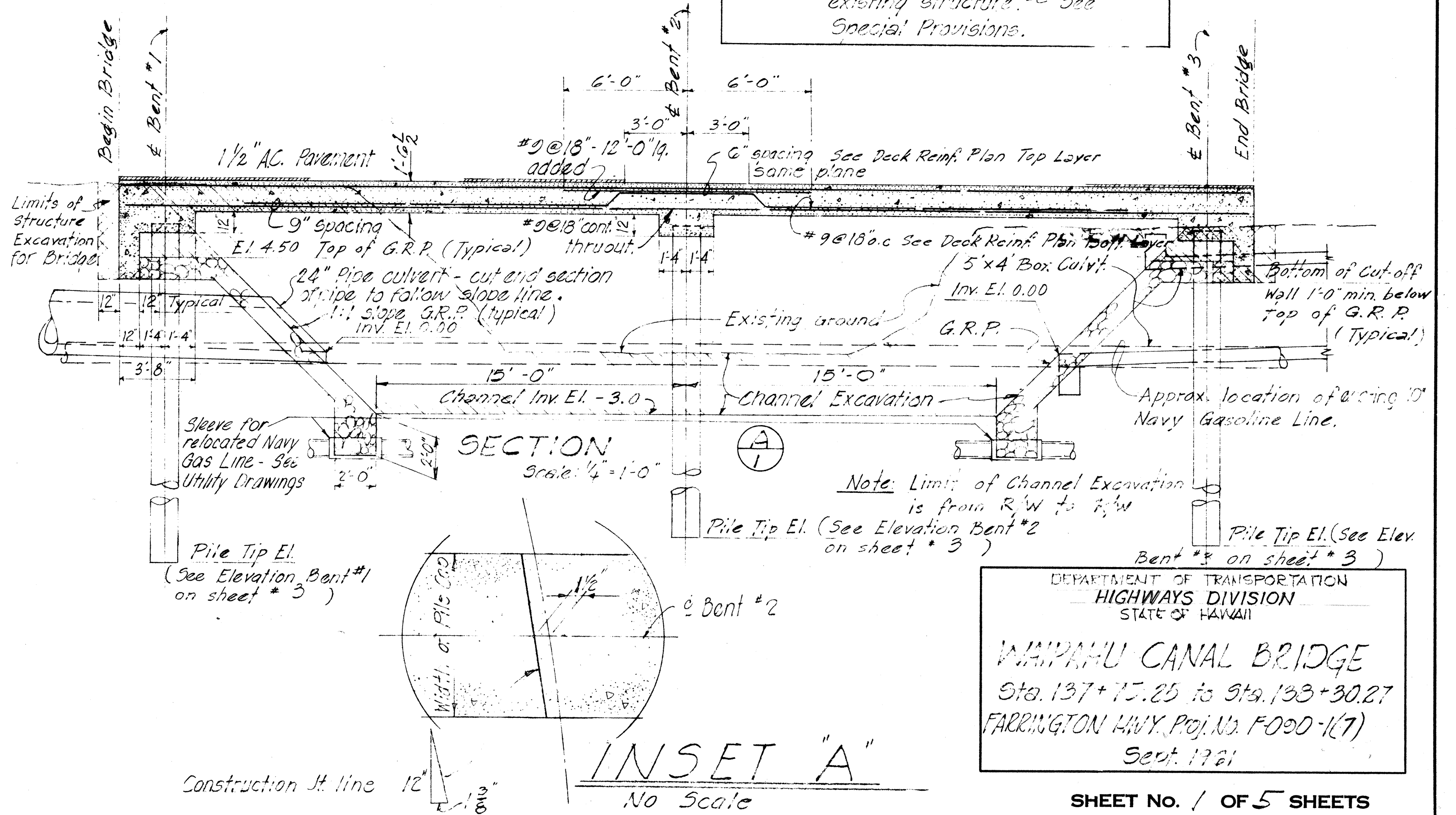
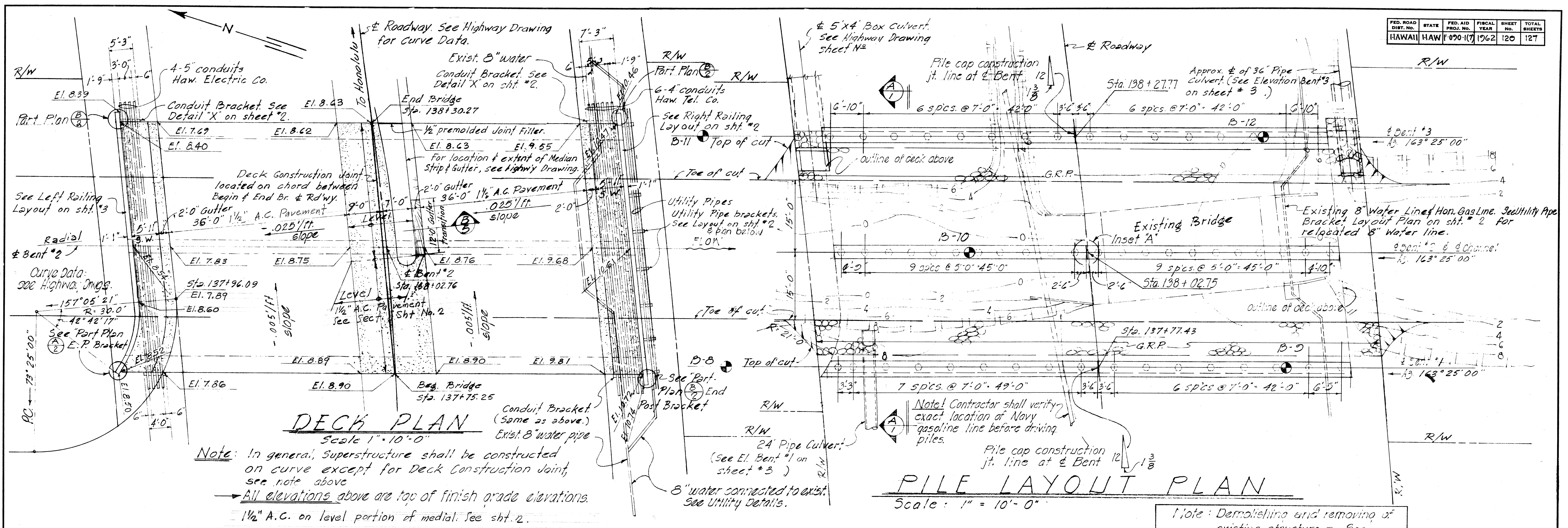
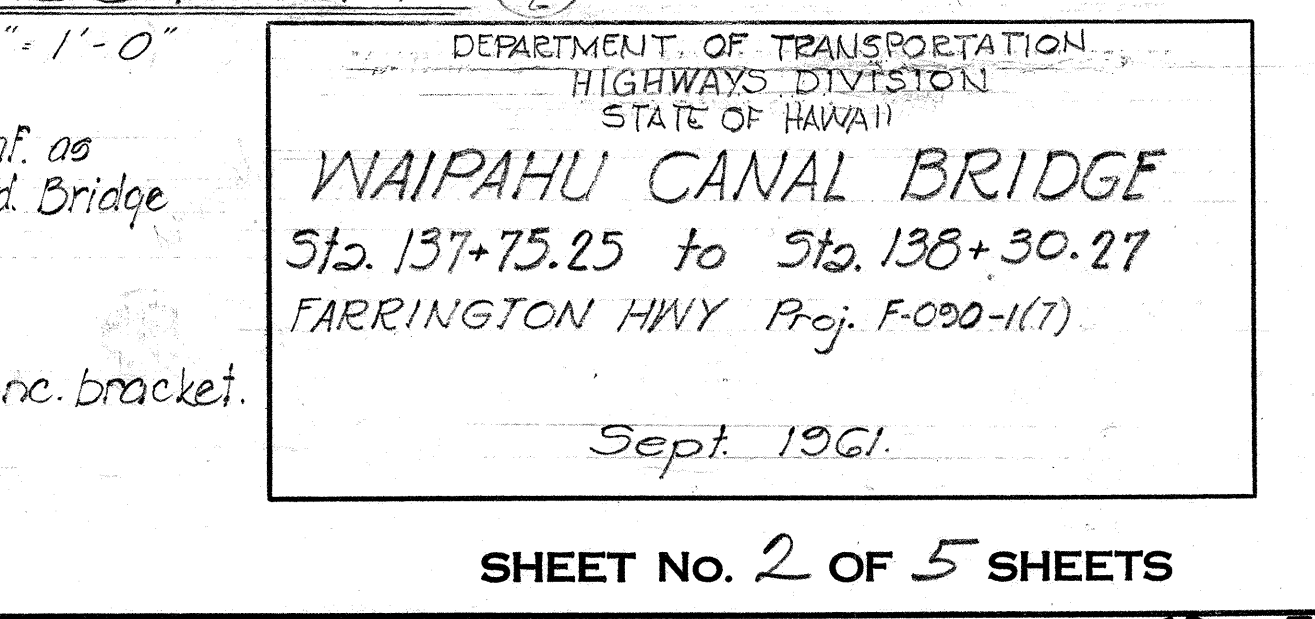
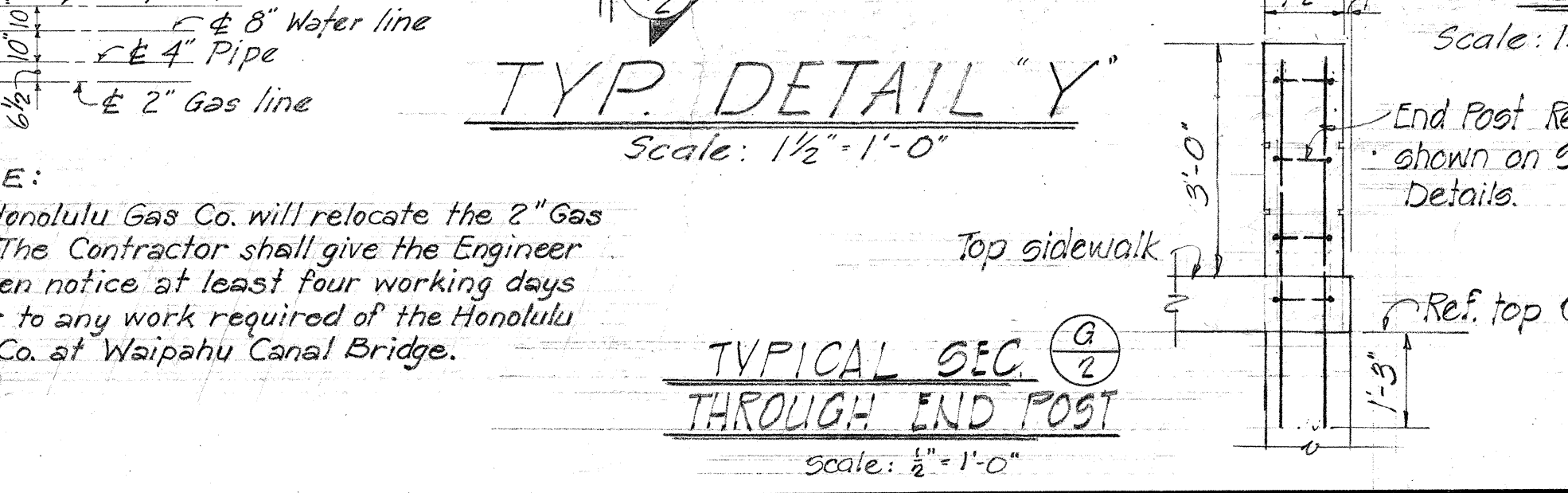
