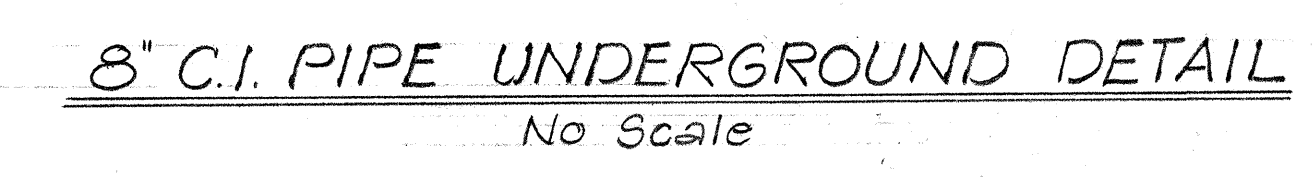
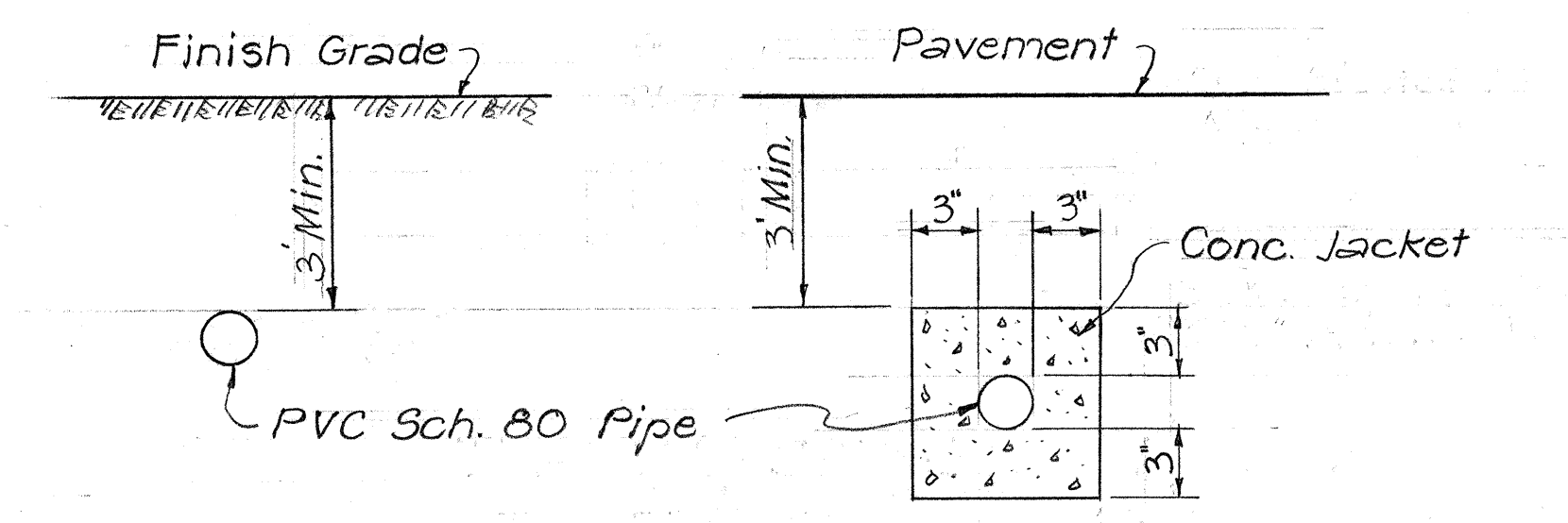
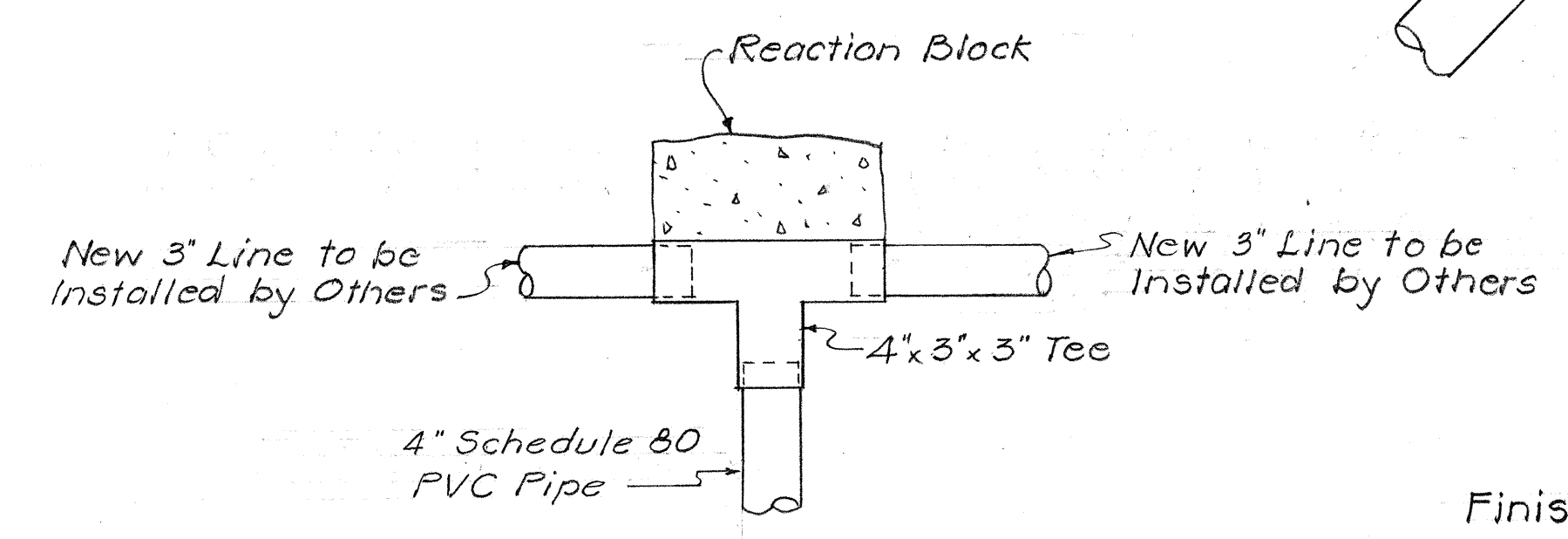
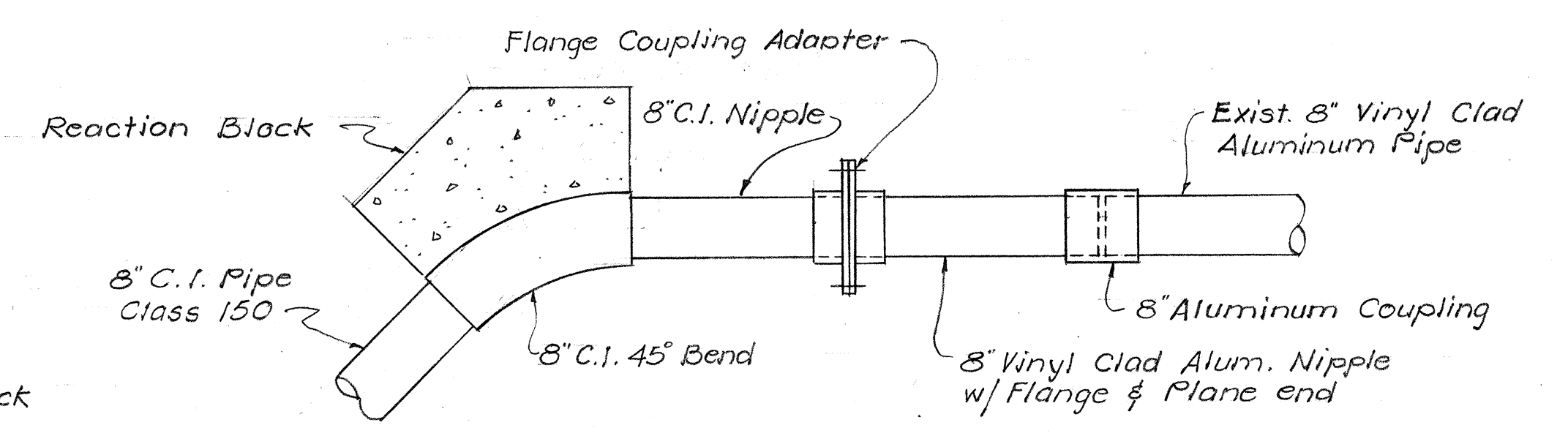
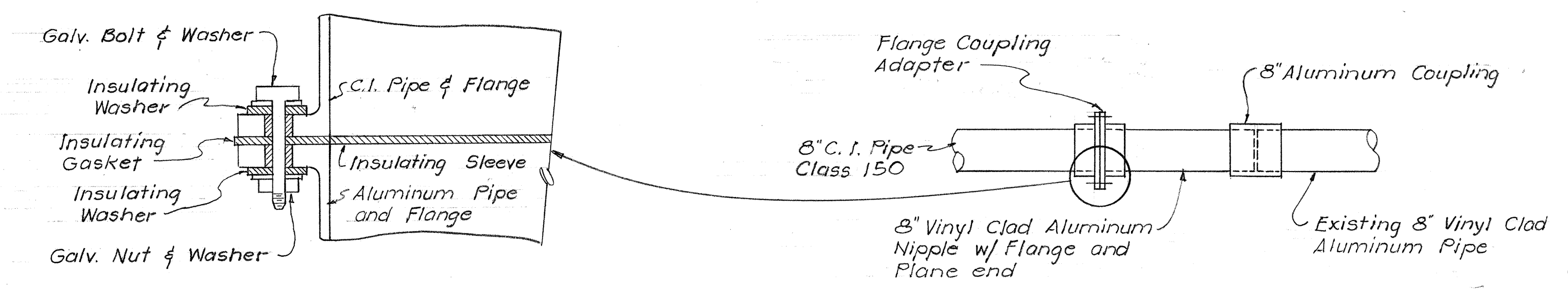
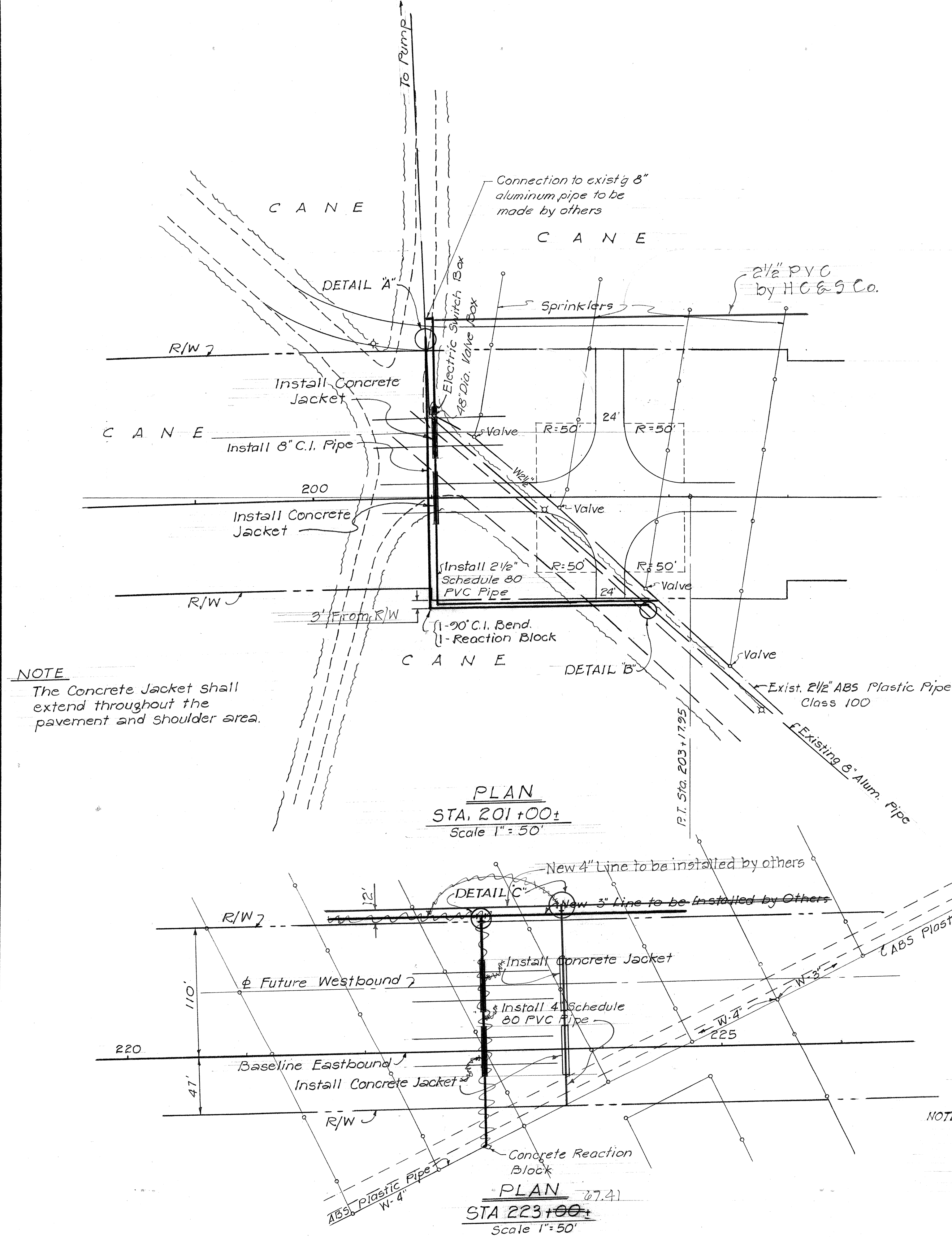


