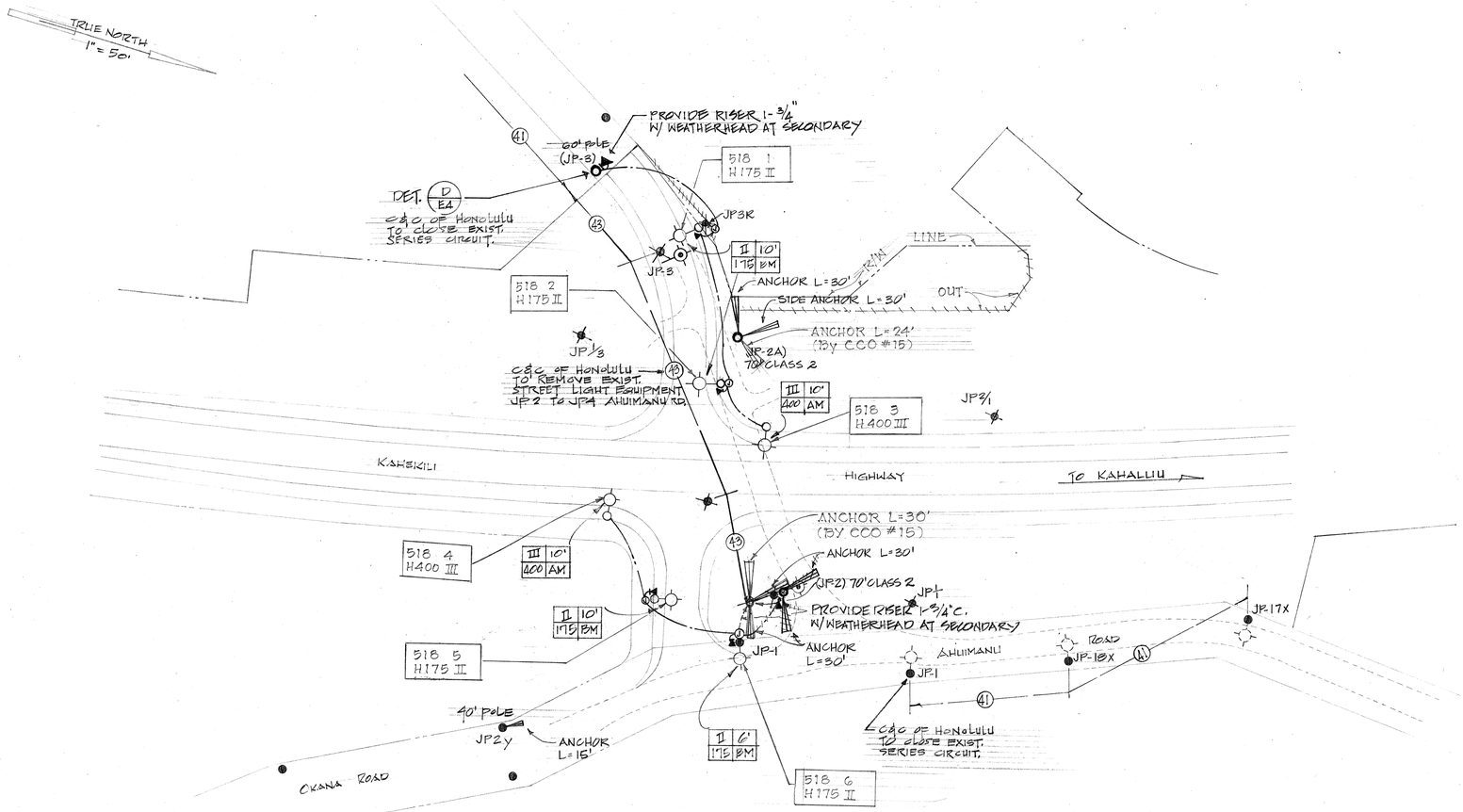
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BD 67-320	1969	62	109



PLAN "A"

KAHEKILI HIGHWAY & AHUIMANU ROAD INTERSECTION

NOTE:

1. UNDER THIS CONTRACT, CONTRACTOR SHALL DO ALL POLE & ANCHOR EXCAVATION AND INSTALLATION OF ANCHOR IN ACCORDANCE WITH H.E.C. REQUIREMENTS.

ORIGINAL PLAN

NOTE BOOK No.

SURVEY PLOTTED BY DATE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

APPROVED:

A.B. Henderson 4-17-68
HAWAIIAN ELECTRIC, INC. DATE

Kenneth R. Thompson 4/16/68
for TRAFFIC ENGINEER DATE
C&C OF HONOLULU

C.F. Young 4/30/69
HAWAIIAN TELEPHONE CO. DATE

TAKETO KAWABATA REGISTERED PROFESSIONAL ENGINEER No. 750 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Taketo Kawabata

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KAHEKILI HIGHWAY EXTENSION
KAHALUU, OAHU, HAWAII
HIGHWAY LIGHTING AND ELECTRICAL SYSTEM
KAHEKILI HWY. & AHUIMANU RD. INTERSECTION
PROJECT No. BD67-320

