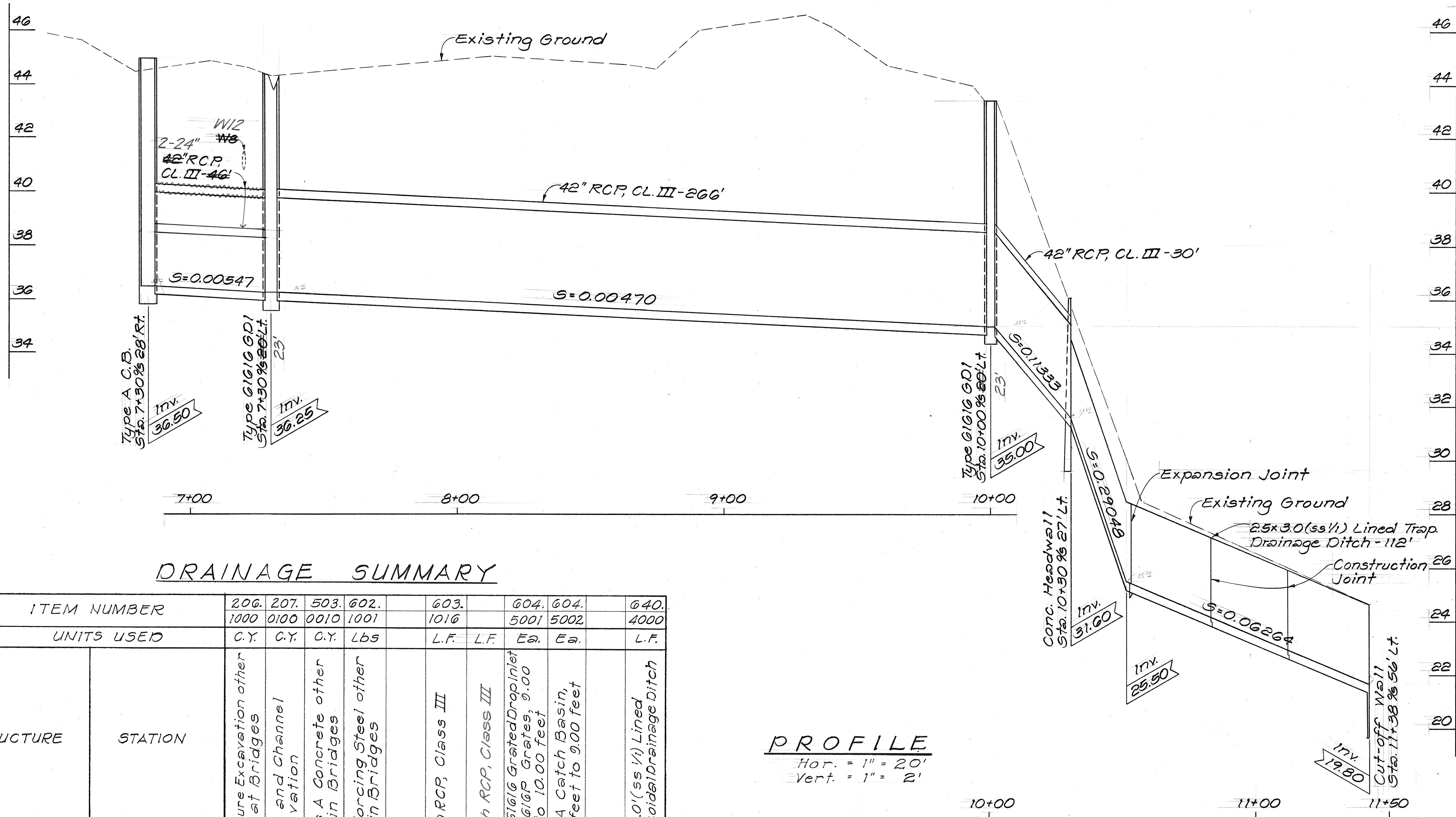




DRAINAGE SUMMARY

ITEM NUMBER		206.	207.	503.	602.		603.		604.	604.		640.
		1000	0100	0010	1001		1016		5001	5002		4000
UNITS USED		C.Y.	C.Y.	C.Y.	Lbs		L.F.	L.F.	Ea.	Ea.		L.F.
STRUCTURE	STATION											
		Structure Excavation other than at Bridges	Ditch and Channel Excavation	Class A Concrete other than in Bridges	Reinforcing Steel other than in Bridges		42 inch RCP, Class III	24 inch RCP, Class III	Type 61616 Grated Drop Inlet with 61616 Grates, 9.00 feet to 10.00 feet	Type A Catch Basin, 8.00 feet to 9.00 feet		2.5' x 3.0' (ss 1/1) Lined Trapezoidal Drainage Ditch
Type A C.B.	7+30 ± 28' Rt ±	84					46	100		1		
Type 61616 GDI	7+30 ± 23' Lt ±	508					266		1			
Type 61616 GDI	10+00 ± 23' Lt ±	40					30		1			
Std. Conc. Headwall	10+30 ± 27' Lt ±	10		5.1	75							
2.5' x 3.0' (ss 1/1) Lined Trap. Ditch	10+30 ± 27' Lt ± to 11+56 ± 40' Lt ±		110									112
TOTAL		642	110	5.1	75		296	100	2	1		112

PROFILE

Hor. = 1" = 20'
Vert. = 1" = 2'

