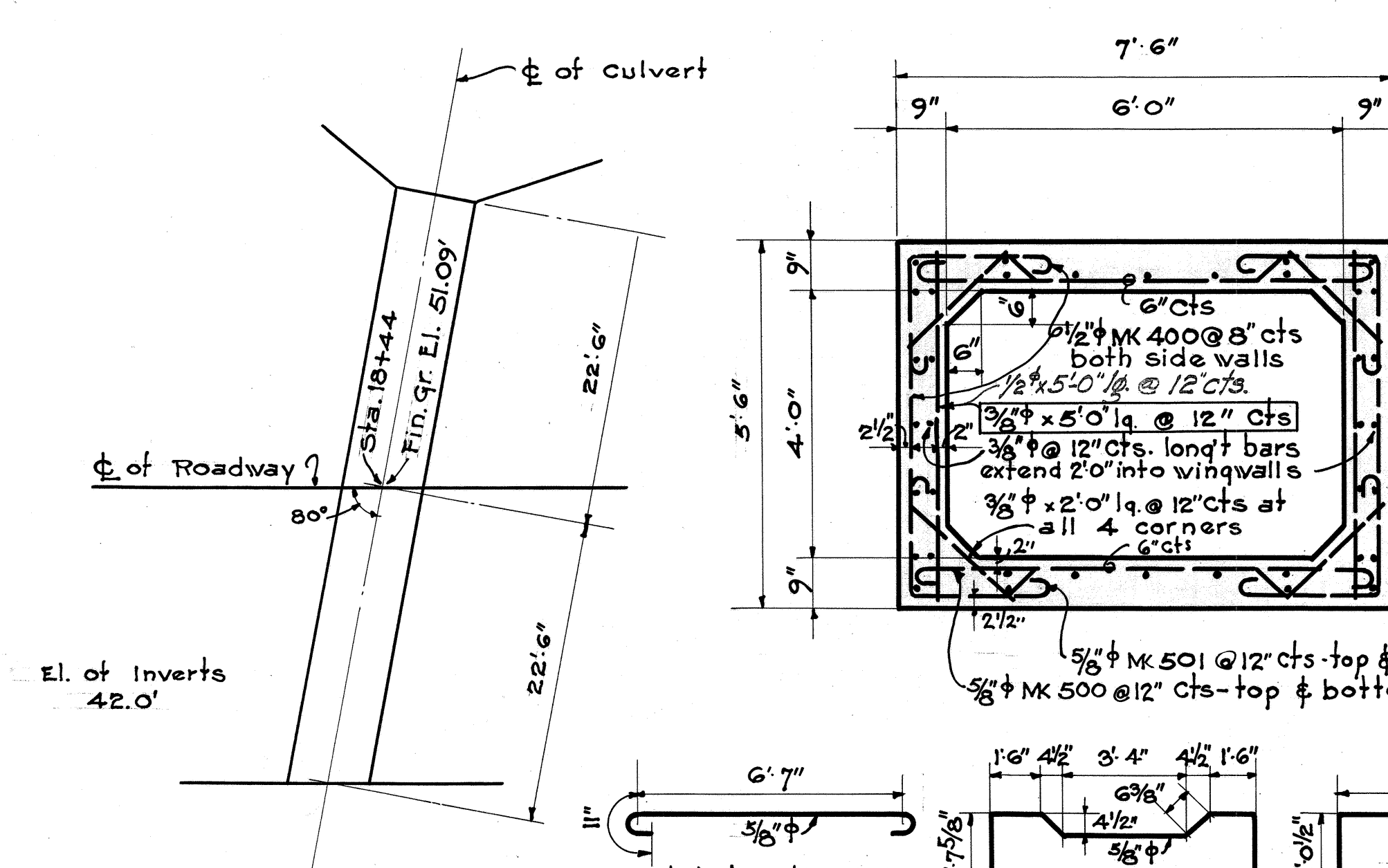


PROJ. ROAD DIST. NO.	STATE	PROJ. AND DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	N.R.H. 13-C	1934	8	17

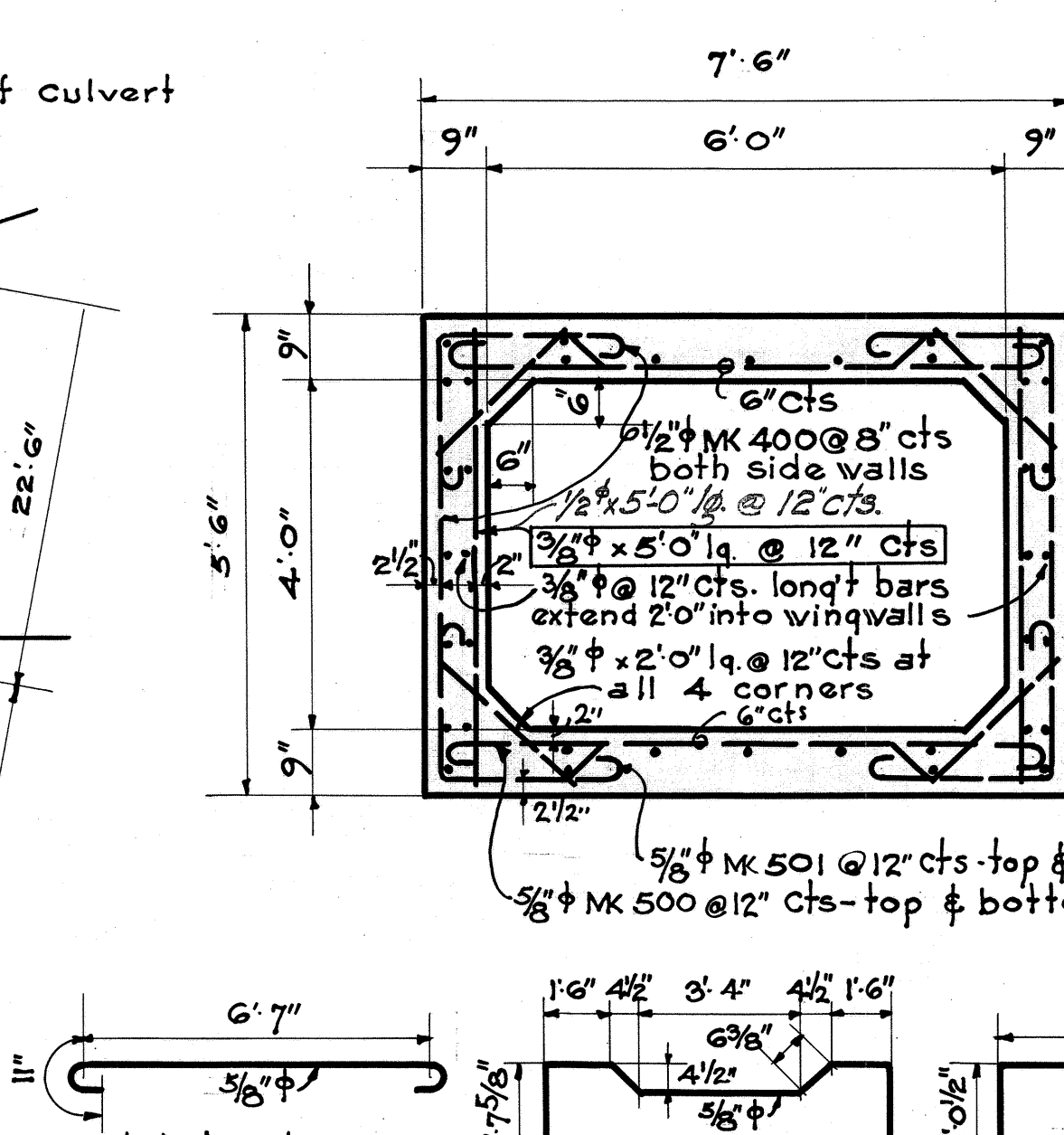


DIAGRAMMATICAL LAYOUT PLAN
Scale 1" = 10'

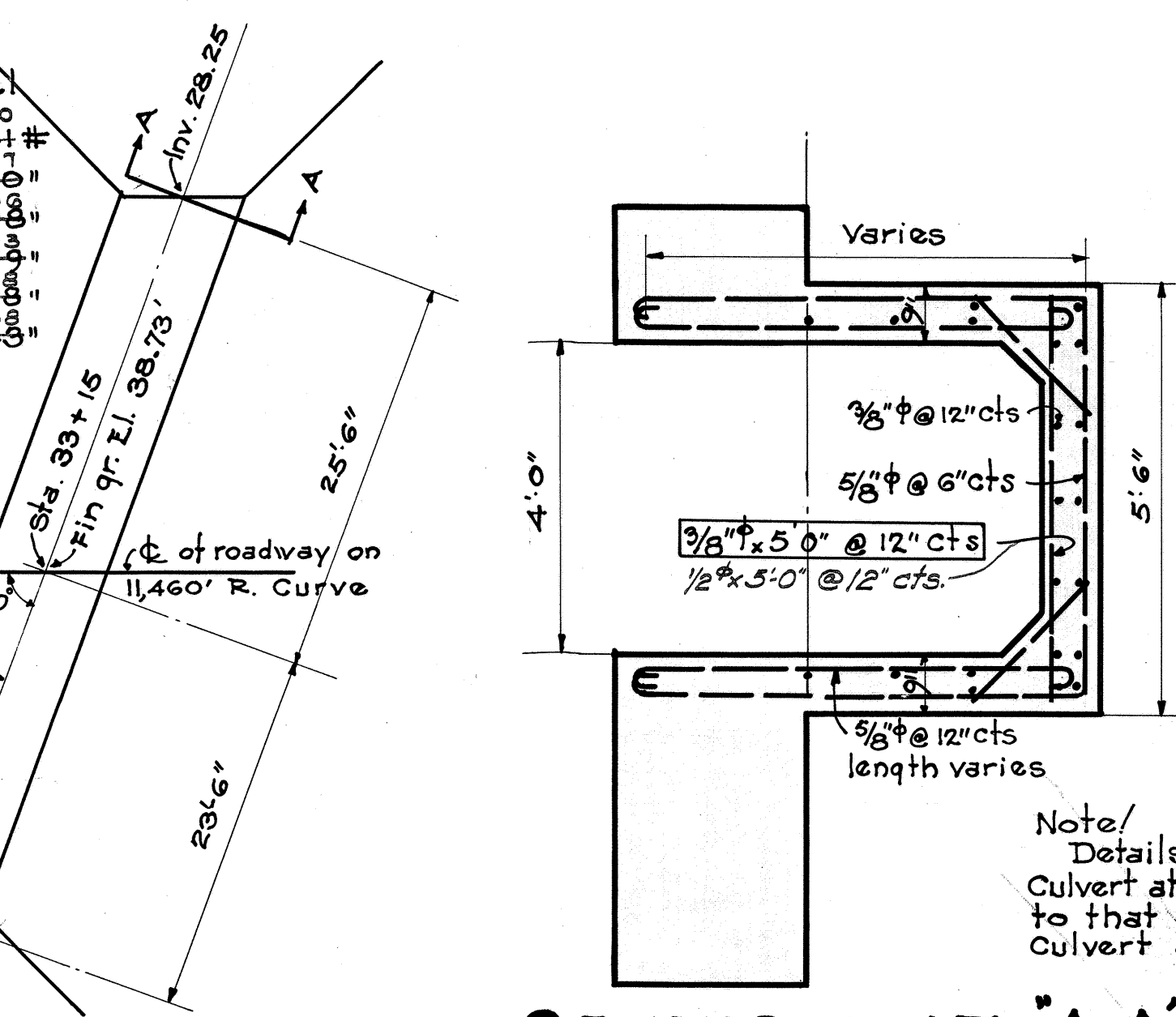
QUANTITIES

Location	Str. Exc.	Conc.	Steel
Sta. 0+33	20	C.Y.	25
Sta. 9+06	25	"	22
Sta. 18+44	1	"	40
Sta. 27+75	60	"	46
Sta. 33+15	55	"	40
Sta. 37+00	19	"	29

