

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	802(19)			

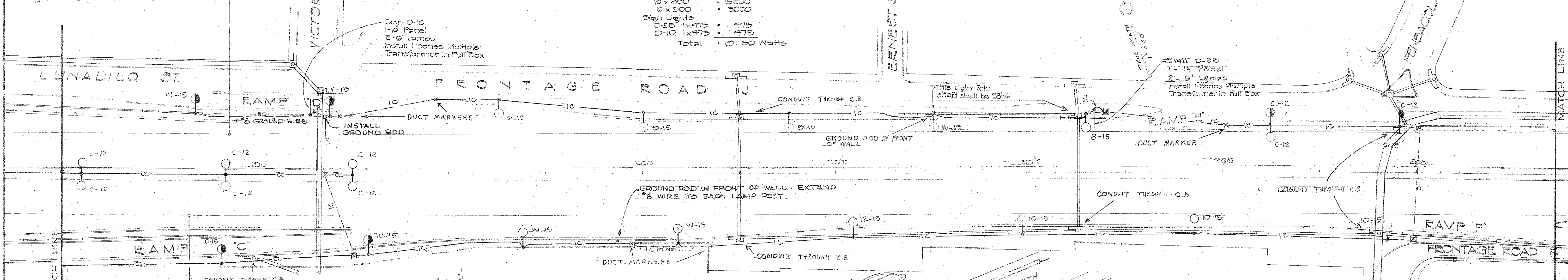
END PROJECT NO. E-008-1(6)
VINEYARD THOROUGHFARE
NESTBOUND STA. 176+00.00
LUNALILO STA. 105+74.75

All Lights on Lunaliilo Circuit #5

Circuit Loading
Roadway Lights
10 x 800 = 8000
6 x 500 = 3000
Sign Lights
D-50 1x475 = 475
D-10 1x475 = 475
Total = 12150 Watts

Sign D-10
1-18" Panel
2-6" Lamps
Install 1 Series Multiple
Transformer in Pull Box

Sign D-50
1-14" Panel
2-6" Lamps
Install 1 Series Multiple
Transformer in Pull Box



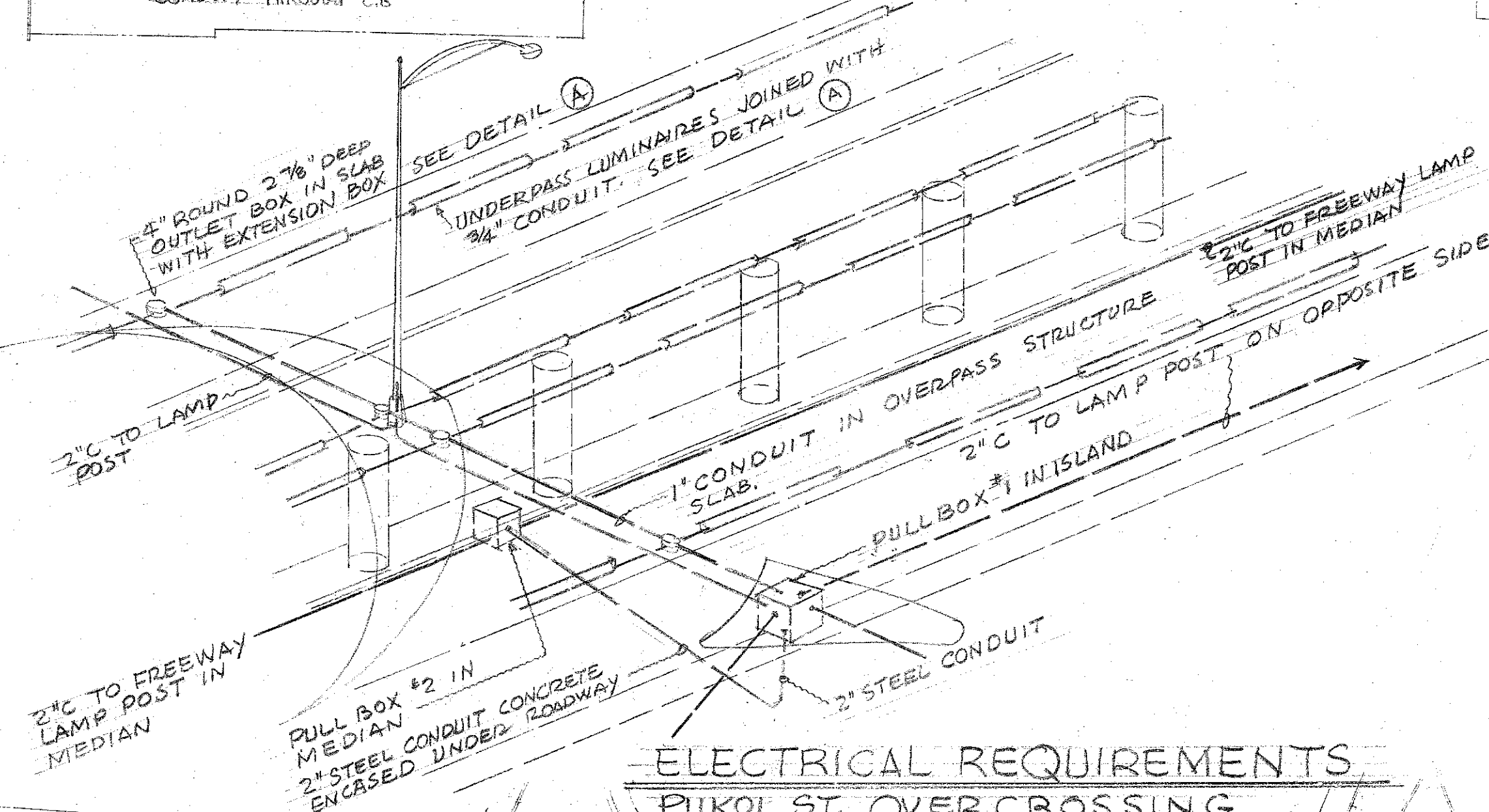
END PROJECT NO. E-008-1(6)
VINEYARD THOROUGHFARE
EASTBOUND STA. 173+00.00
LUNALILO STA. 105+74.75

