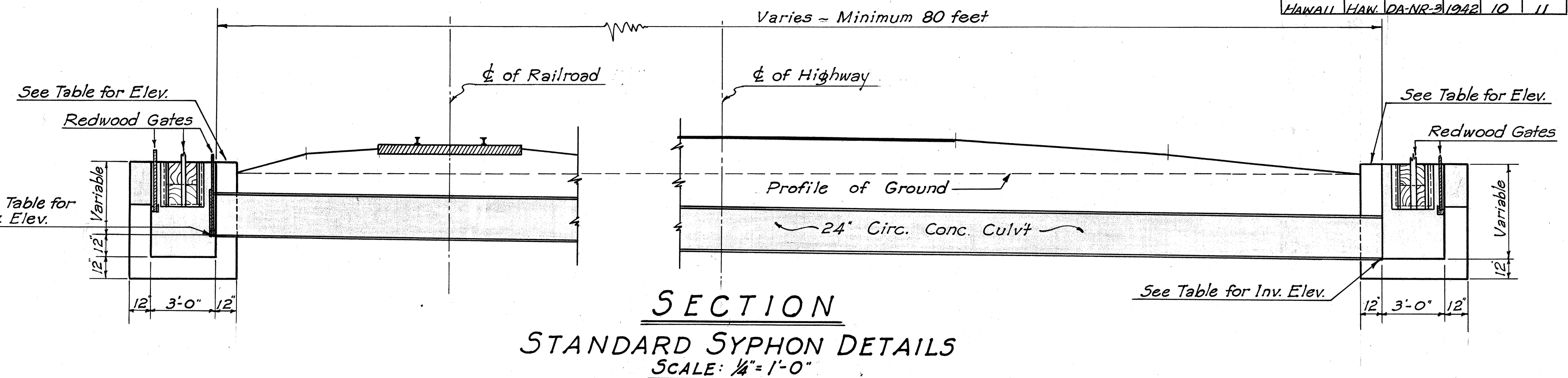
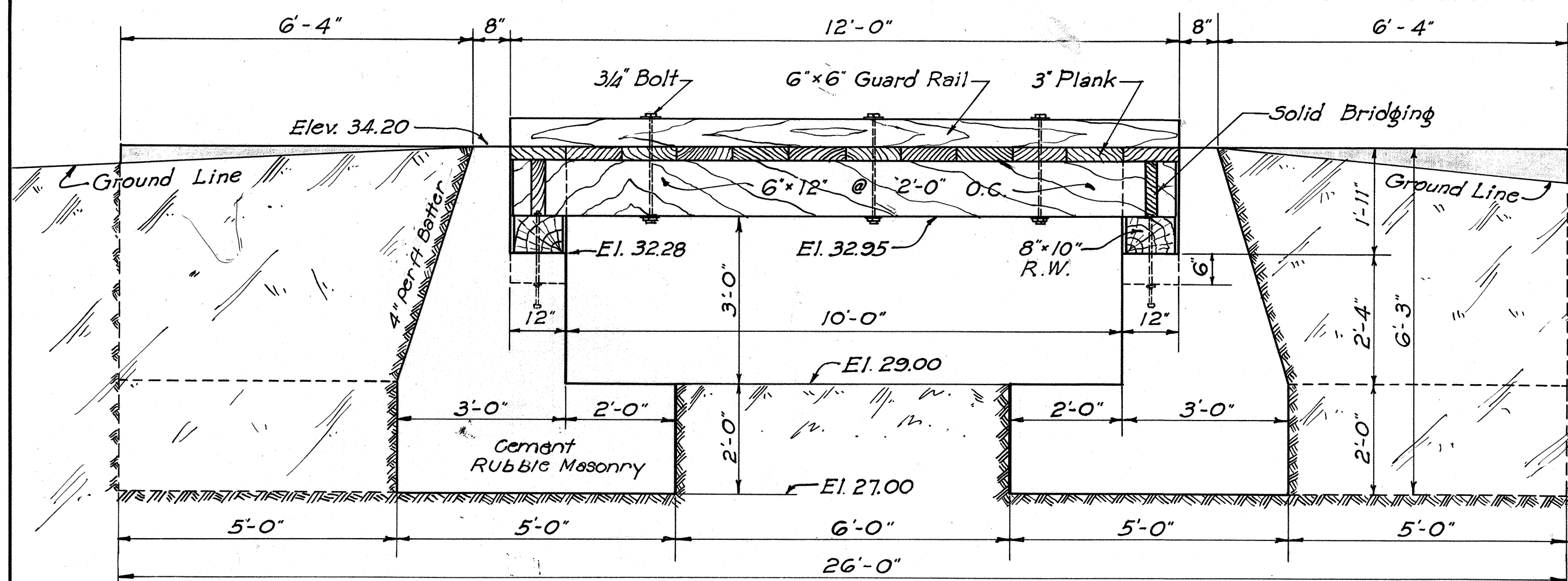