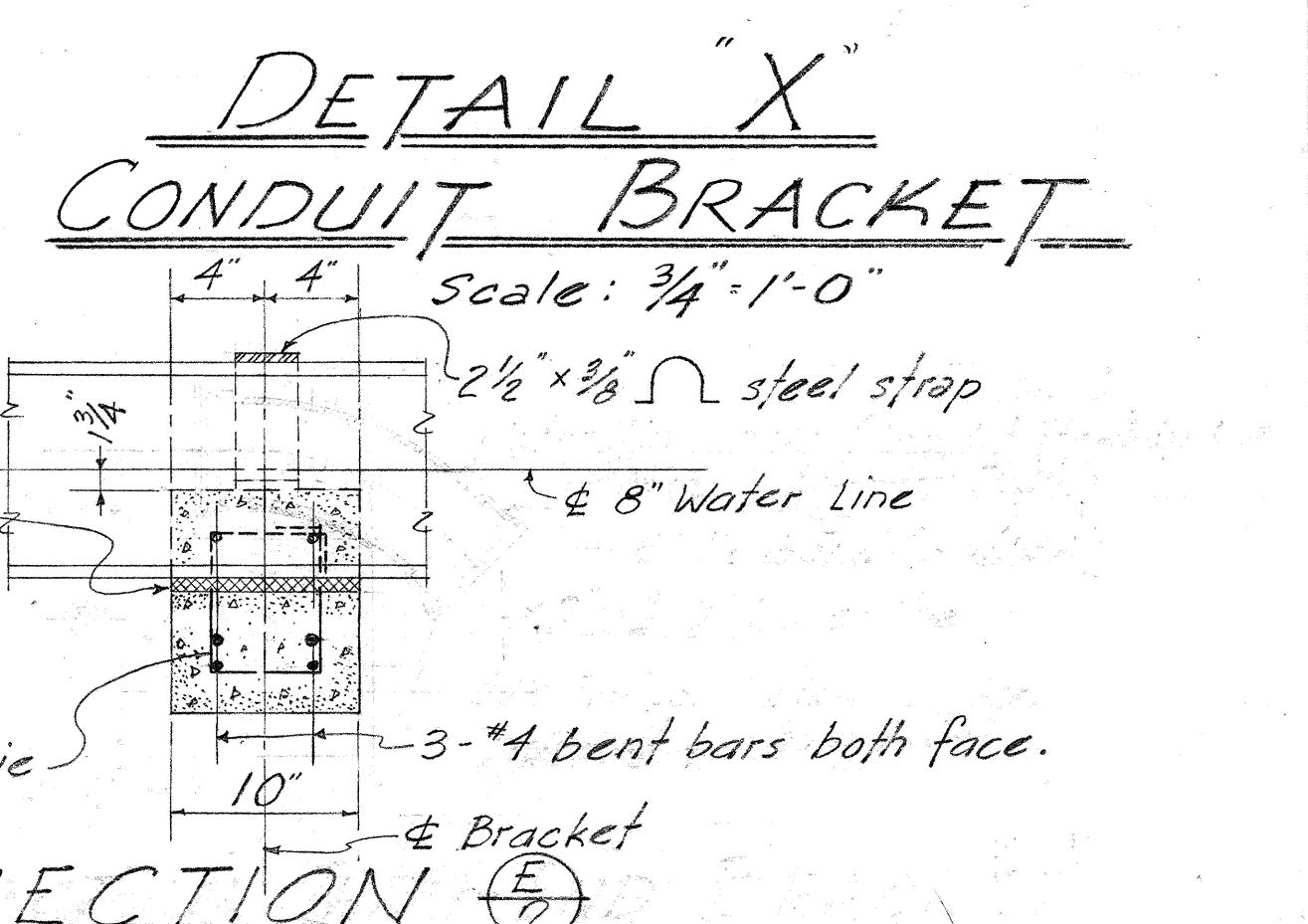
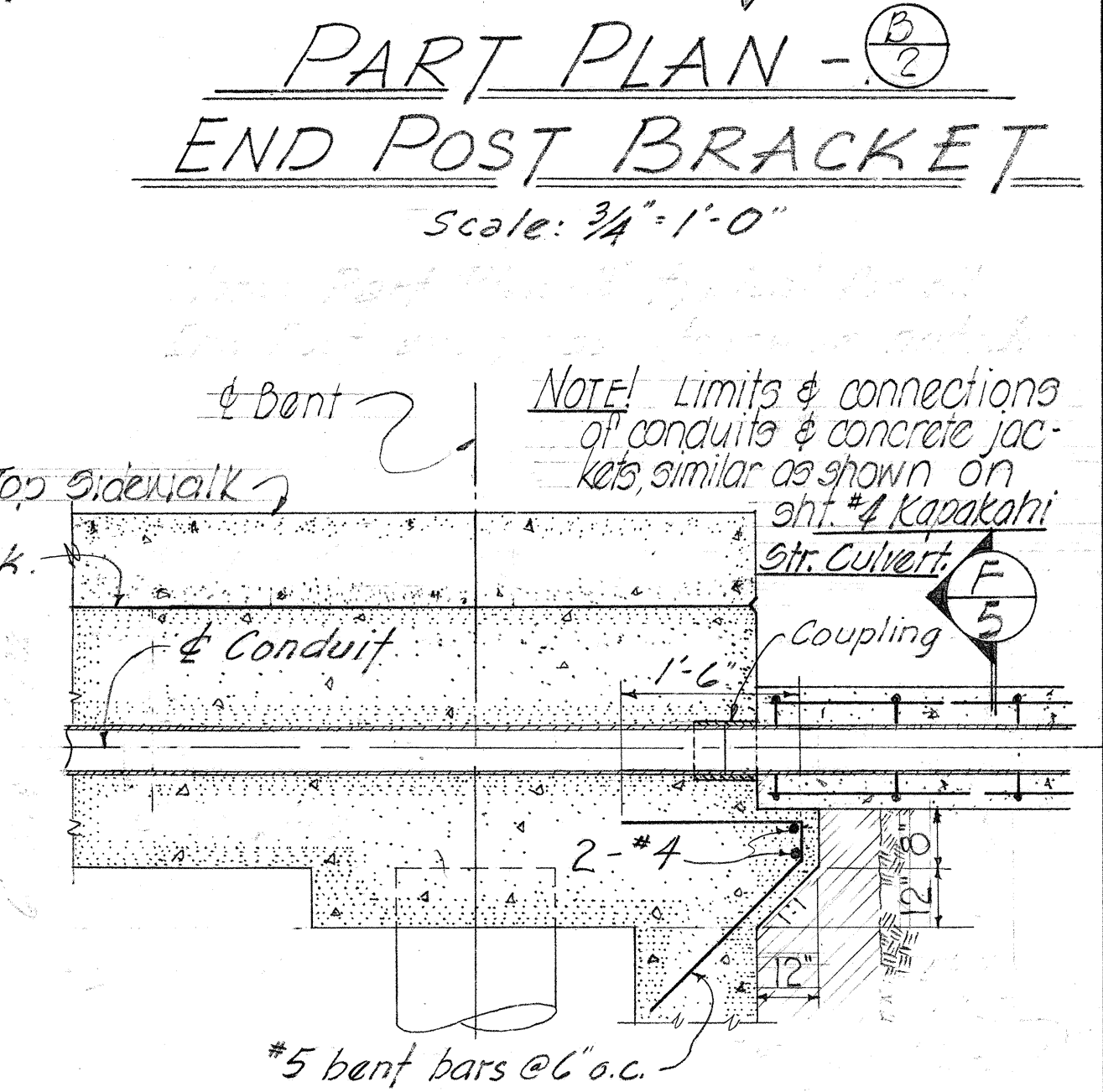
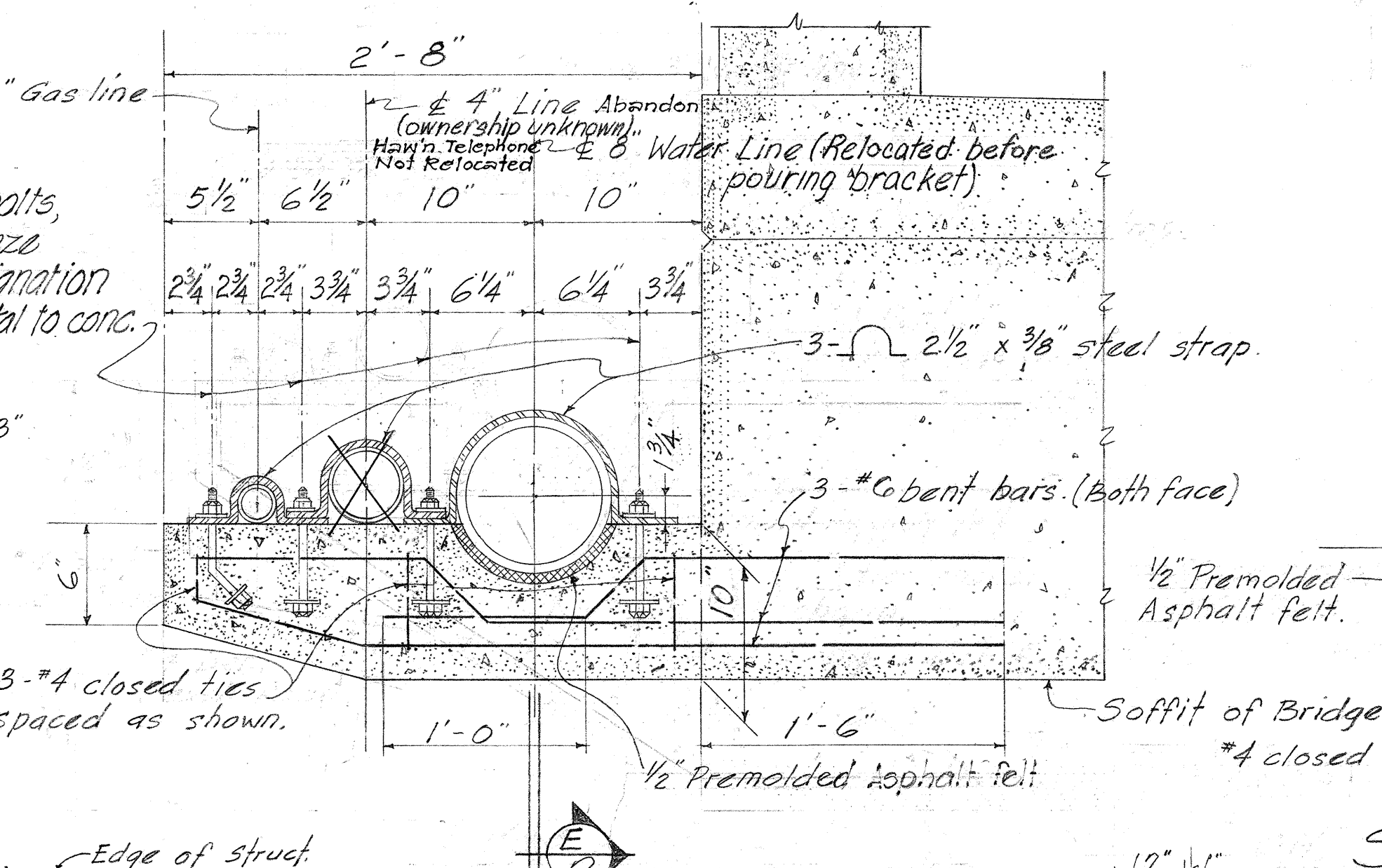
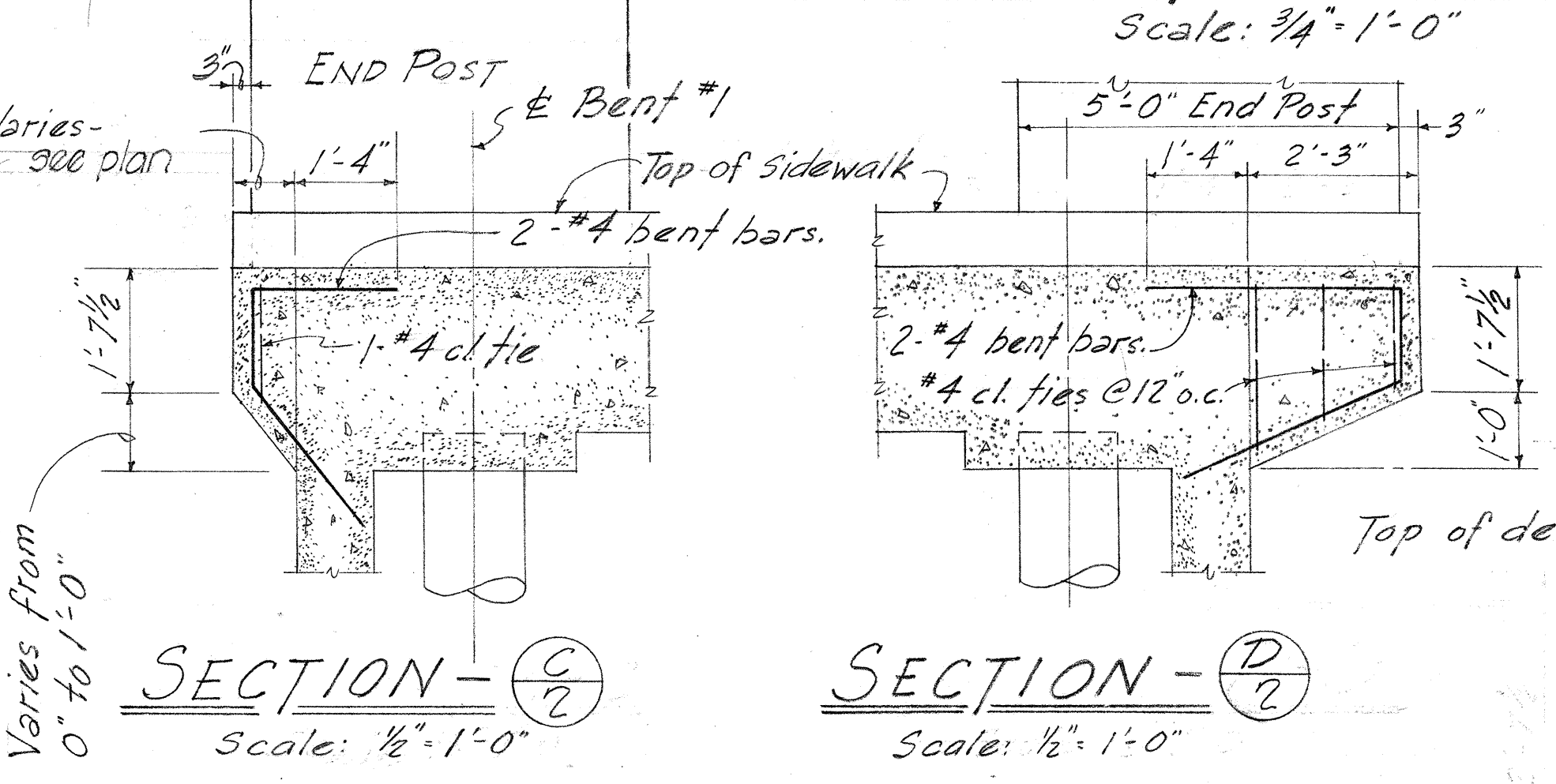
