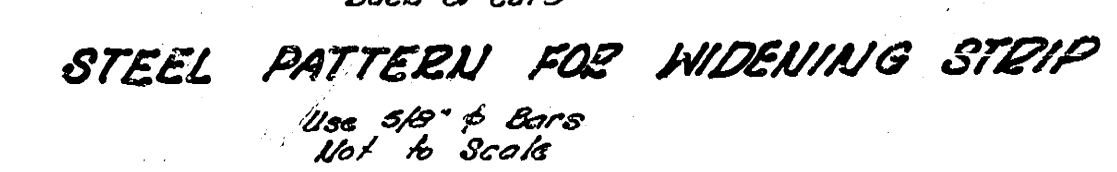
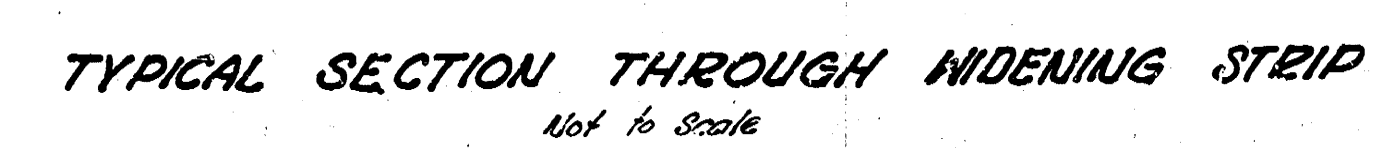
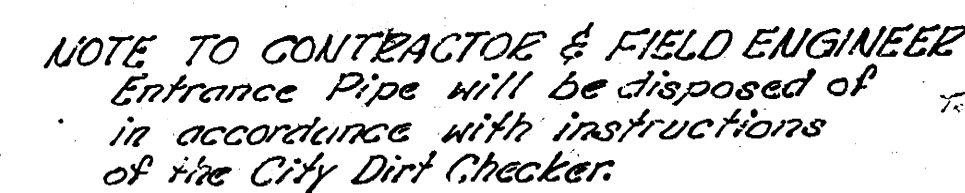


Survey Mills Blk 82
Plan Bengtson
Exc Berntson
Checked



Stationing on Sedge Conc. Pymt, U.S. 54



EXPERIMENTAL

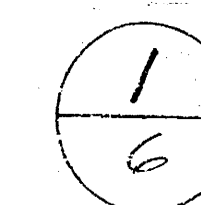
CITY		PREFERRED	
OUT	IN	OUT	IN
82°	114.6	82.5	106.7
100°	101.3	114.6	96.1
100°	98°	114.6	96.1
TOTAL 80.5 CUPS	TOTAL 382.9 CUPS	TOTAL 114.6 CUPS	TOTAL 106.7 CUPS

