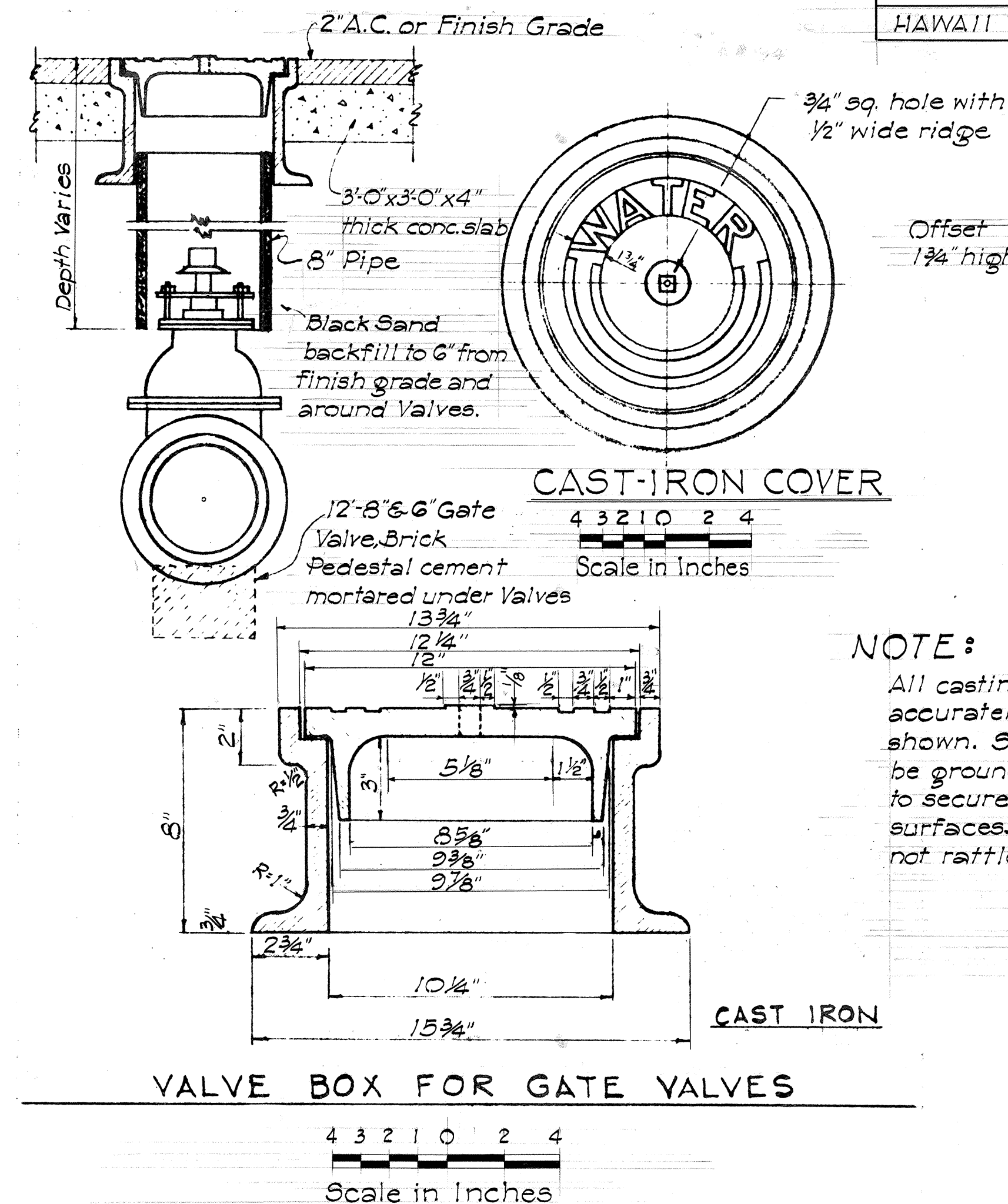
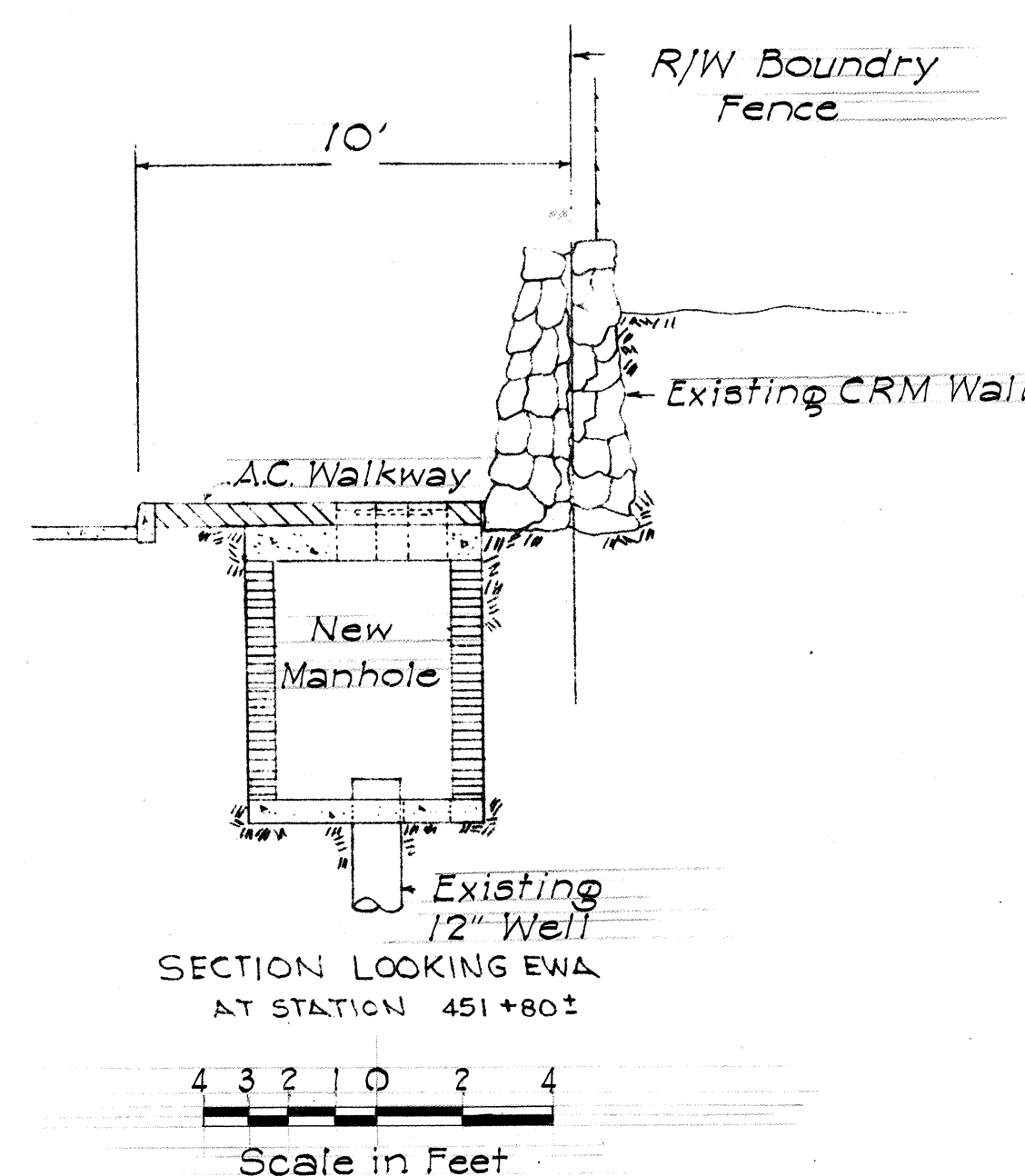
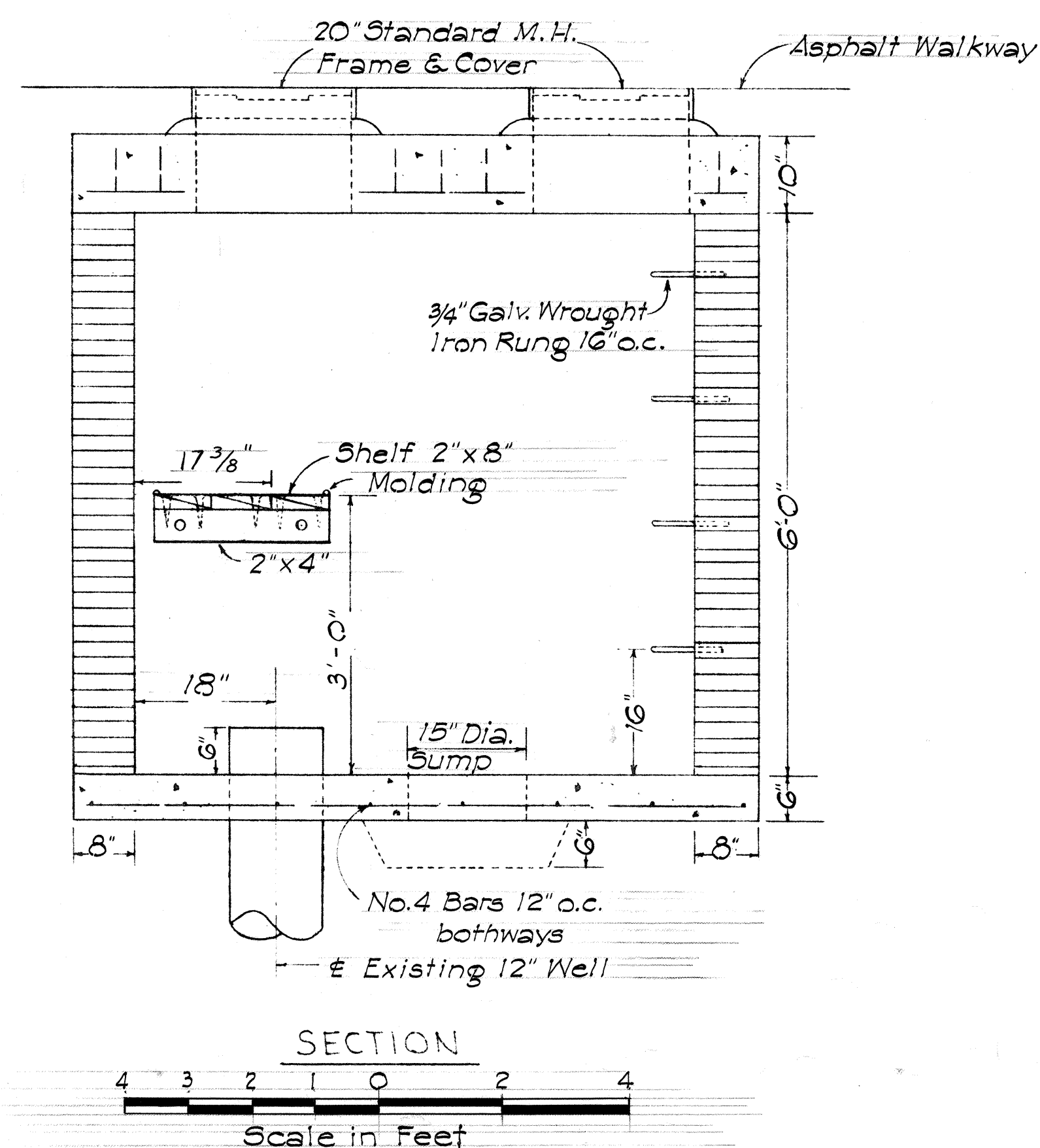
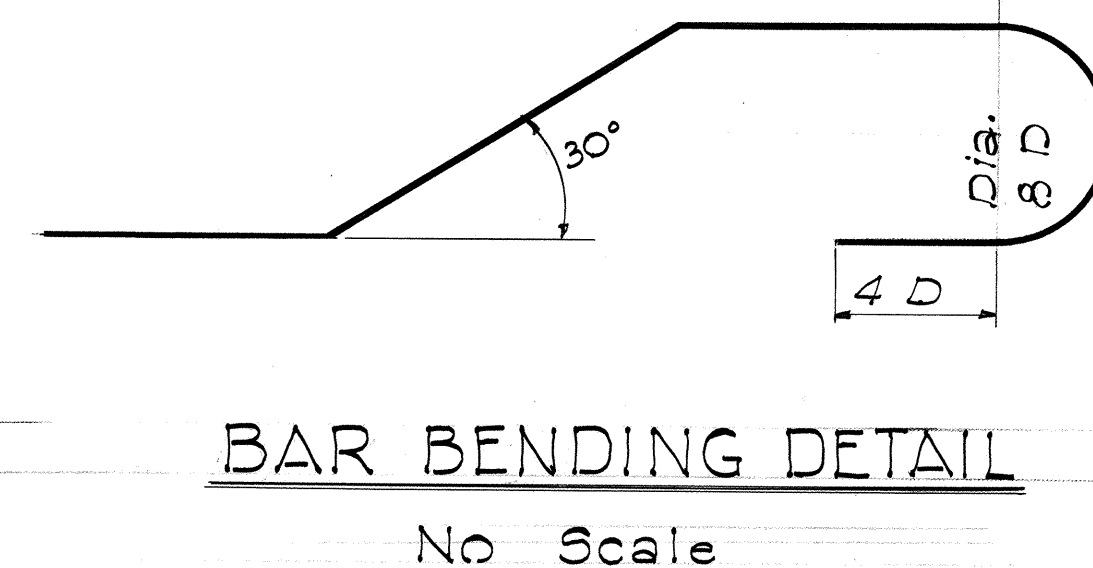