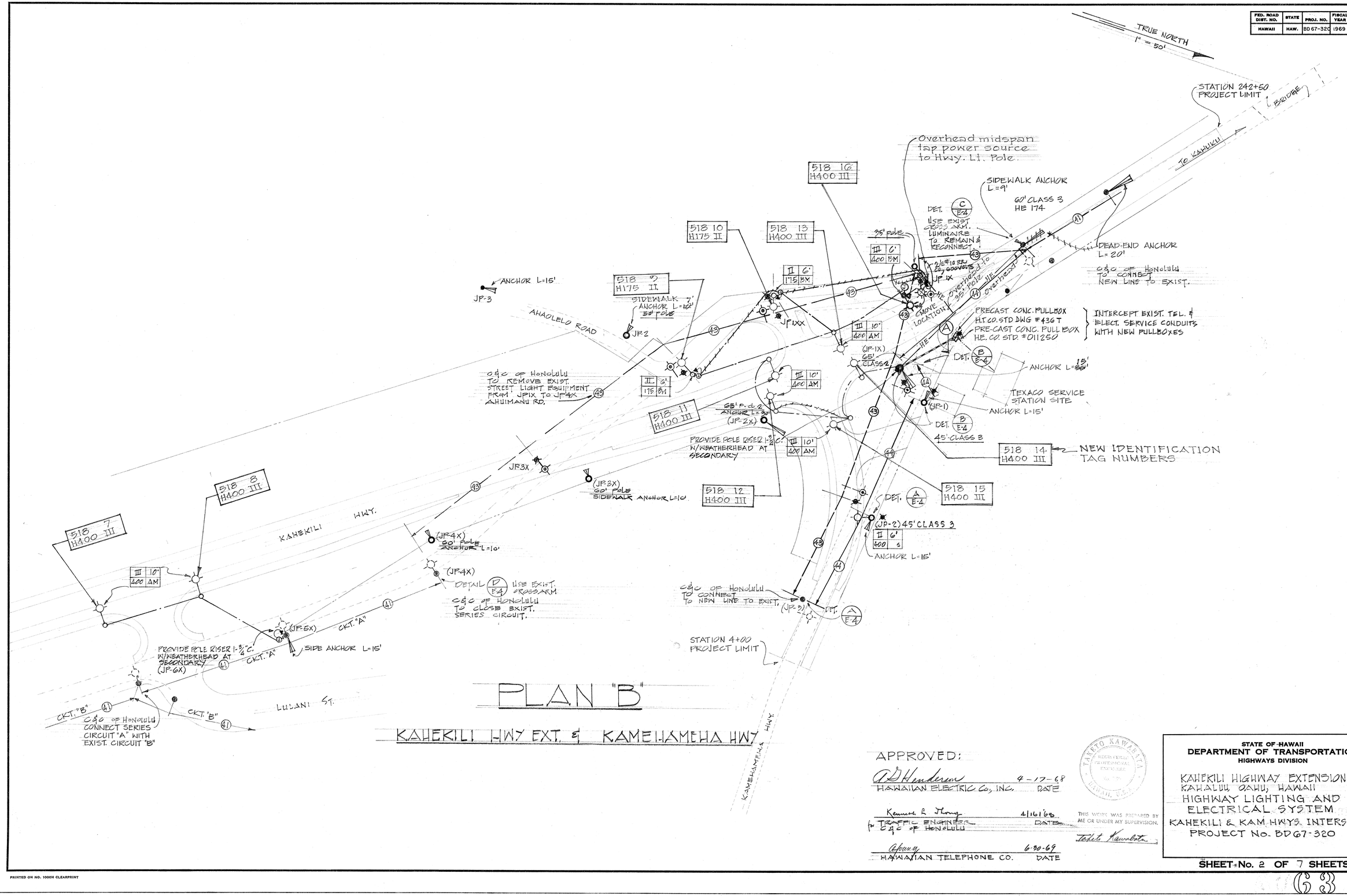
SHEET No. 1 OF 7 SHEETS

62

PRINTED ON NO. 5000H CLEARPRINT

Kahekili Hwy

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BD 67-320	1969	63	109



PLAN "B"

KAHEKILI HWY EXT. & KAMEHAMEHA HWY

APPROVED:

A D Henderson 4-17-68
HAWAIIAN ELECTRIC Co., INC. DATE

Kenneth R. Hong 4/16/68
TRAFFIC ENGINEER DATE
C&C OF HONOLULU

Aprony 6-30-69
HAWAIIAN TELEPHONE CO. DATE

TAKETO KAWABATA
REGISTERED PROFESSIONAL ENGINEER
No. 3731
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Taketo Kawabata

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KAHEKILI HIGHWAY EXTENSION
KAHALUU, OAHU, HAWAII
HIGHWAY LIGHTING AND ELECTRICAL SYSTEM
KAHEKILI & KAM. HWYS. INTERSECTION
PROJECT No. BDG7-320

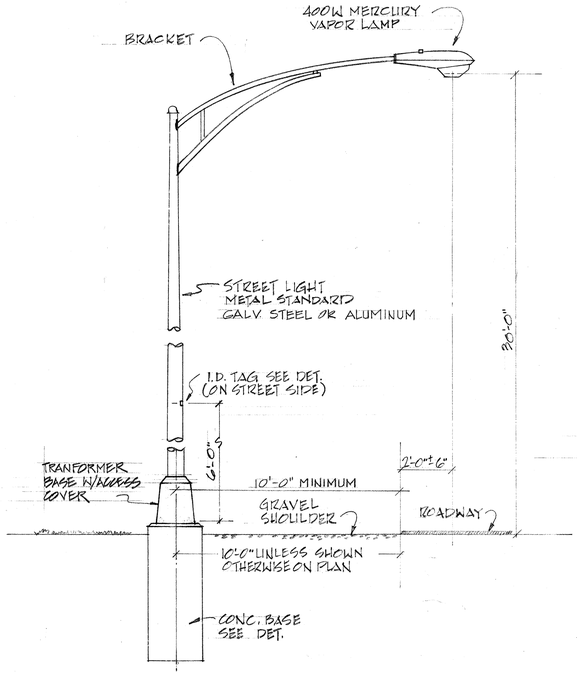
SHEET No. 2 OF 7 SHEETS

63

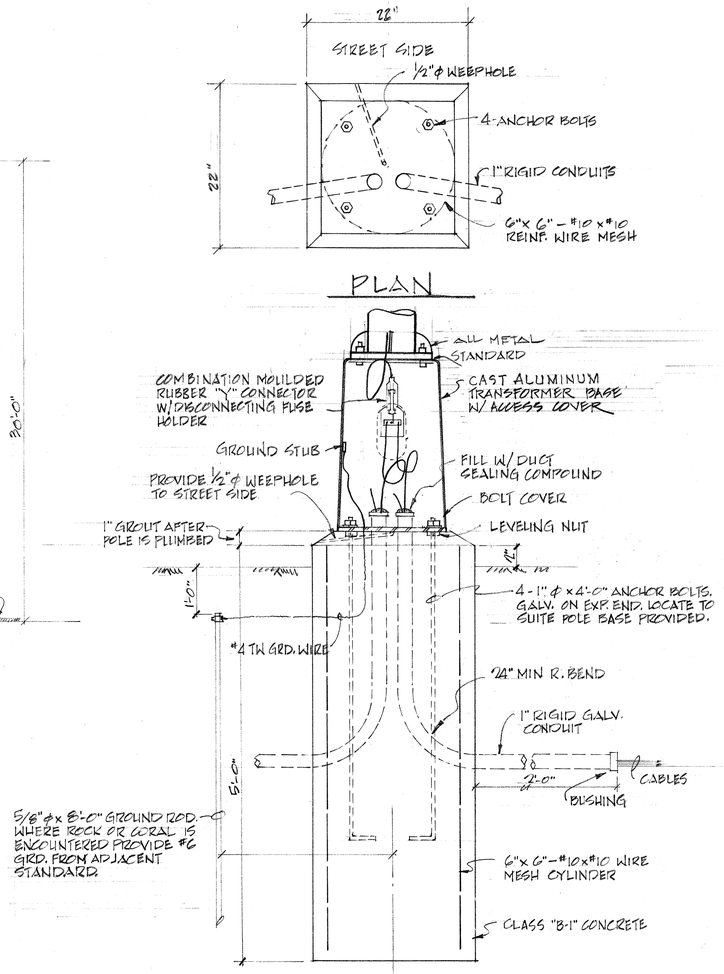
ORIGINAL PLAN | NOTE BOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

PRINTED ON NO. 1000H CLEARPRINT

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BD 67-320	1969	64	109

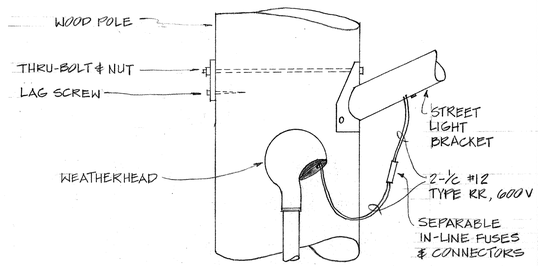


POLE-TYPE "A"
N.T.S.