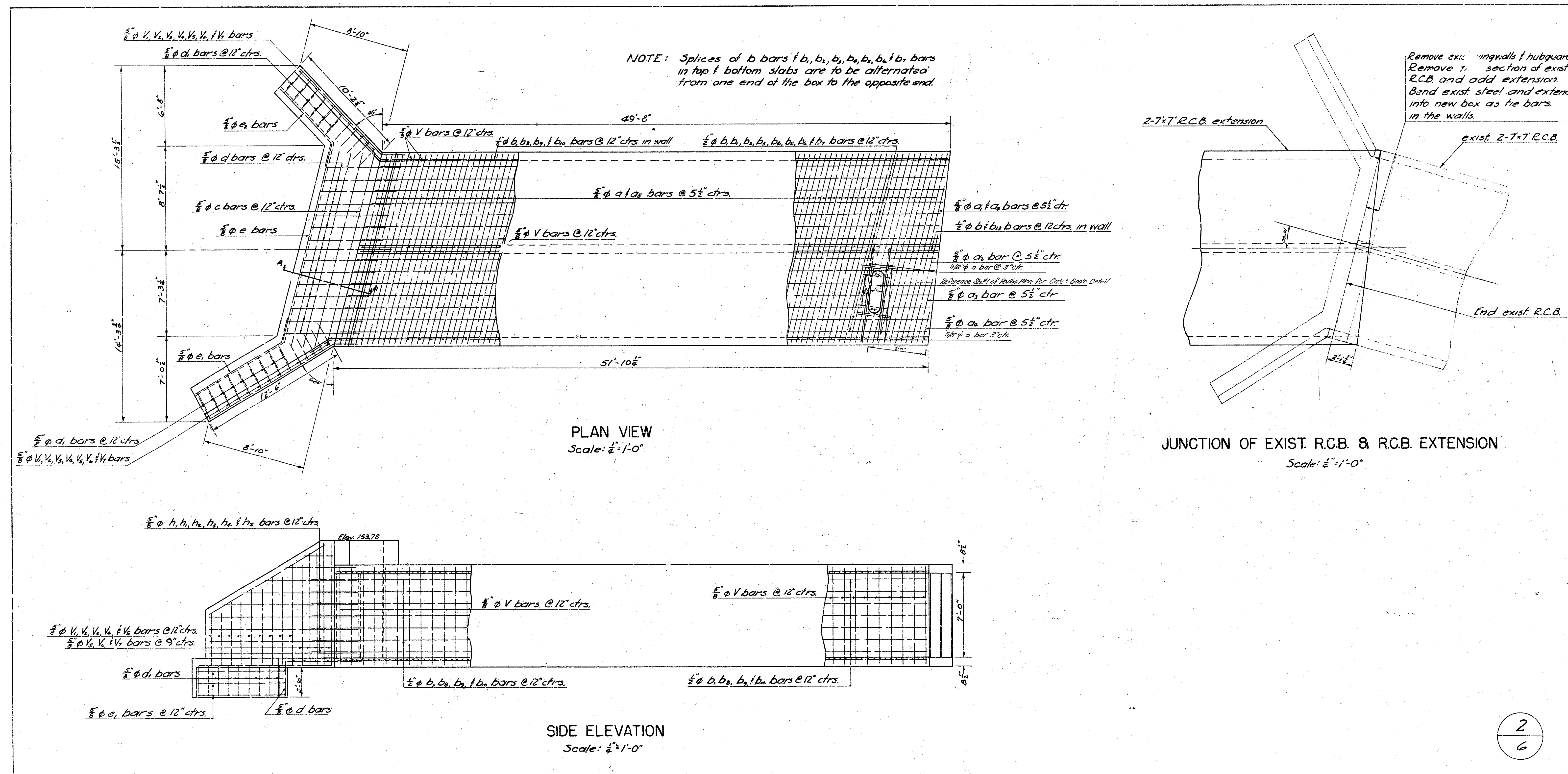
B.E. SMITH
MARCH 1953

CITY ENGINEER
Prov. No. C-12-231

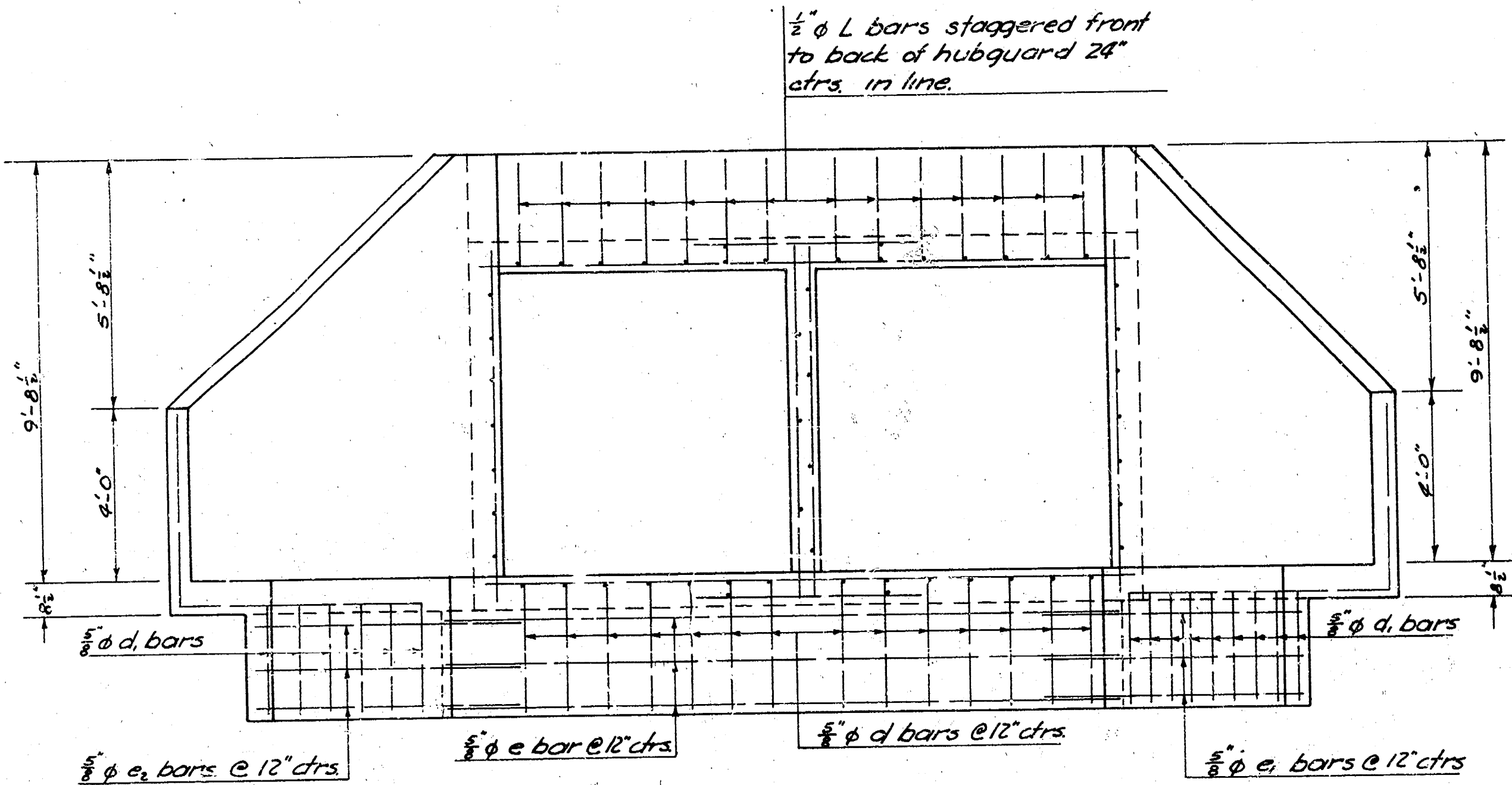
D.M. 153.82 "R" in Ritchie W. Cb. Calhoun, S.L. Kellogg

PLAN LAYOUT
Scale: 1"=10'-0"