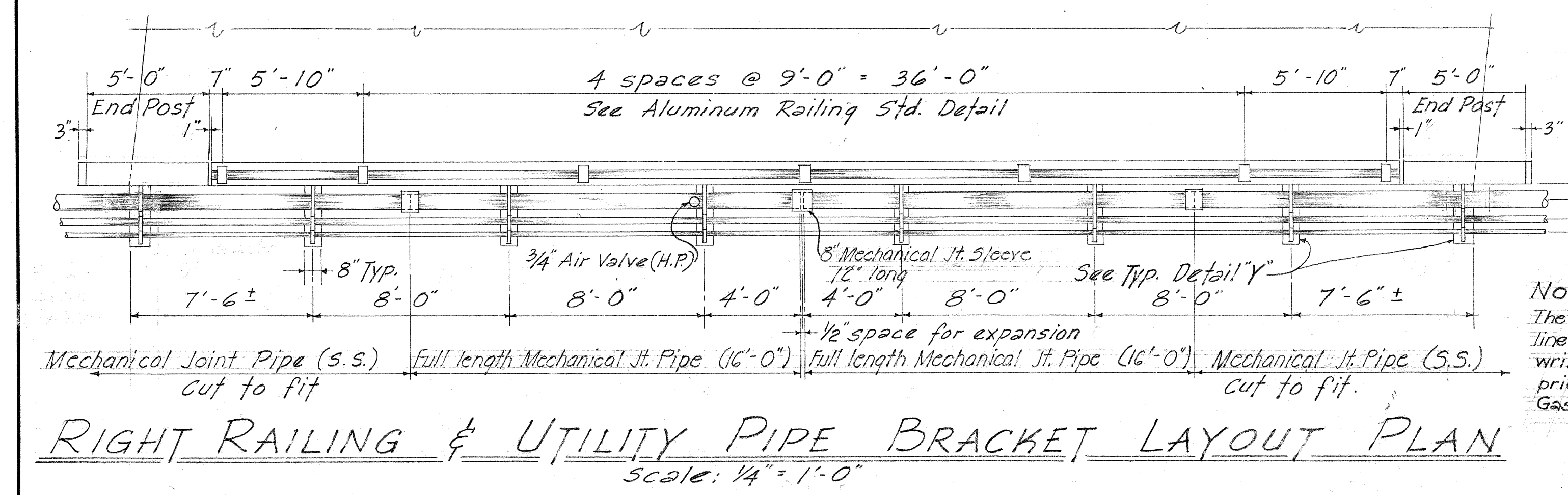
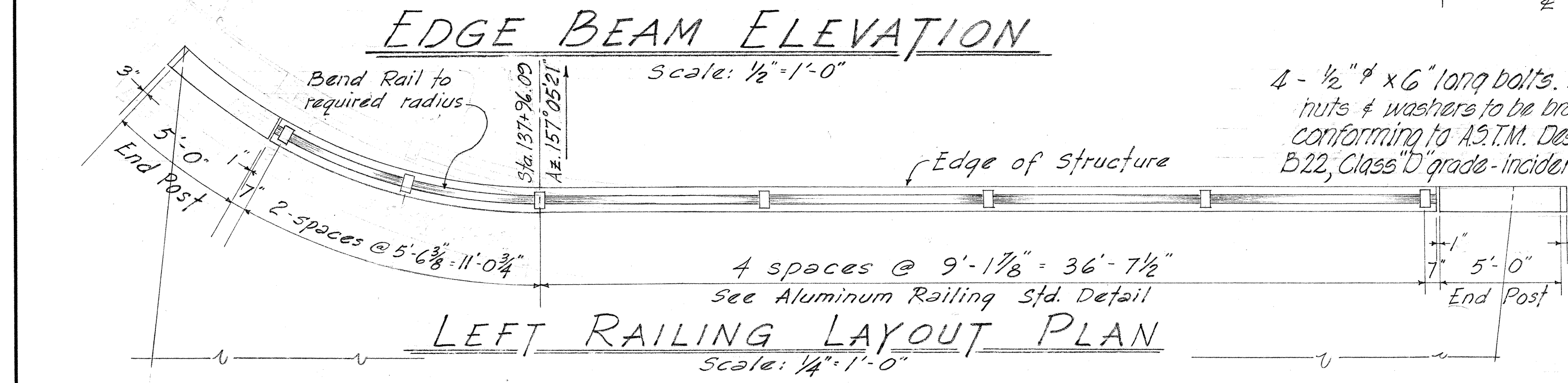
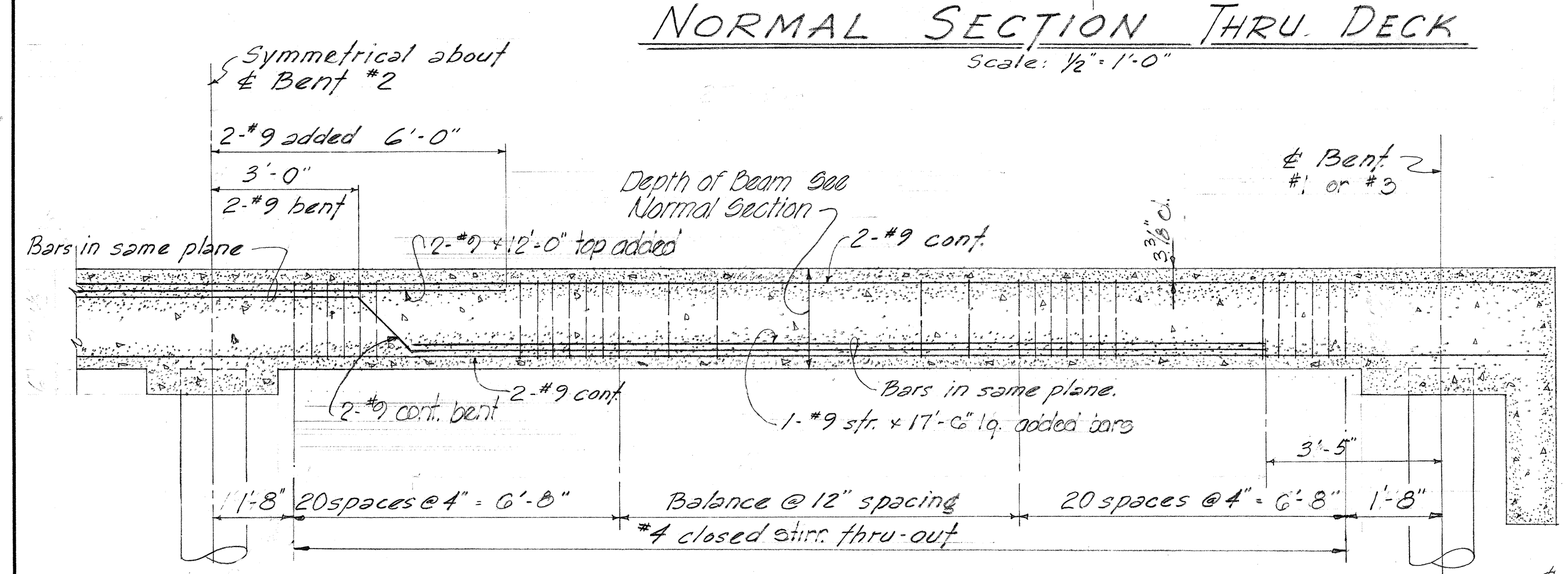
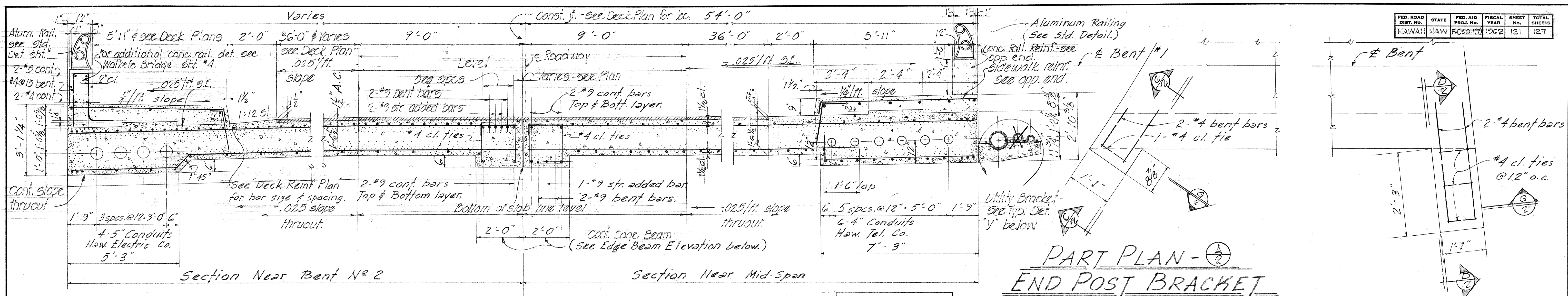




DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII

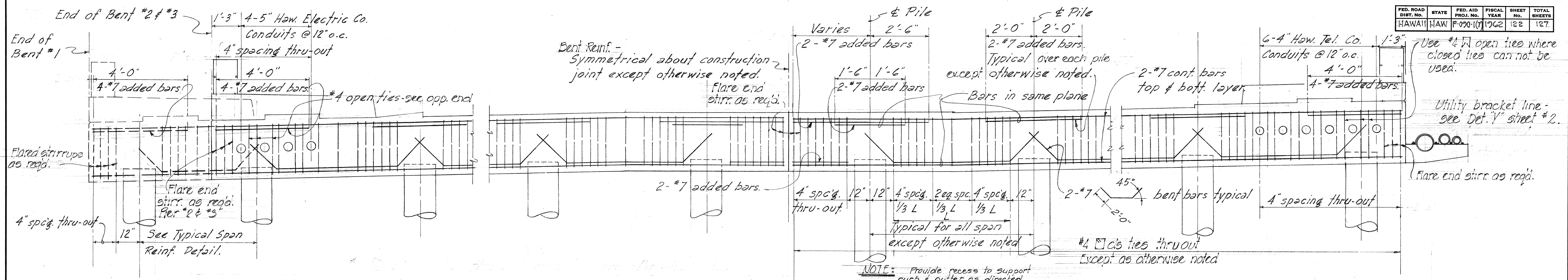
WAIPAHU CANAL BRIDGE
Sta. 137+75.25 to Sta. 133+30.27
FARRINGTON HWY. Proj. No. F-020-1(7)
Sept. 1961

FED. ROAD DIST. NO.	STATE	FED. AID YEAR	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	F090-1(7)	1962	121	127



NOTE:
The Honolulu Gas Co. will relocate the 2" Gas line. The Contractor shall give the Engineer written notice at least four working days prior to any work required of the Honolulu Gas Co. at Waipahu Canal Bridge.

