

UTAH
STATE ROADS
STATE ROAD COMMISSION

STATE OF UTAH STATE ROAD COMMISSION

PLANS OF PROPOSED STATE ROAD

FEDERAL AID PROJECT

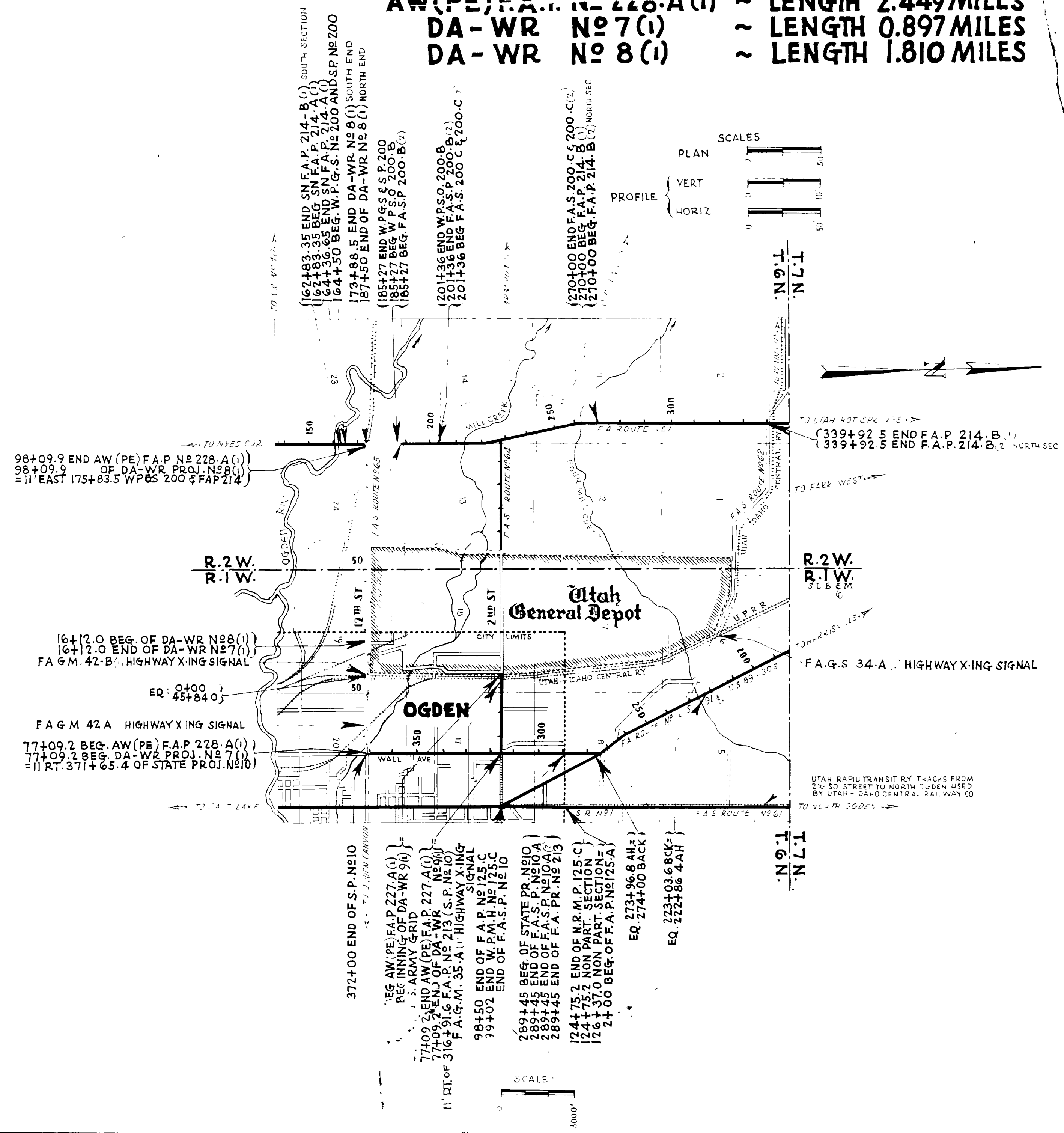
AW(PE) F.A.P. No 227-A (1) ~ LENGTH 0.613 MILES
 DA-WR No 9 (1) ~ LENGTH 0.613 MILES
 AW(PE) F.A.P. No 228-A (1) ~ LENGTH 2.449 MILES
 DA-WR No 7 (1) ~ LENGTH 0.897 MILES
 DA-WR No 8 (1) ~ LENGTH 1.810 MILES

INDEX TO SHEETS DA-WR No 9 (1)

SHEET	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION
3-4	PLAN AND PROFILE
5-7	EXT TO EXISTING CULVERT
8	HEAD GATES AND OUTLETS
9	F.A.P. MARKERS
9A	DETAIL OF TRANSITION OF ROAD
10	X SECTIONS

INDEX TO SHEETS DA-WR No 8 (1)

SHEET	DESCRIPTION	DRAWING NO.	STATION
1	TITLE SHEET		
2	TYPICAL SECTION		
3-4	PLAN AND PROFILE		
5-7	EXT TO EXISTING CULVERT		
8	HEAD GATES AND OUTLETS		
9	F.A.P. MARKERS		
9A	DETAIL OF TRANSITION OF ROAD		
10	X SECTIONS		



INDEX TO SHEETS DA-WR No 9 (1)

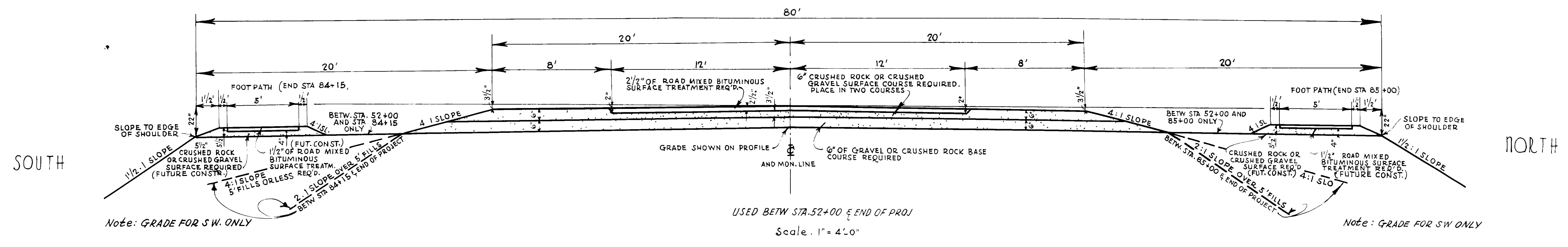
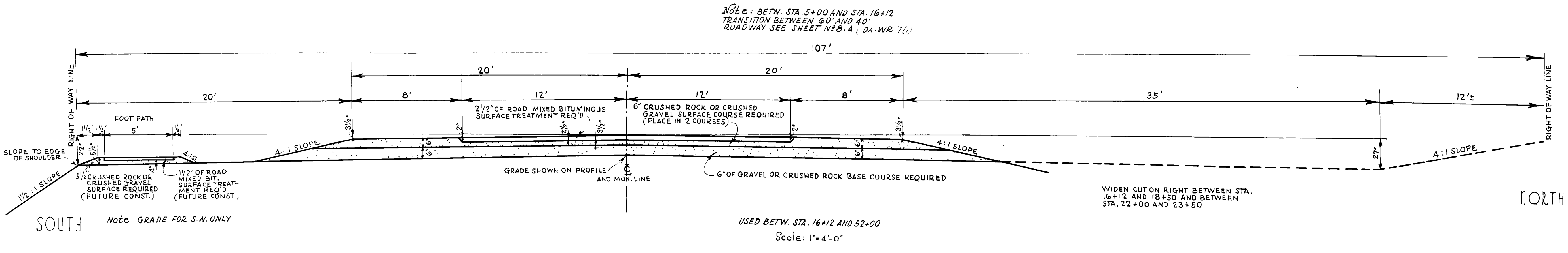
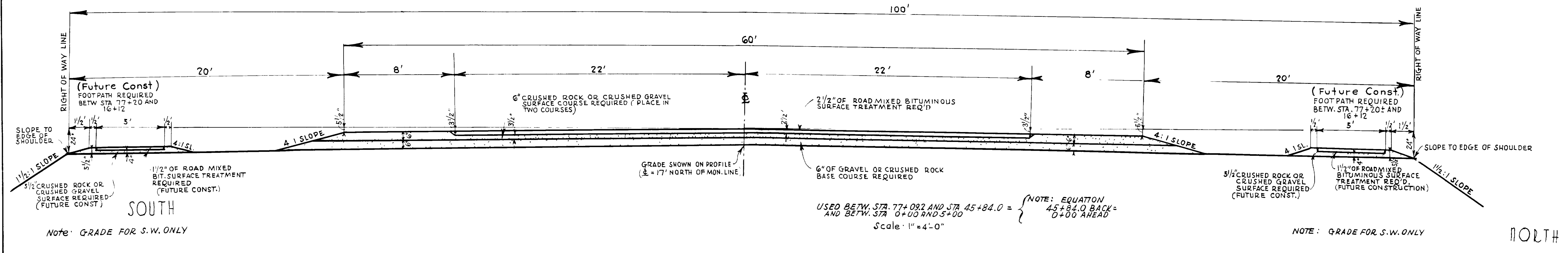
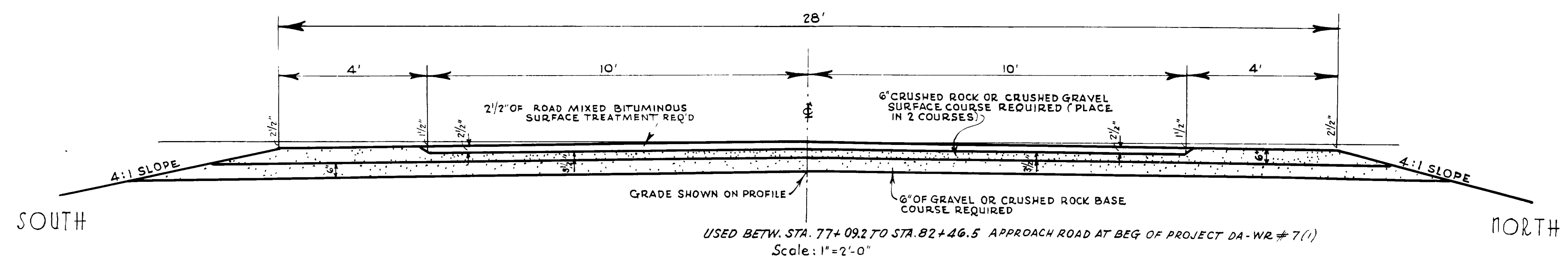
SHEET	DESCRIPTION	DRAWING NO.	STATION
1	TITLE SHEET		
2	TYPICAL SECTION		
3-4	PLAN AND PROFILE		
5	EXT TO EXISTING CULVERT		
6	24" 105" CULV PIPE SYPHON	E 746 L	
7	24" 105" " " " "	E 746 L	
7A	F.A.P. MARKERS	M 45	
8	HEAD GATES AND OUTLETS	VARIOUS	
9	DETAIL OF TRANSITION OF ROAD		
10	X SECTIONS		

APPROVED JANUARY 1942
STATE ROAD COMMISSION OF UTAH

RECOMMENDED FOR APPROVAL
 [Signature]
 POST COMMANDER

APPROVED
 [Signature]
 COMMANDING GENERAL

FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOT. SHEETS
12	UTAH	228 A(1)	1942	2	9
"	"	DA WR 7(1)	1942	2	9
"	"	DA WR 8(1)	1942	2	15



REVISIONS	DATE	BY	CHKD

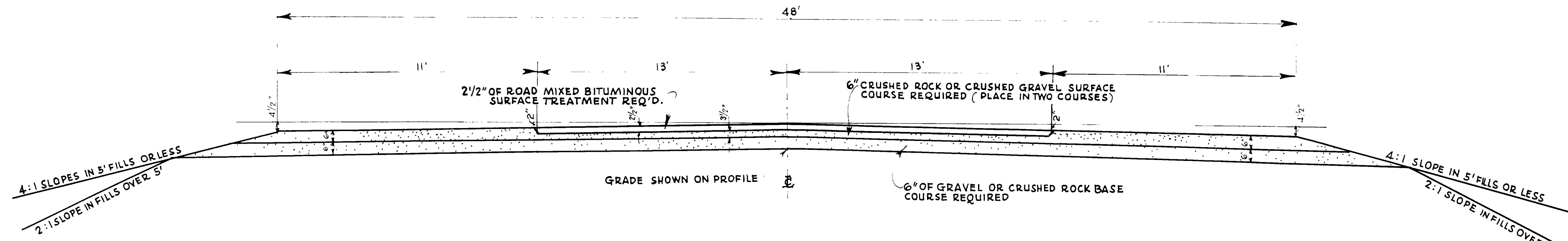
UTAH STATE ROAD COMMISSION
SALT LAKE CITY, UTAH

ROAD MIXED BITUMINOUS SURFACED ROADWAY

DESIGNED BY: _____ SCALE: AS SHOWN
 DRAWN BY: H.M.F. ISSUED: _____
 CHECKED BY: H.S.W. APPROVED: _____
 EXAMINED BY: _____
 BR. NO. _____ DRG. NO. _____

TYPICAL CROSS SECTION

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	228-A(1)	1942	2 A	15
"	"	DAWR B.1	"	2 A	"



USED BETWEEN STA. 173+88.5 AND STA. 187+50
 (ON F. A. P. 214, NYE'S COR. - HOT SPRINGS ROAD)
 Scale 1"=3'-0"

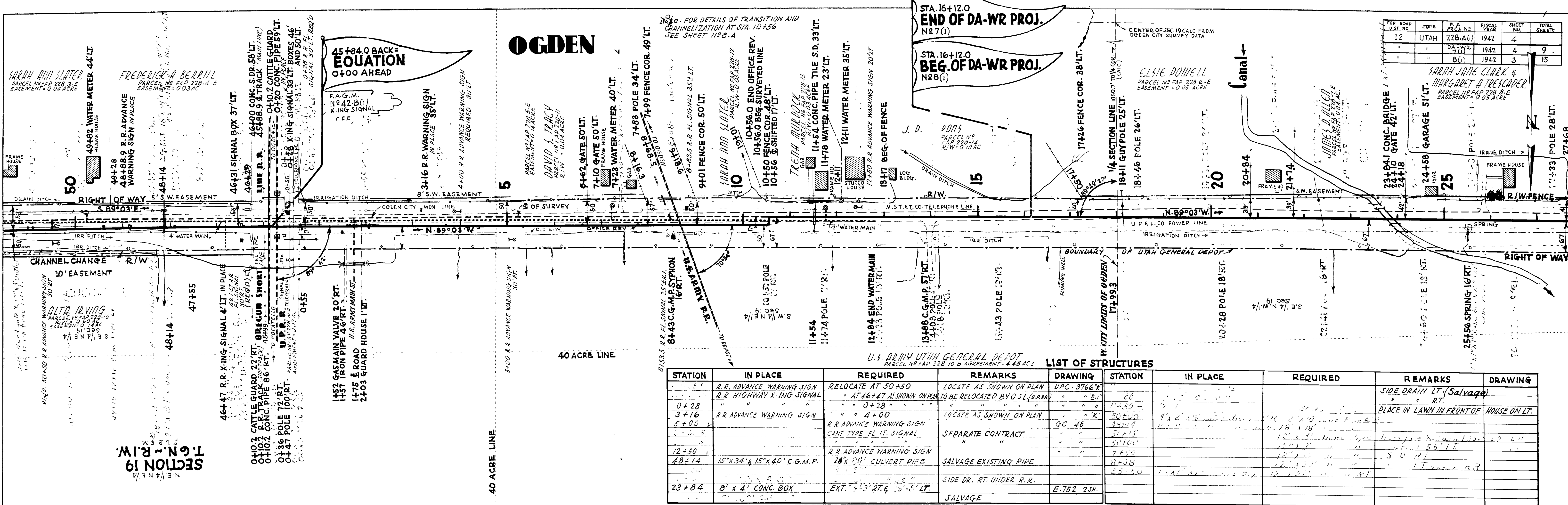
REVISIONS	DATE	BY	CHKD.

UTAH STATE ROAD COMMISSION
 SALT LAKE CITY, UTAH
 W. L. ANDERSON - DESIGN ENGINEER

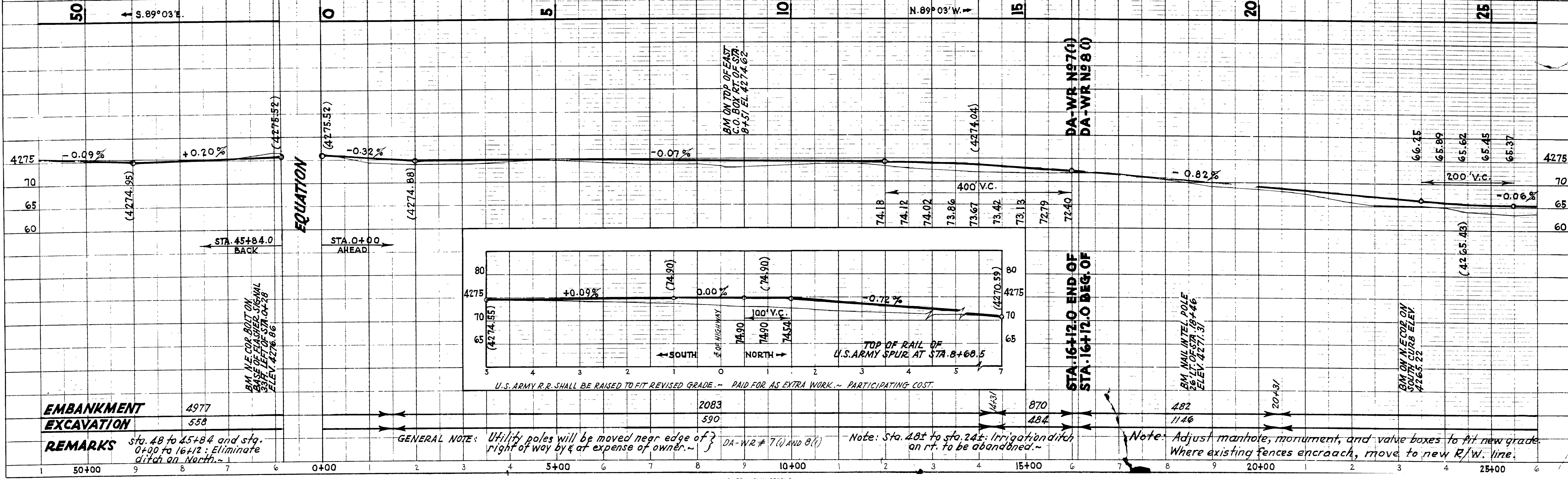
ROAD MIXED BIT.
 SURFACED ROADWAY

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STATION	IN PLACE	REQUIRED	REMARKS	DRAWING	STATION	IN PLACE	REQUIRED	REMARKS	DRAWING
	R.R. ADVANCE WARNING SIGN	RELOCATE AT 50+50	LOCATE AS SHOWN ON PLAN	UPC-3766 R					
	R.R. HIGHWAY X-ING SIGNAL	AT 46+47 AS SHOWN ON PLAN TO BE RELOCATED BY O.S.L. (UPARR)		" " " " " " " " " " " "					
0+28	" " " " " " " " " " " "	" " " " " " " " " " " "		" " " " " " " " " " " "					
3+16	R.R. ADVANCE WARNING SIGN	" " " " " " " " " " " "	LOCATE AS SHOWN ON PLAN	" " " " " " " " " " " "					
5+00	R.R. ADVANCE WARNING SIGN	" " " " " " " " " " " "	LOCATE AS SHOWN ON PLAN	GC 46					
	GANT TYPE FL. LT. SIGNAL	" " " " " " " " " " " "	SEPARATE CONTRACT	" " " " " " " " " " " "					
12+50	R.R. ADVANCE WARNING SIGN	" " " " " " " " " " " "	" " " " " " " " " " " "	" " " " " " " " " " " "					
48+14	15"x34" & 15"x40" C.G.M.P.	28"x30" CULVERT PIPE	SALVAGE EXISTING PIPE	" " " " " " " " " " " "					
23+84	8' x 4' CONC. BOX	EXT. 2' x 3' RT. & 10'-5" LT.	SIDE DR. RT. UNDER R.R.	E-752 734					



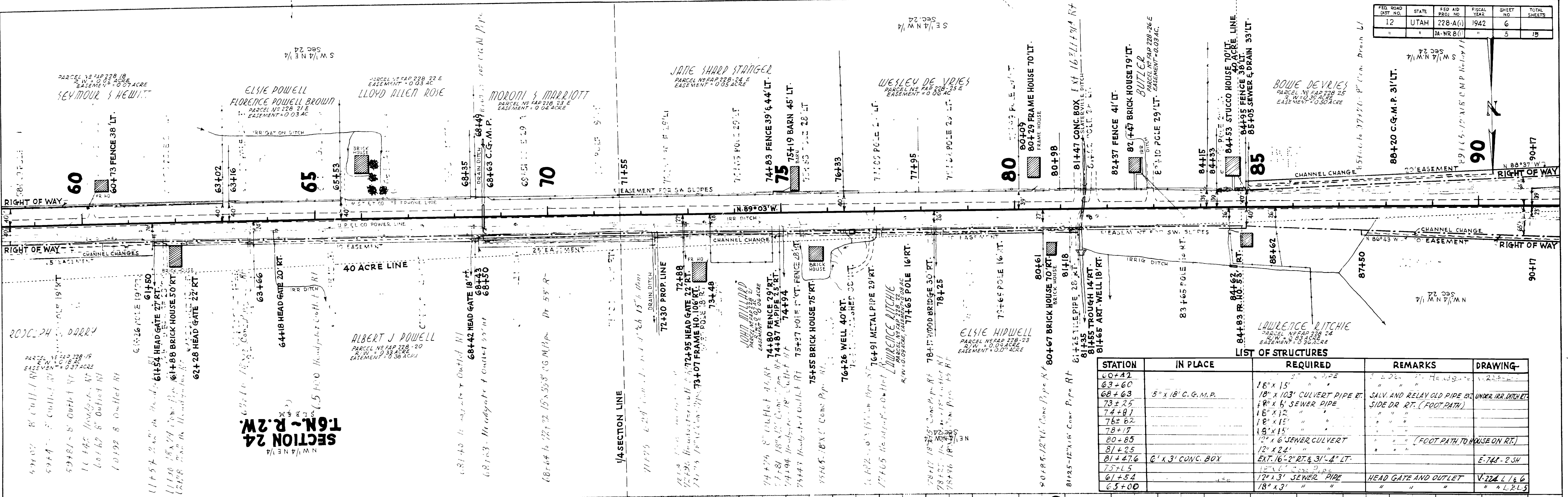
EMBANKMENT	4977
EXCAVATION	558
REMARKS	Sta. 48 to 45+84 and sta. 0+00 to 16+12. Eliminate ditch on north.

