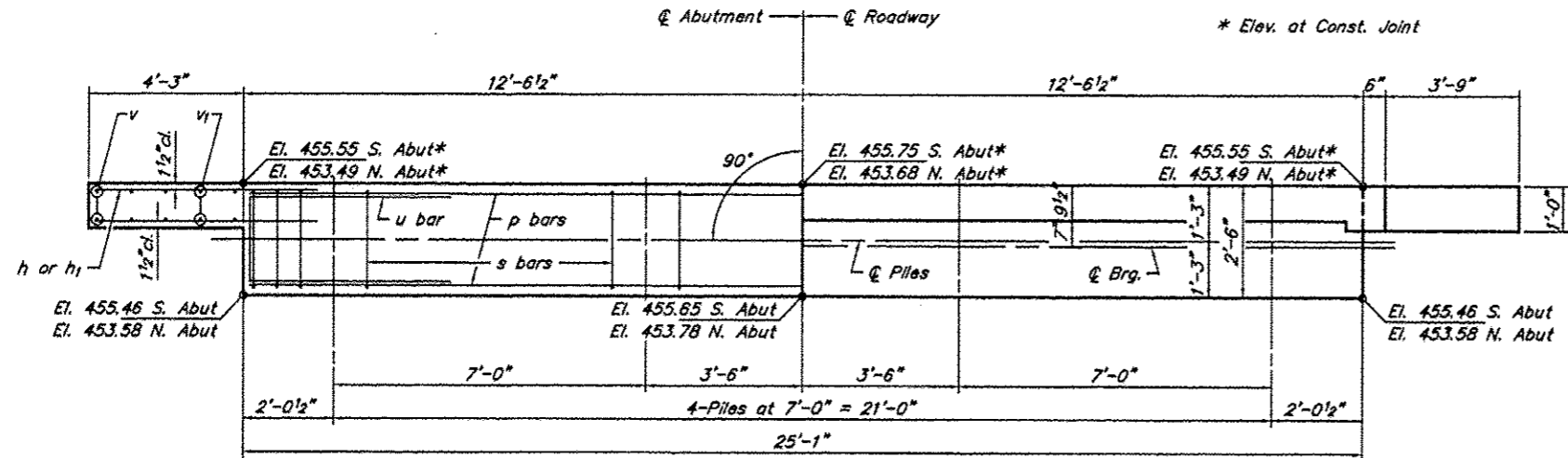
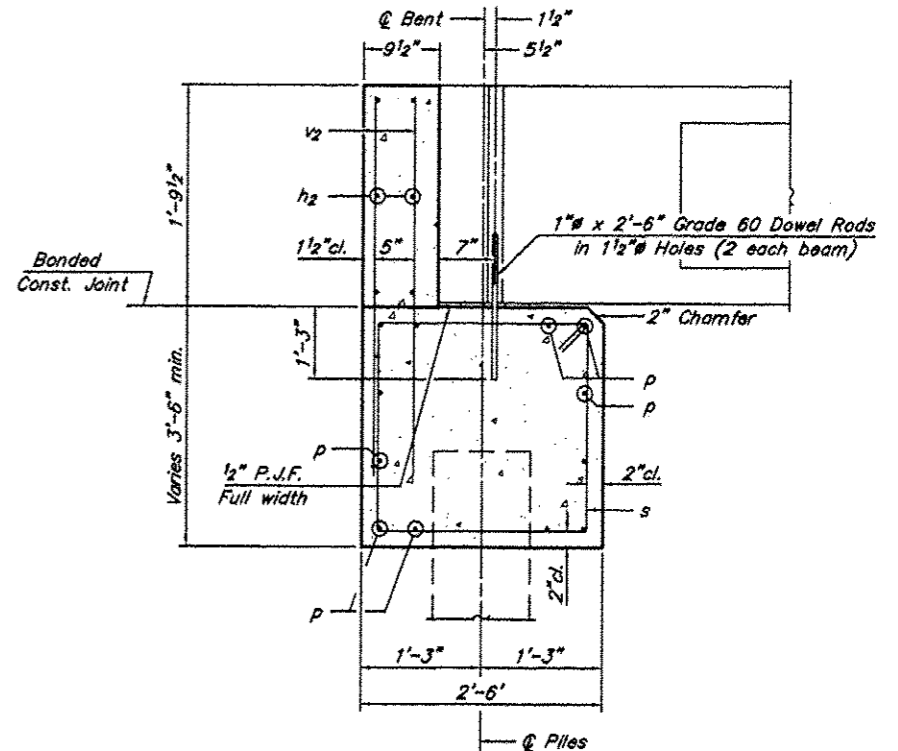