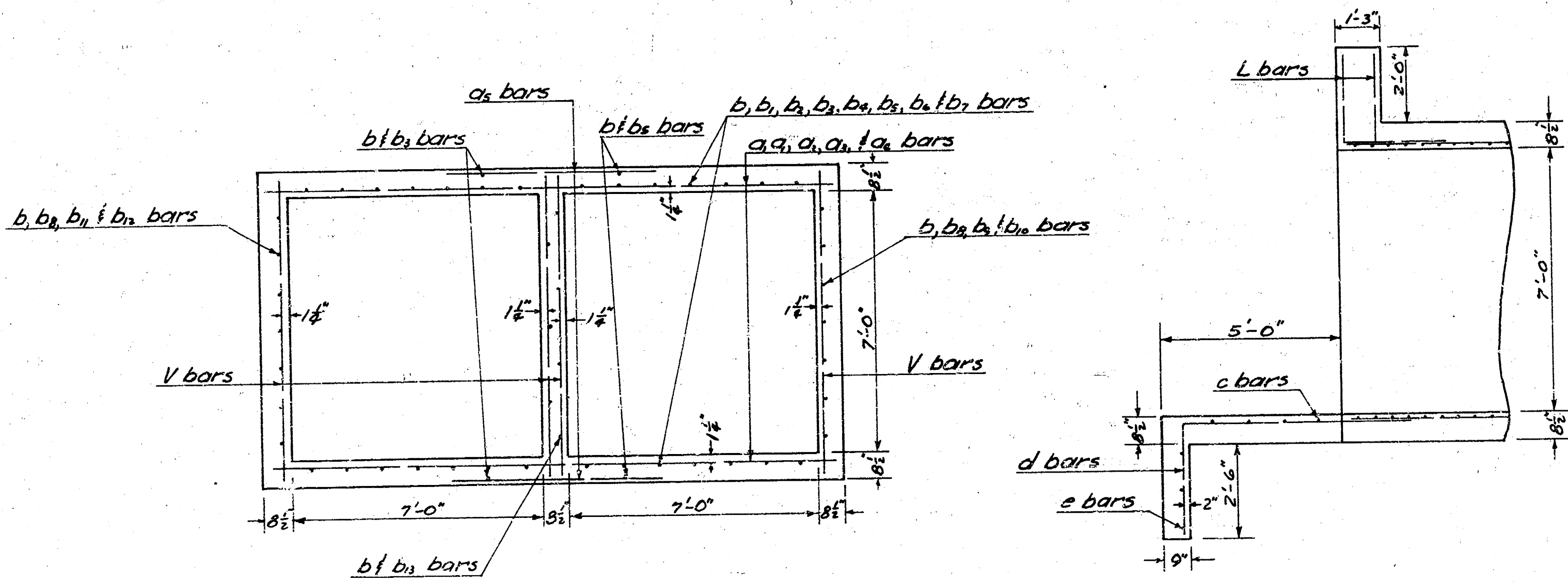




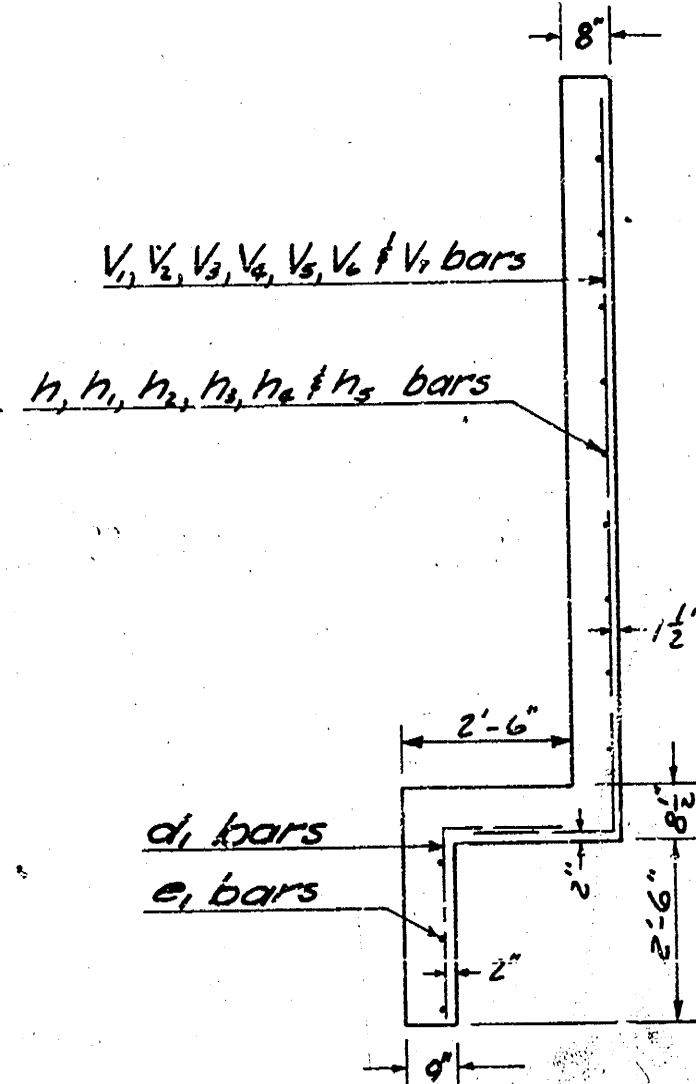
NOTE: Excav to be extended 3' each side of box and 3' behind end of exist box.
Excav 2' below bottom of box & wingwalls and compact back-fill with sand & dirt.
X-Sec. are to be taken after excav is completed, before backfilling and beginning construction.



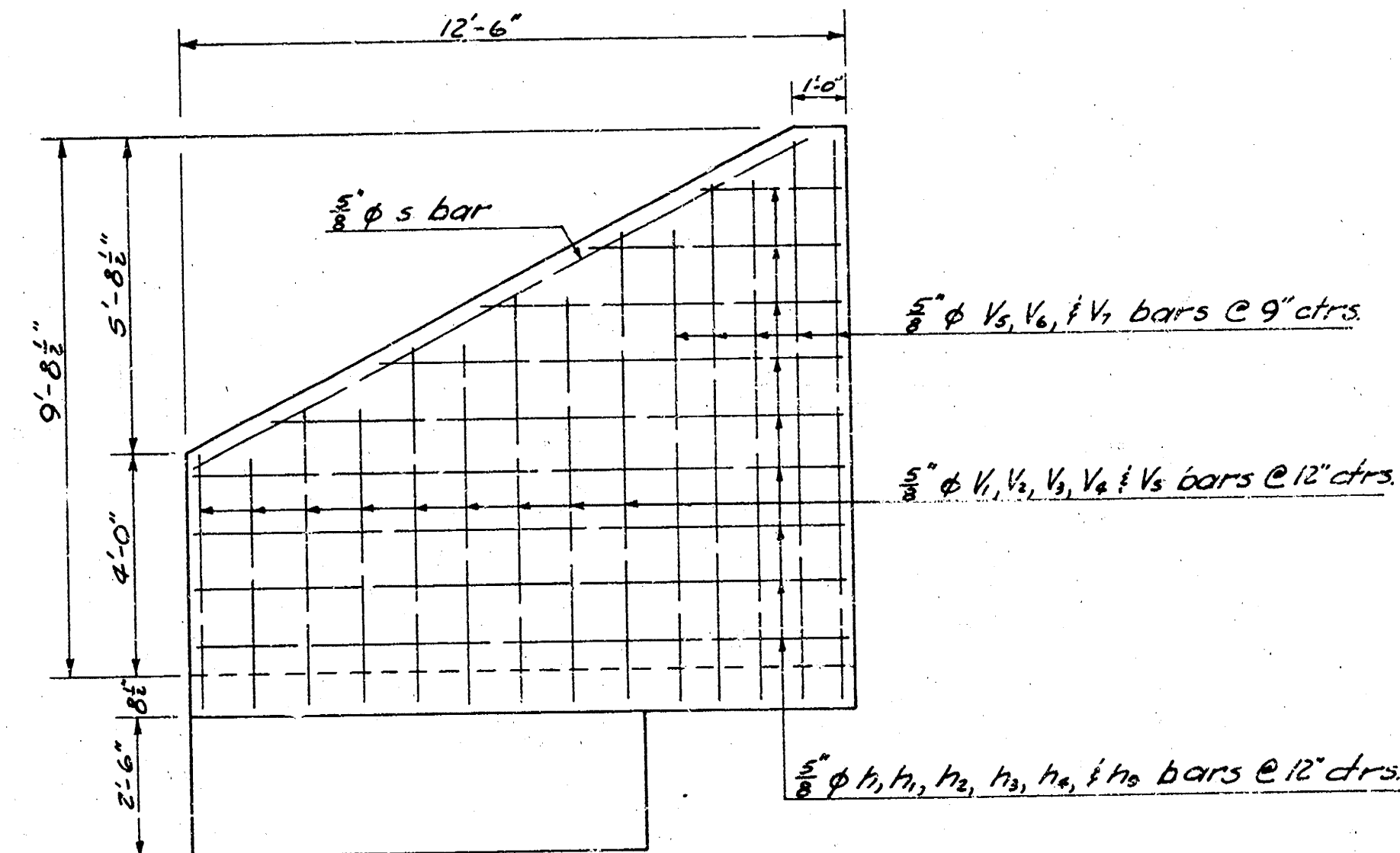
END ELEVATION
Scale: $\frac{3}{8}'' = 1'-0''$