GENERAL NOTE: Utility poles will be moved near edge of right of way by & at expense of owner. - DA-WR # 7(1) AND 8(1) - Note: Sta. 48 to sta. 24: Irrigation ditch on rt. to be abandoned. - Note: Adjust manhole, monument, and valve boxes to fit new grade. Where existing fences encroach, move to new R/W. line.

1941
1942
C. R. KIMBALL
H. S. WRIGHT
H. M. WRIGHT
M. M. FENHART

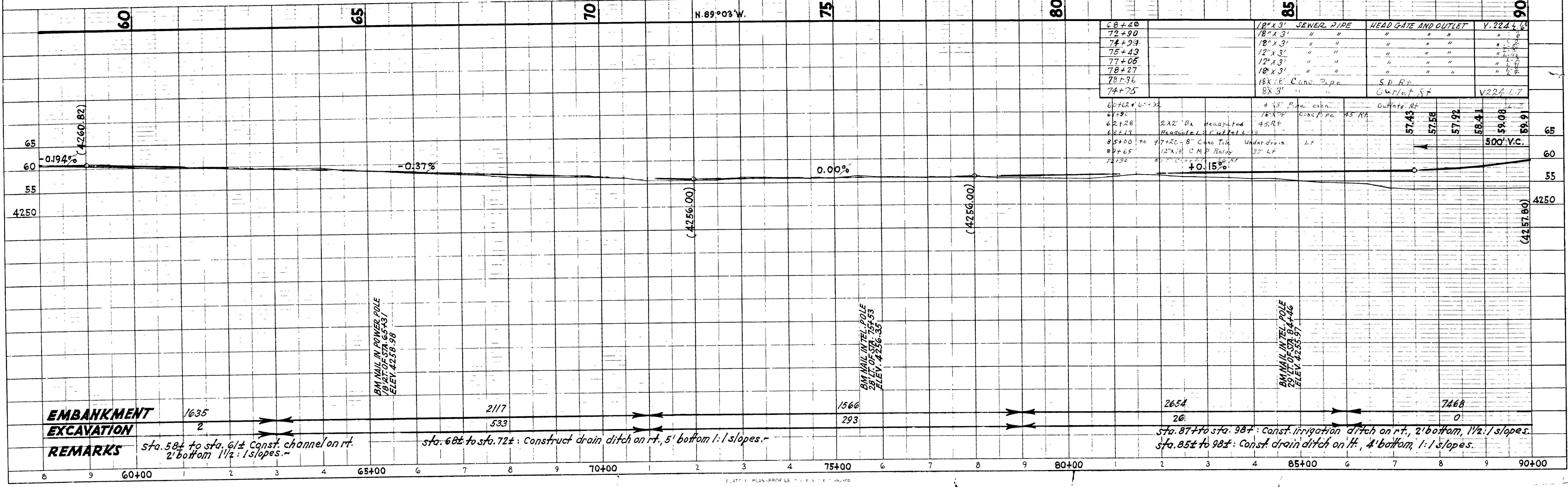
1941
1942
C. R. KIMBALL
H. S. WRIGHT
H. M. WRIGHT
M. M. FENHART

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	228-A(1)	1942	6	19
		DA-WR-8(1)		5	19



LIST OF STRUCTURES

STATION	IN PLACE	REQUIRED	REMARKS	DRAWING
60+00		18" x 15" "	" " " "	
63+60		18" x 103' CULVERT PIPE RT.	SALV. AND RELAY OLD PIPE EX.	UNDER IRR. DITCH
68+63	5" x 18" C.G.M.P.	18" x 6' SEWER PIPE	SIDE DR. RT. (FOOTPATH)	
73+25		18" x 12' "	" " " "	
74+81		18" x 15' "	" " " "	
76+82		18" x 15' "	" " " "	
78+17		18" x 15' "	" " " "	
80+85		12" x 6' SEWER CULVERT	" " " "	(FOOT PATH TO HOUSE ON RT.)
81+25		12" x 2' "	" " " "	
81+47.6	6' x 3' CONC. BOX	EXT. 16'-2" RT. & 3' 1/2" LT.	" " " "	E-742-2 SH
75+L5		12" x 3' SEWER PIPE	HEAD GATE AND OUTLET	V-224-L 1/6
61+54		18" x 3' "	" " " "	" " L-5
65+00		18" x 3' "	" " " "	" " L-5

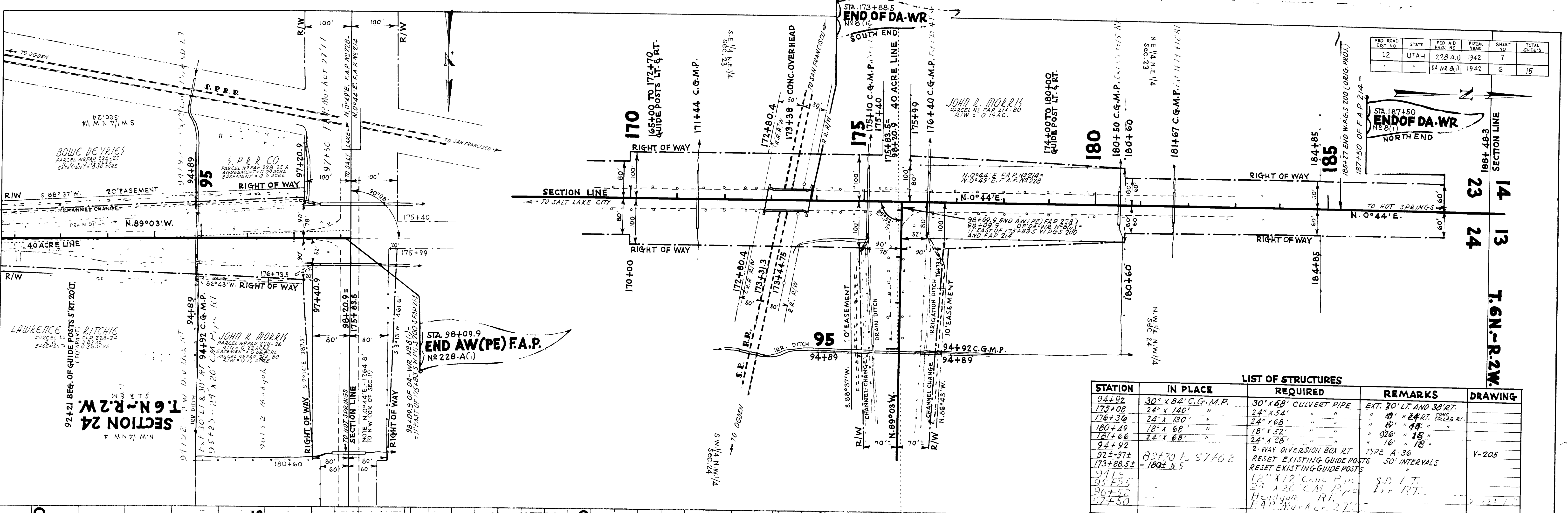


EMBAKMENT 1635
EXCAVATION 2
REMARKS sta. 58+ to sta. 61± Const. channel on rt. 2' bottom 1 1/2:1 slopes.
 sta. 68± to sta. 72± Construct drain ditch on rt. 5' bottom 1:1 slopes.
 sta. 87± to sta. 98± Const. irrigation ditch on rt. 2' bottom 1 1/2:1 slopes.
 sta. 85± to 98± Const. drain ditch on ft. 4' bottom 1:1 slopes.

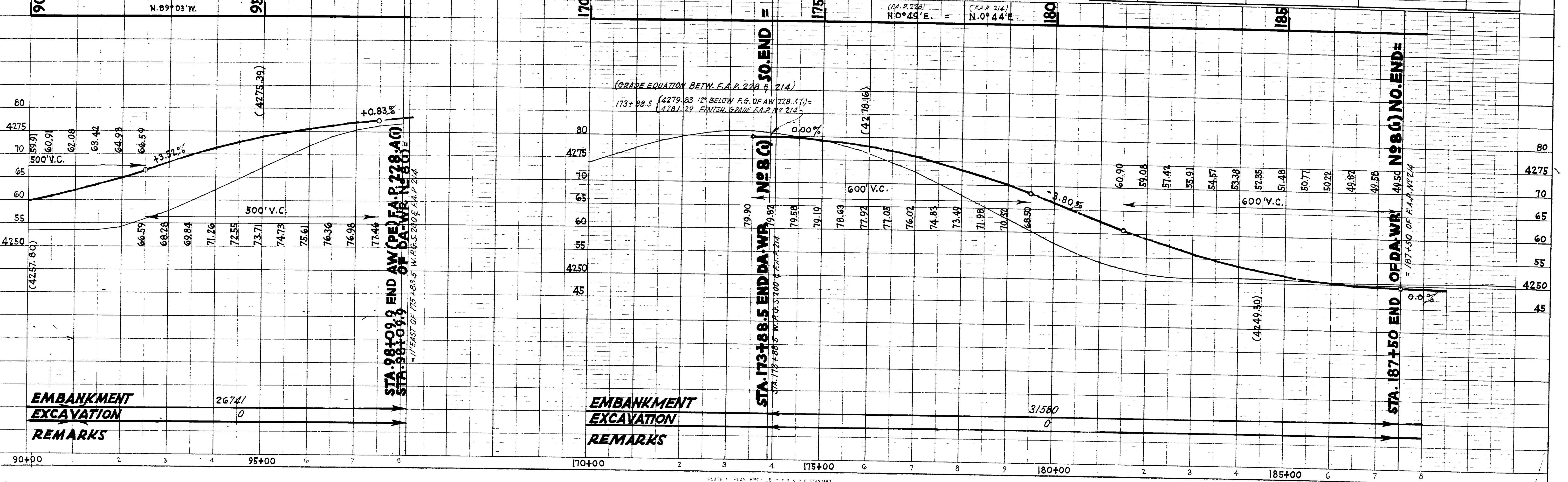
PLAN
 PREPARED BY
 C. R. KIMBALL
 H. M. FEHMELE
 H. S. WRIGHT
 H. M. FEHMELE
 No. 4914
 DATED
 1941
 1942

PROFILE
 PREPARED BY
 C. R. KIMBALL
 H. M. FEHMELE
 H. S. WRIGHT
 H. M. FEHMELE
 No. 4915
 DATED
 1941
 1942

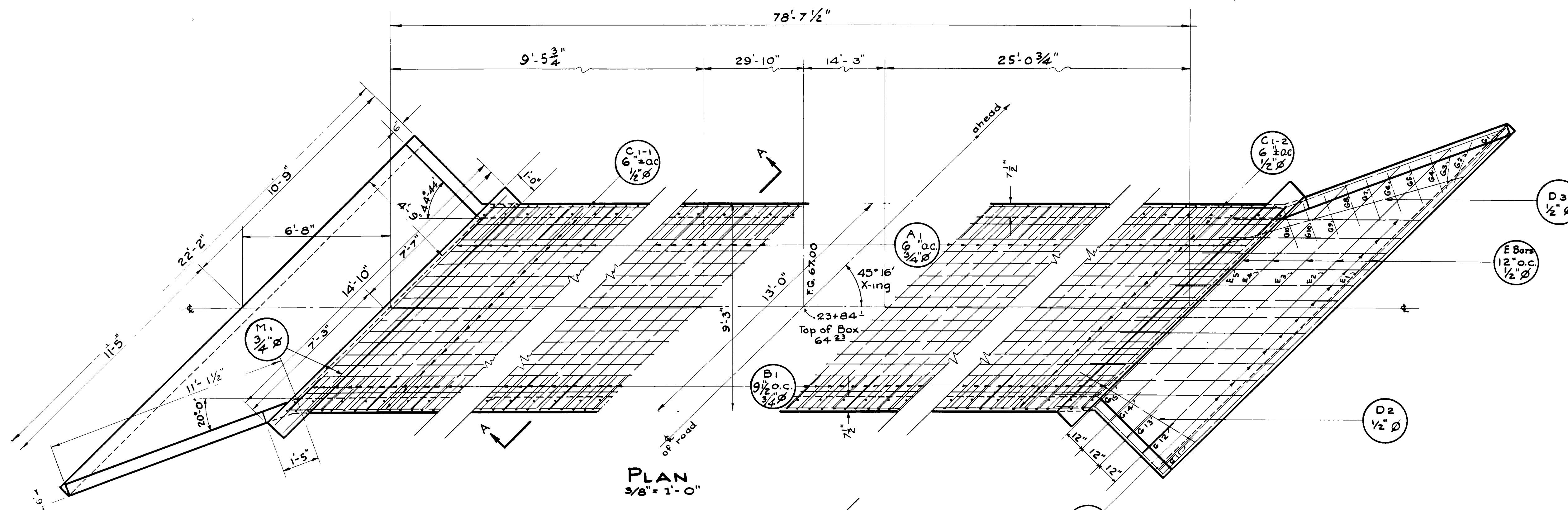
FED. ROAD DIST. NO.	STATE	FED. AID PKG. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	228 A(1)	1942	7	15
		DA WR 8(1)	1942	6	



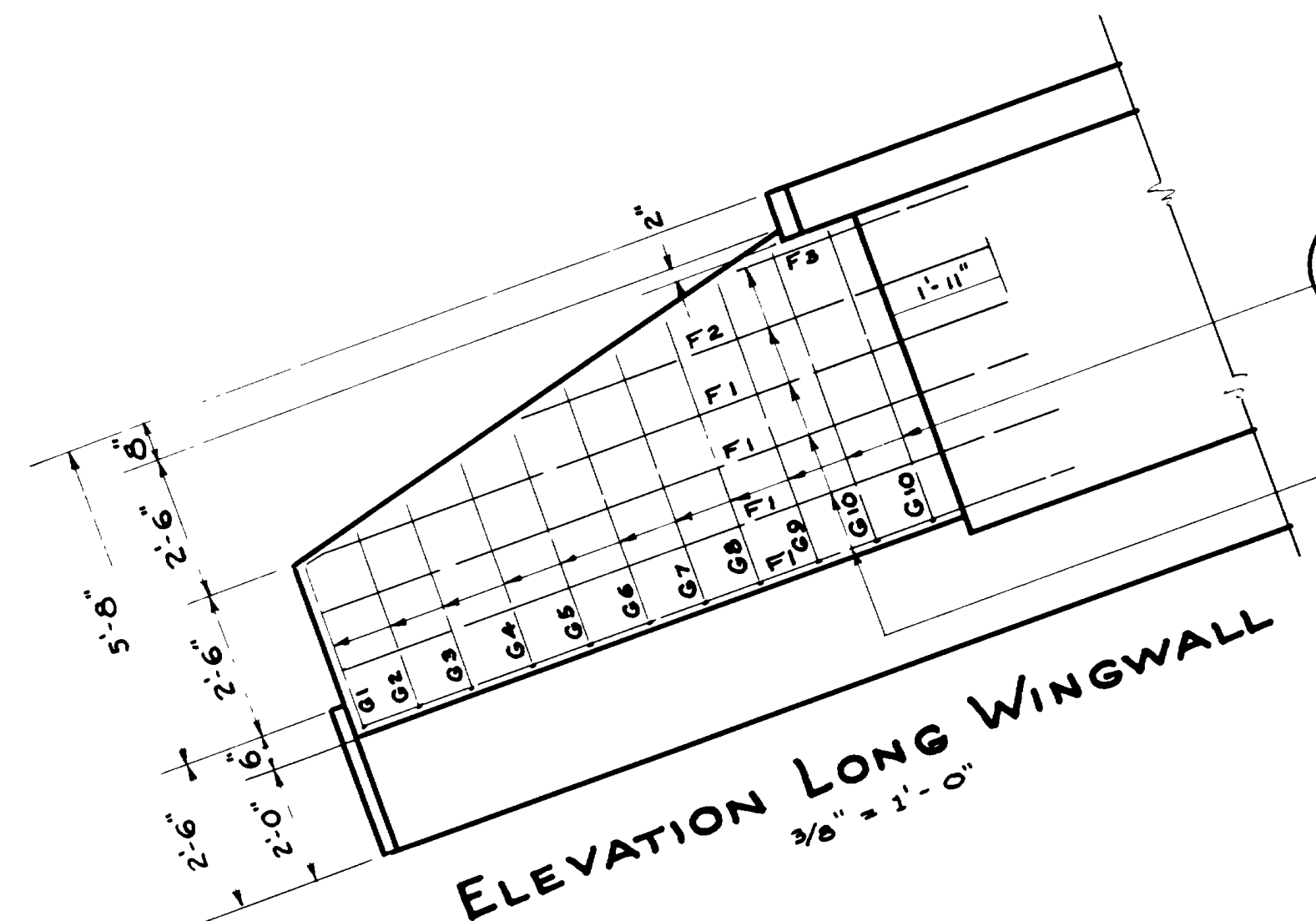
STATION	LIST OF STRUCTURES			DRAWING
	IN PLACE	REQUIRED	REMARKS	
94+92	30" x 84" C.G.M.P.	30" x 68" CULVERT PIPE	EXT. 30' LT. AND 38' RT.	V-205
175+08	24" x 140"	24" x 54"	" " 24' RT. 88' 32' RT.	
176+36	24" x 130"	24" x 68"	" " 80' " 48' "	
180+49	18" x 68"	18" x 52"	" " 92' " 18' "	
181+66	24" x 68"	24" x 28"	" " 16' " 18' "	
94+92		2-WAY DIVERSION BOX RT	TYPE A-36	
92+97	80+70 to 57+62	RESET EXISTING GUIDE POSTS	50' INTERVALS	
173+88.5	-180±5.5	RESET EXISTING GUIDE POSTS		
94+55		12" X 12" CONC. PIPE	S.D. LT.	
95+25		24" X 26" C.A.I. P.P.	Err RT.	
96+52		Headgate RT.		
97+50		F.A.P. Marker 27"		