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-0380(6)	1969	37	80



NOTE: All waterlines crossing the highway shall have a minimum cover of 3 feet below the finished grade of the roadway or as directed by the Engineer. The Contractor shall verify in the field all sizes and locations of pipe lines.

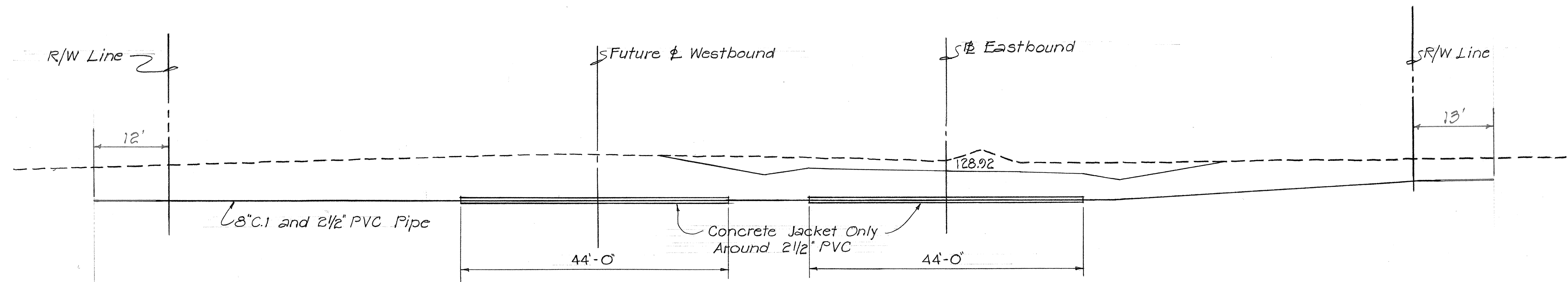
APPROVED:
J.E. Jortler
MANAGER
9-25-69
H.C. & S. Co. Date

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

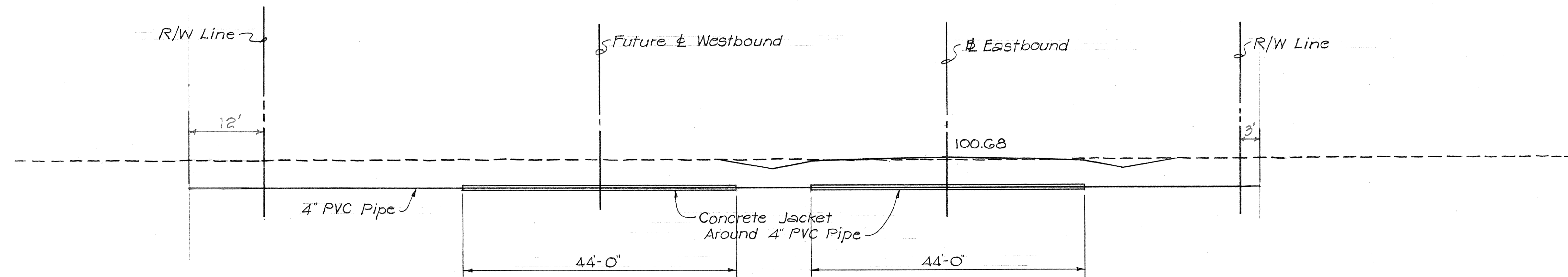
SPRINKLER SYSTEM DETAILS
PIPE @ STA. 201+00± & 223+00±
KAHULUI AIRPORT-MAALAEA HWY.
PROJ. NO. 5-0380(6)
SCALE AS SHOWN
FEB. 1969

Irrigation Pipe Detail

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	S-0380(6)	1969	38	89



STA. 201+00
PROFILE OF 8" C.I. PIPE AND
2 1/2" PVC. SCH. 80 PIPE



STA. 223+00
PROFILE OF 4" PVC SCH. 80 PIPE

Scale:
Horizontal = 1" = 10'
Vertical = 1" = 10'

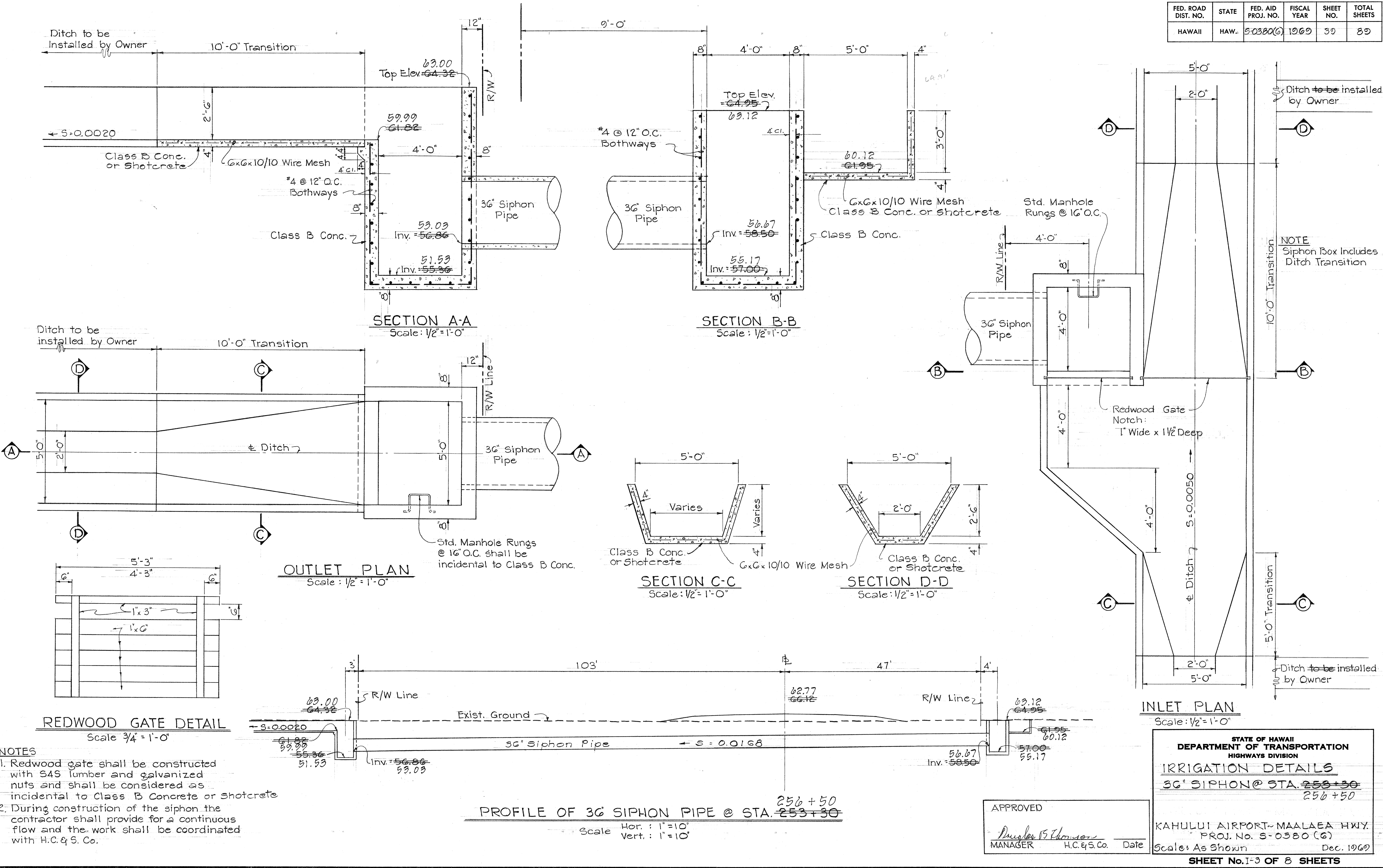
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPRINKLER SYSTEM DETAILS
PROFILE @ STA. 201+00 & 223+00
KAHULUI AIRPORT-MAALAEA HWY.
PROJ. NO. S-0380 (6)
SCALE AS SHOWN OCT 1969

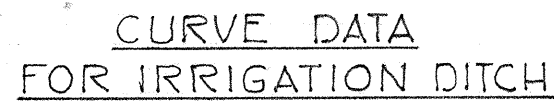
SHEET No. 1-2 OF 8 SHEETS

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-0380(6)	1969	30	89



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-0360(6)	1969	40	89



$\Delta = 71^{\circ}-08'-52''$
 $R = 90.00'$
 $T = 62.23'$
 $L = 108.03'$

Sta. 0+75.71 Rt. to Sta. 3+83.04 Rt.
Top of ditch sides to
be kept at Elev. 39.25
See Detail

- This portion of concrete ditch to be constructed after Roadway is completed.

Exist. Siphon to be removed
after Roadway is completed

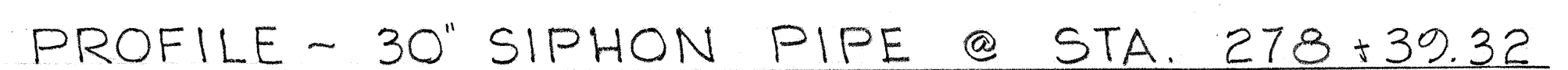
Sta. 6+10.12 R.F.
Inv. = 37.48

Provide Smooth Connection

To Puynene -

NOTE

1. Demolish existing irrigation ditch within R/W. Payment to be considered incidental to roadway excavation.
2. Contractor shall make provisions to provide a continuous flow until the new ditch and siphon is completed.



