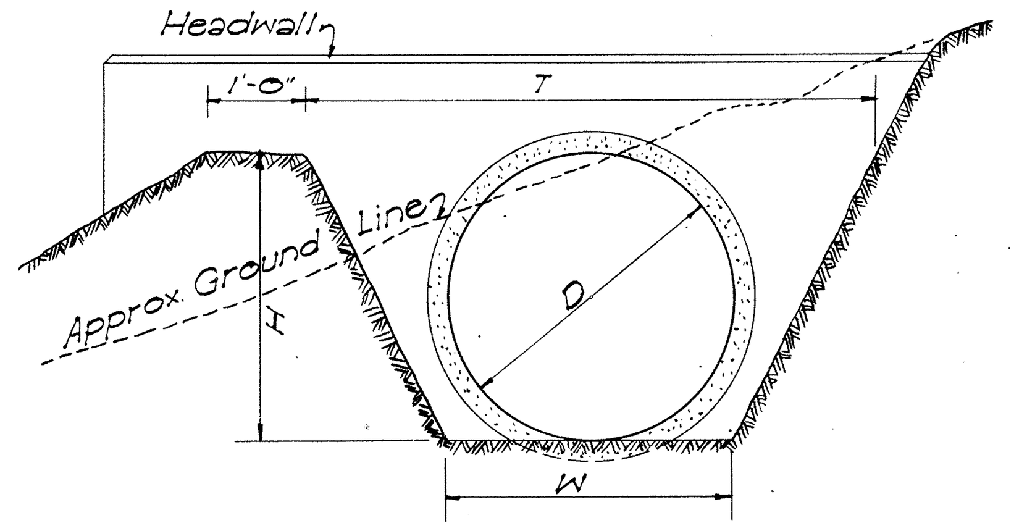
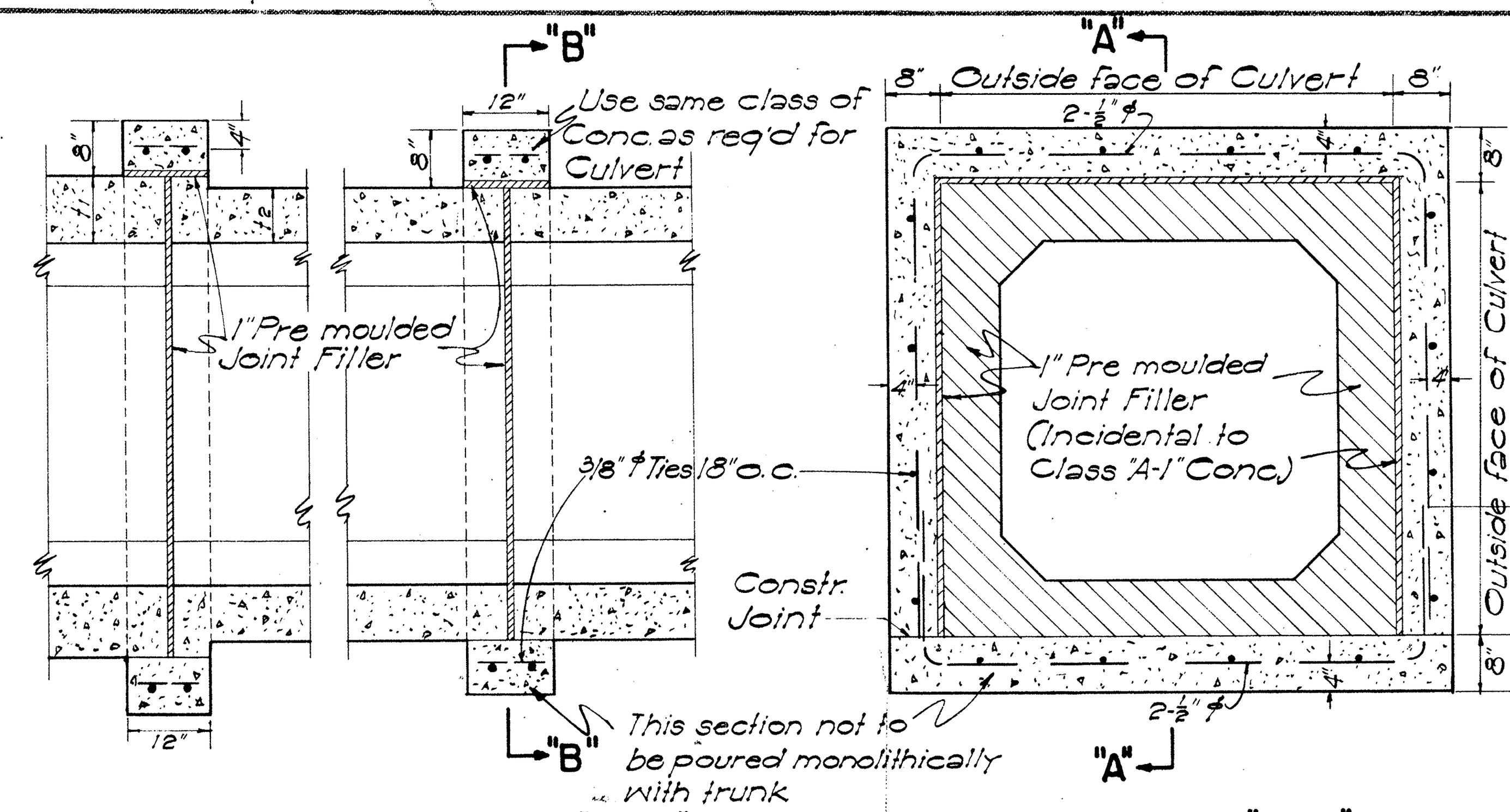
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	F 046(1)	1955	10	38

DATA FOR OUTLET DITCH			
D	W	H	T=W+H
18"	24"	2'-0"	4'-0"
24"	30"	2'-0"	4'-6"
30"	30"	2'-6"	5'-0"
36"	36"	3'-0"	6'-0"
48"	48"	4'-0"	8'-0"



DETAIL OF OUTLET DITCH

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



SECTION "A-A" SECTION "B-B"

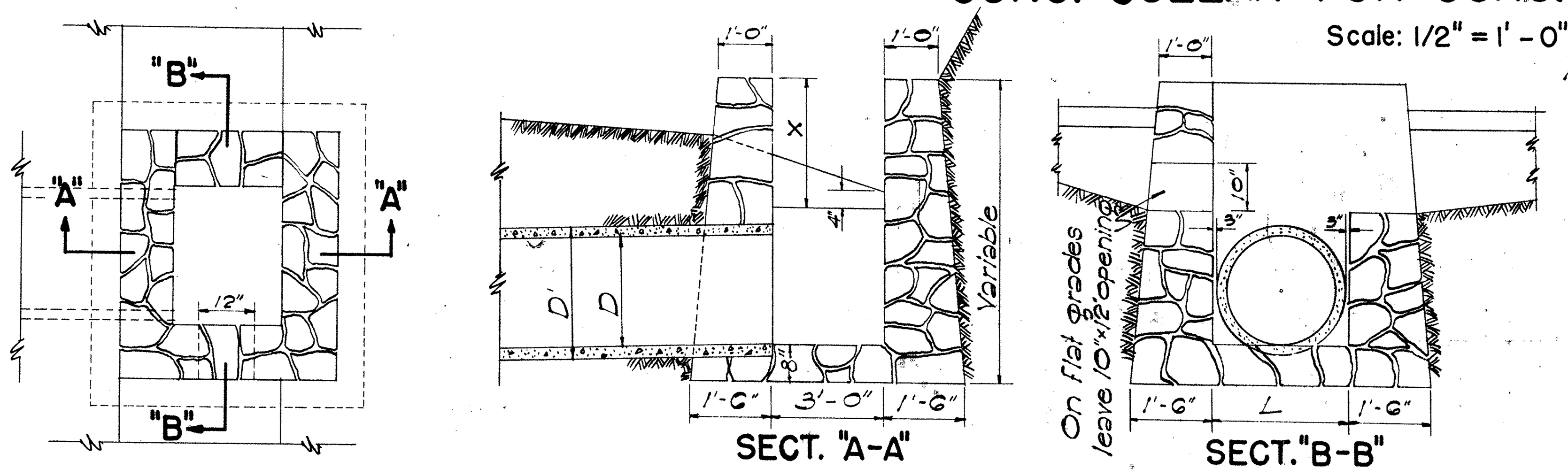
CONC. COLLAR FOR CONC. BOX CULVERT

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

Note:
Reinforcing Steel:
All reinforcing steel shall be Billet Steel Bars A.S.T.M. A15 intermediate grade or Rail Steel Bars A.S.T.M. A16. Steel shall be made by the open-hearth process.
Deformations shall conform to A.S.T.M.-A305.

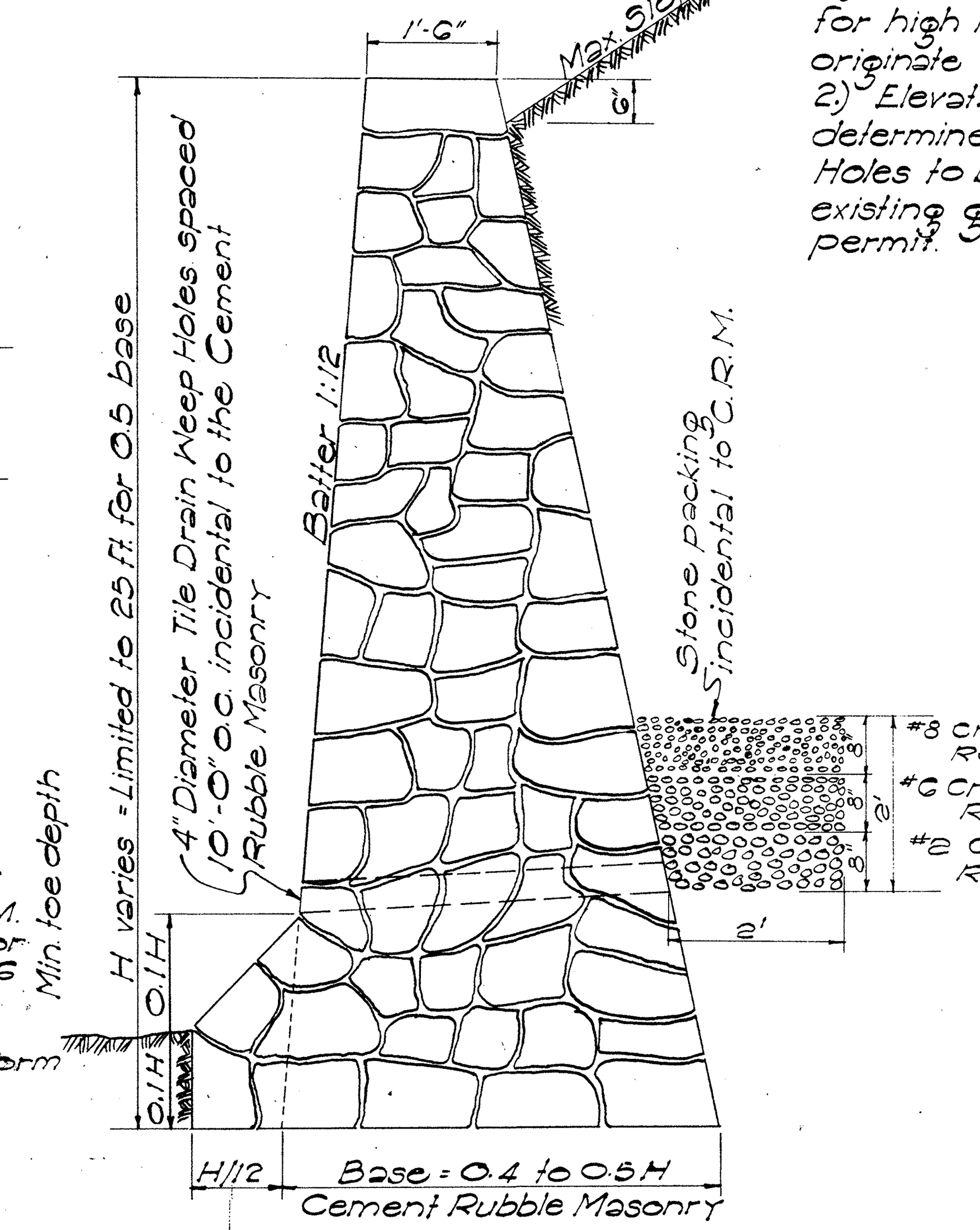
DATA FOR MASONRY DROP INTAKE				Where Variables Equal
D'	D	L=D'+6"	Cu.Yds.	
23"	18"	2'-5"	3.02	4'-6"
30"	24"	3'-0"	3.61	5'-0"
37"	30"	3'-7"	4.21	5'-6"
44"	36"	4'-2"	4.85	6'-0"
58"	48"	5'-4"	6.86	7'-0"

NOTE:
Dimension "X" is assumed as 2'-4" in figuring the above quantities.