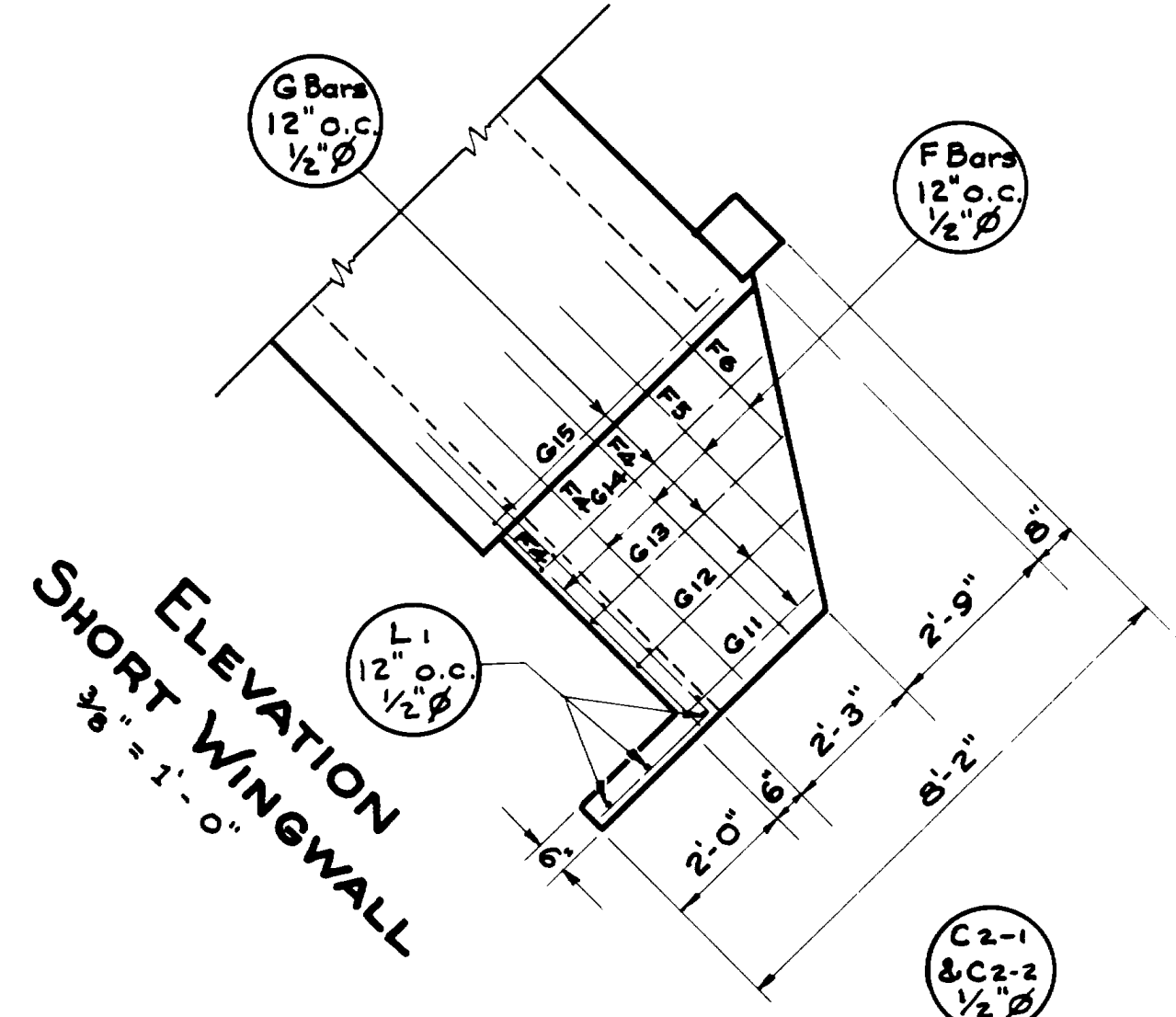
FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	228A			



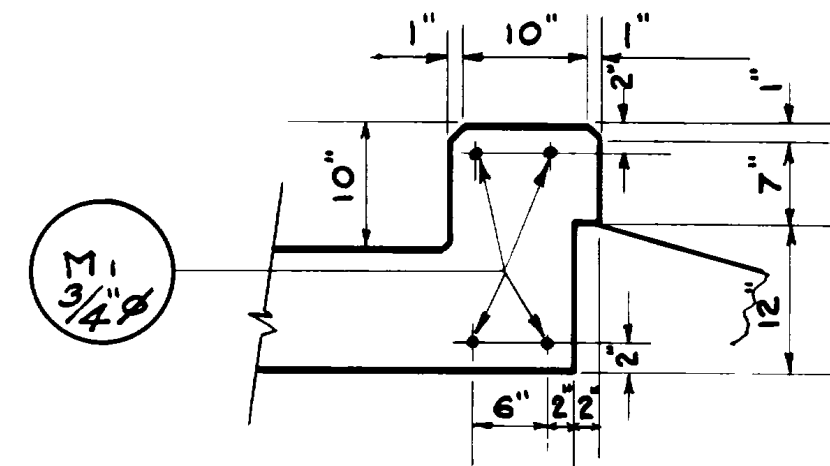
PLAN
3/8" = 1'-0"



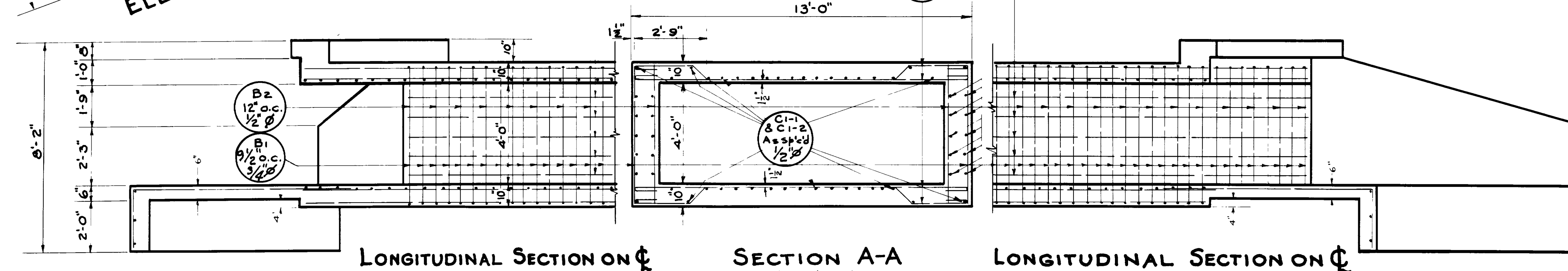
ELEVATION LONG WINGWALL
3/8" = 1'-0"



ELEVATION SHORT WINGWALL
3/8" = 1'-0"



CURB DETAIL
3/4" = 1'-0"



LONGITUDINAL SECTION ON CL

SECTION A-A
3/8" = 1'-0"

LONGITUDINAL SECTION ON CL

GENERAL NOTES

Materials, construction, and workmanship shall be in accordance with State Standard Specifications for Road & Bridge Construction, edition of 1939. All exposed edges to be chamfered 1".

DESIGN DATA

In accordance with A.A.S.H.O. Specifications for 1941.
 Deadload: Gravel 140%_w, Conc. 150%_w, Fill 120%_w
 Live Load: H-15
 Stresses: $f_s = 20,000 \text{ psi}$, $f_c = 1000 \text{ psi}$, $n = 10$

QUANTITIES

Excavation for Structure 170 cuyd.
 Concrete, Class "A" 34 cuyd.
 Reinforcing Steel 6738 lbs.

REVISIONS

NO.	DATE	BY	REVISION
1	10-24-41	A.M.M.	REVISED
2	11-26-41	A.S.M.	REVISED

Sheet 1 of 2 Sheets

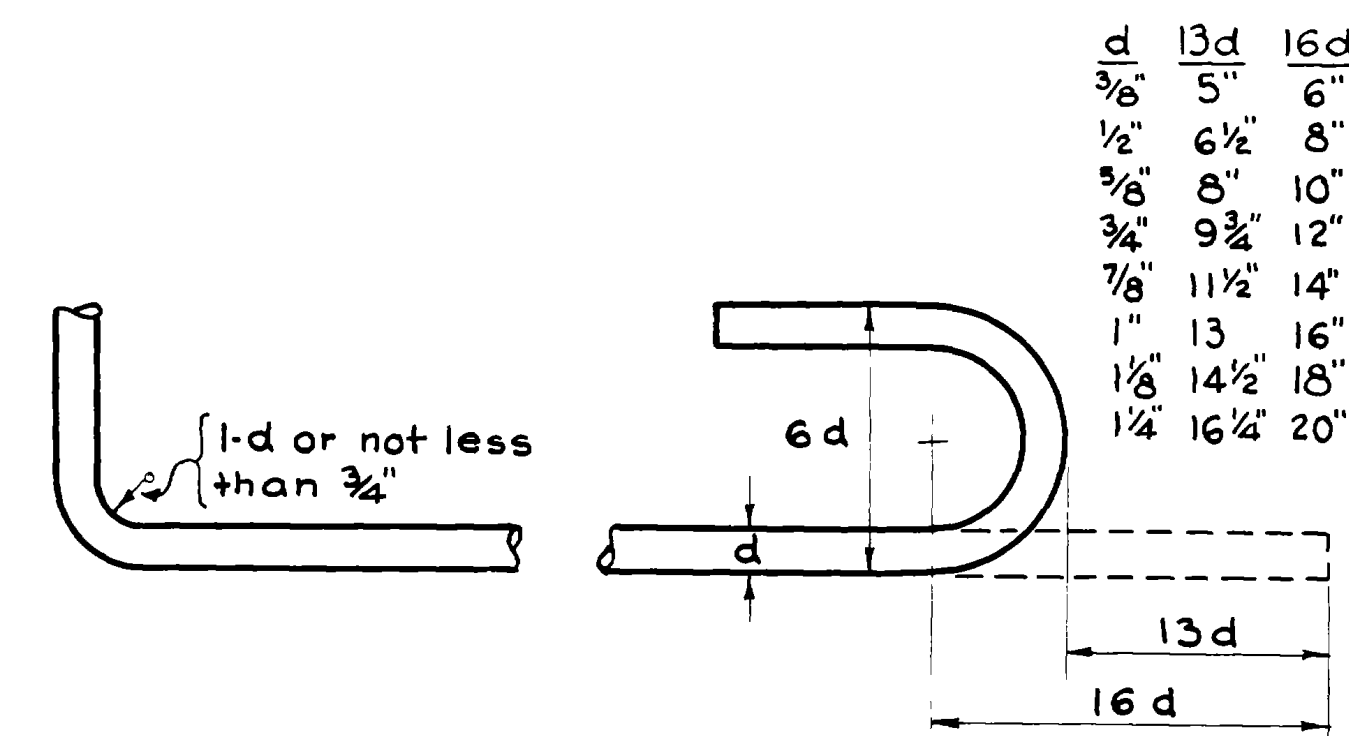
UTAH STATE ROAD COMMISSION
 SALT LAKE CITY, UTAH
 ETRA C. FROSTEN, CHIEF ENGINEER

**8'-0" x 4'-0" CULVERT EXT.
 RT. & LT. 45° 16' X-ING**
 A.W.F.P. 228A(1) STA. 23+84.1
 12th STREET, OGDEN, WEBER CO.

DESIGNED BY: R.B.R. as shown
 DRAWN BY: R.B.R. as shown
 CHECKED BY: J. W. [Signature]
 DATE: 10-24-41
 SHEET NO. E-752

MARK	LOCATION	SIZE	LENGTH	N ^o Bars	Total LENGTH	SKETCH	O.toO
A1	Slab	3/4" ∅	14'-7 1/2"	138	2018'-3"		12'-9"
B1	Wall	3/4" ∅	10'-1"	30	907'-6"		
B2	Wall	1/2" ∅	5'-5"	70	379'-1"		
C1-1	Slab Lt.	1/2" ∅	9'-3"	40	370'-0"		
C1-2	Slab Rt.	1/2" ∅	24'-10"	40	993'-4"		
C2-1	Wall Lt.	1/2" ∅	9'-3"	20	185'-0"		
C2-2	Wall Rt.	1/2" ∅	24'-10"	20	496'-8"		
D1	Aprons	1/2" ∅	10'-6"	24	252'-0"	A = 8'-4"	
D2	"	1/2" ∅	8'-2"	2	16'-4"	A = 6'-0"	
D3	"	1/2" ∅	13'-4"	2	26'-8"	A = 11'-2"	
E1	Aprons	1/2" ∅	21'-11"	2	43'-10"		
E2	"	1/2" ∅	19'-4"	2	38'-8"		
E3	"	1/2" ∅	17'-3"	2	34'-6"		
E4	"	1/2" ∅	15'-0"	2	30'-0"		
E5	"	1/2" ∅	13'-0"	2	26'-0"		
F1	Wingwalls	1/2" ∅	12'-4"	8	98'-8"		
F2	"	1/2" ∅	8'-3"	2	16'-6"		
F3	"	1/2" ∅	4'-2"	2	8'-4"		
F4	"	1/2" ∅	6'-0"	6	36'-0"		
F5	"	1/2" ∅	5'-3"	2	10'-6"		
F6	"	1/2" ∅	3'-9"	2	7'-6"		

MARK	LOCATION	SIZE	LENGTH	N ^o Bars	Total LENGTH	SKETCH	O.toO
G1	Wingwalls	1/2" ∅	4'-8"	2	9'-4"	A = 2'-9"	
G2	"	1/2" ∅	5'-0"	2	10'-0"	A = 3'-1"	
G3	"	1/2" ∅	5'-3"	2	10'-6"	A = 3'-4"	
G4	"	1/2" ∅	5'-6"	2	11'-0"	A = 3'-7"	
G5	"	1/2" ∅	5'-9"	2	11'-6"	A = 3'-10"	
G6	"	1/2" ∅	6'-0"	2	12'-0"	A = 4'-1"	
G7	"	1/2" ∅	6'-3"	2	12'-6"	A = 4'-4"	
G8	"	1/2" ∅	6'-6"	2	13'-0"	A = 4'-7"	
G9	"	1/2" ∅	6'-9"	2	13'-6"	A = 4'-10"	
G10	"	1/2" ∅	7'-0"	4	28'-0"	A = 5'-1"	
G11	"	1/2" ∅	4'-5"	2	8'-10"	A = 2'-6"	
G12	"	1/2" ∅	5'-2"	2	10'-4"	A = 3'-3"	
G13	"	1/2" ∅	5'-11"	2	11'-10"	A = 4'-0"	
G14	"	1/2" ∅	6'-6"	2	13'-0"	A = 4'-7"	
G15	"	1/2" ∅	7'-1"	2	14'-2"	A = 5'-2"	
L1	Cut-off Wall	1/2" ∅	21'-11"	6	131'-6"		
M1	Curb	1/2" ∅	14'-7"	8	116'-8"		
			2925'-9" of 3/4" ∅	⊙ 1.502	=	4394.48 #	
			3507'-3" of 1/2" ∅	⊙ .668	=	2342.84 #	
						6737.32 #	

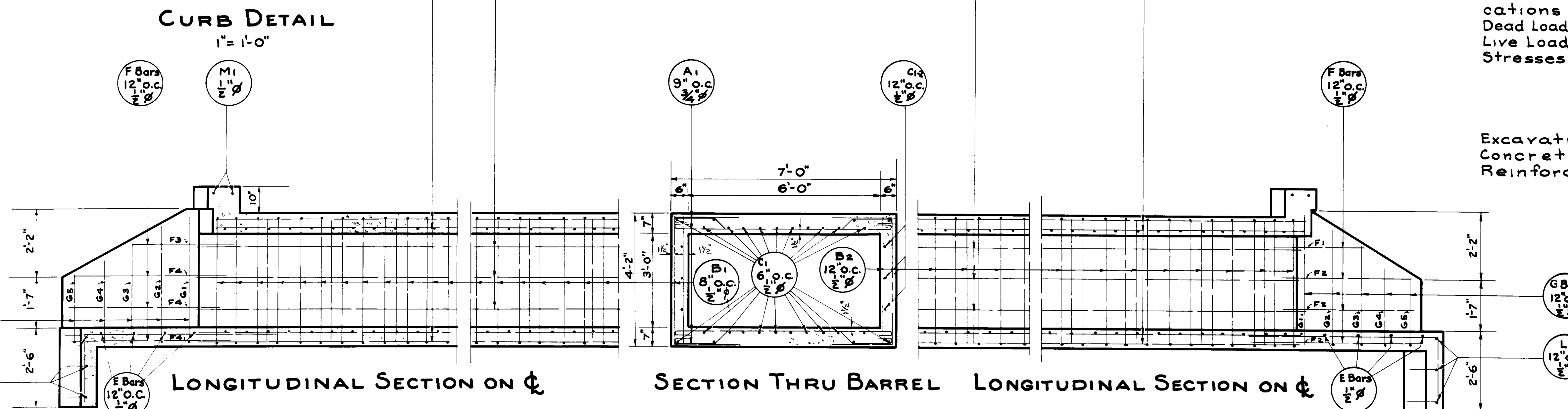
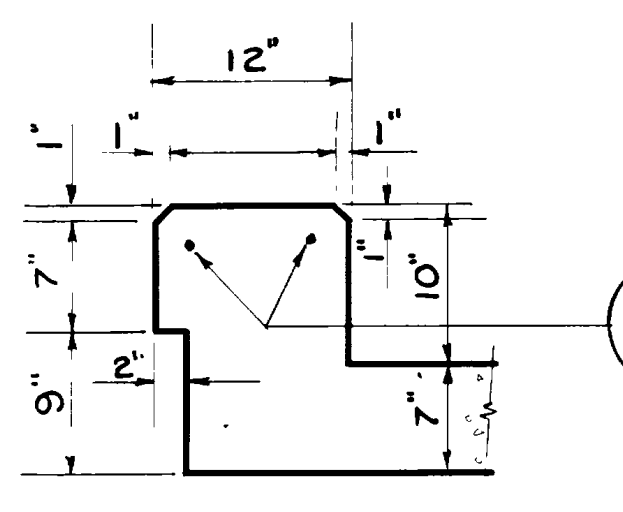
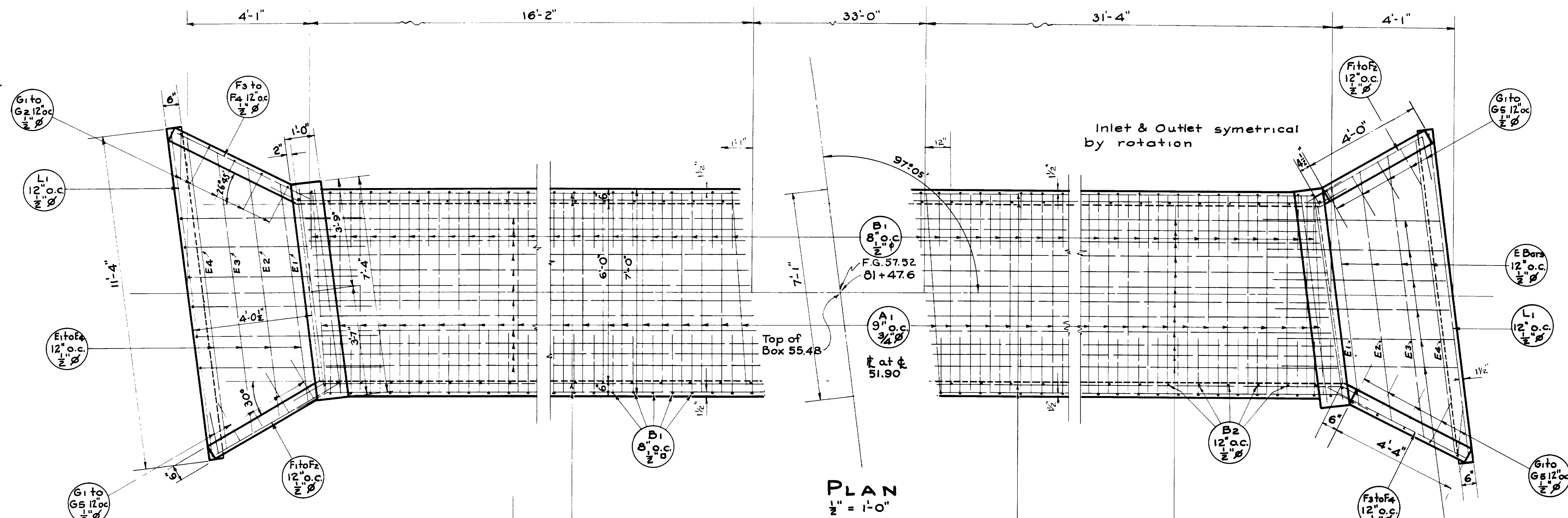


ROD NOTES

When hooks are called for the lengths given in the Total Length column include allowance for hooks as shown in above detail. Lengths given in sketches are center to center of bend points. Bar diagrams are not drawn to scale and those bars not detailed are either straight or field bent.

REVISIONS	
DATE	BY

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	228A			



GENERAL NOTES

Materials, Construction, and workmanship shall be in accordance with State Standard Specifications for Road and Bridge Construction, edition of 1939.

All exposed edges to be chamfered 1".

All bars to be $\frac{1}{2}$ " spaced 12" on centers unless otherwise shown.

DESIGN DATA

In accordance with A.A.S.H.O. Specifications for 1941

Dead Load: Gravel=140%cu.ft., Fill=120%cu.ft., Conc.=150%cu.ft.