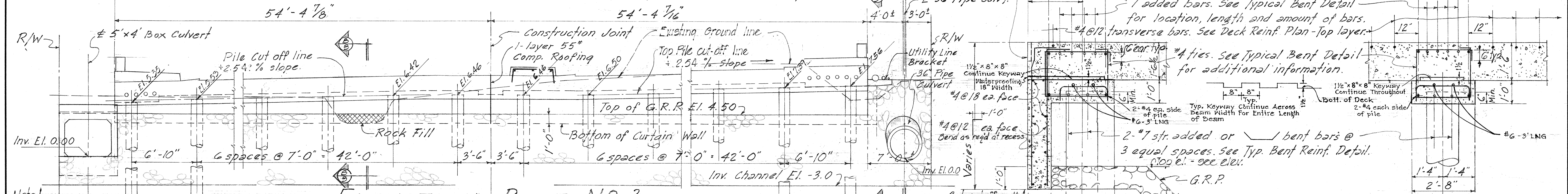
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII
WAIPAHU CANAL BRIDGE
Sta. 137+75.25 to Sta. 138+30.27
FARRINGTON HWY Proj. F-090-1(7)
Sept. 1961



Note: All lengths given at Bent are measured along & bent.

TYPICAL BENT #2 & #3 REINF. DETAIL AS SHOWN

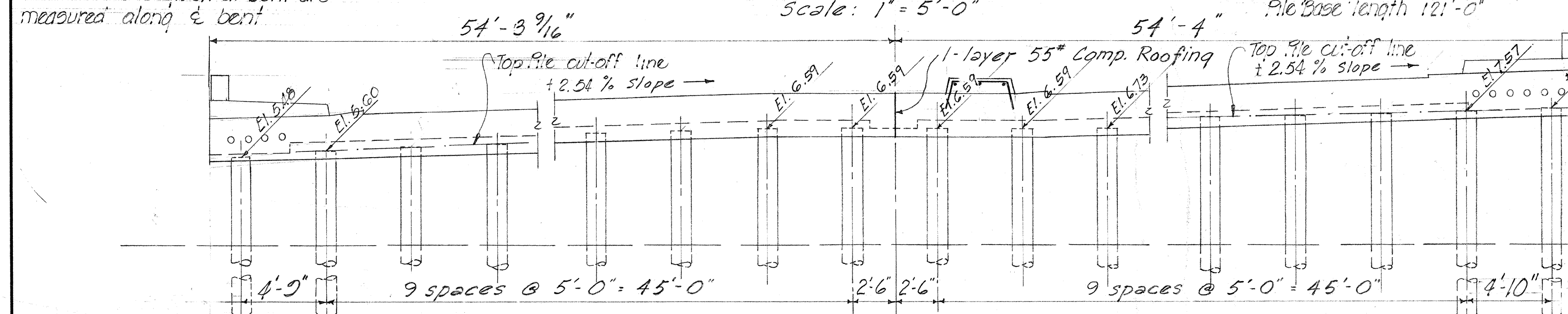
(Bent #1 Similar Except As Otherwise Noted) SCALE: 1/2" = 1'-0"



Note! All dimensions given at bent are measured along & bent.

ELEVATION BENT No 3

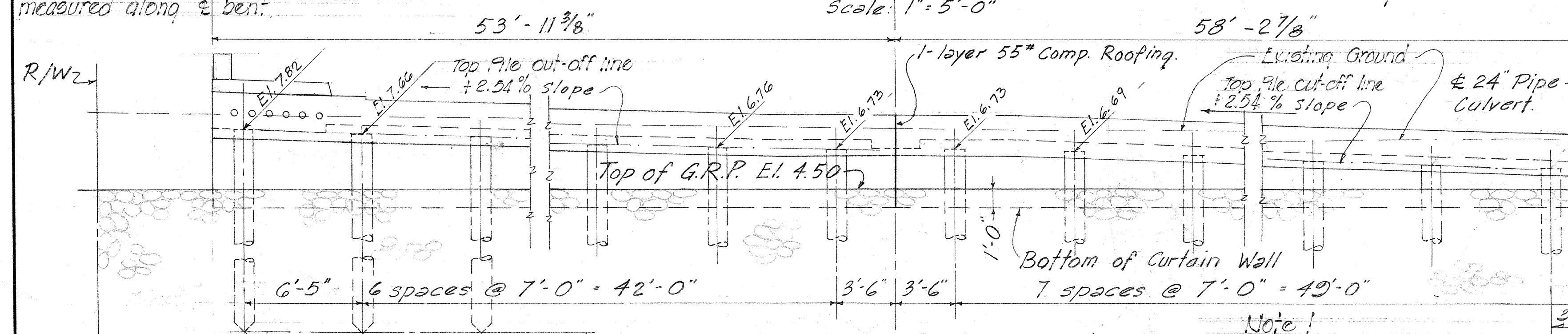
Scale: 1" = 5'-0"



Note! All dimensions given at bent are measured along & bent.

ELEVATION BENT No 2

Scale: 1" = 5'-0"



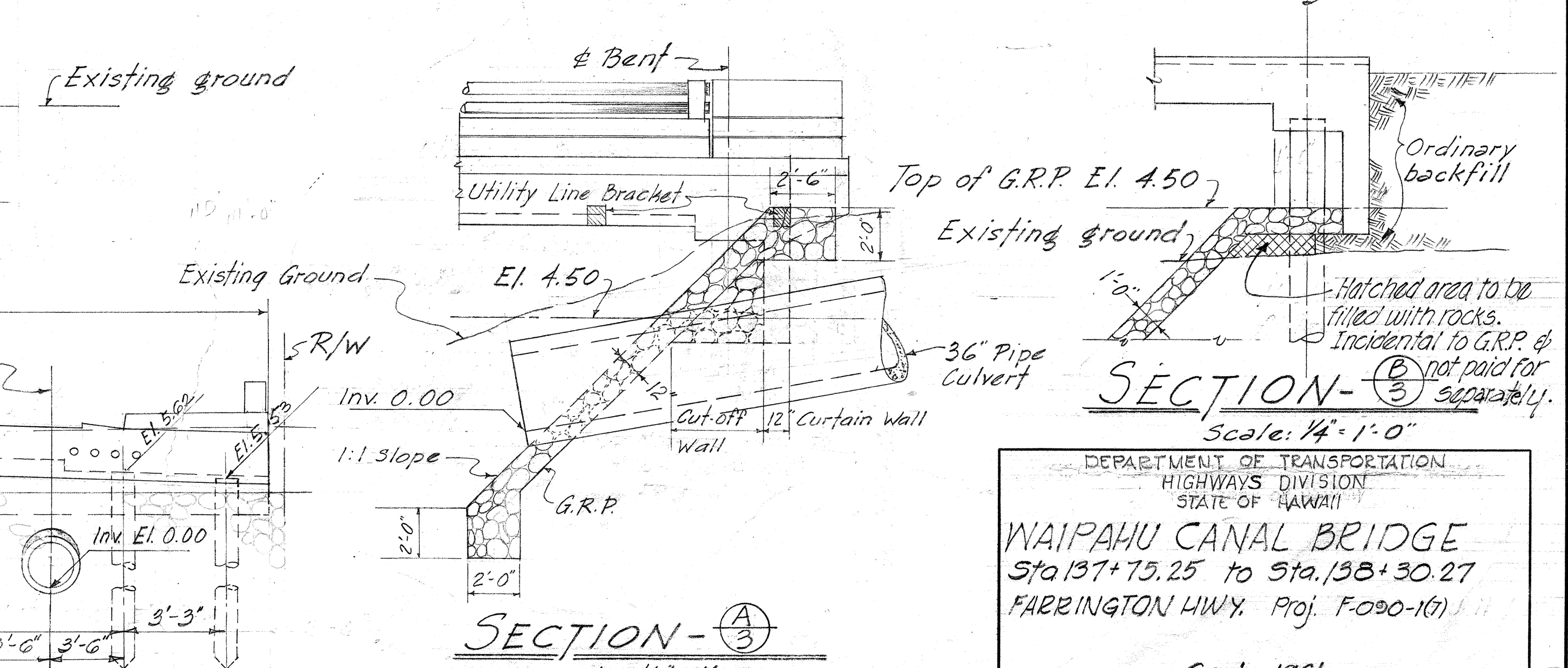
Note! All dimensions given at bent are measured along & bent.

ELEVATION BENT No 1

Scale: 1" = 5'-0" (Looking against station.)