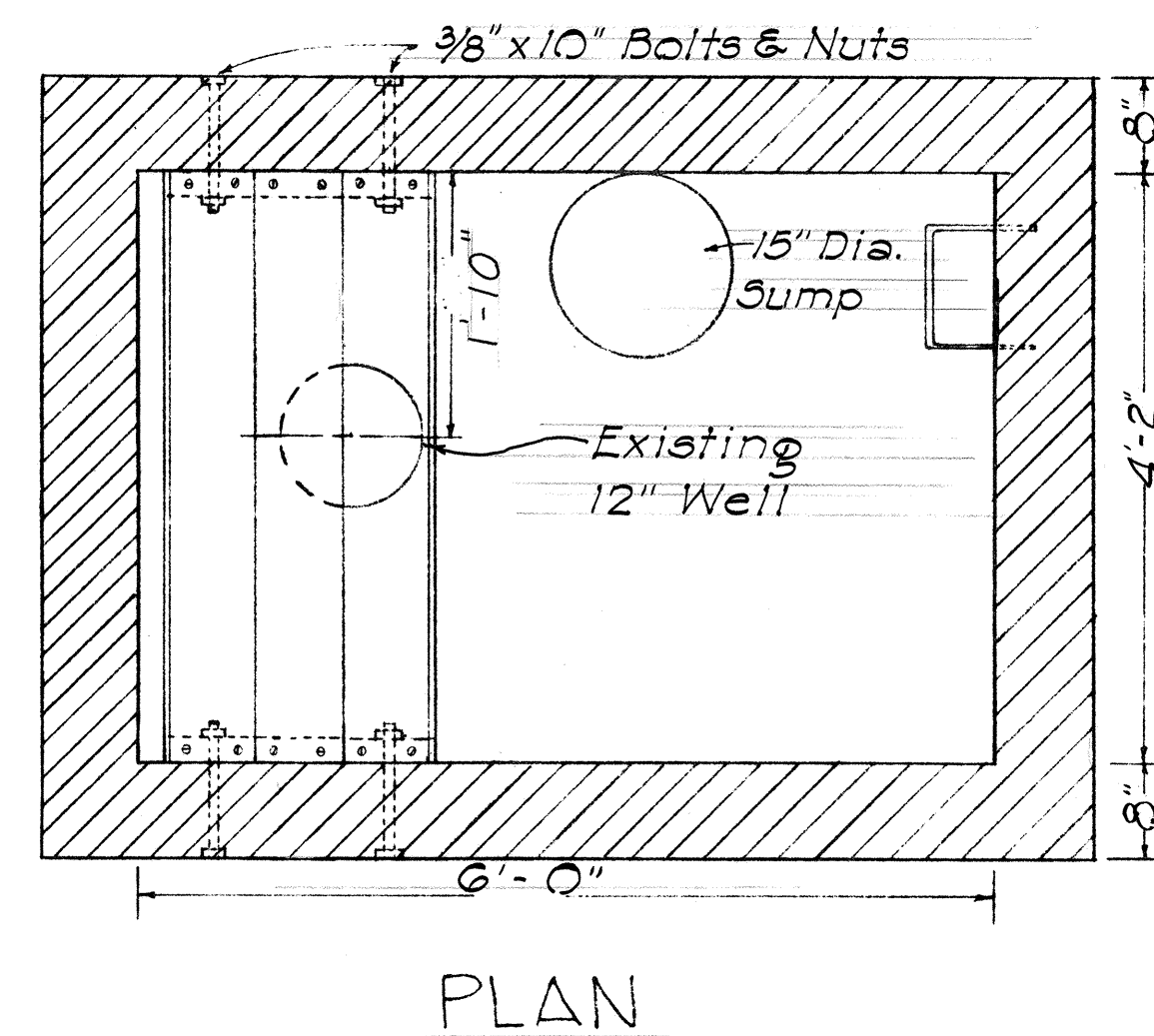
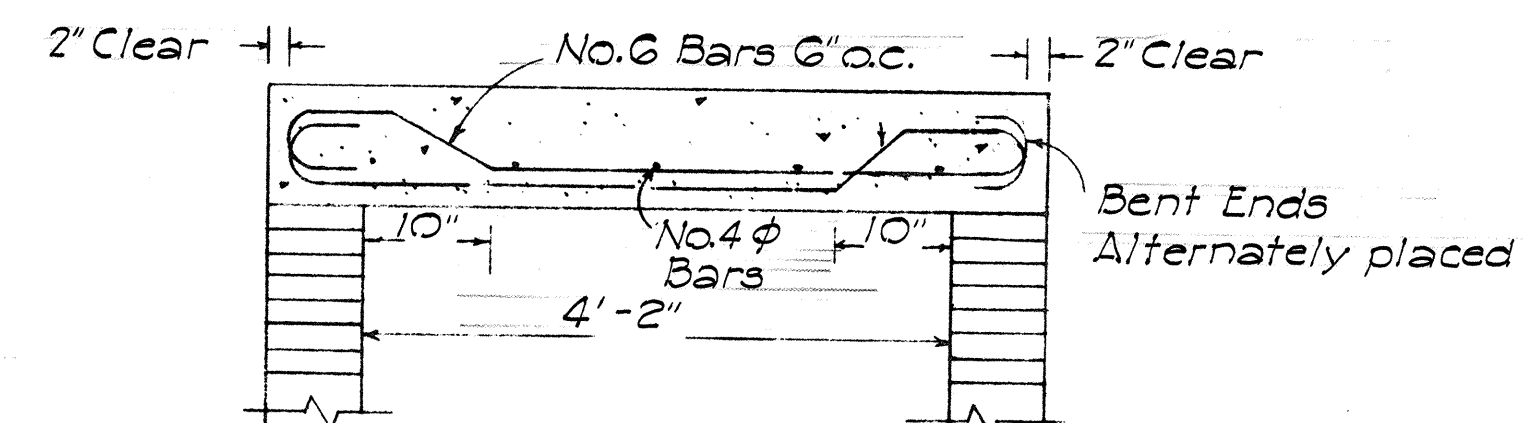
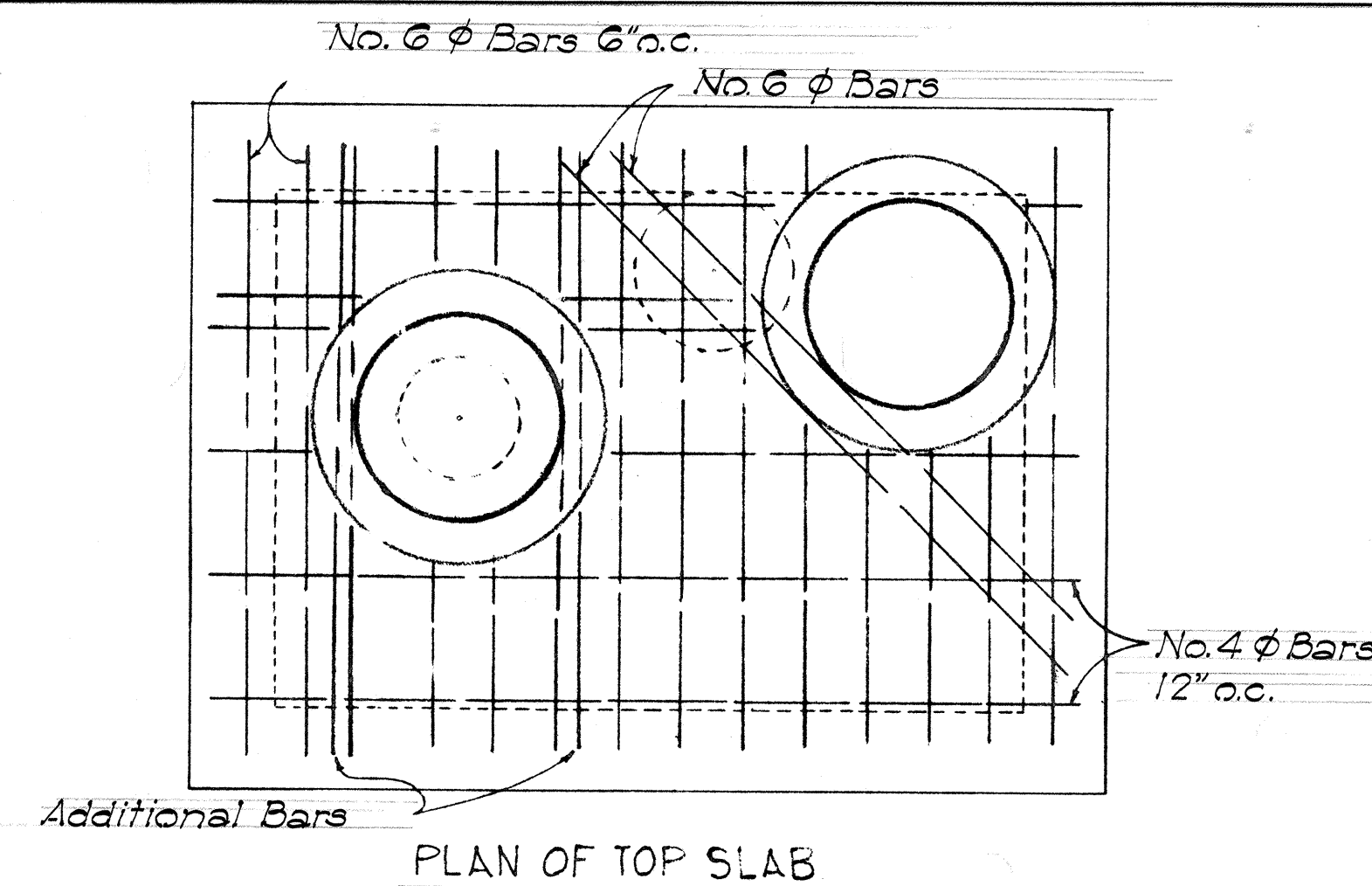


