

SUMMARY OF QUANTITIES FOR PIER

ITEM	UNIT	QUANTITY
STRUCTURE CONCRETE (1A43)	CU. YD.	52
STRUCTURE CONCRETE (3Y43)	CU. YD.	102
REINFORCEMENT BARS	POUND	2700
REINFORCEMENT BARS (EPOXY COATED)	POUND	15230
C.I.P. CONCRETE PILING DELIVERED 12"	LIN. FT.	1120
C.I.P. CONCRETE PILING DRIVEN 12"	LIN. FT.	1120
C.I.P. CONCRETE TEST PILE 60 FEET LONG 12"	EACH	2
FOUNDATION PREPARATION (PIER)	LUMP SUM	ONE

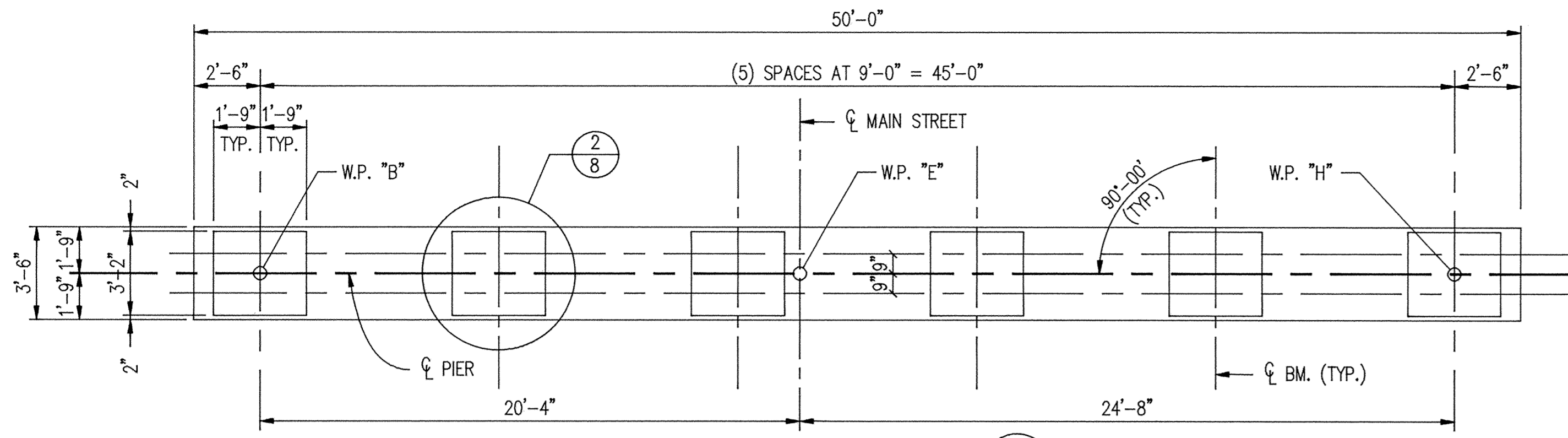
COMPUTED PILE LOADS
TONS PER PILE

DEAD LOAD	37.0
LIVE LOAD	11.9
OVERTURNING	---
TOTAL	48.9
* DESIGN LOAD	48.9

* 48.9 = 48.9/1.00 REDUCTION PER AASHTO 3.22.1 GROUP I LOADING

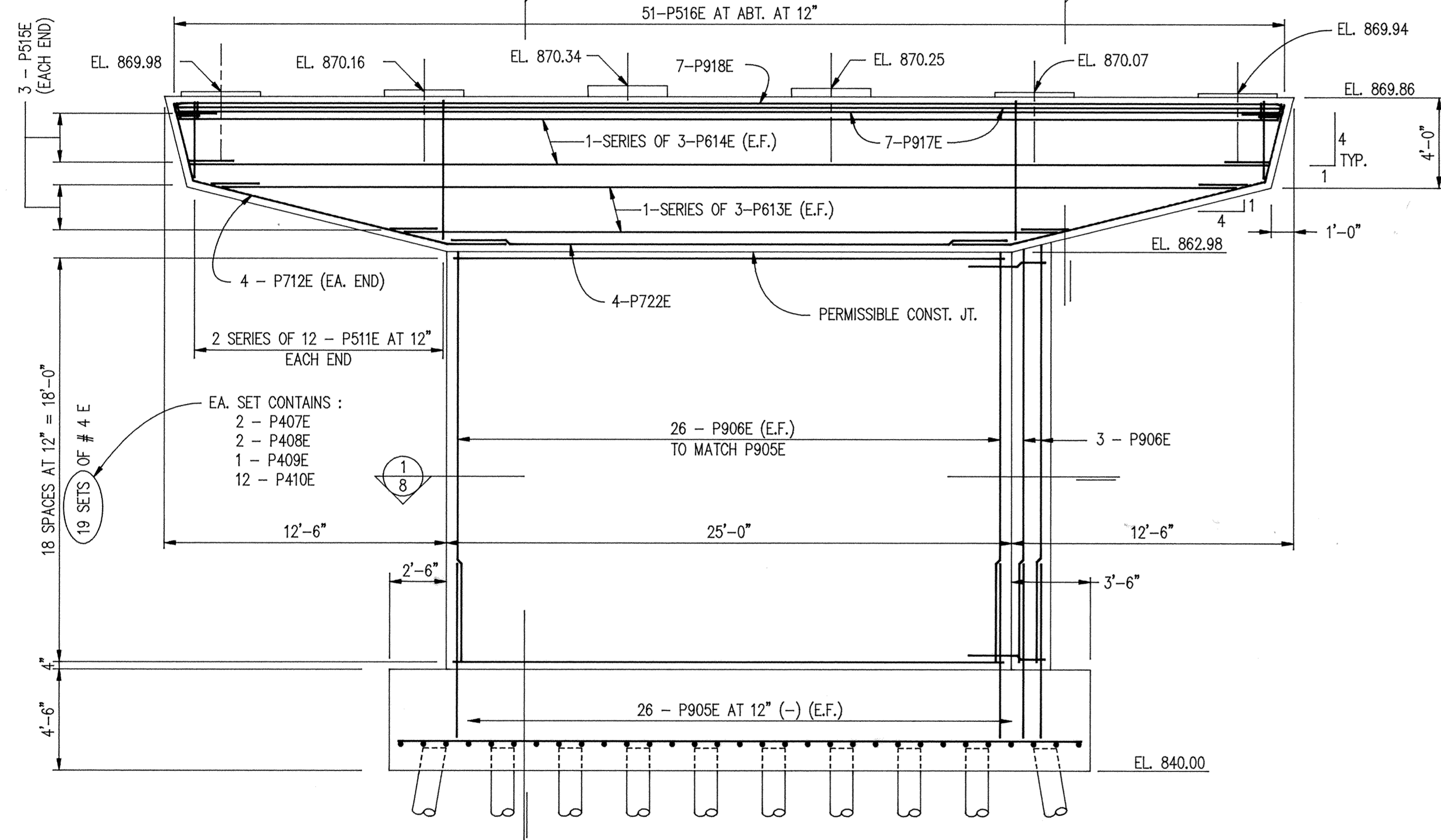
PILE NOTES :