TYP. SECT. THRU BENT No 1 & No 3

Scale: 1/2" = 1'-0"



TYP. SECT. THRU BENT No 2

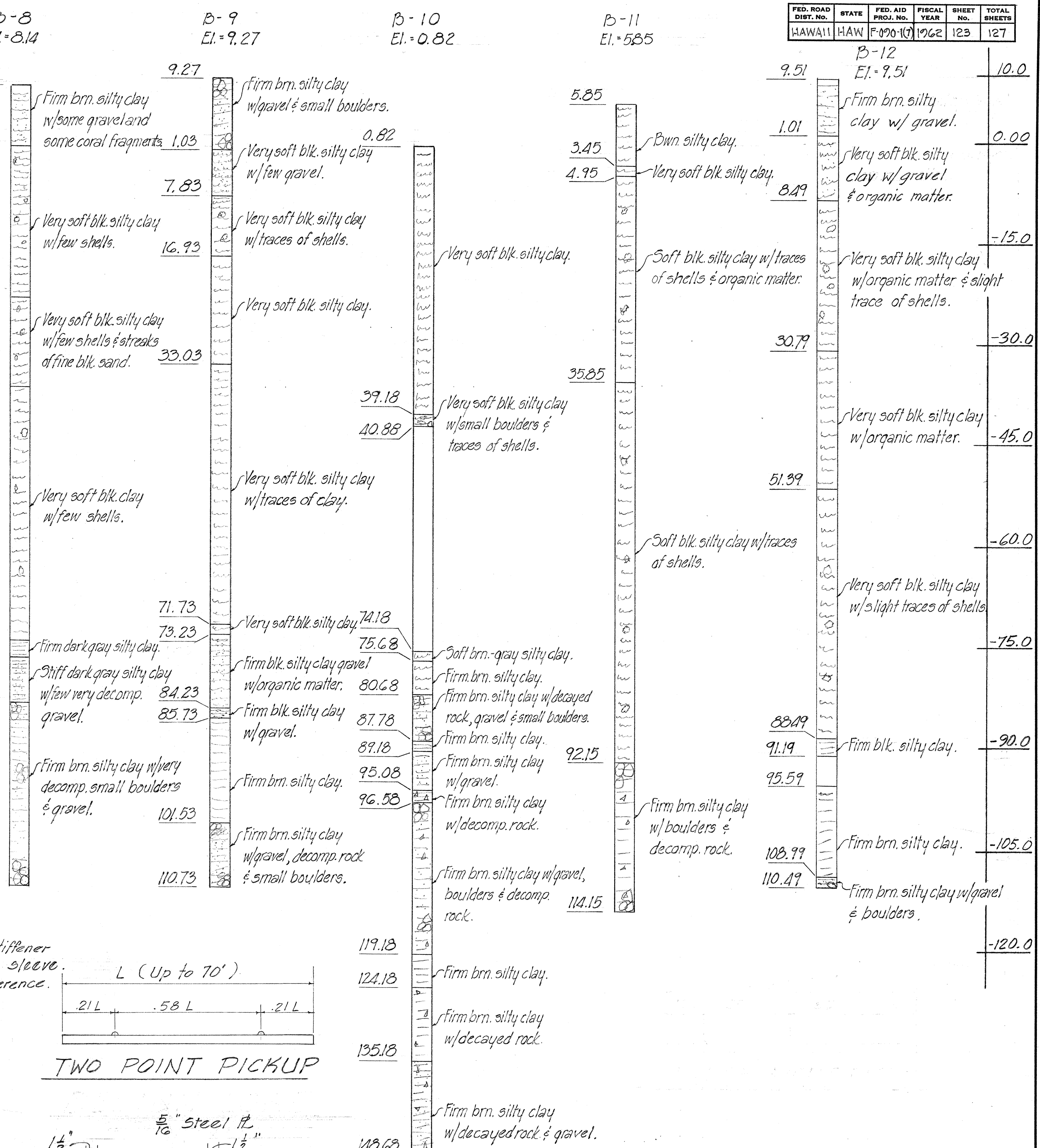
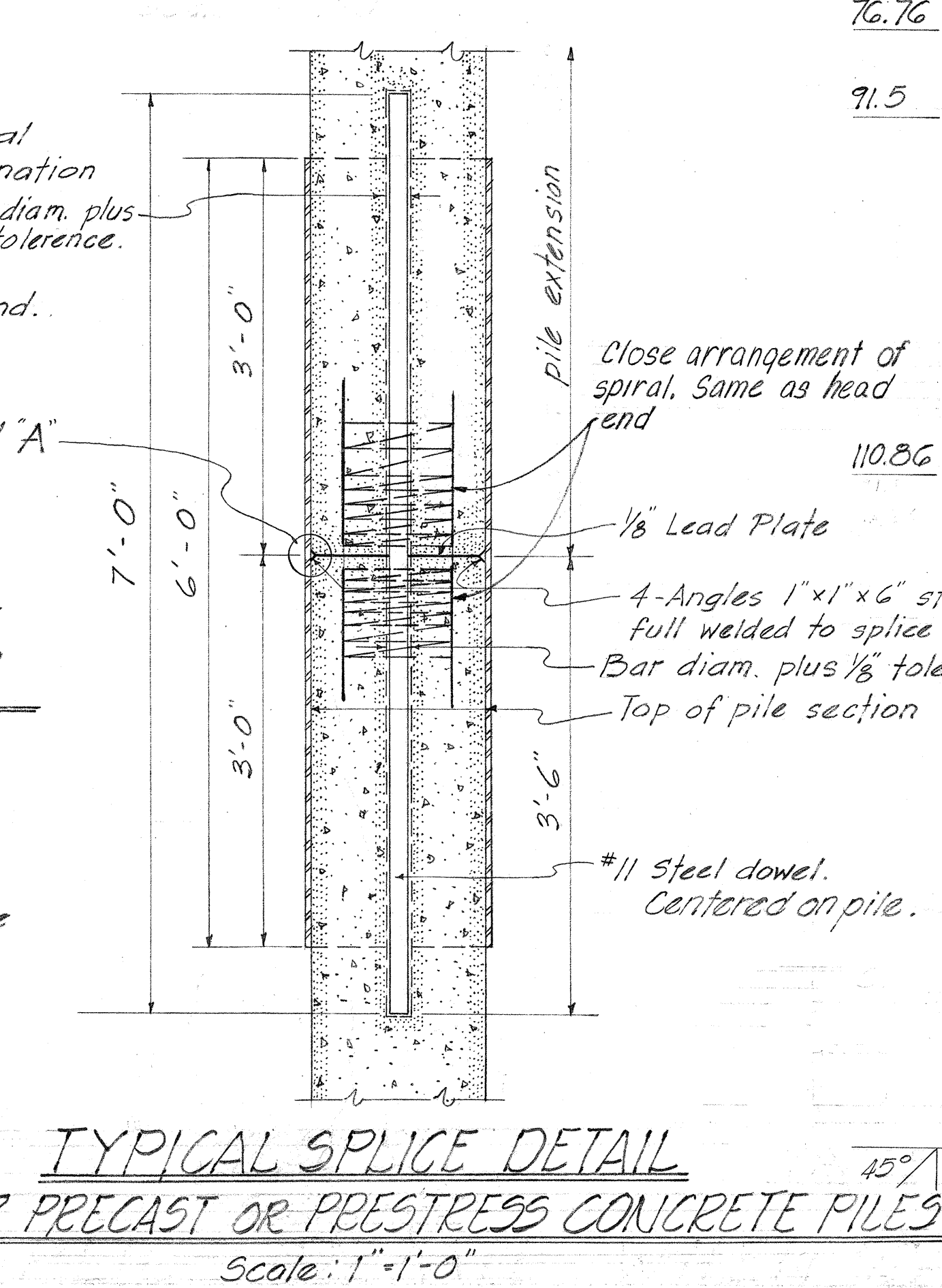