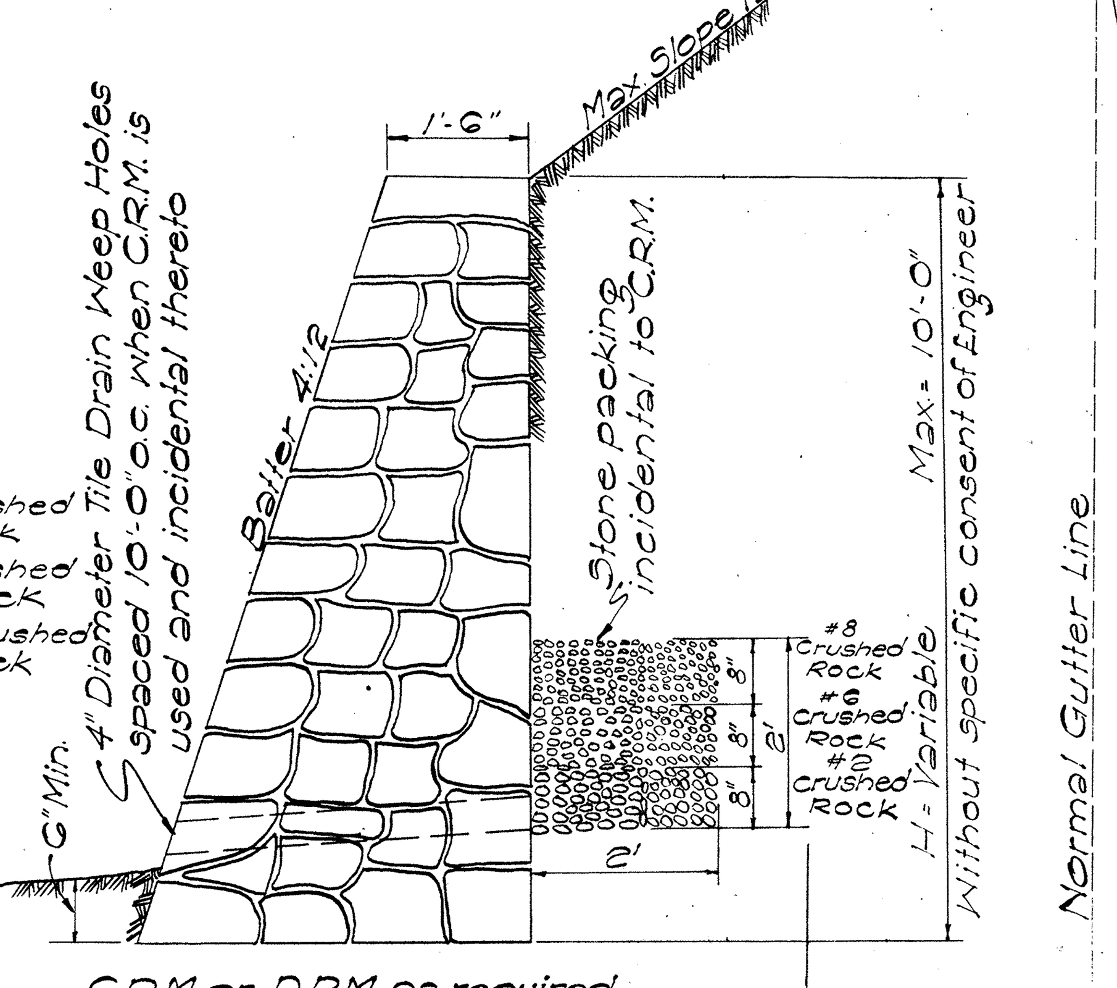
DETAIL OF MASONRY DROP INTAKE

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

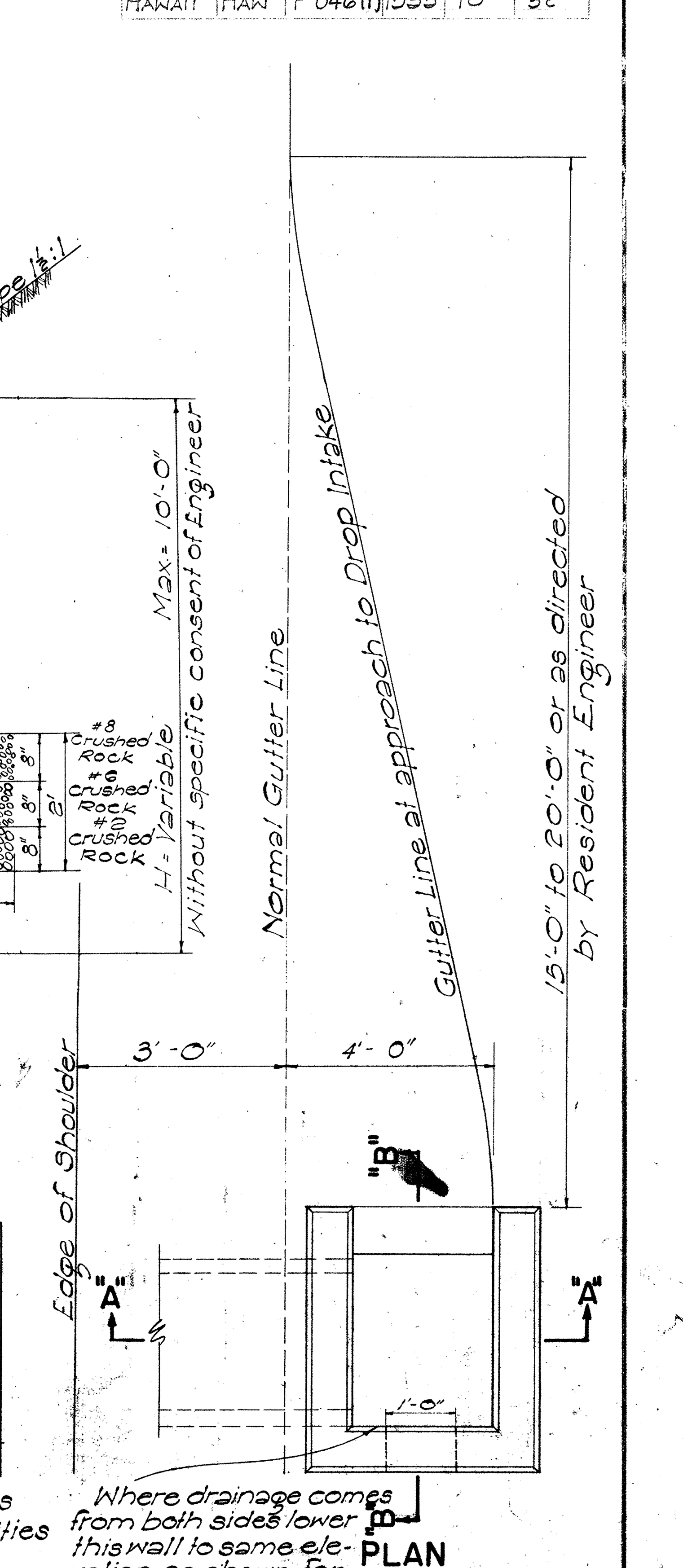


SECTION OF HIGH CEMENT RUBBLE MASONRY RETAINING WALL OR SEAWALL

Note: To Resident Engineer
1.) Consider economy of reinf. conc. for high retaining walls which did not originate on plan layout.
2.) Elevation of weep holes to be determined by Resident Engineer. Holes to be placed as close to the existing ground line as local conditions permit.



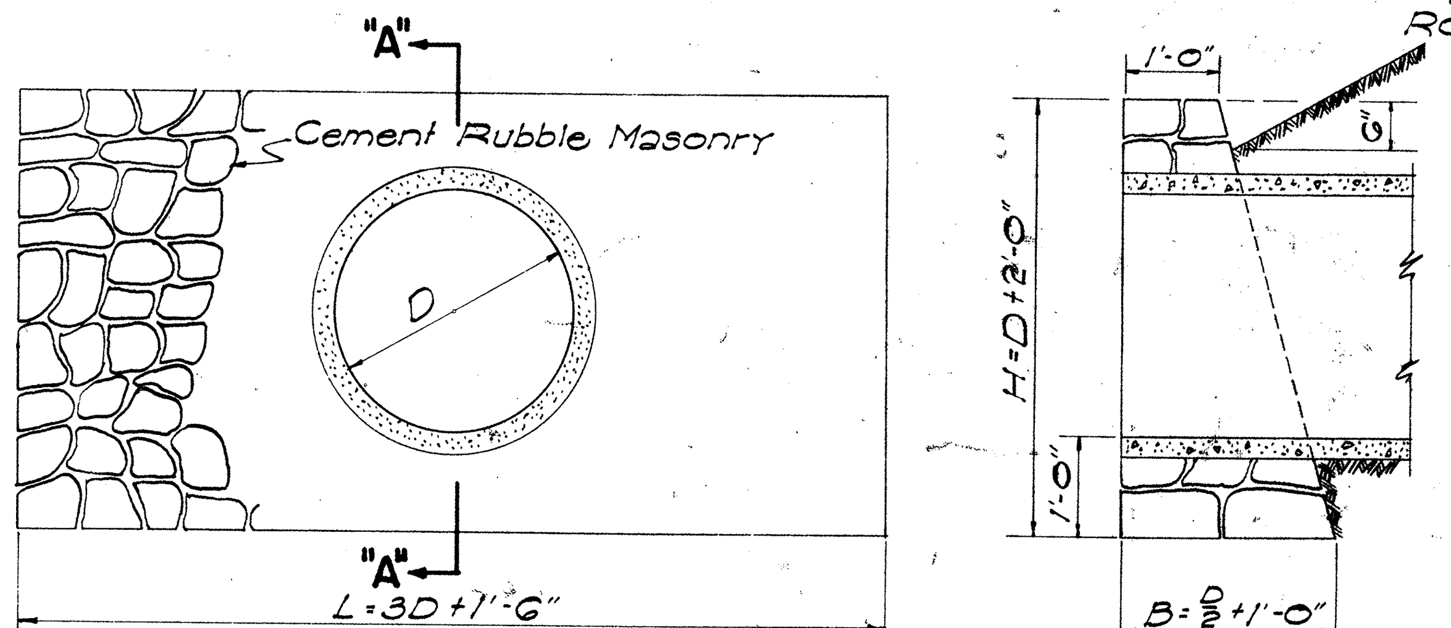
SECTION OF LOW MASONRY RETAINING WALL OR SEAWALL



DATA-CONC. DROP INTAKE					Where Variable Equals
D'	D	L=D'+6"	S	Cu.Yds.	
23"	18"	2'-5"	8"	1.41	4'-6"
30"	24"	3'-0"	8"	1.72	5'-0"
37"	30"	3'-7"	9"	2.32	5'-6"
44"	36"	4'-2"	9"	2.73	6'-0"
51"	42"	4'-9"	10"	3.54	6'-6"
58"	48"	5'-4"	10"	4.01	7'-0"