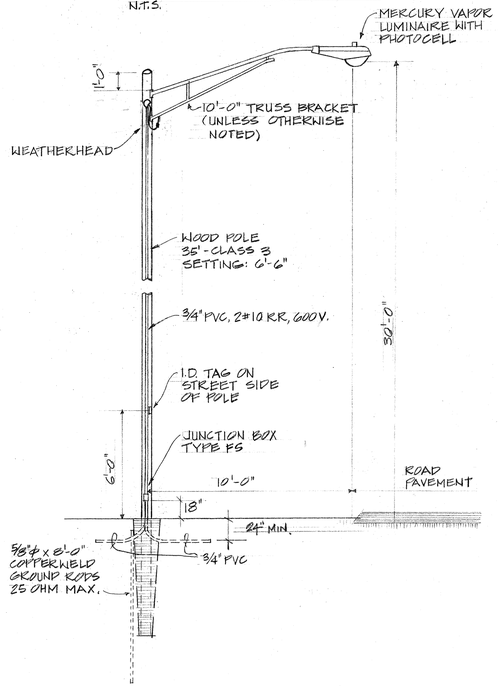


ELEVATION

CONCRETE BASE DETAIL
N.T.S.



DETAIL AT HANGER
N.T.S.



POLE-TYPE "B"
N.T.S.

ELECTRICAL SYMBOLS

41	STREET LIGHT, SERIES CKT. 5KV, TO REMAIN
42	STREET LIGHT, SERIES CKT. SYSTEM TO BE REMOVED BY CITY & COUNTY OF HONOLULU.
44	STREET LIGHT, SERIES CKT. #6 MHD, CU., NEW
III 16" / 400 AM	INDICATOR — IES TYPE III (UNLESS OTHERWISE INDICATED) 400W, MERCURY VAPOR LAMP; POLE STANDARD, TYPE "A" (UNLESS OTHERWISE NOTED); MULTIPLE CIRCUIT "M"; SERIES CIRCUIT "S"; BRACKET LENGTH 10'-0" (UNLESS OTHERWISE NOTED).
	DEADEND

EXIST	NEW	
●	○	POLE
✱		POLE, TO BE REMOVED BY OTHERS.
—	—	PVC CONDUIT WITH 2#10 RR COPPER, 600 V., CONCEALED 24" BELOW GRADE.
⊕	⊕	STREET LIGHT, LUMINAIRE W/ POLE, TYPE AS INDICATED
⊛		STREET LIGHT, LUMINAIRE TO BE REMOVED.
—	Ⓐ	DUCTLINE, CONCRETE JACKET, SECTION DET. "A"
⊣	◁	ANCHOR, SUPPLIED BY H.E.CO.; EXCAVATION & INSTALLATION OF ANCHOR & ROD BY CONTRACTOR
	◂	WEATHERHEAD
	Ⓙ	JUNCTION BOX, TYPE "FS" WEATHERPROOF
	○	POLE SUPPLIED & INSTALLED BY H.E.CO. EXCAVATION BY CONTRACTOR

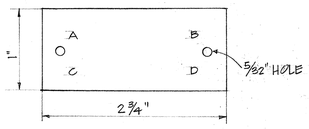
NOTE: ALL WORK TO BE DONE BY CONTRACTOR UNLESS OTHERWISE INDICATED.

APPROVED:

DATE

Kenneth R. Young 4/16/68
for TRAFFIC ENGINEER, DATE
C & C OF HONOLULU

R Young 6-30-69
HAWAIIAN TELEPHONE CO. DATE



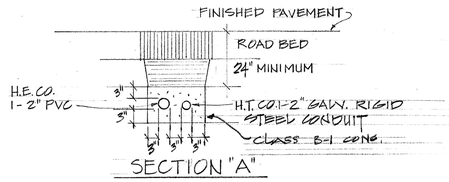
LEGEND:

A = CONTRACT NUMBER
B = LIGHT NUMBER (NOTE: FOR NUMBER SEE PLAN)
C = LAMP DATA: #400W (UNLESS OTHERWISE NOTED)
D = REFRACTOR DATA: TYPE NO.
(NOTE: FOR NUMBER SEE PLAN)

NOTES:

1. - TAG - MAKE FROM PLASTIC SHEET (GRAVOFLEX/3 PLY). LAMINATED BLACK-WHITE-BLACK.
2. - MOUNTING HEIGHT OF TAG = 6'-0" FROM FIN. GRADE.
3. - LETTERS - NO. 5 REDUCTION, ⅛", STENCILLED
4. - ATTACH TO ALUMINUM POST WITH NO. 7 ALUMINUM DRIVE SCREW
ATTACH TO STEEL POST WITH NO. 7 CAD. PLATED DRIVE SCREW
ATTACH TO WOOD POLES WITH 4D NAILS

IDENTIFICATION TAGS DETAIL
N.T.S.



SECTION "A"

DUCT SECTION
N.T.S.

TOKITO KAWAKAMI
REGISTERED PROFESSIONAL ENGINEER
No. 759
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Tokito Kawakami

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KAHEKILI HIGHWAY EXTENSION
KAHALUU, OAHU, HAWAII
HIGHWAY LIGHTING AND ELECTRICAL SYSTEM
KAHEKILI & KAM HWYS. INTERSECTION
PROJECT NO. BDG7-320