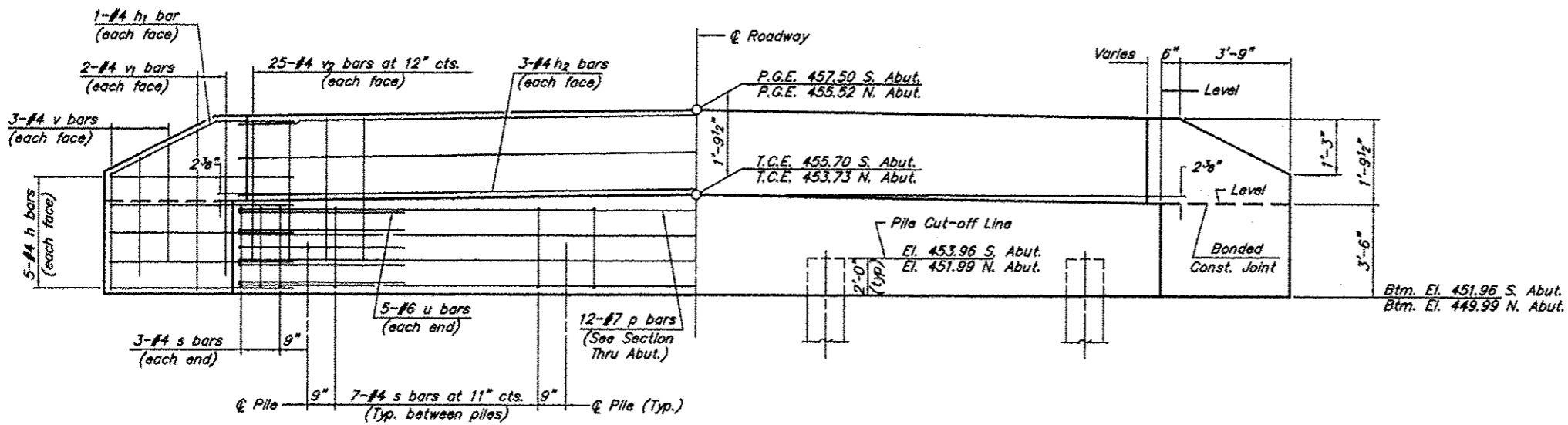
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 88A	10-01197-00-BR	UNION	12	8
PROJECT NO. BROS-181(55)			CONTRACT NO. 99480	



PLAN



SECTION THRU ABUT.
(At Right Angles)



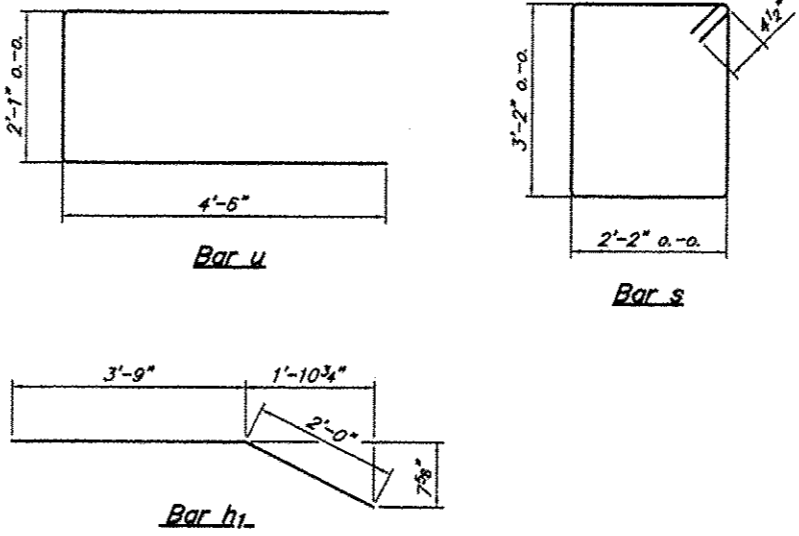
ELEVATION

NOTES

- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- Reinforcement bars shall conform to A.A.S.H.T.O. M-31, M-42 or M-53, Grade 60.

DESIGN STRESSES

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi



BILL OF MATERIAL FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h	20	#4	5'-9"	—
h1	4	#4	5'-9"	—
h2	6	#4	24'-9"	—
p	12	#7	24'-9"	—
s	27	#4	11'-5"	□
u	10	#6	11'-1"	□
v	12	#4	4'-2"	—
v1	8	#4	5'-0"	—
v2	50	#4	3'-5"	—
Concrete Structures			11.35	Cu. Yds.
Reinforcement Bars			1345	Lbs.

ABUTMENT
TOWNSHIP ROUTE 88A (BARTSCH LANE)
TRIBUTARY TO CLEAR CREEK
SECTION 10-01197-00-BR
UNION COUNTY
STRUCTURE NO. 091-3237