Live Load: H-15 10% Impact.

Stresses: $f_s=20,000 \text{ psi}$, $f_c=1000 \text{ psi}$, $n=10$.

QUANTITIES

Excavation for Structure 80.0 cu. yd.

Concrete Class "A" 23.5 cu. yd.

Reinforcing Steel 4068.0 lbs.

NO.	DATE	BY	REVISIONS
1			

Sheet 1 of 2 Sheets

UTAH STATE ROAD COMMISSION
SALT LAKE CITY - UTAH
EZRA C. KNOWLTON, CHIEF ENGINEER

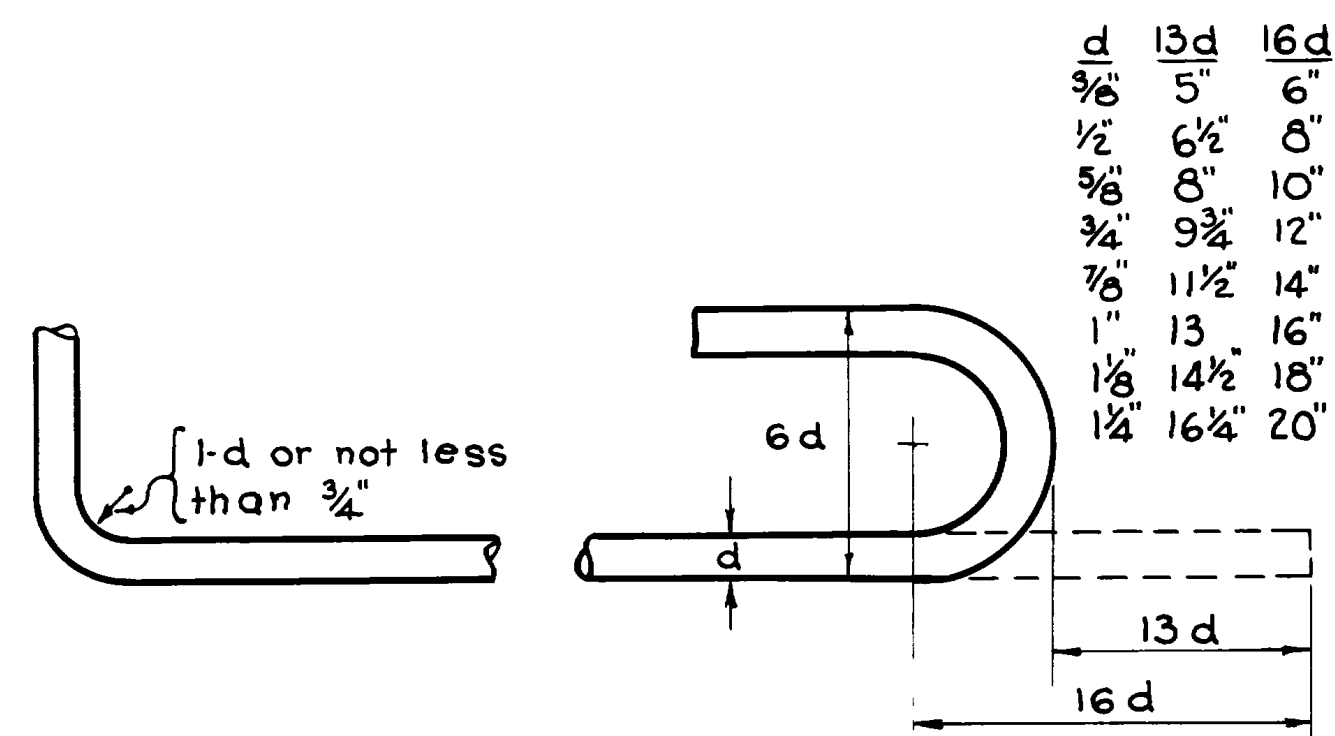
**6'-0"x3'-0" CULVERT EXT.
RT. & LT. 97°-05' XING**

A.W.F.P. 228 A(1) STA. 81+47.6
12th STREET, OGDEN, WEBER CO.

DESIGNED BY D.F.H. SCALE 1/2" = 1'-0"
DRAWN BY D.F.H. ISSUED Jan 20 1944
CHECKED BY APPROVED Paul H. Hoelzer
EXAMINED BY

MARK	LOCATION	SIZE	LENGTH	NO BARS	TOTAL LENGTH	SKETCH	O.T.O.
A1	Slab	3/4" ∅	8'-6"	128	1088'-0"		
B1	Walls	1/2" ∅	8'-7"	142	1218'-10"		
B2	Walls	1/2" ∅	3'-11"	98	383'-10"		
C1	Slab Lt.	1/2" ∅	15'-11"	28	445'-8"		
C1-1	Slab Rt.	1/2" ∅	31'-1"	28	870'-4"		
C2	Walls Lt.	1/2" ∅	17'-2"	6	103'-0"		
C1-2	Walls Rt.	1/2" ∅	32'-4"	6	194'-0"		
D1	Apron	1/2" ∅	8'-2"	12	98'-0"		
E1	Apron	1/2" ∅	7'-6"	2	15'-0"		
E2	"	1/2" ∅	8'-7"	2	17'-2"		
E3	"	1/2" ∅	9'-8"	2	19'-4"		
E4	"	1/2" ∅	10'-8"	2	21'-4"		
F1	Short WW	1/2" ∅	2'-11"	2	5'-10"		
F2	"	1/2" ∅	4'-7"	6	27'-6"		
F3	Long "	1/2" ∅	3'-0"	2	6'-0"		
F4	"	1/2" ∅	5'-1"	6	30'-6"		
G1	Wingwalls	1/2" ∅	5'-8"	4	22'-8"		
G2	"	1/2" ∅	5'-2"	4	20'-8"	A = 3'-8"	
G3	"	1/2" ∅	4'-8"	4	18'-8"	A = 3'-2"	
G4	"	1/2" ∅	4'-1"	4	16'-4"	A = 2'-7"	
G5	"	1/2" ∅	3'-7"	4	14'-4"	A = 2'-1"	
L1	Cut-off Wall	1/2" ∅	11'-1"	6	66'-6"		
M1	Curb	1/2" ∅	7'-1"	4	28'-4"		
					1088'-0" of 3/4" ∅ @ 1.502 =	1634.18	
					3643'-10" of 1/2" ∅ @ .668 =	2434.08	
						4068.26*	

NO.	DATE	BY
1	1-24-41	D.F.H.



d	13d	16d
3/8"	5"	6"
1/2"	6 1/2"	8"
5/8"	8"	10"
3/4"	9 3/4"	12"
7/8"	11 1/2"	14"
1"	13"	16"
1 1/8"	14 1/2"	18"
1 1/4"	16 1/4"	20"

ROD NOTES

When hooks are called for the lengths given in the Total Length column include allowance for hooks as shown in above detail.

Lengths given in sketches are center to center of bend points.

Bar diagrams are not drawn to scale and those bars not detailed are either straight or field bent.

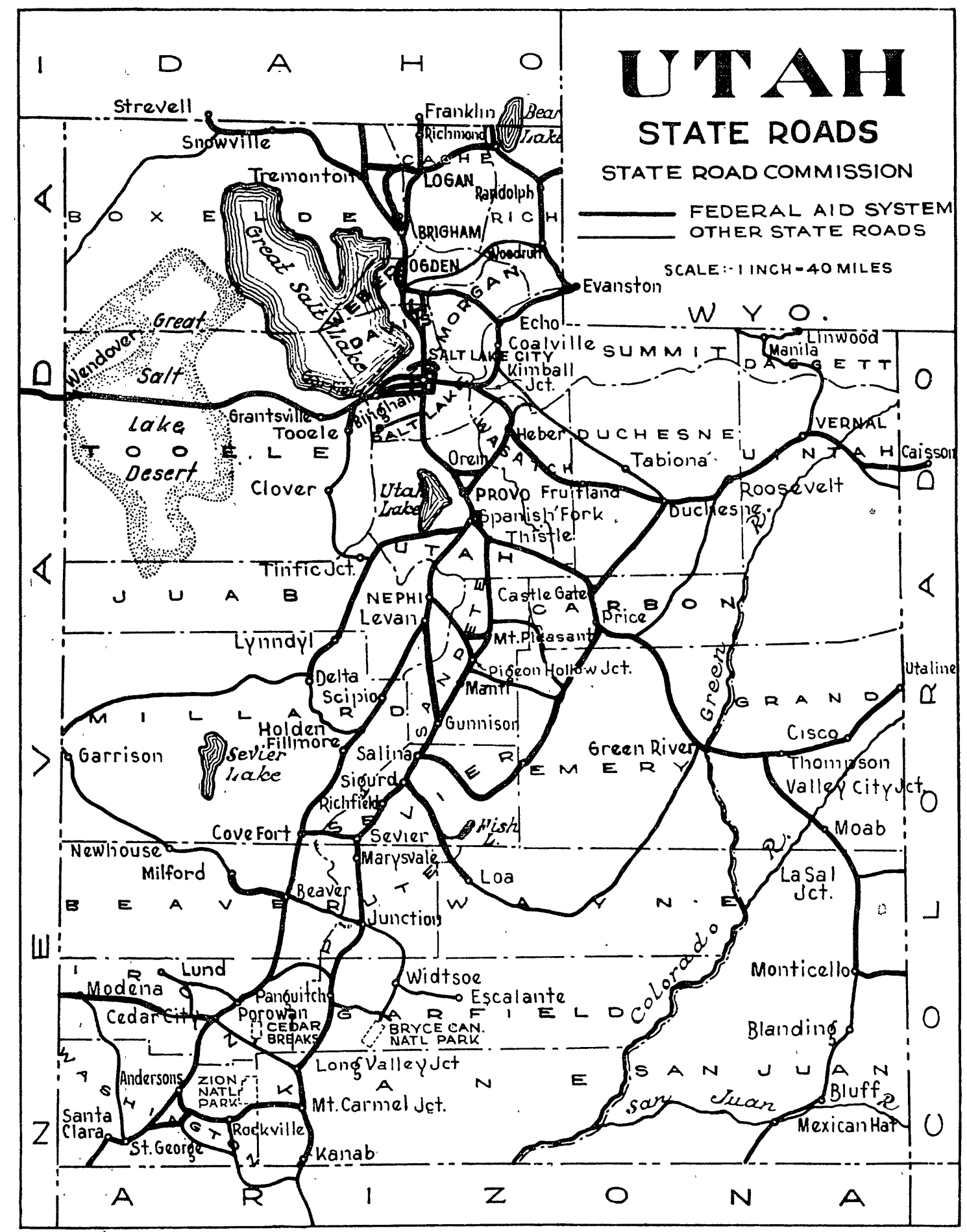
Sheet 2 of 2 Sheets

UTAH STATE ROAD COMMISSION
SALT LAKE CITY - UTAH
EZRA C. KNOWLTON CHIEF ENGINEER

**6'-0" x 3'-0" CULVERT EXT
RT. & LT. 97°05' X-ING**
AW F.A.P. 228 A(1) STA. 61+47.8
12 TH STREET, OGDEN, WEBER CO.

DESIGNED BY: D.F.H. SCALE: 1/2" = 1'-0"
DRAWN BY: D.F.H. ISSUED: May 29, 1941
CHECKED BY: APPROVED: Paul M. [Signature]
EXAMINED BY: [Signature] CHIEF ENGINEER

BR No. _____ DRG No. **E-748**



STATE OF UTAH STATE ROAD COMMISSION

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	227-A(1)	1942	1	8
"	"	DA-WR 9(1)	1942	1	8
"	"	228-A(1)	1942	1	7
"	"	DA-WR 8(1)	1942	1	15
"	"	DA-WR 7(1)	1942	1	11

INDEX TO SHEETS DA-WR No 7(1)

SHEET	DESCRIPTION	DRAWING NO.	STATION
1	TITLE SHEET		
2	TYPICAL SECTION		
3-4	PLAN AND PROFILE		
5-7	EXT. TO 17'-7" CONC. RIG-FR. BRIDGE	E-751 & V-82-21	77+21
8	HEAD GATES AND OUTLETS	V-224/L-1, L-22	VARIOUS
9	F.A.P. MARKERS	M-45	
9-A	DETAIL OF TRANSITION OF ROADWAY		10+56±
10	R.R. ADVANCE WARNING SIGN	M-154	
11	R.R. X-ING SIGNAL	GC-60	
1-10	X-SECTIONS		

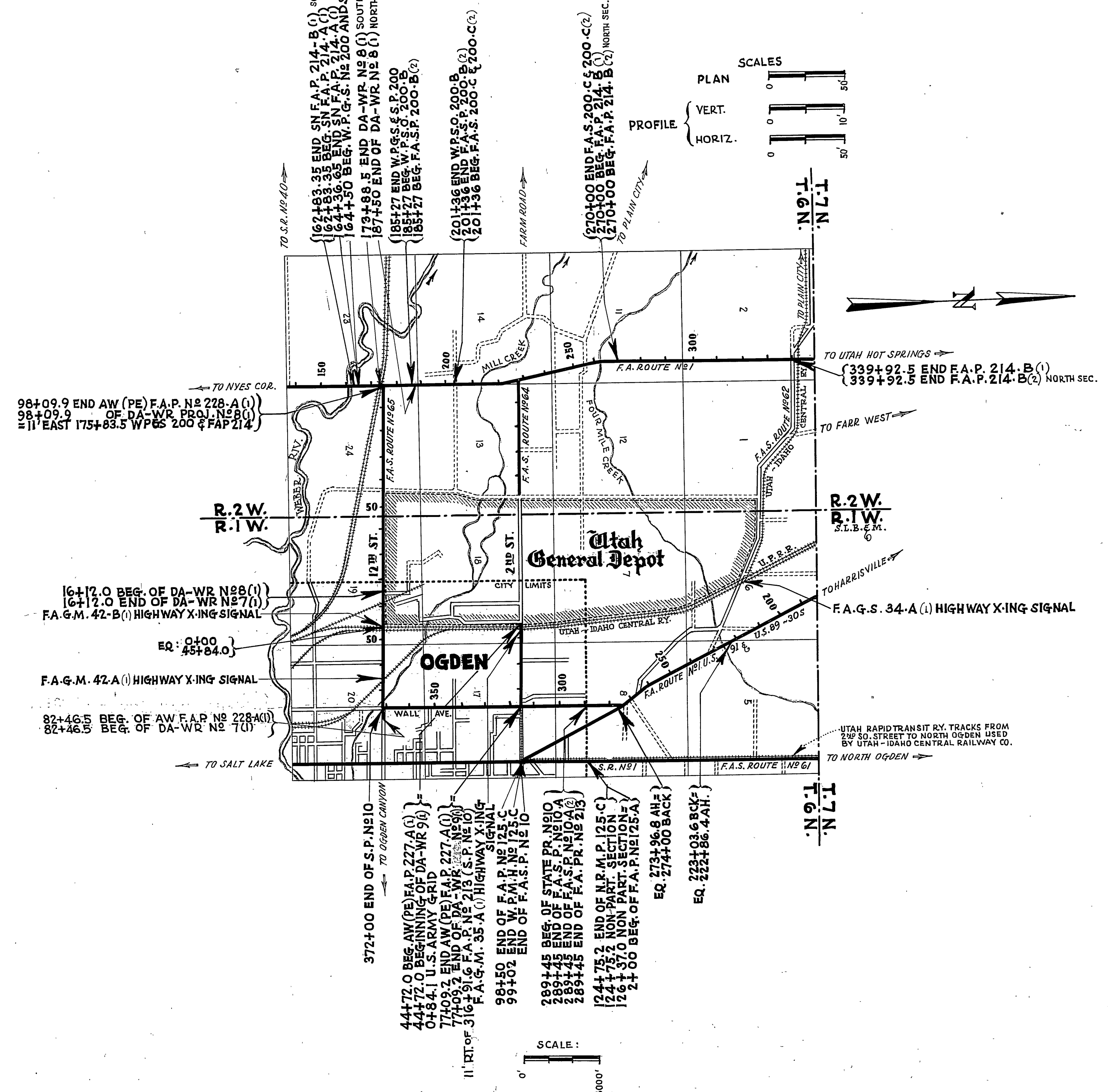
PLANS OF PROPOSED STATE ROAD

FEDERAL AID PROJECT

- AW(PE) F.A.P. No 227-A(1) ~ LENGTH 0.613 MILES
- DA-WR No 9(1) ~ LENGTH 0.613 MILES
- AW(PE) F.A.P. No 228-A(1) ~ LENGTH 2.551 MILES
- DA-WR No 7(1) ~ LENGTH 0.998 MILES
- DA-WR No 8(1) ~ LENGTH 1.810 MILES

INDEX TO SHEETS DA-WR No 8(1)

SHEET	DESCRIPTION	DRAWING NO.	STATION
1	TITLE SHEET		
2-2A	TYPICAL SECTION		
3-6	PLAN AND PROFILE		
7-8	4' X 2' X 60' CONC. BOX CULV. & DIVERSION	E-334-L1	55±
9-10	EXTENSION TO EXISTING CULVERT	E-748	81+47.6
11	2-WAY DIVERSION RT. TYPE A-36	V-205	94+92
12-13	EXTENSION TO EXISTING CULVERT	E-752	23+84.1
14	HEAD GATES AND OUTLETS	V-224-L1	VARIOUS
15A	F.A.P. MARKERS	M-45	
1-28	X-SECTIONS		



INDEX TO SHEETS DA-WR No 9(1)

SHEET NO.	DESCRIPTION	DRAWING NO.	STATION
1	TITLE SHEET		
2	TYPICAL SECTION		
3-4	PLAN AND PROFILE		
5	STD. HEAD GATES AND OUTLETS	V-224	VARIOUS
6	24" X 105' CULV. PIPE SYPHON	E-746-L1	61+85
6	24" X 108' " " "	" L2	72+32
7-A	F.A.P. MARKERS	M-45	
8	FLASH LT. SIGNAL & ADVANCE WARNING SIGN	UPC 3766	45+38.4 46+16.5 50+00
1-9	X-SECTIONS		

APPROVED JANUARY 1942

STATE ROAD COMMISSION OF UTAH

M. Anderson
DESIGN ENGINEER

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

RECOMMENDED FOR APPROVAL

Wm. W. ...
POST COMMANDER

RECOMMENDED FOR APPROVAL

CHIEF, WESTERN REGION
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

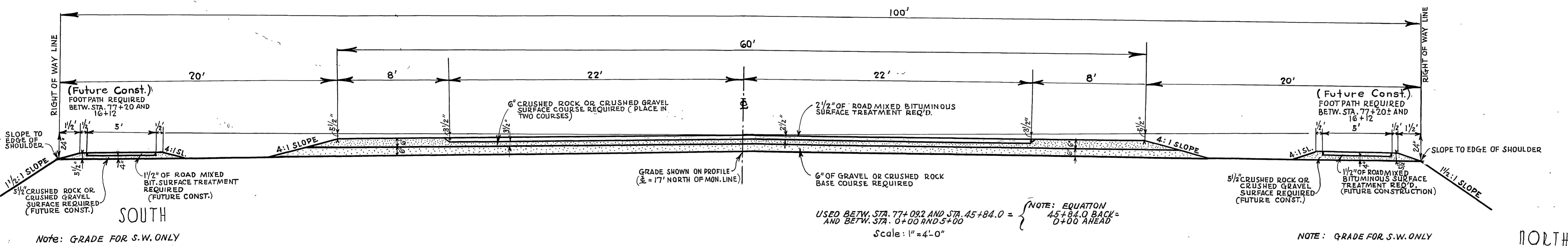
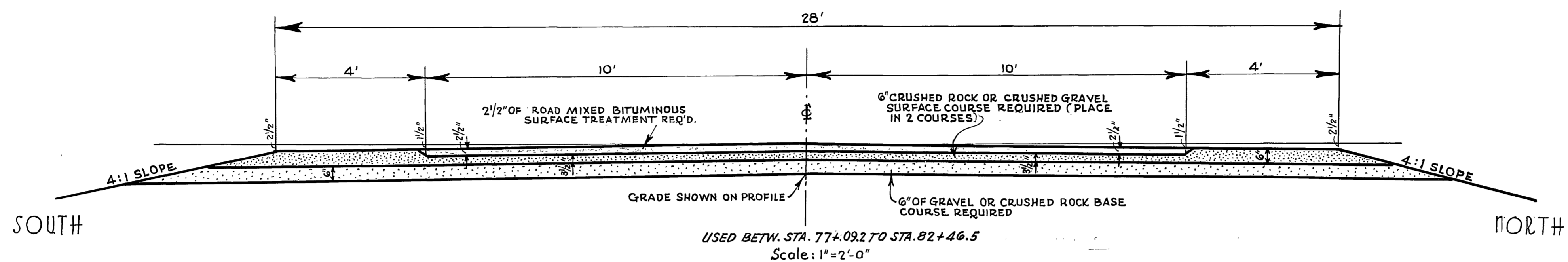
APPROVED