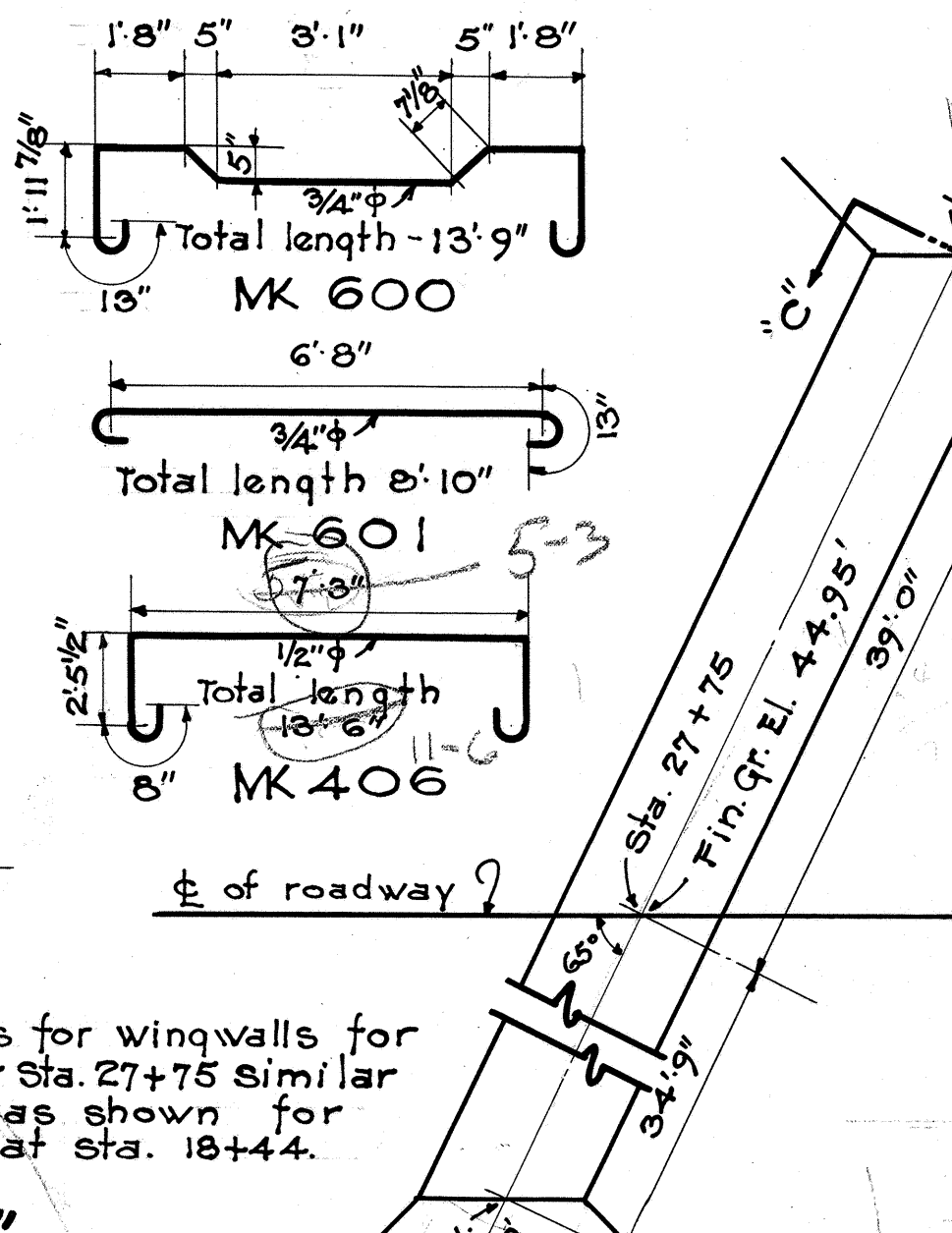
Note: Cross section of trunk for culvert at Sta. 33+15 is similar to that as shown for culvert at Sta. 18+44. This note also applies to the wingwalls & headwalls.



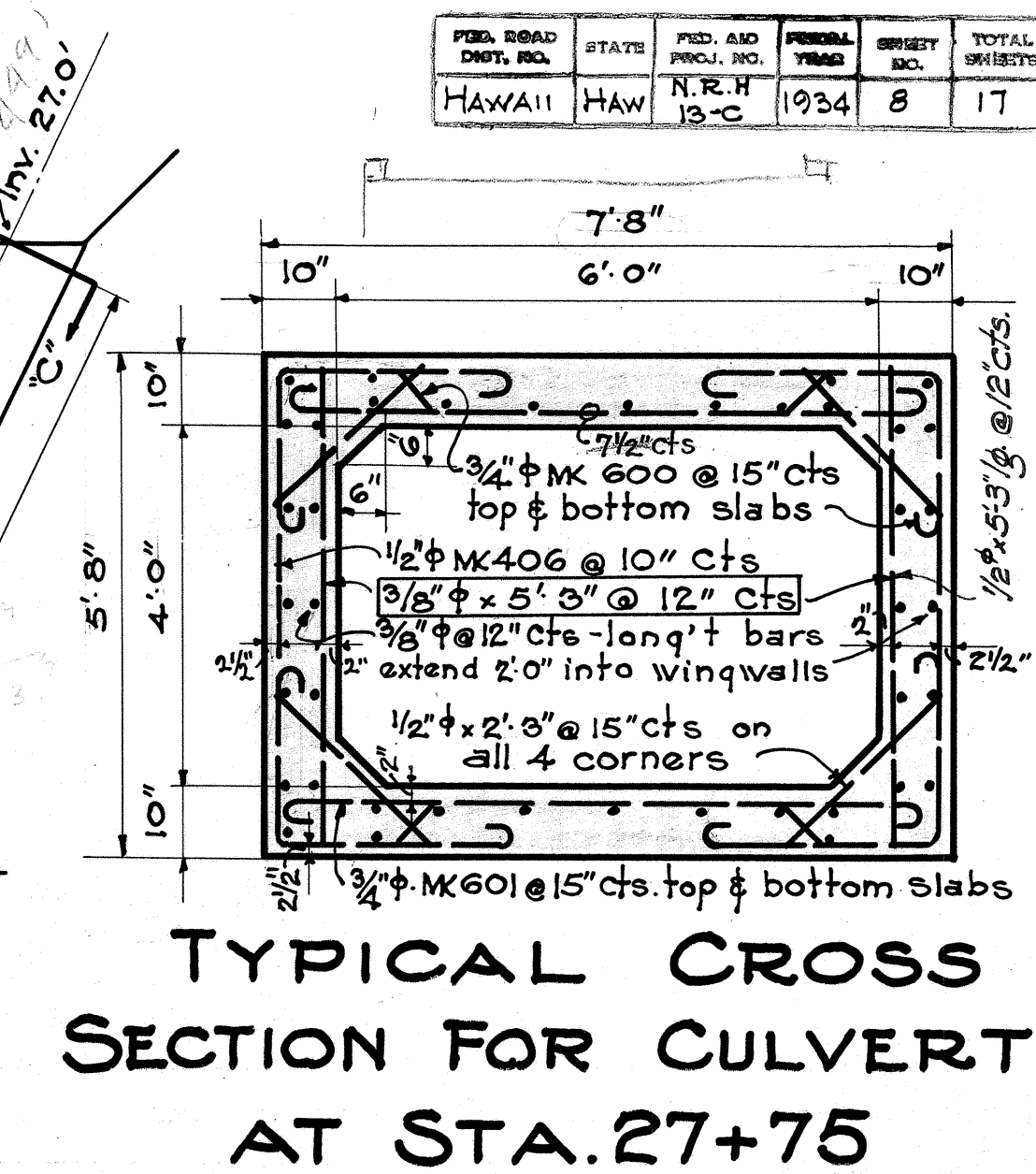
TYPICAL CROSS SECTION FOR CULVERTS AT STA. 18+44 & 33+15
Scale 1/2" = 1'0"



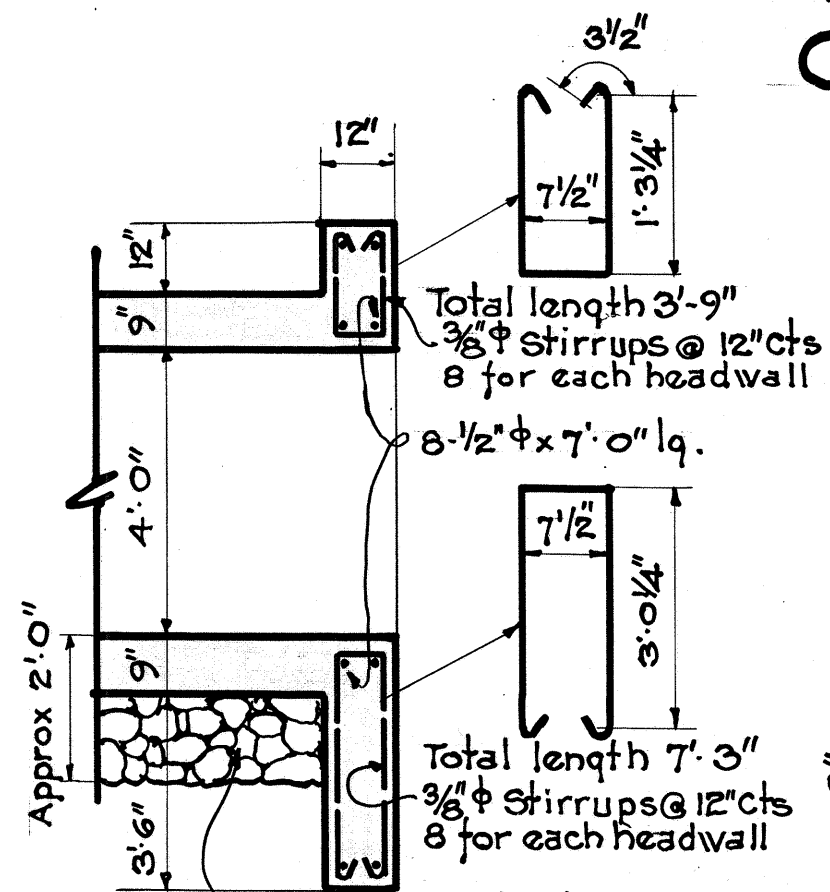
DIAGRAMMATICAL LAYOUT PLAN
Scale 1" = 10'



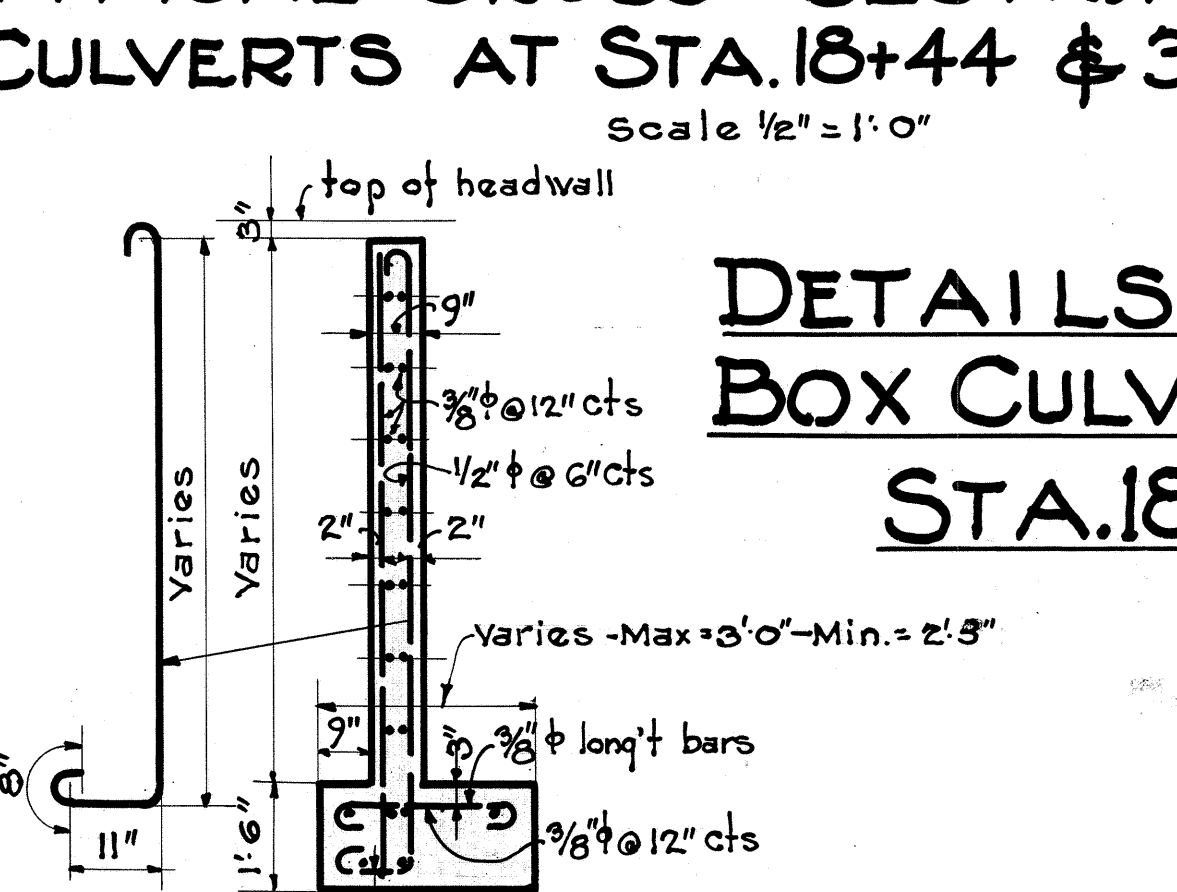
SECTION AT "A-A" BOTH ENDS SIMILAR
Scale 1/2" = 1'0"