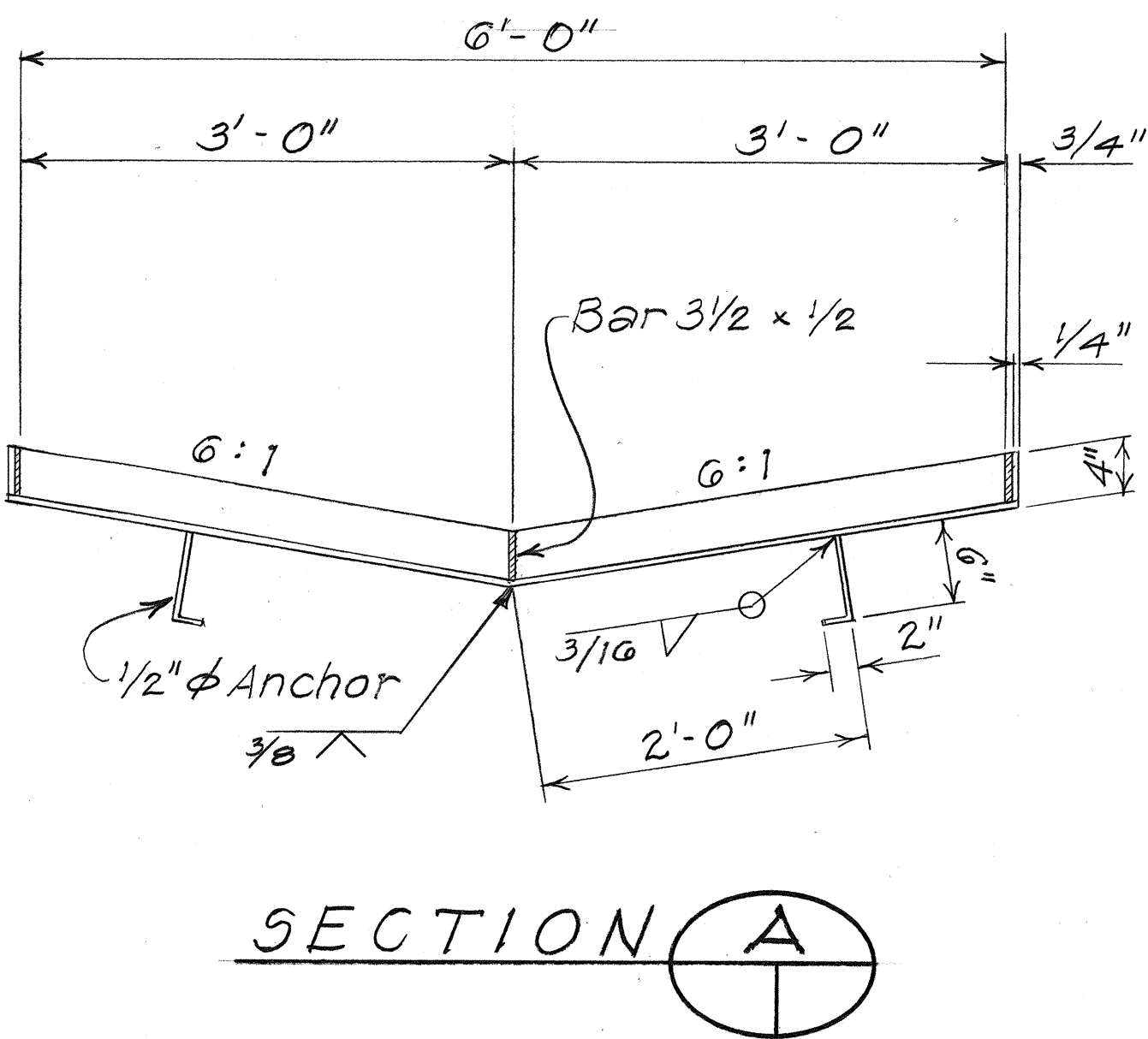
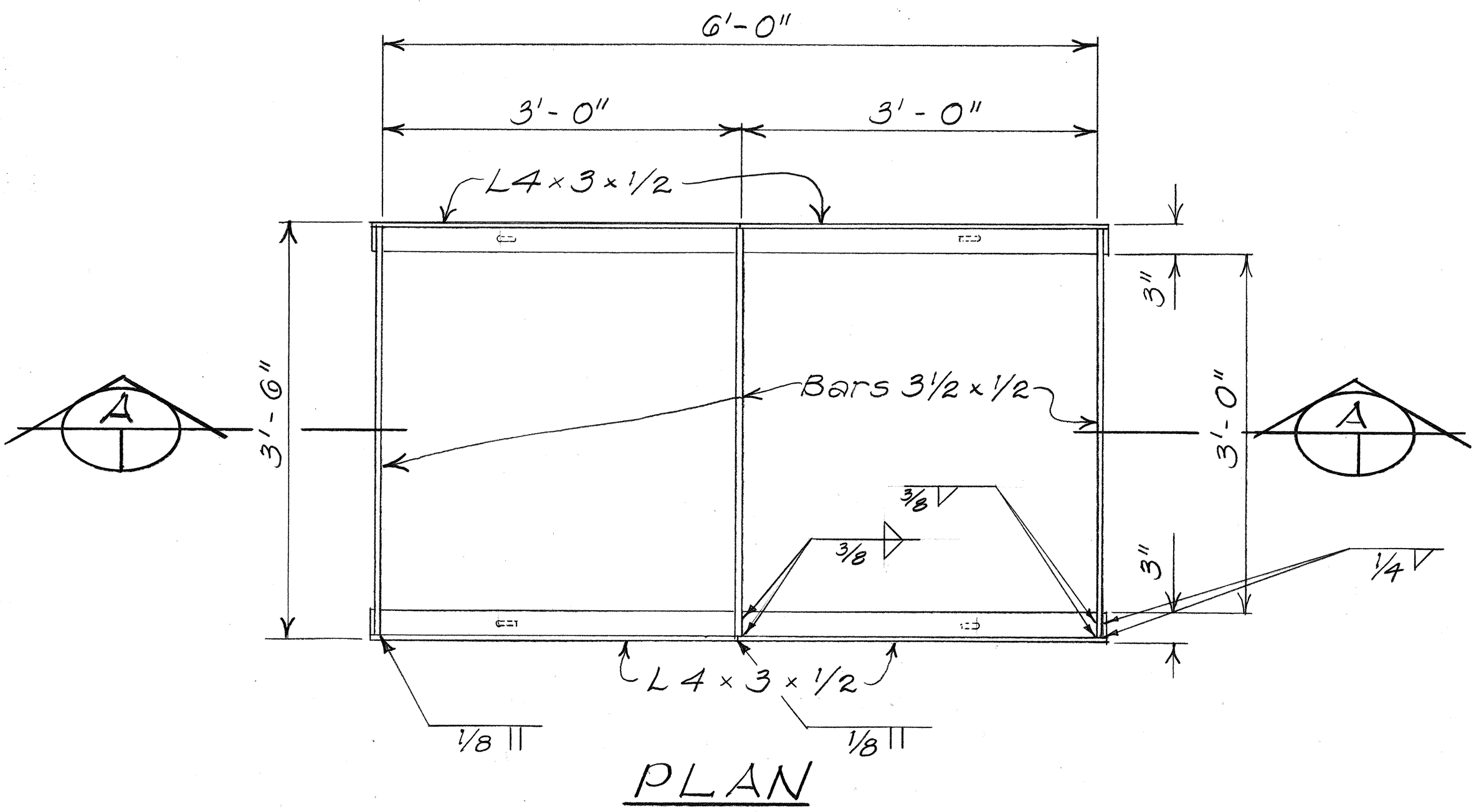
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