POLE RISER SEE
SHEET NO. E-007.65

POLE RISER
SEE SHEET NO. E-007.65

THESE TWO LAMP
POSTS CONNECTED TO
GROUND ROD IN
PULL BOX #1

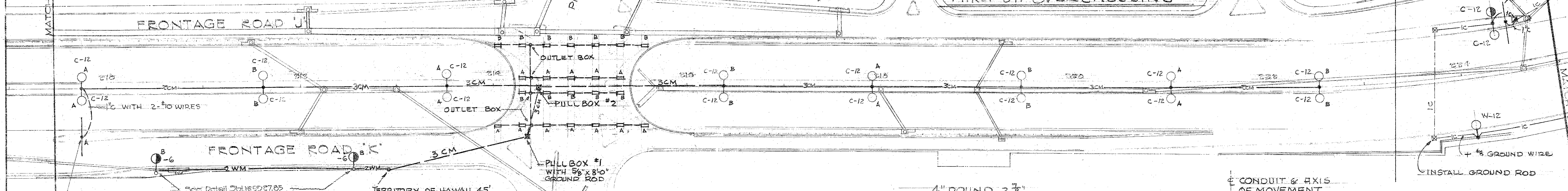
PULL BOX #1
1-2" C LEAVES THIS
PULL BOX VERTICALLY
SEE DETAIL



These Lights on Existing Lunaliilo Circuit

Existing Lunaliilo Circuit Loading
Roadway Lights
8 x 800 = 6400
1 x 500 = 500
Sign Light
C x 475 = 475
Total = 7375 Watts

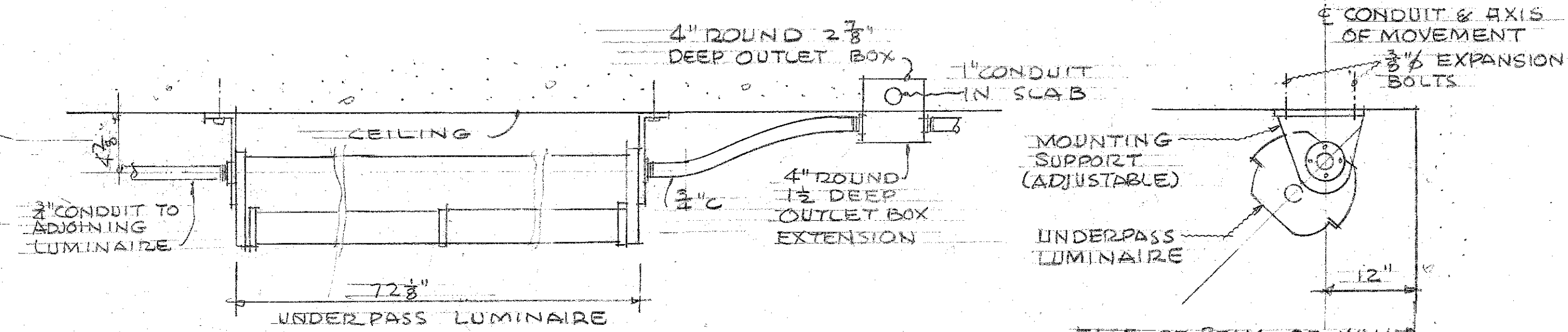
Sign D-5
1-12" Panel
4-6" Lamps
Install 2 Series Multiple
Transformer in Pull Box



NOTES: BETWEEN STA. 209 AND 222 AND
ON PIKOI STREET
ALL HIGHWAY LIGHTING LUMINAIRES, UNDER
PASS LUMINAIRES AND SIGN LIGHTING
LUMINAIRES SHALL OPERATE FROM A 120/240
VOLT, 1Ø, 3 WIRE SERVICE. LETTER ON EACH
SYMBOL INDICATES WHETHER CONNECTED TO
LEG "A" OR LEG "B"

ALL WIRING BETWEEN PULL BOX #1 AND UNDER
PASS LUMINAIRES SHALL BE #8 AWG.

ALL OTHER MULTIPLE CIRCUIT WIRING (TO
LAMP POSTS) IN DUCT OR BURIED SHALL
BE #2 AWG.