COMMANDING GENERAL

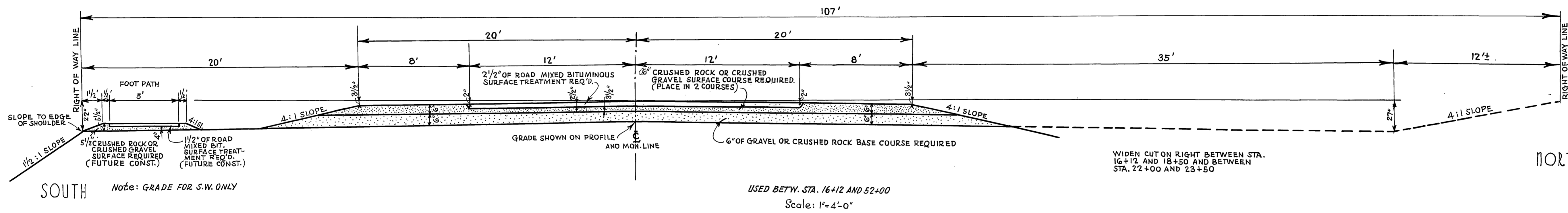
APPROVED

COMMISSIONER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

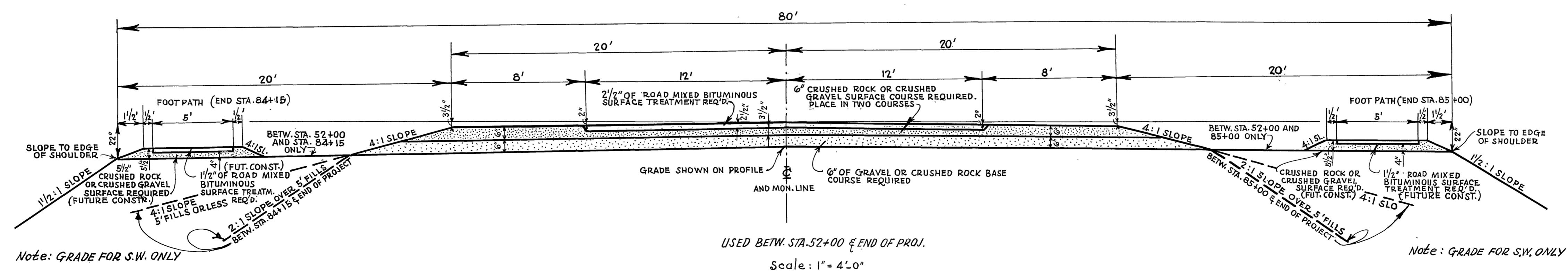
FED. ROAD DIST. NO.	STATE	F. A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	228-A(1)	1942	2	
"	"	DA-WR 7(1)	1942	2	11
"	"	DA-WR 8(1)	1942	2	15



Note: BETWEEN STA. 5+00 AND STA. 16+12 TRANSITION BETWEEN 60' AND 40' ROADWAY SEE SHEET N2B-A (DA-WR 7(1))



WIDEN CUT ON RIGHT BETWEEN STA. 16+12 AND 18+50 AND BETWEEN STA. 22+00 AND 23+50



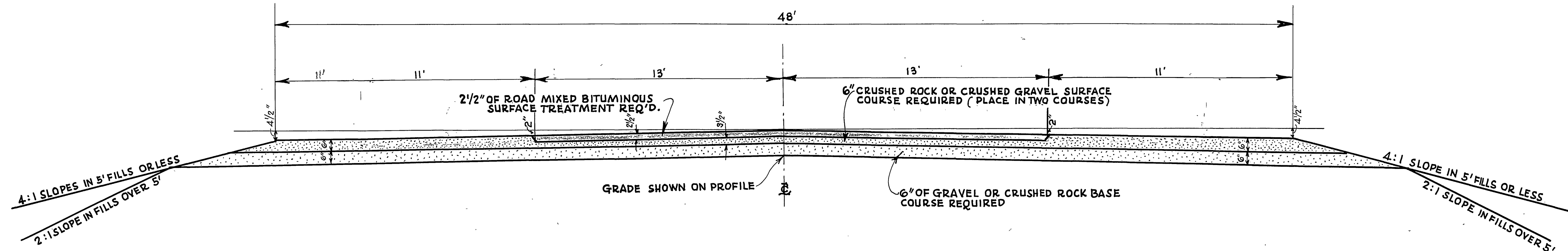
UTAH STATE ROAD COMMISSION
SALT LAKE CITY - UTAH

ROAD MIXED BITUMINOUS SURFACED ROADWAY

DESIGNED BY: _____ SCALE: AS SHOWN
 DRAWN BY: H.M.F. ISSUED: _____
 CHECKED BY: H.S.W. APPROVED: _____
 EXAMINED BY: _____
 BR. No. _____ DRG. No. _____

TYPICAL CROSS SECTION

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	228-A(1)	1942	2-A	15
"	"	DA-WR.8(1)	"	"-2-A	15



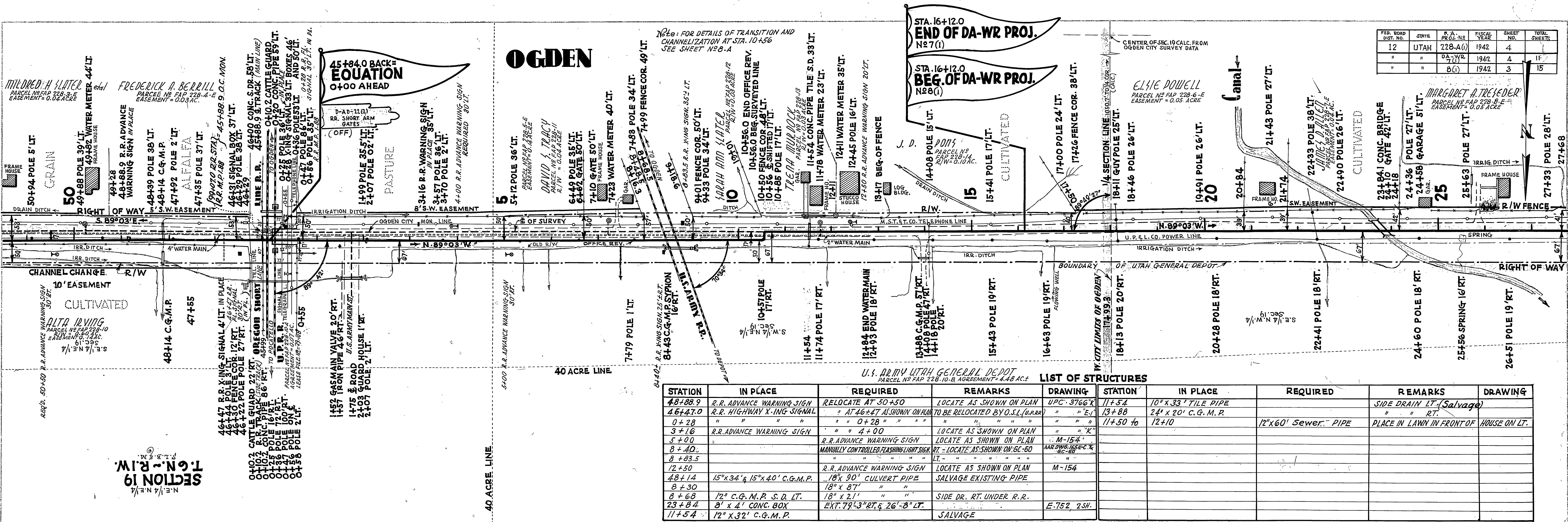
USED BETWEEN STA. 173+88.5 AND STA. 187+50
 (ON F. A. P. 214, NYE'S COR. - HOT SPRINGS ROAD)
 Scale: 1" = 3'-0"

UTAH STATE ROAD COMMISSION
 SALT LAKE CITY - UTAH
 W. L. ANDERSON DESIGN ENGINEER

— TYPE —

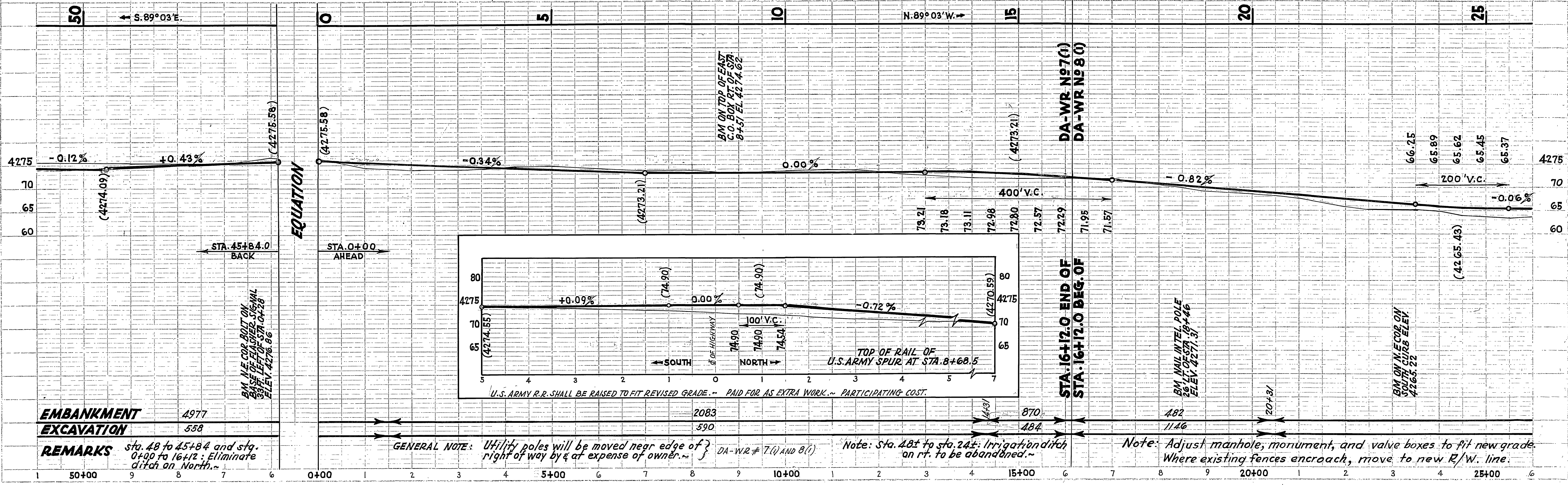
ROAD MIXED BIT.
 SURFACED ROADWAY

FED. ROAD DIST. NO.	STATE	P.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	728-A(1)	1942	4	15
"	"	8(1)	1942	4	"
"	"	"	"	3	"



LIST OF STRUCTURES

STATION	IN PLACE	REQUIRED	REMARKS	DRAWING	STATION	IN PLACE	REQUIRED	REMARKS	DRAWING
48+88.9	R.R. ADVANCE WARNING SIGN	RELOCATE AT 50+50	LOCATE AS SHOWN ON PLAN TO BE RELOCATED BY O.S.L. (U.R.R.R.)	UPC-3766'K	11+54	10" x 33" TILE PIPE		SIDE DRAIN LT. (Salvage)	
46+47.0	R.R. HIGHWAY X-ING SIGNAL	" AT 46+47 AS SHOWN ON PLAN	"	" " "E"	13+88	24" x 20" C.G.M.P.		" " RT.	
0+28	"	" " 0+28 " " " "	"	" " "K"	11+50 to	12+10	12" x 60" Sewer. PIPE	PLACE IN LAWN IN FRONT OF HOUSE ON LT.	
3+16	R.R. ADVANCE WARNING SIGN	" " 4+00	LOCATE AS SHOWN ON PLAN	" " " "					
5+00	R.R. ADVANCE WARNING SIGN	LOCATE AS SHOWN ON PLAN		M-154					
8+40	MANUALLY CONTROLLED FLASHING LIGHT SIGN	RT - LOCATE AS SHOWN ON 6C-60		AARDING 154C & 6C-60					
8+83.5	"	LT - " " "		" " " "					
12+50	R.R. ADVANCE WARNING SIGN	LOCATE AS SHOWN ON PLAN		M-154					
48+14	15" x 34" & 15" x 40" C.G.M.P.	18" x 90" CULVERT PIPE	SALVAGE EXISTING PIPE						
8+30	"	18" x 87" " "	"						
8+68	12" C.G.M.P. S.D. LT.	18" x 21" " "	SIDE DR. RT. UNDER R.R.						
23+84	8' x 4' CONC. BOX	EXT. 78'-3" RT. & 26'-8" LT.		E-752, 2SH.					
11+54	12" x 32" C.G.M.P.	SALVAGE							



EMBANKMENT	4977
EXCAVATION	558

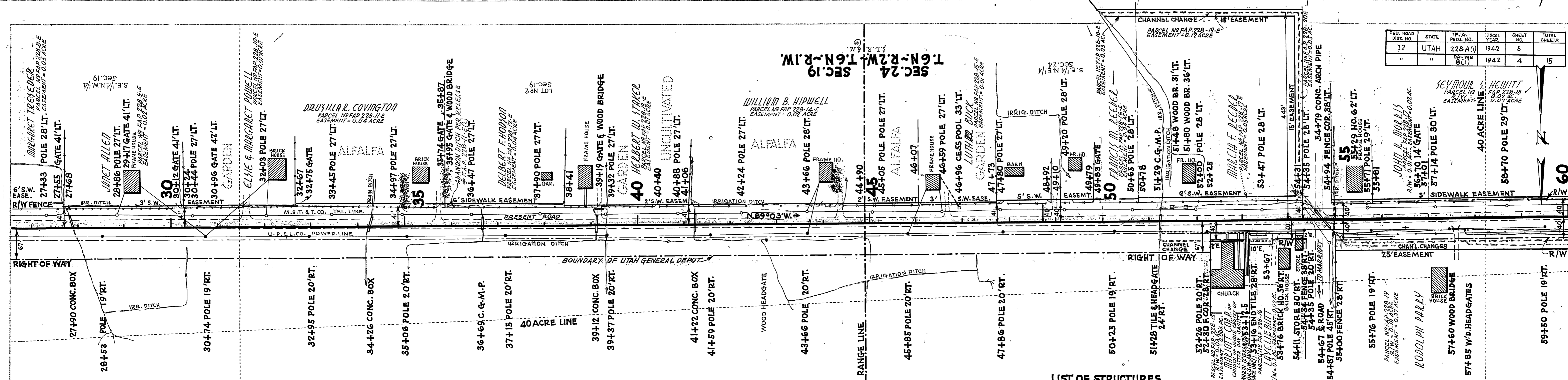
REMARKS sta. 48 to 45+84.0 and sta. 0+00 to 16+12.0: Eliminate ditch on North.

GENERAL NOTE: Utility poles will be moved near edge of right of way by & at expense of owner. DA-WR # 7(1) AND 8(1)

Note: Sta. 48 to sta. 24: Irrigation ditch on rt. to be abandoned.

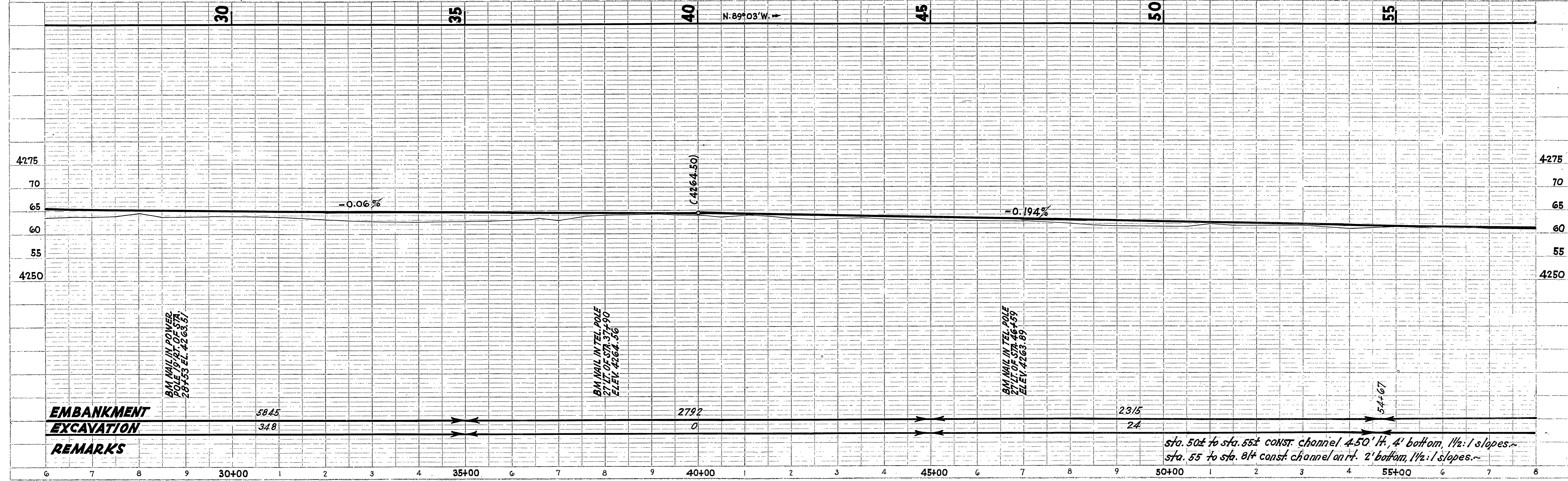
Note: Adjust manholes, monument, and valve boxes to fit new grade. Where existing fences encroach, move to new R/W. line.

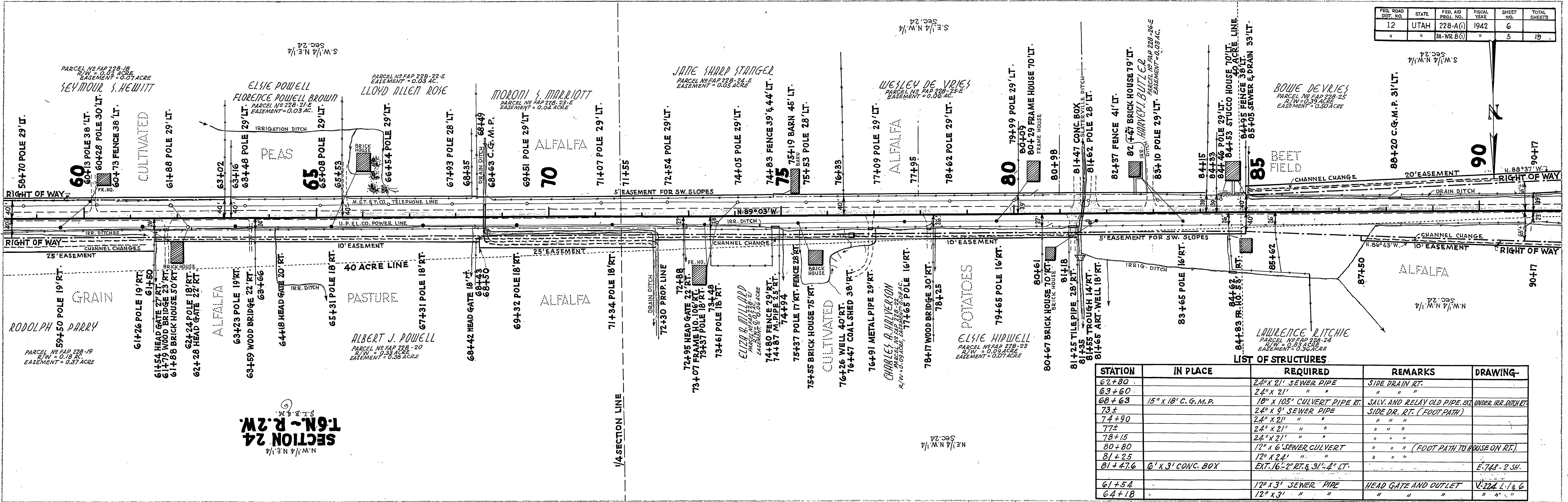
FED. ROAD DIST. NO.	STATE	IF. A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	228-A(1)	1942	5	15
"	"	DA. YR 8(1)	1942	4	"



U.S. ARMY UTAH GENERAL DEPOT
 PARCEL NO. FAP 228-10-B
 AGREEMENT = 4.13 AC.