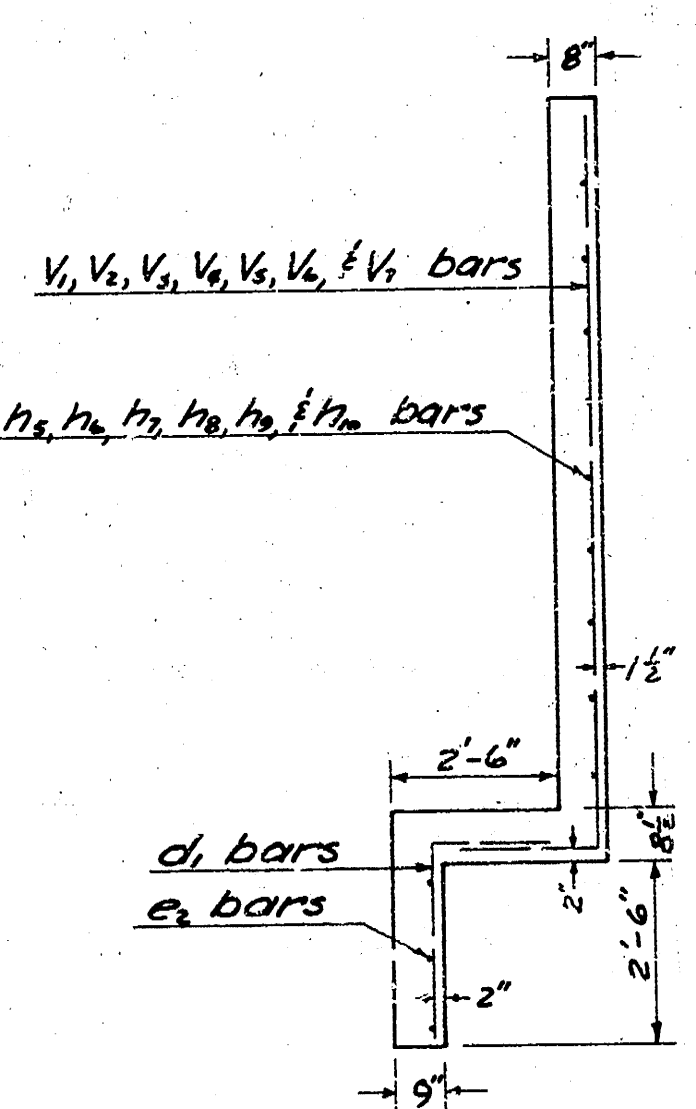
CROSS SECTION OF BOX
Scale: $\frac{3}{8}'' = 1'-0''$



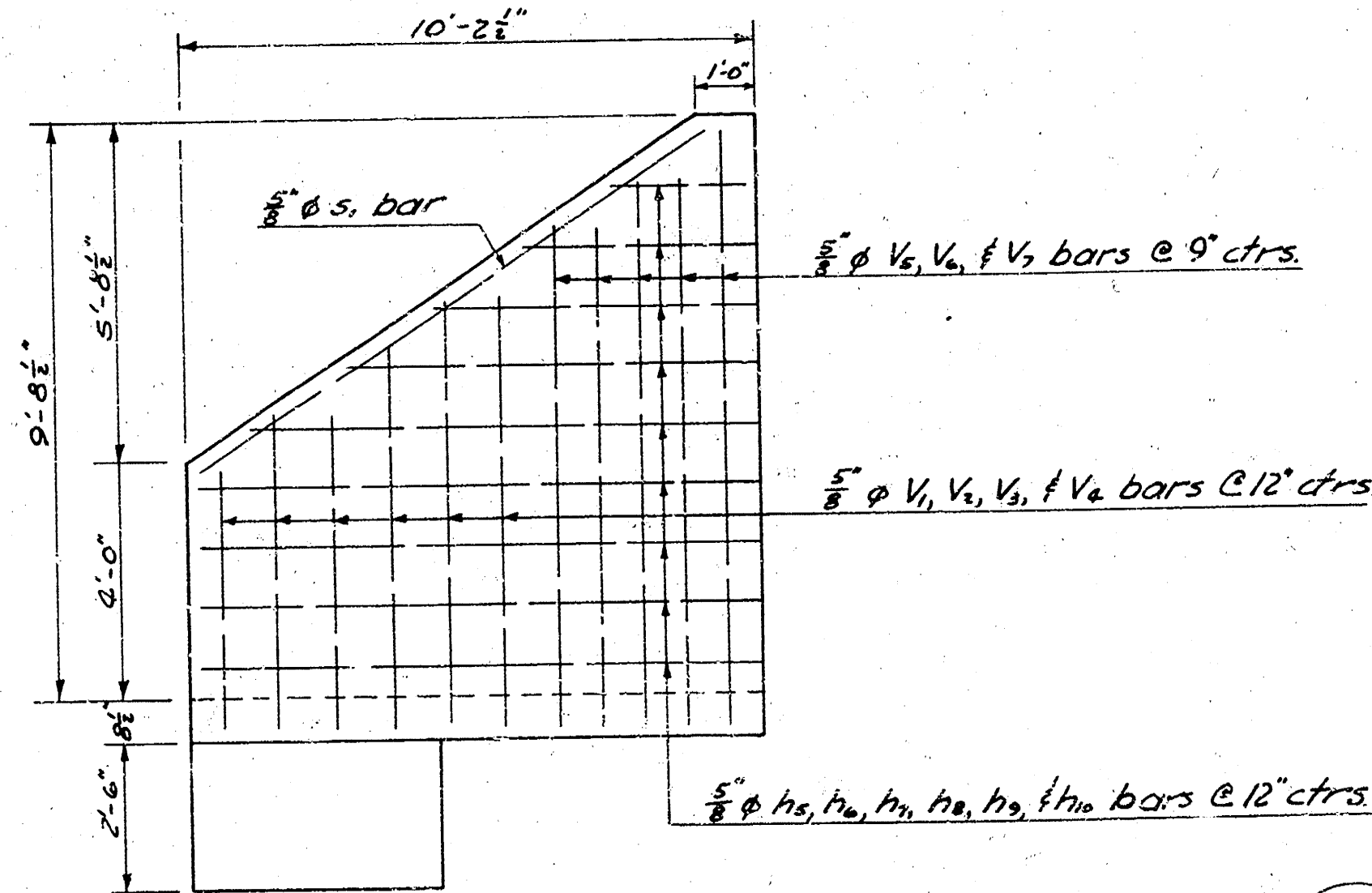
SECTION EAST WINGWALL
Scale: $\frac{3}{8}'' = 1'-0''$