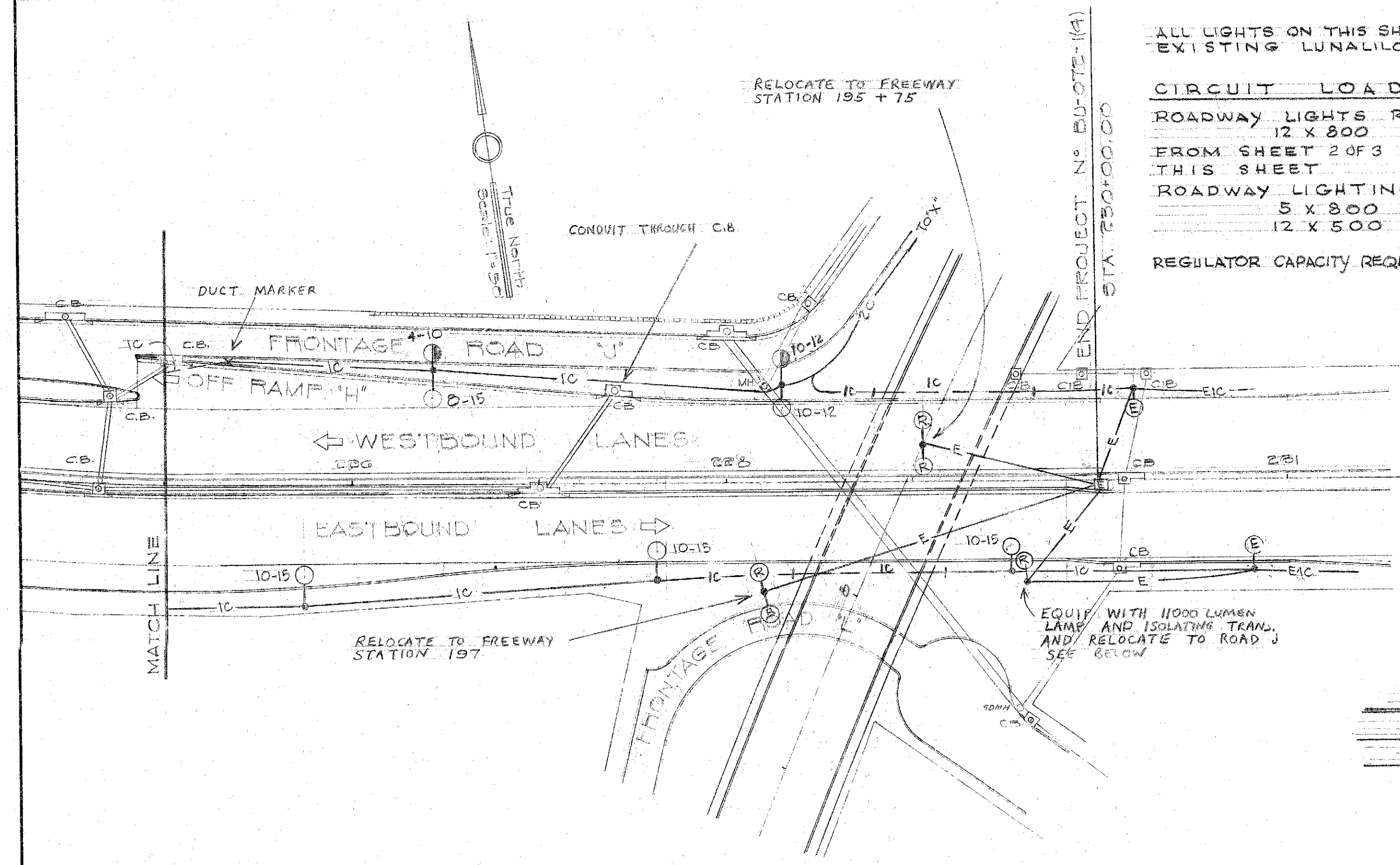
TYPICAL UNDERPASS LUMINAIRE DETAIL

NOT TO SCALE

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
HIGHWAY LIGHTING SYSTEM
LUNALILO FREEWAY
PELE ST. TO KEEAUMOKU ST.
PROJECT NO. BU-072(10)