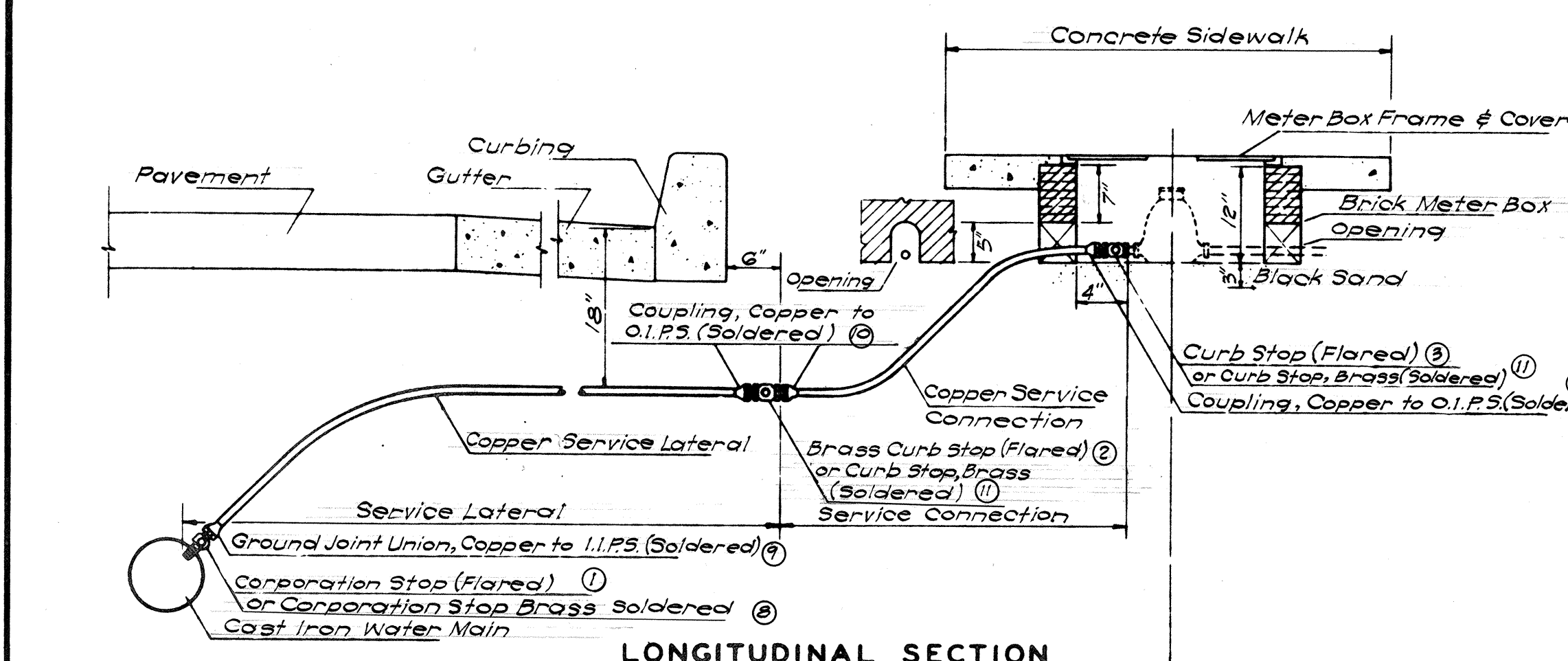
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F090-1(G)	1961	13	71