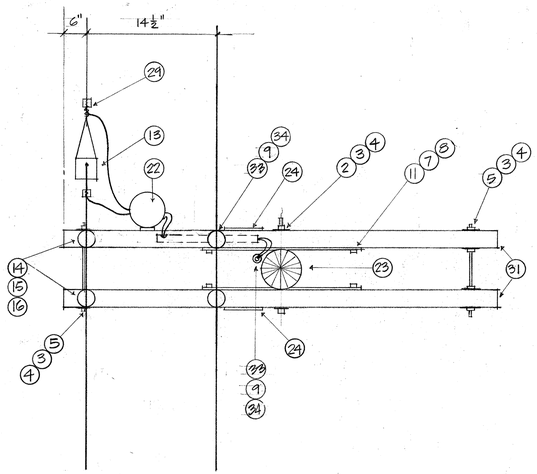
SHEET No. 3 OF 7 SHEETS

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

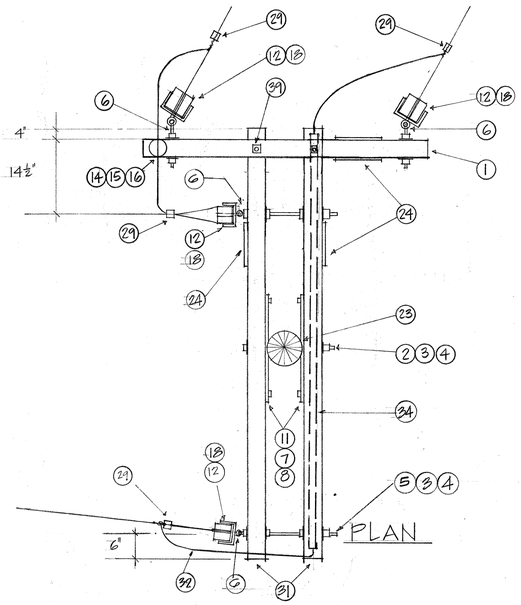
PRINTED ON NO. 1000H CLEARPRINT

64

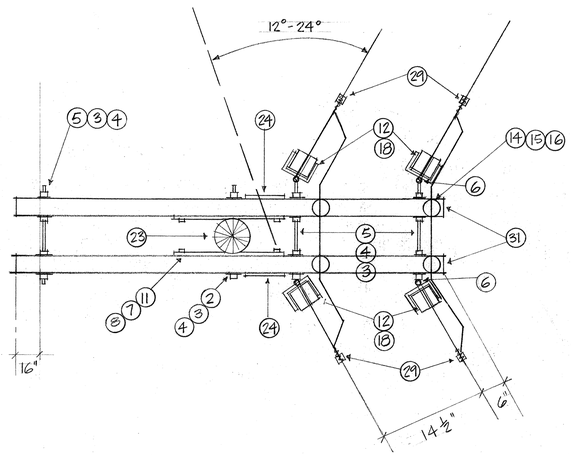
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BD 67-320	1969	G5	109



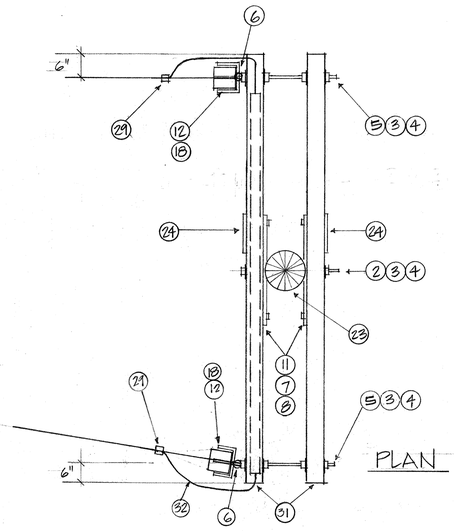
A THRU CONSTRUCTION



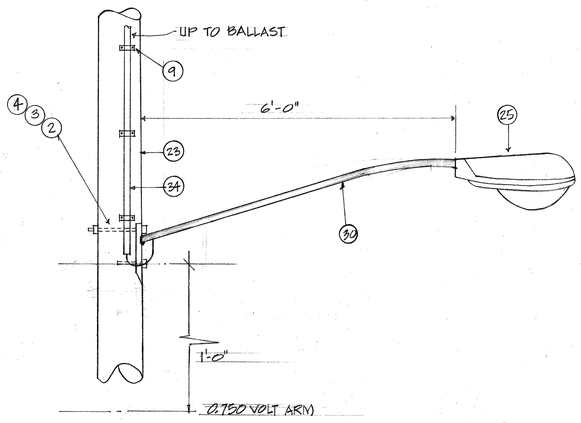
B BUCK CONSTRUCTION



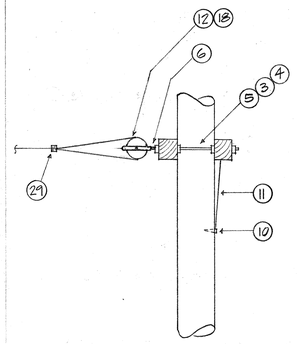
C ANGLE CONSTRUCTION



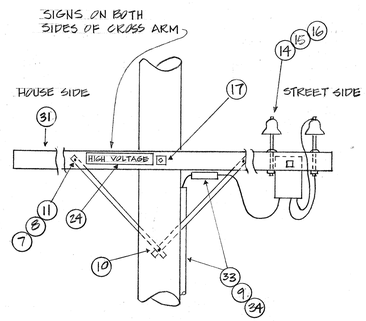
D DEADEND CONSTRUCTION



E LUMINAIRE MOUNTING DETAIL



F SIDE ELEVATION DEAD-END POLE



G FRONT ELEVATION THRU-POLE

LIST OF MATERIALS

PART NO.	DESCRIPTION
1	4 PIN ARM 3½' x 4½" x 5'-6"
2	MACHINE BOLT, ⅝" x REQ'D LENGTH, EEI SPEC. TD-1
3	SQUARE WASHER, 2¼" x 2¼" x 3/16", 11/16" HOLE
4	M-F LOCKNUT SQUARE, ⅝" BOLT SIZE
5	DOUBLE ARMING BOLT, ⅝" x 22", EEI SPEC. TD-1
6	EYENUT, ⅝" BOLT SIZE
7	MACHINE BOLT, ⅜" x 4½", EEI SPEC. TD-1
8	ROUND WASHER, 1" DIA. 7/16" HOLE
9	GALV. STEEL CONDUIT STRAPS, 2 NAIL HOLE
10	LAG SCREW, ½" x 4", FETTER DRIVE, EEI SPEC. TD-3
11	BRACE, FLAT CROSSARM, 1¼" x ¼" x 28", STRUCTURAL GRADE STEEL, 10,000 LBS., BREAKING STRENGTH
12	STEEL INSULATOR CLEVICES, STEEL FLAT YOKE WITH NON-FERROUS SELF-LOCKING COTTER.
13	STRAIN INSULATOR, 7.0 KV-MECHANICAL STRENGTH 20,000 LBS.
14	INSULATOR PIN TYPE, NORMAL RATED VOLTAGE 6.6 KV, WET FLASH OVER 25 KV, DRY FLASH OVER 50 KV 1" PIN DIA.
15	INSULATOR PIN, ⅝" SHANK, HEIGHT ABOVE ARM 5" FOR 1" THREADED PIN HOLE
16	2" x 2" x ⅛" SQ. WASHER, SQ. NUT & M-F LOCK NUT
17	MACHINE BOLT, ½" x 6", W/ 2" x 2" x ⅛" SQ. WASHER, SQ. NUT & M-F LOCK NUT
18	SPOOL INSULATOR, 7.0 KV-MECH. STRENGTH 6000 LBS., EEI CLASS 53-5
19	MACHINE BOLT, ⅝" ϕ x 14" EEI SPEC. TD-1
20	GLASS INSULATOR, TOP GROOVE, WESTERN UNION STYLE, W/1" THREADS
21	WESTERN UNION STEEL PINS, W/ 5" SHANK FOR INSULATOR (ITEM #20)
22	BALLAST, SERIES TYPE, G.6A, 2400 VOLTS
23	WOOD POLE BY OTHERS UNLESS OTHERWISE NOTED.
24	"HIGH VOLTAGE" SIGN, YELLOW PLASTIC 3½" x 14" W/ 2" HIGH MIN. CUTOUT