DATE	DESIGNED BY	TRACED BY	QUANTITIES CHECKED BY	NOTED BY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	2007-14			



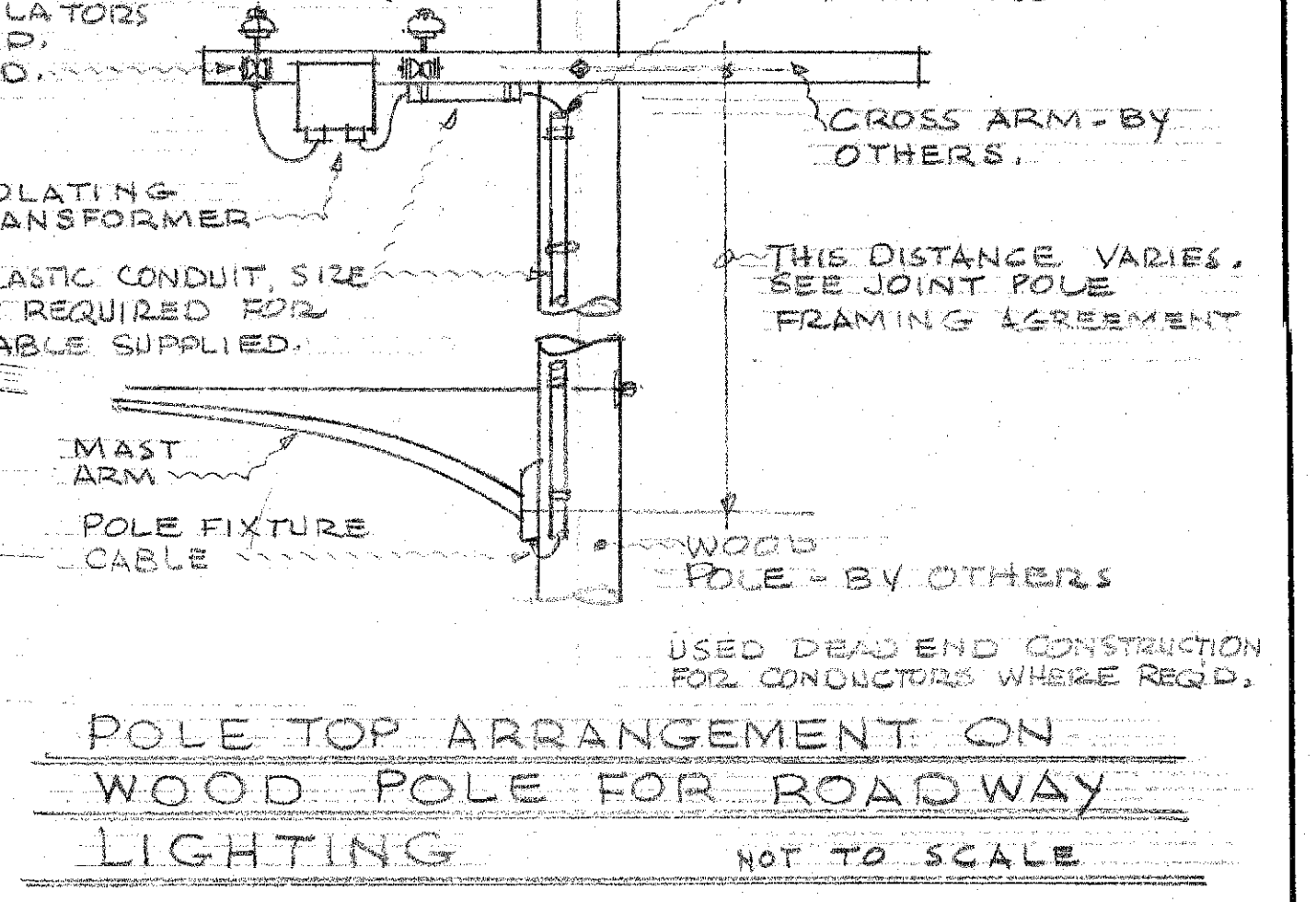