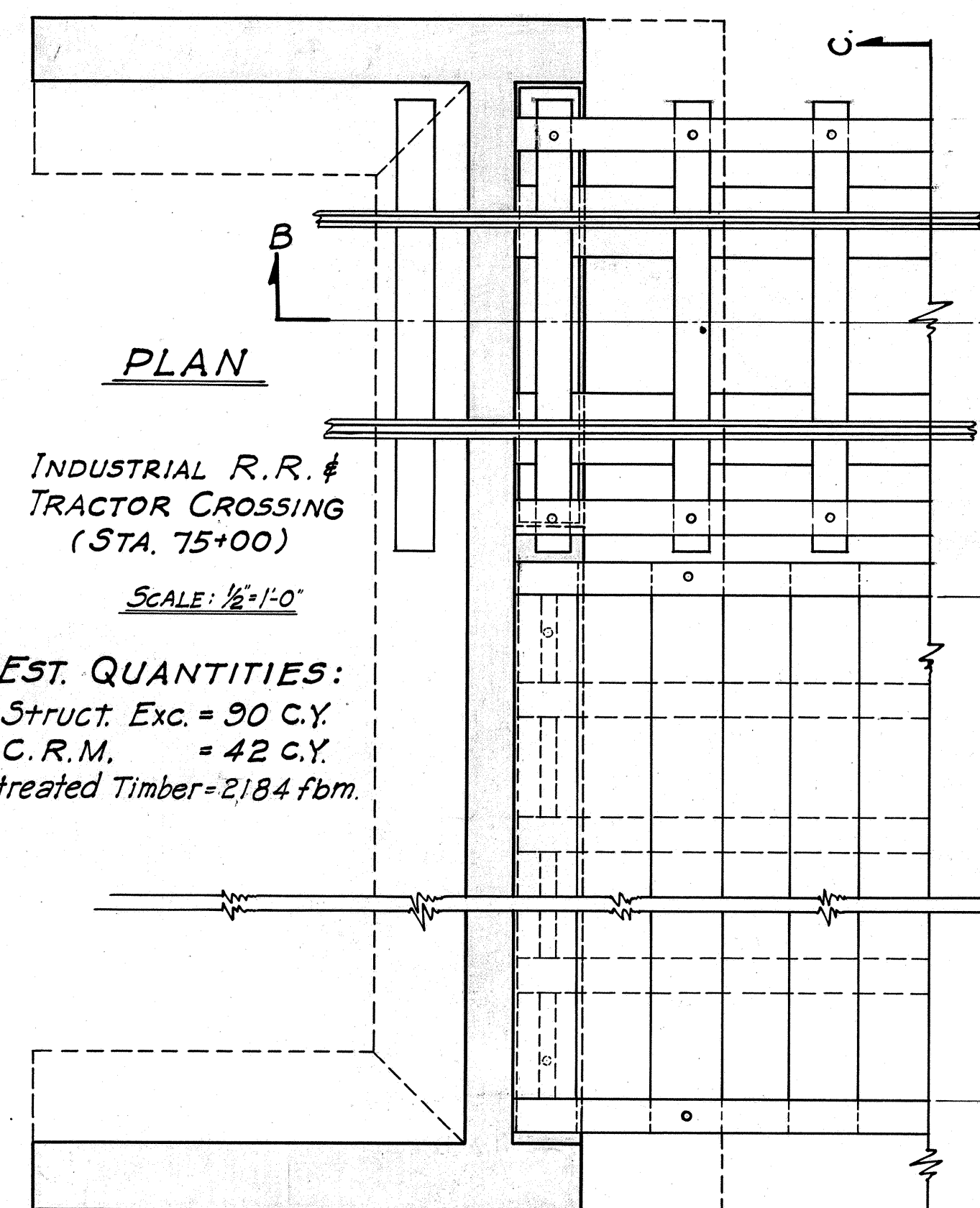
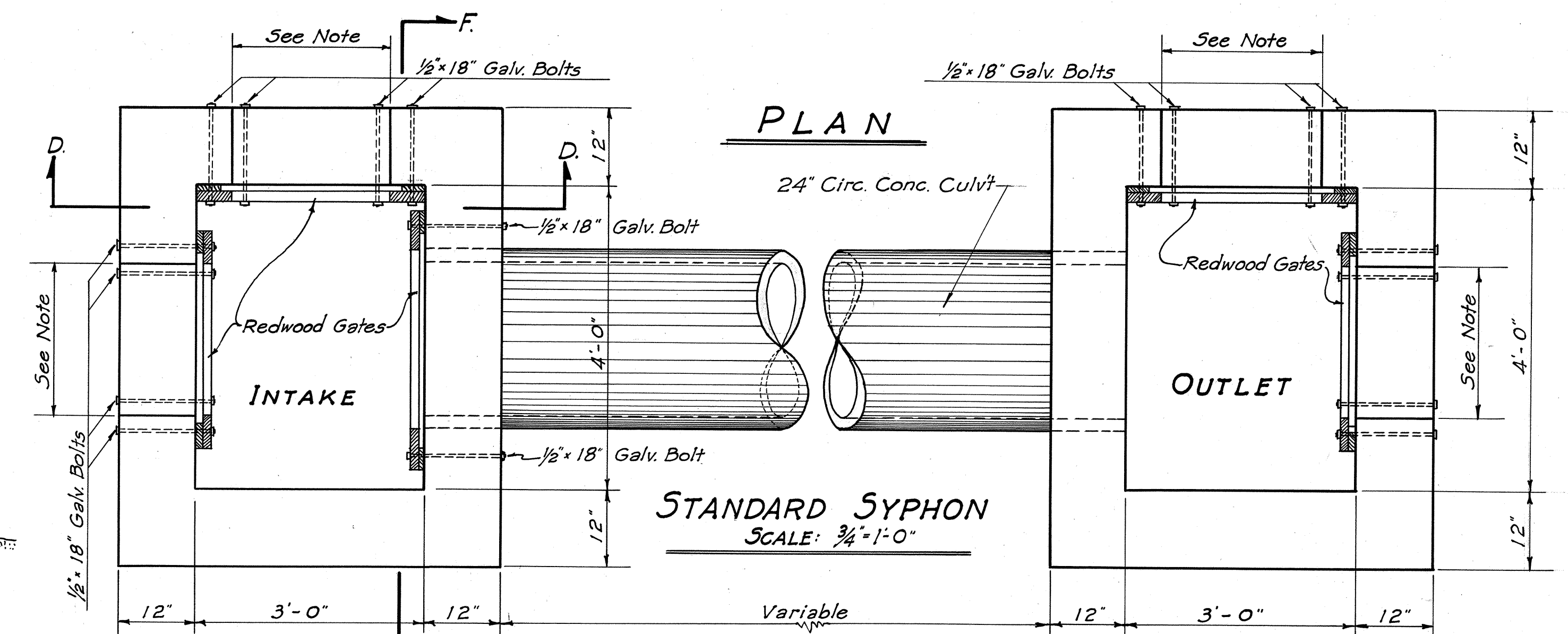