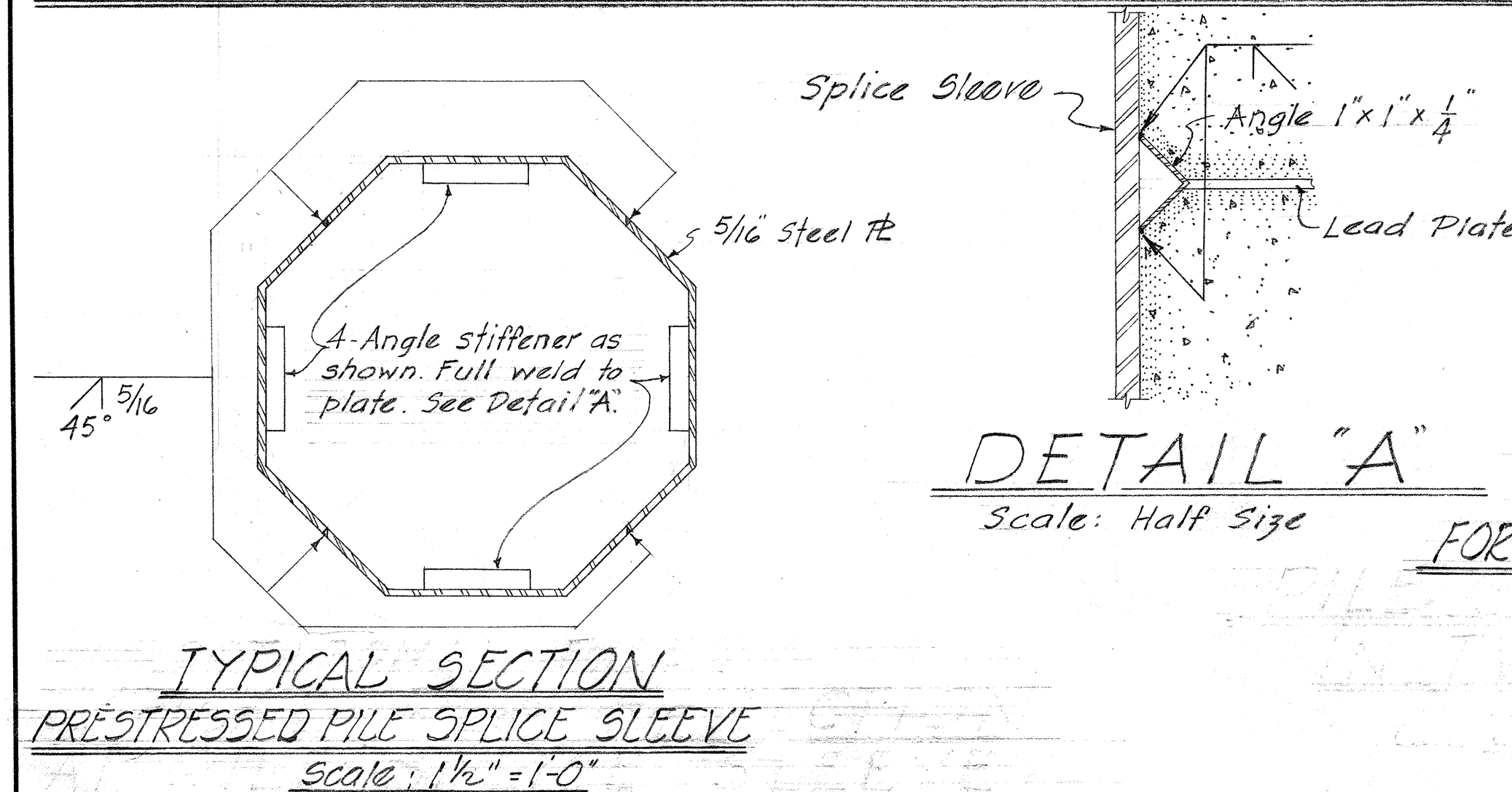
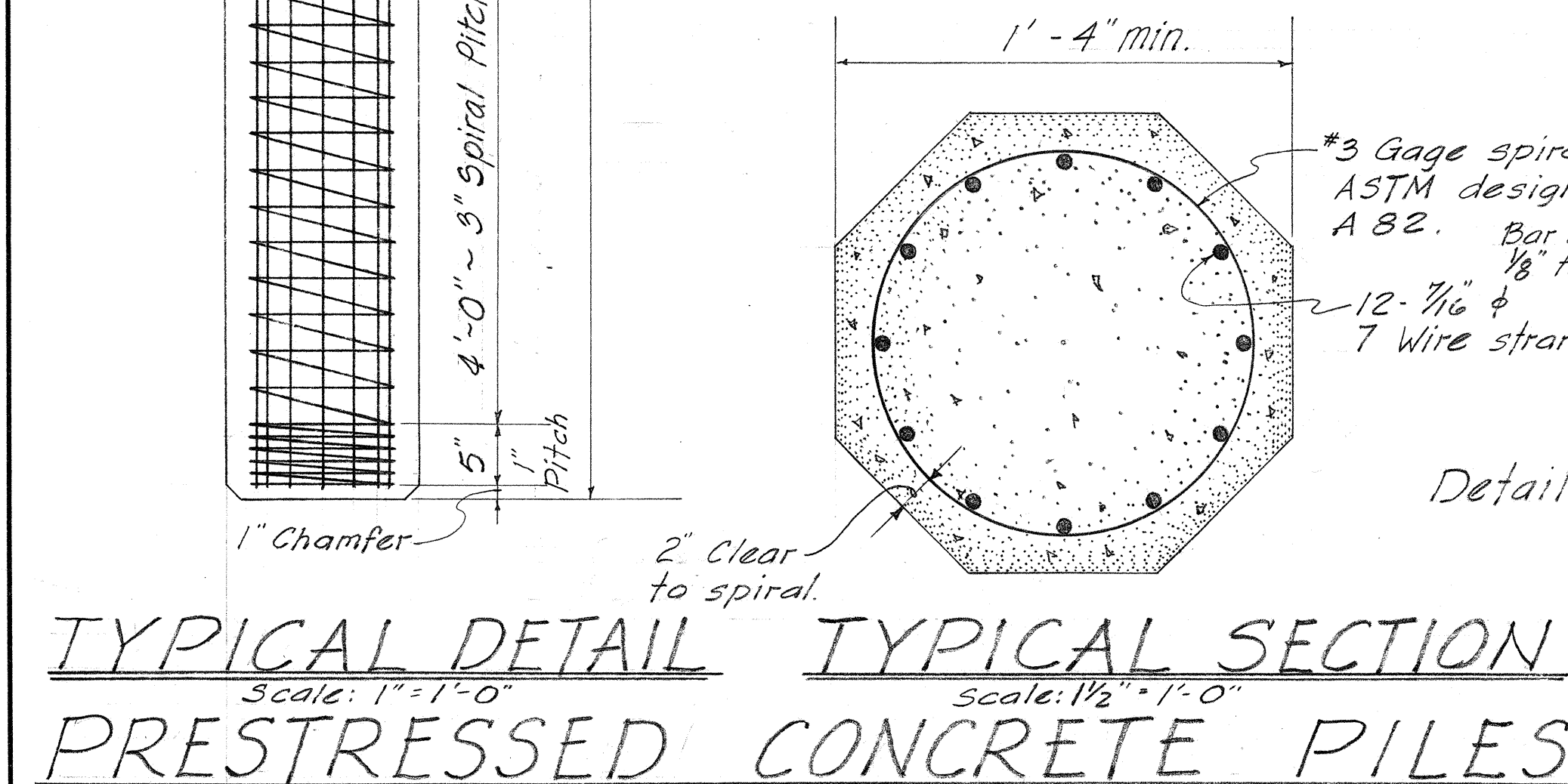
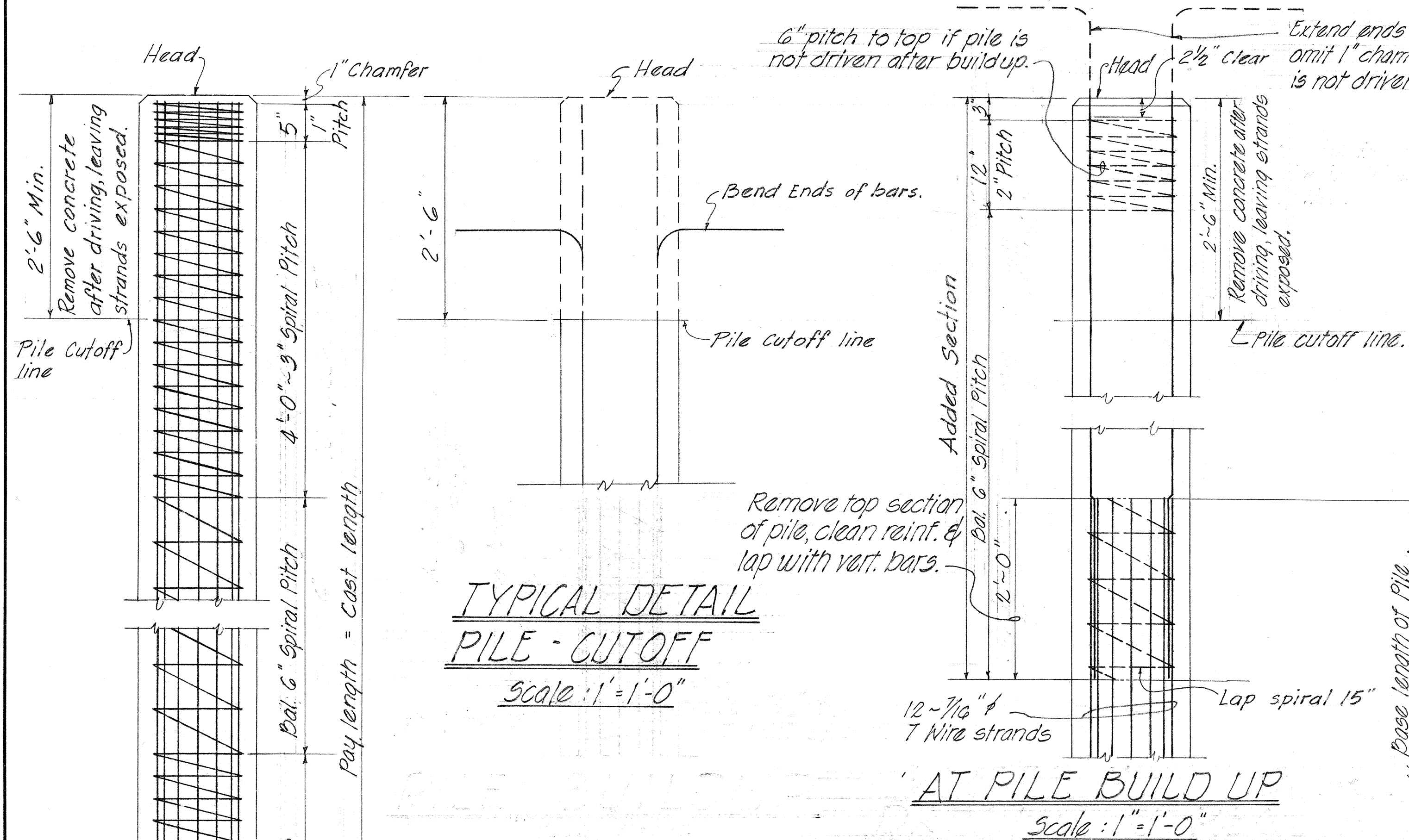
Scale: 1/2" = 1'-0"