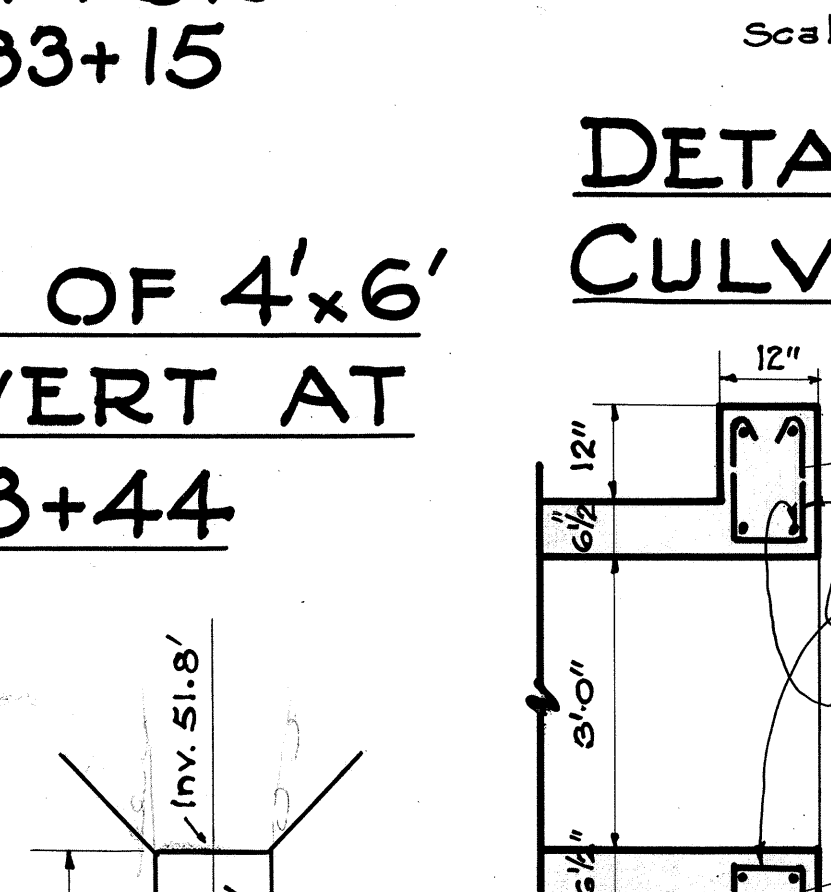
TYPICAL CROSS SECTION FOR CULVERT AT STA. 27+75
Scale 1/2" = 1'0"



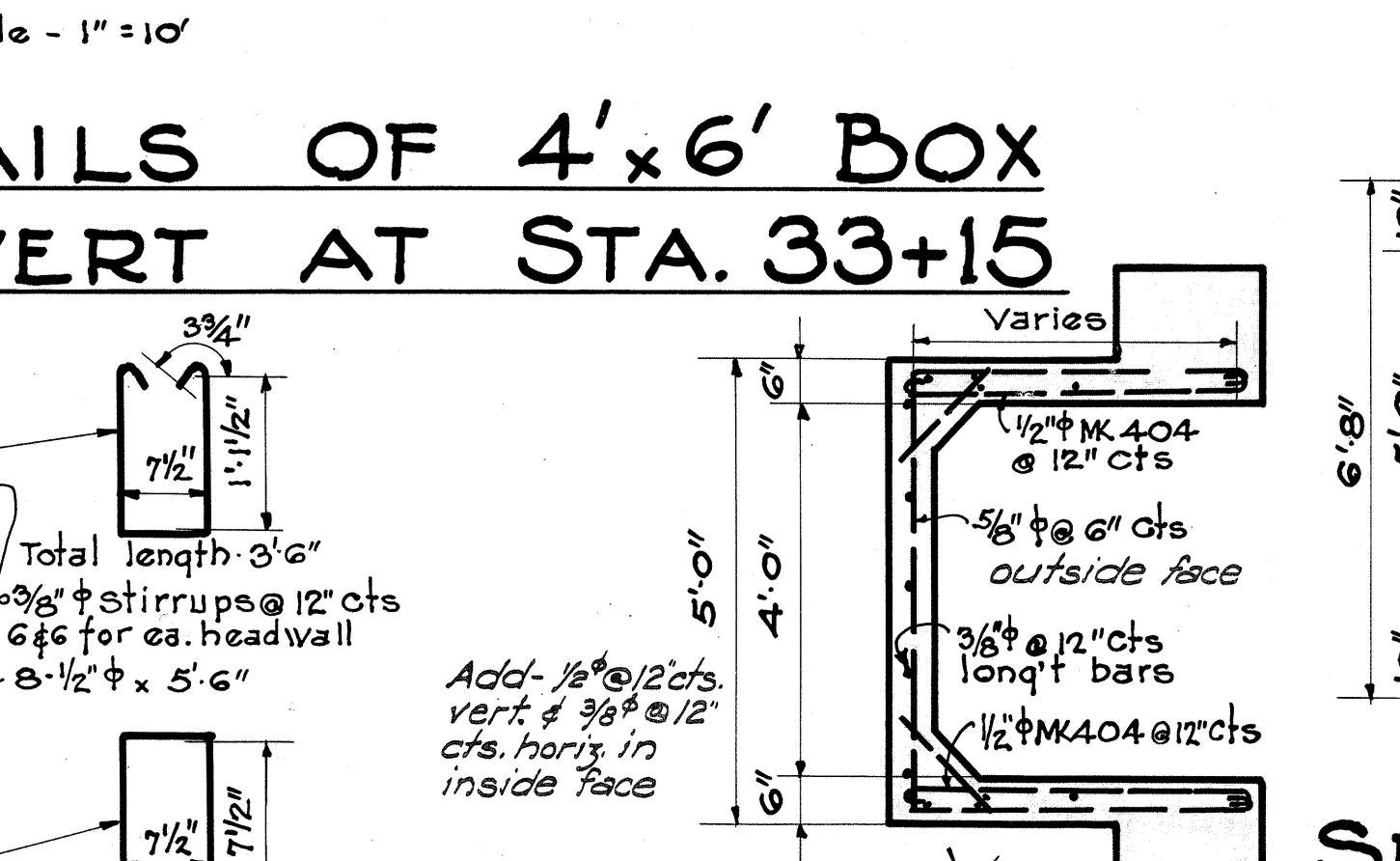
TYPICAL HEAD SECT. AT STA. 18+44
Scale 3/8" = 1'0"



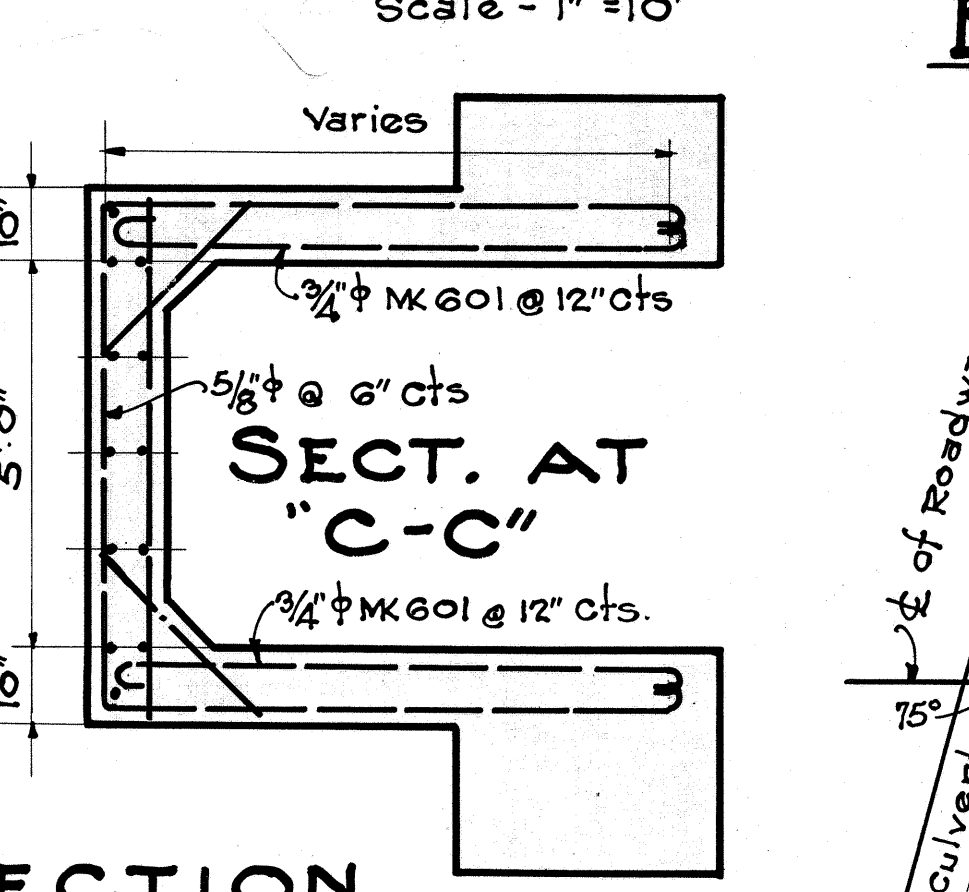
TYPICAL WINGWALL SECTION CULVERT AT STA. 18+44
Scale 3/8" = 1'0"



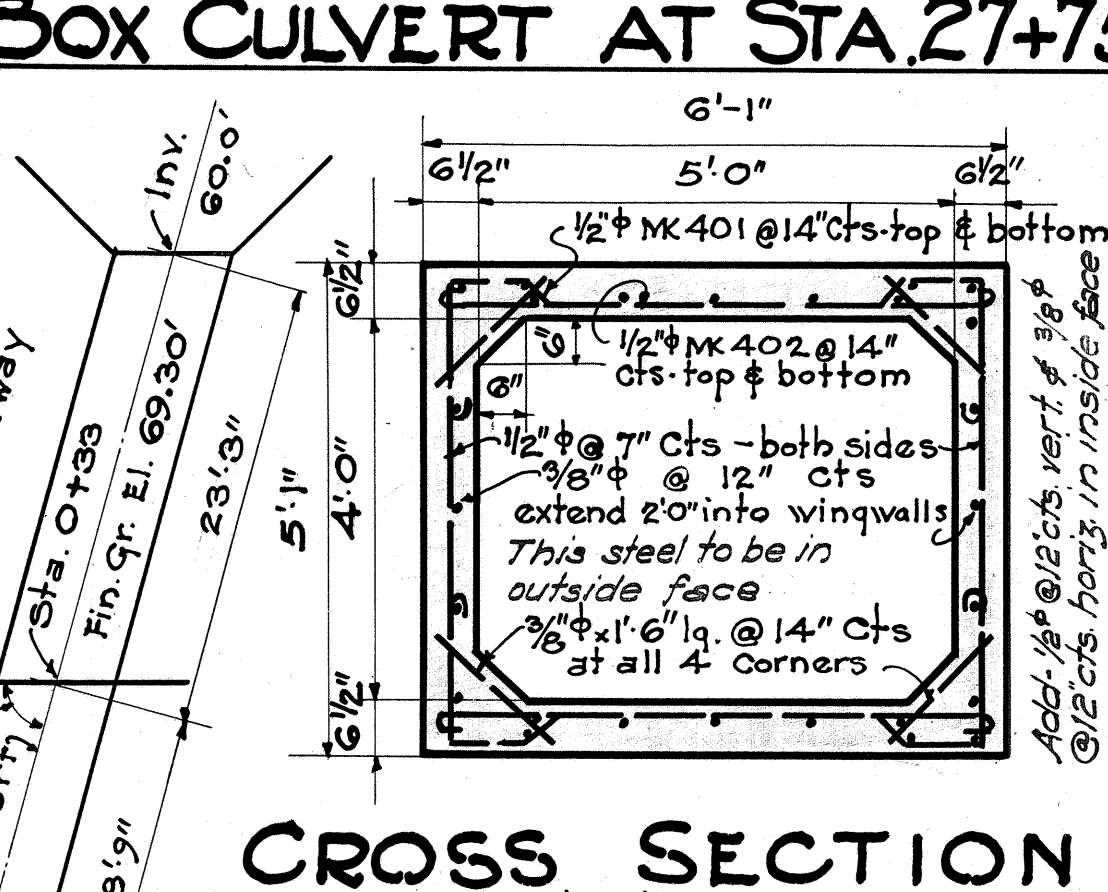
TYPICAL HEAD SECT. AT STA. 9+06
Scale 1/2" = 1'0"