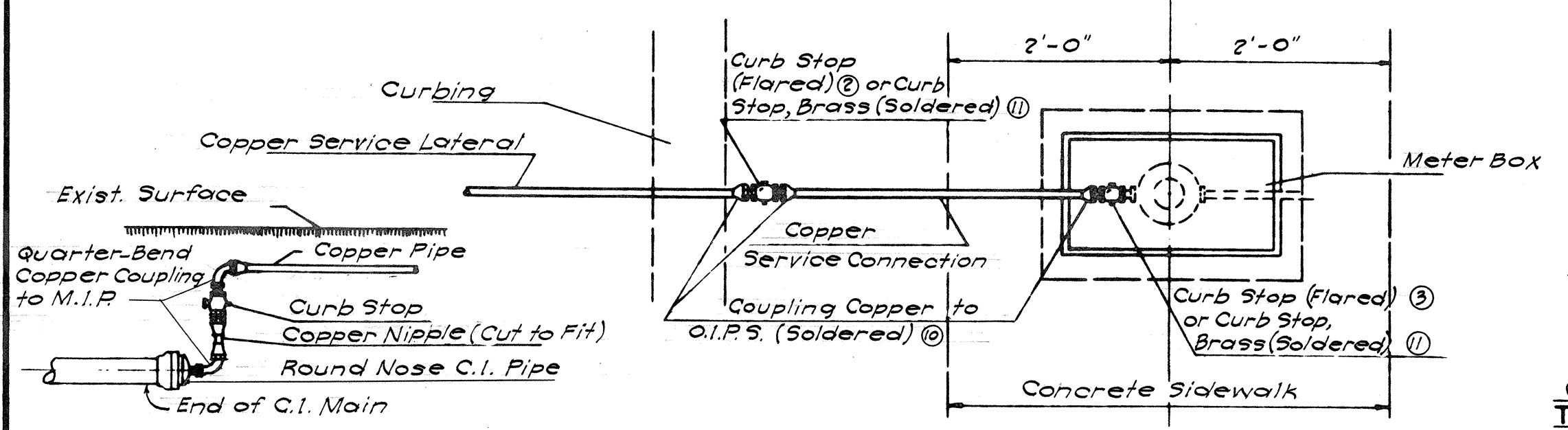
NOTE:
All castings shall be made accurately to the dimensions shown. Seat and Cover shall be ground where necessary, to secure flat and true surfaces. The Cover shall not rattle in any position.