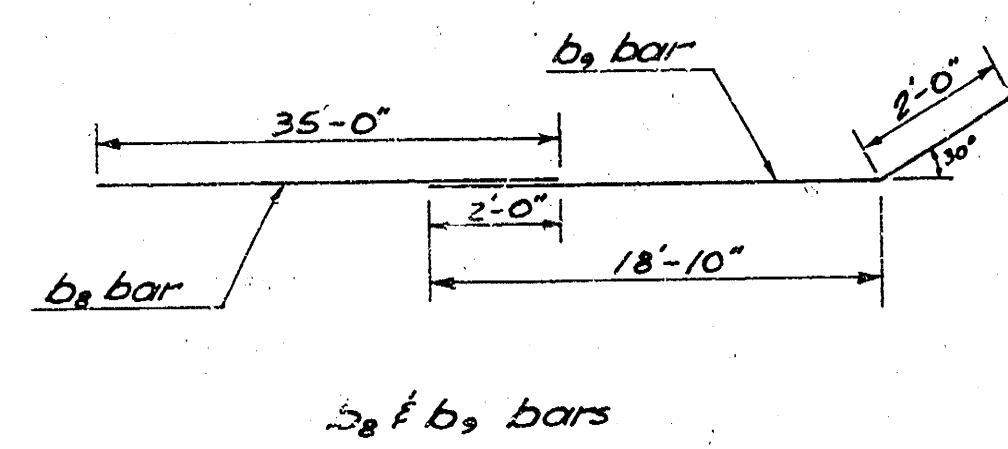
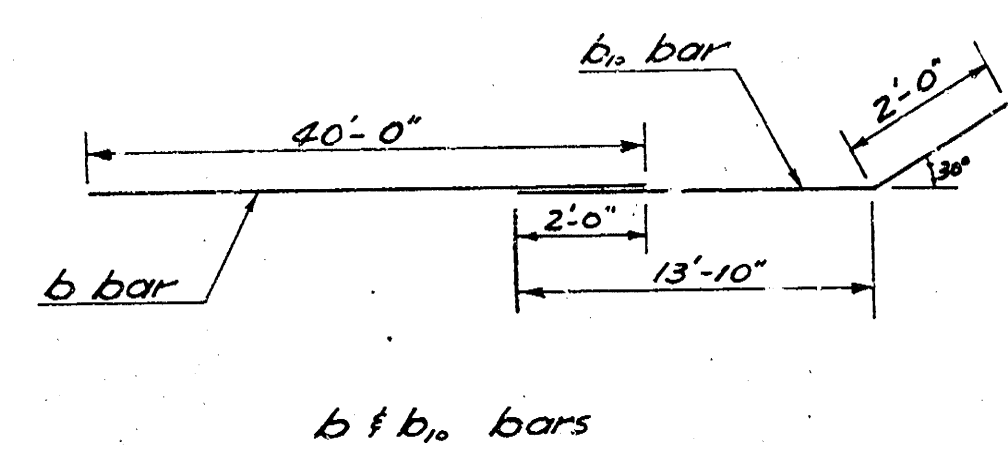
LONGITUDINAL SECTION OF EAST WINGWALL
Scale: $\frac{1}{8}'' = 1'-0''$



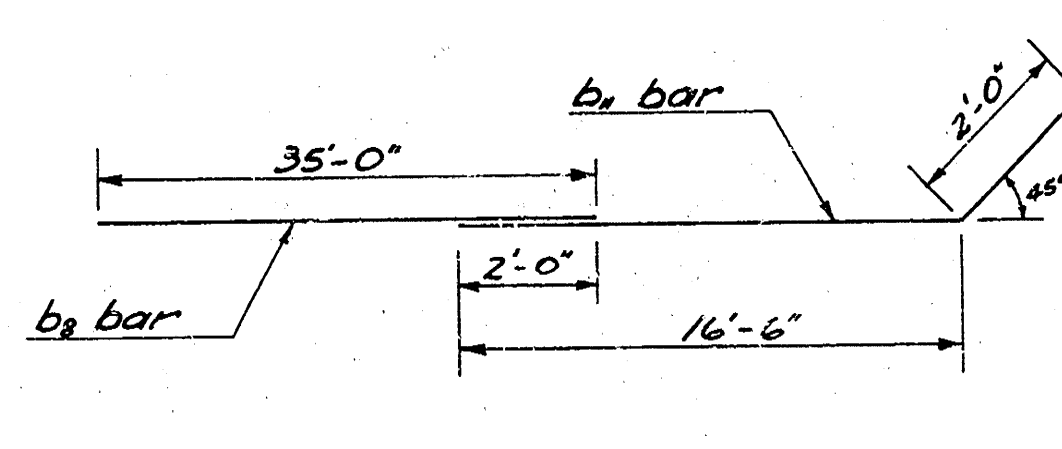
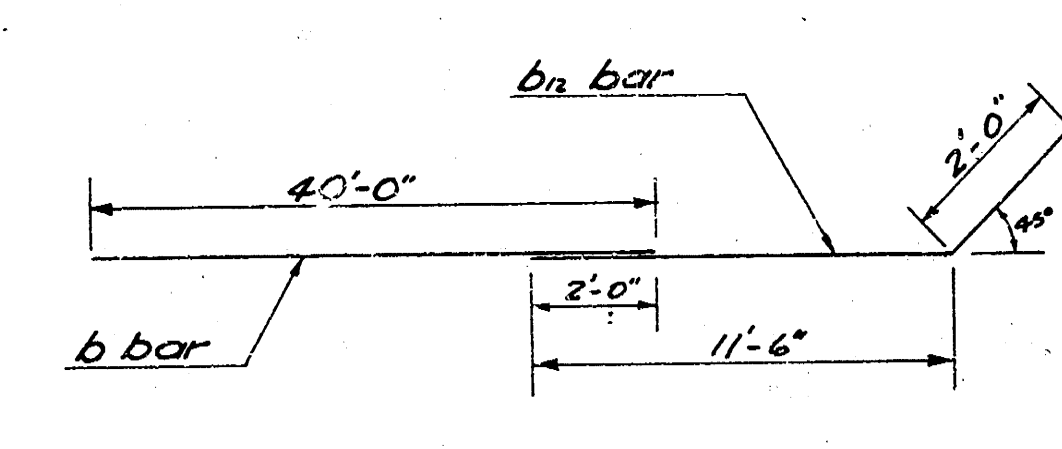
SECTION WEST WINGWALL
Scale: $\frac{3}{8}'' = 1'-0''$