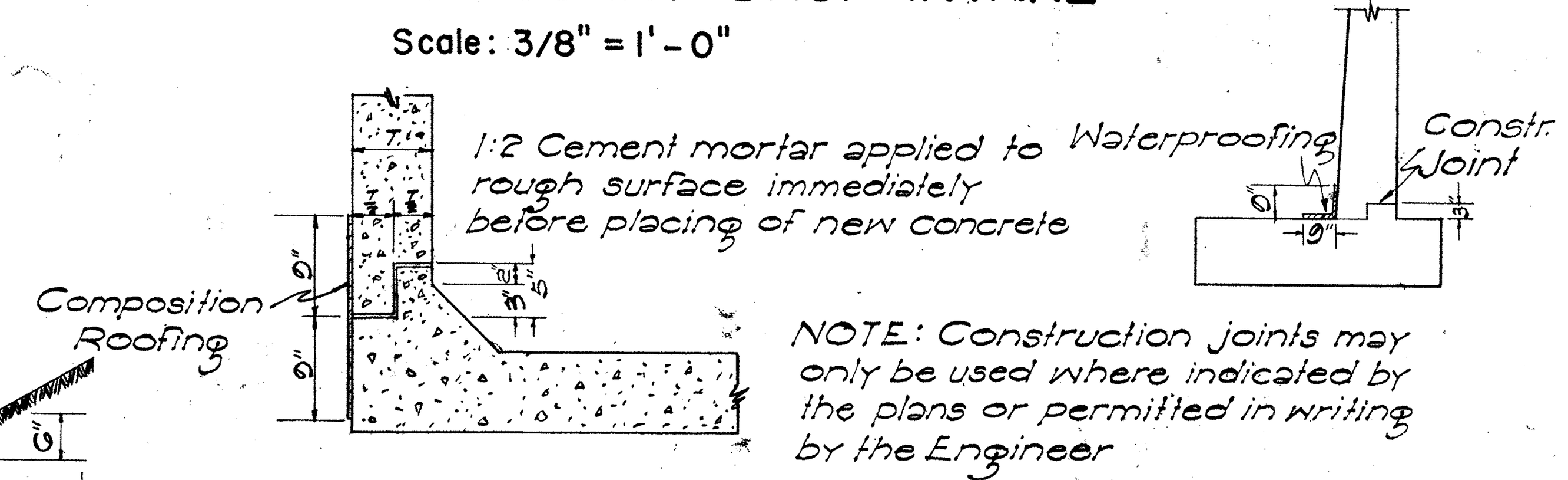
Note: Dimension "X" is assumed as 2'-4" in figuring the above quantities

DATA-MASONRY HEADWALL				Cast-in-Place Conc. Culv't	Conc. Pipe Culvert	Corrugated Pipe Culv't
D	H	B	L	Cu. Yds.	Cu. Yds.	Cu. Yds.
18"	3'-6"	1'-9"	6'-0"	0.85	0.95	0.93
24"	4'-0"	2'-0"	7'-6"	1.28	1.45	1.41
30"	4'-6"	2'-3"	9'-0"	1.83	2.06	2.00
36"	5'-0"	2'-6"	10'-6"	2.49	2.84	2.72
48"	6'-0"	3'-0"	13'-6"	—	4.64	—



DETAIL OF MASONRY HEADWALL

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

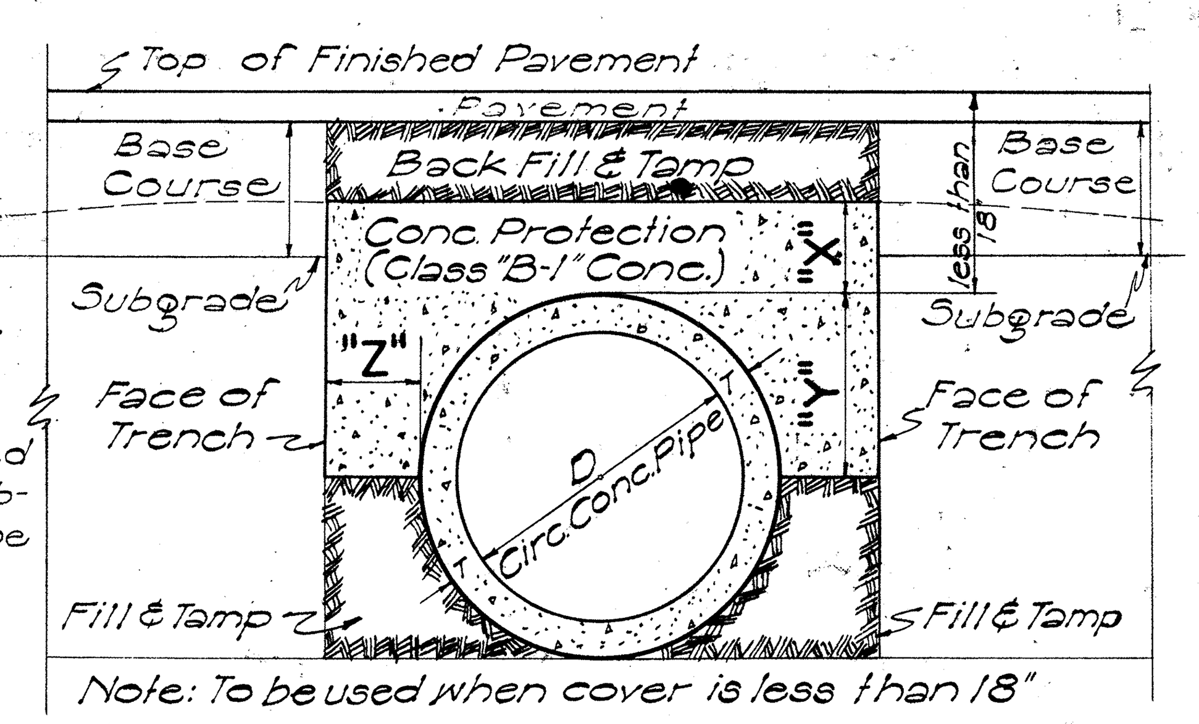


NOTE: Construction joints may only be used where indicated by the plans or permitted in writing by the Engineer

CONSTR. JOINT DETAILS

METHOD OF APPLYING CONSTR. JOINT WATERPROOFING
(1.) Mop surface either side of joint as required with asphalt 50-100 penetration (A.S.T.M. Desig. D 5-25) applied at 200°F.
(2.) Apply one layer of 55-lb composition roofing to hot asphalt.
(3.) Mop surface of composition roofing and 3" beyond all around with thick coat of asphalt as specified under (1.)
The above work is incidental to concrete and will not be paid for separately.

Note:
When subgrade is below top of jacket, it shall be fully compacted to this line and then re-excavated (struc. exc.) to proper subgrade. This surface shall be rolled again.



Note: To be used when cover is less than 18"

DATA FOR CONCRETE PROTECTION OVER CULVERTS		
X	Y	Z
6" for 18"D	$\frac{D}{2}+T$	Z must be from pipe to face of trench. Minimum = X. Maximum pay quantity will be Z = 12"
7" " 24"D		
8" " 30"D		
9" " 36"D		
10" " 42"D		
11" " 48"D		
12" " 54"D		

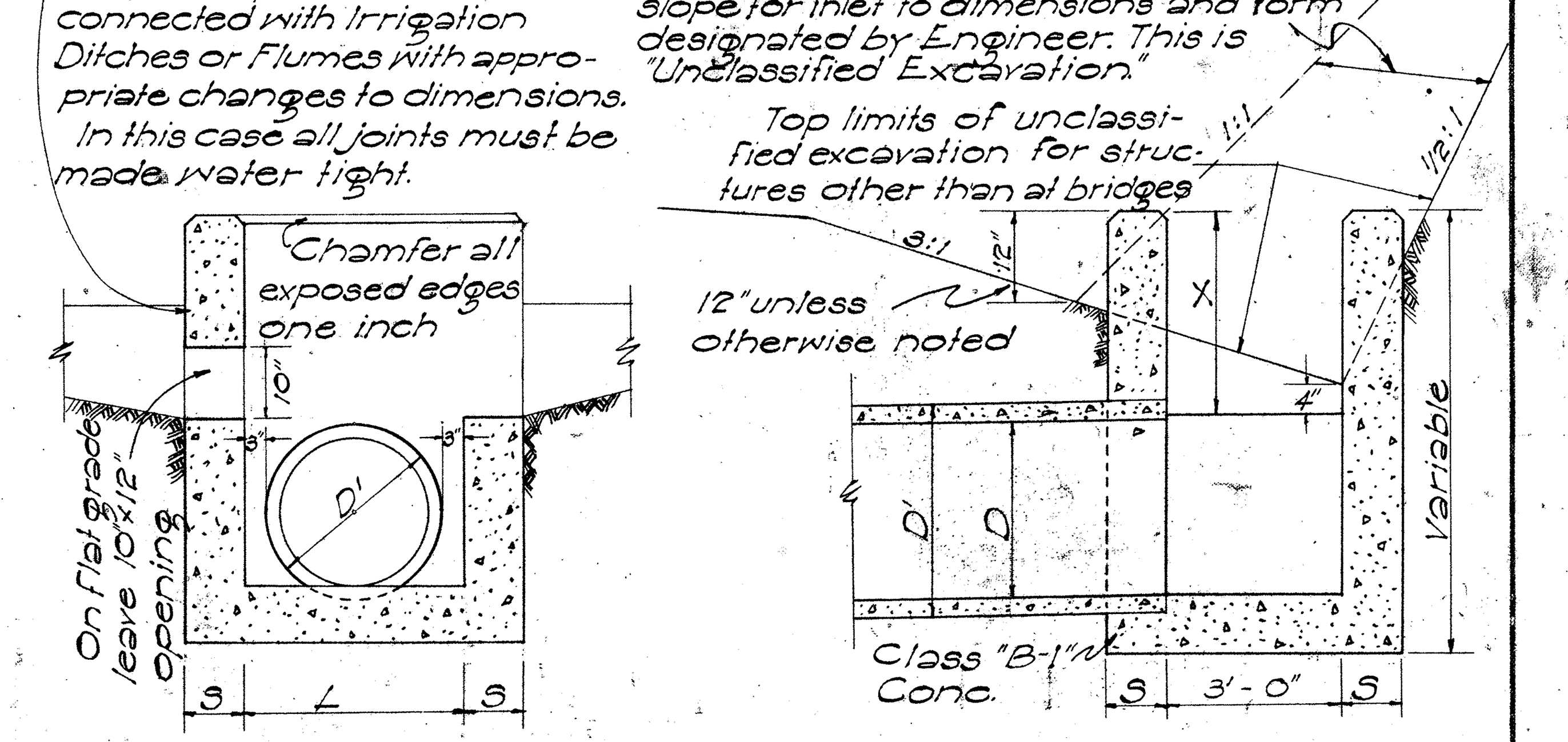
SECT. OF CULVERT WITH CONC. PROTECTION

Scale: 1" = 1'-0"

Note: This type of structure shall also be used for the Drop Intakes of Syphons connected with Irrigation Ditches or Flumes with appropriate changes to dimensions.
In this case all joints must be made water tight.

Excavate recess in roadway excavation slope for inlet to dimensions and form designated by Engineer. This is "Unclassified Excavation."

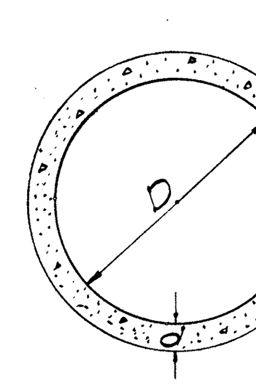
Top limits of unclassified excavation for structures other than at bridges



SECTION "B-B" SECTION "A-A"

DETAIL OF CONCRETE DROP INTAKE

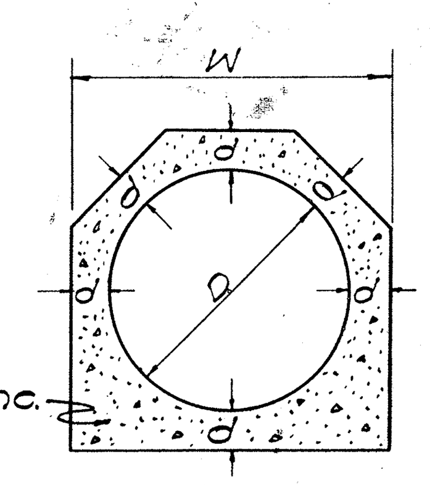
Scale: 1/2" = 1'-0"