APPROVED:
W. J. Smith May 25 1961
Asst. Chief Engineer, B.W.S. Date

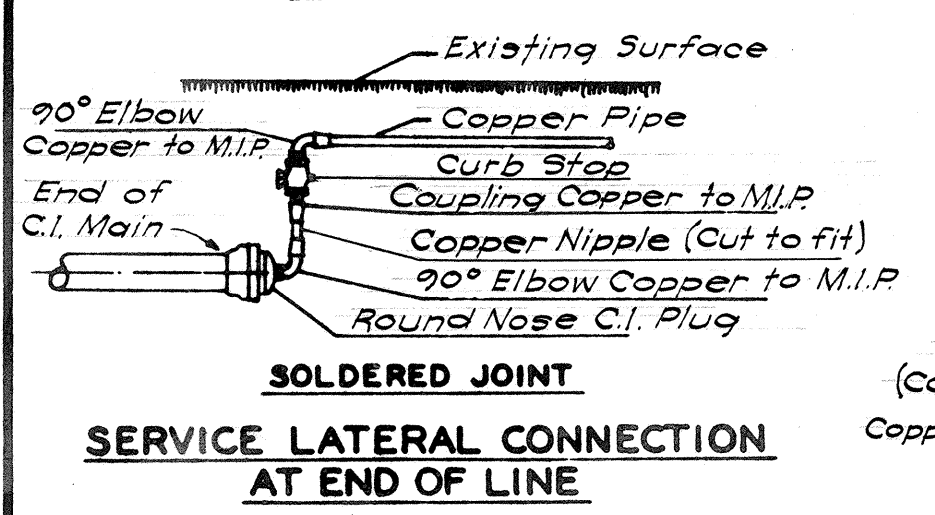
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII
DETAIL-WAIIAWA
OBSERVATION WELL &
GATE VALVE BOX
Scale: As Noted May 1961
PROJ. NO. F-090-1(G)



LONGITUDINAL SECTION



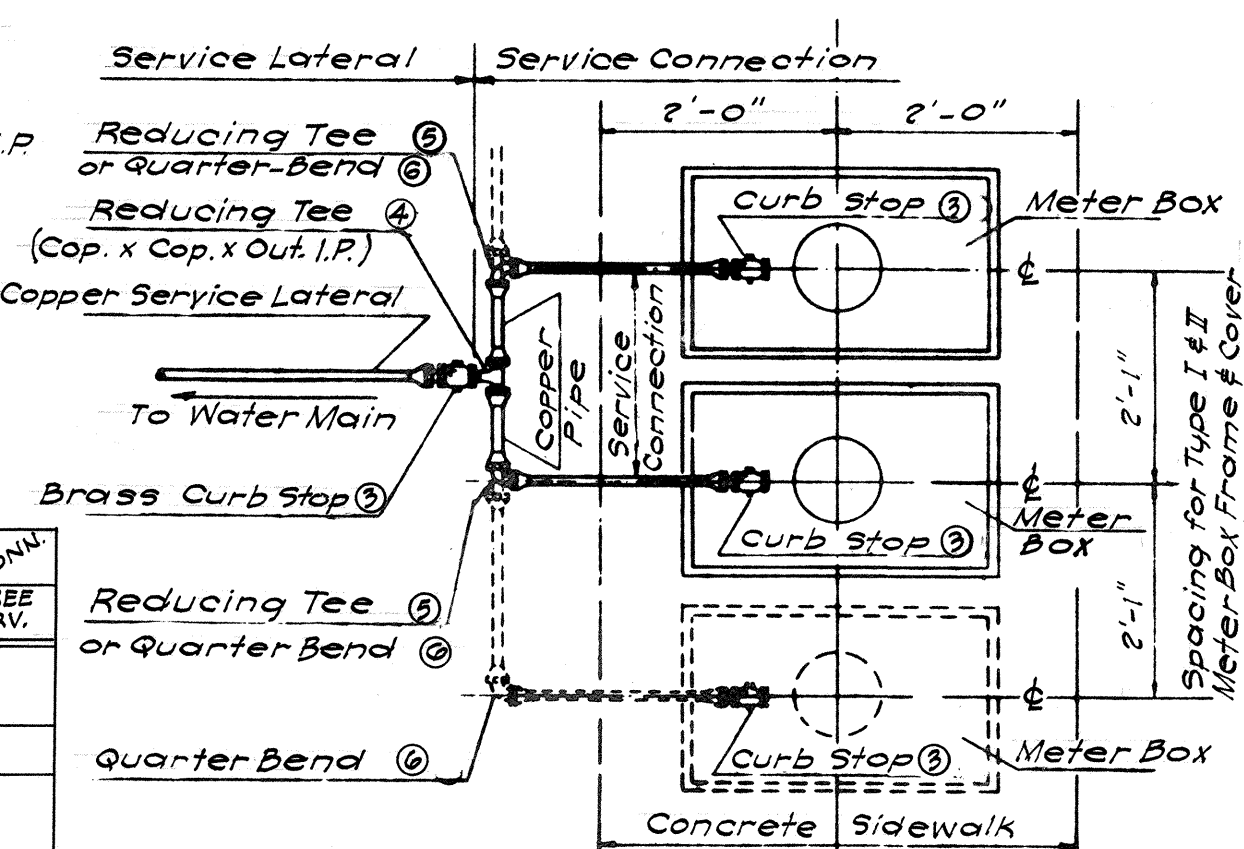
SINGLE SERVICE CONNECTION



SOLDERED JOINT SERVICE LATERAL CONNECTION AT END OF LINE

ITEM NO.	DESCRIPTION	SINGLE SERVICE CONN.	MULTI-SERV. CONN. TWO SERV.	MULTI-SERV. CONN. THREE SERV.
1	Corporation Stop with Straight Coupling Nut	1	1	1
2	Brass Curb Stop	1	-	-
3	Curb Stop with Tube Nut, Copper to Inside I.P.	1	3	4
4	Reducing Tees with Tube Nuts - Copper to Copper to Outside I.P.	-	1	1
5	Reducing Tees with Tube Nuts - Copper to Copper to Copper	-	-	1
6	1/4 Bend Union Coupling with Tube Nuts - Copper to Copper	-	2	2
7	Three Part Union Coupling or Solder Coupling	-	-	-

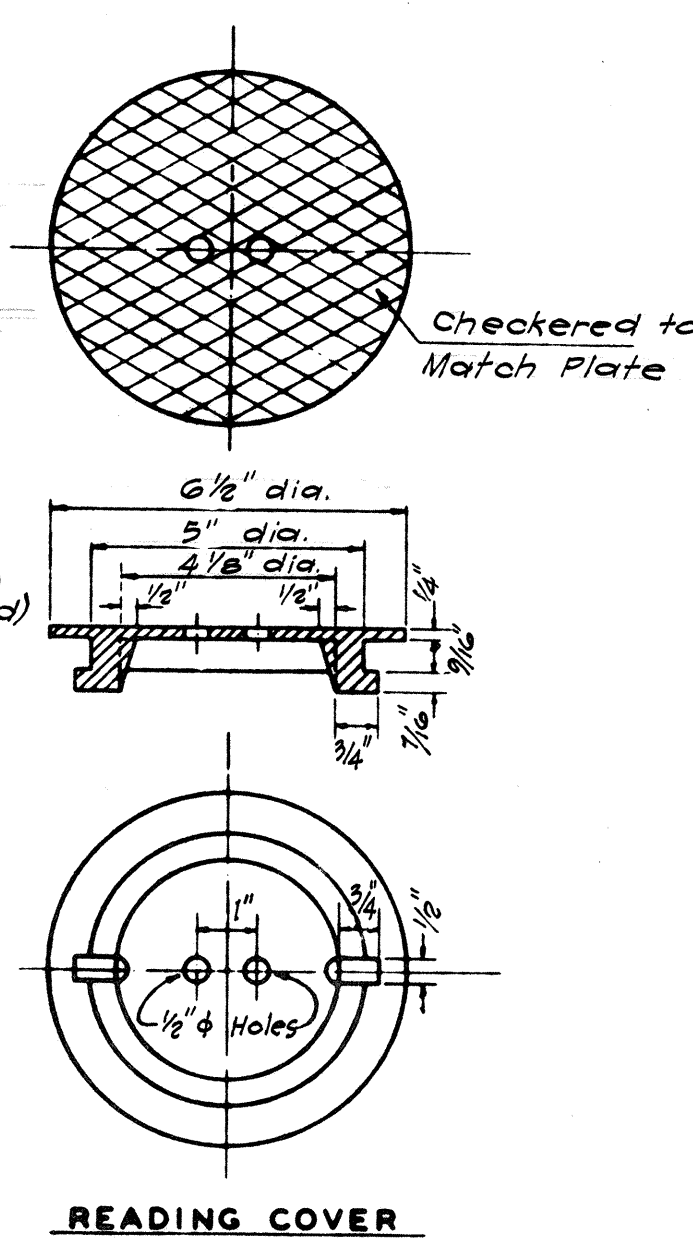
SCHEDULE OF COPPER FITTINGS (FLARED JOINT)