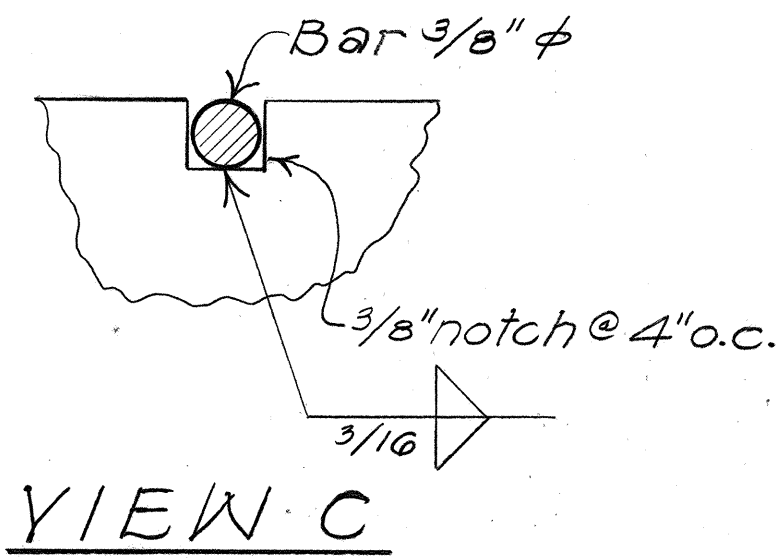
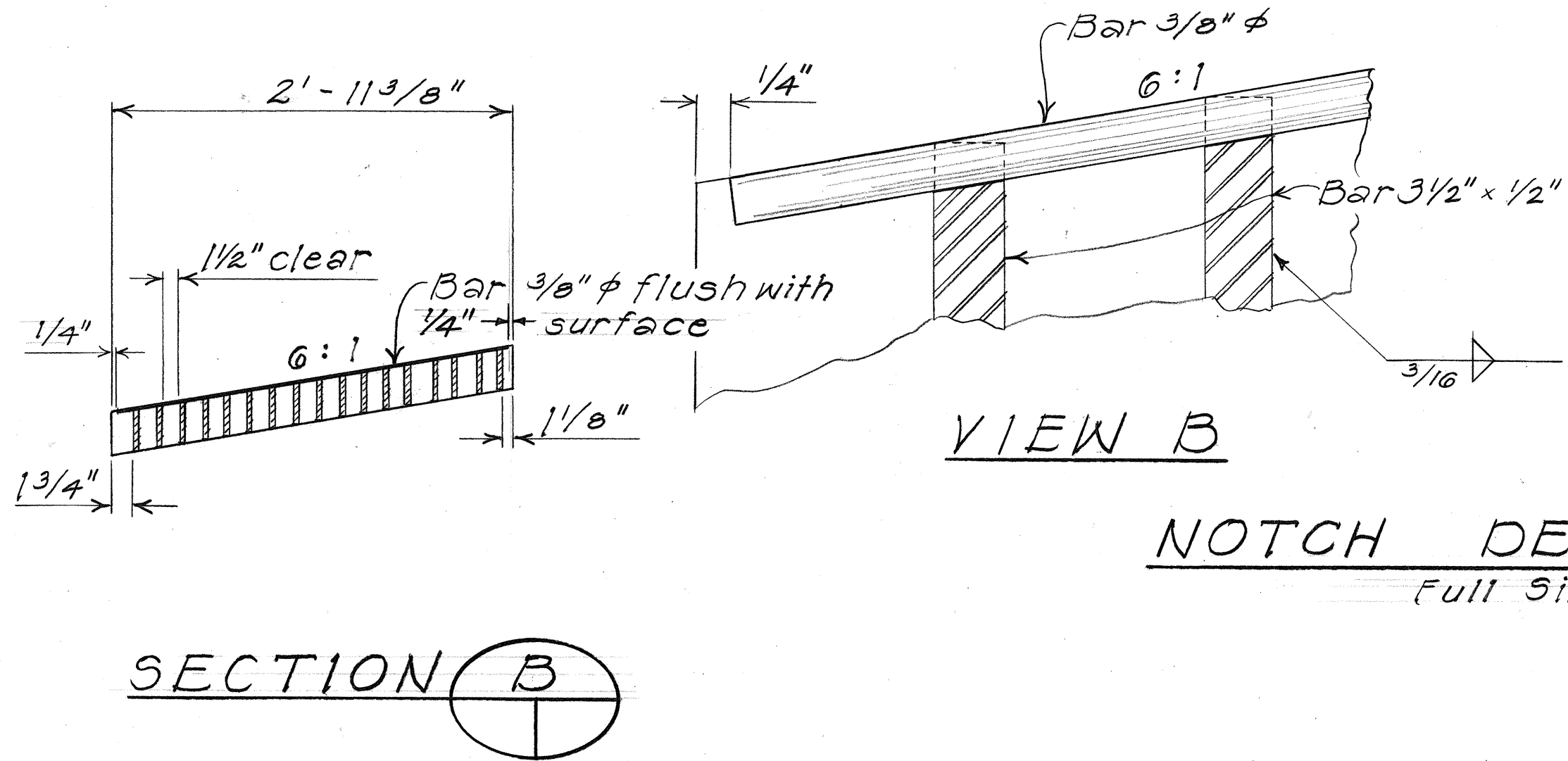
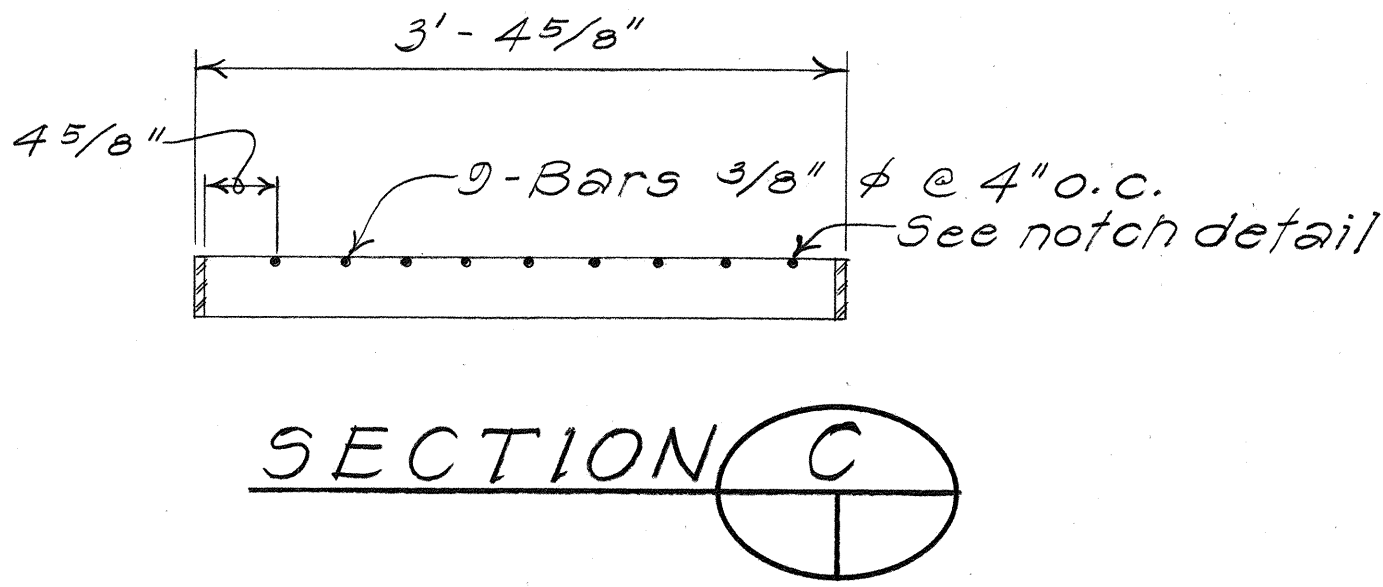
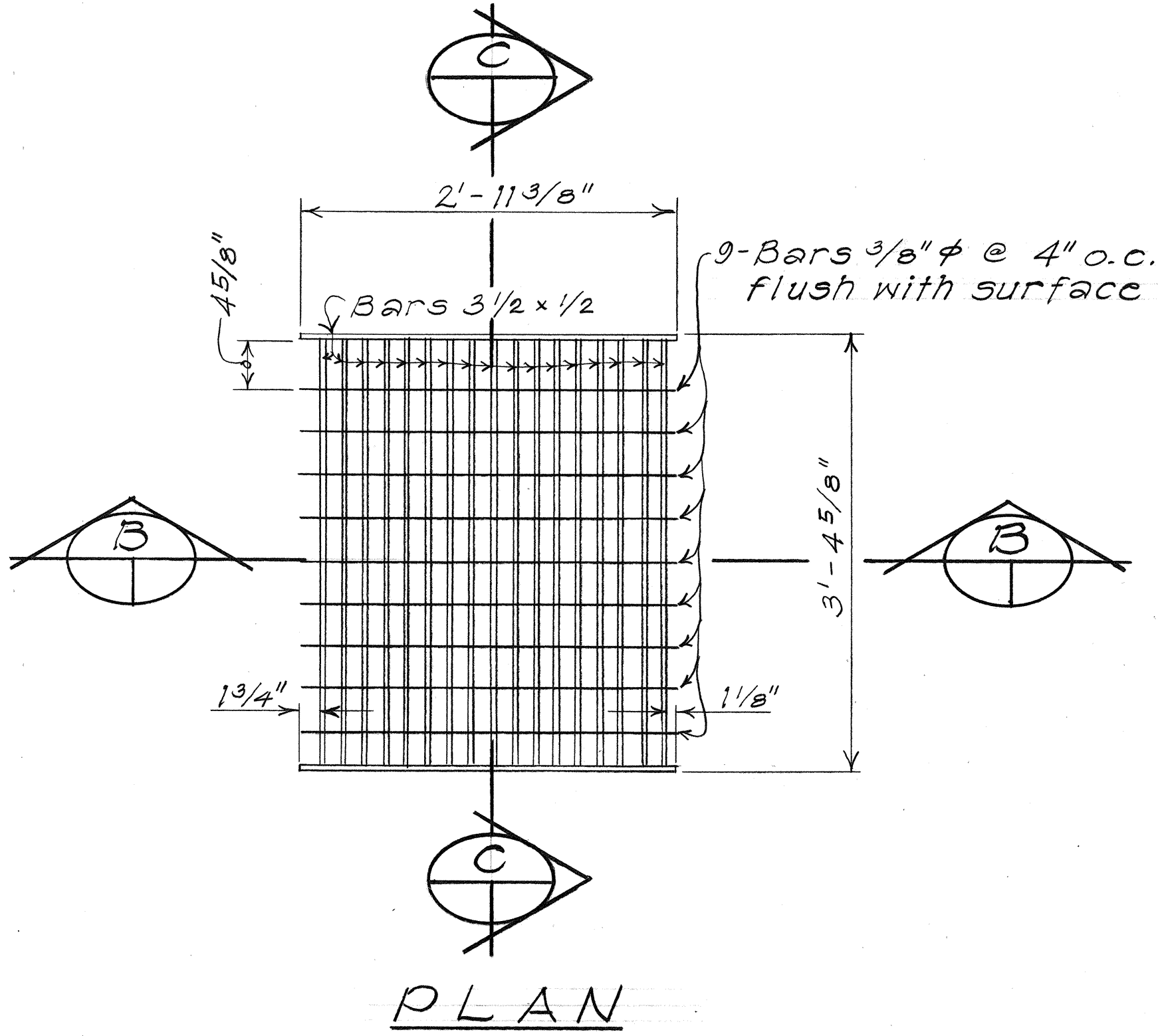
Kaukonahua Road Resurfacing
Thomson Corner to Weed Jet.
Project No. 930D-01-88M
Scale: As Shown Date: Feb. 1988