PART NO.	DESCRIPTION
	COMMERCIAL GOTHIC LETTERS.
25	LUMINAIRE, MERCURY VAPOR, 175 W, SERIES
26	
27	EYE BOLT, ½" x 5", WITH 2½" x 2½" WASHERS
28	
29	CONNECTOR, SPLIT BOLT, COPPER ALLOY
30	LUMINAIRE BRACKET, 1¼" DIA. x 6'-0"
31	CROSS ARM, 3½" x 4½" x 8'-0"
32	1/c #8, TYPE RR, 5KV W/ PROTECTORS, SERIES ST. LIGHTING NON-SHIELDED CABLE
33	3/c #10, TYPE RR, 600 V., ORNAMENTAL POLE & BRACKET CABLE
34	1½" POLY VINYL CHLORIDE CONDUIT (SCHEDULE 40)

APPROVED:

DATE

Kenneth L. Thung 4/16/68
TRAFFIC ENGINEER, C&C HONOLULU — DATE

TAKETO KAWABATA REGISTERED PROFESSIONAL ENGINEER No. 2708 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Taketo Kawabata

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KAHEKILI HIGHWAY EXTENSION
KAHALUU, OAHU, HAWAII
HIGHWAY LIGHTING AND ELECTRICAL SYSTEM

PROJECT No. BD 67-320

SHEET No. 4 OF 7 SHEETS

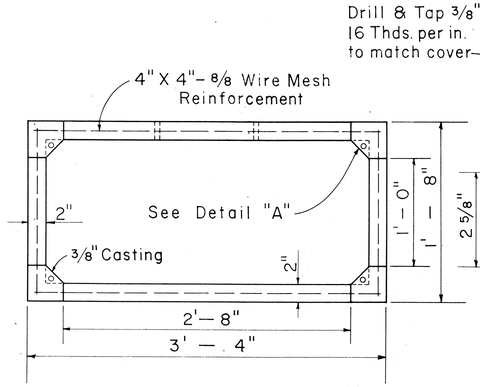
ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
NOTE BOOK
QUANTITIES BY
No.
CHECKED BY
DATE

PRINTED ON NO. 1000H CLEARPRINT

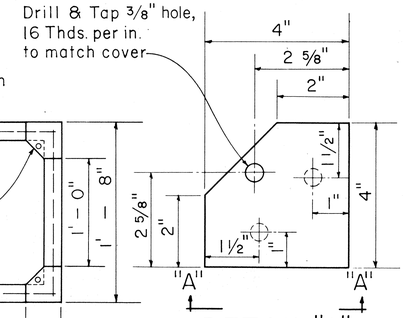
G5

KAHEKILI HWY

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	BD 67-320	1969	66	109

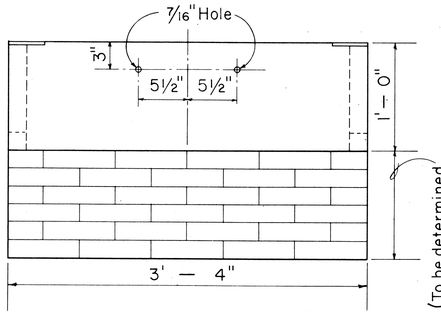


PLAN

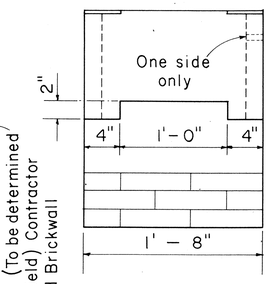


DETAIL "A"

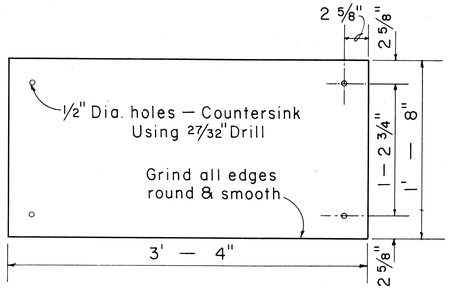
SECTION "A-A"



SIDE VIEW



END VIEW



NOTES:
Use 3/8" Plate for driveways.
Concrete Box 225 Lbs.
1/4" Checker Plate 62 Lbs.
Secure cover with 3/8" x 1" flat head brass machine screws.

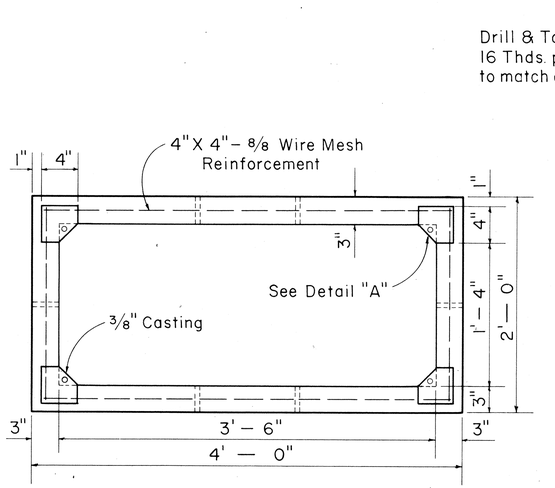
1/4" CHECKER PLATE COVER

(Hot dip galvanize checkered plate after drilling, countersinking, and grinding edge)

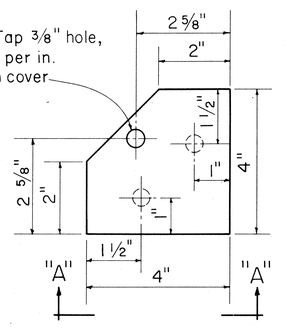
1'-4" X 3'-0" CONCRETE SERVICE BOX

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

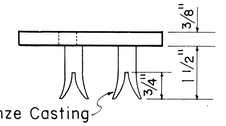
011250



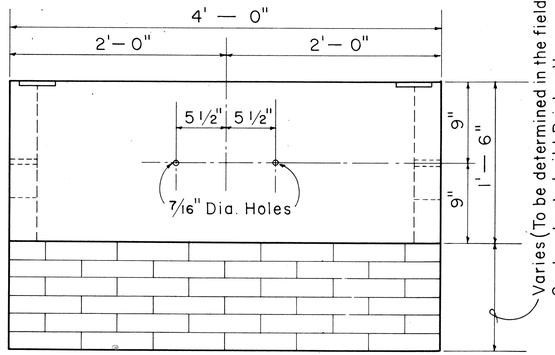
PLAN



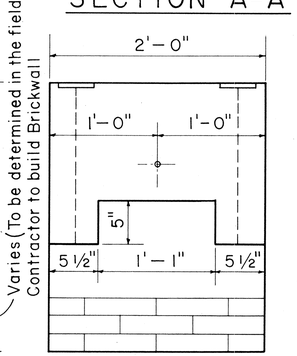
DETAIL "A"



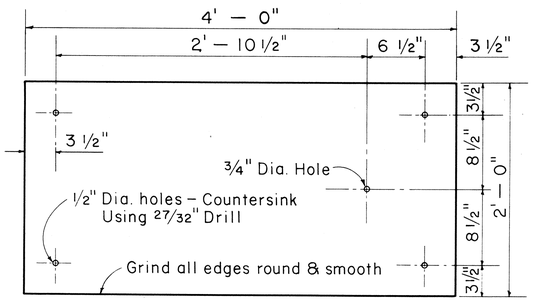
SECTION "A-A"



SIDE VIEW



END VIEW



NOTES:
Use 3/8" Plate for driveway.
Concrete Box 575 Lbs.
1/4" Checker Plate 130 Lbs.
Secure cover with 3/8" x 1" flat head brass machine screws.