Scale 1" = 10'

J. E. Trotter
MANAGER H

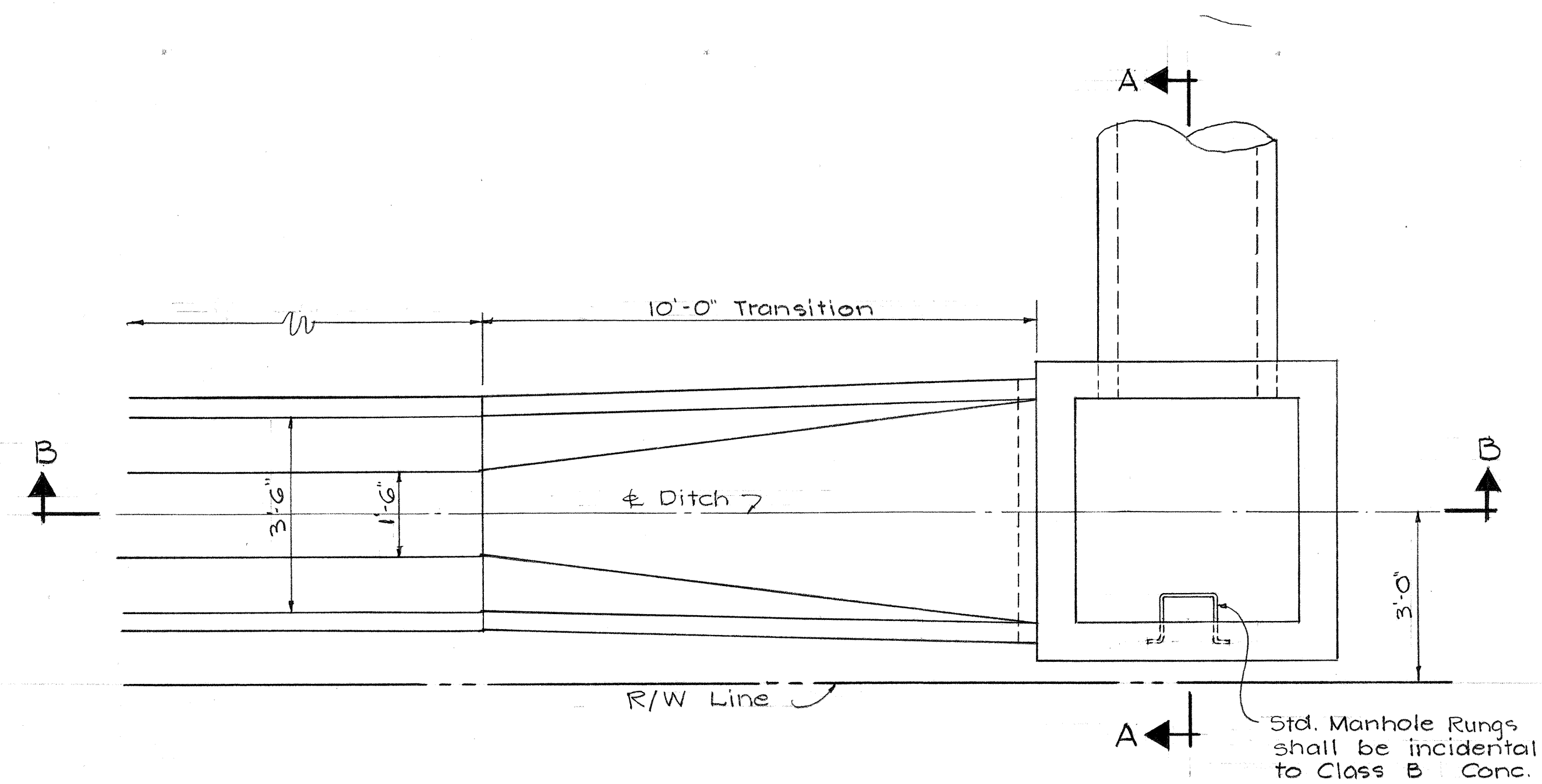
H.C. & S Co. Date

30" SIPHON @ STA. 278+39.32

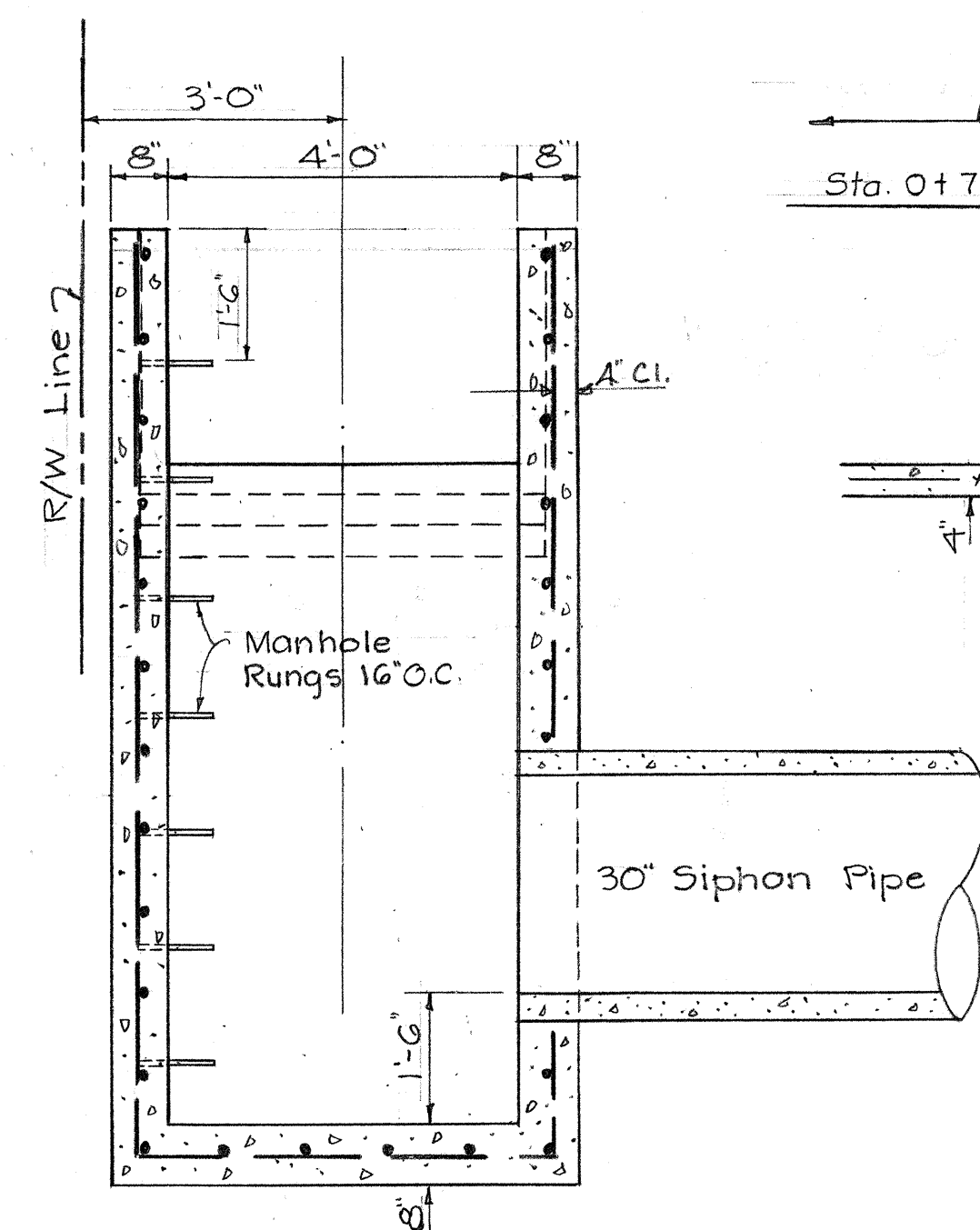
Scale: As Shown Dec. 1969

SHEET No. 1~4 OF 8 SHEETS

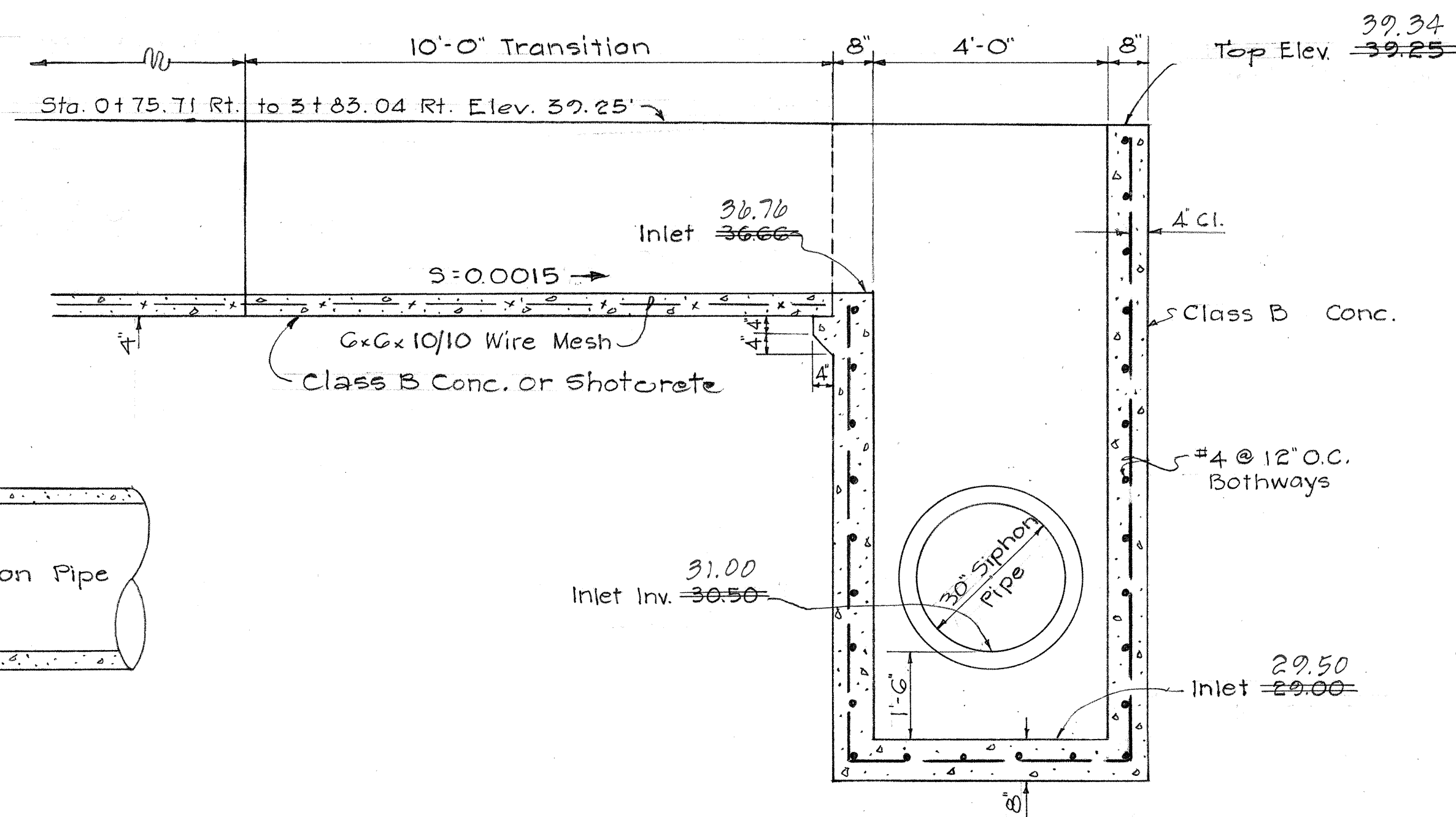
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-0380(6)	1969	41	89