SHEET No. 11 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	930D-01-88M	1988	11	20



FRAME DETAILS



NOTCH DETAILS
Full Size

GRATE DETAILS

61616P STEEL FRAME AND GRATE
Scale: 1" = 1'-0"

ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

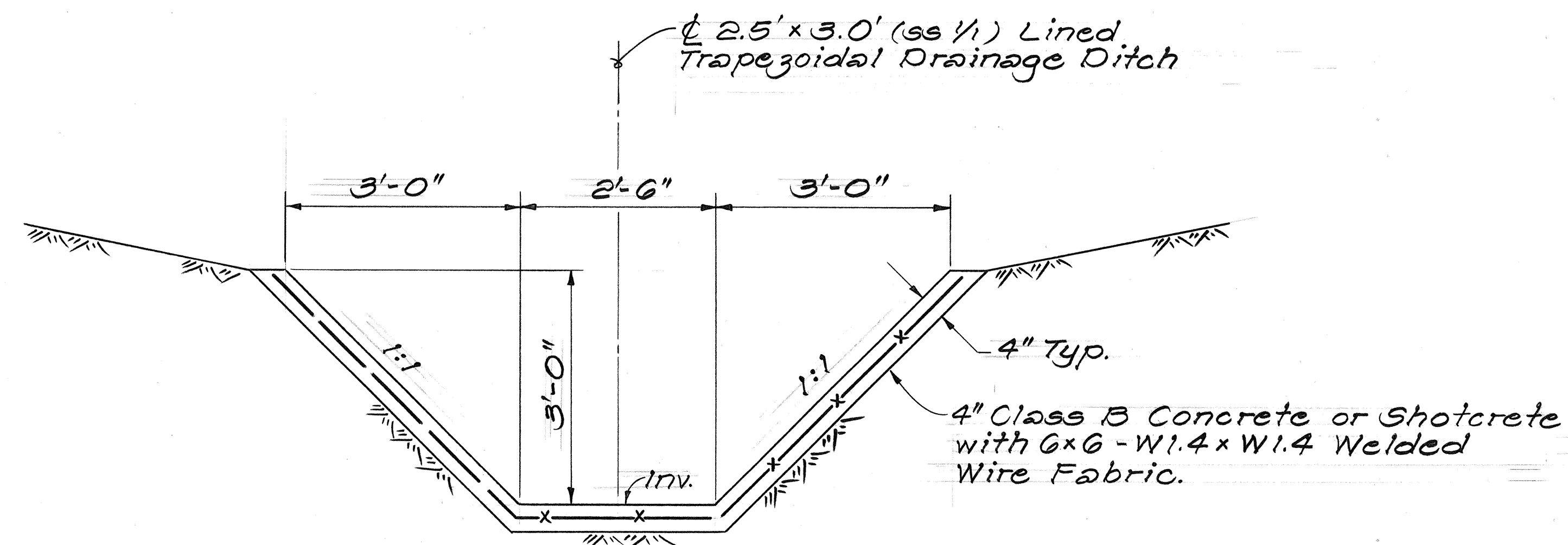
DRAINAGE DETAILS

Kaunohua Road Resurfacing
Thomson Corner to Weed Jct.