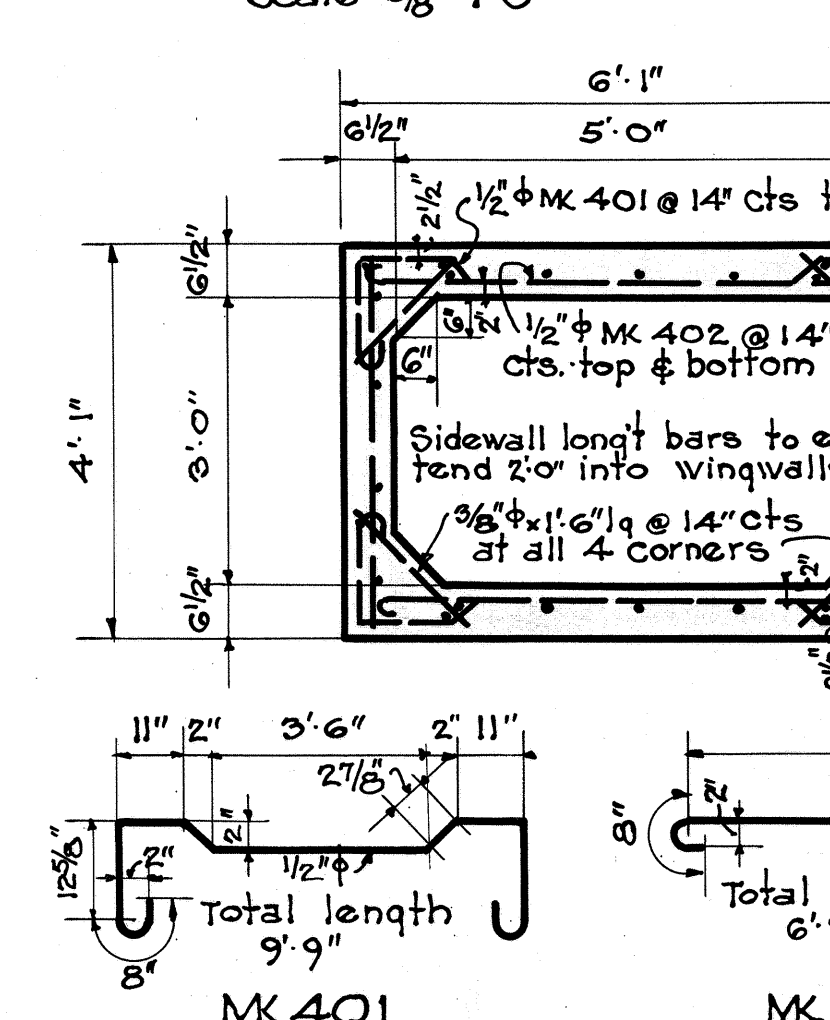
DETAILS OF 4'x6' BOX CULVERT AT STA. 18+44
Scale 1/2" = 1'0"



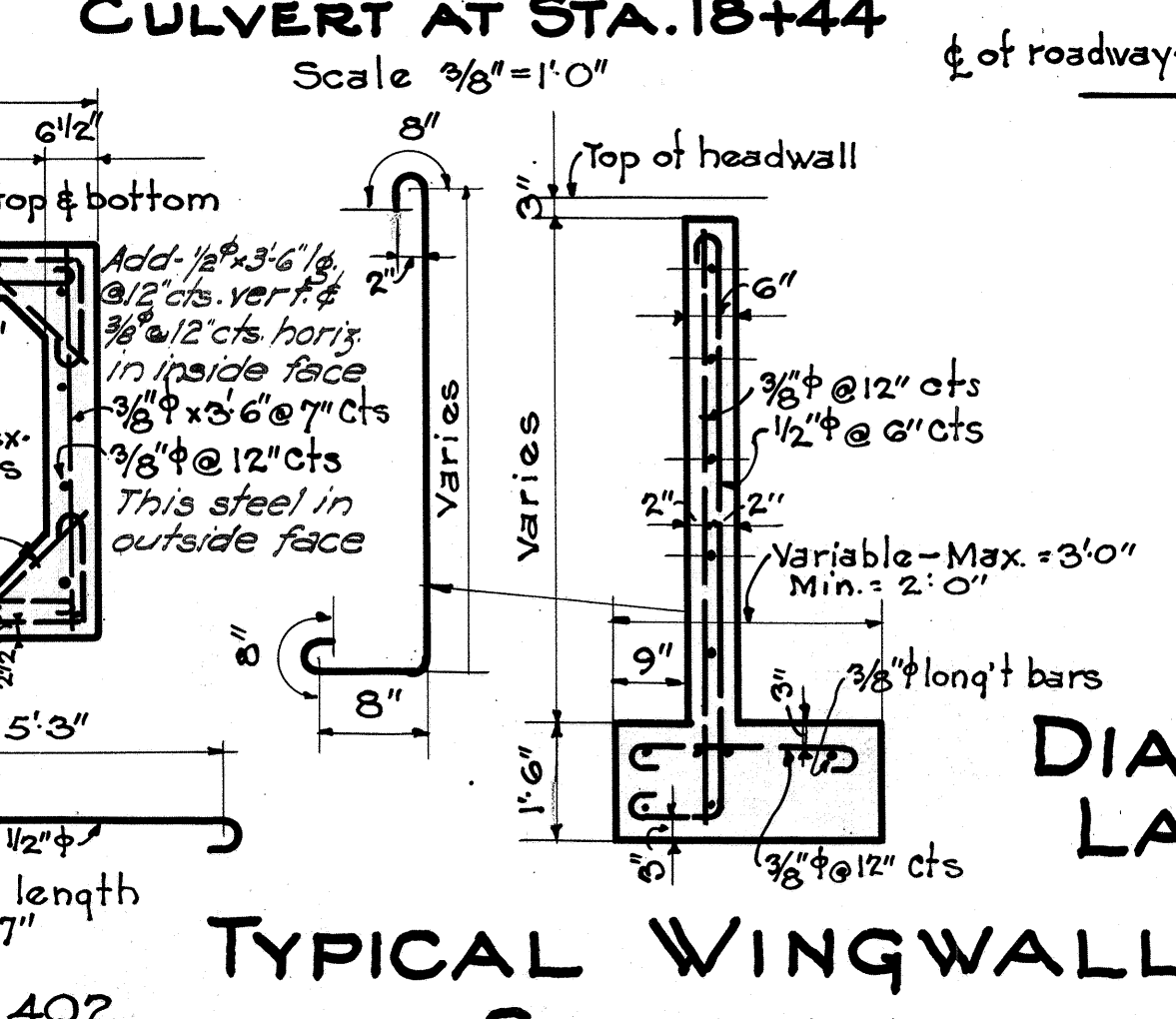
SECTION AT "C-C"
Scale 1/2" = 1'0"



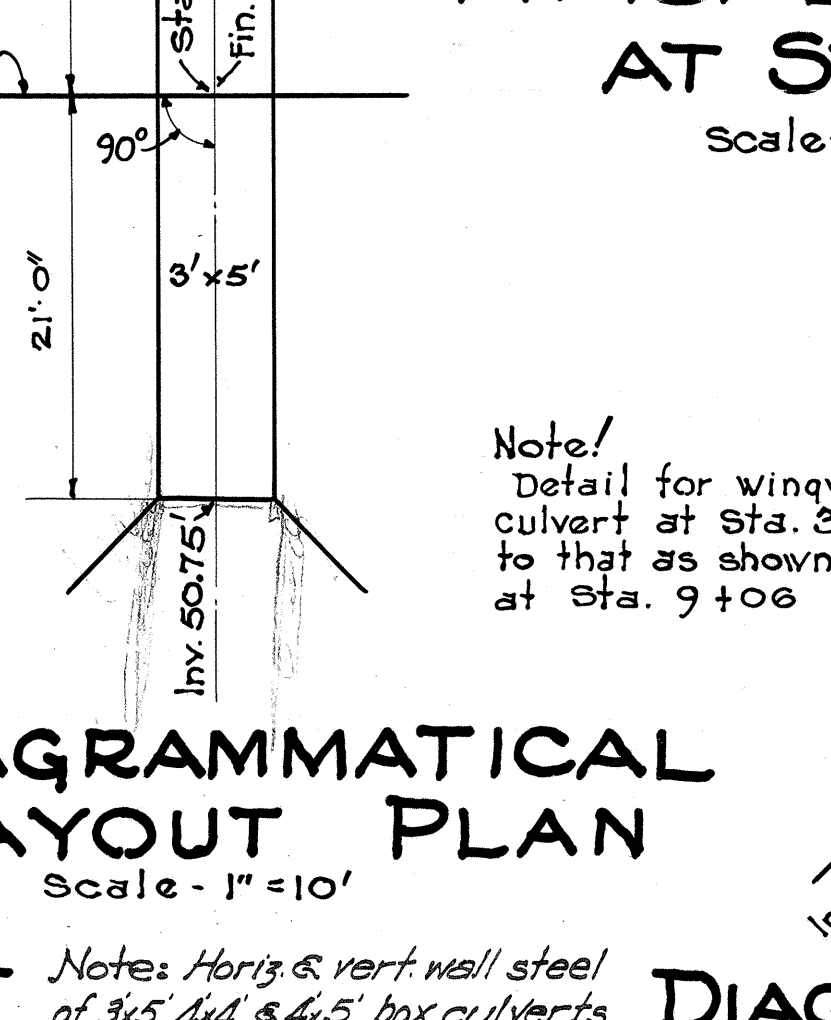
CROSS SECTION CULVERT AT STA. 0+33
Scale 1/2" = 1'0"



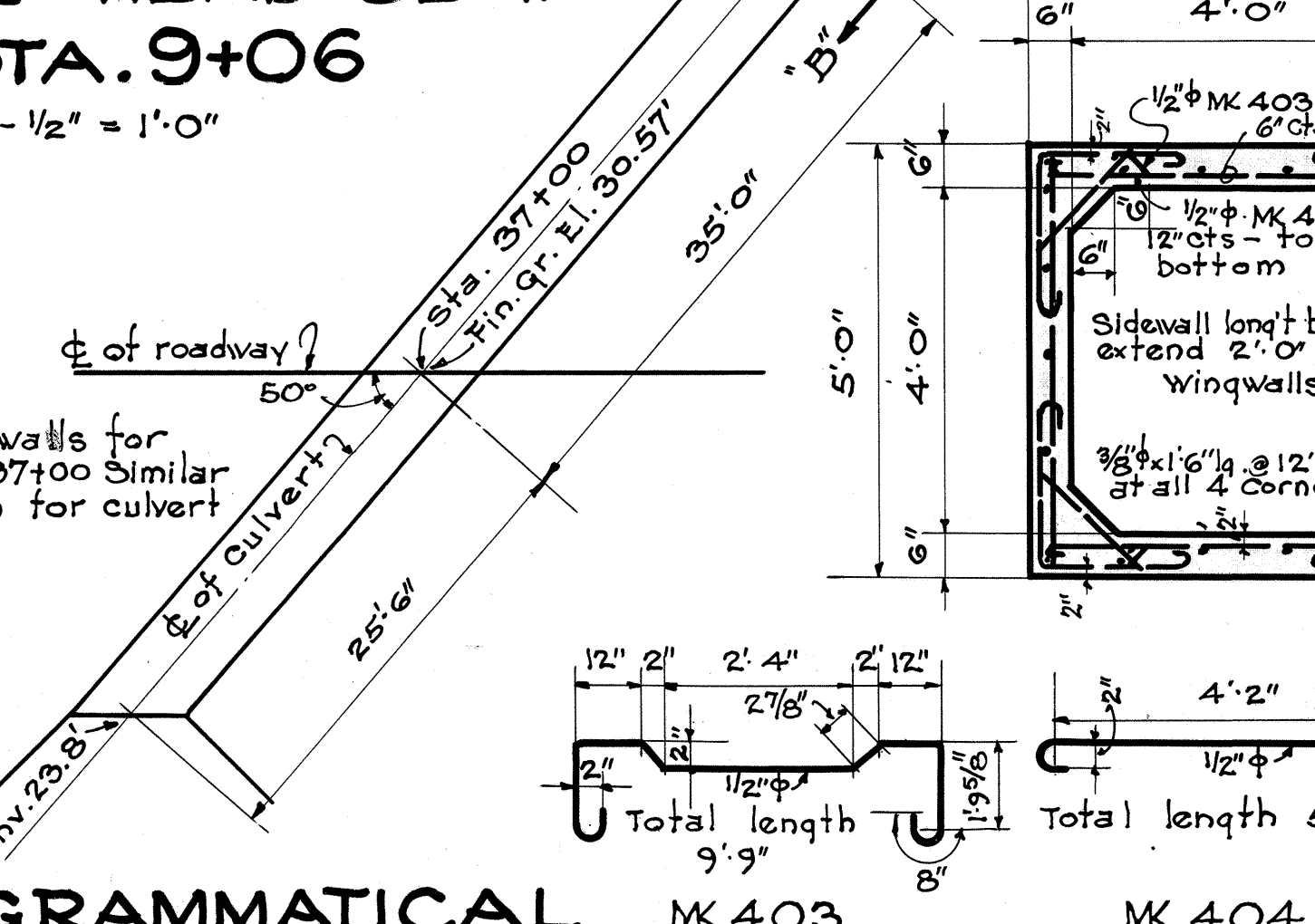
CROSS SECTION FOR CULVERT AT STA. 9+06
Scale 1/2" = 1'0"



