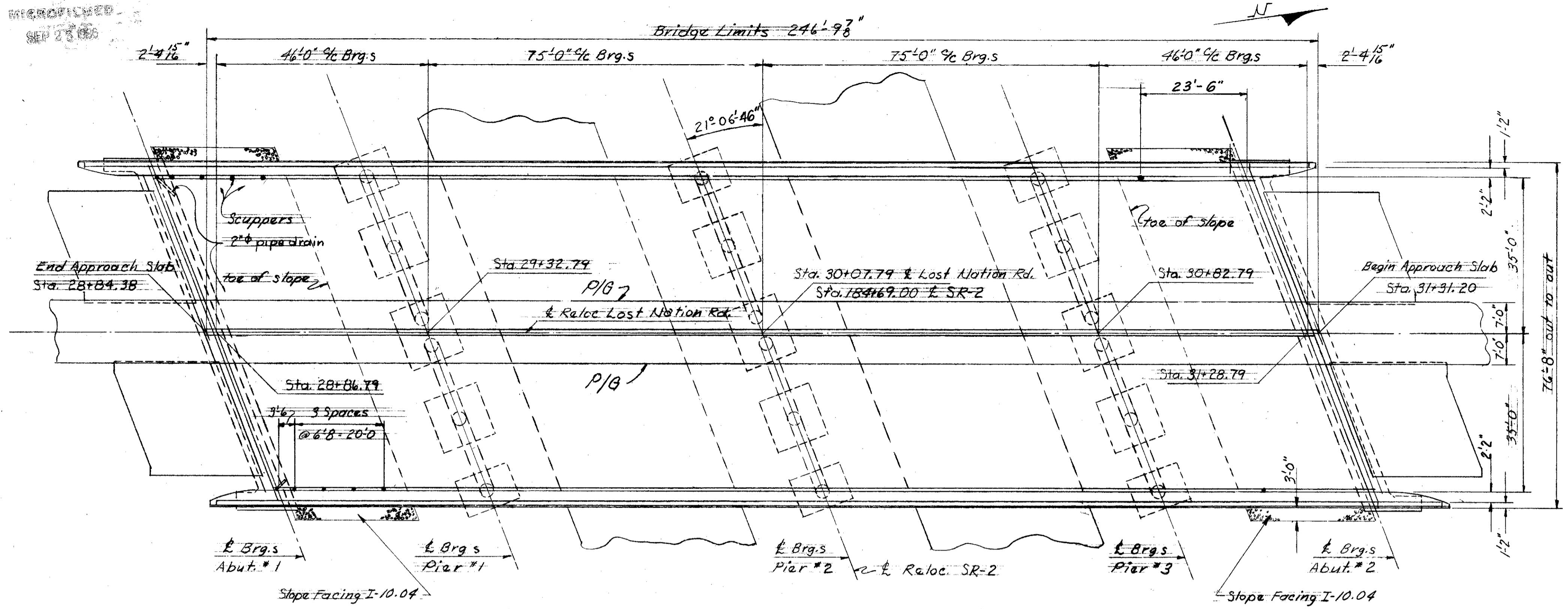
LAKE COUNTY
SEC. LAK-2-4.42

GENERAL NOTES:

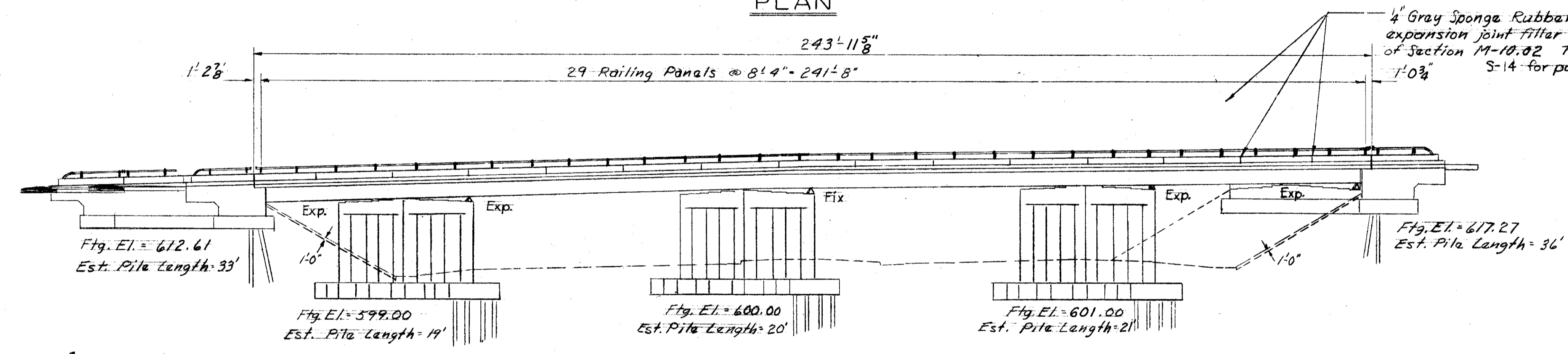
- Reference shall be made to Standard Drawings AS-1-54 dated 7-1-54 Revised 12-1-54, CSB-2-56 sheet N4/2 and 3 of 6 Revised 2-2-59, RB-1-55 Revised 2-2-59 and AR-1-57 Revised 2-2-59
- Design Specifications: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57 together with current revisions thereof.
- Excavation Quantities include the removal of fill material between the surface of the proposed embankment and the bottom of the abutments. Back fill behind the 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 Item E-2.
- Excavation Quantities for the Piers includes the removal of fill material required for construction of the Piers.
- 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.
- Procedure: The embankment shall be placed and compacted up to the finish spill-thru slope and to the level of the subgrade for 200 ft. back of the abutments, after which a delay of 90 days shall occur before excavation for the piers or abutments is made. All piling shall be driven before any of the piers are extended above the tops of the footings and before the abutments are placed.
- Porous Backfill 2ft. thick, full length of abutments and wings shall extend up to the underside of the approach slab or to the finished ground surface. Excavation in excess of that required for the abutments shall be considered as included in the bid price per cu. yd. for porous backfill.
- Crushed Aggregate Slope Protection (I-10.04) one foot thick shall be provided as indicated on the General Plan.
- 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 bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to formula in Sec. 5-18.05 is not less than the following values for a pile hammer of the indicated energy rating:

Hammer, Ft. Lb.	ABUTMENTS Tons per pile	PIERS Tons per pile
11,000	34	40
15,000	33	35

if the energy rating of the hammer is between the ratings given above, the required formula capacity shall be determined by interpolation. The design load is 30 tons per pile.



PLAN



ELEVATION

1.4093% -0.391%
PVI. 30+00
El. 629.80
LVC. 350'

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	PIER	ABUT.	GEN.
E2	Lump	Sum	Cofferdams, cribbing & sheeting				
E2	790	Cu.Yd.	UNCLASSIFIED EXCAVATION		440	350	
S1	644	Cu.Yd.	CLASS "C" CONCRETE, SUPERSTRUCTURE	644			
S1	161	Cu.Yd.	CLASS "C" CONCRETE, PIER CAPS and COLUMNS		161		
S1	164	Cu.Yd.	CLASS "E" CONCRETE, ABUTMENTS, ABOVE FTG.S			164	
S1	383	Cu.Yd.	CLASS "E" CONCRETE, FOOTINGS		261	122	
S4	274,410	Lbs.	REINFORCING STEEL	174,652	79,523	20,235	
S7	527,400	Lbs.	STRUCTURAL STEEL	527,400			
S8	527,400	Lbs.	FIELD PAINTING OF STRUCTURAL STEEL as per plan	527,400			
S14	540	Ltn.Ft.	RAILING, ALUMINUM RAIL and SUPPORTS, CONCRETE PARAPET	488		52	
S16	Lump Sum		FIRST TEST PILE				
S18	6224	Lin.Ft.	STEEL PILES (12 BP 53)		4320	1904	Lump Sum
S29	63	Cu.Yd.	POROUS BACKFILL			63	
I10	540	Sq.Yd.	CRUSHED AGGRAGATE SLOPE PROTECTION				540

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-2-0543
RELOC. S.R.2 UNDER LOST NATION RD.
LAKE COUNTY
STA. 184 + 69.00

DESIGNED	DRT	DRAWN	DRT	TRACED		CHECKED		REVISED DATE		REVISED
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