Project No. 930D-01-88M

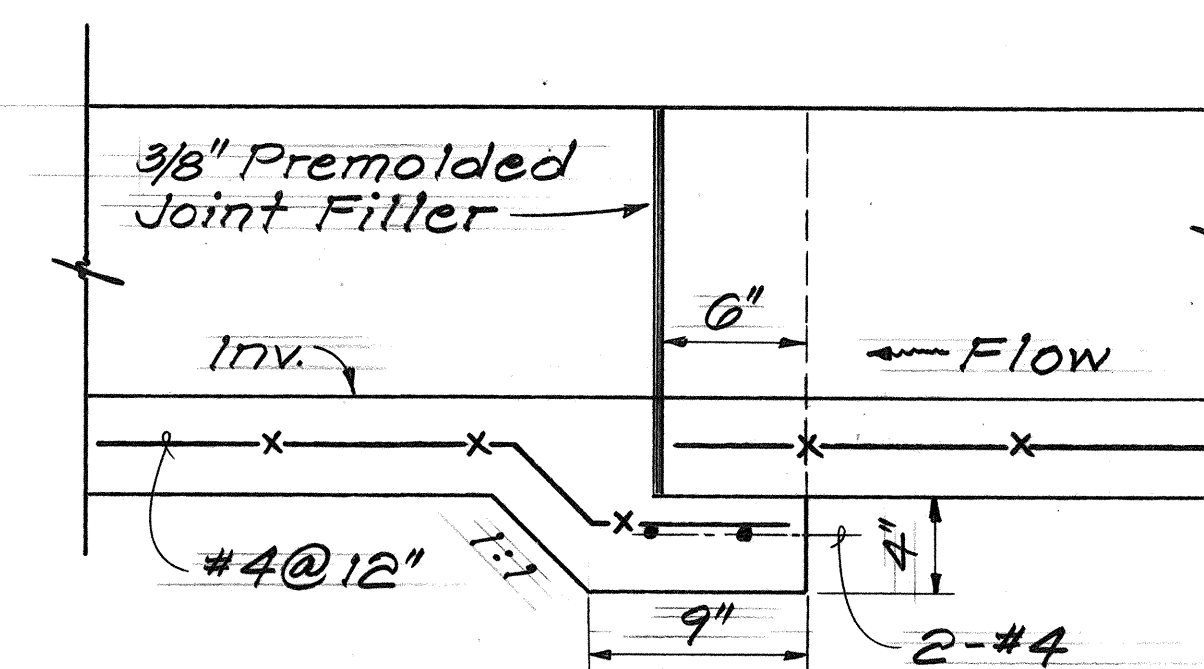
Scale: As Shown Date: Feb. 1988

SHEET NO. 12 OF 3 SHEETS

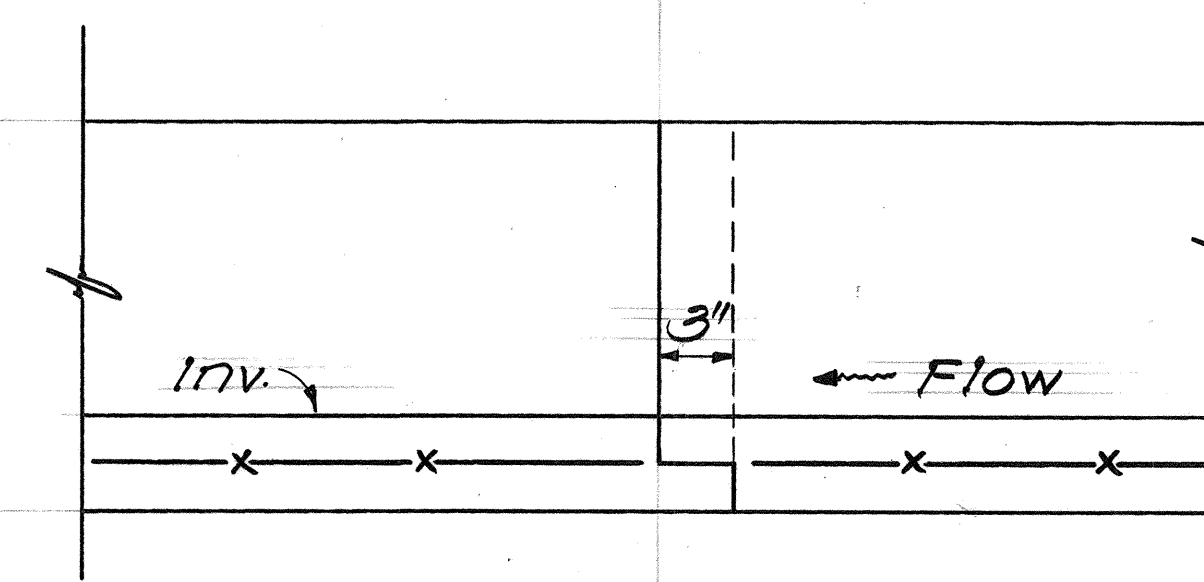
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	930D-01-88M	1988	12	20



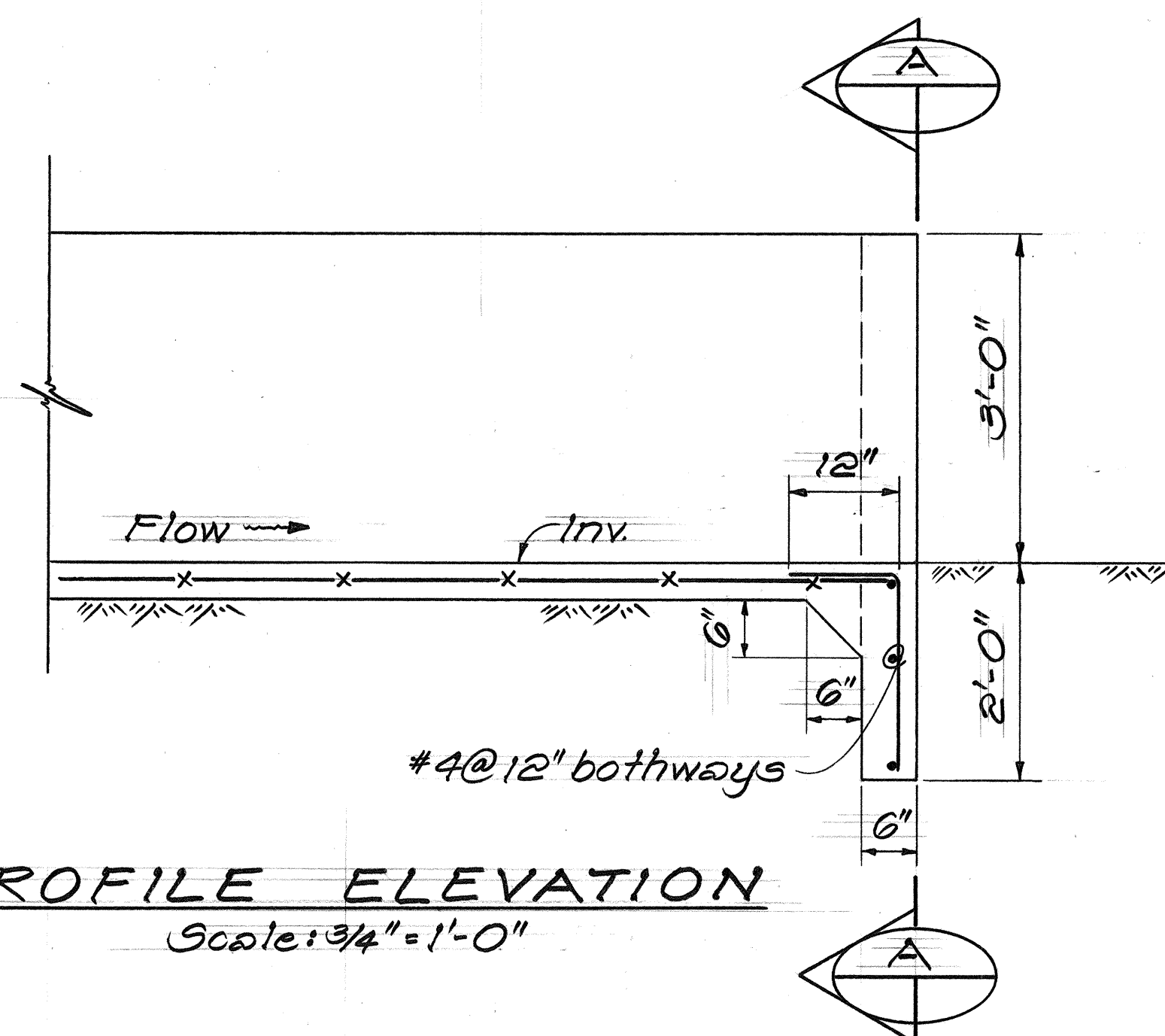
**TYPICAL SECTION 2.5' x 3.0' (as 1/1)
LINED TRAPEZOIDAL DRAINAGE DITCH**
Scale: 3/4" = 1'-0"