PLAN

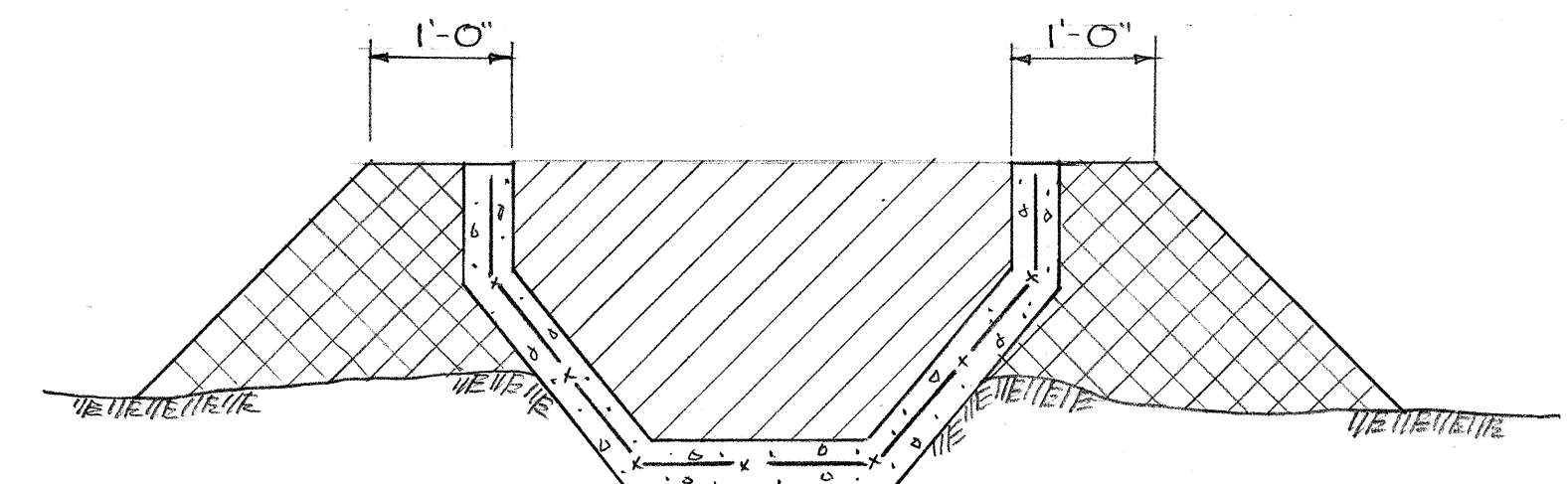


SECTION A-A

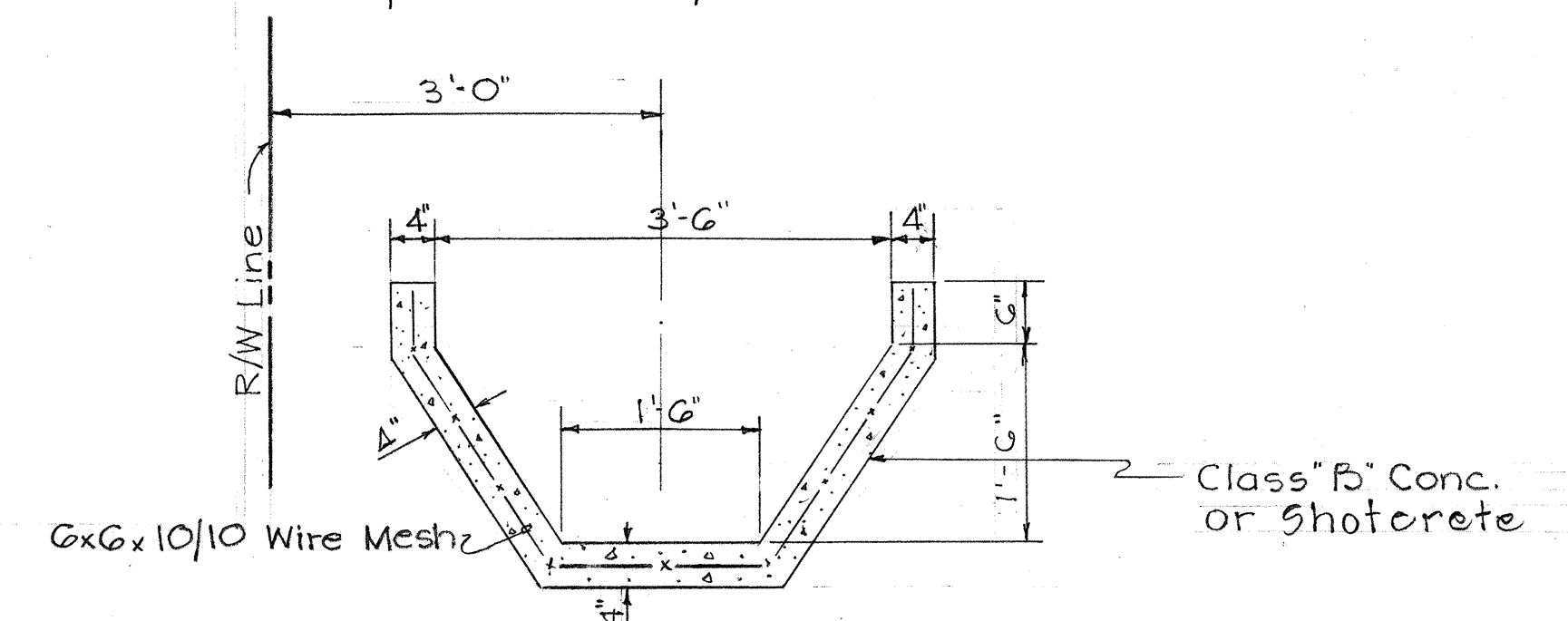


SECTION B-B

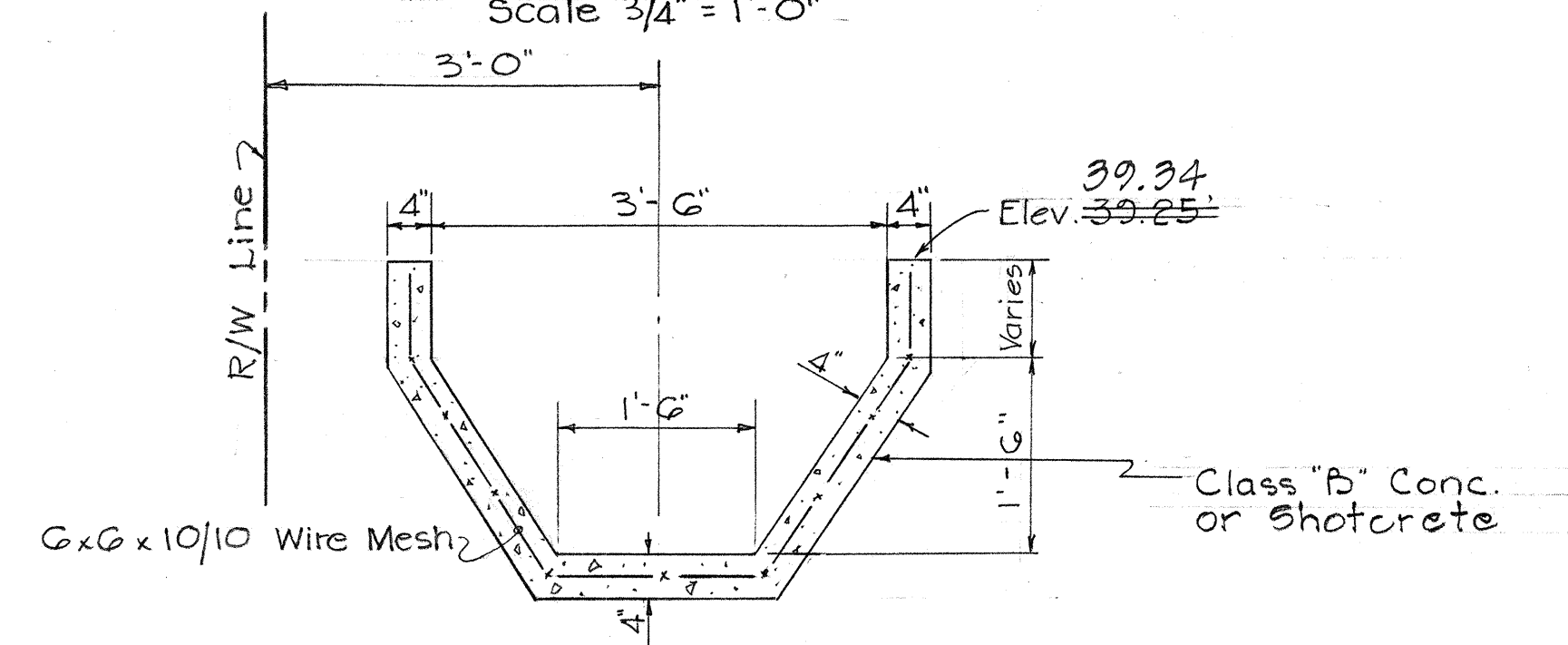
INLET
TYPICAL DETAIL OF SIPHON BOX
@ STA. 278+39.32
Scale 1/2" = 1'-0"



- Limits of ditch and channel excavation
- Embankment shall be built-up before ditch excavation commences. Payment for embankment incidental to ditch and channel excavation. Embankment shall be compacted to a relative compaction of 95%.



TYPICAL DITCH
@ STA. 1+62.67 LT. TO 3+75.25 LT.
& STA. 3+83.04 RT. TO 6+10.12 RT.
Scale 3/4" = 1'-0"

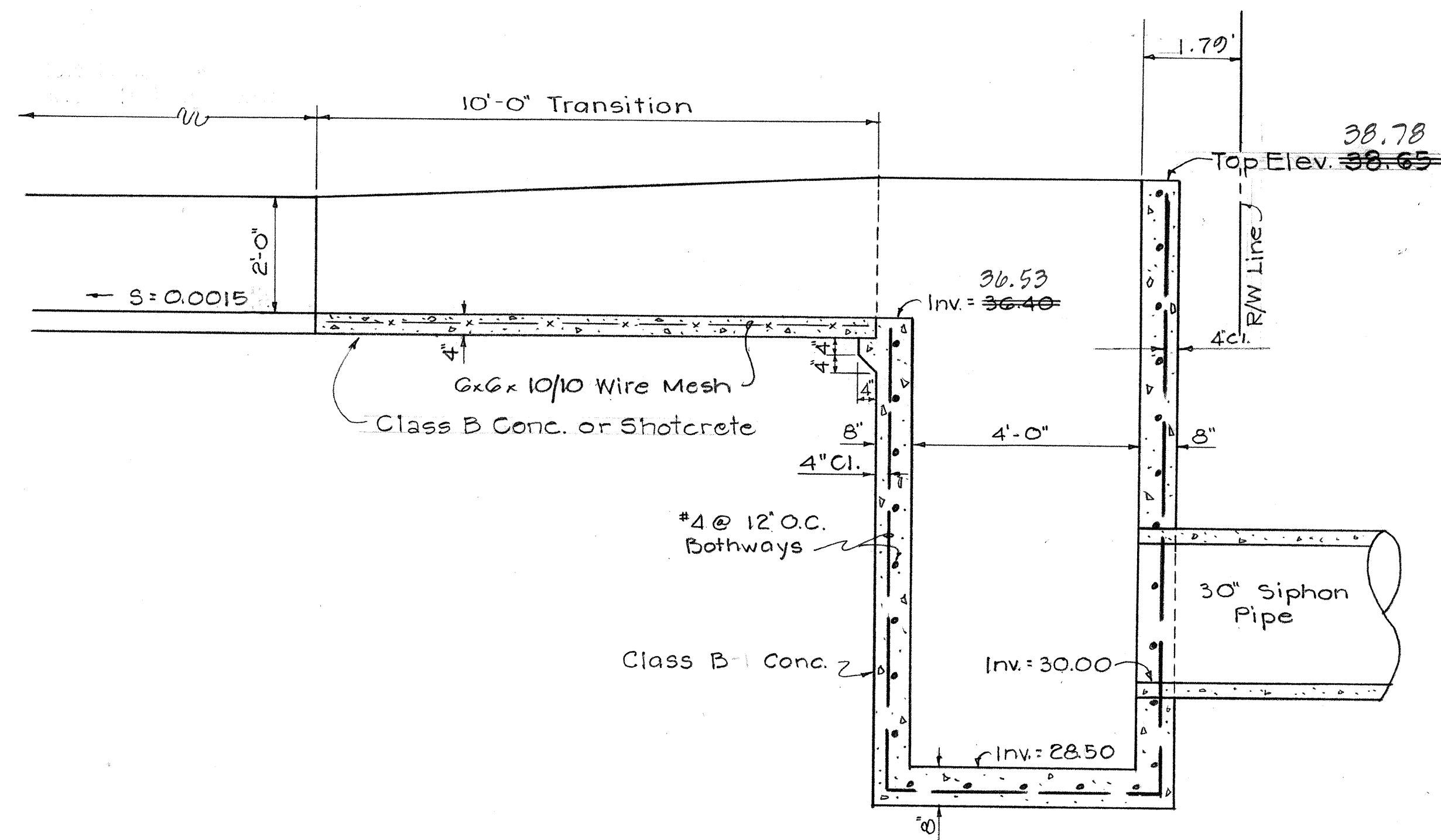


TYPICAL DITCH
@ STA. 0+75.71 RT. TO 3+83.04 RT.
Scale 3/4" = 1'-0"