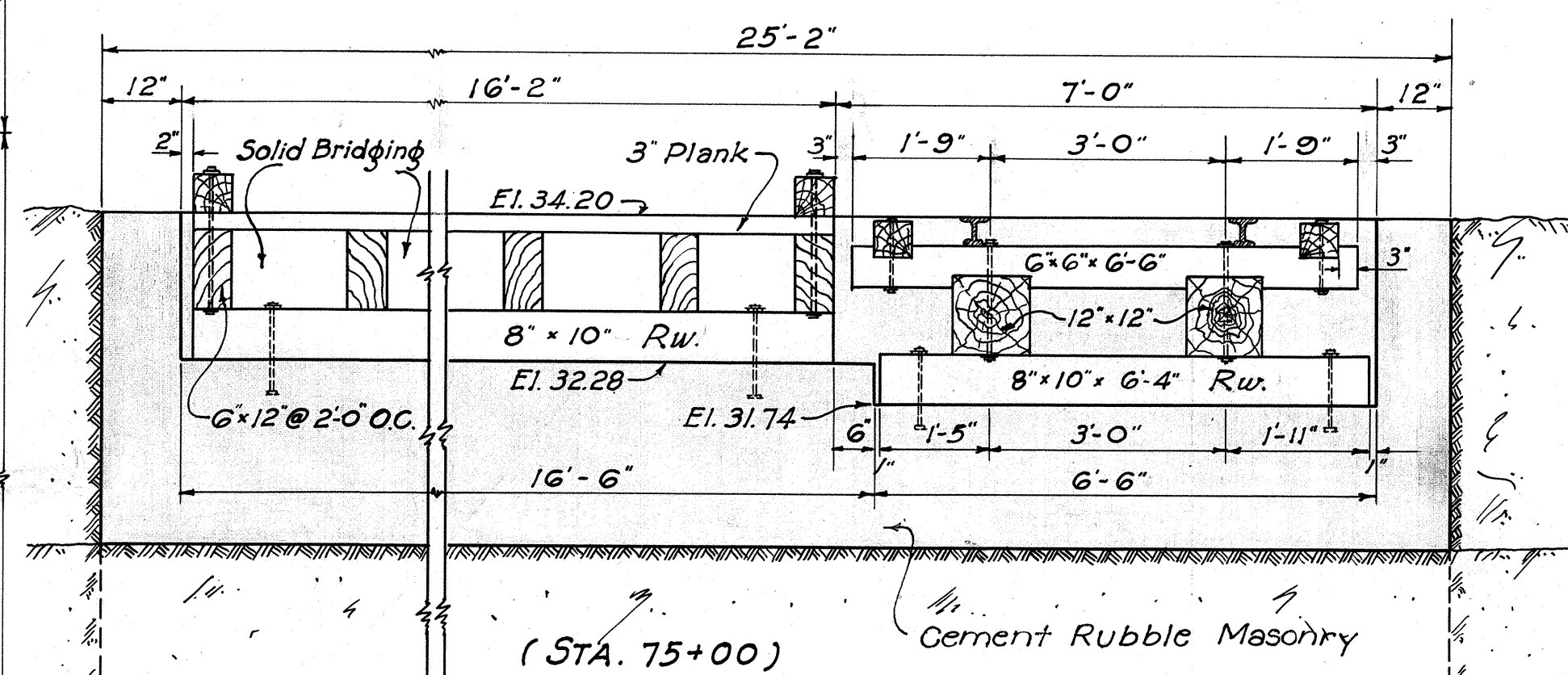
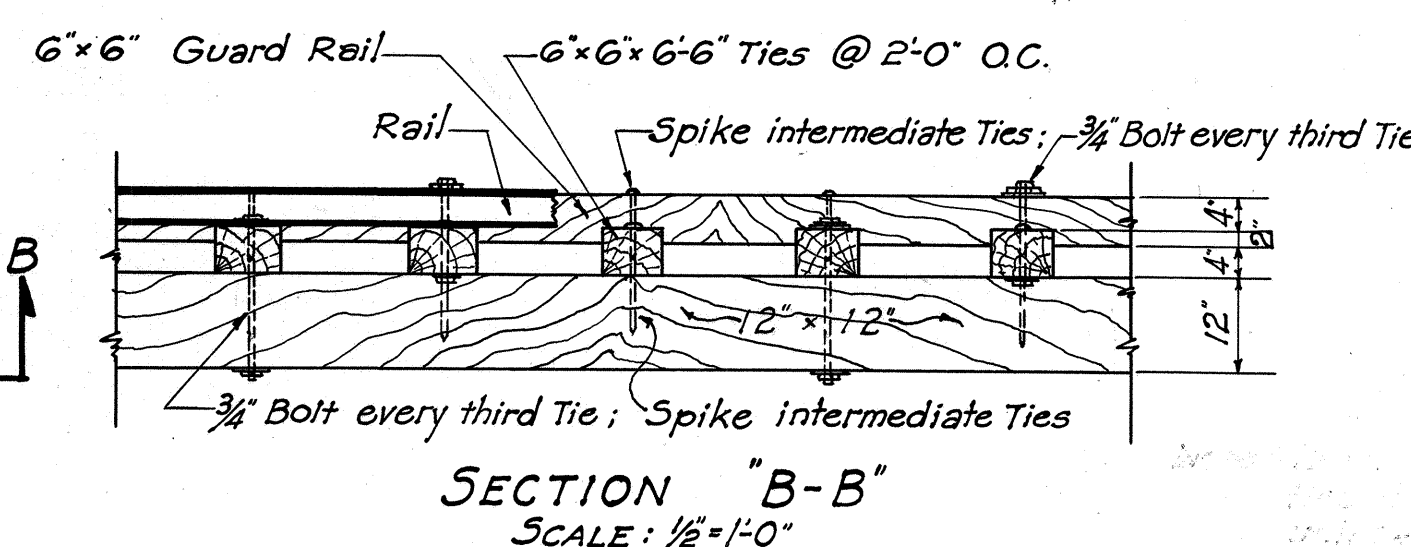




SECTION