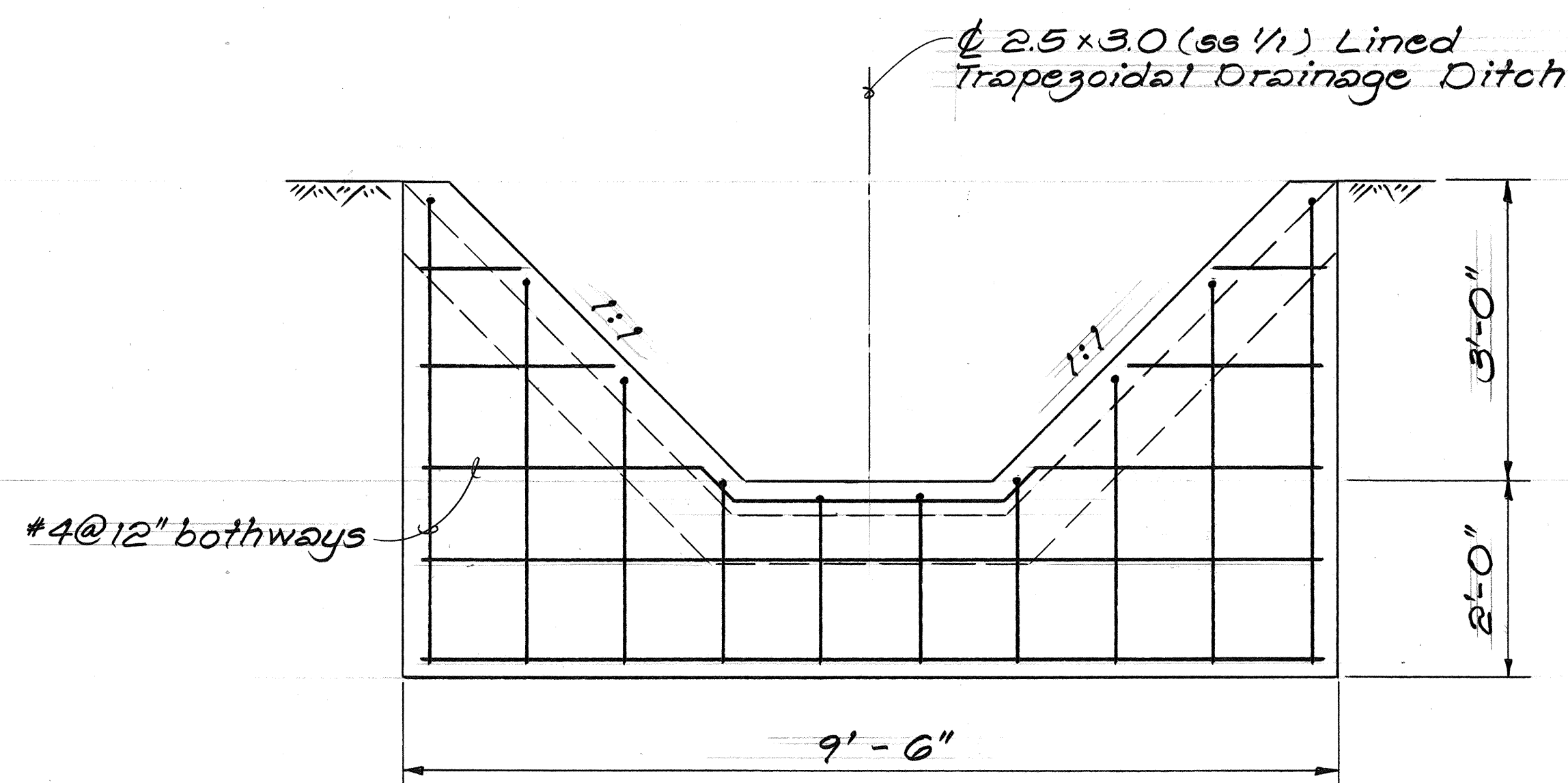
**PROFILE SECTION
TYPICAL EXPANSION JOINT AT 90' SPACING**
Scale: 1 1/2" = 1'-0"



**PROFILE SECTION
TYPICAL CONSTRUCTION JOINT AT 30' SPACING**
Scale: 1 1/2" = 1'-0"



PROFILE ELEVATION
Scale: 3/4" = 1'-0"



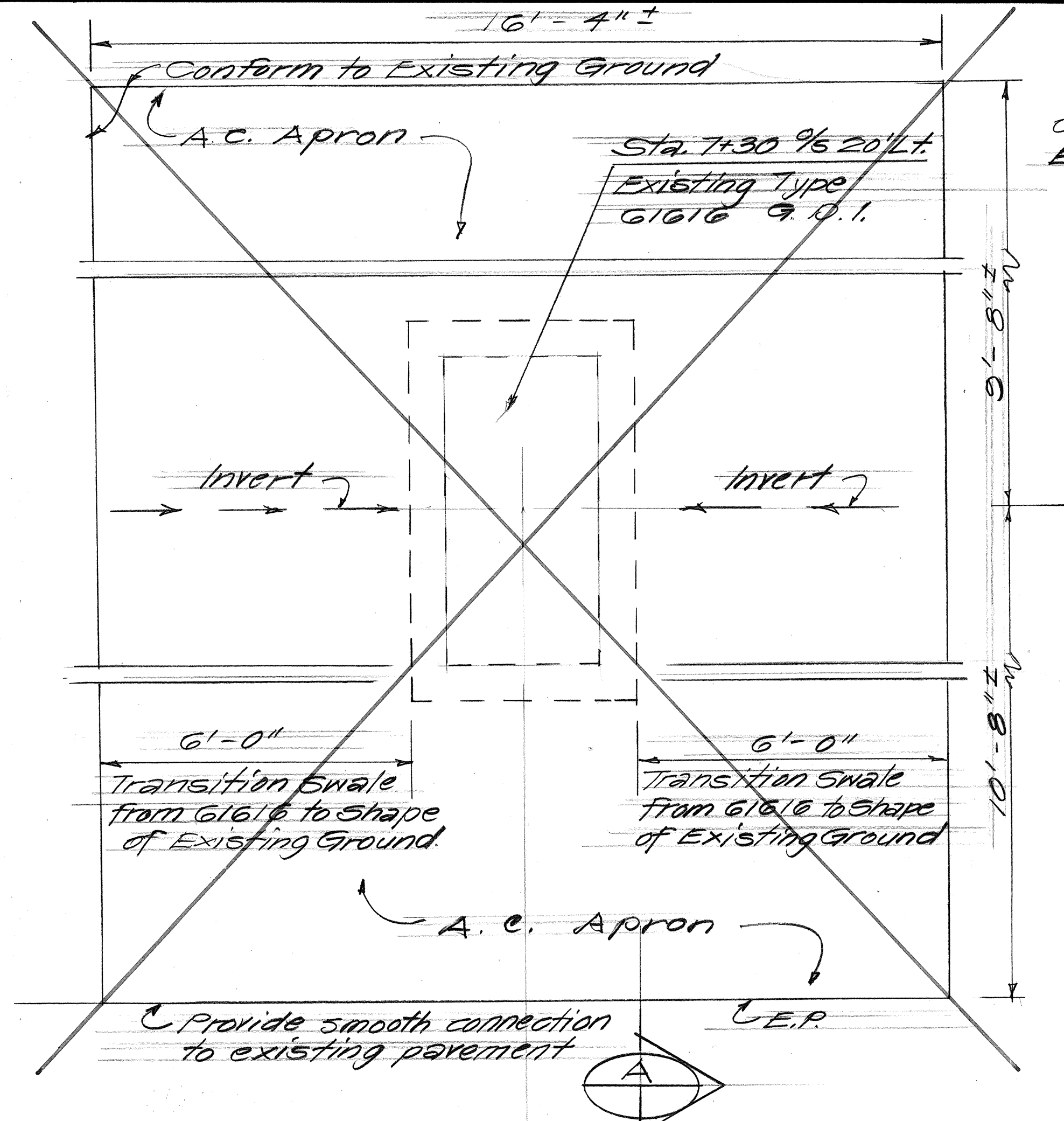
SECTION A
Scale: 3/4" = 1'-0"

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION				
DRAINAGE DETAILS				
Kaukonahua Road Resurfacing Thomson Corner to Weed Jct. Project No. 930D-01-88M				
Scale: As Shown Date: Feb. 1988				
SHEET NO. H3 OF 3 SHEETS				