STATION	IN PLACE	REQUIRED	REMARKS	DRAWING	STATION	IN PLACE	REQUIRED	REMARKS	DRAWING
VARIOUS		24" x 20' SEWER PIPE	SIDE DR. - PLACE AS DIRECTED						
34+26	2' x 36' CONC. BOX	24" x 90' CULVERT PIPE	ABANDON EXISTING BOX						
36+69	15" x 28" C.G.M.P.		SALVAGE AND RELAY						
51+29	15" x 28"	18" x 84' CULVERT PIPE	" " " " OLD PIPE						
51+29 TO 52+17	12" TILE	12" x 189' SEWER "	SIDE DRAIN RT. FRONT OF CHURCH						
56+50	57+50	24" x 99' SEWER PIPE	" " " " HOUSE						
55±		4' x 2' x 80' CONC. BOX CULVERT		SC-234-L/L					
55±		3-WAY DIVERSION RT.		Y-320					
57+82		12" x 3' SEWER PIPE	HEADGATE	Y-224-L/L	56				
39+12	24" x 37' CONC. BOX		ABANDON						
41+22	24" x 34' "								
54+79	4' x 2' x 60' CONC. ARCH PIPE		SALVAGE						
27+90	24" x 50' " BOX		ABANDON						

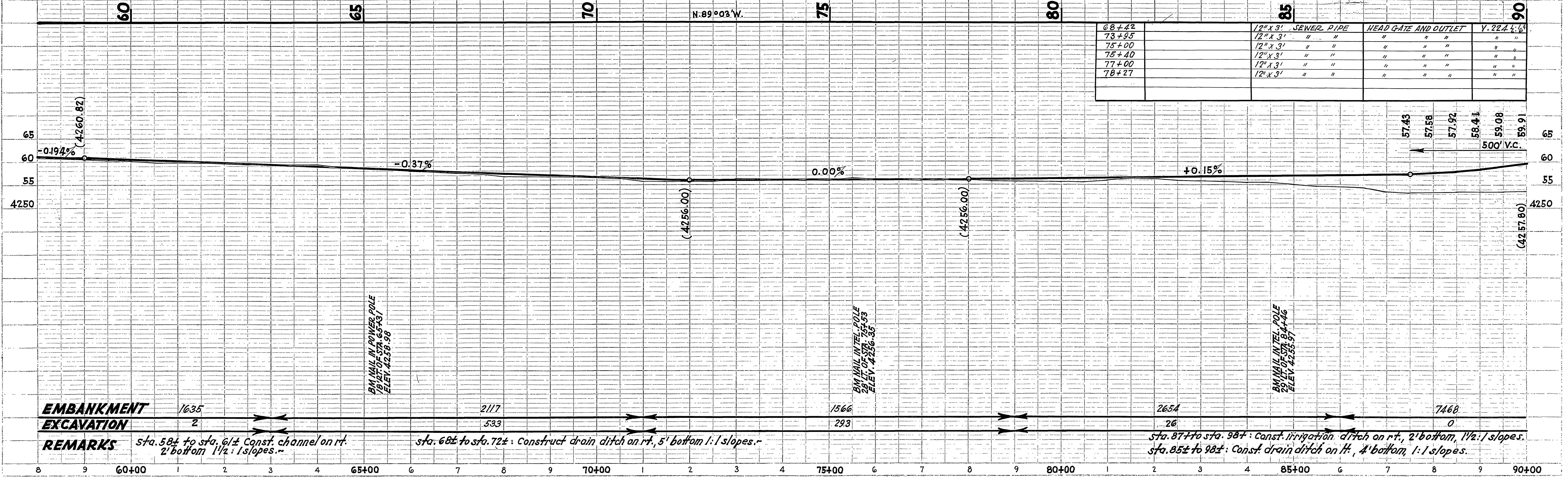




SECTION 24
T6N-R2W
S. 1/4 N. 1/4 N.W. 1/4

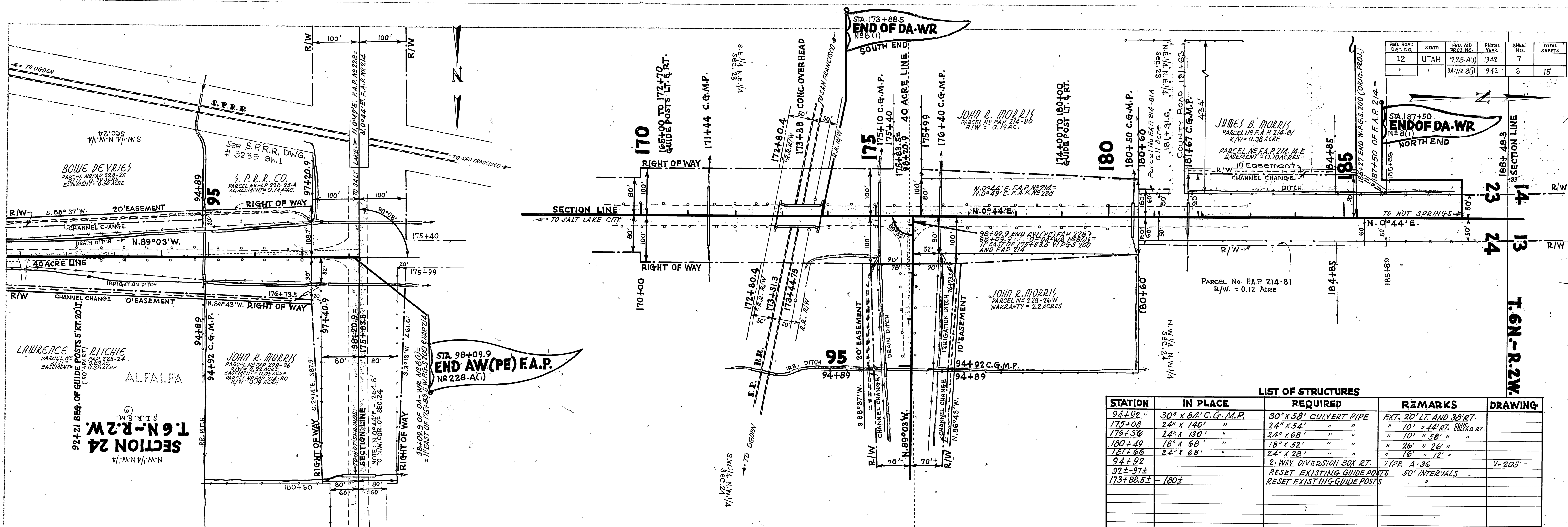
LIST OF STRUCTURES

STATION	IN PLACE	REQUIRED	REMARKS	DRAWING
62+80		24" x 21" SEWER PIPE	SIDE DRAIN RT.	
63+60		24" x 21" "	" " "	
68+63	15" x 18" C.G.M.P.	18" x 105' CULVERT PIPE RT.	SALV. AND RELAY OLD PIPE, EXT. UNDER IRR. DITCH RT.	
73±		24" x 9' SEWER PIPE	SIDE DR. RT. (FOOT PATH)	
74+90		24" x 21" "	" " "	
77±		24" x 21" "	" " "	
78+15		24" x 21" "	" " "	
80+80		12" x 6' SEWER CULVERT	" " (FOOT PATH TO HOUSE ON RT.)	
81+25		12" x 24" "	" " "	
81+47.6	6' x 3' CONC. BOX	EXT. 16'-2" RT. & 31'-4" LT.		E-748-2 SH.
61+54		12" x 3' SEWER PIPE	HEAD GATE AND OUTLET	V-724 L. 1 & 6
64+18		12" x 3' "	" " "	" " "
68+42		12" x 3' SEWER PIPE	HEAD GATE AND OUTLET	Y. 224 L. 6
73+95		12" x 3' "	" " "	" " "
75+00		12" x 3' "	" " "	" " "
75+40		12" x 3' "	" " "	" " "
77+00		12" x 3' "	" " "	" " "
78+27		12" x 3' "	" " "	" " "

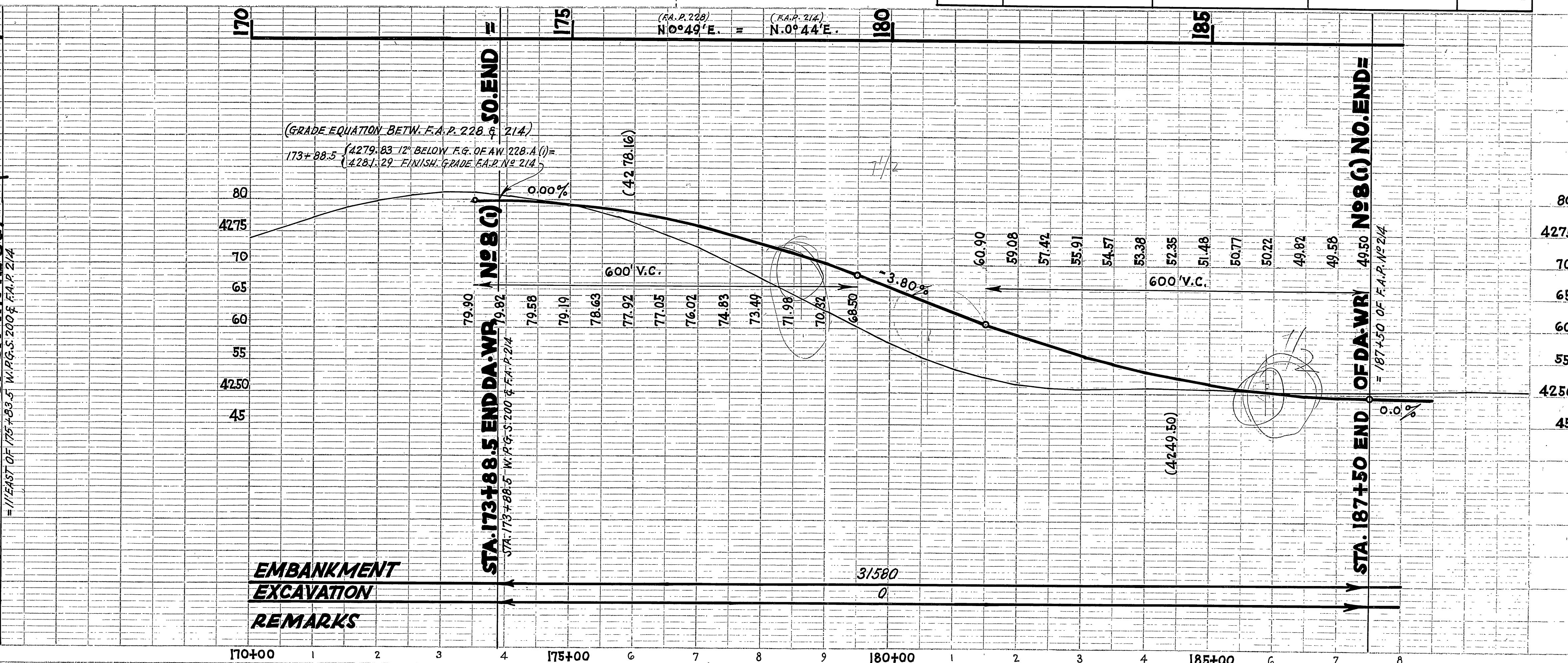
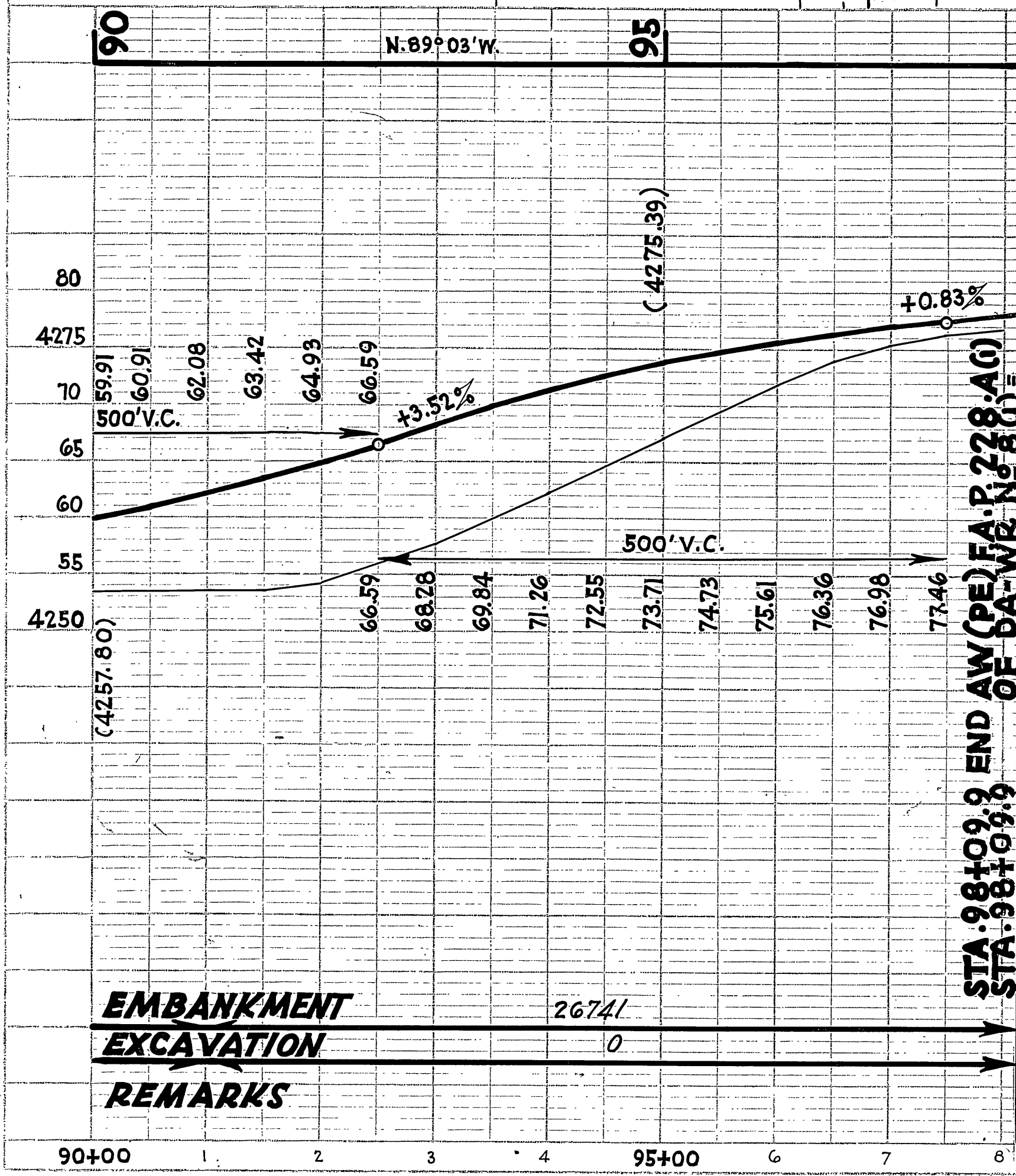


EMBANKMENT 1635
EXCAVATION 2
REMARKS sta. 58± to sta. 61± Const. channel on rt. 2' bottom 1 1/2: 1 slopes.
 sta. 68± to sta. 72±: Construct drain ditch on rt., 5' bottom 1: 1 slopes.
 sta. 87± to sta. 98±: Const. irrigation ditch on rt., 2' bottom, 1 1/2: 1 slopes.
 sta. 85± to 98±: Const. drain ditch on lt., 4' bottom, 1: 1 slopes.

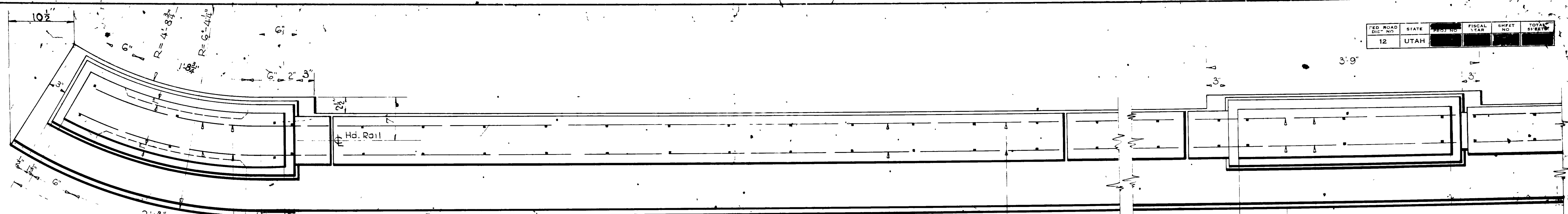
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	228-A(1)	1942	7	15
"	"	DA-WR 8(1)	1942	6	15



STATION	IN PLACE	REQUIRED	REMARKS	DRAWING
94+92	30" x 84' C.G.M.P.	30" x 58" CULVERT PIPE	EXT. 20' LT. AND 38' RT.	
175+08	24" x 140' "	24" x 54' "	" 10' " 44' RT. CONC. RT.	
176+36	24" x 130' "	24" x 68' "	" 10' " 58' "	
180+49	18" x 68' "	18" x 52' "	" 26' " 26' "	
181+66	24" x 68' "	24" x 28' "	" 16' " 12' "	
94+92		2-WAY DIVERSION BOX RT.	TYPE A-36	V-205
92±-97±		RESET EXISTING GUIDE POSTS	50' INTERVALS	
173+88.5±		RESET EXISTING GUIDE POSTS	"	

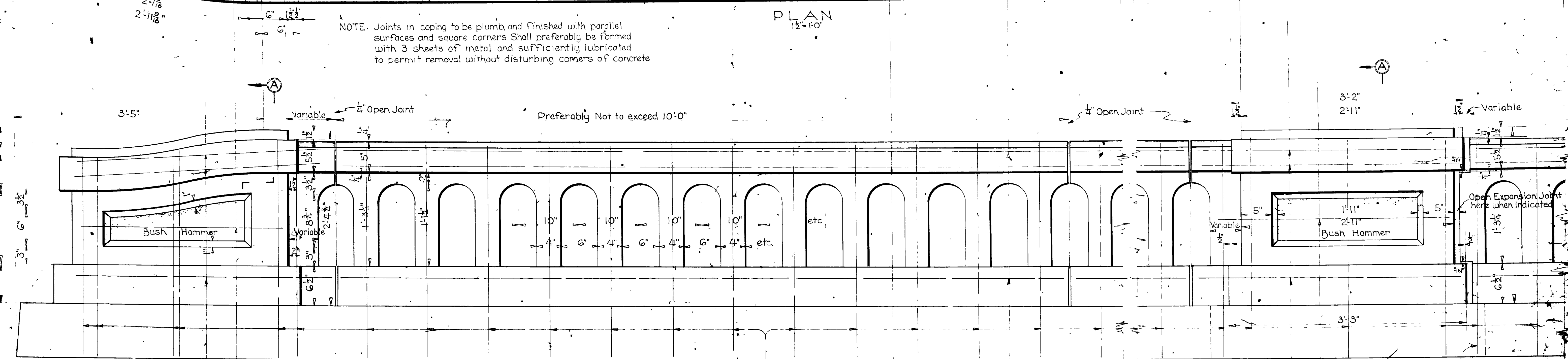


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH				

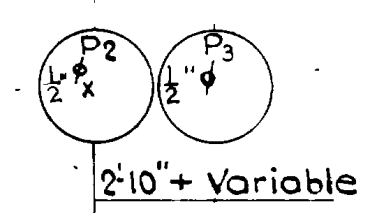


PLAN
1/2" = 1'-0"

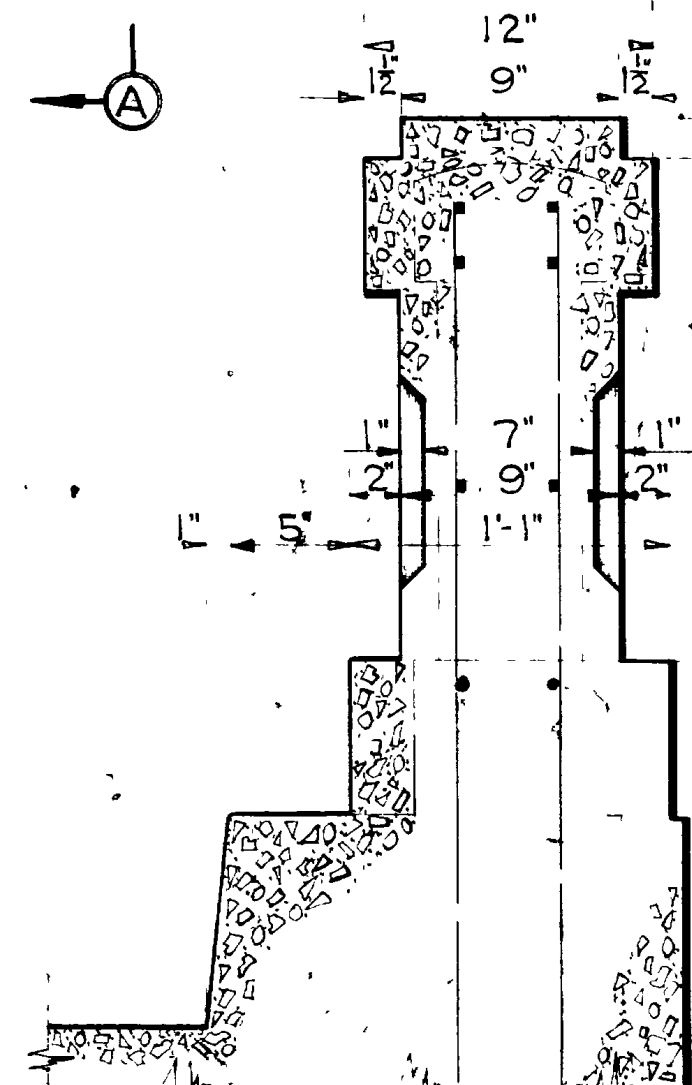
NOTE: Joints in coping to be plumb, and finished with parallel surfaces and square corners. Shall preferably be formed with 3 sheets of metal and sufficiently lubricated to permit removal without disturbing corners of concrete.