STANDARD SYPHON DETAILS
SCALE: 1/4"=1'-0"

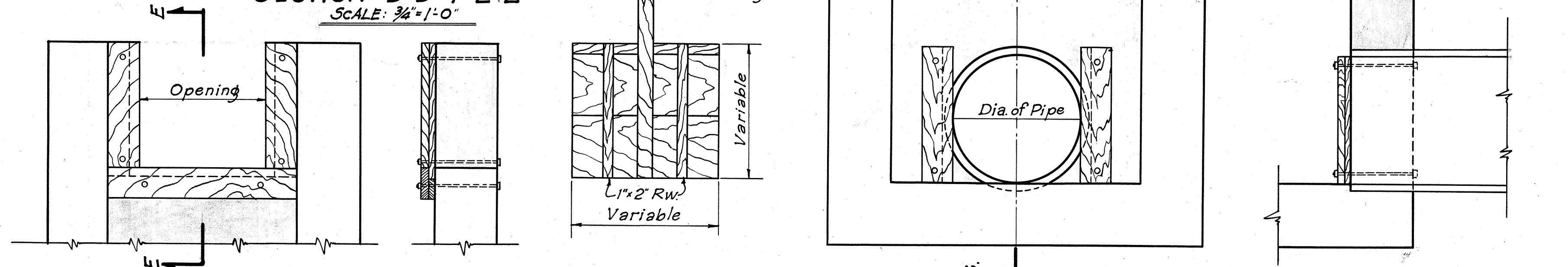


EST. QUANTITIES:
STRUCT. Exc. = 90 C.Y.
C.R.M. = 42 C.Y.
Untreated Timber = 2184 fbm.