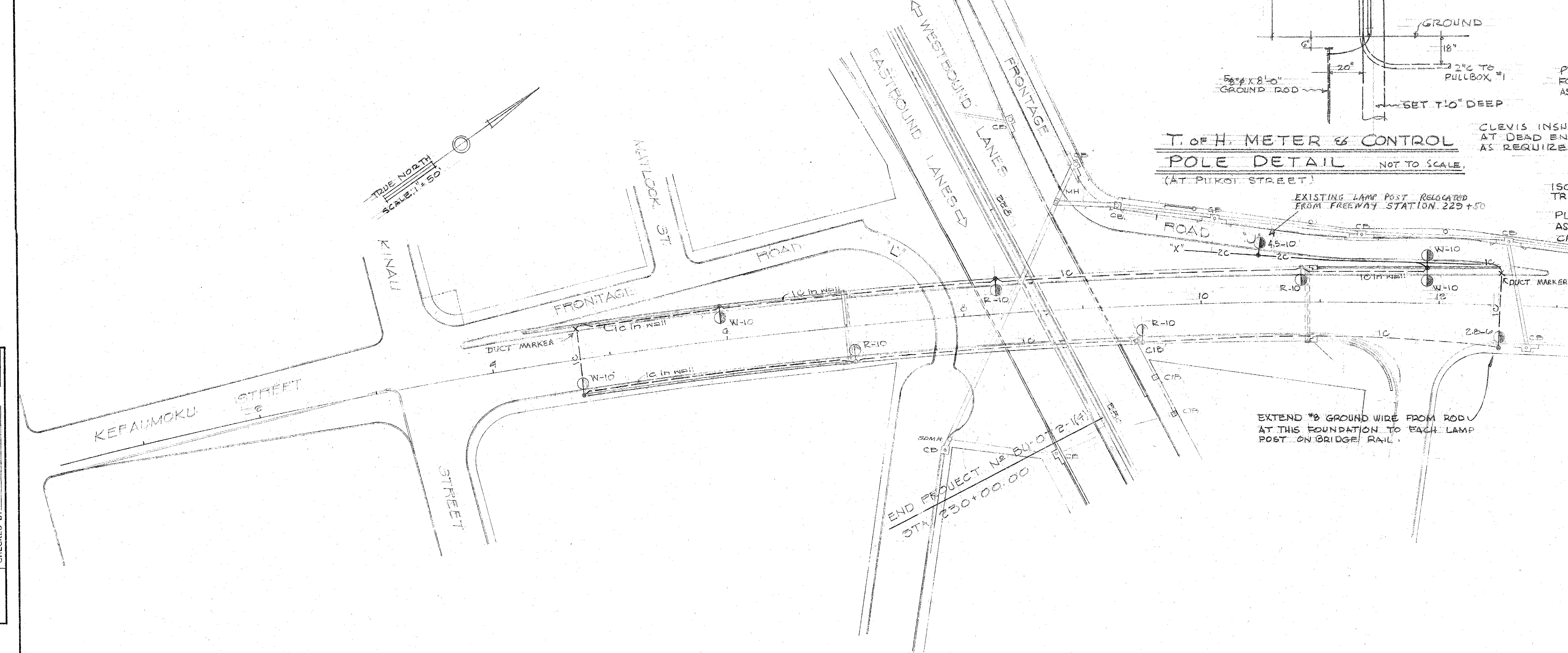
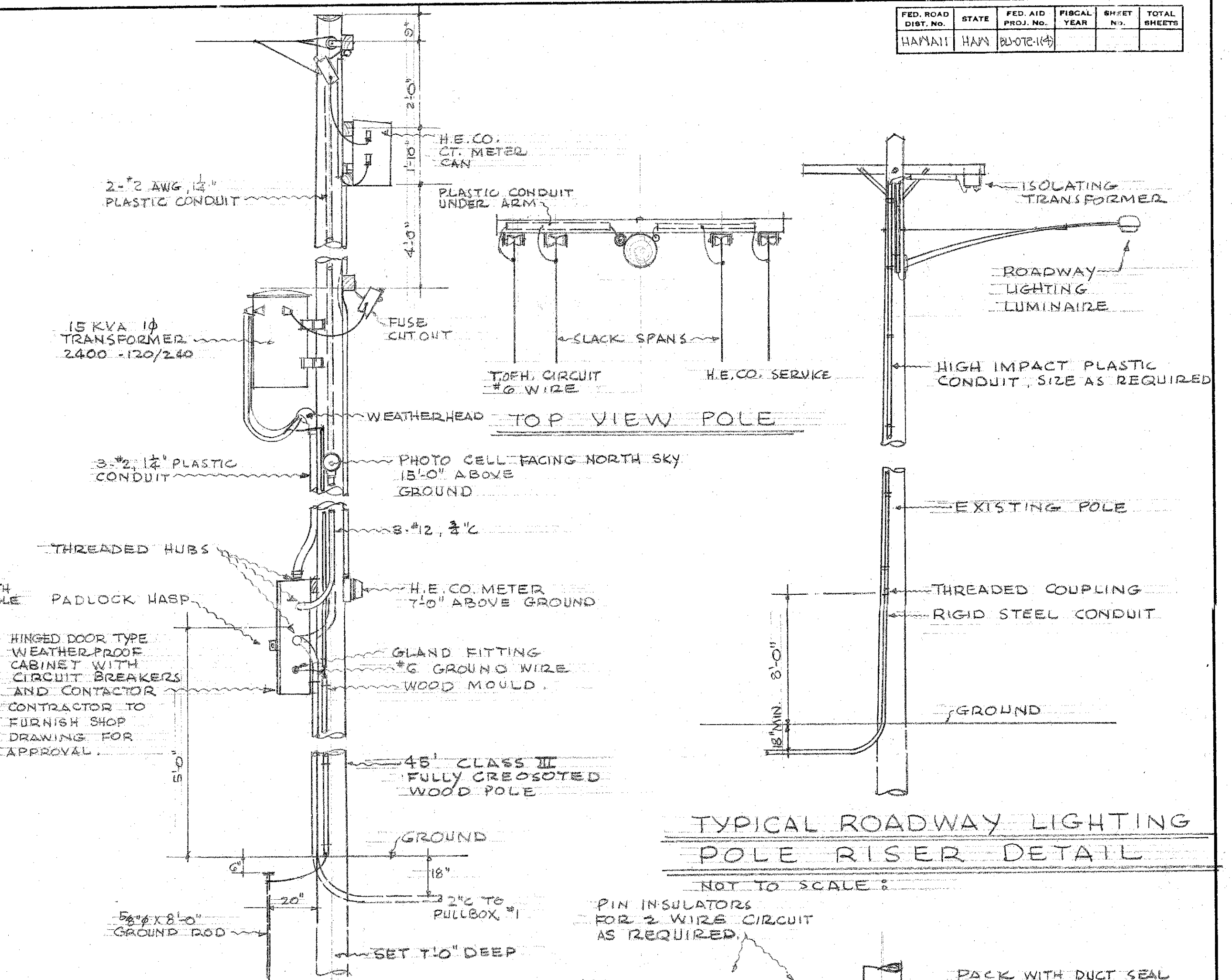
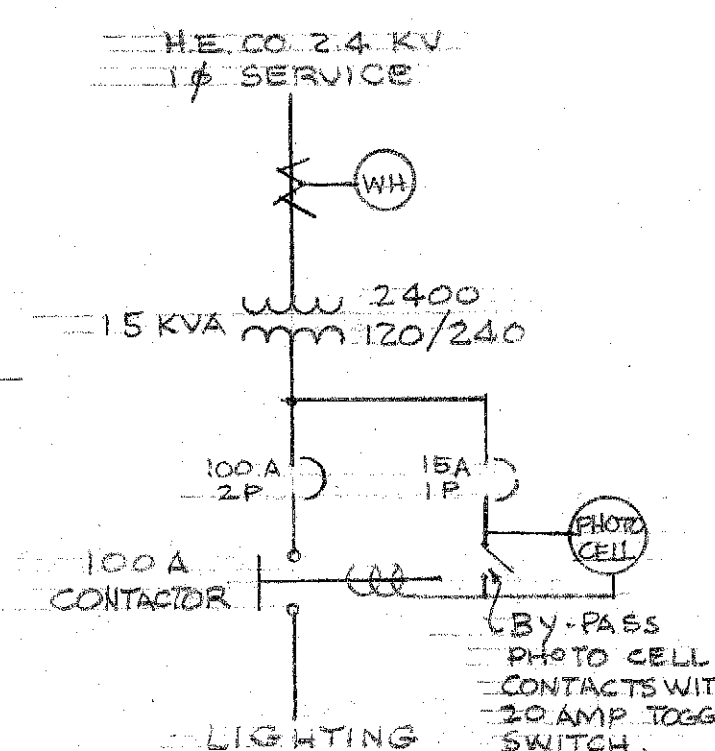
ALL LIGHTS ON THIS SHEET ON EXISTING LUNALILO CIRCUIT.