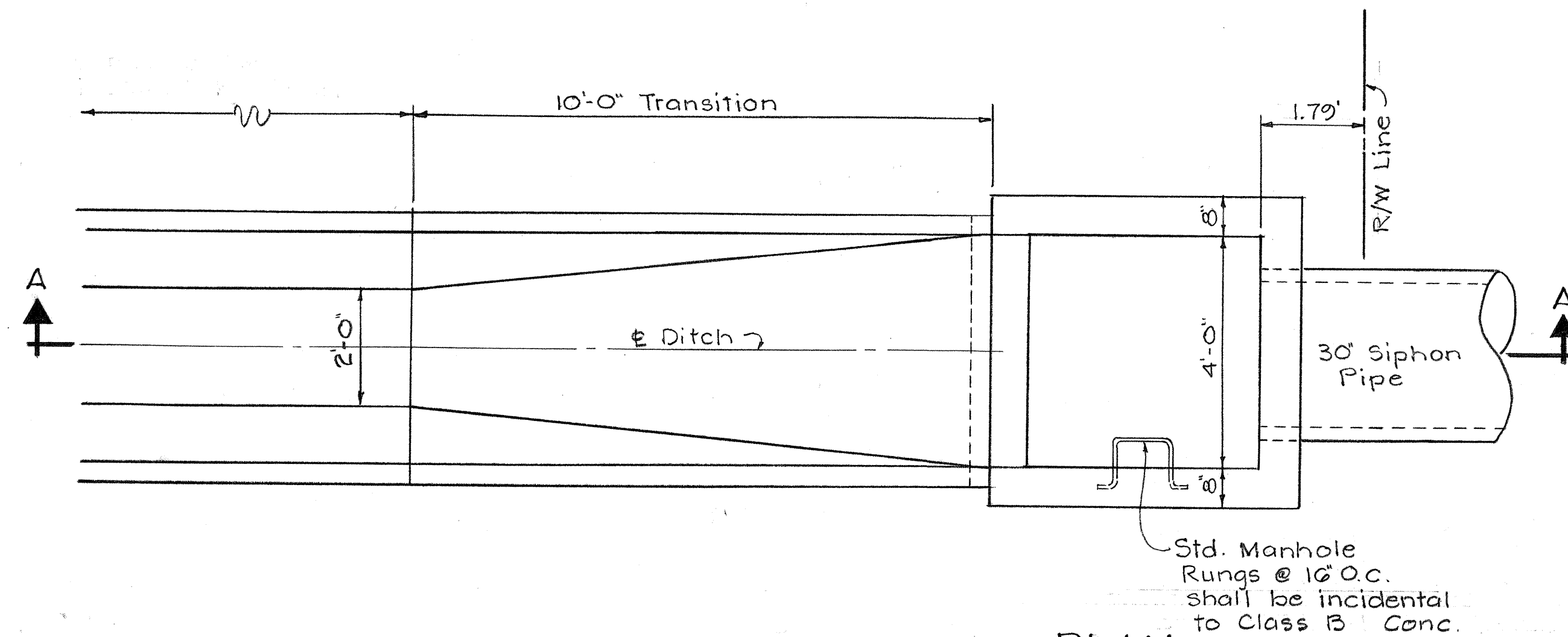
APPROVED:
J.E. Trotter
MANAGER H.C. & S.Co. Date 9-25-69

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
IRRIGATION DETAILS
INLET STRUCTURE @ STA. 278+39.32
TYPICAL IRRIGATION DITCH
KAHULUI AIRPORT - MAALAE HWY.
PROJ. No. S-0380 (6)
Scale: As shown Dec. 1969
SHEET No. 1-5 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-0380(6)	1969	42	89



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



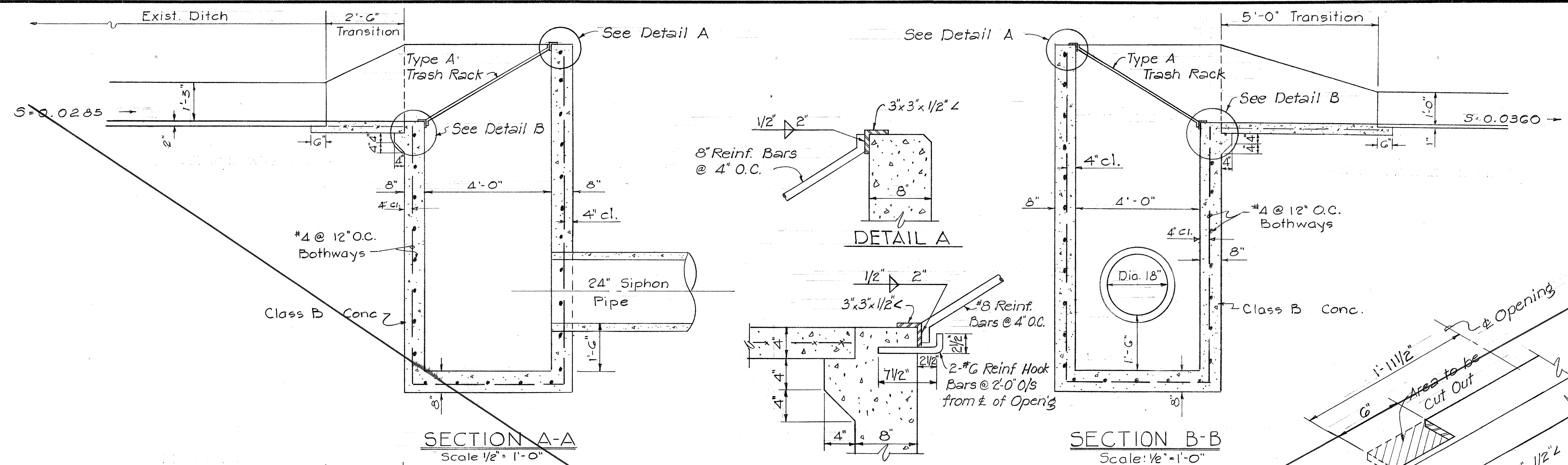
PLAN
Scale 1/2" = 1'-0"

DETAIL OF SIPHON BOX OUTLET
@ STA. 278+39.32
Scale 1/2" = 1'-0"

