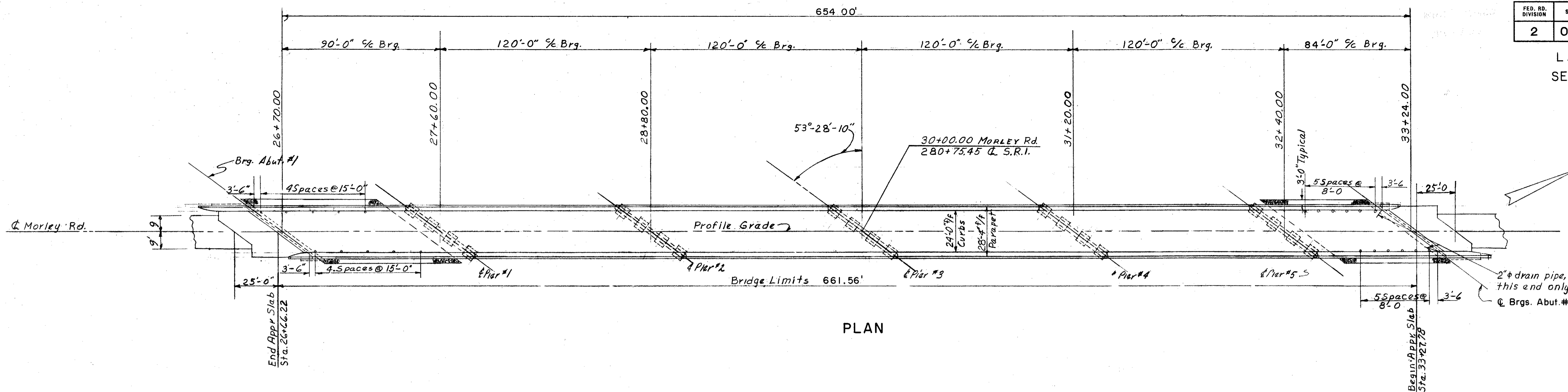
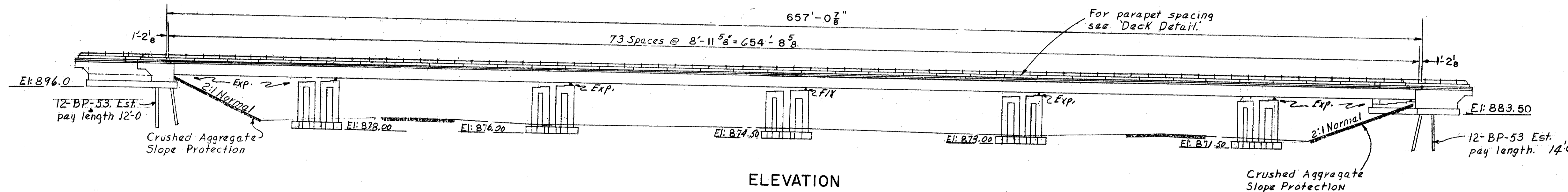


LAKE COUNTY
SEC. LAK-1-10.38



PLAN



ELEVATION

P.I. Sta. 32+00
Elev. 903.80
V.C. 350'
M.O. 1.78'

-1.167%
-5.227%

ESTIMATED QUANTITIES							
Item	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT.	PIER	GEN.
E-2	455	Cu. Yds.	Unclassified Excavation		390	65	
E-2	192	Cu. Yds.	Shale Excavation			192	
S-1	630	Cu. Yds.	Class C Concrete, Superstructure	630			
S-1	161	Cu. Yds.	Class C Concrete, Pier Columns & Caps.			161	
S-1	183	Cu. Yds.	Class E Concrete, Footings		103	80	
S-1	147	Cu. Yds.	Class E Concrete, Abutments above Footings		147		
S-4	217,202	Lbs.	Reinforcing Steel	159,441	20,775	36,986	
S-7	679,800	Lbs.	Structural Steel	679,800			
S-8	679,800	Lbs.	Field Painting of Structural Steel as per Plan	679,800			
S-14	1,394	Lin. Ft.	Railing (Aluminum Rail & Supports, & Conc. Parapet	1,314	80		
S-16		Lump Sum	First Test Pile				Lump
S-18	820	Lin. Ft.	Piles (12 BP 53) Steel		820		
S-29	54	Cu. Yds.	Porous Backfill		54		
I-10	402	Sq. Yds.	Crushed Aggregate Slope Protection				402

GENERAL NOTES

REFERENCE shall be made to Standard Drawings, CSB-2-56 Sheets 2 & 3 of 6 revised 2-2-59, RB-1-55 revised 2-2-59 & AR-1-57 revised 2-2-59 and Supplemental Specification S207 dated 4-28-55.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specification for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57 together with current revisions thereof.

EXCAVATION QUANTITIES includes the removal of fill material between the surface of the proposed embankment & the bottom of the abutments.

FOUNDATION BEARING PRESSURE: Pier footings have a design bearing pressure of 10 tons per Sq. Ft. & shall extend a minimum of 3' into solid shale or to the elevation shown, whichever is lower. The actual maximum bearing pressure is 9.5 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.

PROPOSAL NOTES: See Proposal for notes concerning the requirements for A-313 Steel and Machine Finishing of Bridge Deck Slabs.

PROCEDURE: The embankment shall be placed & compacted up to the finished spill-thru slope & to the level of the subgrade for a distance of 200 feet back of the abutments, before excavation for the abutment is made.

POROUS BACKFILL shall extend full length of abutment backwall and upward to the approach slab. Excavation thereof, in excess of that required for construction of the abutments, shall be considered as paid for in the bid price per cu. yd. paid for porous backfill.

CRUSHED AGGREGATE SLOPE PROTECTION (I-10.04) one ft. thick shall be provided as indicated on the General Plan.

PILES: shall be driven 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 the formula in Sec. S-18.05 is not less than the following value for a Pile Hammer of the indicated energy rating:

- 44 Tons per Pile using a 7000 Ft. Lb. Hammer
- 37 Tons per Pile using a 11,000 Ft. Lb. Hammer
- 35 Tons per Pile using a 15,000 Ft. Lb. Hammer or greater

if the energy rating of the hammer is between the ratings given, the required formula capacity shall be determined by interpolation.

Allowable Pile Load = 25 Tons
Actual Max. Pile Load = 24.2 Tons

SEC. C-31A

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-1-1199
S.R.I UNDER MORLEY ROAD
LAKE COUNTY

STA. 280 + 75.45

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	J.T.A.					3-1-60