- (2) CAST-IN-PLACE CONCRETE TEST PILES 60 FEET LONG.
- (28) CAST-IN-PLACE CONCRETE PILES ESTIMATED LENGTH 40 FEET.
- (30) CAST-IN-PLACE CONCRETE PILES REQUIRED FOR PIER.
- PILE SPACING SHOWN IS AT BOTTOM OF FOOTING.
- PILES MARKED THUS : $\odot \blacktriangleright$ TO BE BATTERED 2" PER FOOT IN DIRECTION SHOWN.
- PILES TO HAVE A NOMINAL DIAMETER OF 12".



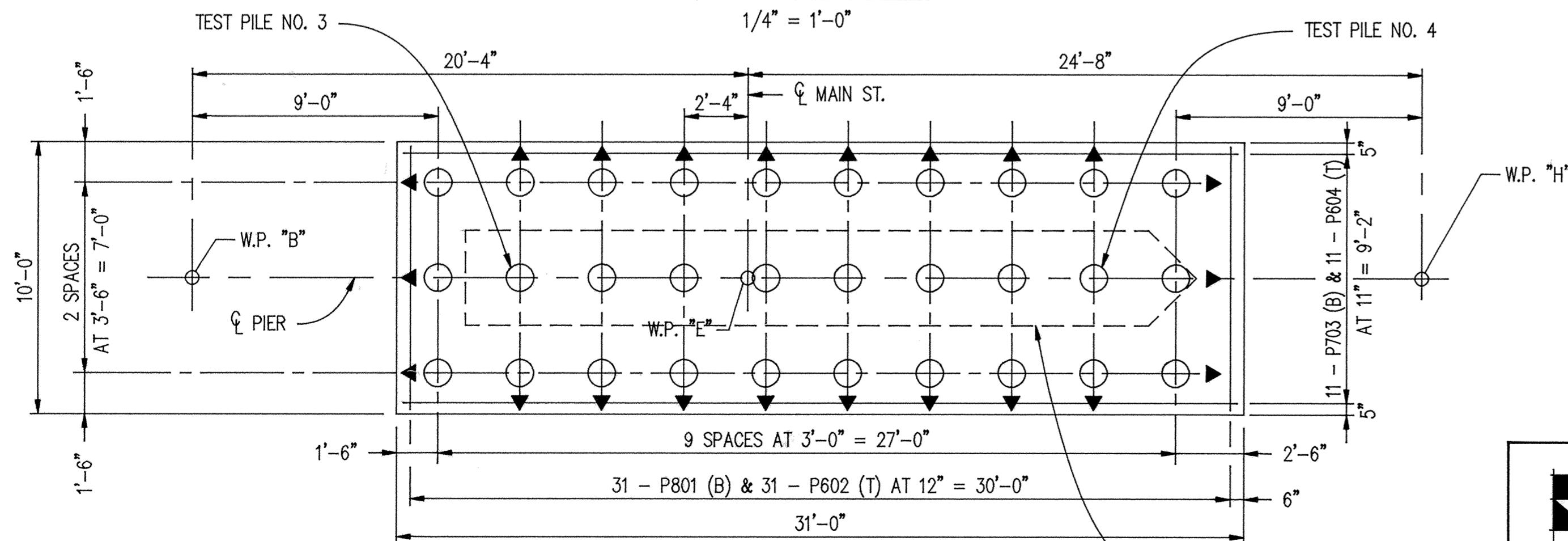
PLAN

1/4" = 1'-0"



ELEVATION

1/4" = 1'-0"



PILE PLAN

1/4" = 1'-0"

Larson
 ENGINEERING OF MINNESOTA
 3524 LABORE ROAD
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 612-481-9120

S.P. 204-113-03

PIER PLAN & ELEVATION

RECORD PLAN OCT. 1993

DES : RLD	DR : GLA	APPROVED :	Bridge No.
CHK : DRM	CHK : DRM	7-2-92	71517
Sheet No. 7 of 24 Sheets			