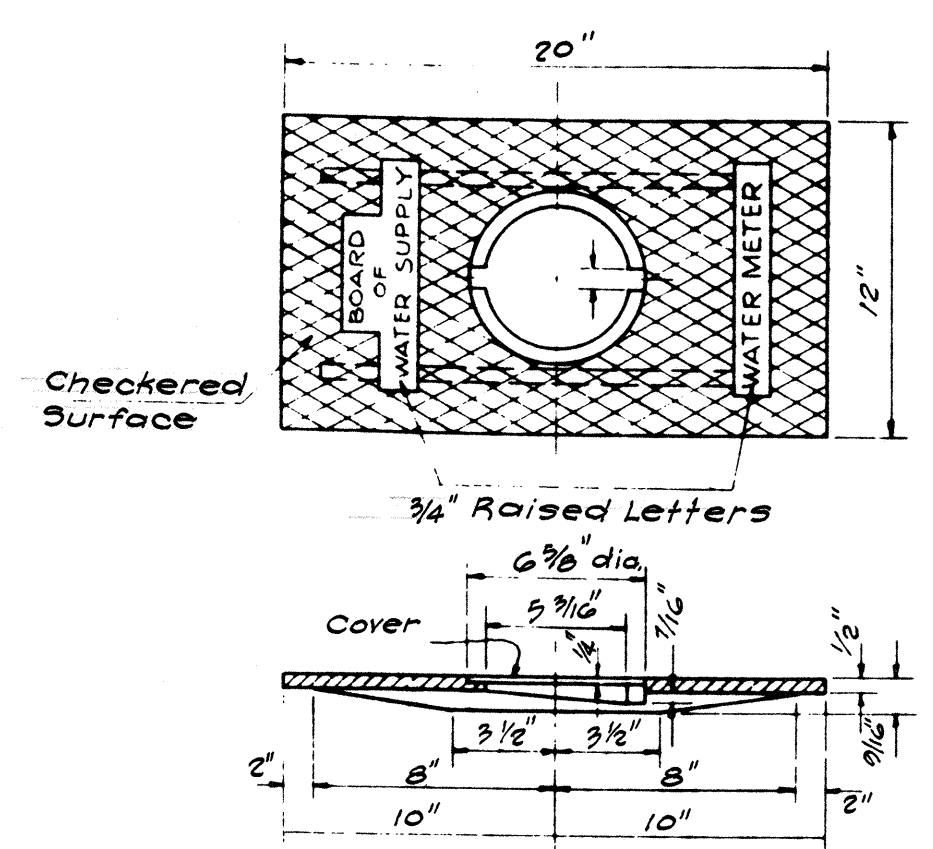
MULTIPLE SERVICE CONNECTION FLARED JOINTS

ITEM NO.	DESCRIPTION	SINGLE SERVICE CONN.	MULTI-SERV. CONN. TWO SERV.	MULTI-SERV. CONN. THREE SERV.
8	Corporation Stop, Brass	1	1	1
9	Ground Joint Union, Copper to I.I.P.S.	1	1	1
10	Coupling, Copper to O.I.P.S.	2	1	1
11	Curb Stop, Brass (BWS Standard)	1	1	1
12	Fitting Adapter, Fitting to O.I.P.S.	-	1	1
13	Tee, Copper to Copper to Copper	-	1	1
14	Bushings, Fitting to Copper	-	2	2
15	90° Elbow, Copper to Copper	-	2	2
16	Coupling, Copper to O.I.P.S.	1	2	3
17	Curb Stop, Brass (BWS Standard)	1	2	3
18	Reducing Tee, Copper to Copper (Sub. for Items No. 13 & 14)	-	1	1
19	Tee, Copper to Copper to Copper	-	-	1
20	Bushing, Fitting to Copper	-	-	1
21	Reducing Tee, Copper to Copper (Sub. for Items No. 19 & 20)	-	-	1

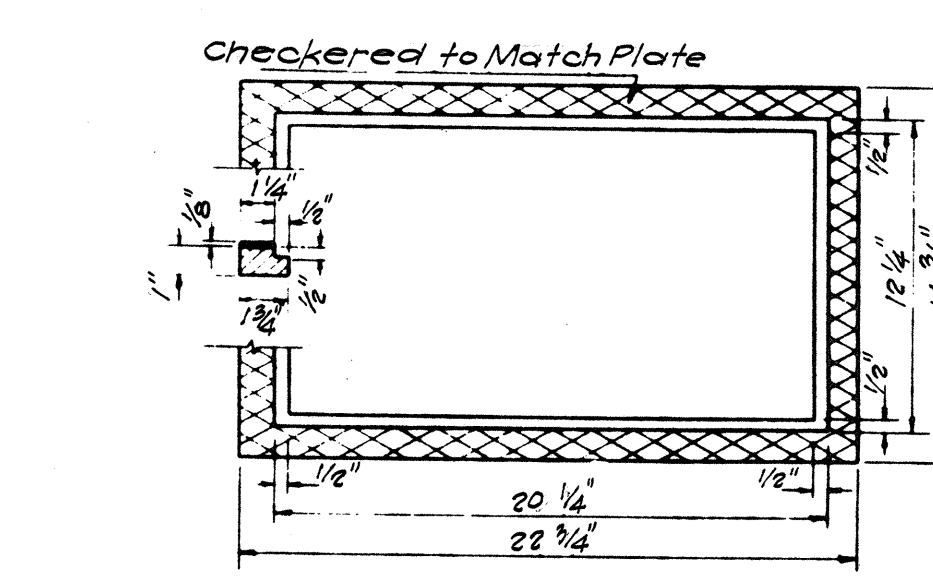
SCHEDULE OF COPPER FITTINGS (SOLDERED JOINT)



