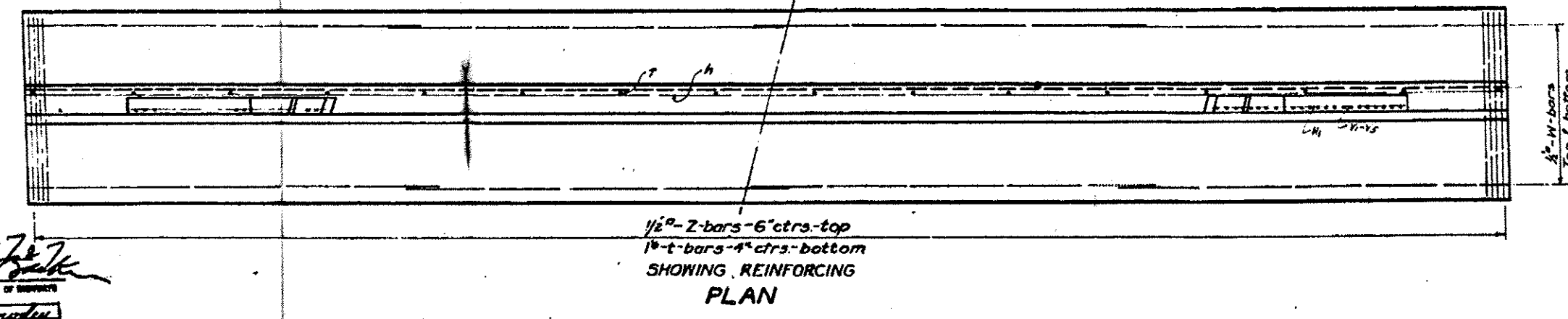
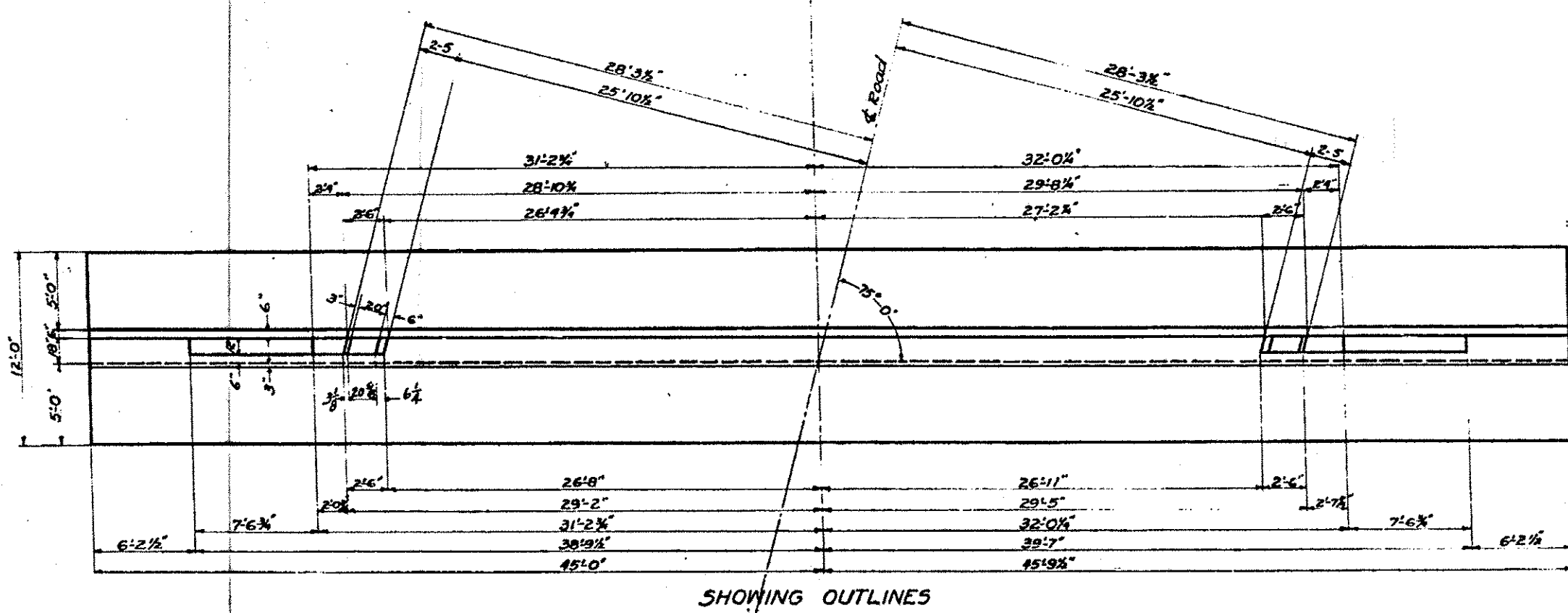


ELEVATION



**NOTE**  
 Class A Concrete to be used throughout. Proportions 1-2 1/2-4.  
 All edges of exposed concrete to be beveled by use of 3/4 inch triangular moulding.  
 All reinforcing bars shall be either new billet steel or rail steel conforming to the requirements specified in Art. 474 of the County Specifications for Highways and Bridges. All bars must be obtained in full lengths indicated in the Bill of Material.  
 All reinforcing steel shall be securely wired in position before concrete is placed.  
 Place 3 inch tile drains 8 ft. centers in abutment and wing walls one foot above ground line at face of abutment.  
 Abutments and wing walls to be constructed around existing tiles, sewers, pipes or conduits, as directed by the Engineer in field.  
 The wing walls may at the option of the Engineer be constructed at any angle with the face of the abutment.  
 The necessity of driving piles will be determined by the Engineer at the time the excavation for the footing is made. If piles are deemed necessary the Engineer will furnish detailed plans showing spacing and number required.

Z ABUTMENTS			
Bar	No	Size	Length
V	276	1/2"	10'-0"
V <sub>1</sub>	28	1/2"	13'-0"
V <sub>2</sub>	24	1/2"	14'-9"
V <sub>3</sub>	12	1/2"	12'-3"
V <sub>4</sub>	12	1/2"	11'-6"
V <sub>5</sub>	12	1/2"	10'-6"
h	136	1/2"	24'-3"
H	32	1/2"	24'-3"
H <sub>1</sub>	4	1/2"	12'-9"
T	32	1/2"	17'-0"
Z	364	1/2"	11'-9"
W	48	1/2"	24'-3"
t	544	1"	11'-9"
m	182	1"	8'-6"
m <sub>1</sub>	182	1"	13'-0"
B	24	1"	26'-0"

REINFORCING LOG 44328  
 CONC. CU YDS. = 413.67

SUBSTRUCTURE DETAIL  
 R.R. AND RR. D.G.E.  
 Sec. 1289-130

APPROVED: *[Signature]*  
 CHIEF ENGINEER  
 DISTRICT ENGINEER  
 DISTRICT ENGINEER  
 DISTRICT ENGINEER