1/4" CHECKER PLATE COVER

(Hot dip galvanize checkered plate after drilling, countersinking, and grinding edge)

1'-6" X 3'-6" CONCRETE SERVICE BOX

011255

CREOSOTED DOUGLAS FIR & YELLOW PINE POLE DATA

LENGTH IN FEET	CLASS	APPROX. MINIMUM DIMENSIONS (INCHES) AT TOP DIA.	AT TOP CIR.	6' FROM BUTT DIA.	6' FROM BUTT CIR.	AVERAGE WEIGHT (LBS.) DOUGLAS FIR	POLE SETTING DEPTH (FT.) IN SOIL	IN ROCK	BREAKING LOAD 2'-0" BELOW TOP OF POLE (LBS.)
25	5	6.04	19	8.26	26	525	4.5	3	1900
30	3	7.32	23	10.32	32.5	810	5	3.5	3000
	5	6.04	19	8.90	28	600	5	3.5	1900
35	2	7.96	25	12.23	37.5	1260	5	3.5	3700
	5	6.04	19	9.55	30	770	5	3.5	1900
40	3	7.32	23	11.77	37	1320	5.5	3.5	3000
45	2	7.96	25	13.20	41.5	1845	6	4.	3700
	3	7.32	23	12.25	38.5	1575	6	4	3000
50	2	7.96	25	13.70	43.	2150	6.5	4	3700
	3	7.32	23	12.70	40	1850	6.5	4	3000
55	1	8.59	27	15.11	47.5	2860	7	4.5	4500
	2	7.96	25	14.15	44.5	2475	7	4.5	3700
	3	7.32	23	13.20	41.5	2145	7	4.5	3000
60	1	8.59	27	15.75	49.5	3360	7	4.5	4500
	2	7.96	25	14.62	46	2820	7	4.5	3700
65	1	8.59	27	16.20	51	3835	7.5	5	4500
	2	7.96	25	15.11	47.5	3250	7.5	5	3700
70	1	8.59	27	16.70	52.5	4340	7.5	5	4500
	2	7.96	25	15.60	49	3640	7.5	5	3700
75	1	8.59	27	17.20	54	4800	8	5.5	4500
	2	7.96	25	16.05	50.5	4050	8	5.5	3700
80	1	8.59	27	17.50	55	5240	8	6	4500
	2	7.96	25	16.40	51.5	4400	8	6	3700
85	1	8.59	27	18.00	56.5	5780	8.5	6.5	4500
	2	7.96	25	16.88	53	4930	8.5	6.5	3700
90	1	8.59	27	18.30	57.5	6300	8.5	6.5	4500
	2	7.96	25	17.20	54	5400	8.5	6.5	3700

NOTE:
The ultimate fiber stress for creosoted Southern Yellow Pine & Douglas Fir is 7,400 Lbs. per square inch.

Weights are for untreated poles. Add 5% as estimate of added weight of creosote treatment.

REFERENCES:
American Standards Association 05.4-1941, 05.6-1945.
Standard Handbook for Electrical Engineers, Eighth Edition
H. E. Co. Specification for Poles.

WOOD POLE DATA

APPROVED:

A D Henderson 8-17-69
HAWAIIAN ELECTRIC Co., Inc. DATE

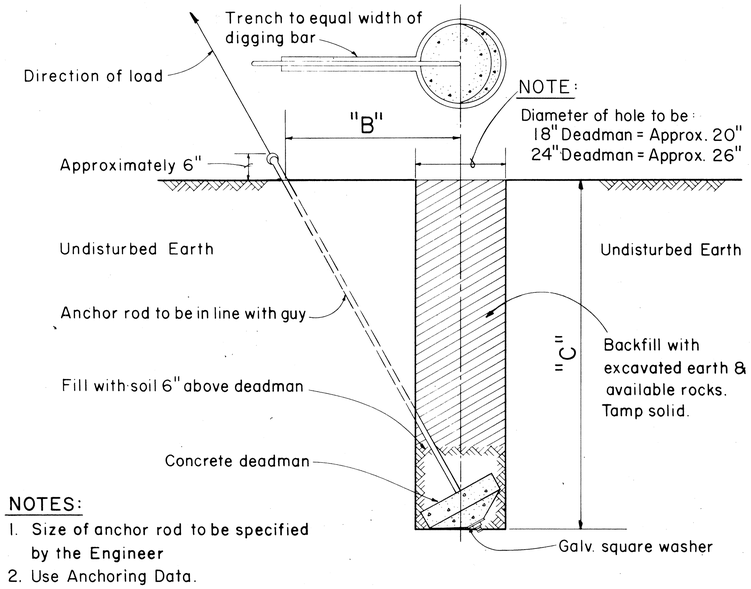
G Young 6-30-69
HAWAIIAN TELEPHONE Co. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
H. E. Co. AND H. T. Co.
SERVICE BOX DETAILS AND WOOD POLE DATA
KAHEKILI HWY EXTENSION
KAHALUU, OAHU, HAWAII
Scales: As Noted Date: Mar. 1969

SHEET NO. 5 OF 7 SHEETS

66

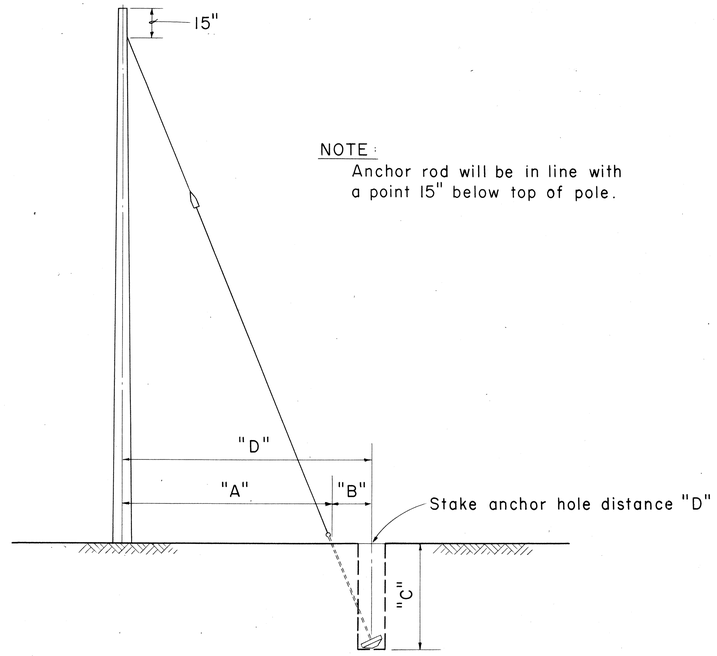
ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE
NOTE BOOK
No.