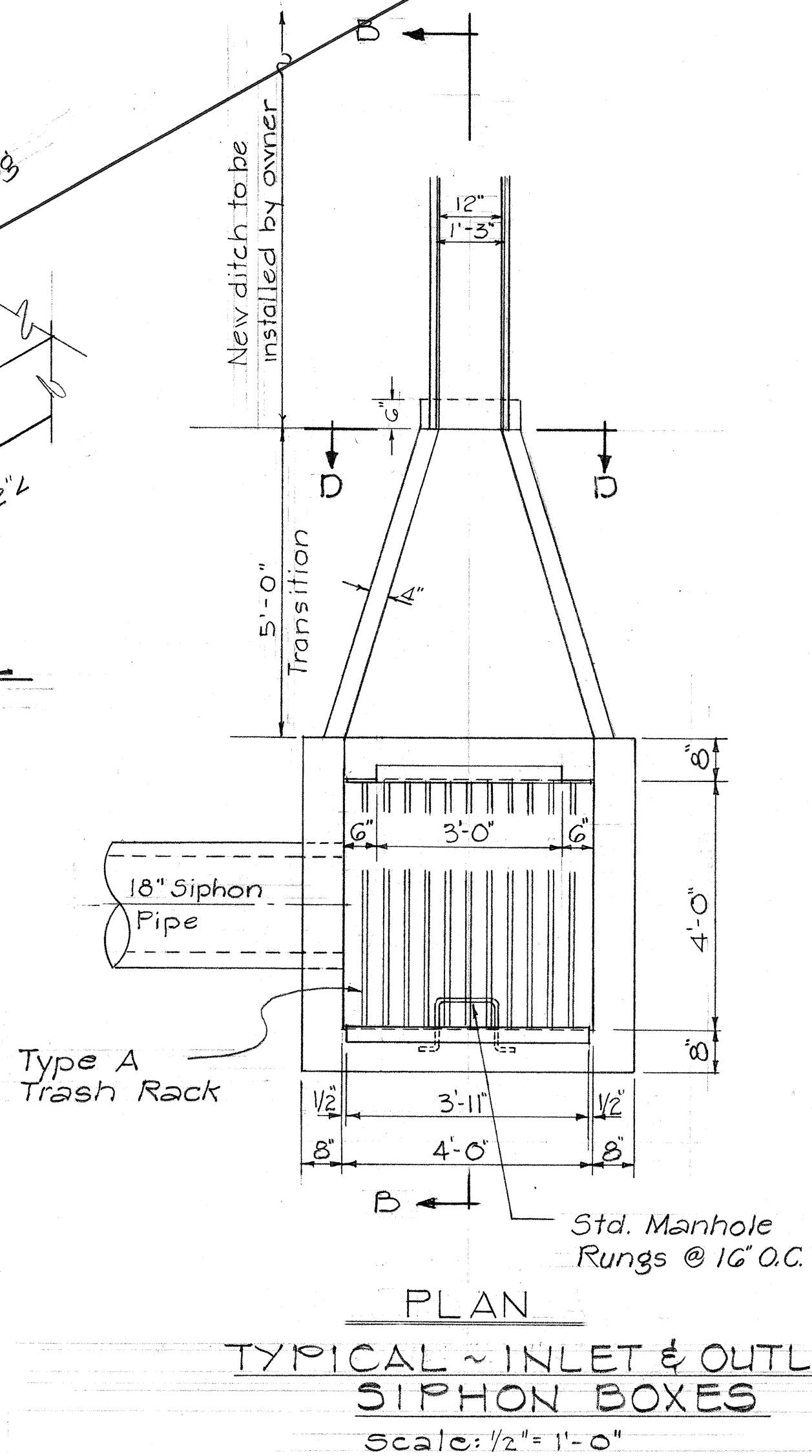
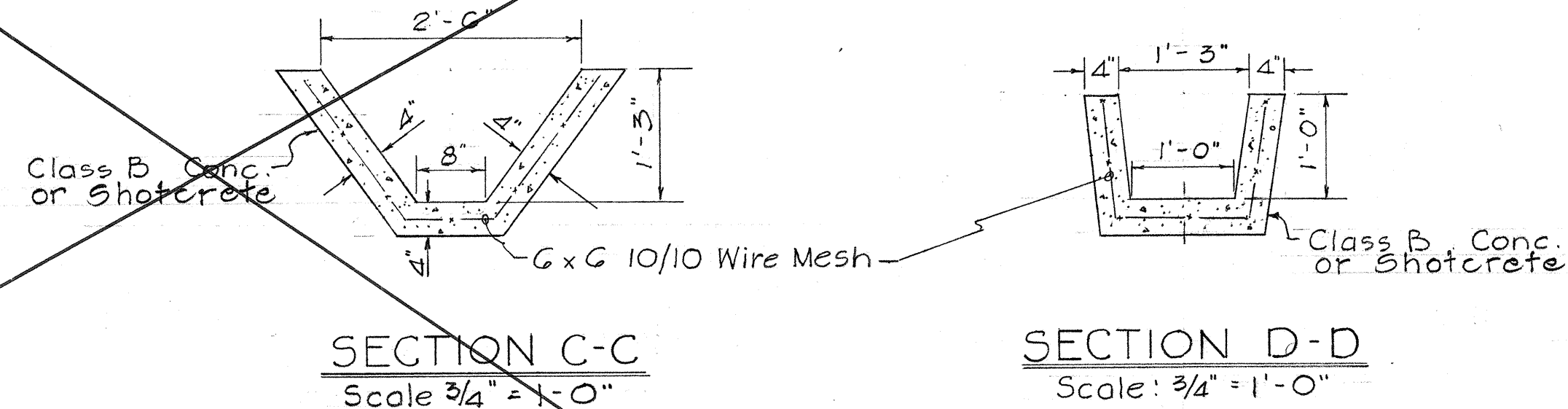
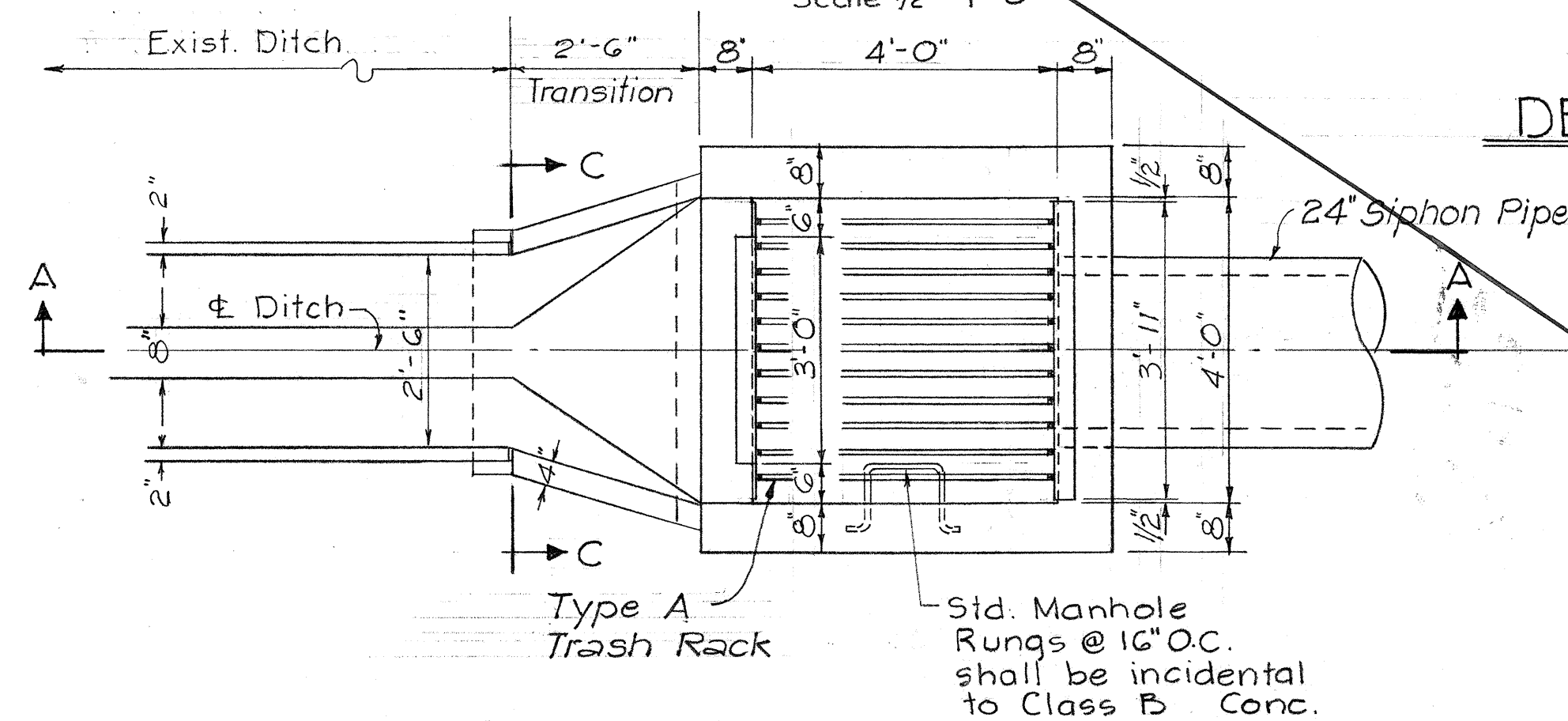
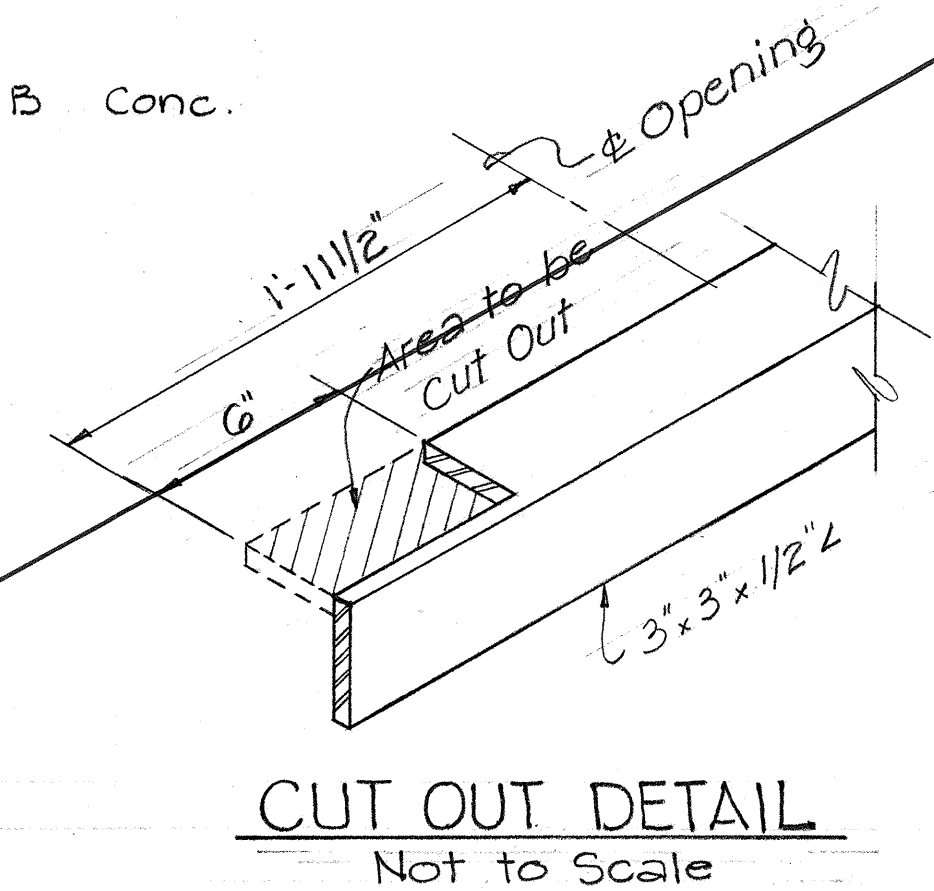
APPROVED: *H. Trotter*
MANAGER H.C. & S. Co. Date 9-25-69

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
IRRIGATION DETAILS
OUTLET STRUCTURE @
STA. 278+39.32
KAHULUI AIRPORT-MAALAEA HWY.
PROJ. No. 5-0380 (6)
Scale: As Shown Dec. 1969
SHEET No. 16 OF 8 SHEETS

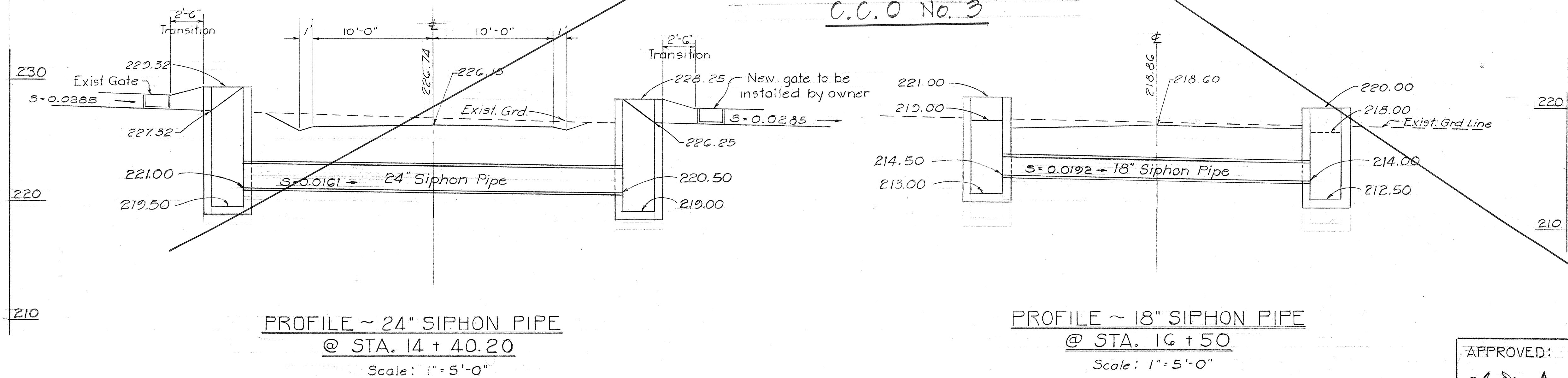
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-0360(6)	1969	43	89



DETAILS OF TYPE A TRASH RACK
Scale: 1 1/2" = 1'-0"



Note:
Location of manhole rungs shall be determined by Engineer in the field.