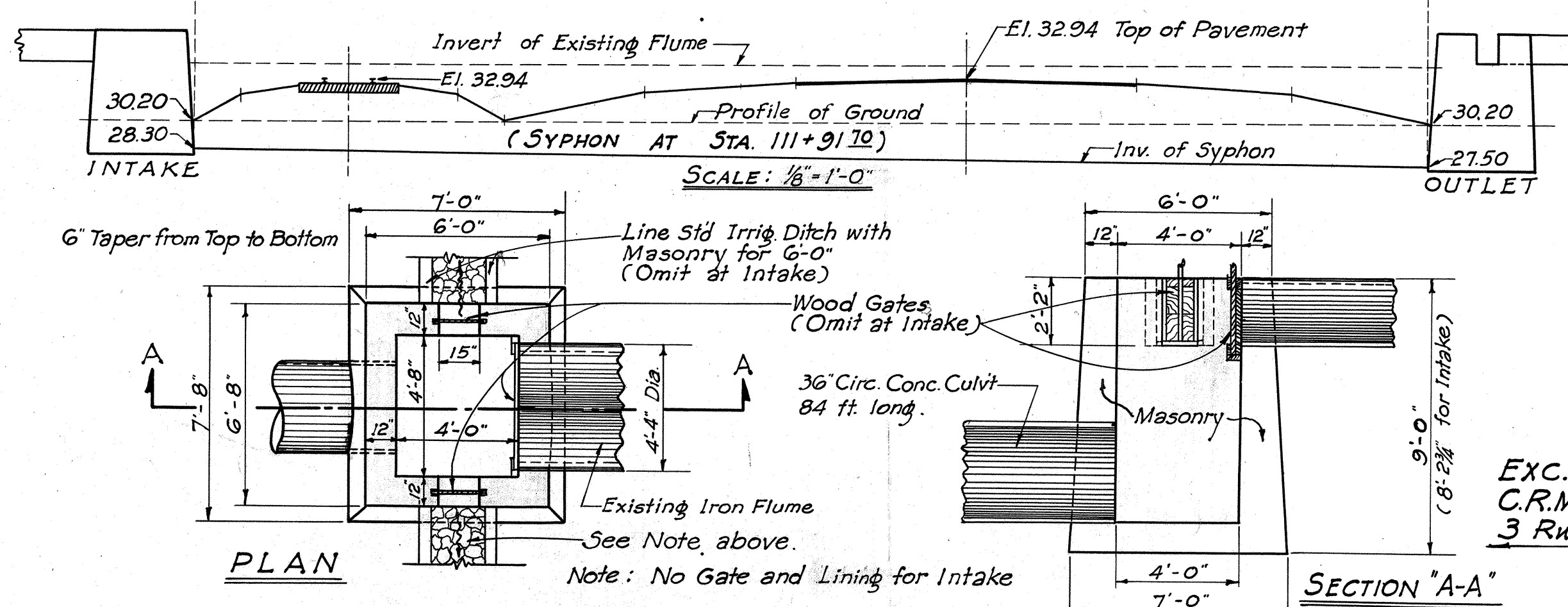


NOTES: Allow a minimum of 24" covering over top of pipe and a minimum of 6" fall between intake and outlet grades. Size, number and location of openings shall be determined by the Resident Engineer. All redwood gates are considered incidental to C.R.M. and will not be paid for separately. All redwood timber shall be S4S. All nails to be galvanized.

SECTION 'D-D' & 'E-E'
SCALE: 3/4"=1'-0"



SPECIAL INDUSTRIAL R.R. & TRACTOR CROSSING ~ STA. 75+00



Exc. = 63 C.Y.
C.R.M. = 20 C.Y.
3 R.W. Gates Req'd

Station		Pipe		Top of Syphon Left	Invert Syphon Left	Top of Syphon Right	Invert Syphon Right	Redwood Gates Required	Exc.	C.R.M.
65+28	24"	See Detail Sheet No. 9A	See Detail Sheet No. 9A	31.5	28.6	31.5	28.0	4	66	7.2
73+30	24"	See Detail Sheet No. 9A	See Detail Sheet No. 9A	31.3	28.8	31.3	28.2	4	67	6.7
95+10	24"	80'		30.5	28.8	30.5	28.2	2	43	5.7
98+73	24"	120'		31.4	28.2	31.4	27.6	3	73	7.7
103+70	24"	80'		30.7	28.1	30.7	27.5	3	66	6.8
114+80	24"	80'		30.6	28.5	30.6	27.9	3	51	5.6
119+38	24"	92'		32.1	28.7	32.1	28.1	4	78	7.9
128+90	24"	80'		30.5	28.8	30.5	28.2	2	42	5.7

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
INDUST. R.R. & TRACTOR CROSSING
AND
SYPHON DETAILS
PROJECT No. DA-NR-3
SHEET NO. 10 OF 11