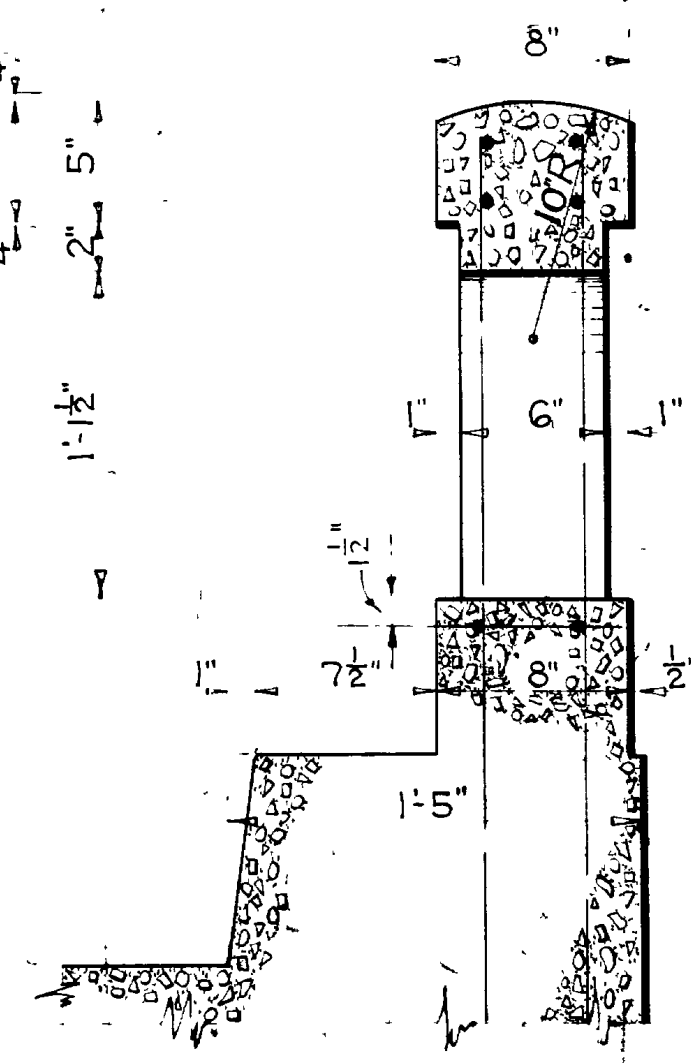
ELEVATION
1/2" = 1'-0"



2'-10" + Variable



SECTION AA
CROSS SECTION OF END POST
AND INTERMEDIATE POST
1/2" = 1'-0"



CROSS SECTION THRU RAILING
1/2" = 1'-0"

GENERAL NOTES
 All concrete to be class "A" and to be kept moist 14 days after pouring. All corners to be square and sharp except as shown. The general outline is to be finished so as to be entirely free from wavy surfaces and lines.
 All reinforcing steel to be #2 and #3 deformed bars complying with A.A.S.H.O. specifications and are to be secured against displacement by wiring at all intersections with #10 Gage Iron Wire.

For Materials and Workmanship see State Standard Specifications for Road and Bridge Construction, 1939 edition.

CONCRETE QUANTITIES
(Not Including Curb)

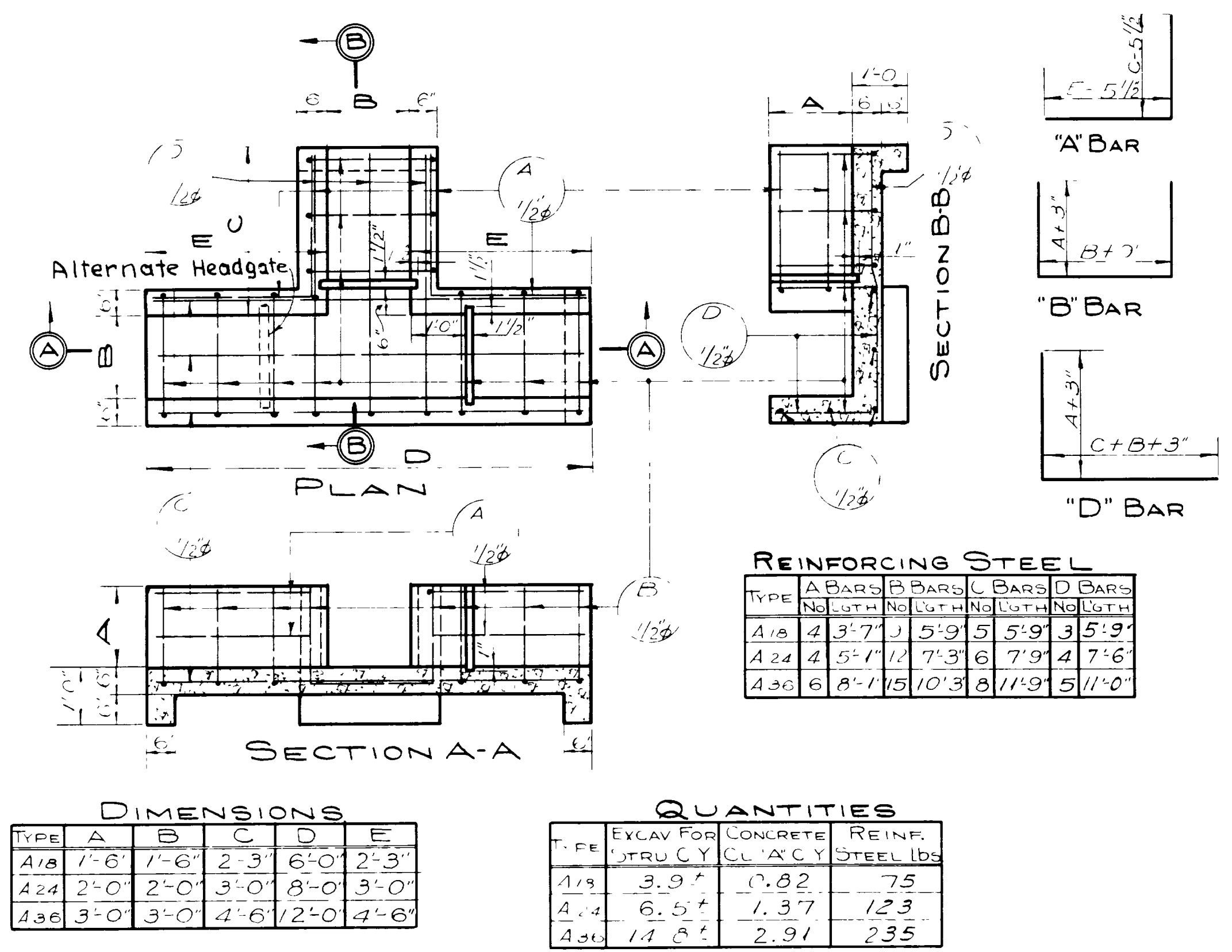
One end post	6.39 Cu. Ft.
One intermediate post	6.32 Cu. Ft.
Handrail-per foot	.90 Cu. Ft.

If expansion joint is used cut this bar to clear joint

UTAH STATE ROAD COMMISSION
 SALT LAKE CITY, UTAH
 H. S. KIRBY - CHIEF ENGINEER

STANDARD CONCRETE HANDRAIL

DESIGNED BY: C.G.S. SCALE: 1/2" = 1'-0"
 DRAWN BY: C.G.S. REVISION: [Signature]
 CHECKED BY: [Signature]
 BRIDGE NO. [] DRG. NO. []



DIMENSIONS

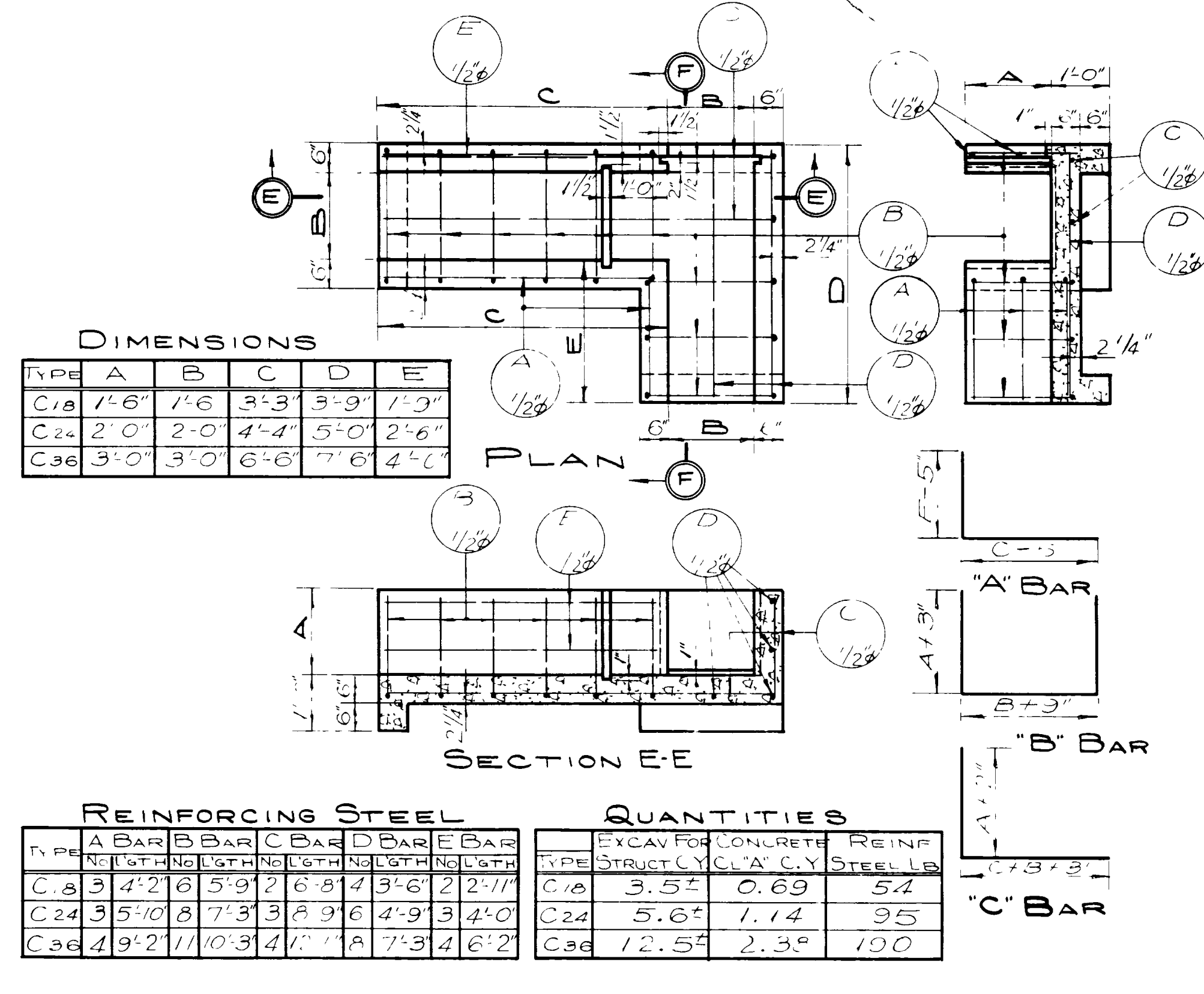
TYPE	A	B	C	D	E
A18	1'-6"	1'-6"	2'-3"	6'-0"	2'-3"
A24	2'-0"	2'-0"	3'-0"	8'-0"	3'-0"
A36	3'-0"	3'-0"	4'-6"	12'-0"	4'-6"

QUANTITIES

TYPE	EXCAV FOR STRUCT. CY	CONCRETE CL. A' C.Y.	REINF. STEEL LBS.
A18	3.9±	0.82	75
A24	6.5±	1.37	123
A36	14.6±	2.91	235

REINFORCING STEEL

TYPE	A BARS	B BARS	C BARS	D BARS
	NO.	LGTH.	NO.	LGTH.
A18	4	3'-7"	5	5'-9"
A24	4	5'-1"	6	7'-9"
A36	6	8'-1"	8	11'-9"



DIMENSIONS

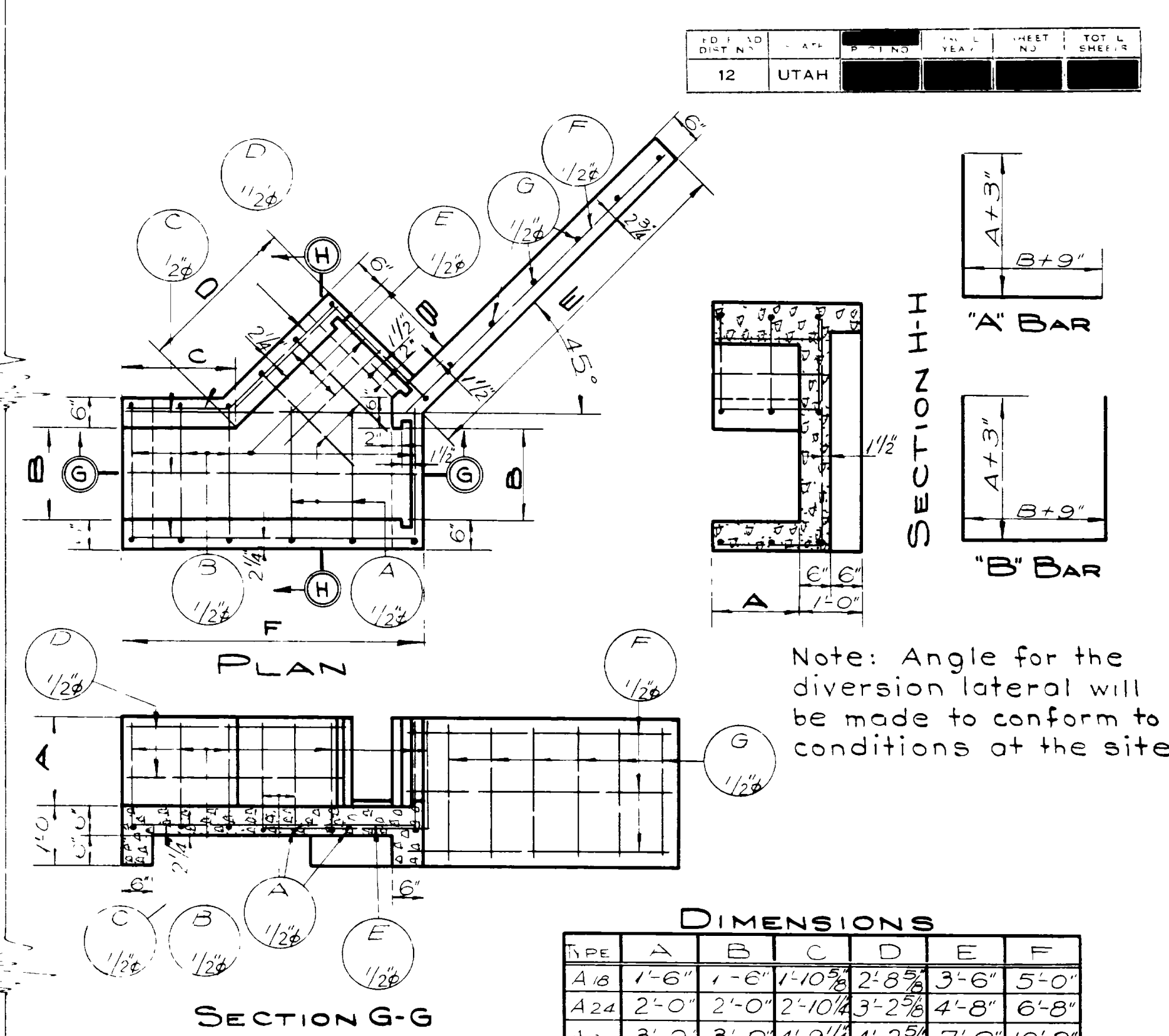
TYPE	A	B	C	D	E
C18	1'-6"	1'-6"	3'-3"	3'-9"	1'-9"
C24	2'-0"	2'-0"	4'-4"	5'-0"	2'-6"
C36	3'-0"	3'-0"	6'-6"	7'-6"	4'-6"

REINFORCING STEEL

TYPE	A BARS	B BARS	C BARS	D BARS	E BARS
	NO.	LGTH.	NO.	LGTH.	NO.
C18	3	4'-2"	6	5'-9"	2
C24	3	5'-10"	8	7'-3"	3
C36	4	9'-2"	11	10'-3"	4

QUANTITIES

TYPE	EXCAV FOR STRUCT. CY	CONCRETE CL. A' C.Y.	REINF. STEEL LB.
C18	3.5±	0.69	54
C24	5.6±	1.14	95
C36	12.5±	2.35	190



REINFORCING STEEL

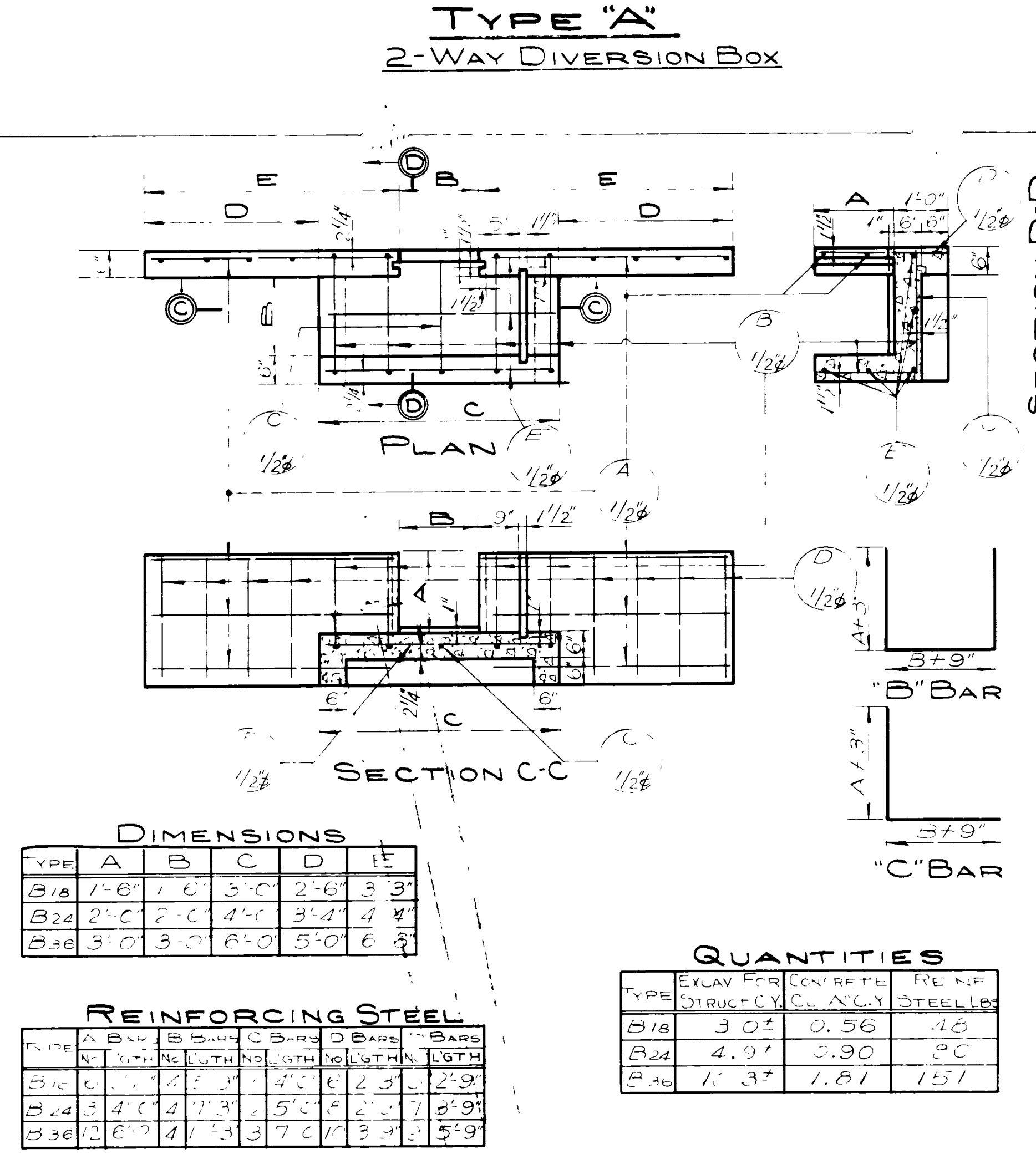
TYPE	A BARS	B BARS	C BARS	D BARS	E BARS	F BARS	G BARS
	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.
E18	4	4'-3"	5	5'-9"	5	4'-9"	2
E24	7	5'-0"	5	7'-3"	7	6'-5"	3
E36	9	7'-0"	7	10'-3"	9	9'-9"	4

DIMENSIONS

TYPE	A	B	C	D	E	F
A18	1'-6"	1'-6"	1'-0"	2'-8"	3'-6"	5'-0"
A24	2'-0"	2'-0"	2'-10"	3'-2"	4'-8"	6'-8"
A36	3'-0"	3'-0"	4'-9"	4'-2"	7'-0"	10'-0"

Note: Angle for the diversion lateral will be made to conform to conditions of the site.