SECTION

CONC. PIPE CULVERT

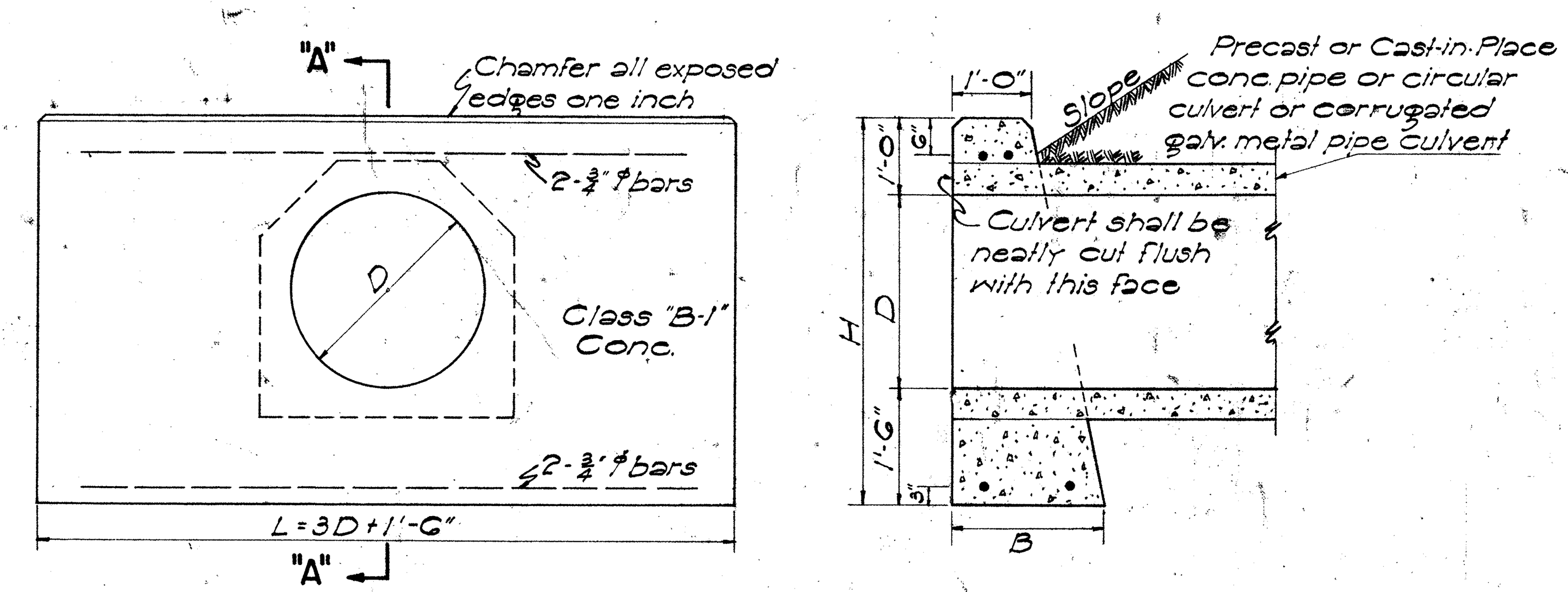
NOTE:
Thickness 'd', reinforcing and Concrete used, are to conform with the approved design as provided by the Specifications.



SECTION

DATA-CAST-IN-PLACE CONC. CULV'T			
D	d	W	Cu.Yd. per Ft.
18"	4"	2'-2"	0.11
24"	4½"	2'-9"	0.14
30"	5"	3'-4"	0.19
36"	5½"	3'-11"	0.26

CAST-IN-PLACE CONC. CULVERT



ELEVATION SECTION "A-A"

DATA FOR CONC. HEADWALL				Cast-in-Place Conc. Culvert	Conc. Pipe Culvert	Steel For One Headwall			
D	B	L	H	Cu. Yd.	Cu. Yd.	No. of Bars	Size	Length	Lbs.
18"	1'-6"	6'-0"	4'-0"	0.92	1.00	4	3/4" ϕ	5'-6"	33
24"	1'-6"	7'-6"	4'-6"	1.25	1.38	4	3/4" ϕ	7'-0"	42
30"	2'-0"	9'-0"	5'-0"	1.95	2.17	4	3/4" ϕ	8'-6"	51
36"	2'-0"	10'-6"	5'-6"	2.45	2.74	4	3/4" ϕ	10'-0"	60
42"	2'-6"	12'-0"	6'-0		3.87	4	3/4" ϕ	11'-6"	69
48"	2'-6"	13'-6"	6'-6"		4.66	4	3/4" ϕ	13'-0"	78

DETAIL OF CONCRETE HEADWALL

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

APPROVED: DATE 6-28-52

Bus E. Nutter
TERRITORIAL HIGHWAY ENGINEER

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

STANDARD DETAILS

DROP INTAKES, RETAINING WALLS, HEADWALLS, CONSTRUCTION JOINTS

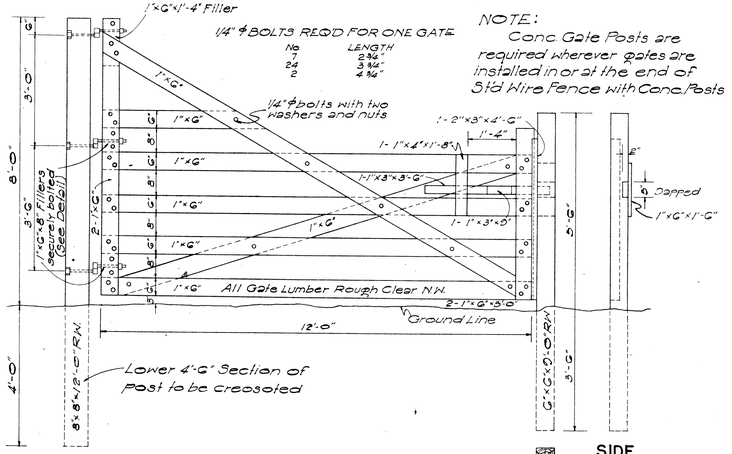
SCALES AS NOTED

SHEET No 1 OF 5 SHEETS

5712.10

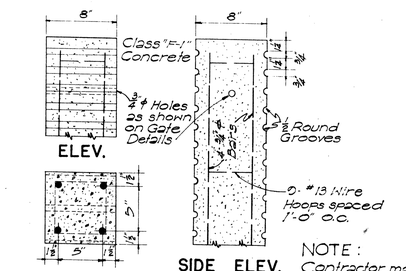
ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY
DESIGNED BY
DRAWN BY
TRACED BY L. Calistro
QUANTITIES BY
QUANTITIES CHECKED BY
CHECKED BY
DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	F 046(1)	1955	11	32

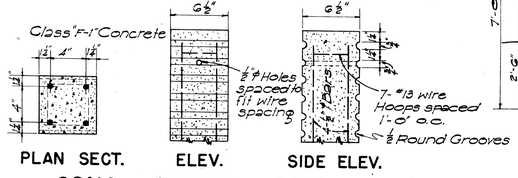


DETAIL OF CATTLE GATE

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



NOTE: Contractor may either cast holes for fastening fence wire or cast post with 3/4" - 1/2 round grooves on 2 sides.



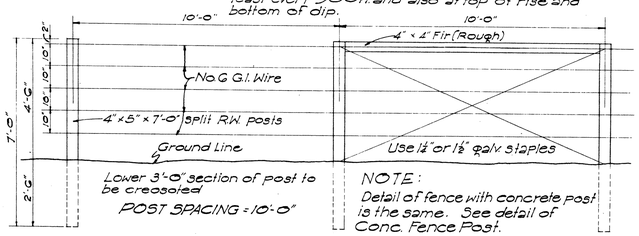
CONC. GATE POST

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

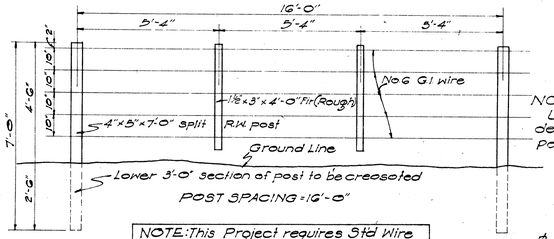
CONC. FENCE POST

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

Note: Fence must be anchored against pull at least every 500 ft. and also at top of rise and bottom of dip.



NOTE: Detail of fence with concrete post is the same. See detail of Conc. Fence Post.



NOTE: Use above detail for end post.

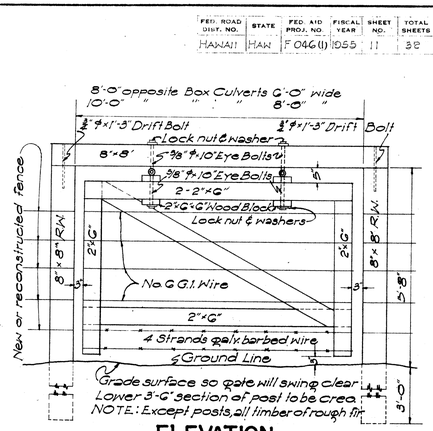
NOTE: This Project requires Std Wire Fence with ____ ft. post spacing (If spacing is not indicated above use 10 ft)

Position in relation to ℄ in front of each separate property must be secured from the Engineer.

Note to Engineer: Fence must be on Road R/W to participate in Federal Aid. Consult office if uncertain what to do.

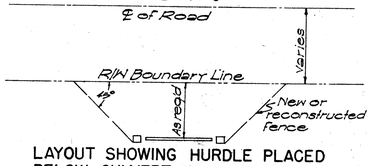
DETAILS OF STANDARD WIRE FENCE WITH WOOD POSTS

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



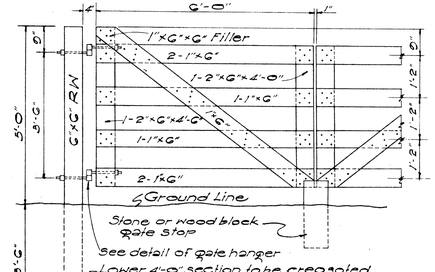
ELEVATION

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



LAYOUT SHOWING HURDLE PLACED BELOW CULVERT IN A POSITION WHICH WILL BE CATTLE TIGHT

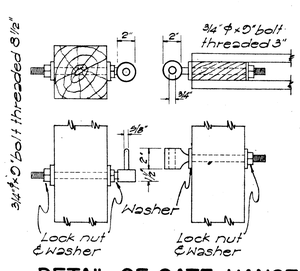
DETAILS OF HURDLE



DETAIL OF DOUBLE HUNG GATE

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

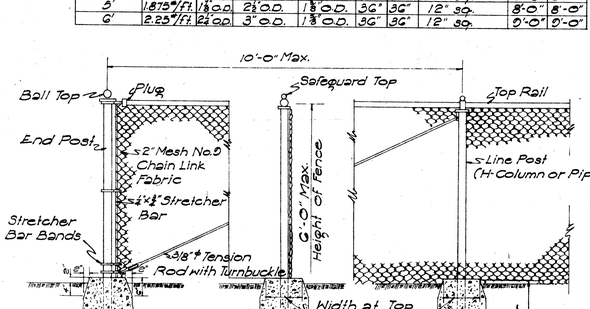
See note regarding use of Conc. Posts



DETAIL OF GATE HANGER

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

Note: Use 3/4" ϕ x 11" bolts for Cattle Gate

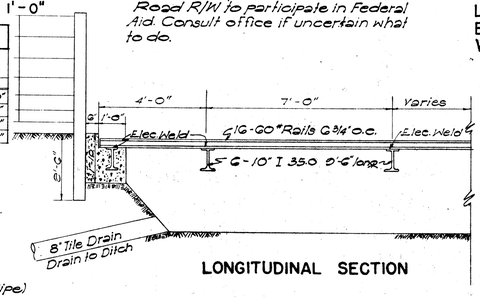


DETAIL OF CHAIN LINK FENCE

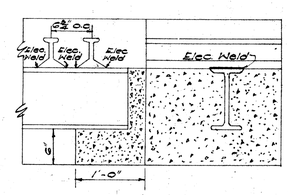
Scale: 1/2" = 1'-0"

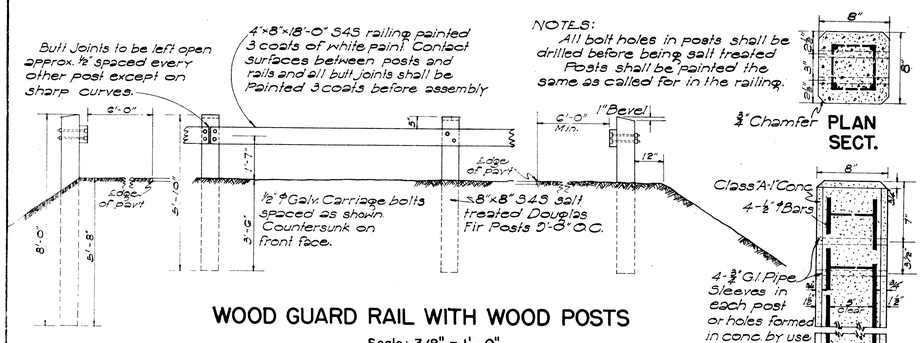
SCHEDULE FOR CHAIN LINK FENCE

Height of Fence	Line Post H column	Line Post Pipe	End Post Pipe	Top Rail Pipe	Depth of Footing End	Depth of Footing Line	Top of Footing Size	Length of Posts End	Length of Posts Line
3'	1.675#/ft.	1 1/4" O.D.	2" O.D.	1 1/4" O.D.	30"	24"	8" sq.	5'-6"	5'-0"
4'	1.675#/ft.	1 1/4" O.D.	2" O.D.	1 1/4" O.D.	30"	24"	10" sq.	6'-6"	6'-0"
5'	1.675#/ft.	1 1/4" O.D.	2 1/2" O.D.	1 1/4" O.D.	36"	36"	12" sq.	8'-0"	8'-0"
6'	2.25#/ft.	2" O.D.	3" O.D.	1 1/4" O.D.	36"	36"	12" sq.	9'-0"	9'-0"



LONGITUDINAL SECTION





WOOD GUARD RAIL WITH WOOD POSTS

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

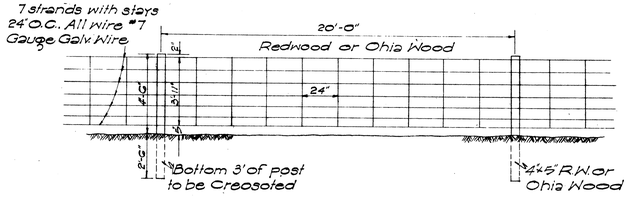
NOTE: For Conc. Post see detail at right

GUIDE POSTS: Wood or Conc. Guide Posts are the same as those used for Wood Guard Rail spaced as shown on plans.