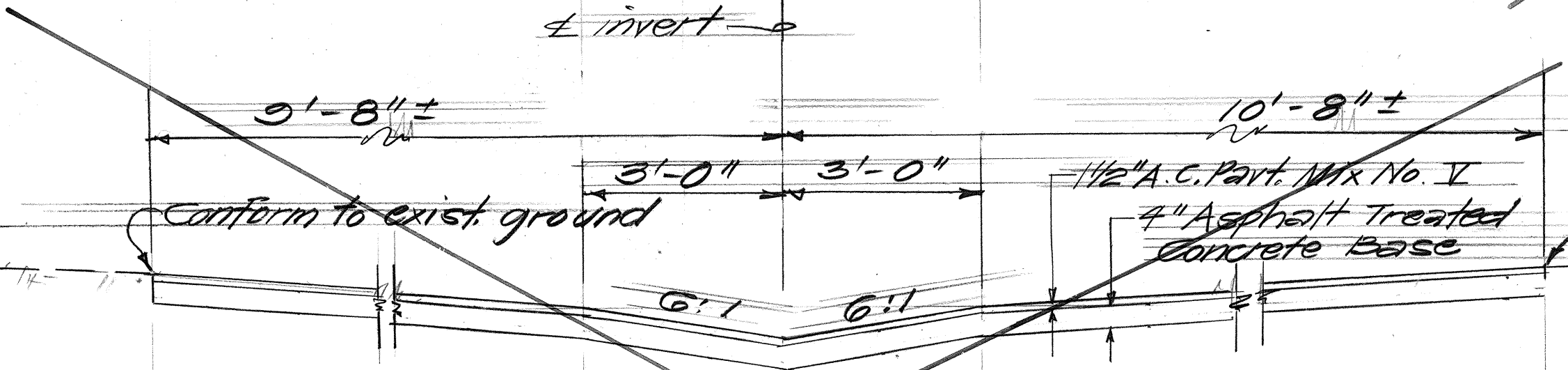
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	930D-01-88M	1988	C.0	20
				125-1	

OMIT

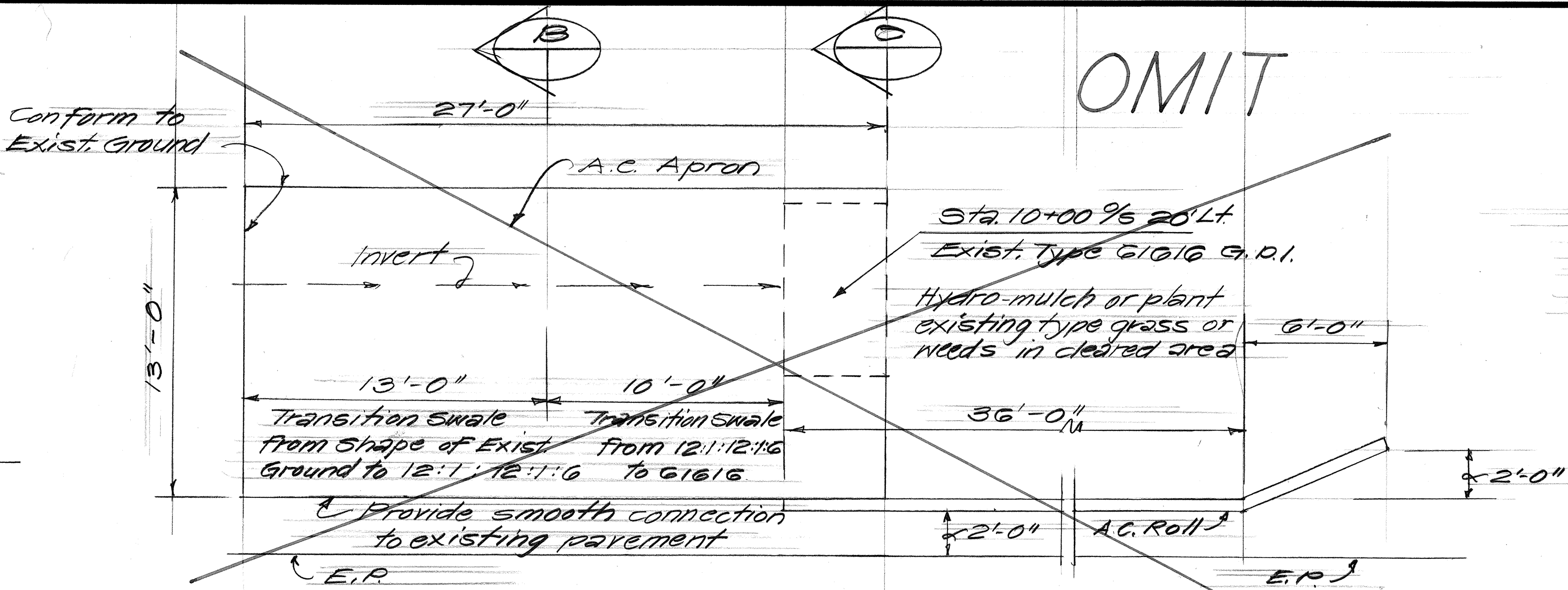
- Notes:
1. Paved Swales and A.C. Apron shall be paid as A.C. Pavement Mix No. V and Plant Mix Asphalt Concrete Base Course.
 2. Exact location of Earth Swale shall be to the satisfaction of the Engineer.
 3. Hydro-mulching or grassing of cleared area shall be considered incidental to the various contract items.
 4. Excavation for A.C. Apron shall be considered incidental to A.C. Pavement Mix No. V.



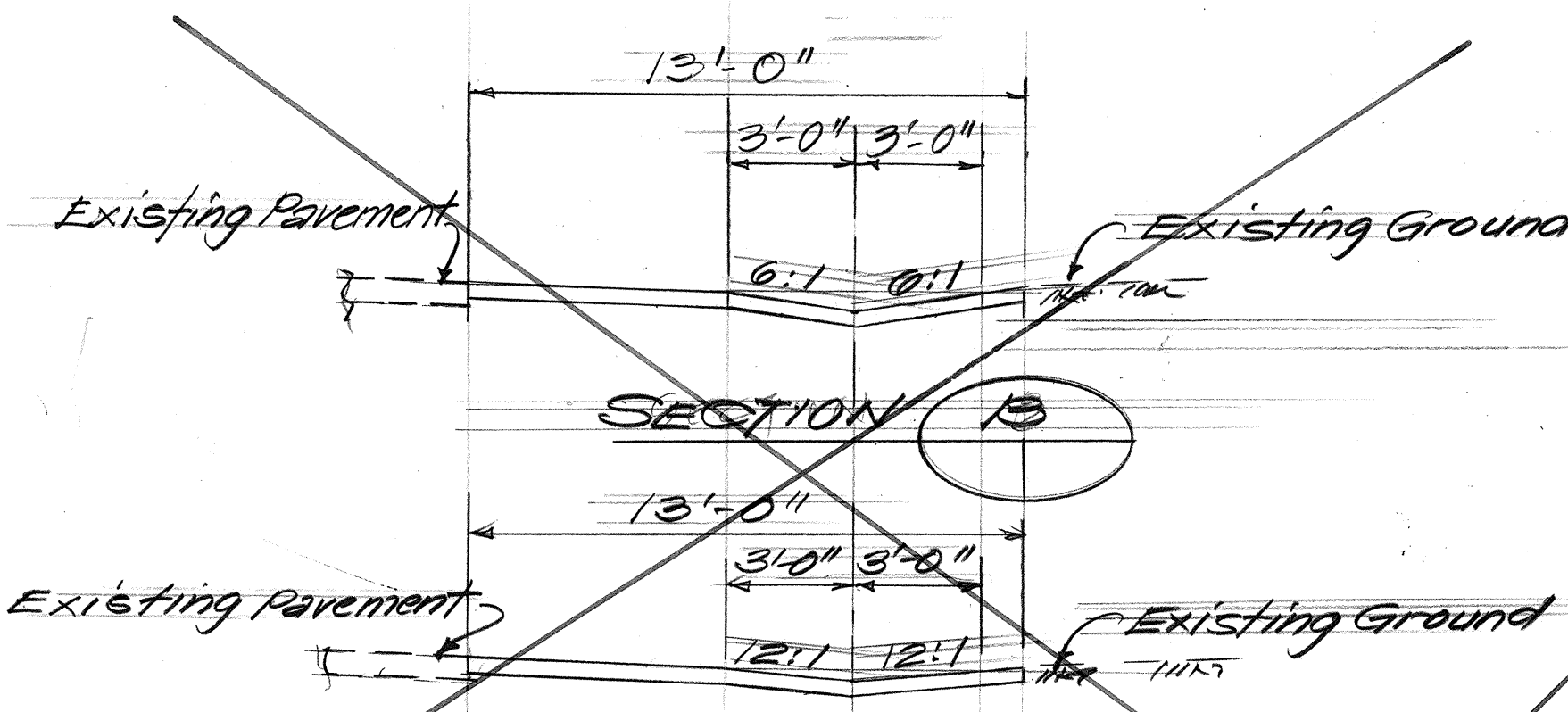
PLAN
Scale: 1/2" = 1'-0"