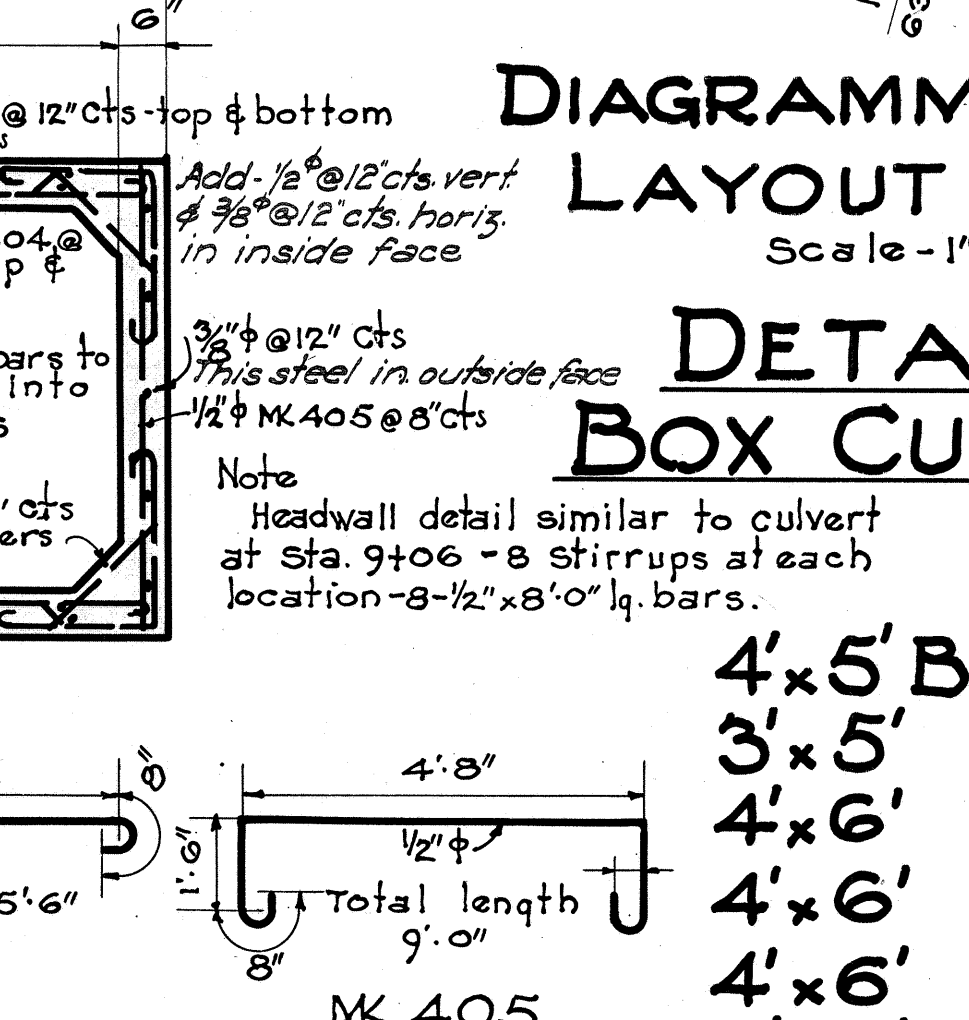
TYPICAL WINGWALL SECTION CULVERT AT STA. 9+06
Scale 1/2" = 1'0"



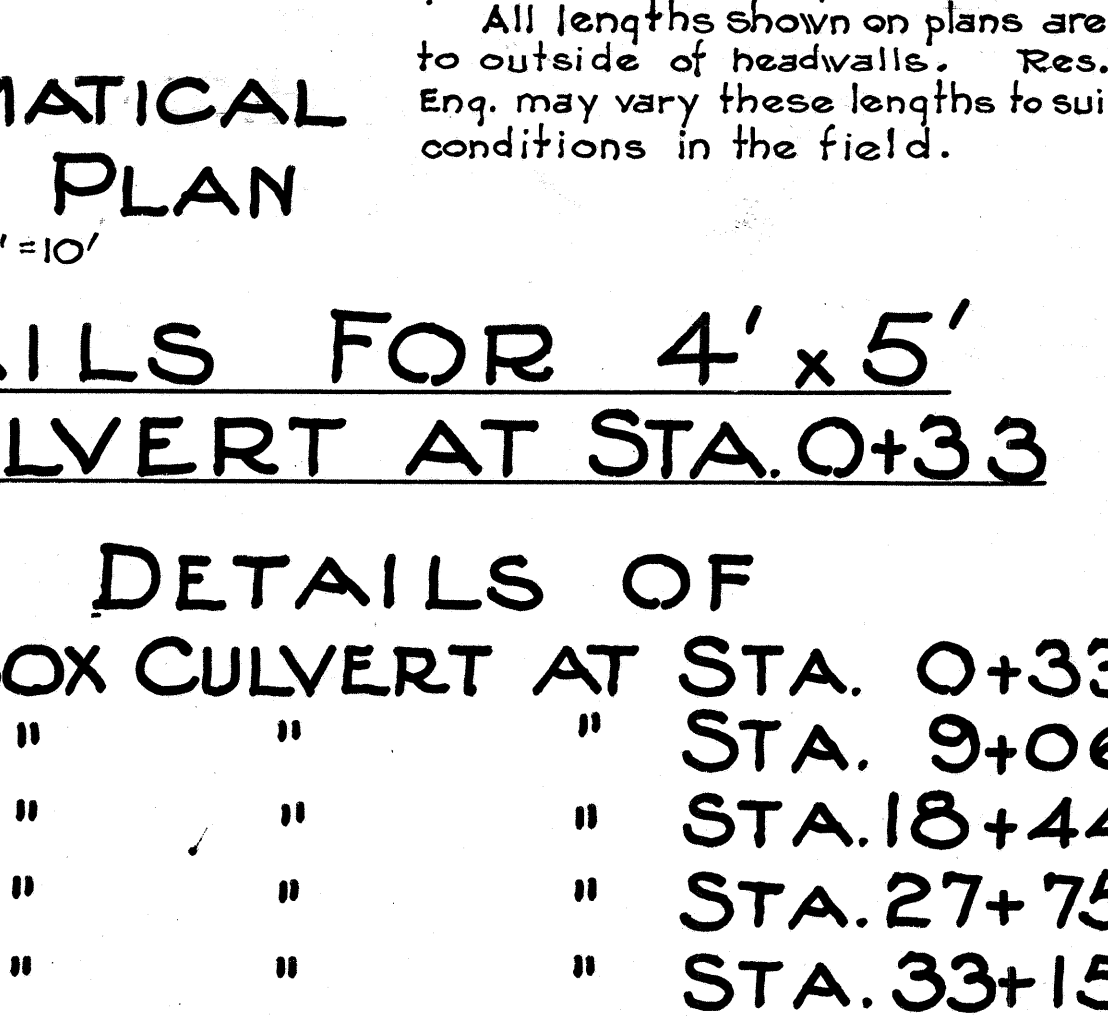
DIAGRAMMATICAL LAYOUT PLAN
Scale 1" = 10'



CROSS SECTION FOR CULVERT AT STA. 37+00
Scale 1/2" = 1'0"



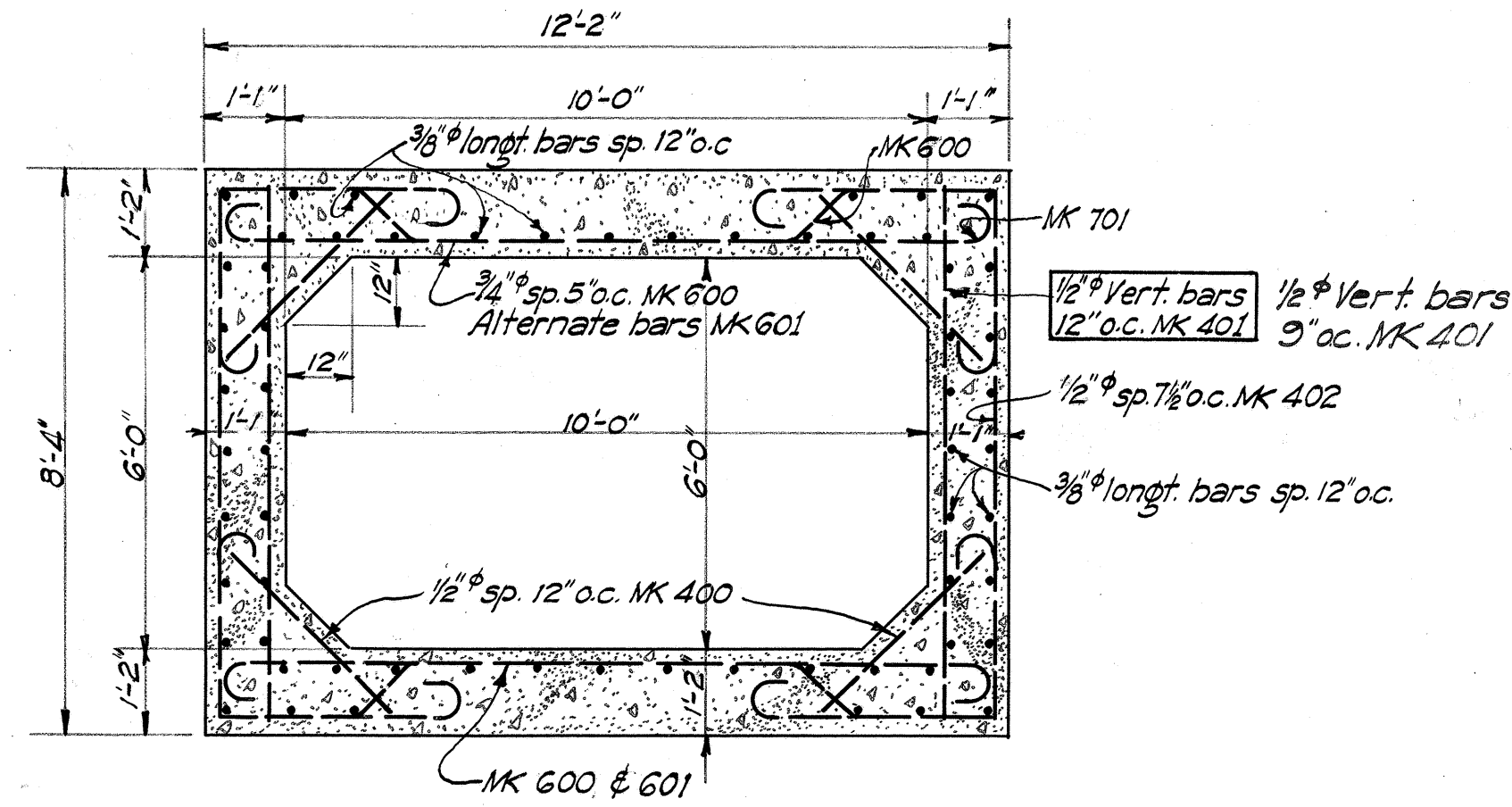
DIAGRAMMATICAL LAYOUT PLAN
Scale 1" = 10'