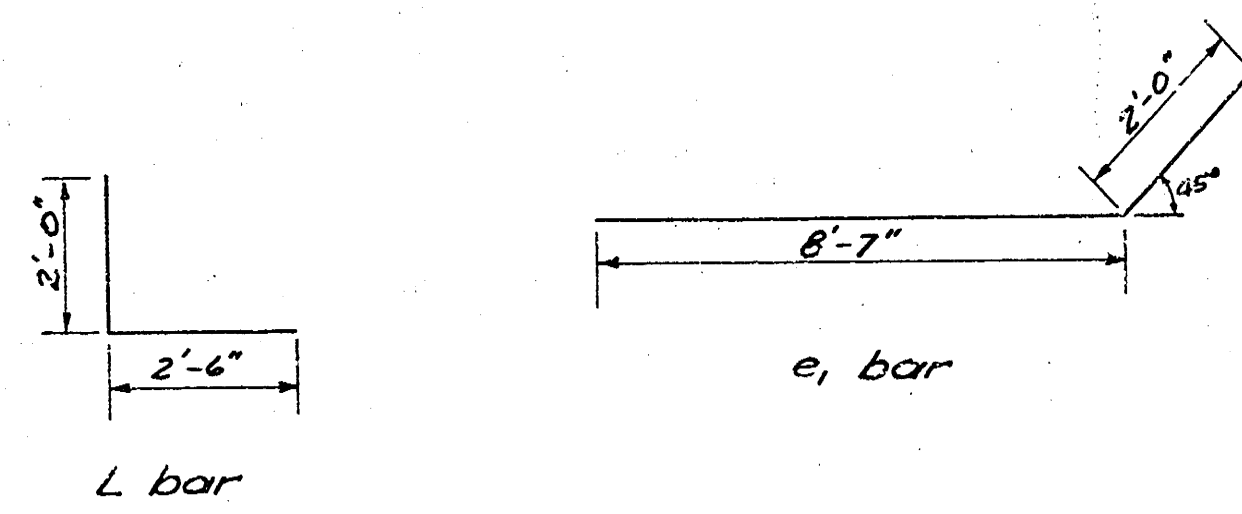
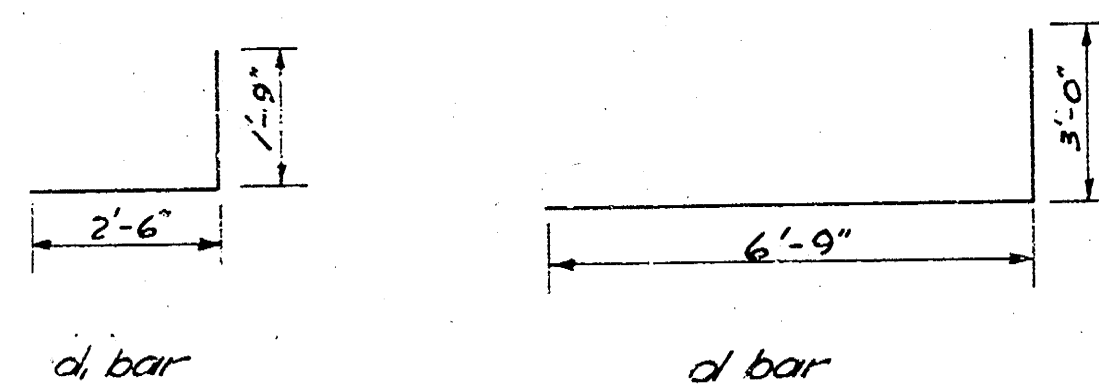
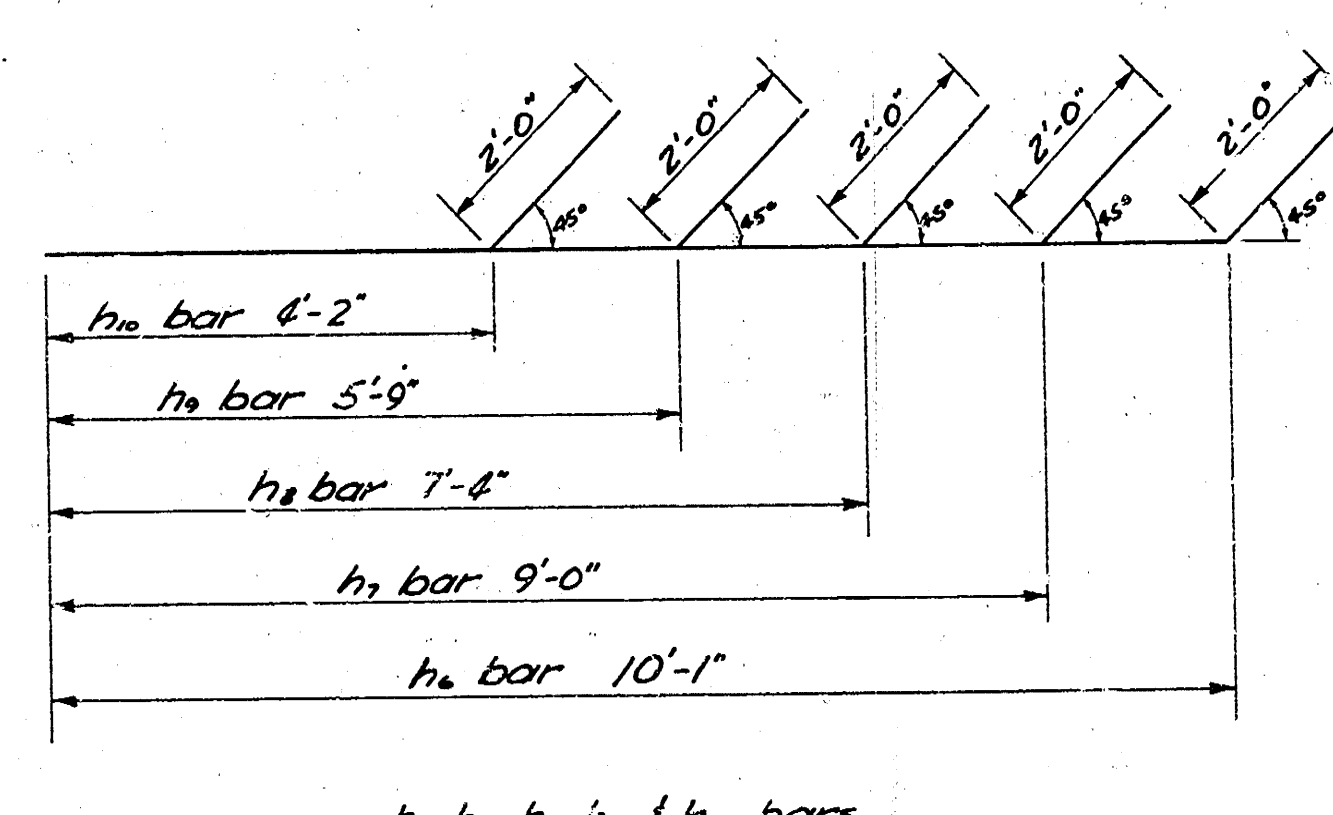
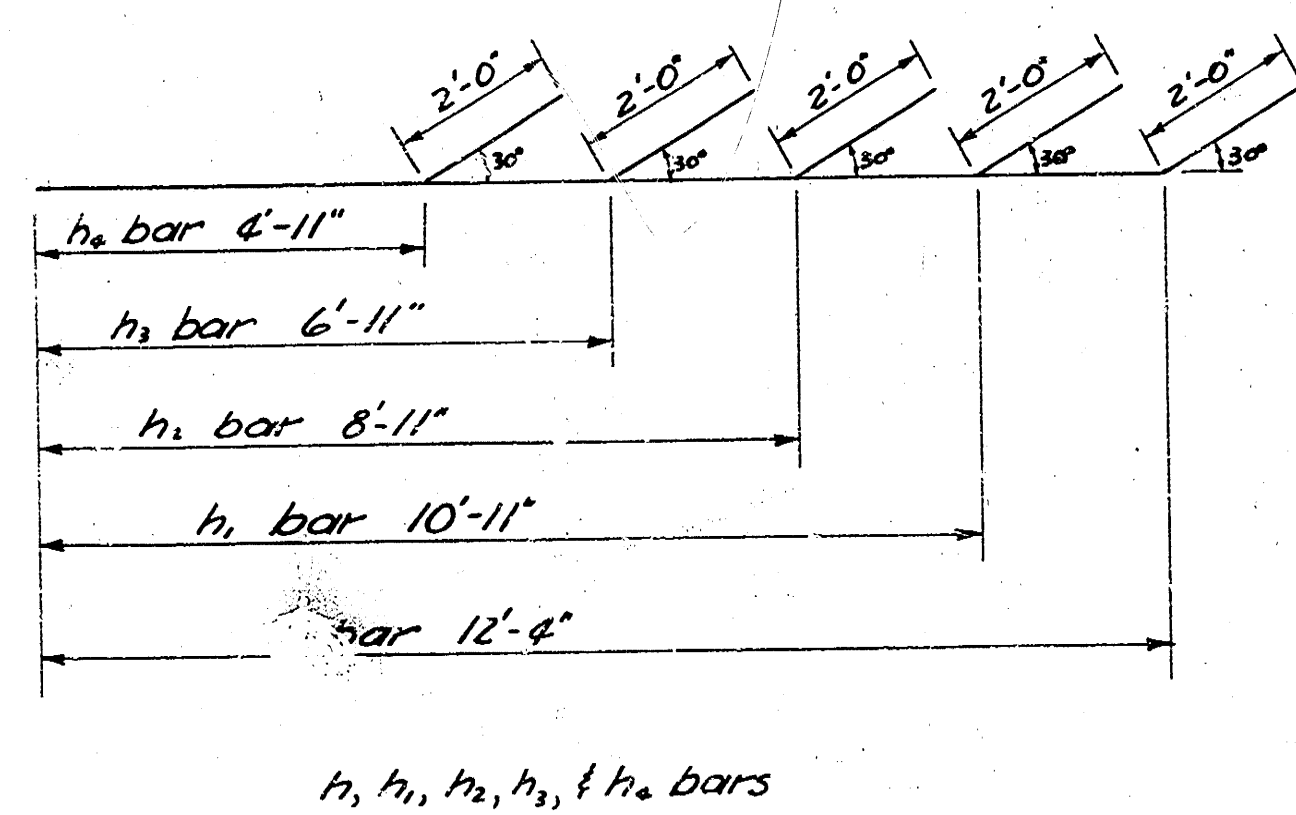
LONGITUDINAL SECTION OF WEST WINGWALL
Scale: $\frac{3}{8}'' = 1'-0''$