NOTES: All bolt holes in posts shall be drilled before being salt treated. Posts shall be painted the same as called for in the railing.

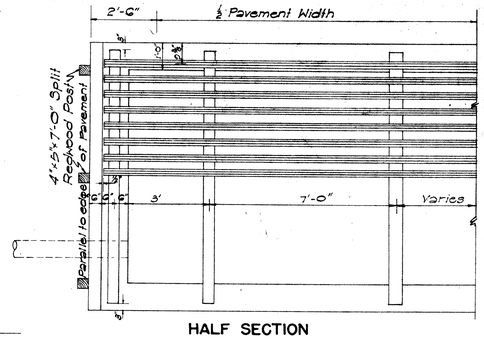
DETAIL OF CONC. POST

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

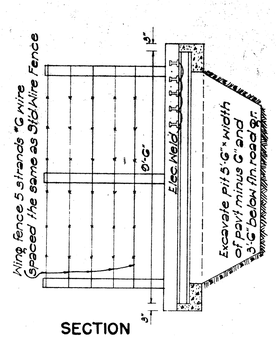


DETAIL OF WOVEN WIRE FENCE

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



HALF SECTION



Piling fence 5 strands 12 ga wire @ spaced the same as Std Wire Fence

SECTION

DETAIL OF CATTLE GUARD

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

APPROVED: _____ DATE 6-23-55

TERRITORIAL HIGHWAY ENGINEER

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

STANDARD DETAILS

FENCES, GATES, GUARD RAILS, GUIDE POSTS, CATTLE GUARD

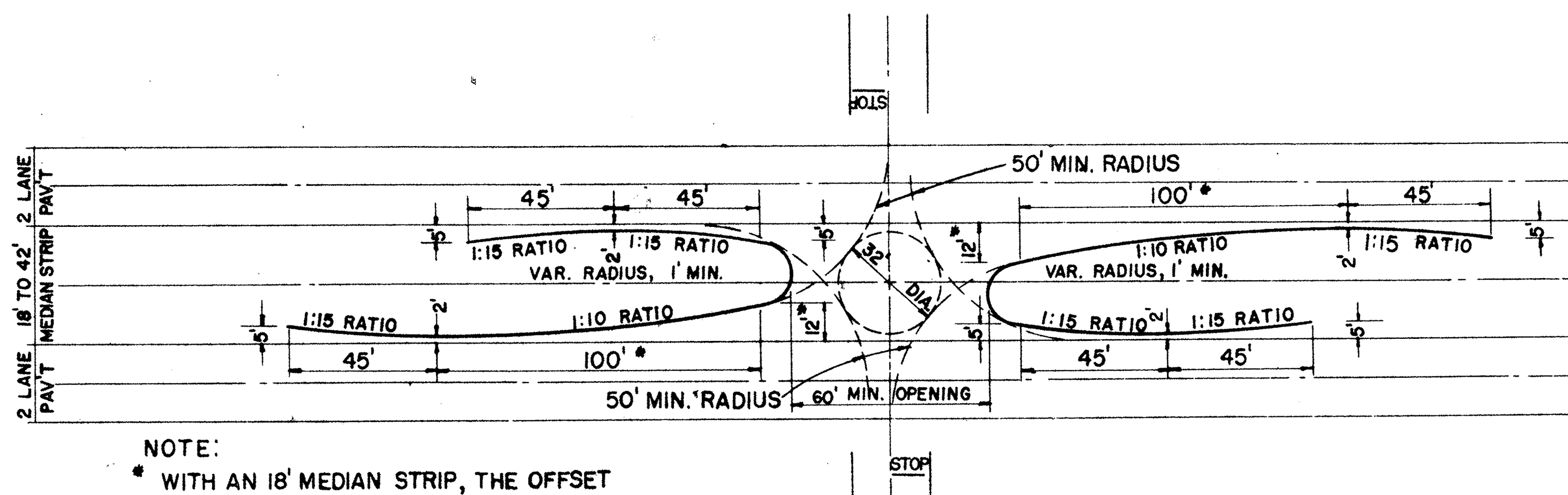
SCALES AS NOTED

SHEET № 2 OF 5 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DESIGNED BY	
	DRAWN BY	
	TRACED BY	
	QUANTITIES BY	
	CHECKED BY	
NOTE BOOK	No.	

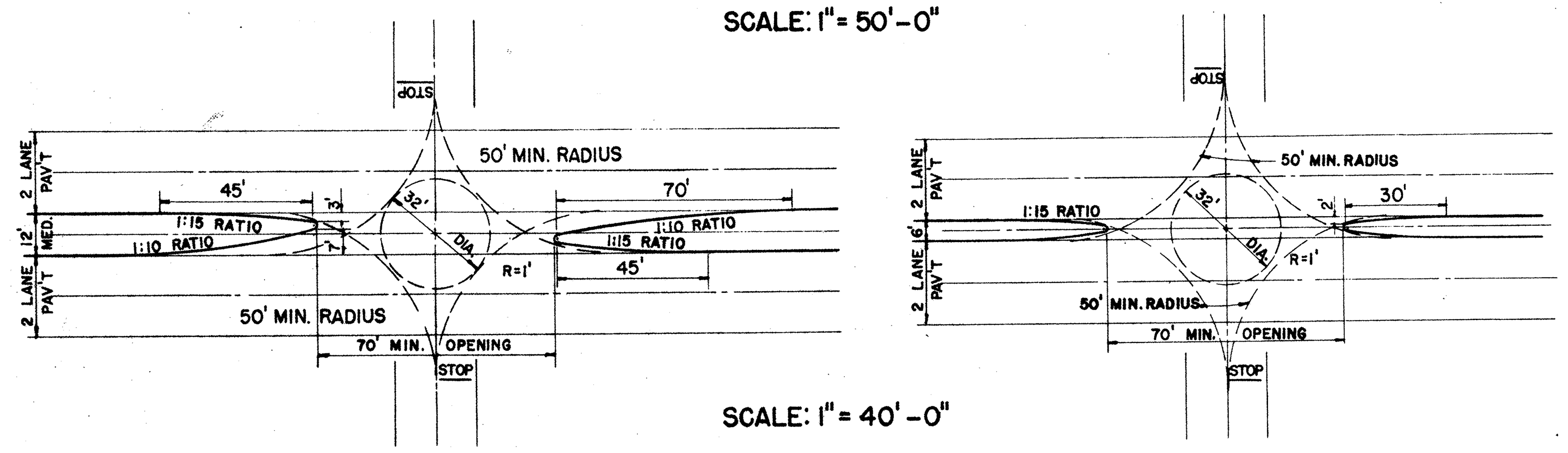
5712.11

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	F 046(1)	1955	12	38



NOTE:
* WITH AN 18' MEDIAN STRIP, THE OFFSET MUST BE REDUCED TO 11', WHICH IN TURN REDUCES THE 1:10 FLARE TO 90'.

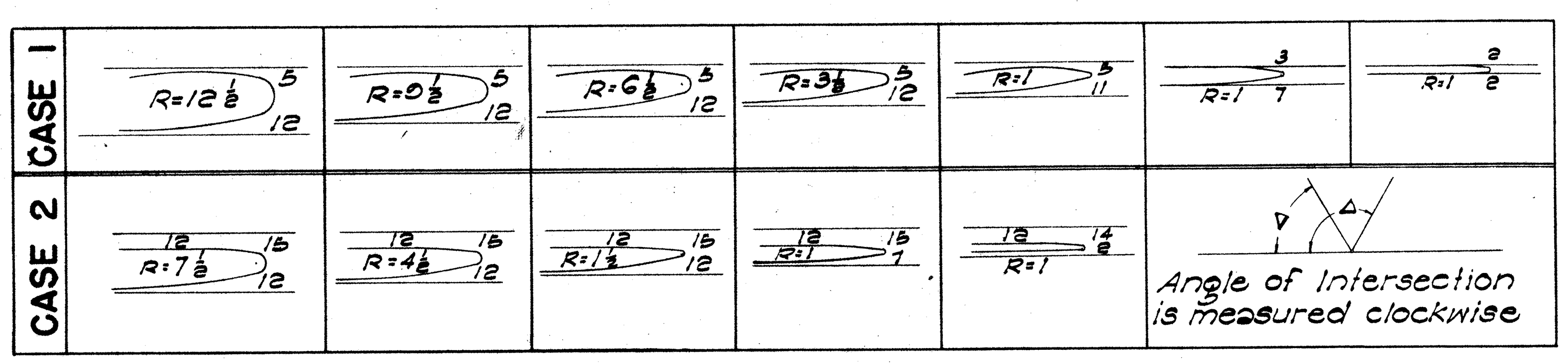
SCALE: 1" = 50'-0"



SCALE: 1" = 40'-0"

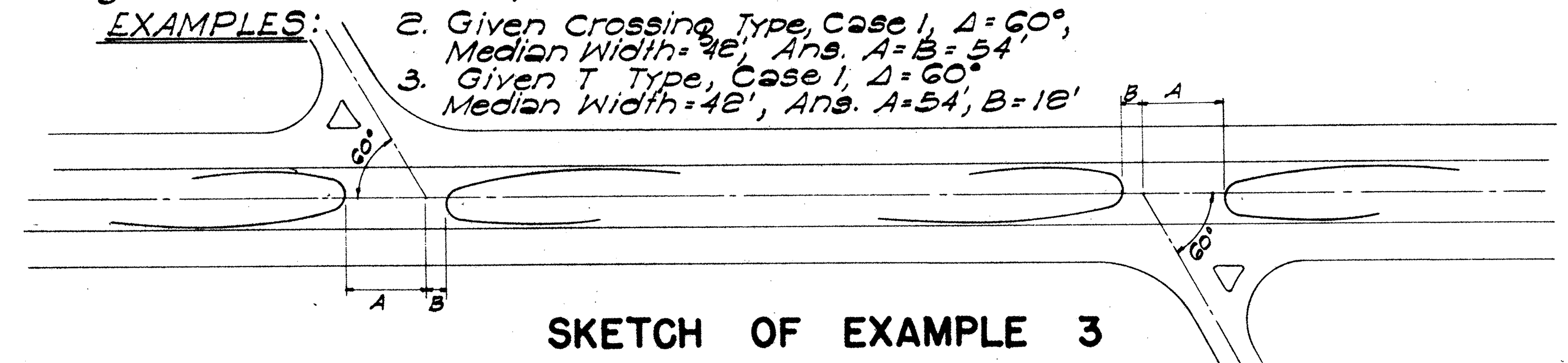
DETAILS OF MEDIAN STRIP OPENINGS

Δ ANGLE OF INTERS.	WIDTH OF MEDIAN STRIP 42' Case 1 A		42' Case 2 A		36' Case 1 A		36' Case 2 A		30' Case 1 A		30' Case 2 A		24' Case 1 A		24' Case 2 A		18' Case 1 A		18' Case 2 A		12' Case 1 A		6' Case 2 A	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
60°	54	12	58	14	58	14	62	14	64	14	66	14	68	14	70	16	70	16	70	16	64	18	70	18
65°	48	14	52	16	52	16	56	16	56	16	60	16	60	16	62	18	62	18	62	18	58	20	62	20
70°	42	18	46	18	46	18	50	18	50	18	54	18	54	18	56	20	54	20	56	20	52	22	56	22
75°	36	24	40	20	40	20	44	20	44	20	48	22	48	20	50	24	48	24	50	24	46	26	50	26
80°	32	28	36	24	36	24	38	24	38	22	42	26	42	24	44	28	42	28	44	28	40	30	44	30
85°	30	30	32	28	32	28	34	28	34	26	38	30	36	26	38	30	36	30	38	34	36	34	38	32
90°	30	30	30	30	30	30	30	30	30	30	34	34	30	30	32	32	30	30	36	36	35	35	35	35
95°	30	30	28	32	30	30	28	34	30	30	30	38	28	32	30	38	30	32	34	38	34	36	32	38
100°	30	30	24	36	30	30	24	38	28	32	26	42	24	36	28	44	28	36	28	44	30	40	30	44
105°	30	30	20	40	28	32	20	44	24	36	22	48	20	42	24	50	24	40	24	50	26	46	26	50
110°	28	32	18	46	24	36	18	50	20	40	18	54	18	46	20	56	20	46	20	56	22	52	22	56
115°	22	38	16	52	18	42	14	56	16	46	16	60	16	52	18	62	18	52	18	62	20	58	20	62
120°	16	44	14	58	12	48	12	62	14	54	14	66	14	58	16	70	16	60	16	70	18	64	18	70



NOTES:
1.) A & B = Distance in feet from Island Nose to Centerline of Intersection.
2.) In a Crossing Intersection A & B are both equal to the larger distance.
3.) In a T Intersection A & B must be measured as shown below. The larger distance is always on the same side with the acute angle.
4.) The minimum radius of 50 ft. should always be scribed on a large scale drawing so that no misinterpretation of the tabulated values is made.