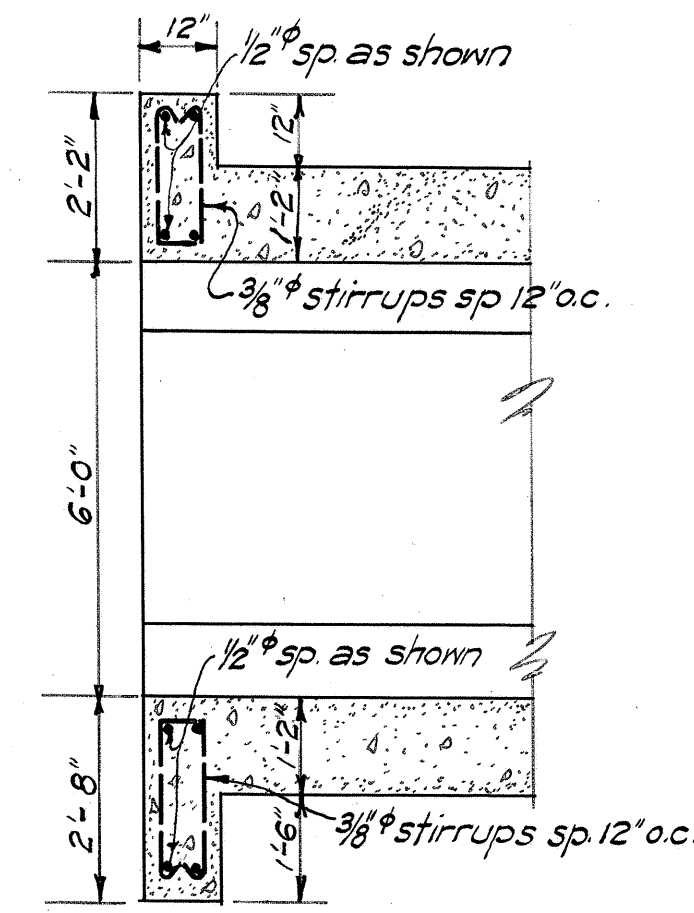
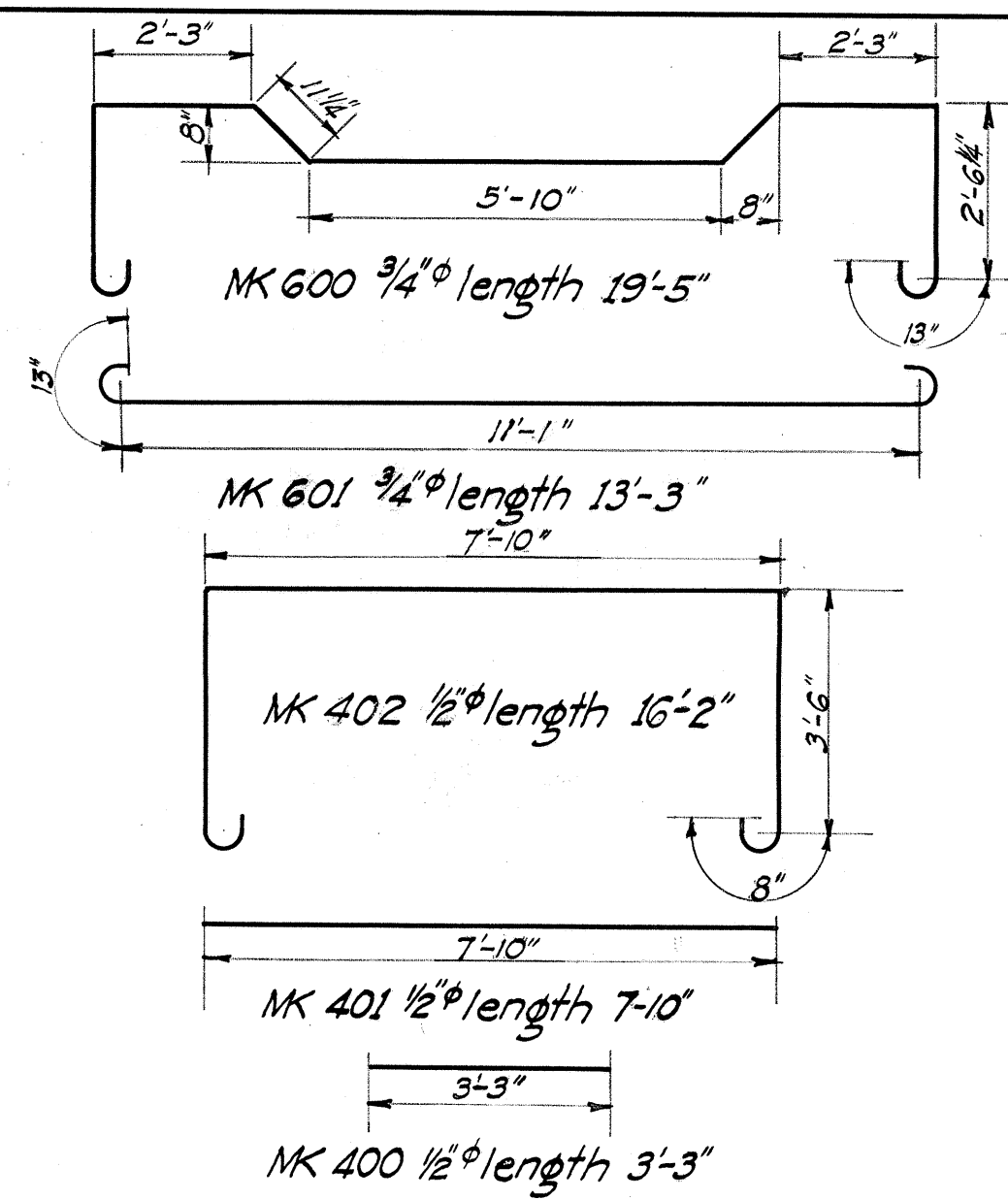
DETAILS FOR 4'x5' BOX CULVERT AT STA. 0+33
Scale 1/2" = 1'0"

Revised as per Bus. Letter of June 29, 1934 J.C.M.

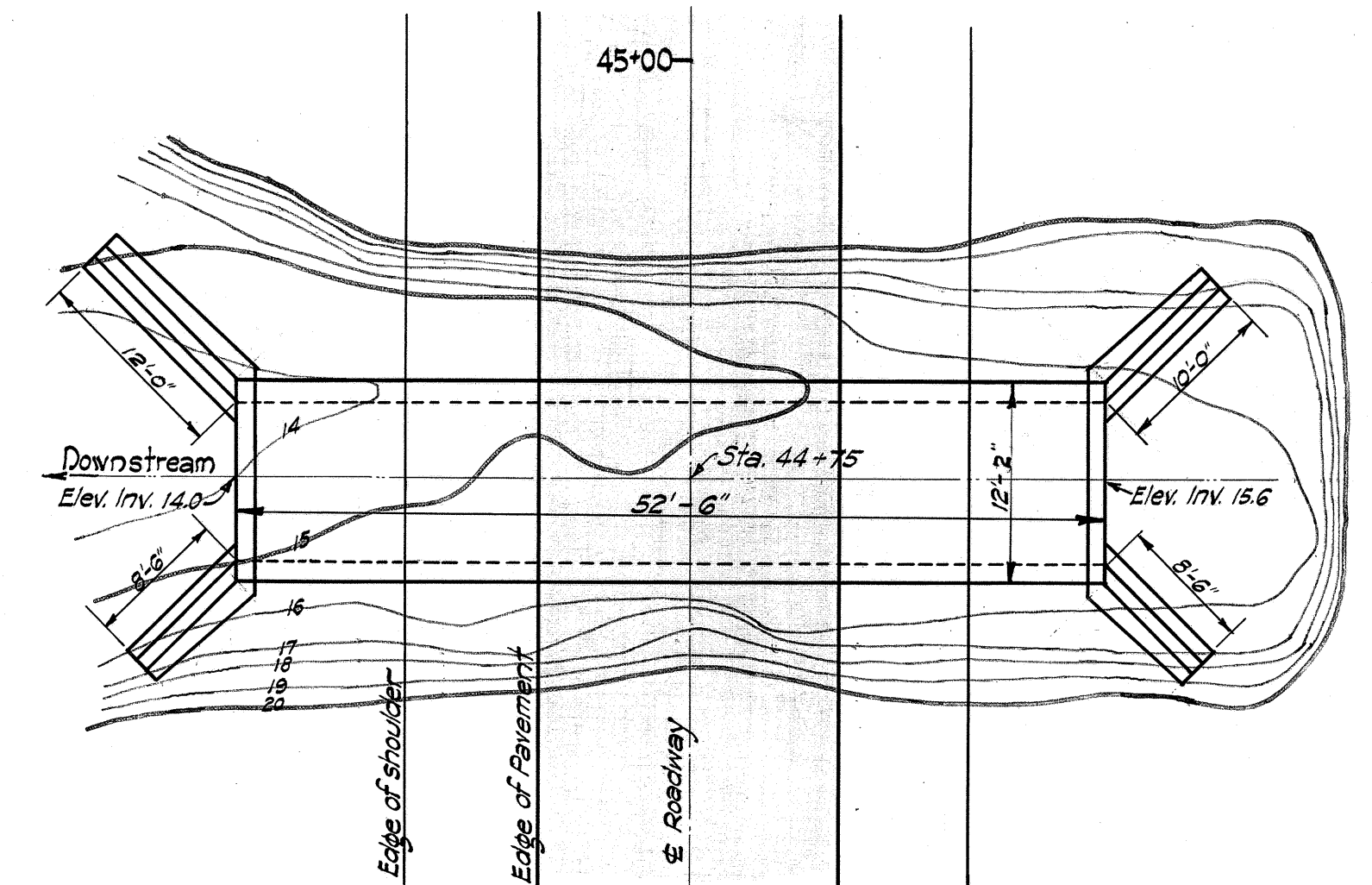
DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
REVISIONS	



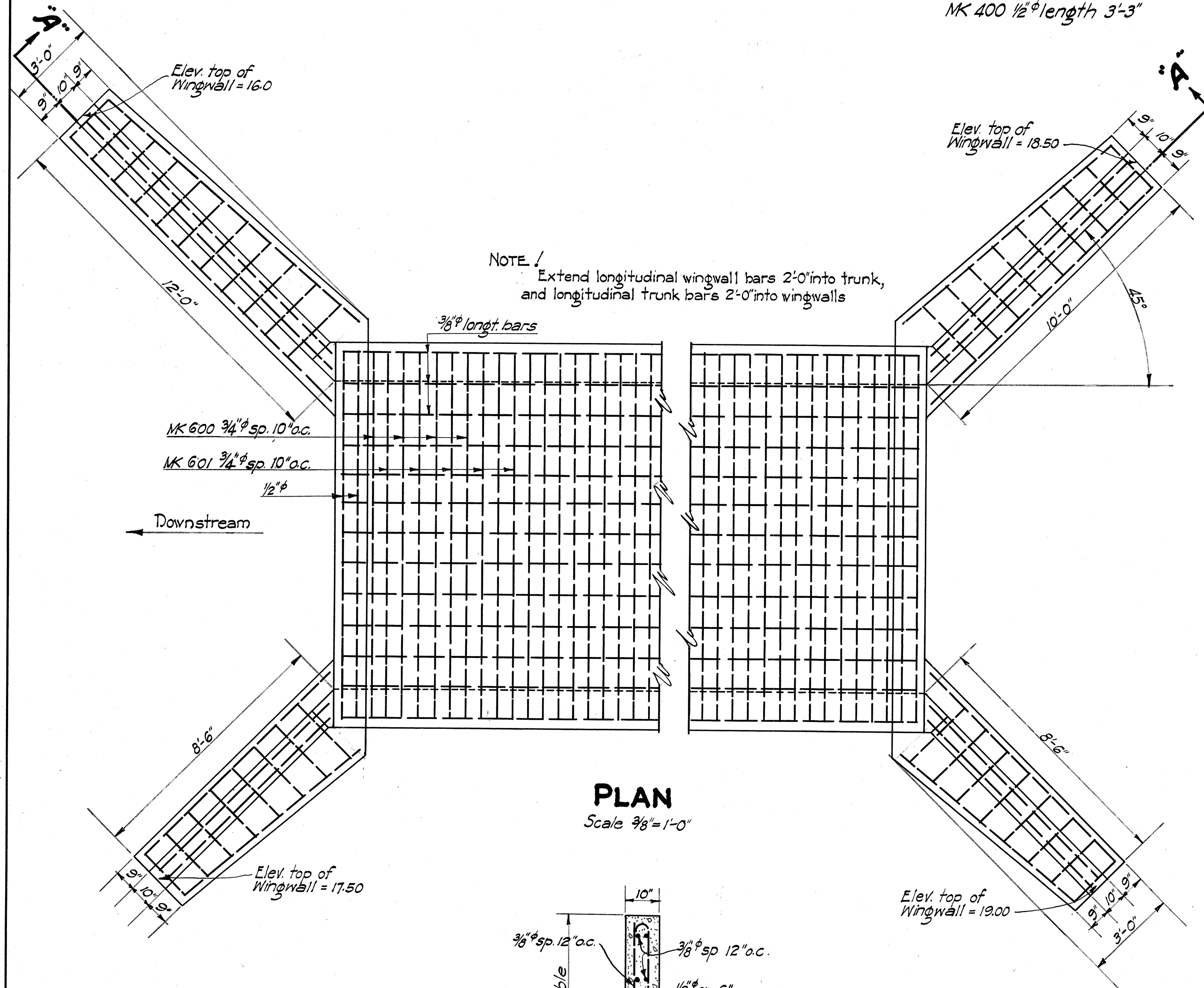
SECT. THRU TRUNK
Scale 3/8" = 1'-0"



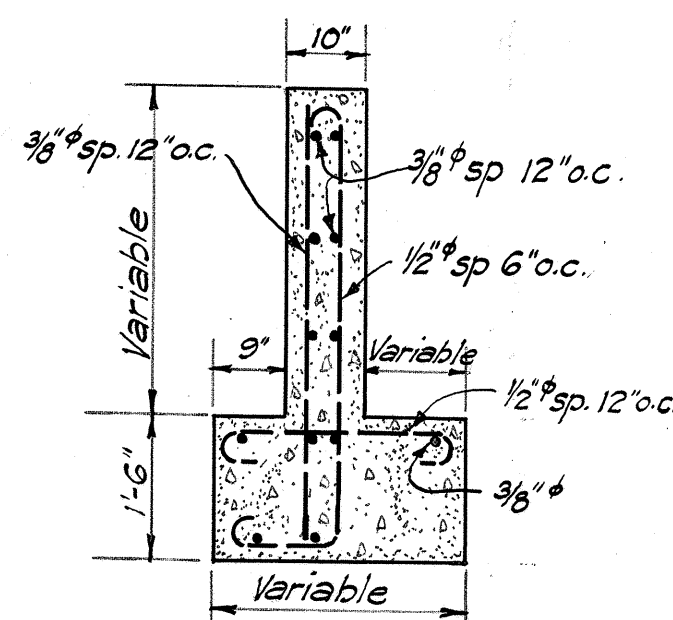
SECT. THRU HEAD
Scale 3/8" = 1'-0"