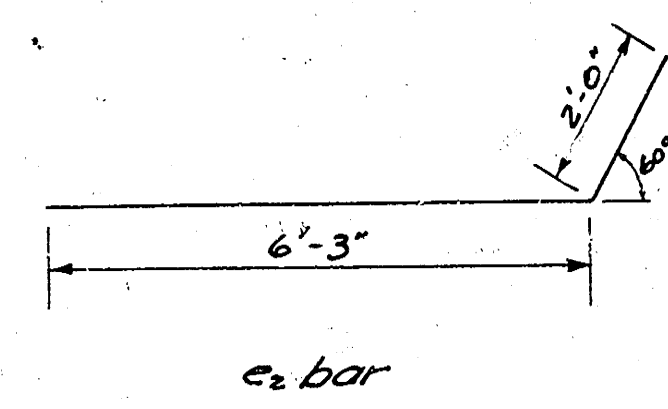
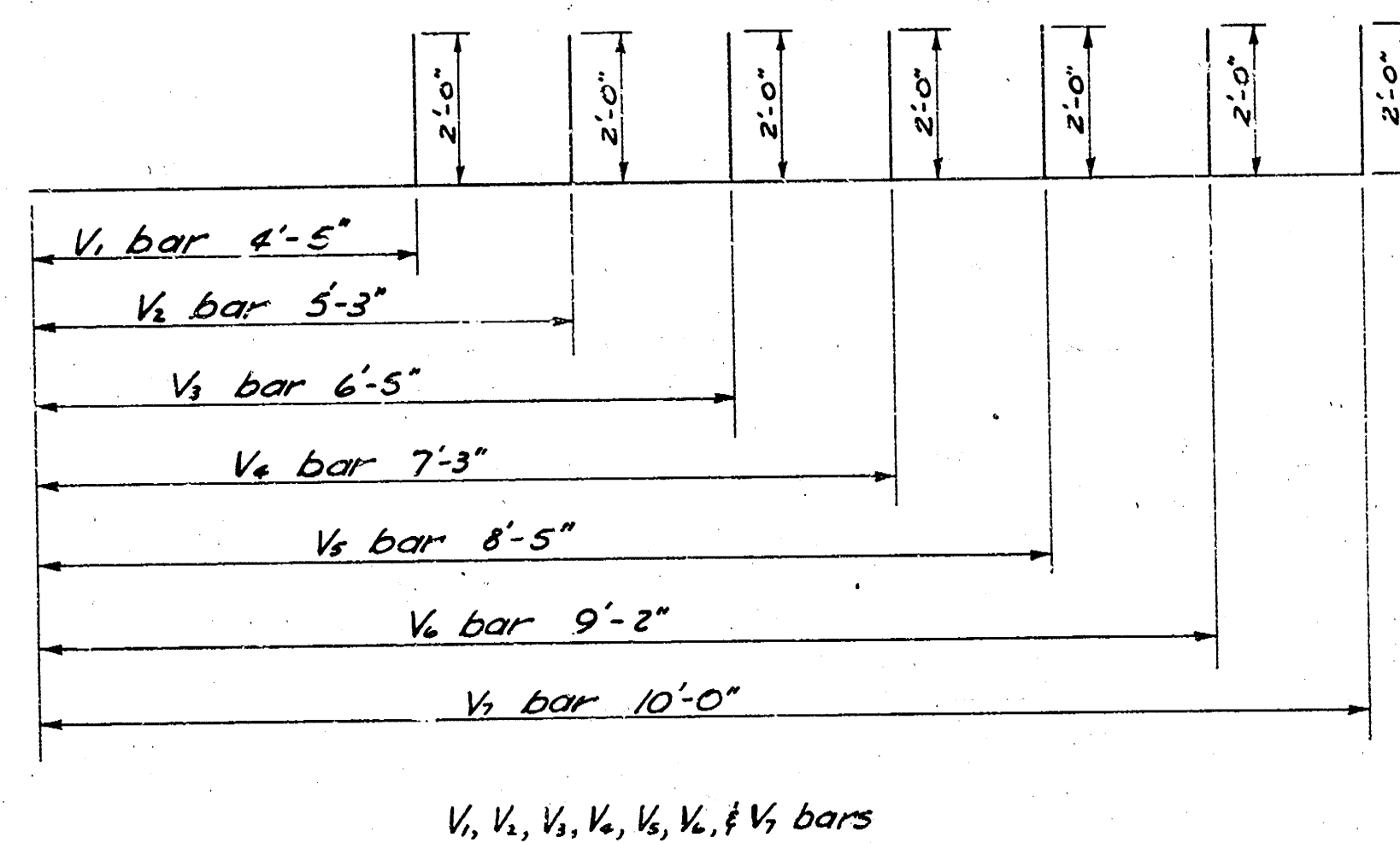
NOTE: Alternate b1 b2 bars with b3 b4 bars in east wall