APPROVED:

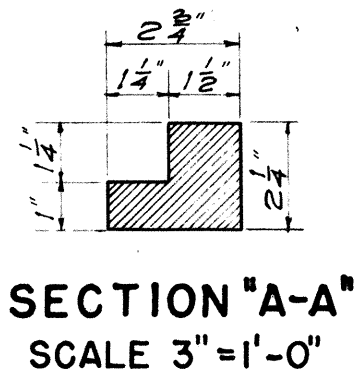
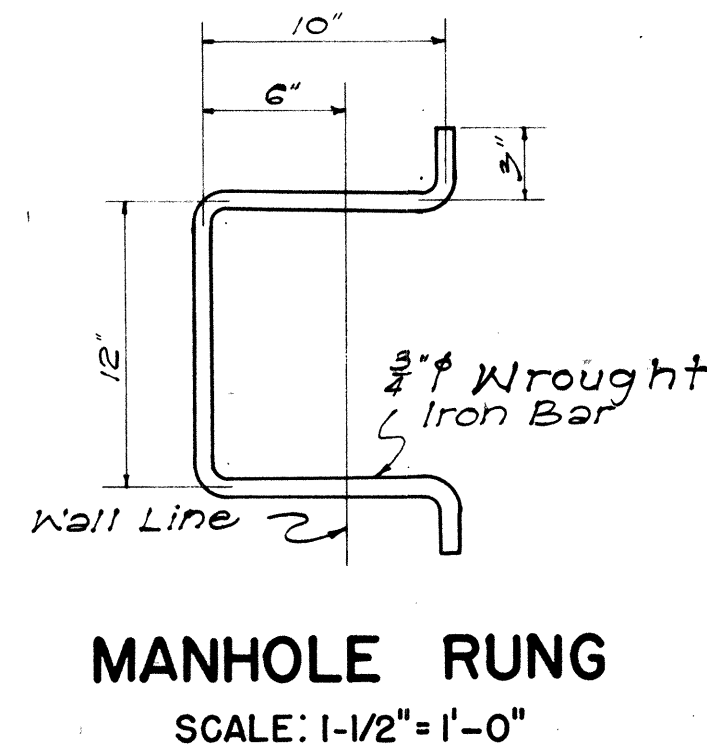
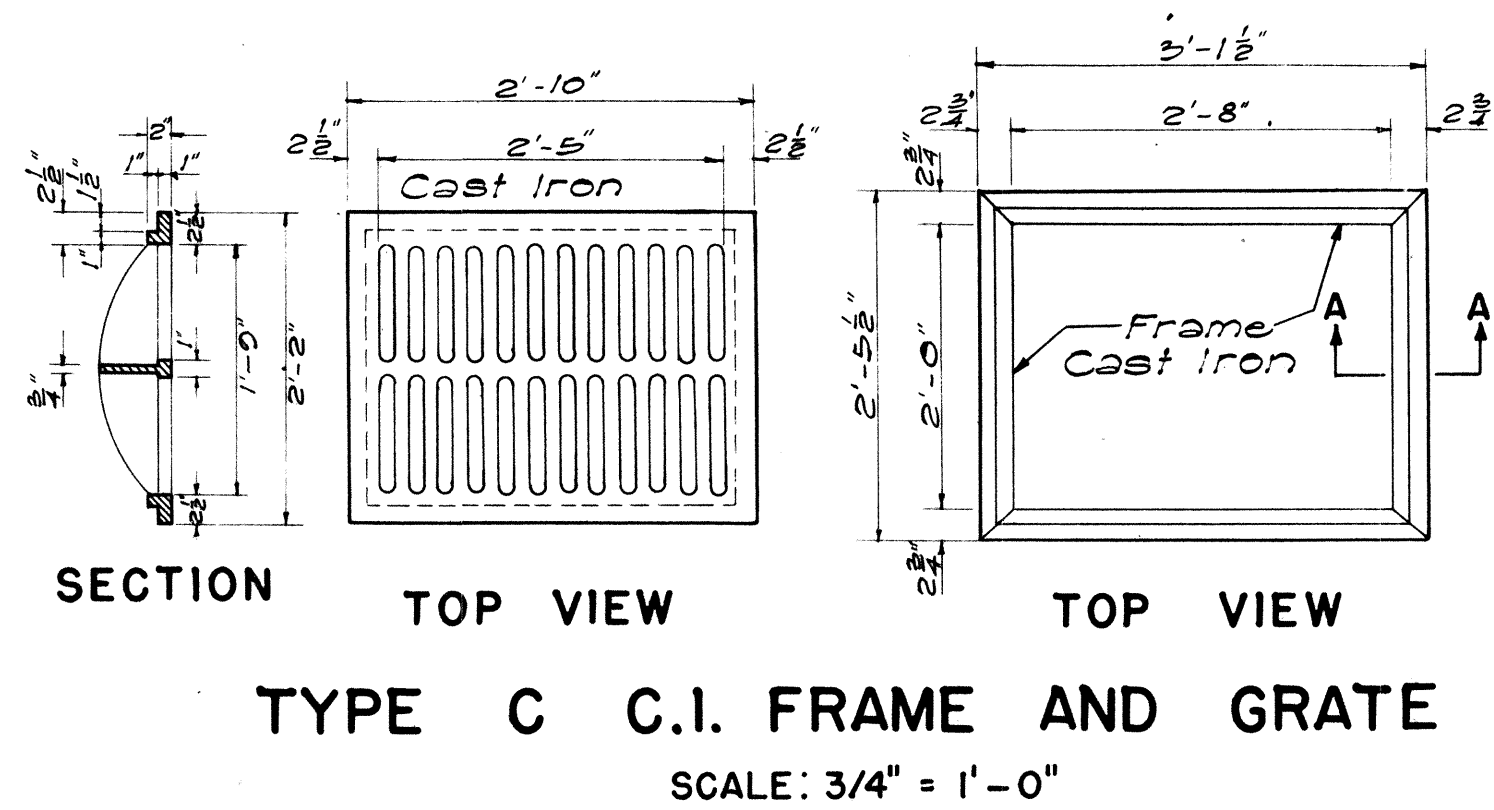
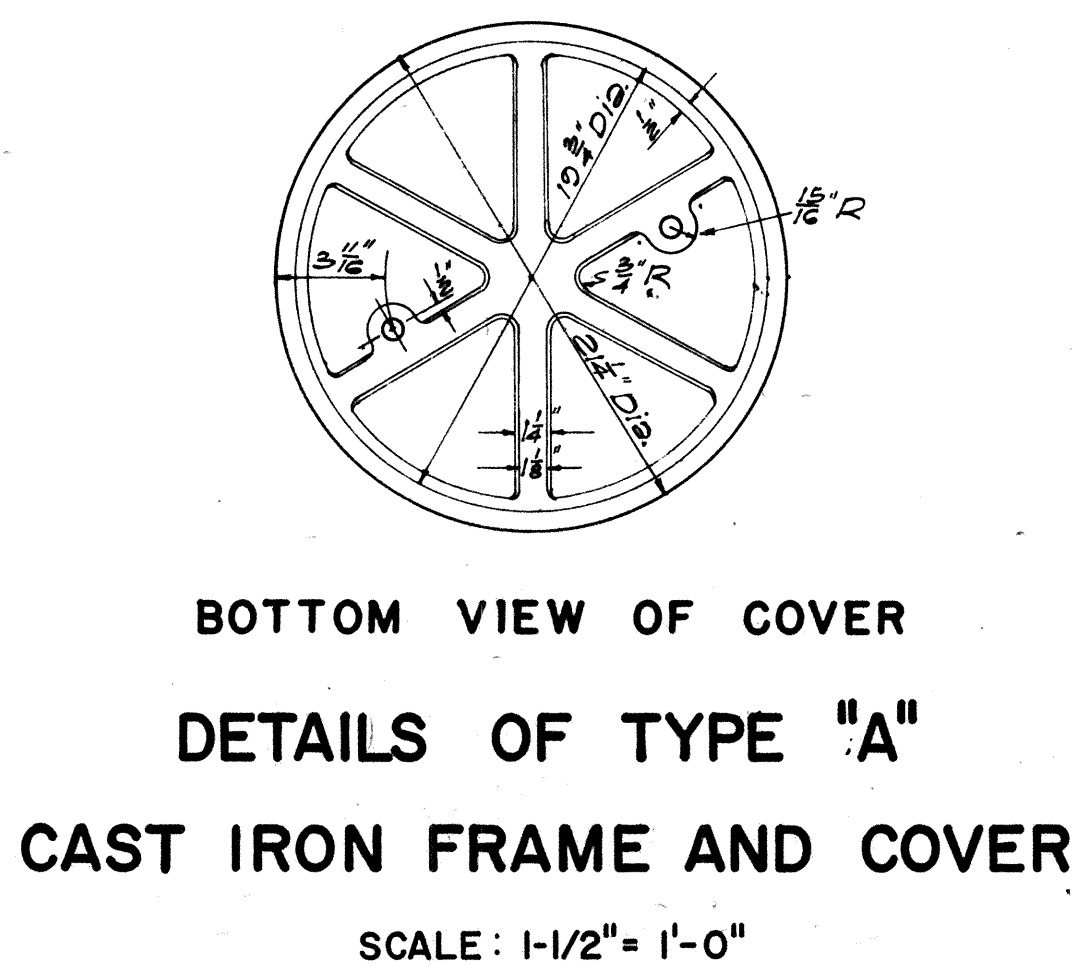
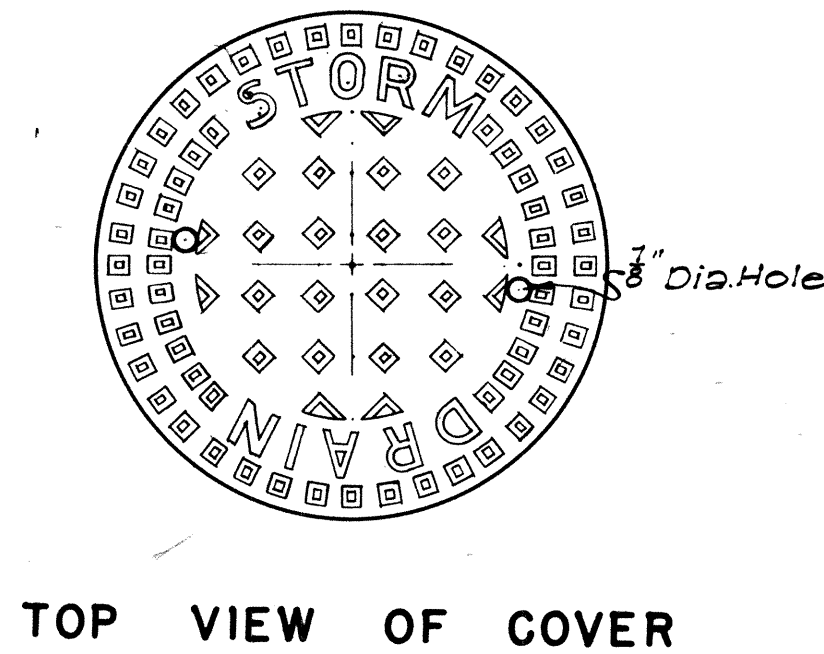
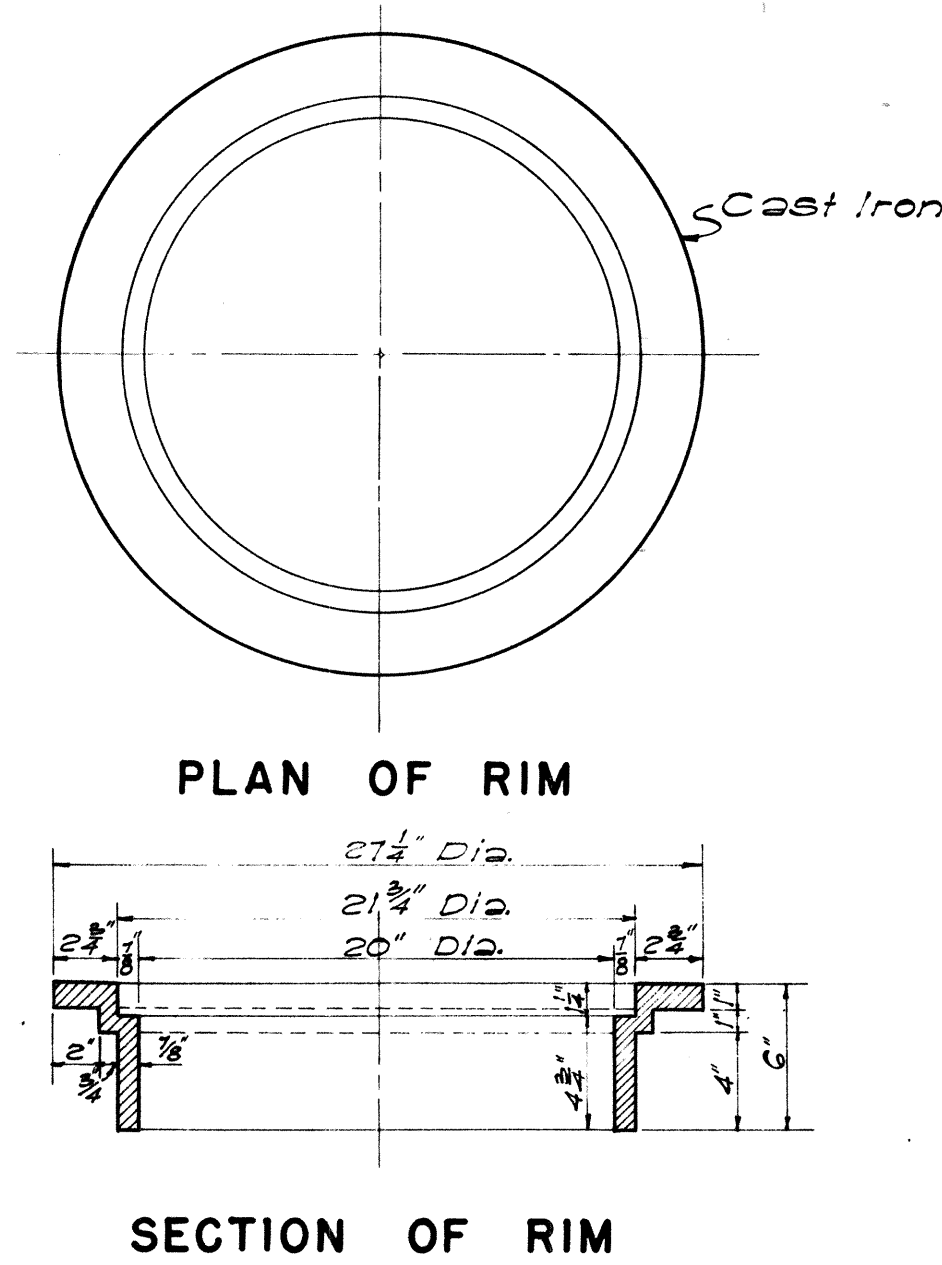
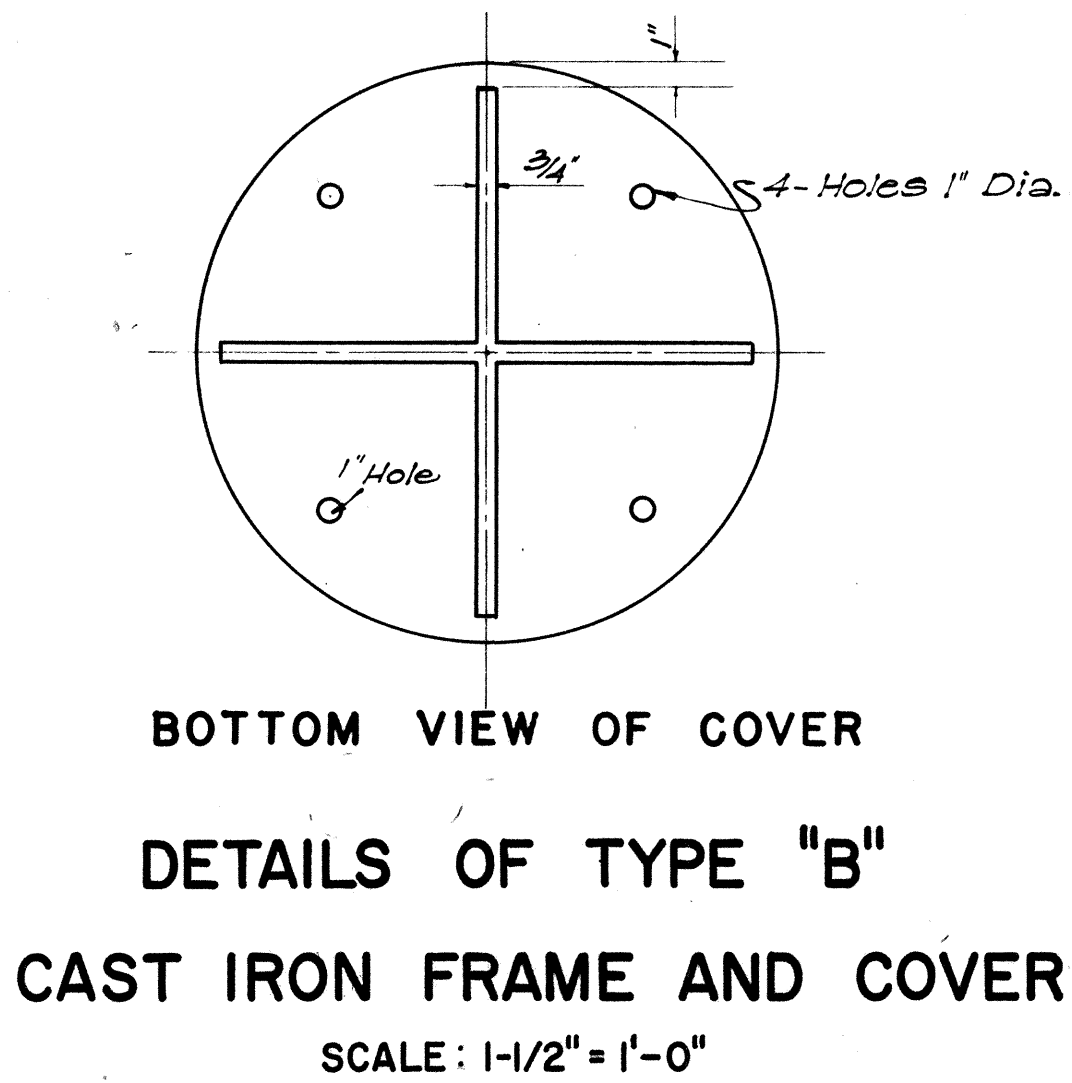
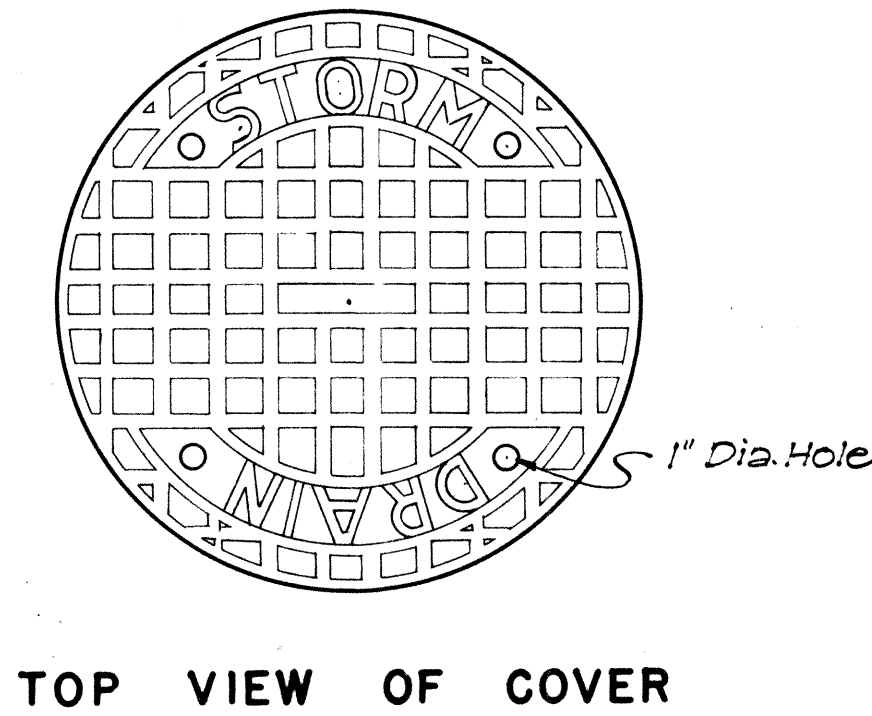
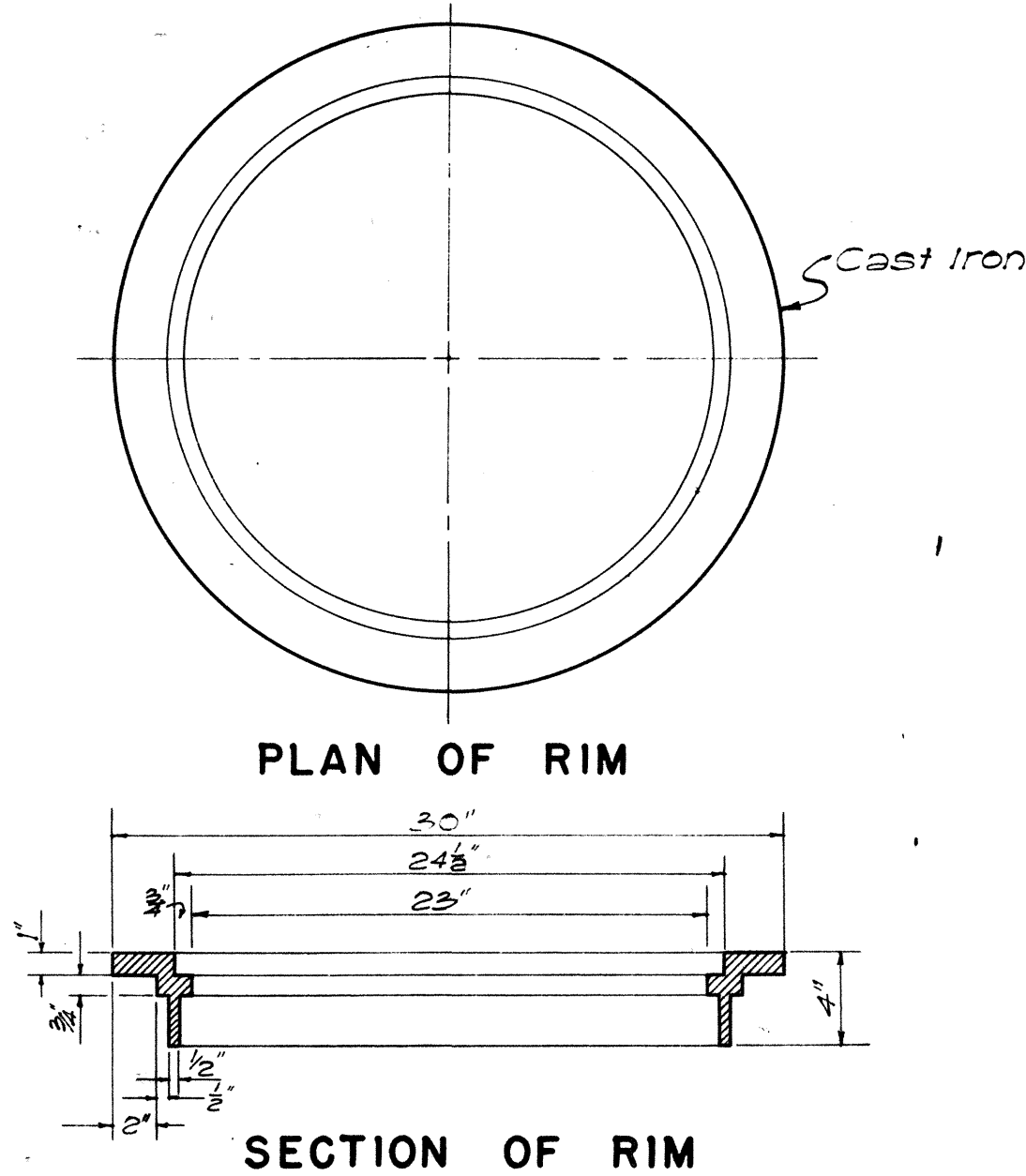
MANAGER

W.S. Co.

Date

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
IRRIGATION DETAILS
FOR CANE HAIL ROAD
24" & 18" SIPHONS AT
STA. 14 + 40.20 AND STA. 16 + 50
KAHULUI AIRPORT ~ MAALAEA HWY.
PROJ. No. S-0380 (6)
Scale: As Shown Dec. 1969
SHEET No. 1-7 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	S-0380(6)	1969	44	89



APPROVAL RECOMMENDED:	
HYDRAULIC DESIGN ENGINEER	DATE
APPROVED:	
ASSISTANT CHIEF, ENGINEERING	DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
CATCH BASIN AND
MANHOLE CASTINGS

Scale: As Noted
Date: July, 1969