CAST IRON COVER FOR TYPE I & TYPE II FRAMES

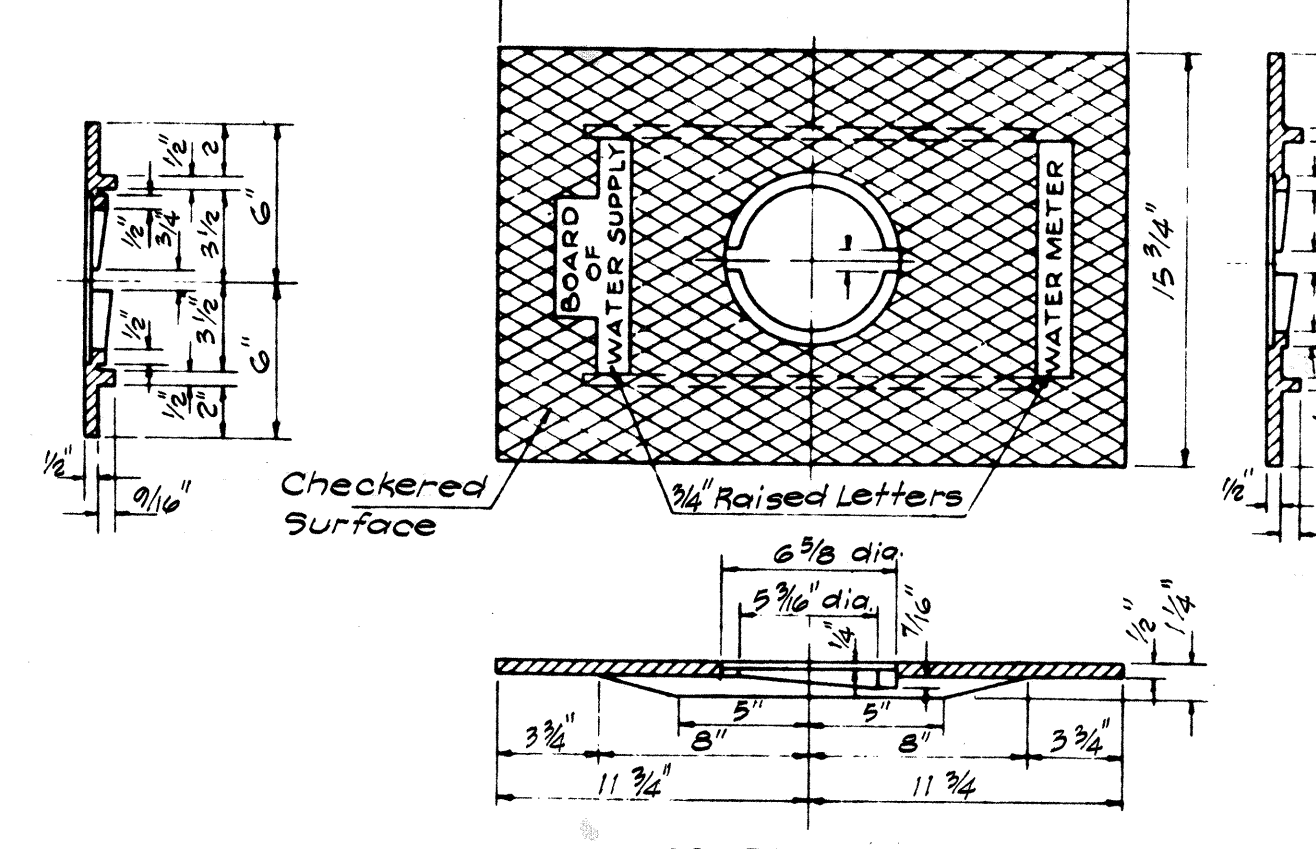


COVER PLATE

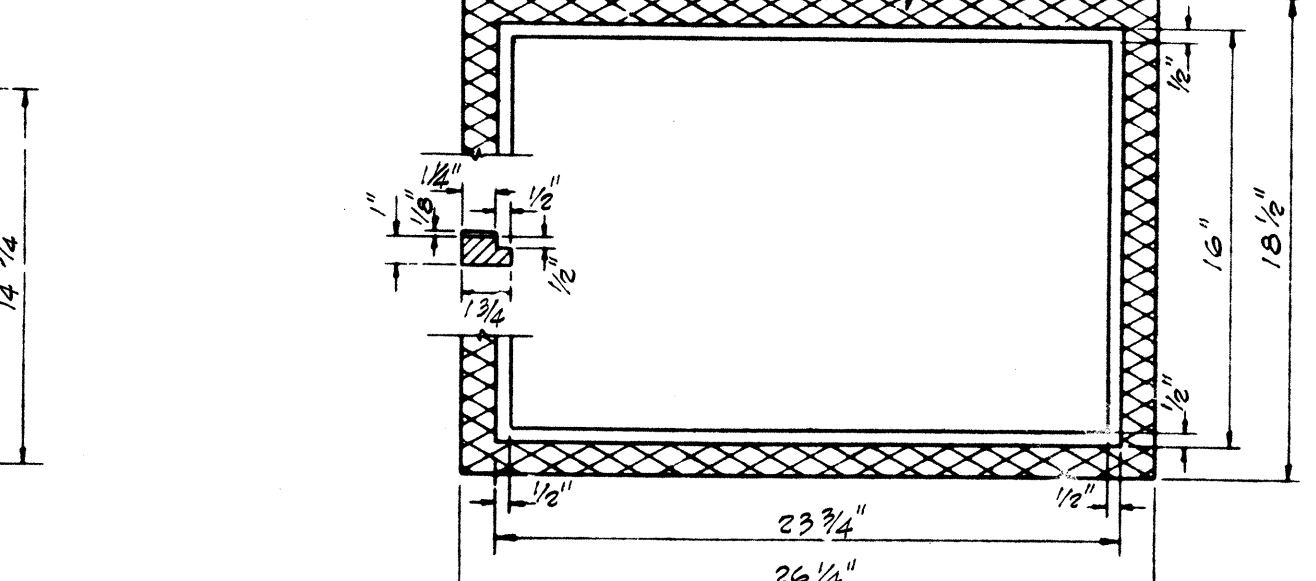


FRAME

CAST IRON FRAME AND PLATE TYPE I

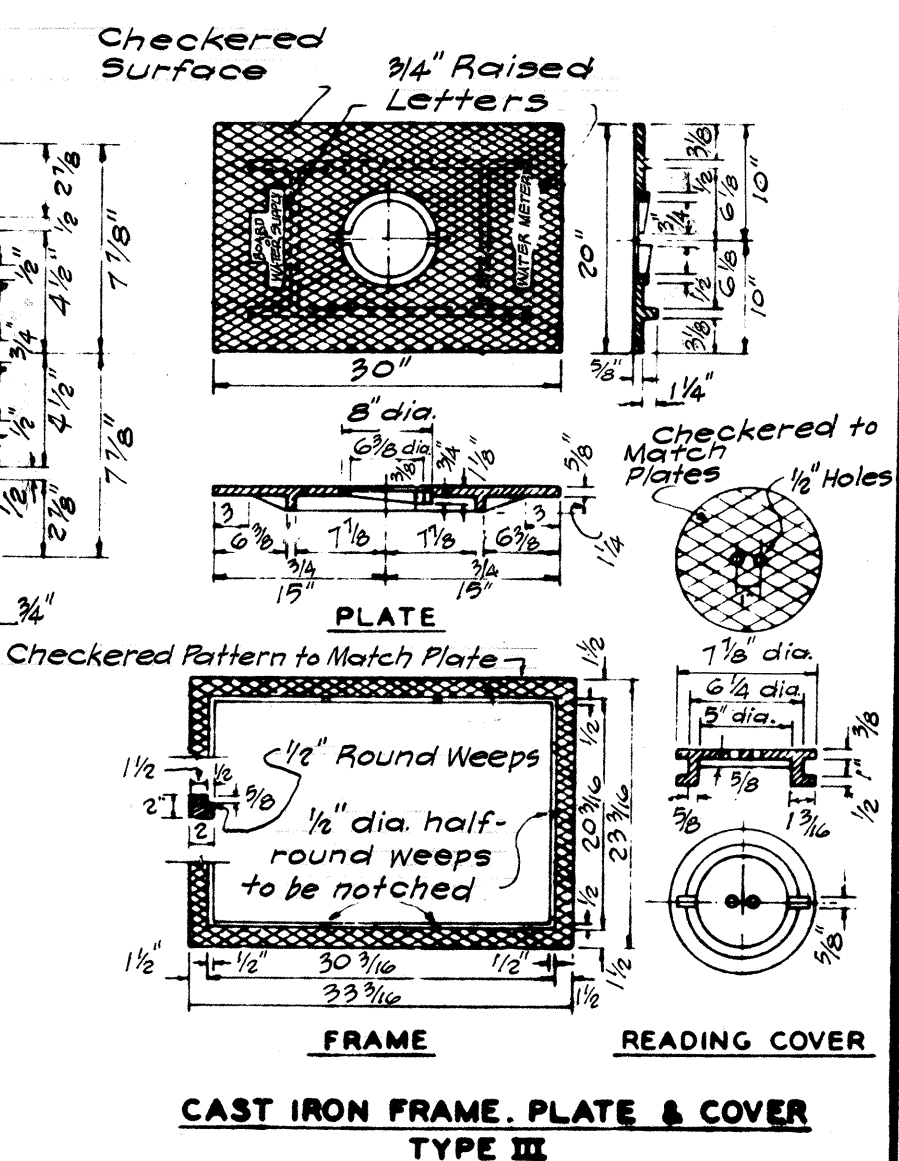


COVER PLATE

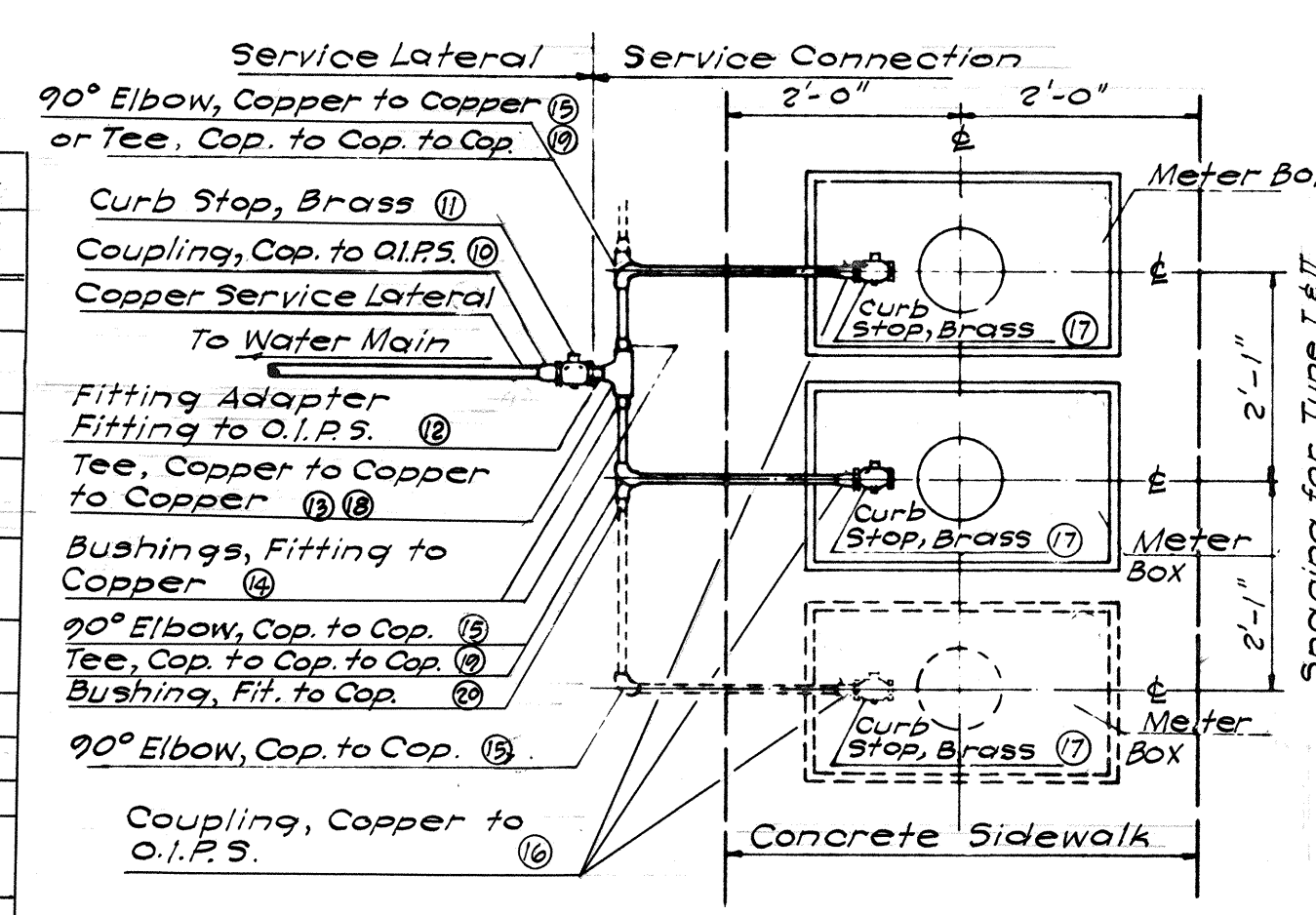


FRAME

CAST IRON FRAME AND PLATE TYPE II

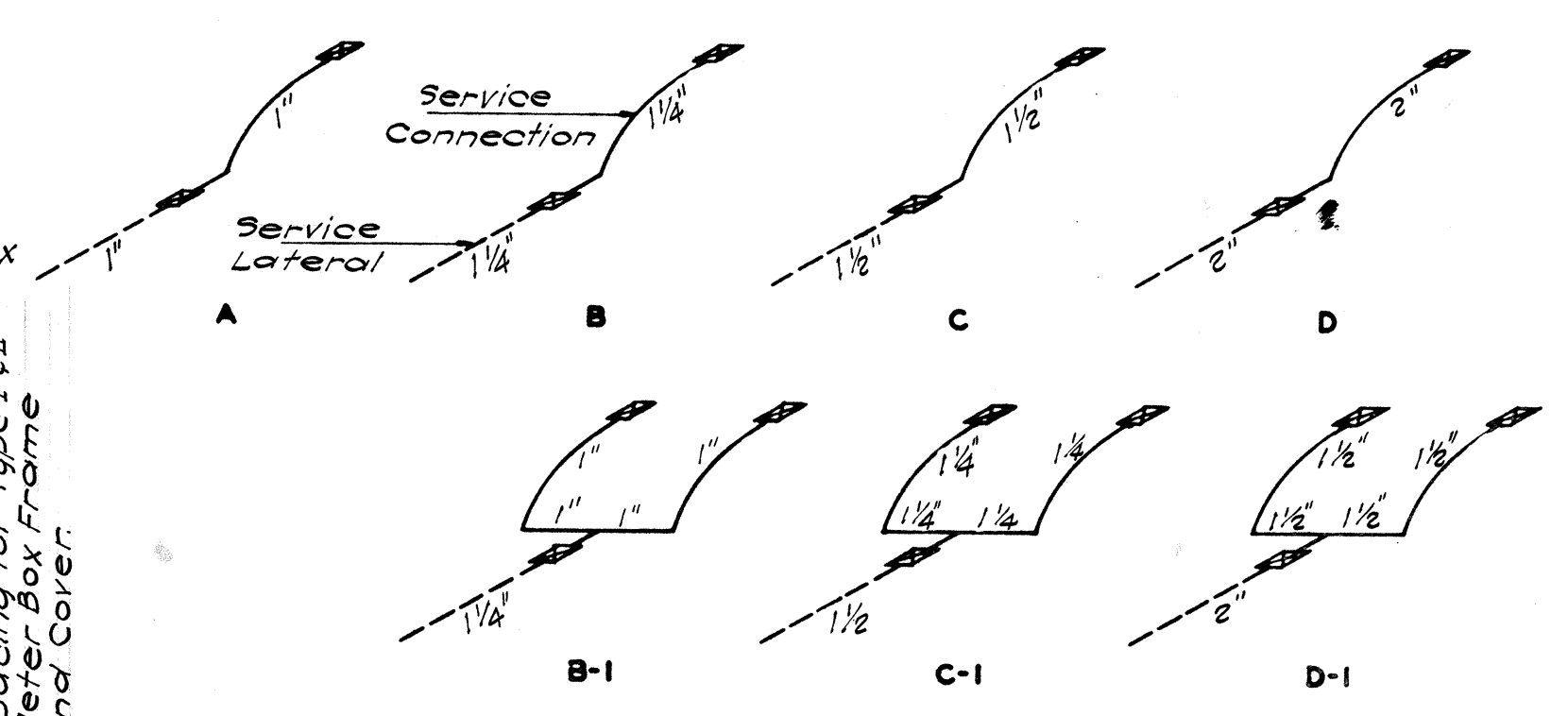


CAST IRON FRAME, PLATE & COVER TYPE III



MULTIPLE SERVICE CONNECTION SOLDERED JOINTS

NOTE:
USE OF COPPER PIPE AND FITTINGS WITH "SOLDERED" JOINTS OPTIONAL UNTIL FURTHER NOTICE.



TYPICAL LAYOUT OF SERVICE LATERALS AND CONNECTIONS

STANDARD DETAILS		DRAWN BY R.O.	
COPPER SERVICE LATERALS AND CONNECTIONS		TRACED BY R.O.	
C.I. METER BOX FRAME AND COVER		CHECKED BY T.I.	
		ENGINEER T.I.	
		DRAWING NO.	
APPROVED <i>[Signature]</i>		FILE 2	
SCALE <i>[Signature]</i>		POCKET FOLDER NO.	
DATE Jan. 27, 1963		SHEET 14 OF 24 b	
BOARD OF WATER SUPPLY			
HONOLULU, T. H.			
SHEET OF SHEETS			
DEPARTMENT OF TRANSPORTATION			
STATE OF HAWAII			
PROJ. NO. F-090-1(6)			