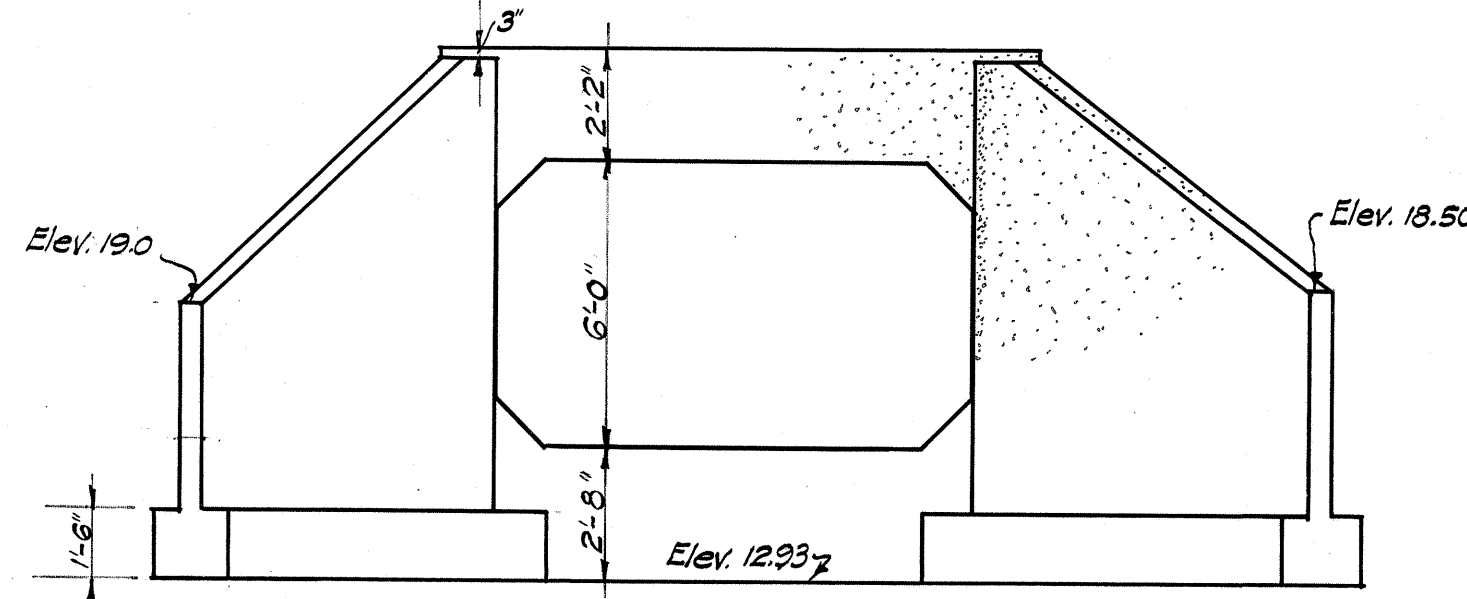
LOCATION PLAN
Scale 1" = 10'



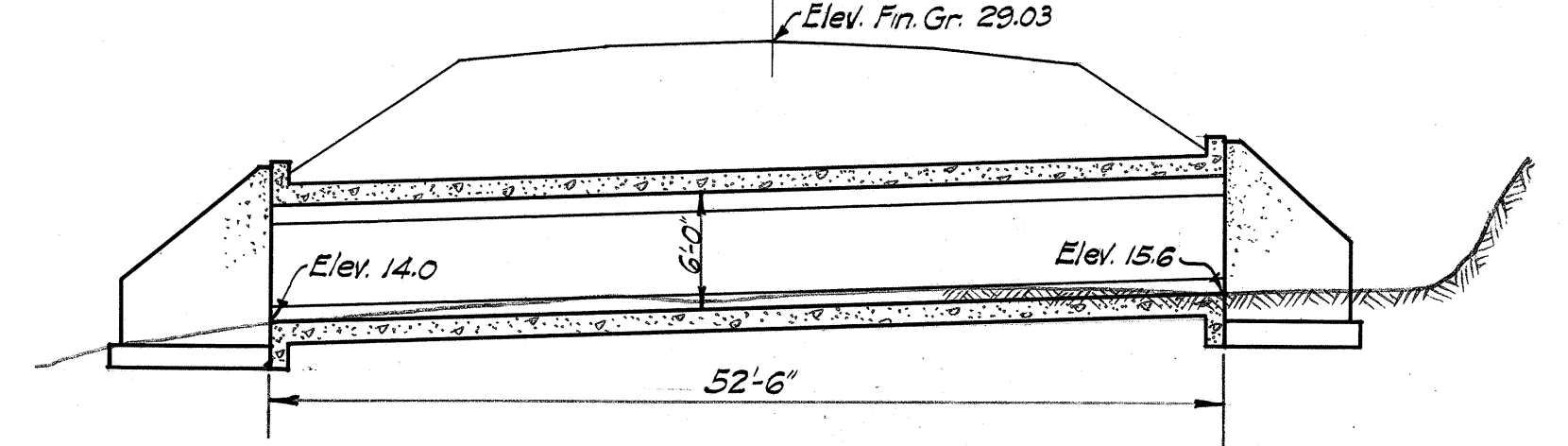
PLAN
Scale 3/8" = 1'-0"



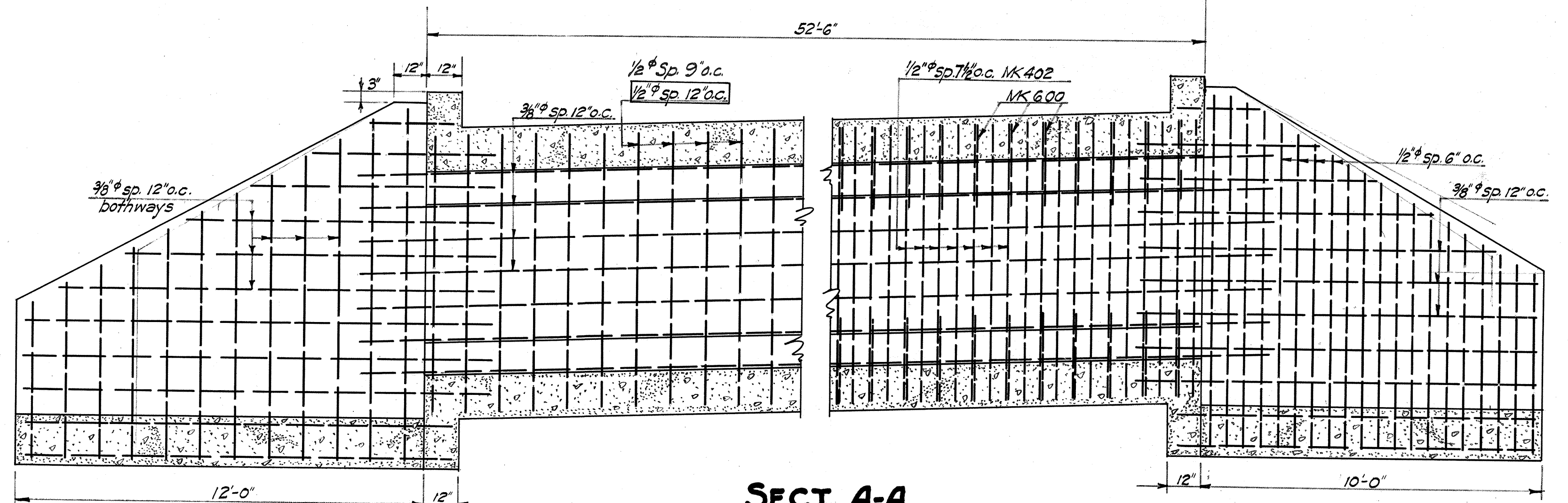
SECT. THRU WINGWALLS
Scale 1/2" = 1'-0"



ELEVATION (UPSTREAM)
Scale 1/4" = 1'-0"



SECTIONAL ELEVATION
Scale 1" = 10'



SECT. A-A
Scale 3/8" = 1'-0"

STEEL INSIDE FACE

STEEL OUTSIDE FACE

ESTIMATED QUANTITIES

Str. Exc.	84. cu. yds.
Class "A" Conc.	99. "
Reinf. Steel	11,752 lbs.
	11,843

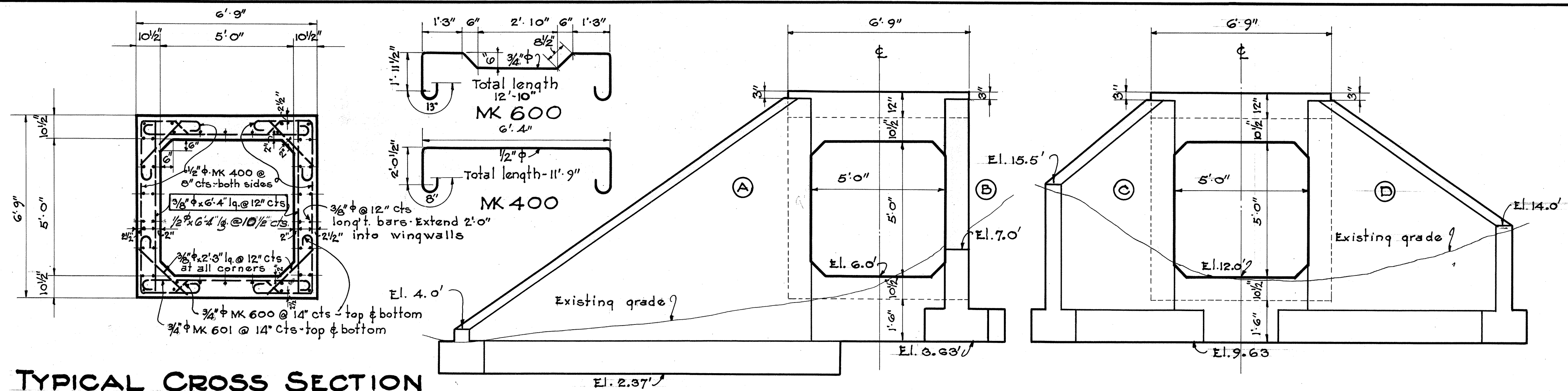
DETAILS OF 6'x10 BOX CULVERT
STA. 44 + 75
N.R.H. - 13C.

LAHAINA-WAILUKU ROAD

DESIGNED BY	W.C.V. J.C.M.
DRAWN BY	W.C.V. J.C.M.
CHECKED BY	J.C.M.
DATE	5/54
REVISION	
NO.	

Revised as per Bus. Letter of June 29, 1934 J.C.M.