EXAMPLES:
2. Given Crossing Type, Case I, Δ=60°, Median Width=42', Ans. A=B=54'
3. Given T Type, Case I, Δ=60°, Median Width=42', Ans. A=54', B=12'



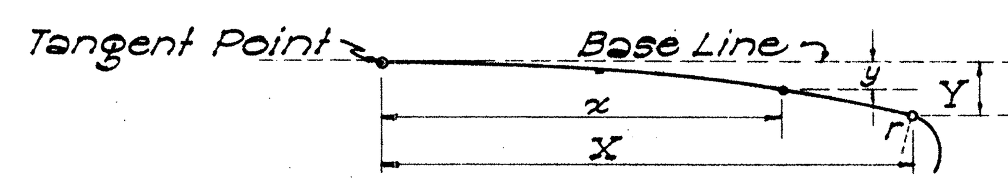
SKETCH OF EXAMPLE 3

NOT TO SCALE

These Curves are based upon the following formula:

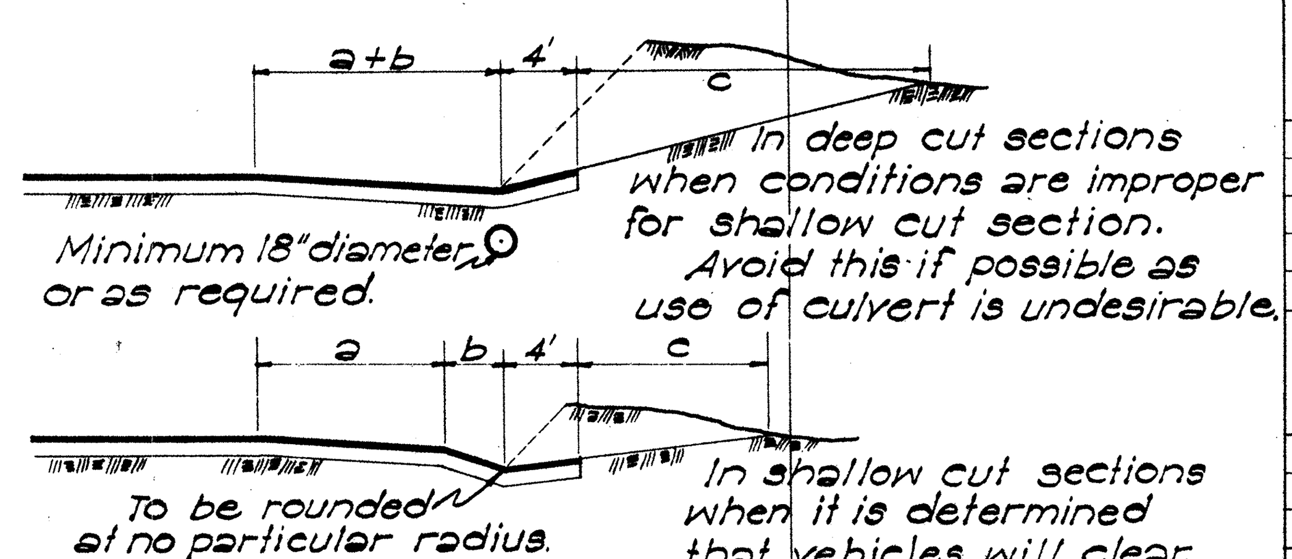
$$y = \frac{Y x^2}{X^2}$$

where: y = any offset, x = its tangent dist. X = maximum tangent distance Y = maximum offset



RATIO CURVE DATA						
DIST. in ft. (x)	Offset in Feet (y) 2:30	3:45	5:50	7:70	9:90	10:100
10	0.22	0.15	0.20	0.14	0.11	0.10
20	0.89	0.59	0.80	0.57	0.44	0.40
30	2.00	1.33	1.80	1.29	1.00	0.90
40		2.37	3.20	2.29	1.78	1.60
50			5.00	3.57	2.78	2.50
60				5.14	4.00	3.60
70				7.00	5.44	4.90
80					7.11	6.40
90					9.00	8.10
100						10.00

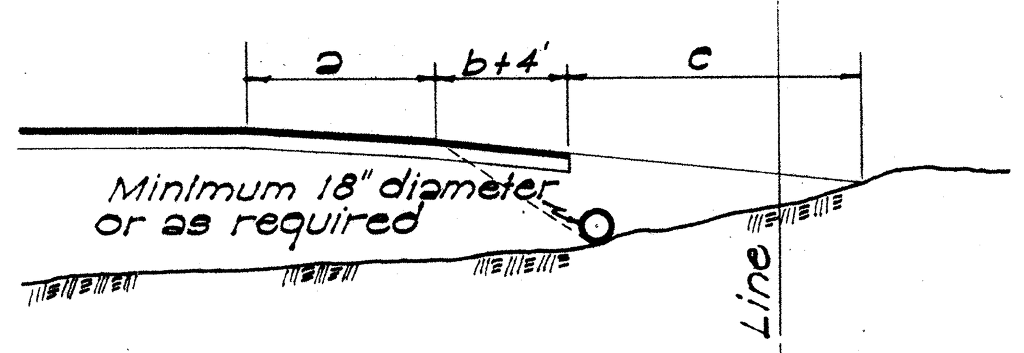
NOTE: Any ratio curve in this tabulation is designated by the maximum offset and its tangent distance



In deep cut sections when conditions are improper for shallow cut section. Avoid this if possible as use of culvert is undesirable.

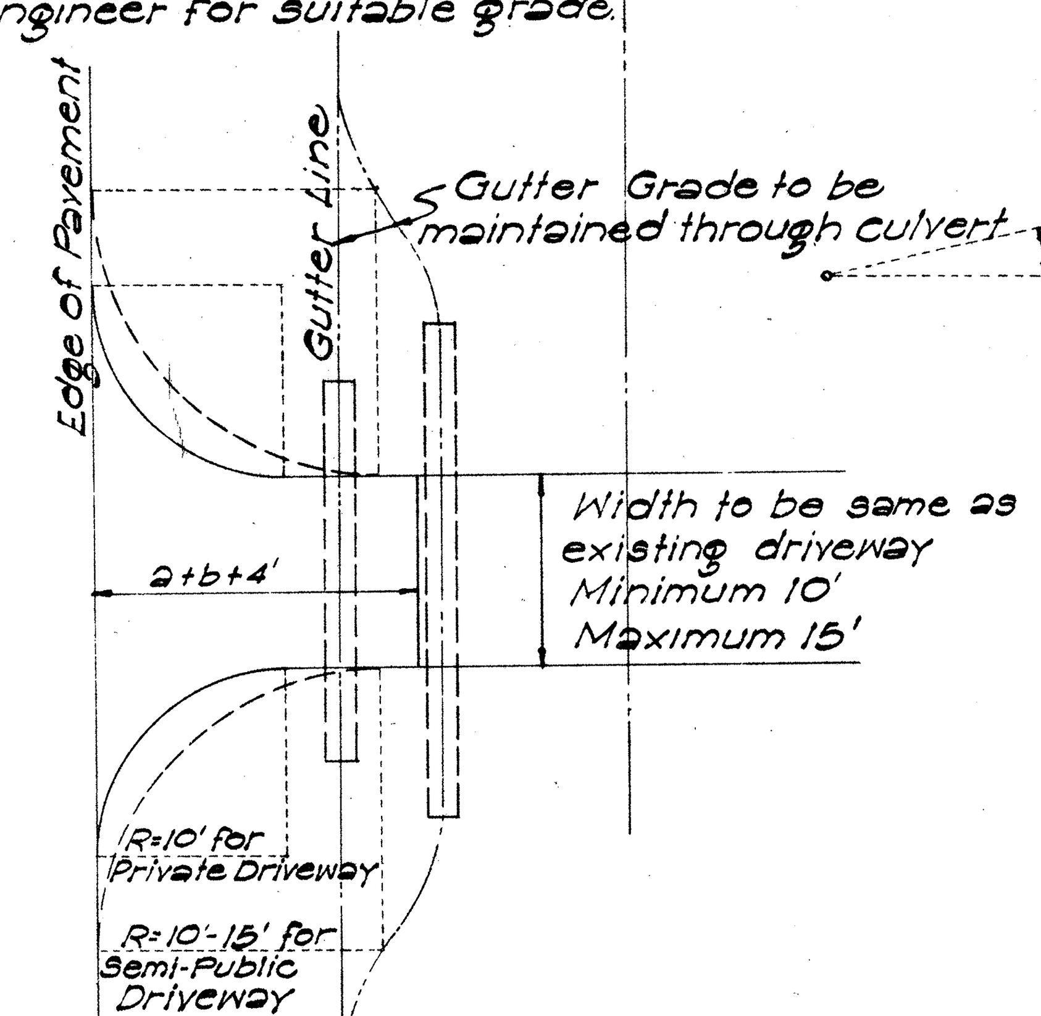
In shallow cut sections when it is determined that vehicles will clear.

CUT SECTIONS



FILL SECTION

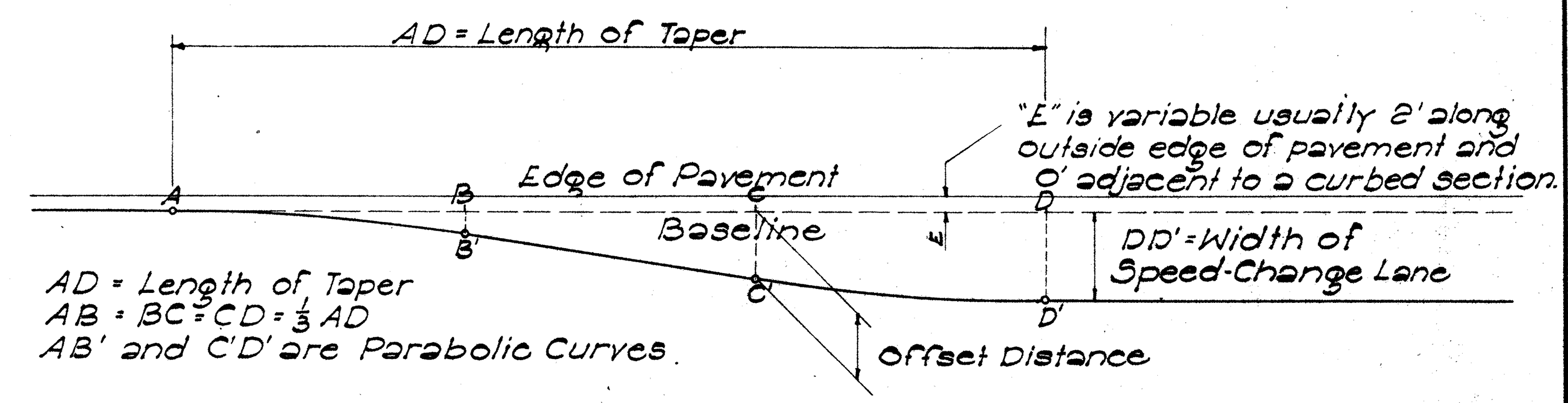
a = Shoulder width
b = Gutter width
c = Distance determined by Engineer for suitable grade.