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-090-1(G)	1961	15	71

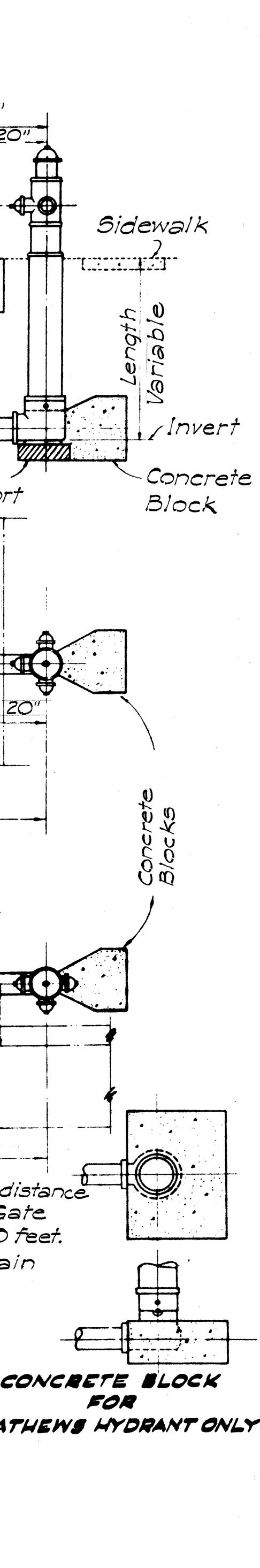
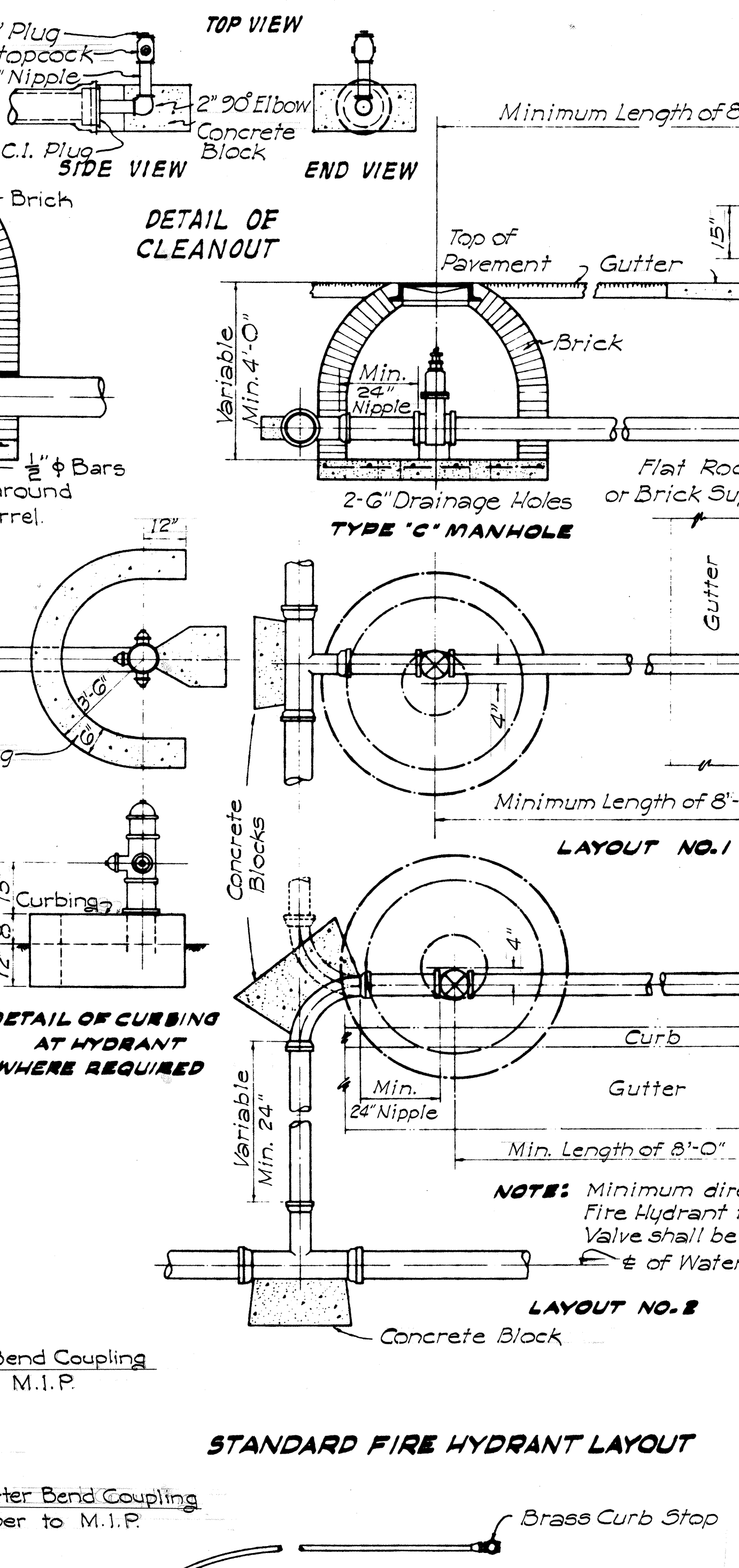
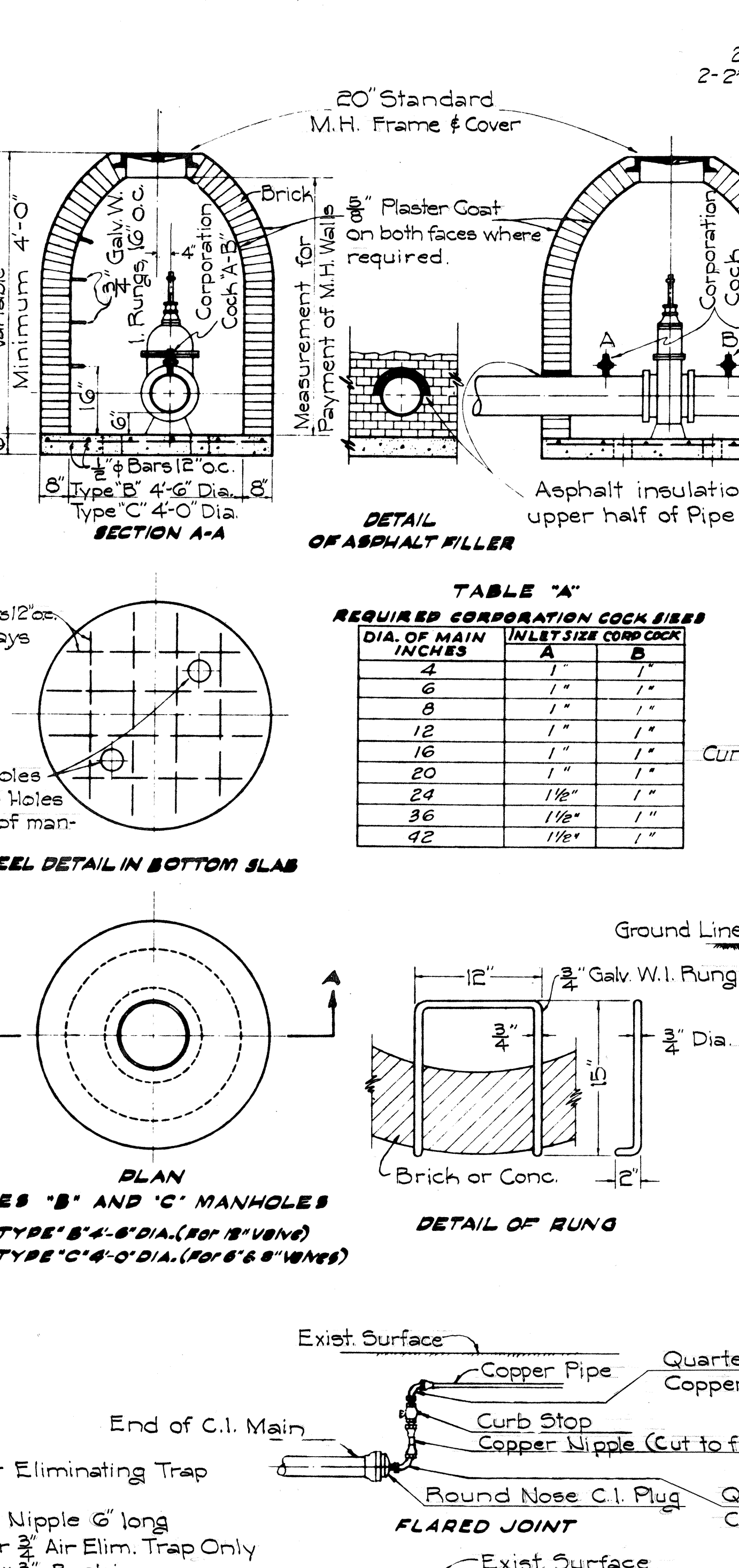
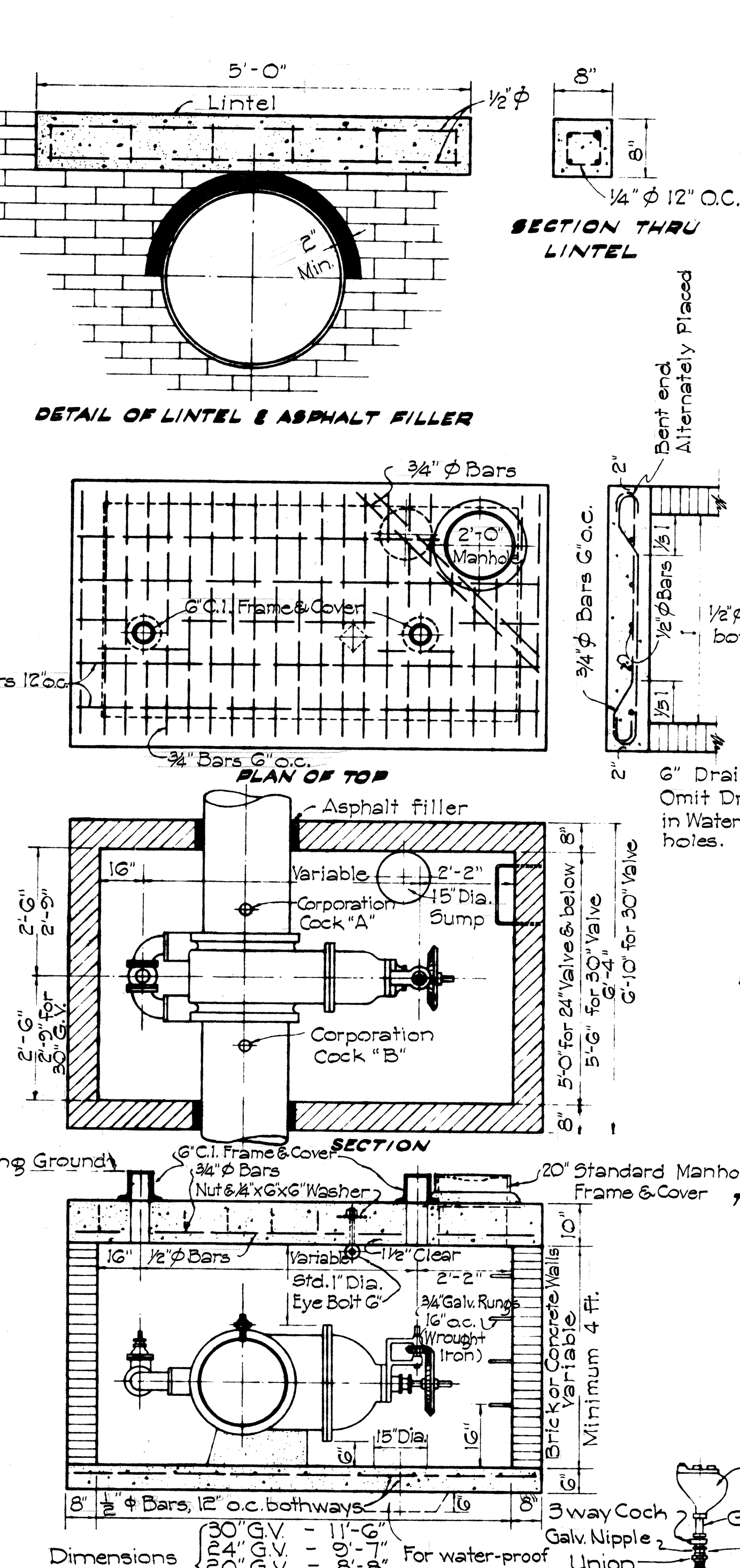
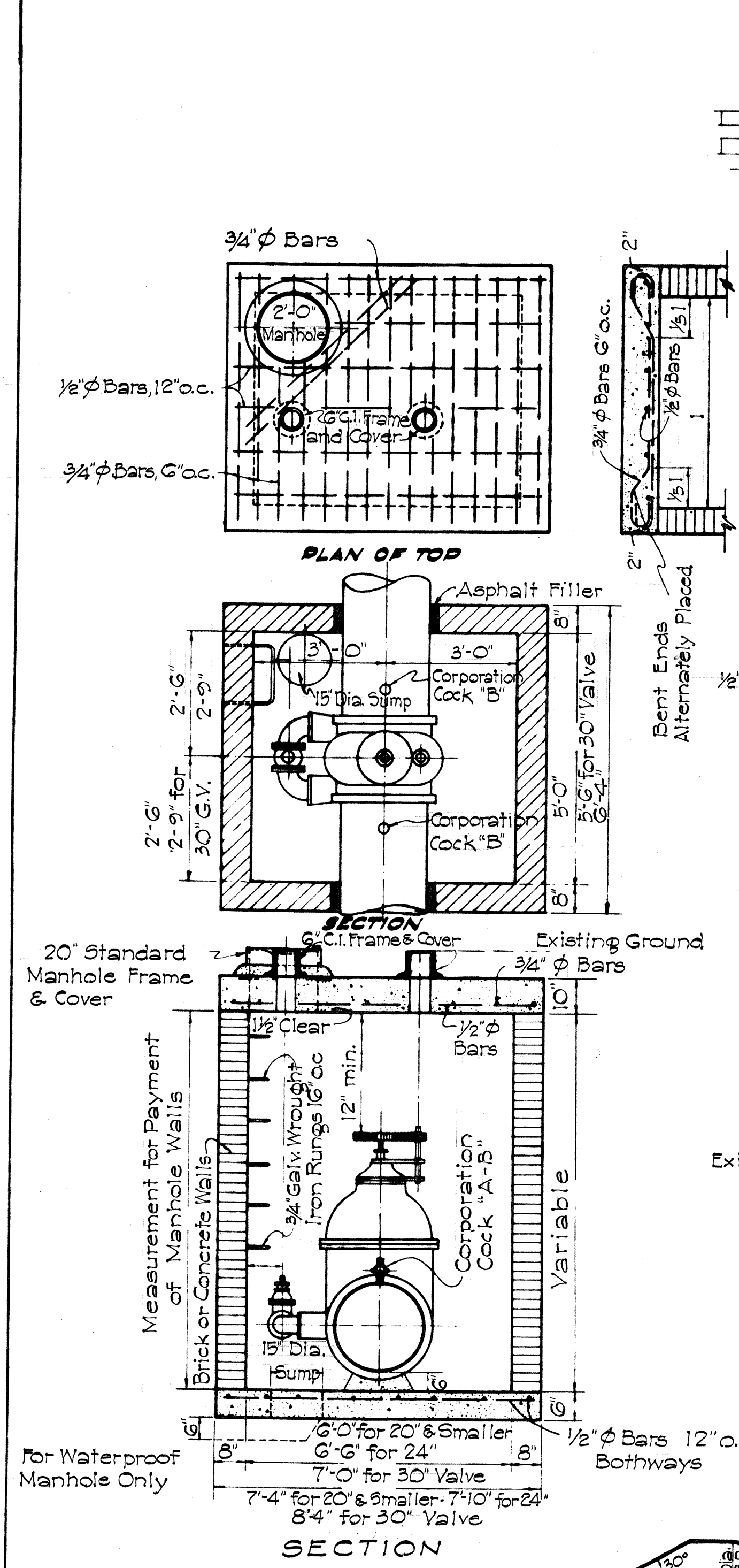


TABLE "A"

REQUIRED CORPORATION COCK SIZES

DIA. OF MAIN INCHES	INLET SIZE CORPORATION COCK	INLET SIZE CORPORATION COCK
4	1"	1"
6	1"	1"
8	1"	1"
12	1"	1"
16	1"	1"
20	1"	1"
24	1 1/2"	1"
36	1 1/2"	1"
42	1 1/2"	1"

STANDARD DETAILS

APPROVED: [Signature]

DATE: OCT. 31, 1962

FILE NO. 1367

BOARD OF WATER SUPPLY

HONOLULU, T.H.

DEPARTMENT OF TRANSPORTATION

STATE OF HAWAII

PROJ. NO. F-090-1(G)