NOTES:
1. Size of anchor rod to be specified by the Engineer
2. Use Anchoring Data.

GUY ANCHOR DEADMAN

Scale: 3/4" = 1' – 0"



Not to Scale

FOR 25', & 30' POLES WITH 8'-0" ANCHOR RODS				
"A"	"B"	"C"		"D" = ("A" + "B")
LEAD-ANCHOR ROD TO ℄ OF POLE	ANCHOR ROD TO ℄ OF HOLE	VERTICAL DEPTH 18" D.M.	VERTICAL DEPTH 24" D.M.	TOTAL DISTANCE POLE TO HOLE
5'-0"	1'-8"	7'-1"	7'-4"	6'-8"
10'-0"	3'-0"	6'-7"	7'-0"	13'-0"
15'-0"	4'-0"	6'-1"	6'-6"	19'-0"
20'-0"	4'-8"	5'-6"	5'-10"	24'-8"
25'-0"	5'-2"	4'-11"	5'-4"	30'-2"
FOR 35' THRU 70' POLES WITH 8'-0" ANCHOR RODS				
5'-0"	1'-0"	7'-3"	7'-4"	6'-0"
10'-0"	1'-11"	7'-1"	7'-3"	11'-11"
15'-0"	2'-8"	6'-9"	7'-1"	17'-8"
20'-0"	3'-3"	6'-6"	6'-10"	23'-3"
25'-0	3'-10"	6'-2"	6'-7"	28'-10"
FOR 40' THRU 70' POLES WITH 1 1/4" x 10'-0" ANCHOR RODS				
5'-0"	1'-7"		9'-4"	6'-7"
10'-0"	3'-0"		9'-0"	13'-0"
15'-0"	4'-2"		8'-6"	19'-2"
20'-0"	5'-3"		7'-11"	25'-3"
25'-0"	6'-2"		7'-3"	31'-2"

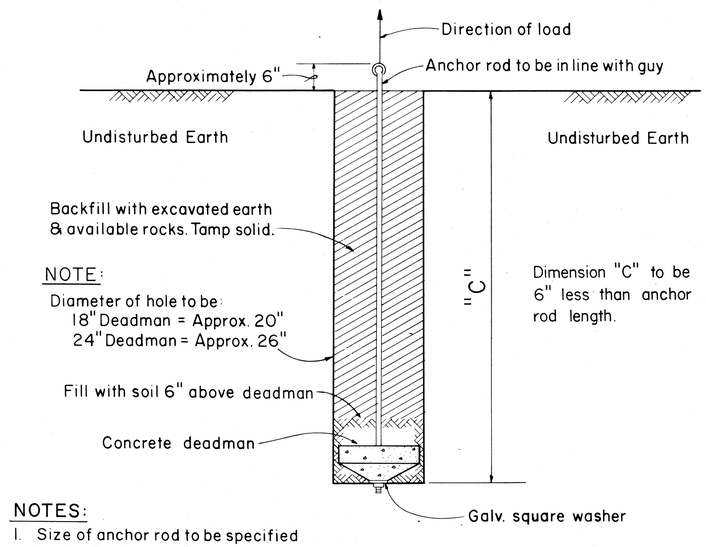
D.M. = Deadman

TABLE 2 ANCHOR ROD - ANCHOR SLUG - SQUARE WASHER COMBINATION

H.E. CODE NO.	ANCHOR ROD	WORKING TENSION 1/2 ULT (LBS.)	H.E. CODE NO.	CONC. ANC. (IN.)	H.E. CODE NO.	WASHER SIZE	QTY.
617	5/8" x 8'-0" Steel	8,000	518	18	2320	4" x 4" x 3/16"	2
615	5/8" x 8'-0" Cu Cov Stl	9,250	518	18	**	3" x 3" x 1/8"	2
618	3/4" x 8'-0" Steel	11,500	518	18	2330	6" x 6" x 3/8"	1
619	1" x 8'-0" Steel	18,000	524	24	2331	6" x 6" x 1/2"	1
616	1" x 8'-0" Cu Cov Stl	22,500	524	24	**	4" x 4" x 3/16"	2
613	1 1/4" x 10'-0" Steel	29,000	524	24	2330	6" x 6" x 3/8"	2

** Use bronze square washers included in anchor rod assembly on copper covered steel (Cu Cov Stl) anchor rods.

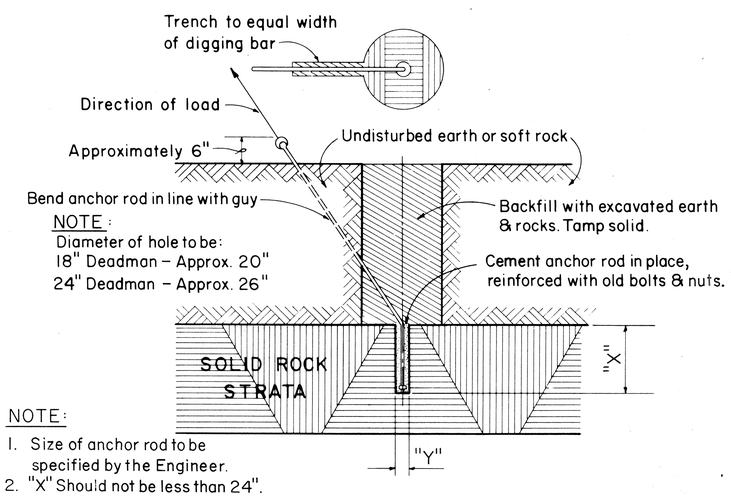
ANCHORING DATA



NOTES:
1. Size of anchor rod to be specified by the Engineer.
2. Use Anchoring Data.

SIDE – WALK ANCHOR

Scale: 3/4" = 1' – 0"



NOTE:
1. Size of anchor rod to be specified by the Engineer.
2. "X" Should not be less than 24". If "X" is less than 24" complete hole & install anchor.
3. "Y" 5/8" Anchor rod drill 2" hole
   3/4" Anchor rod drill 2" hole
   1" Anchor rod drill 2 1/2" hole
   1 1/4" Anchor rod drill 3" hole
4. Use Anchoring Data.