PRIVATE AND SEMI-PUBLIC DRIVEWAYS

SCALE: 1" = 10'-0"

MINIMUM LENGTHS OF SPEED-CHANGE LANES & TAPER						
RAMP DESIGN SPEED (MPH)			20	30	40	50
MIN. CURVE RADIUS (Ft.)			50	130	250	500
HIGHWAY DESIGN SPEED (Y) (MPH)	AVE. SPEED OF TRAVEL (0.7Y) (MPH)	LENGTH OF TAPER (FEET)	TOTAL LENGTH OF DECELERATION LANE INCLUDING TAPER (Feet)			
30	21	90	90	90		
40	28	120	140	120	120	
50	35	150	225	150	150	150
60	42	180	295	235	180	180
70	49	210	370	315	240	210
HIGHWAY DESIGN SPEED (Y) (MPH)	AVE. SPEED OF TRAVEL (0.7Y) (MPH)	LENGTH OF TAPER (FEET)	TOTAL LENGTH OF ACCELERATION LANE INCLUDING TAPER (Feet)			
30	21	150	150	150		
40	28	180	180	180	180	
50	35	240	410	240	240	240
60	42	270	750	510	270	270
70	49	300	1180	950	550	300



TAPER FOR SPEED-CHANGE LANES

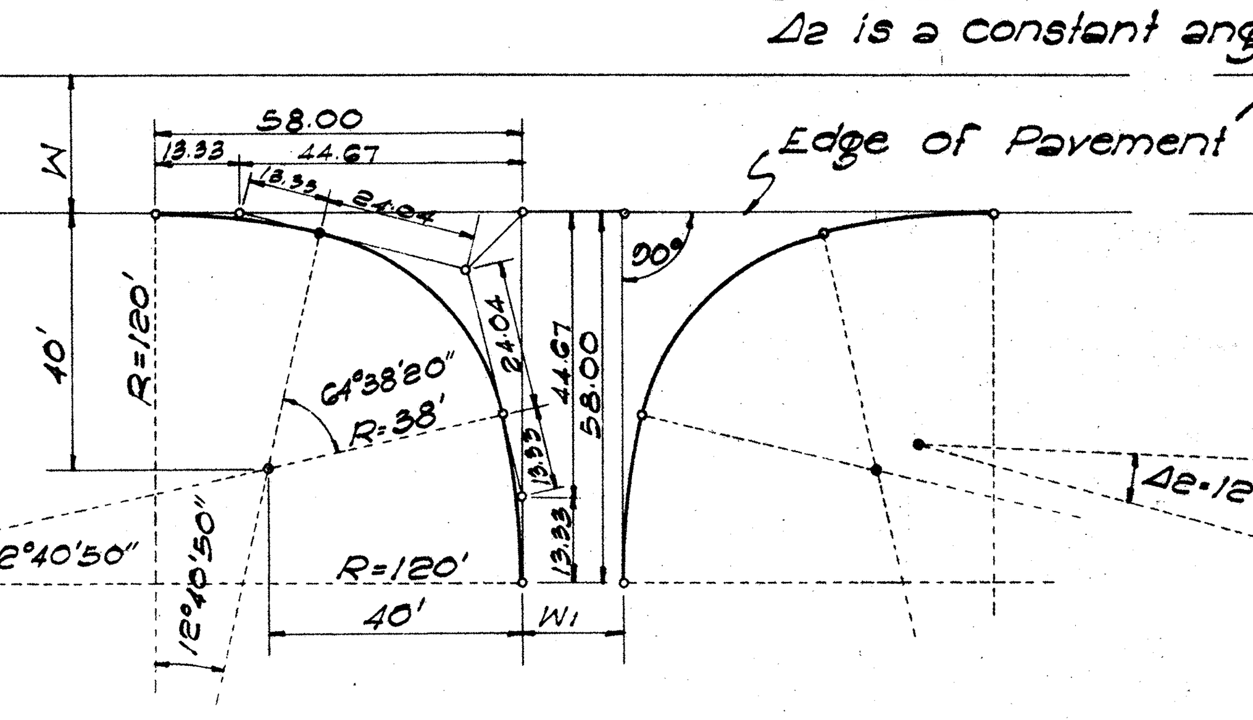
SCALE: 1" = 20'-0"

FOLLOWING TABLE GIVES OFFSETS FROM BASELINE PARALLEL TO EDGE OF PAVEMENT AT INTERVALS MEASURED FROM POINT "A". ADD "E" FOR MEASUREMENT FROM EDGE OF PAV'T

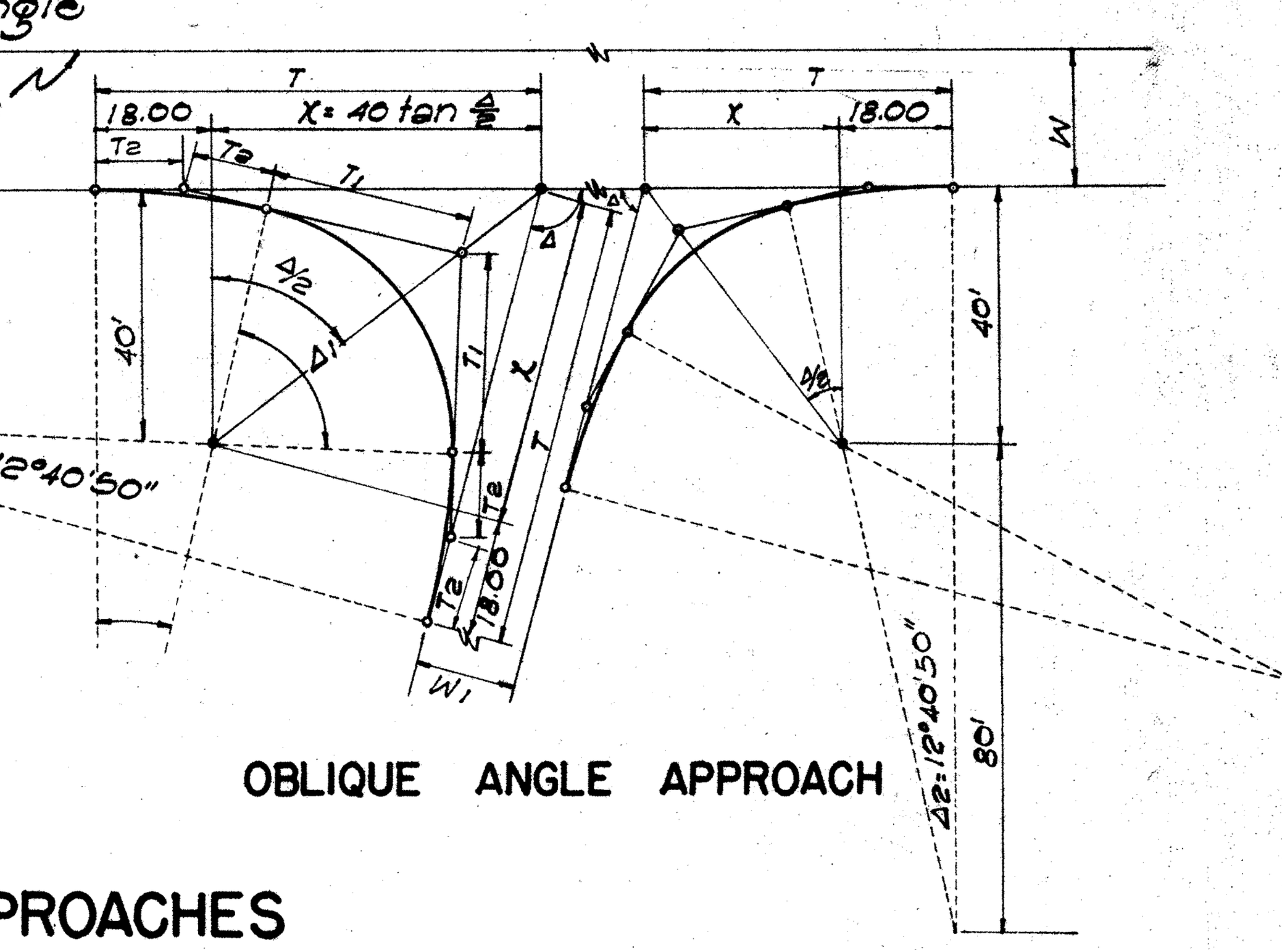
OFFSET FROM BASELINE (Ft.)			LENGTH OF TAPER (Feet) = AD 90	120	150	180	210	240	270	300
DD=10'	DD=11'	DD=12'	DISTANCE FROM POINT "A" (Feet)							
0	0	0	0	0	0	0	0	0	0	0
0.16	0.17	0.19	7.5	10	12.5	15	17.5	20	22.5	25
0.62	0.69	0.75	15	20	25	30	35	40	45	50
1.41	1.55	1.69	22.5	30	37.5	45	52.5	60	67.5	75
*2.50	*2.75	*3.00	30	40	50	60	70	80	90	100
*5.00	*5.50	*6.00	45	60	75	90	105	120	135	150
*7.50	*8.25	*9.00	60	80	100	120	140	160	180	200
8.59	9.45	10.31	67.5	90	112.5	135	157.5	180	202.5	225
9.38	10.31	11.25	75	100	125	150	175	200	225	250
9.84	10.83	11.81	82.5	110	137.5	165	192.5	220	247.5	275
10.00	11.00	12.00	90	120	150	180	210	240	270	300

* Where edge of pavement is a curve, neither Baseline nor Taper between B' and C' will be a tangent. Use proportional offset from B' to C'.

$\Delta_1 = \Delta - 2\Delta_2$
Distance a = 80 tan 12° 40' 30" = 18.00' (Constant)
Distance "T" = 18.00' + 40 tan $\frac{\Delta}{2}$
Δ_2 is a constant angle



RIGHT ANGLE APPROACH



OBLIQUE ANGLE APPROACH

SIDE ROAD APPROACHES

THREE CENTERED COMPOUND CURVE

SCALE: 1" = 30'-0"

APPROVED: DATE 9-23-53

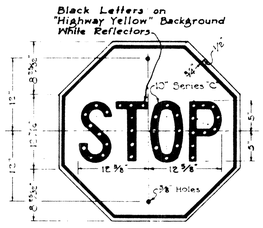
Ben E. Nutter
TERRITORIAL HIGHWAY ENGINEER

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
STANDARD DETAILS
DRIVEWAYS, SPEED-CHANGE LANES, MEDIAN STRIPS & APPROACHES
SCALES AS NOTED

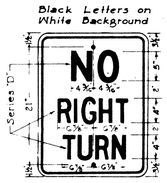
5712.12

ORIGINAL PLAN	SURVEY PLOTTED BY .... DATE .... DESIGNED BY .... DRAWN BY .... TRACED BY L. Calistro QUANTITIES BY .... QUANTITIES CHECKED BY .... CHECKED BY ....
NOTE BOOK No.	