PROJ. ROAD	STATE	PROJ. NO.	FED. AID	PERCENT	DATE	TOTAL
HAWAII	HAW.	N.R.H. 13-C	1934	10	17	



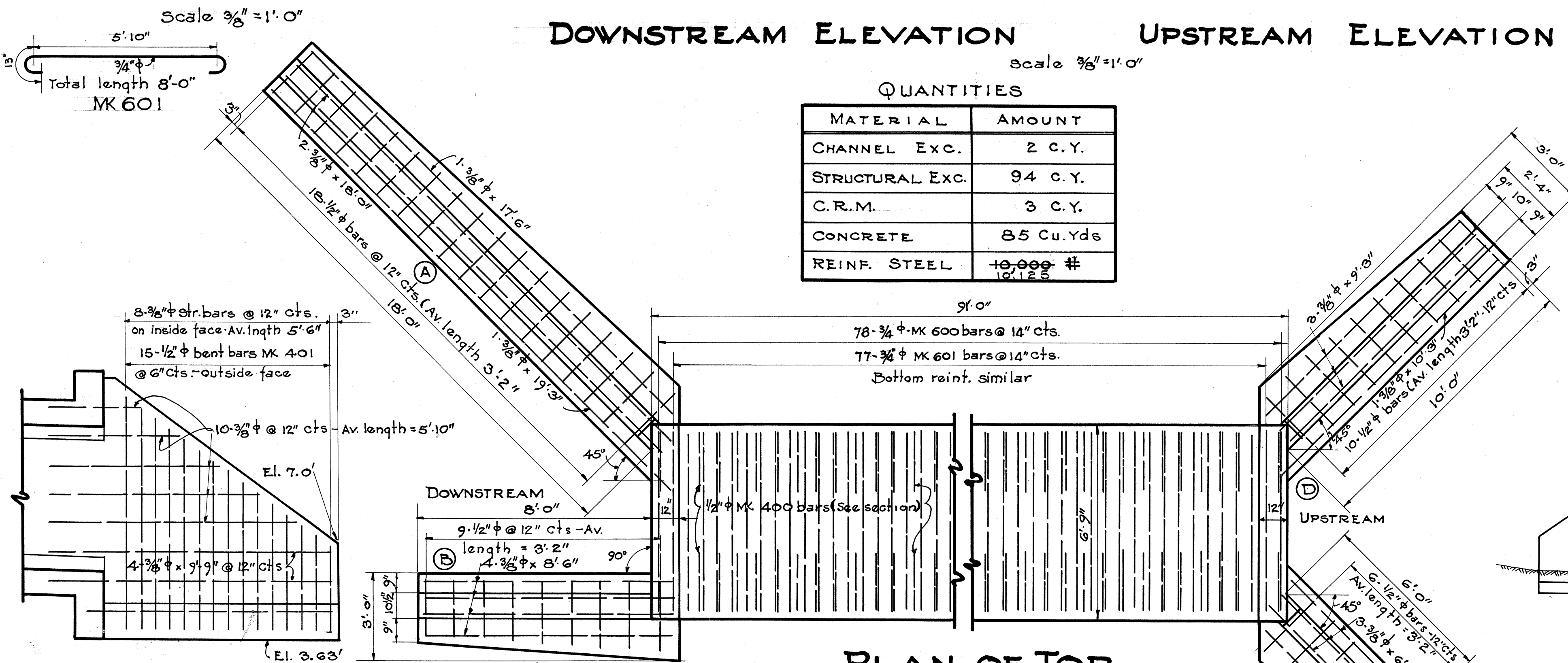
TYPICAL CROSS SECTION

DOWNSTREAM ELEVATION

UPSTREAM ELEVATION

QUANTITIES

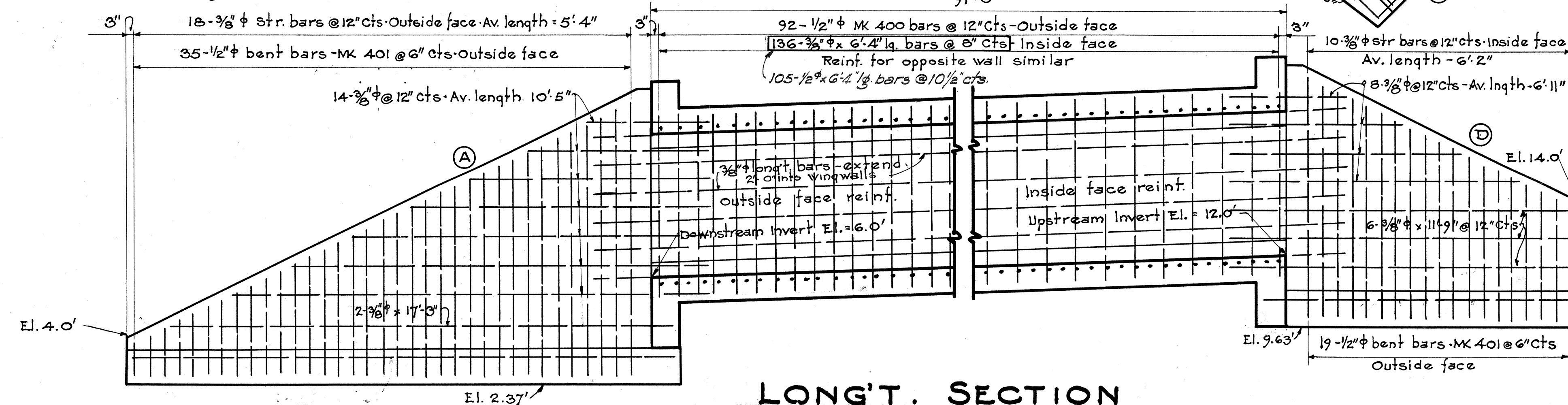
MATERIAL	AMOUNT
CHANNEL EXC.	2 C.Y.
STRUCTURAL EXC.	94 C.Y.
C.R.M.	3 C.Y.
CONCRETE	85 Cu.Yds
REINF. STEEL	10,000 #



ELEV. OF WINGWALL "B"

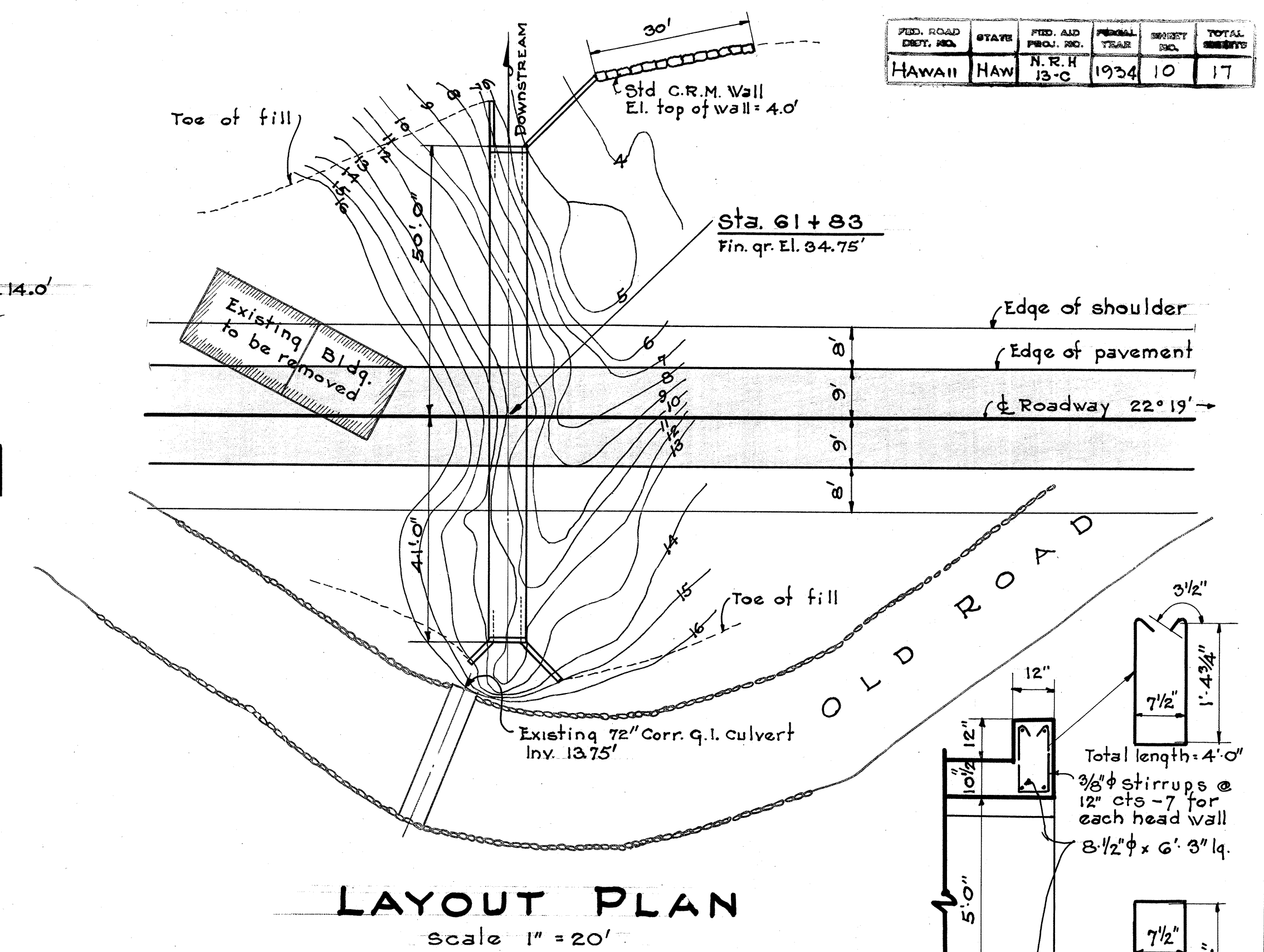
PLAN OF TOP

Scale $\frac{3}{8}" = 1'-0"$



LONG'T. SECTION

Scale $\frac{3}{8}" = 1'-0"$

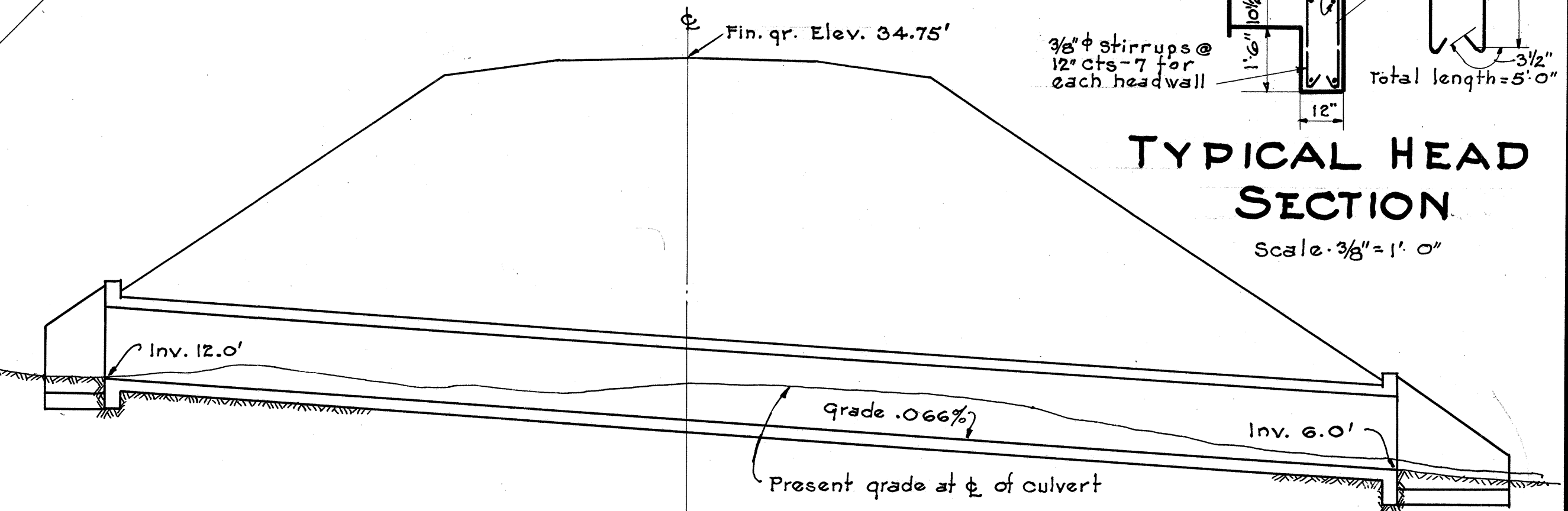


LAYOUT PLAN

Scale $1" = 20'$

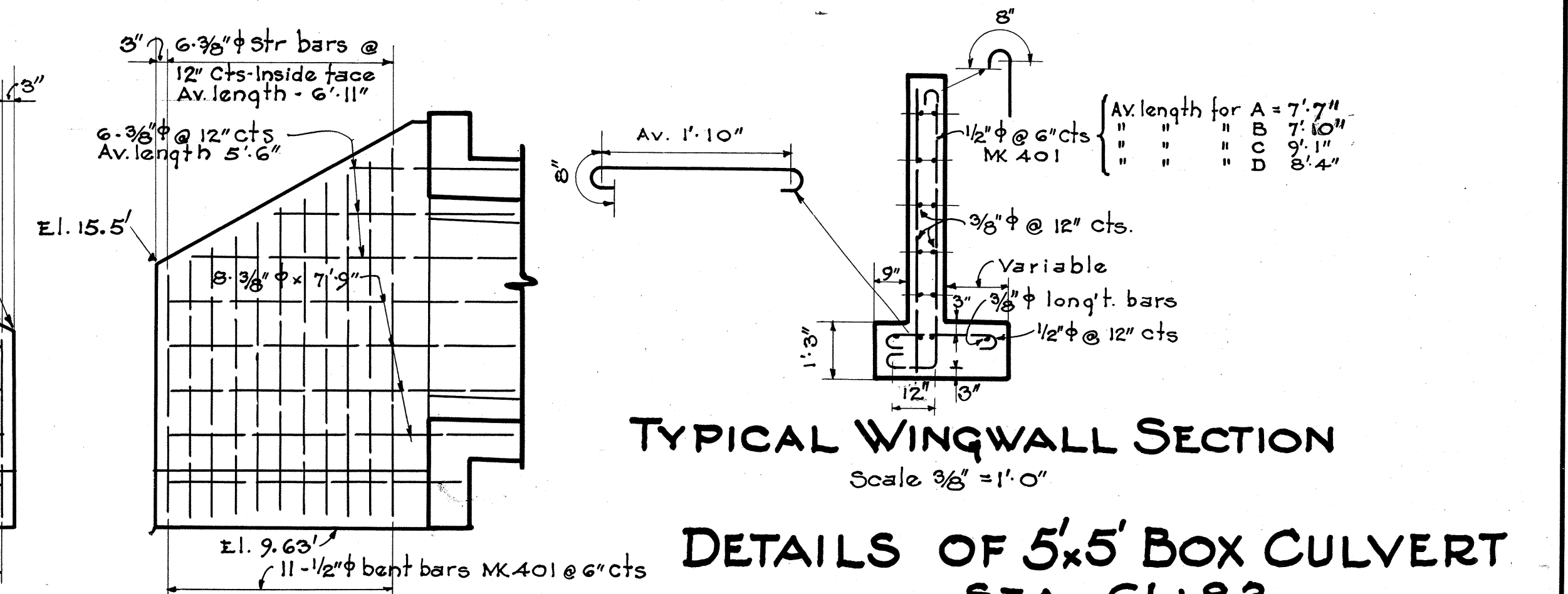
TYPICAL HEAD SECTION

Scale $\frac{3}{8}" = 1'-0"$



LONG'T. SECTION

Scale $\frac{1}{8}" = 1'-0"$



ELEV. OF WINGWALL "C"

Scale $\frac{3}{8}" = 1'-0"$

TYPICAL WINGWALL SECTION

Scale $\frac{3}{8}" = 1'-0"$

DETAILS OF 5'x5' BOX CULVERT

STA. 61+83

N.R.H-13-C

LAHAINA-WAILUKU ROAD

DESIGNED BY	J.C.M.
DRAWN BY	J.C.M.
CHECKED BY	J.C.M.
DATE	5.8.34
NOTED BY	5.9.34
REVISIONS	5.10.34
REVISIONS	5.11.34

Revised as per Bus. Letter of June 29, 1934 J.C.M.