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

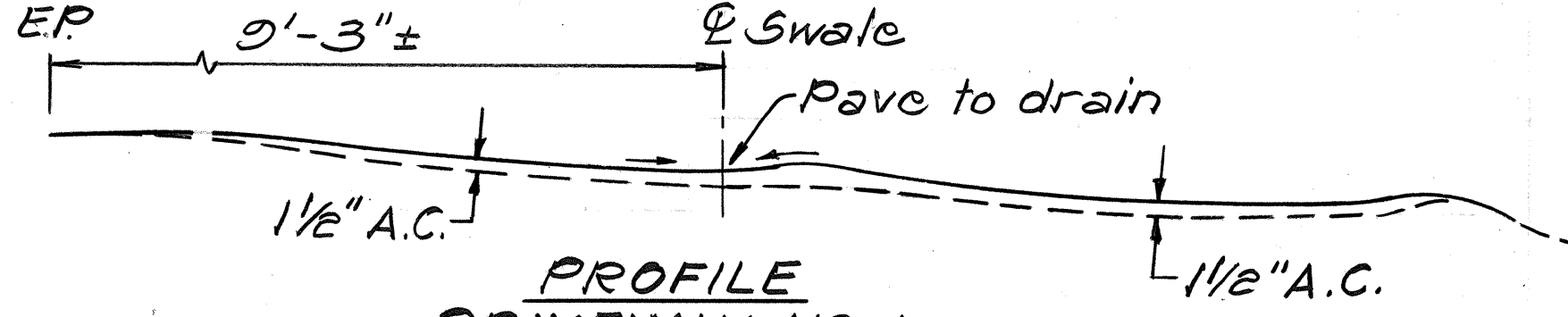


PLAN
Scale: 1/4" = 1'-0"

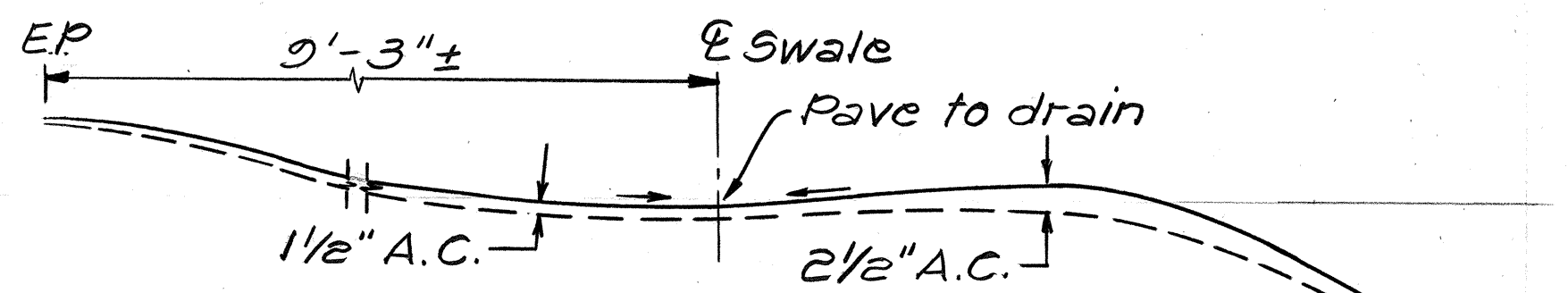


SECTION B-B
Scale: 1/4" = 1'-0"

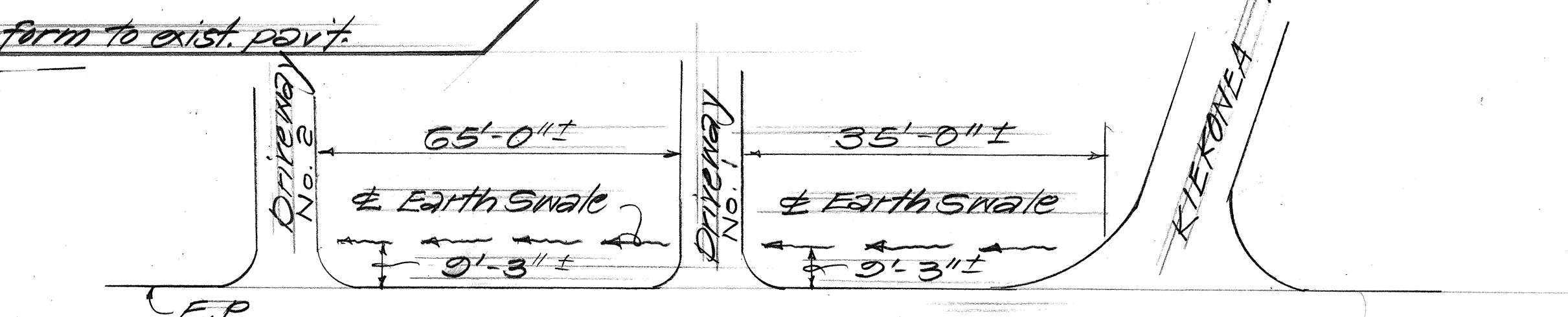
Construct: A.C. Apron, A.C. Roll
Estimated Quantities:
A.C. Apron 520 S.F.
A.C. Roll 42 L.F.



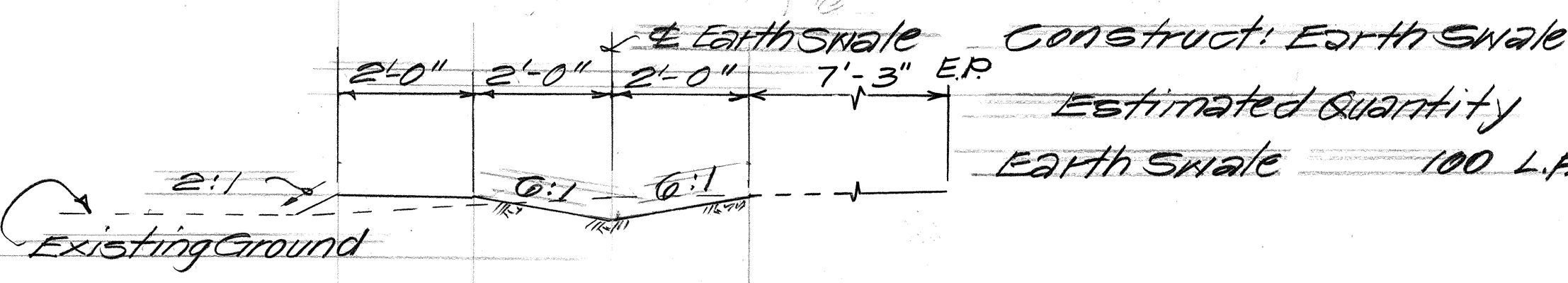
PROFILE
DRIVEWAY NO. 1
Not to Scale



PROFILE
DRIVEWAY NO. 2
Not to Scale



PLAN
Not to Scale



TYPICAL EARTH SWALE
Scale: 1/2" = 1'-0"

(C.C.O. No.3)

DATE	REVISION
11/16/88	Construction of A.C. Apron and Earth Swale

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

Kaukonahua Road Resurfacing
Thomson Corner to Weed Jct.
Project No. 930D-01-88M
Scale: As Shown Date: Nov. 1988

SHEET No. OF SHEETS

C.0 125-1

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	