NOTE: Alternate b1 b2 bars with b3 b4 bars in west wall



BAR BENDING DIAGRAMS.
No Scale



BILL OF MATERIALS		
ITEM	QUANTITY	UNITS
Class A Concrete	83.0	Cu.
General Excavation	160	Cu. Yds.
Compacted Backfill (Sand)	52.3	Tons
Rein. Steel	9,101	Lbs.
Removal Headwall Exist. Box		

STEEL SCHEDULE									
BAR	SIZE	NO.	LENGTH	SHAPE	BAR	SIZE	NO.	LENGTH	SHAPE
a	3/8"	216	16'-4"		h1	3/8"	1	12'-11"	
a1	"	2	15'-4"		h2	"	1	10'-11"	
a2	"	2	9'-4"		h3	"	1	8'-11"	
a3	"	2	5'-4"		h4	"	1	6'-11"	
a4	"	2	2'-4"		h5	"	2	2'-6"	
a5	3/8"	218	5'-9"		h6	"	4	12'-1"	
b	3/8"	45	40'-0"		h7	"	1	11'-0"	
b1	"	4	11'-7"		h8	"	1	9'-4"	
b2	"	4	11'-10"		h9	"	1	7'-0"	
b3	"	6	12'-1"		h10	"	1	6'-2"	
b4	"	4	12'-5"		L	3/8"	14	4'-5"	
b5	"	6	12'-9"		S	3/8"	1	13'-0"	
b6	"	4	13'-0"		S1	"	1	10'-9"	
b7	"	4	13'-3"		V	"	153	8'-2"	
b8	"	8	35'-0"		V1	"	3	6'-5"	
b9	"	4	20'-10"		V2	"	4	7'-3"	
b10	"	3	15'-10"		V3	"	3	8'-5"	
b11	"	4	18'-6"		V4	"	4	9'-3"	
b12	"	3	13'-6"		V5	"	4	10'-5"	
b13	3/8"	7	12'-5"		V6	"	4	11'-2"	
c	3/8"	4	16'-8"		V7	3/8"	3	12'-0"	
d	"	14	9'-9"		O	3/8"	1	3'-0"	
d1	"	15	4'-3"		P	3/8"	1	8'-2"	
e	"	3	16'-8"						
e1	"	3	10'-7"						
e2	3/8"	3	8'-3"						
h	3/8"	4	18'-8"						