CIRCUIT LOADING

ROADWAY LIGHTS REMAINING
 12 X 800 = 9600
 FROM SHEET 2 OF 3 = 3050
 THIS SHEET =
 ROADWAY LIGHTING
 5 X 800 = 4000
 12 X 500 = 6000

REGULATOR CAPACITY REQUIRED = 22650 WATTS

**ONE LINE DIAGRAM
 METER & CONTROL POLE
 AT PIKOI STREET**



**TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
 HIGHWAY LIGHTING SYSTEM
 LUNALILO FREEWAY
 PELE ST. TO KEEALOMOKU ST.
 PROJECT No. BU-072-14**

Scale: 1" = 50'

SHEET No. 4 OF 7 SHEETS

5927 E403

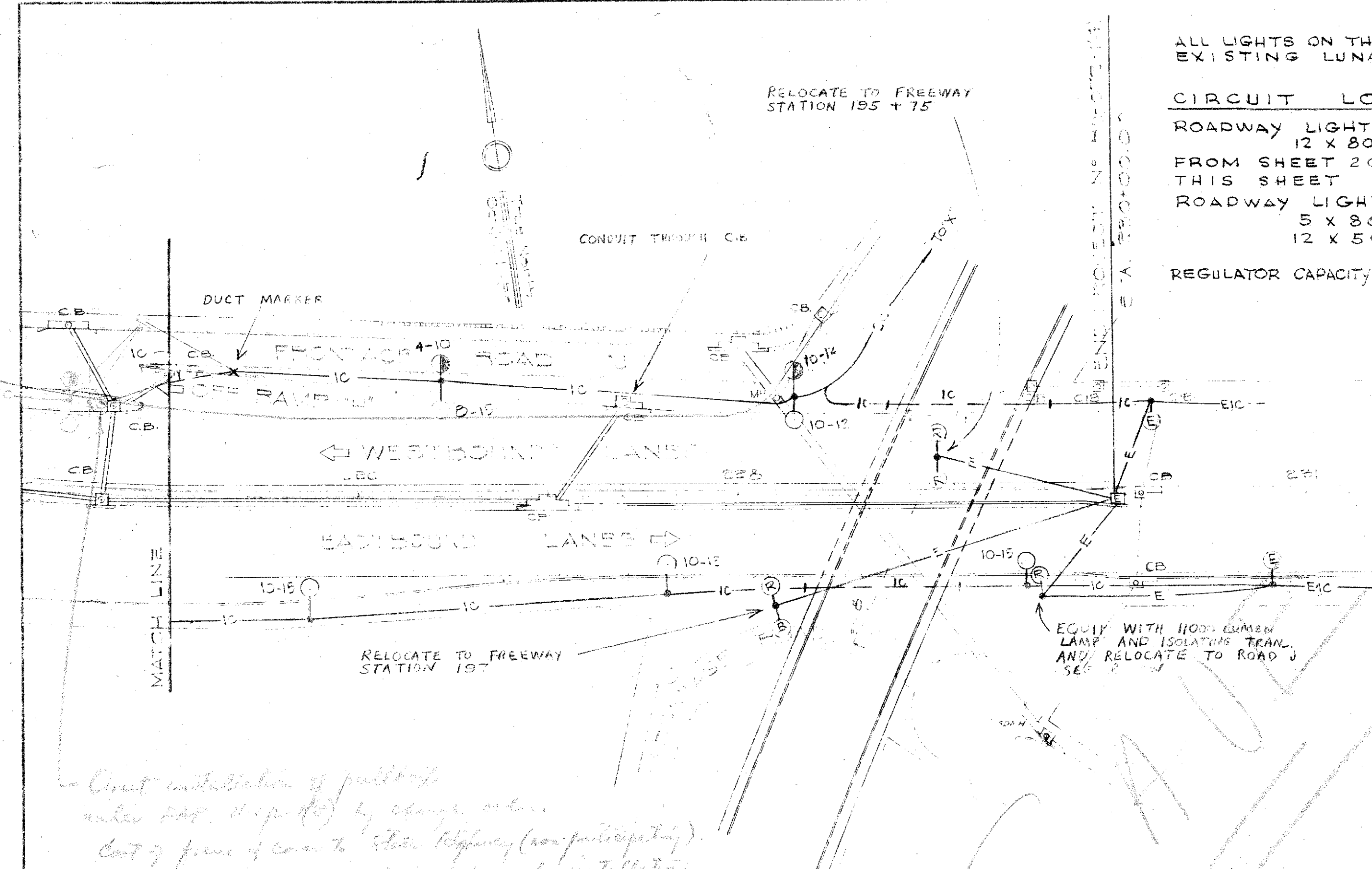
DESIGNED BY	DATE
TRACED BY	
QUANTITIES CHECKED BY	
NOTE BOOK	
CHECKED BY	
No.	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	BU-072-14		4	7

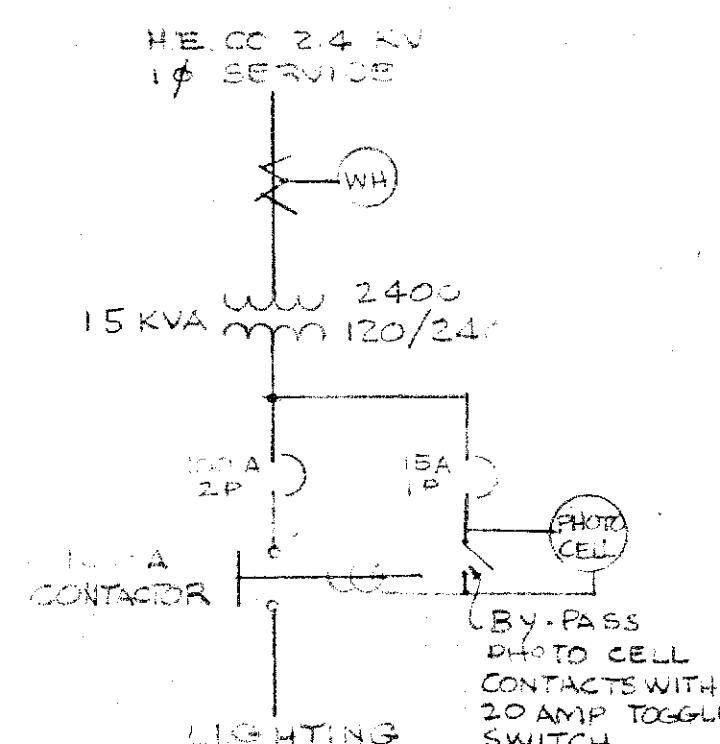
ALL LIGHTS ON THIS SHEET ON EXISTING LUNALILO CIRCUIT.