ROCK ANCHOR

Not to Scale

APPROVED:

A D Henderson 4-17-69
HAWAIIAN ELECTRIC Co., Inc. DATE

Rooney 6-30-69
HAWAIIAN TELEPHONE Co. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

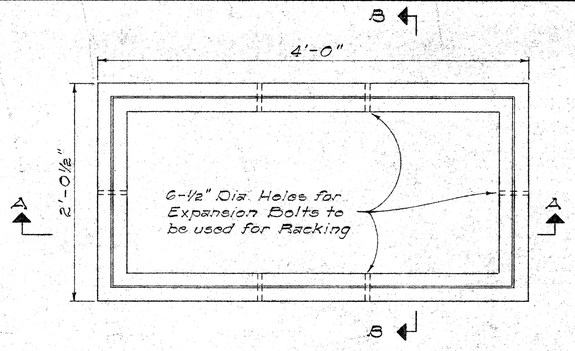
STANDARD DETAILS
H.E. Co. AND H.T. Co.
ANCHOR DETAILS AND ANCHORING DATA

KAMEHAMEHA HWY EXTENSION
KAHALUU, OAHU, HAWAII

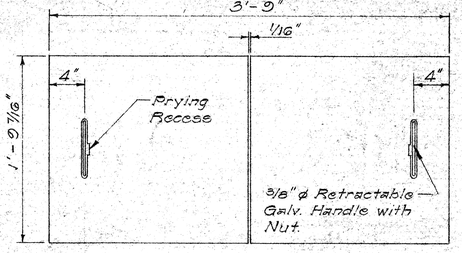
Scales: As Noted Date: Mar. 1969

SHEET No. 6 OF 7 SHEETS

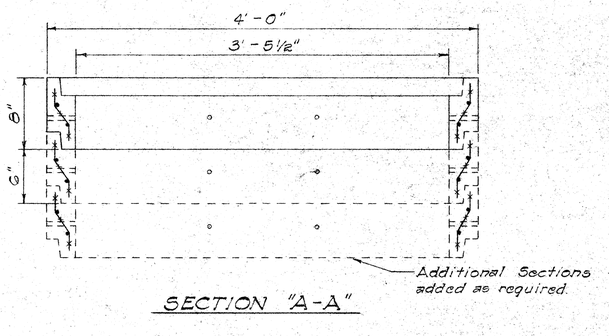
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BD 67-320	1969	68	109



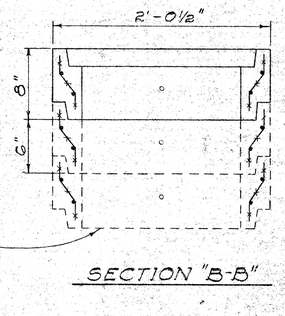
PLAN



PLAN OF COVER



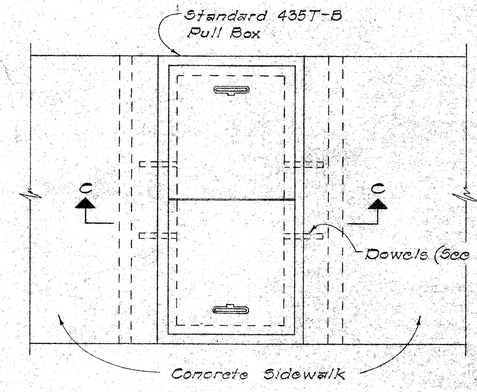
SECTION "A-A"



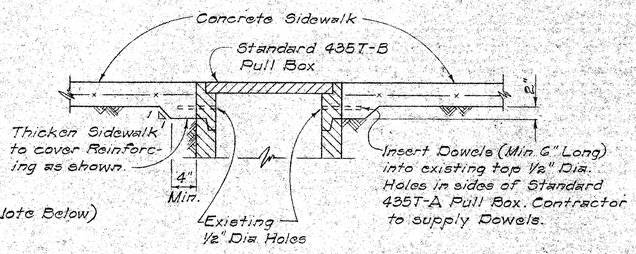
SECTION "B-B"

DETAIL OF LARGE PULL BOX No. 435T-B

Scale: 1½" = 1'-0"



PLAN

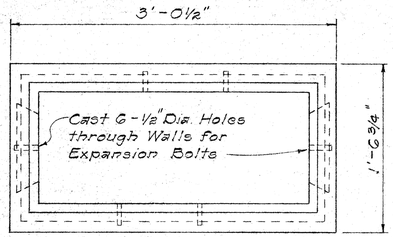


SECTION "C-C"

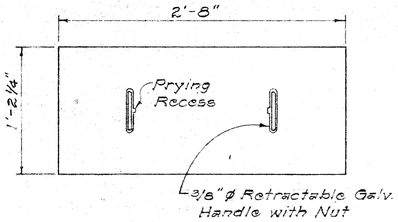
NOTE: Dowels shall be used only where the Sidewalk is as Wide or Narrower than the Pull Box.

INSTALLATION DETAIL OF PULL BOX No. 435T-B IN SIDEWALK AREAS

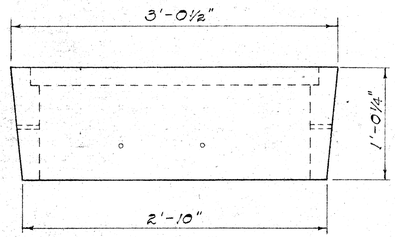
Scale: 1" = 1'-0"



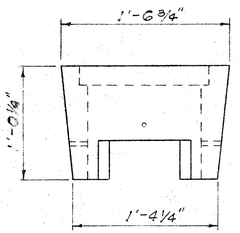
PLAN



PLAN OF COVER



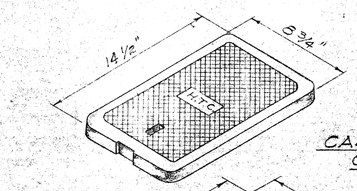
SIDE ELEVATION



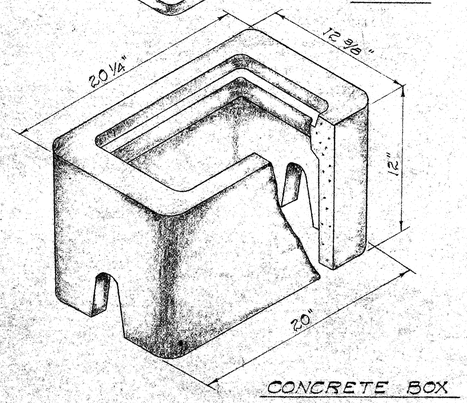
END ELEVATION

DETAIL OF SMALL PULL BOX No. 434T

Scale: 1½" = 1'-0"

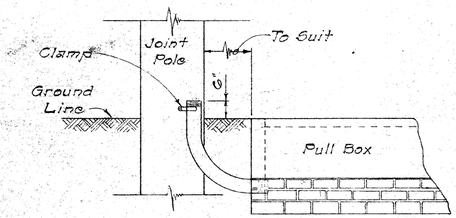


CAST IRON COVER



CONCRETE BOX

TYPE "B" METER BOX TYPE 436T



Field Side of Pole

TYPICAL 90° CONDUIT BEND TO POLE

Not To Scale

APPROVED:

6-30-69

HAWAIIAN TELEPHONE CO. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS TELEPHONE PULL BOXES Nos. 435T-B, 434T AND 436T

Scale: As Shown Date: June 1969

SHEET No. 7 OF 7 SHEETS

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

GS