REVISIONS
BY DATE
1. 11/28/54
2. 12/15/54
3. 1/10/55



DIMENSIONS

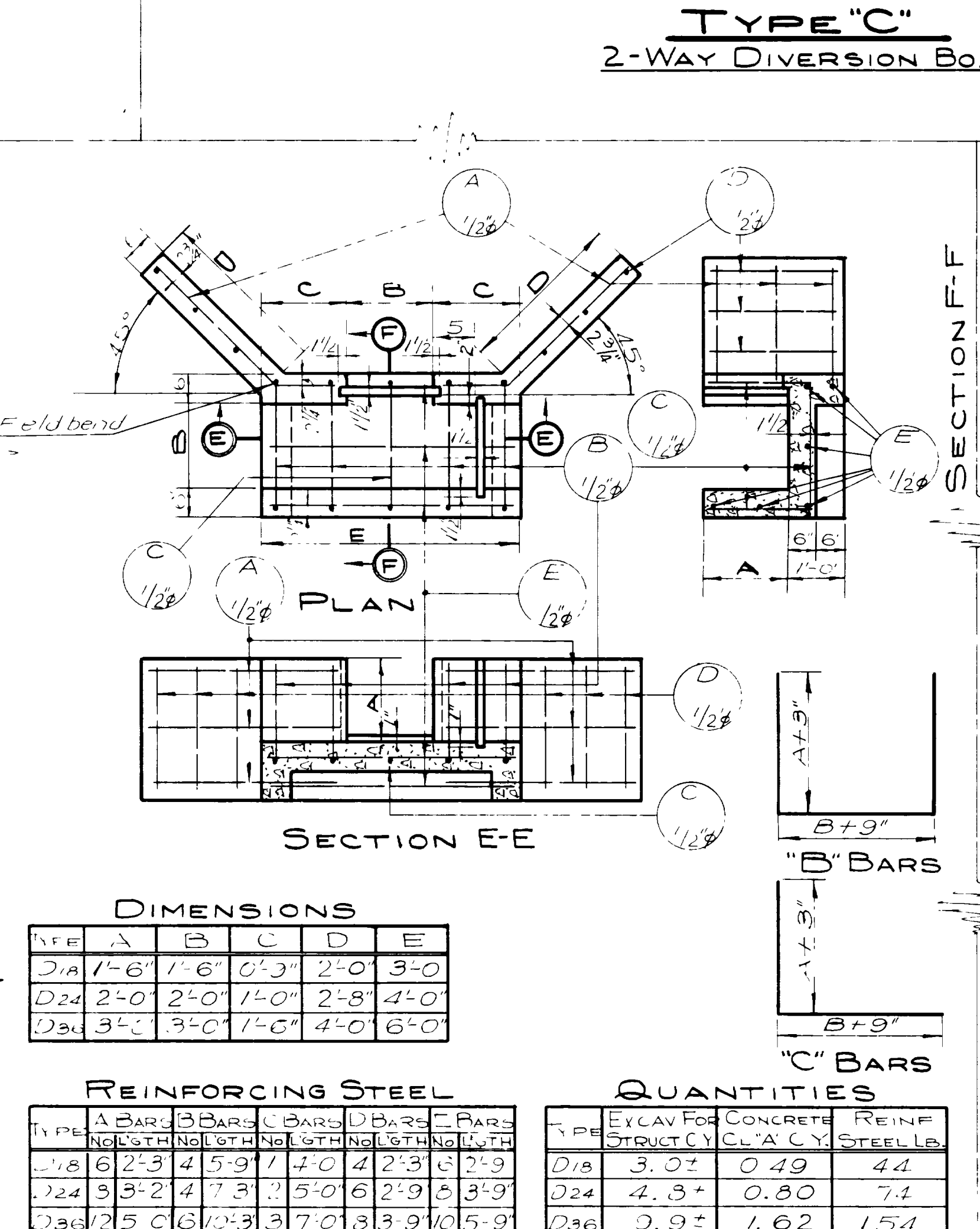
TYPE	A	B	C	D	E
B18	1'-6"	1'-6"	3'-0"	2'-6"	3'-3"
B24	2'-0"	2'-0"	4'-0"	3'-4"	4'-4"
B36	3'-0"	3'-0"	6'-0"	5'-0"	6'-3"

QUANTITIES

TYPE	EXCAV FOR STRUCT. CY	CONCRETE CL. A' C.Y.	REINF. STEEL LBS.
B18	3.0±	0.56	48
B24	4.9±	0.90	90
B36	11.3±	1.81	151

REINFORCING STEEL

TYPE	A BARS	B BARS	C BARS	D BARS	E BARS
	NO.	LGTH.	NO.	LGTH.	NO.
B18	2	4'-0"	2	4'-0"	2
B24	3	4'-0"	4	5'-0"	3
B36	4	6'-0"	5	7'-0"	4



DIMENSIONS

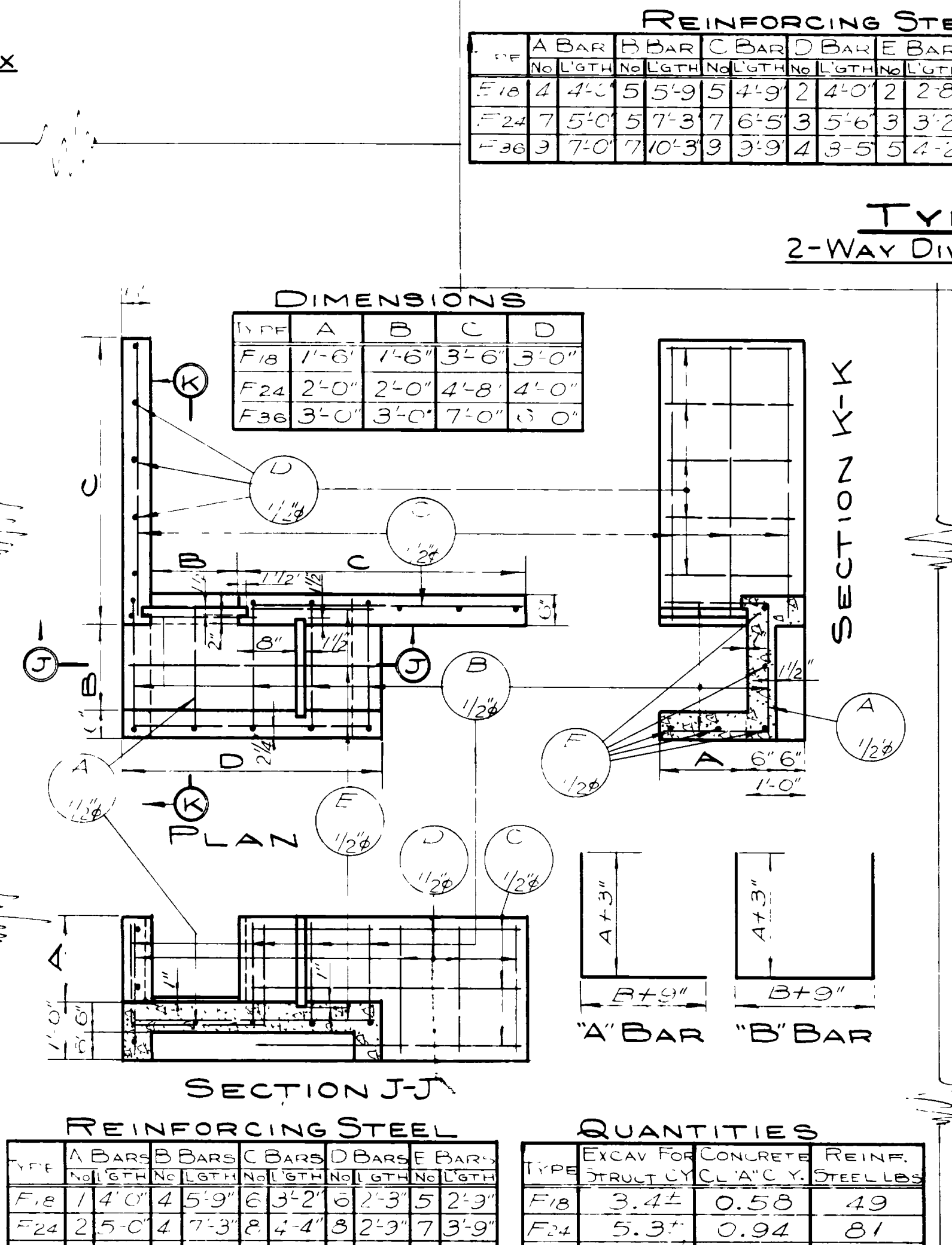
TYPE	A	B	C	D	E
D18	1'-6"	1'-6"	0'-3"	2'-0"	3'-0"
D24	2'-0"	2'-0"	1'-0"	2'-8"	4'-0"
D36	3'-0"	3'-0"	1'-6"	4'-0"	6'-0"

REINFORCING STEEL

TYPE	A BARS	B BARS	C BARS	D BARS	E BARS
	NO.	LGTH.	NO.	LGTH.	NO.
D18	6	2'-3"	4	5'-9"	1
D24	8	3'-2"	7	3'-0"	2
D36	12	5'-0"	10	3'-9"	3

QUANTITIES

TYPE	EXCAV FOR STRUCT. CY	CONCRETE CL. A' C.Y.	REINF. STEEL LB.
D18	3.0±	0.49	44
D24	4.3±	0.80	74
D36	9.9±	1.62	154



DIMENSIONS

TYPE	A	B	C	D
F18	1'-6"	1'-6"	3'-6"	3'-0"
F24	2'-0"	2'-0"	4'-8"	4'-0"
F36	3'-0"	3'-0"	7'-0"	6'-0"

REINFORCING STEEL

TYPE	A BARS	B BARS	C BARS	D BARS	E BARS
	NO.	LGTH.	NO.	LGTH.	NO.
F18	1	4'-0"	4	5'-9"	6
F24	2	5'-0"	7	3'-2"	6
F36	3	7'-0"	10	3'-7"	8

QUANTITIES

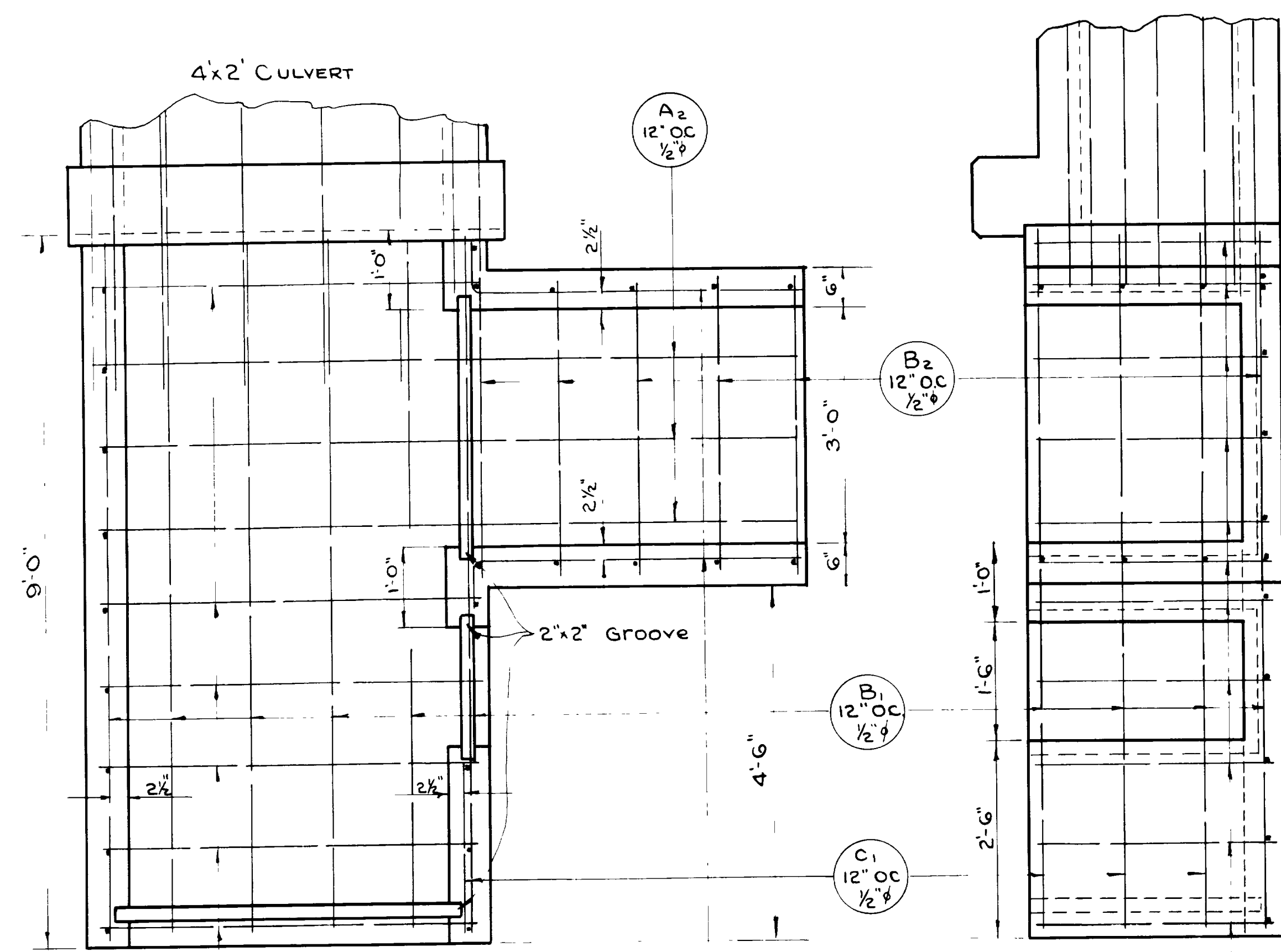
TYPE	EXCAV FOR STRUCT. CY	CONCRETE CL. A' C.Y.	REINF. STEEL LBS.
F18	3.4±	0.58	49
F24	5.3±	0.94	81
F36	11.3±	1.88	166

TYPE "E" 2-WAY DIVERSION BOX **TYPE "E" OPPOSITE HAND**

PROJECT

TYPE	STATION	TYPE	STATION	TYPE	STATION

GENERAL NOTES
 For Materials and Workmanship, see State Standard Specifications for Road and Bridge Construction, 1939 edition.
 All exposed edges to be chamfered 1" unless otherwise noted.
 All reinforcing to be 1/2" deformed bars.
 Furnishing of suitable Flash Boards to be included in unit price bid for Concrete.



SIDE ELEVATION

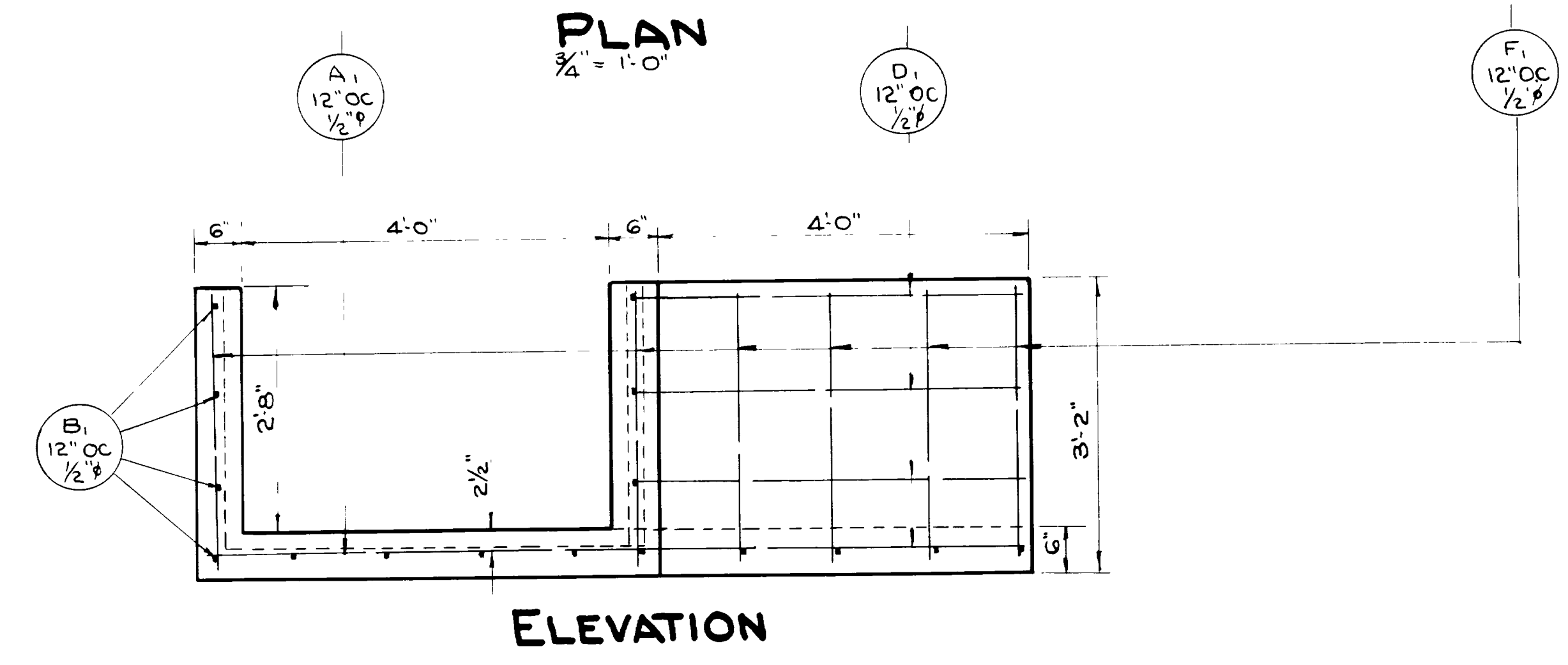
STEEL SCHEDULE

MARK	LOCATION	SIZE	LGTH	NO. BARS	TOTAL LENGTH	SKETCH	0+0
A1	BOTTOM SLAB	1/2"	4'-9"	6	28'-6"		
A2	"	1/2"	8'-9"	3	26'-3"		
B1	"	1/2"	8'-9"	9	78'-9"		
B2	"	1/2"	3'-9"	5	18'-9"		
C1	WALLS	1/2"	2'-2"	3	6'-6"		
D1	WALLS	1/2"	4'-7"	8	34'-2"		
F1	WALLS	1/2"	2'-11"	24	70'-0"		

262'-11" of 1/2" bars @ .668 = 175.63 #

NOTE: 2" Fir Gates to be furnished. Payment for gates to be included in unit price bid for Concrete Class "A"

NO.	DATE	BY	REVISIONS



DIVERSION FEATURE

RIGHT OF STATION 55+ TO ACCOMPANY DRAWING SC 234

QUANTITIES

Excavation for Structure	10 cu.yds
Concrete Class "A"	2.2 cu.yds
Reinforcing Steel	176 lbs.

To accompany Drawg SC 234
SHEET 1 OF 1 SHEET.

UTAH STATE ROAD COMMISSION
SALT LAKE CITY, UTAH

3-WAY DIVERSION FEATURE
AW.FAP.228A(1) STA 55+
12th ST. OGDEN WEBER CO.

DESIGNED BY: DFH
DRAWN BY: DFH
CHECKED BY: [Signature]
APPROVED BY: [Signature]

SCALE: 3/4" = 1'-0"