CIRCUIT LOADING
 ROADWAY LIGHTS REMAINING
 12 X 800 = 9600
 FROM SHEET 20F3 = 3050
 THIS SHEET
 ROADWAY LIGHTING
 5 X 800 = 4000
 12 X 500 = 6000

REGULATOR CAPACITY REQUIRED=22650 WATTS

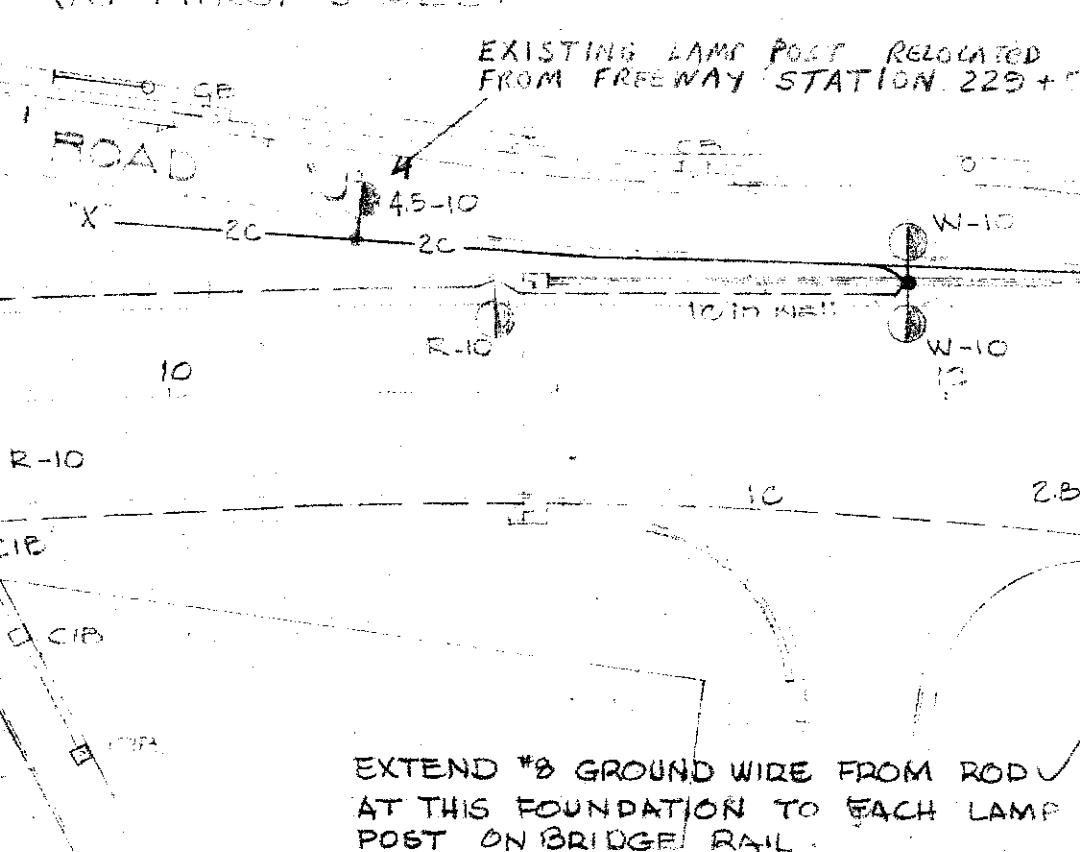


ONE LINE DIAGRAM METER & CONTROL POLE AT PIHKOI STREET

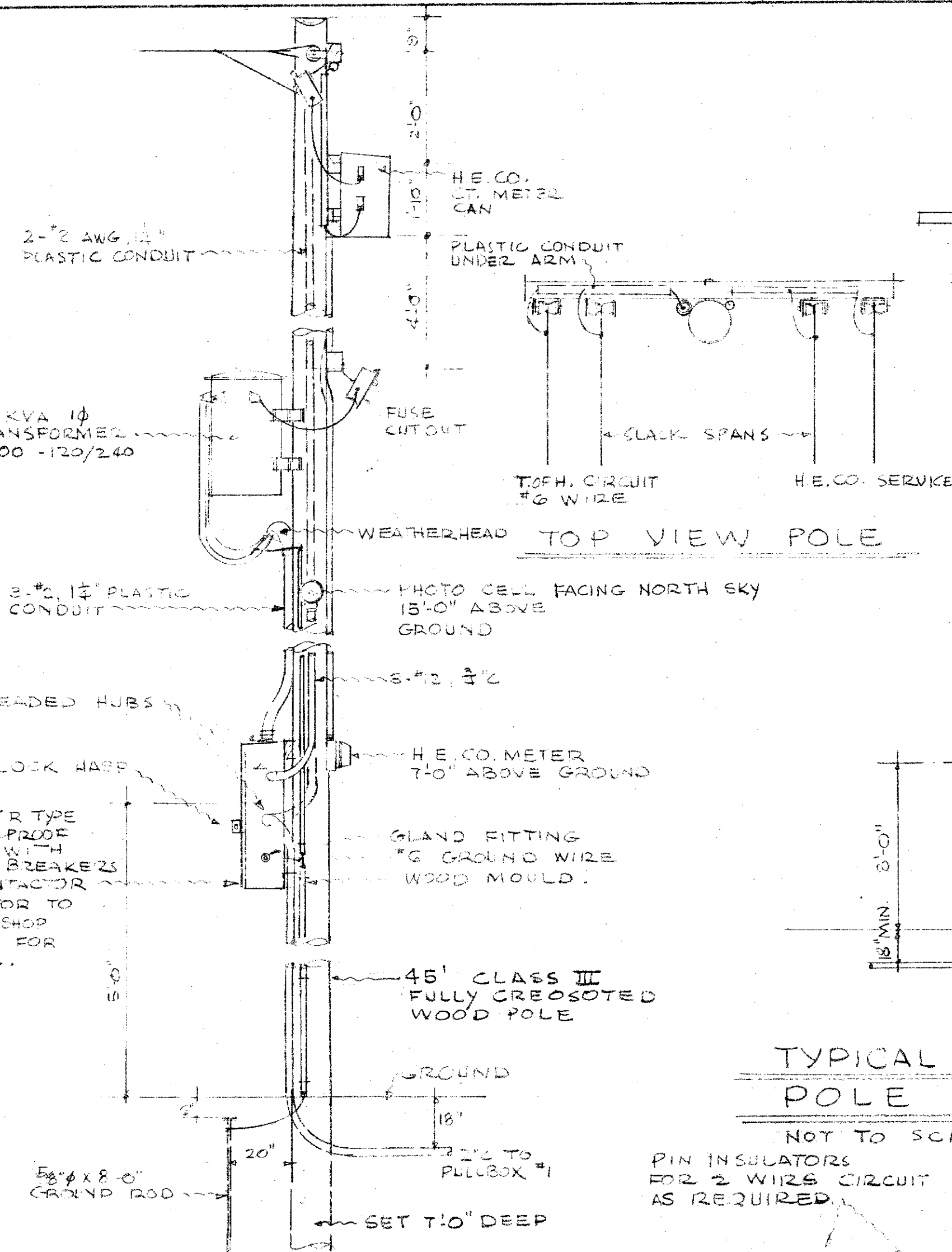


HINED DOOR TYPE WEATHER PROOF CABINET WITH CIRCUIT BREAKERS AND CONTACTOR TO CONTRACTOR TO FURNISH SHOP DRAWING FOR APPROVAL.

T.O.F.H. METER & CONTROL POLE DETAIL (AT PIHKOI STREET)