SECTION - (3)

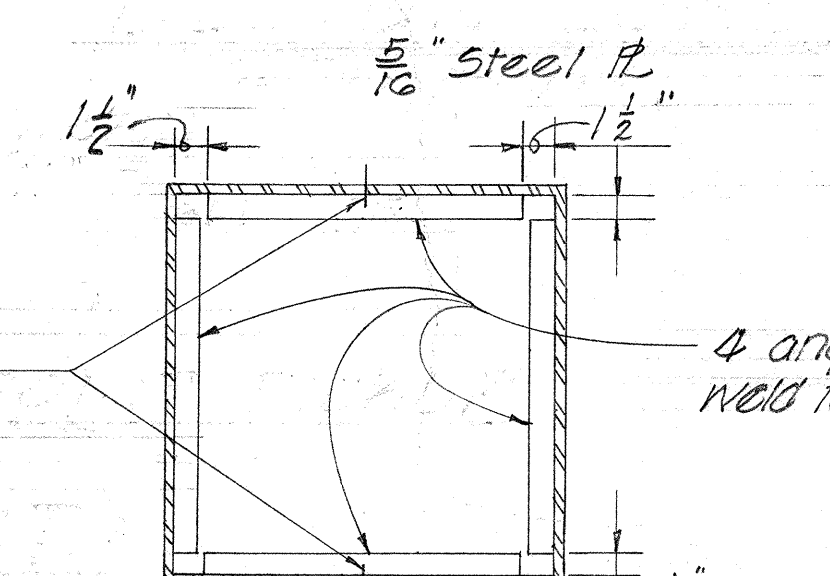
Scale: 1/4" = 1'-0"

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII
WAIPAHU CANAL BRIDGE
Sta. 137+75.25 to Sta. 138+30.27
FARRINGTON HWY. Proj. F-090-1(7)
Sept. 1961

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	F-090-107	1962	123	127



TWO POINT PICKUP



DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII

WAIPIAHU CANAL BRIDGE
Sta. 137+75.25 to Sta. 138+30.27
FARRINGTON HWY. Proj. F-090-117

Sept. 1961

MATERIALS :

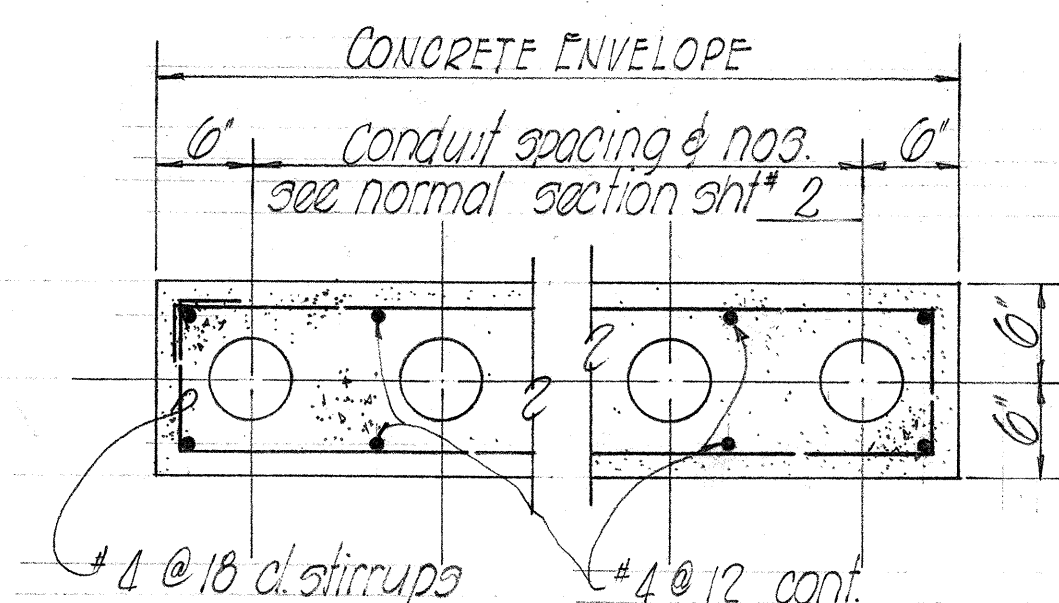
CONSTRUCTION METHOD

GENERAL

DESIGN DATA

DESIGN DATA
Loading H2O - S16 - 44
Allowable Stresses
Cast in Place Conc.
 $f_s = 20,000 \text{ psi}$
 $f_c = 1,200 \text{ psi}$
 $n = 10$

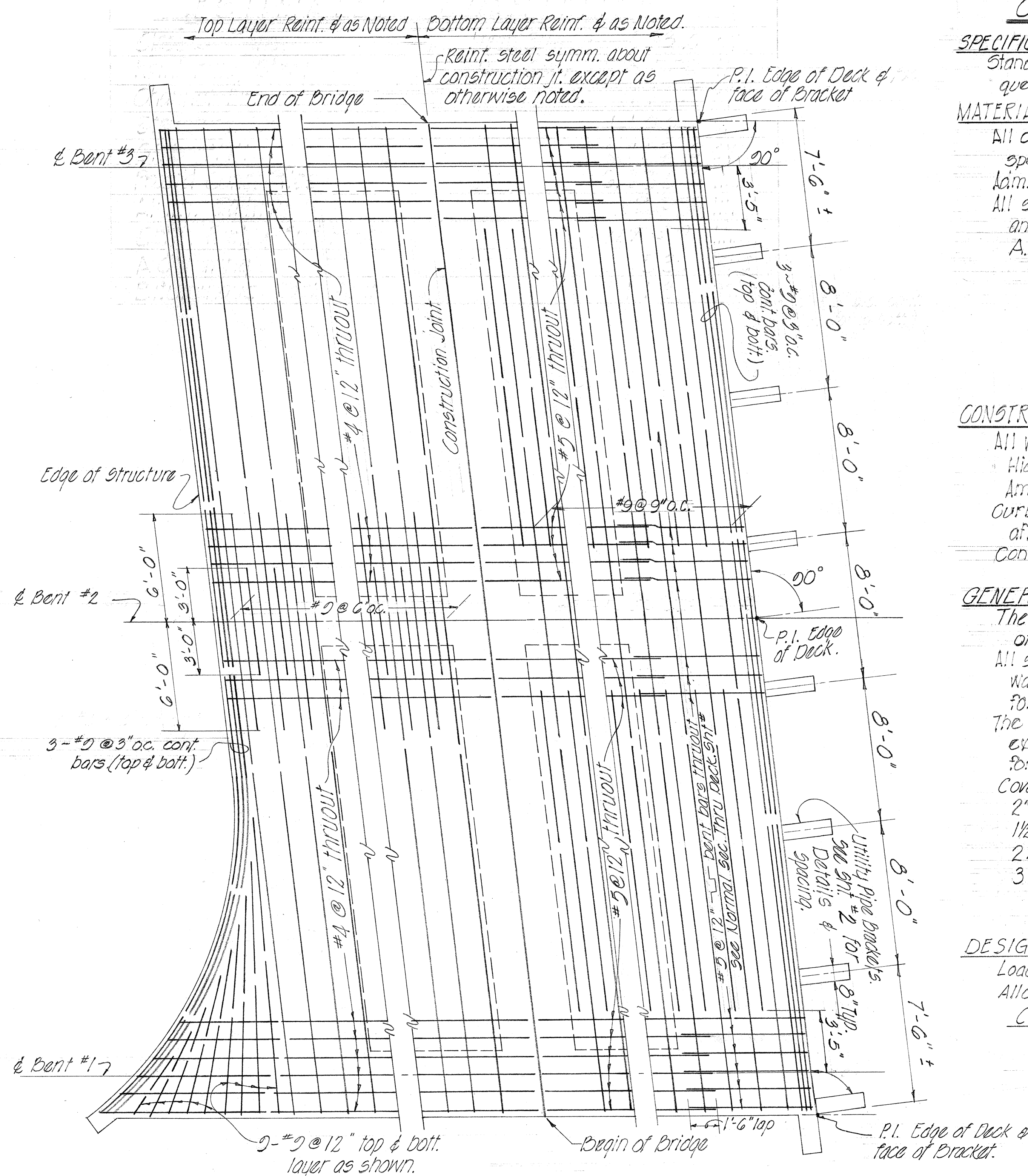
SECTION $\frac{B}{5}$



TYP. SECTION 

ESTIMATED QUANTITIES

Class A-1 Conc.	Lumpsum	409.0	cy
Reinforcing Steel	Lumpsum	68,800	lbs.
Channel Exc.		1,100.0	cy
Structural Exc.		140.0	cy
GRP Wall		116.0	cy
Conc. Piles		6,655.0	lin. ft.
Aluminum Railing		100.00	lin. ft.
Conc. Rail. & End Post		120.00	lin. ft.
A.C. Paving		30.5	tons
Bituminous Tack Coat		113	gals.



DECK REINF. PLAN ~ TOP & BOTTOM LAYER

Scale: $\frac{1}{4}" = 1'-0"$

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII

WAIPAHAU CANAL BRIDGE
Sta. 137 + 75.25 to Sta. 138 + 30.27
Farrington Hwy Proj. 5090-1(7) L.I.
Sept. 1961

SHEET No. 5 OF 5 SHEETS