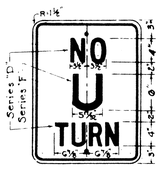
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	F046(1)	1955	13	32



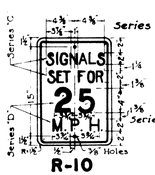
R-1
30" x 30"



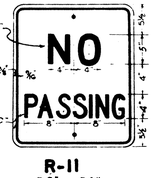
R-6
18" x 24"



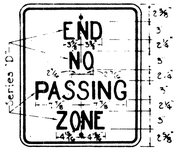
R-8
18" x 24"



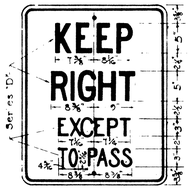
R-10
12" x 18"



R-11
20" x 24"



R-12
20" x 24"



R-13
24" x 30"

R-14
18" x 24"

R-15
24" x 24"

R-16-R
*R-16-L
36" x 12"

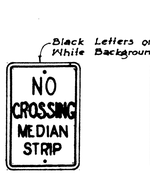
R-18
12" x 18"

R-26
12" x 18"

R-29
24" x 30"

R-41-S
24" x 24"

R-42-S
12" x 18"



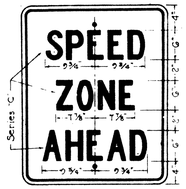
R-43-S
12" x 18"

R-44-S
12" x 18"

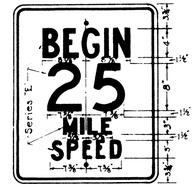
R-102-A
24" x 30"

R-102-B
24" x 30"

R-102-C
24" x 30"



R-104
24" x 30"

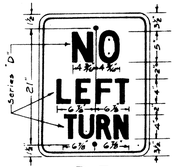


R-105-A
24" x 30"

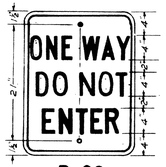
R-105-B
24" x 30"

R-105-C
24" x 30"

R-104-A
24" x 30"



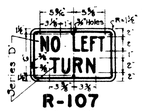
R-7
18" x 24"



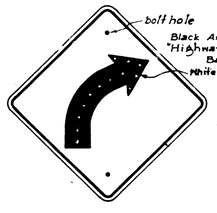
R-66
18" x 24"

R-106
24" x 30"

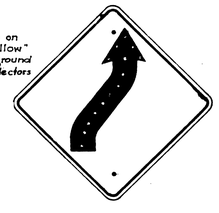
R-107-A
24" x 30"



R-107
14" x 9"

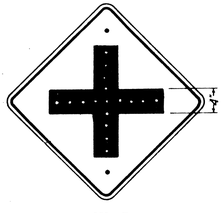


W-2-R
*W-2-L
24" x 24"

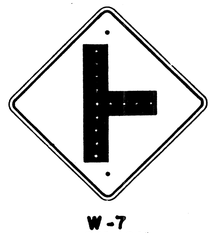


W-4-R
*W-4-L
24" x 24"

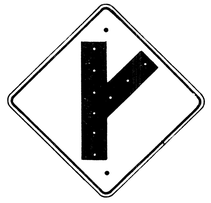
W-5-R
*W-5-L
24" x 24"



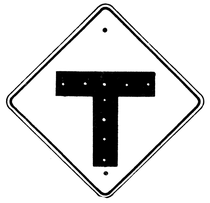
W-6
24" x 24"



W-7
24" x 24"



W-8-R
*W-8-L
24" x 24"



W-9
24" x 24"

W-10
24" x 24"

W-13
24" x 24"

W-14
24" x 24"

W-14-A
24" x 24"

W-19
30" x 30"

W-20
30" x 30"

W-21
30" x 30"

W-22
24" x 24"

W-24
30" x 30"

W-25
24" x 24"

W-29
24" x 24"

W-59
24" x 24"

W-39
24" x 24"

W-1-R
*W-1-L
24" x 24"

Unless otherwise Specified, all signs shall conform with requirements of "Manual on Uniform Traffic Control Devices for Streets and Highways."

All letters and figures shall be of size and design shown and shall conform with "Standard Alphabets for Highway Signs" as set forth by the Public Roads Administration, Federal Works Agency. Series "C" letters and Series "D" numerals shall be used except where noted.

Note: All Regulatory (R) signs shall have black letters on a white background except where noted.
All Warning (W) signs shall have black letters or figures on a "Highway Yellow" background.
*Signs shall be similar but opposite in direction.

See Specifications for Materials and Finish.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

REGULATORY & WARNING SIGNS

Scale: 1" = 1' JUNE 23, 1953

APPROVED: Bew E. Kuttler
TERRITORIAL HIGHWAY ENGINEER

SHEET № 4 OF 5 SHEETS

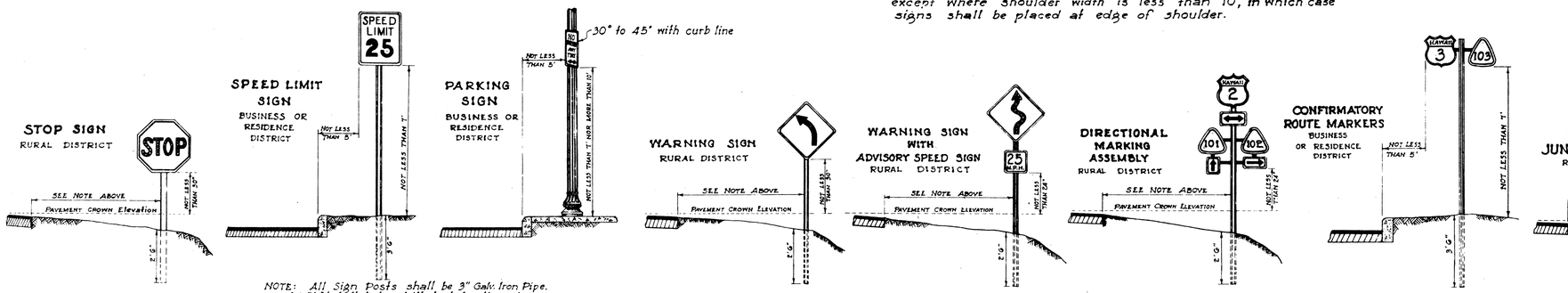
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DESIGN BY	
	TRACED BY T. Tokunaga	
SHEET NUMB.	QUANTITIES BY	
	CHECKED BY	

6-29-54

5712.13

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	F 046(11)	1955	14	36

NOTE: All signs shall be placed 10' from edge of pavement except where shoulder width is less than 10', in which case signs shall be placed at edge of shoulder.

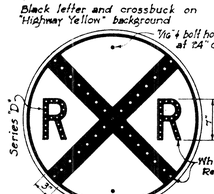


NOTE: All Sign Posts shall be 3" Galv. Iron Pipe. Two (2) 7/16"ϕ bolt holes drilled at location shown. Two (2) 3/8"ϕ bolts with leather washers against face and back of metal sign.

HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATIONS

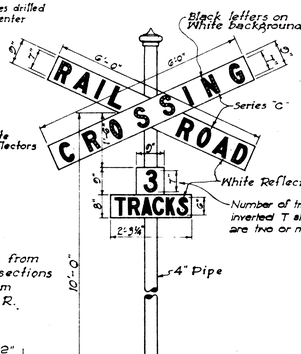
Scale: 1" = 3'-0"

NOTE: THIS MARKER SHALL BE INSTALLED OPPOSITE AND AT THE SAME HEIGHT AS MARKER W-42

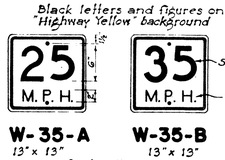


W-32
30" Diameter
Scale: 1" = 1'-0"

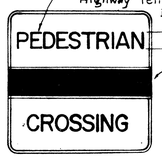
NOTE: This sign shall be placed from 300 to 500 feet from R.R. intersections in rural areas and a minimum distance of 100 feet from R.R. intersections in Residence or Business districts.



W-33
Scale: 1½" = 1"



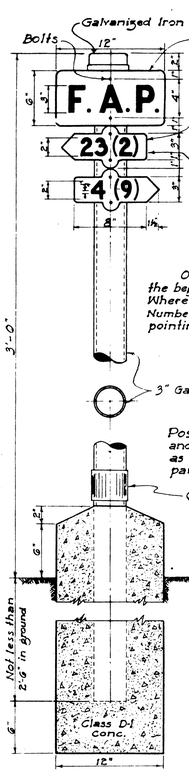
W-35-A 13" x 13"
W-35-B 13" x 13"
Scale: 1" = 1'-0"



W-54
24" x 24"

PLAN OF TOP

R-41-T
24" x 24"

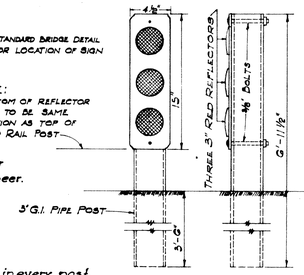


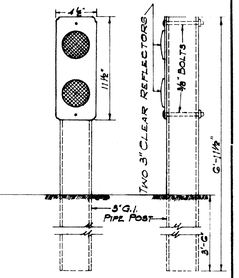
ARRANGEMENT OF MARKERS

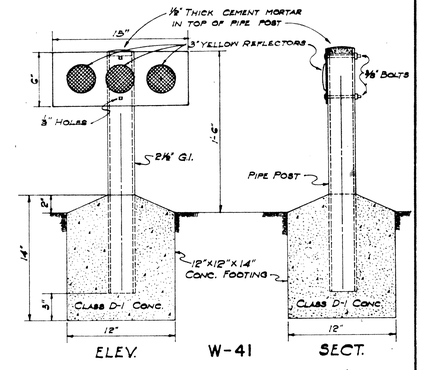
One F.A.P. Marker and one plate shall be placed at the beginning and end of each isolated F.A. Project. Where two F.A. Project adjoin, a single marker and two Number plates shall be placed, each Number plate pointing in the direction of the project to which it refers.

NOTE: SEE STANDARD BRIDGE DETAIL SHEET FOR LOCATION OF SIGN

NOTE: BOTTOM OF REFLECTOR PLATE TO BE SAME ELEVATION AS TOP OF GUARD RAIL POST





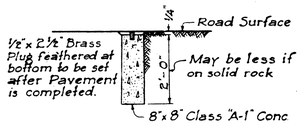


DETAIL OF SIGNS

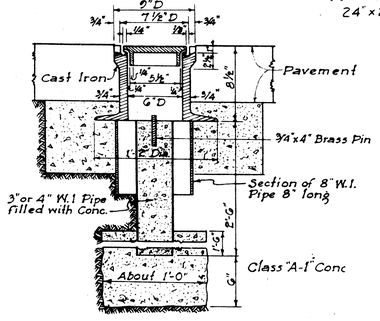
SCALE: 1 1/2" = 1'-0"

ADJUSTABLE BAND BRACKET FOR SUPPORTING TRAFFIC SIGNS ON MONOTUBE LIGHTING STANDARDS
Scale: 3"=1'-0"
This product to be as shown in Catalogue No. 48 of Calephote Corp or equal.

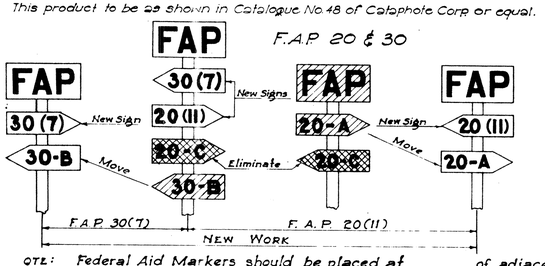
STANDARD DETOUR SIGN

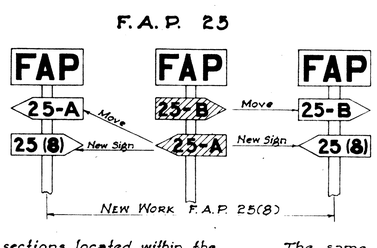


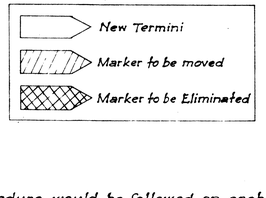
CENTER LINE MONUMENT
Scale: ½" = 1'-0"



STANDARD C&C STREET SURVEY MONUMENT

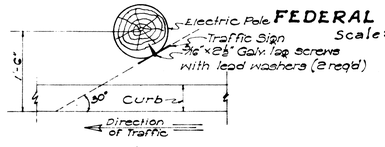






NOTE: Federal Aid Markers should be placed at the termini of suffix designated sections. Intermediate letter designated markers of adjacent sections located within the limits of new improvements should be moved to the termini of the new work. The same procedure would be followed on each successive improvement until all markers for letter designated sections are eventually eliminated.

METHOD OF MARKING F.A. PROJECTS AT OVERLAPS
(USING NUMBER SUFFIX ON NEW WORK)



DETAIL SHOWING ANGLE OF TRAFFIC SIGNS AND CURB LINE
Scale: 1"=1'-0"
Above detail applies to "R-18" and "R-18A" only.

FEDERAL AID MARKER
Scale: 1½" = 1'-0"

APPROVED: DATE: 6-23-55
Ben E. Mattes
TERRITORIAL HIGHWAY ENGINEER

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
STANDARD DETAILS
F. A. MARKERS, MONUMENTS SIGNS & LOCATION OF SIGNS
SCALES AS NOTED

ORIGINAL PLAN	SURVEY PLOTTED BY ..... DATE .....
	DRAWN BY T. Yokumoto " "
NOTE BOOK	TRACED BY T. Yokumoto " "
No.	QUANTITIES CHECKED BY ..... " "
	CHECKED BY ..... " "

6/29/54

SHEET NO 5 OF 5 SHEETS

5712.14