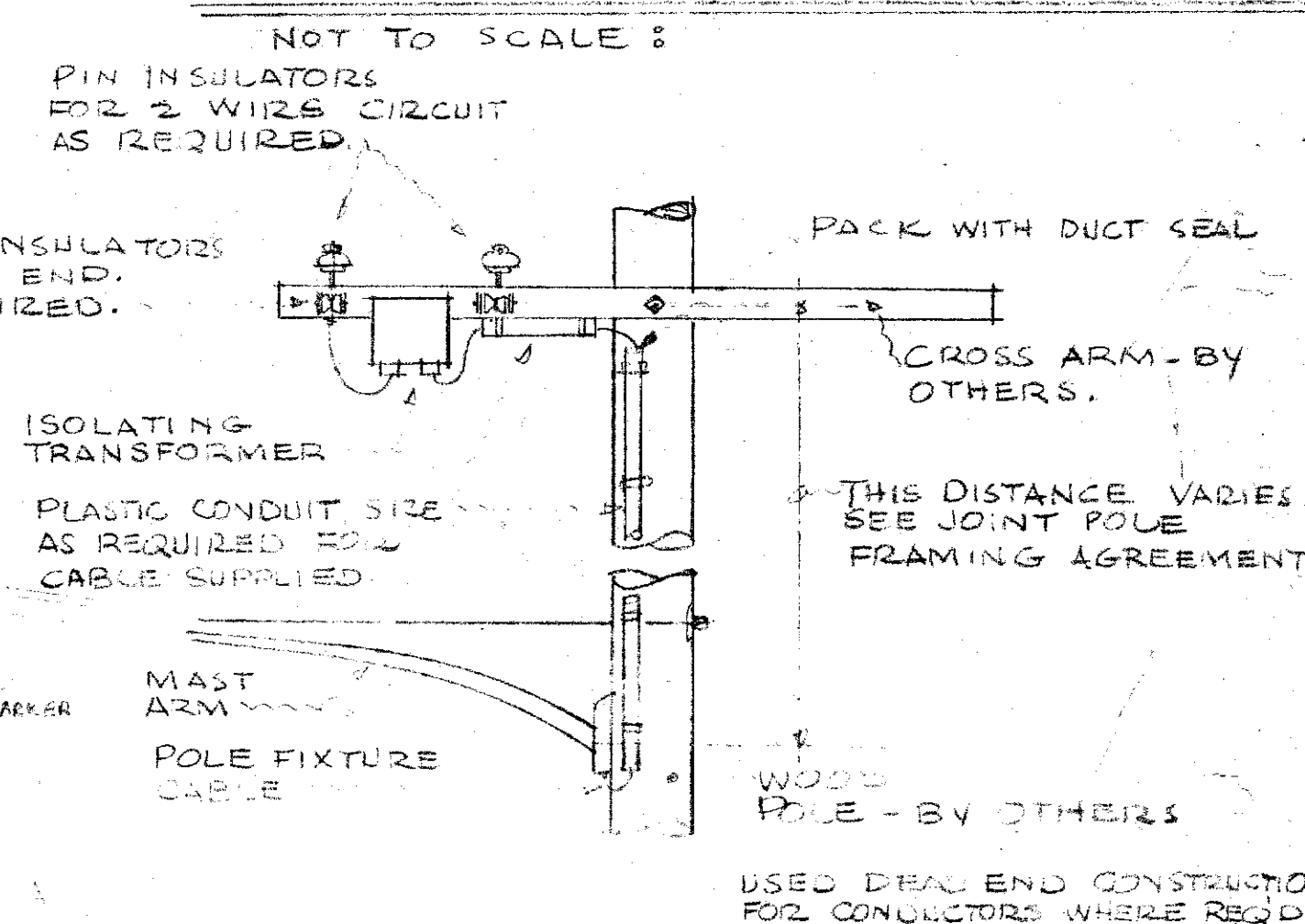


EXTEND #8 GROUND WIRE FROM ROD AT THIS FOUNDATION TO EACH LAMP POST ON BRIDGE RAIL.



TOP VIEW POLE

TYPICAL ROADWAY LIGHTING POLE RISER DETAIL



POLE TOP ARRANGEMENT ON WOOD POLE FOR ROADWAY LIGHTING

NOT TO SCALE

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
 HIGHWAY LIGHTING SYSTEM
 LUNALILO FREEWAY
 PELE ST. TO KEEAUMOKU ST.
 PROJECT NO. BU-072-14

Scale: 1" = 50'

SHEET No. 4 OF 7 SHEETS

5927 E465

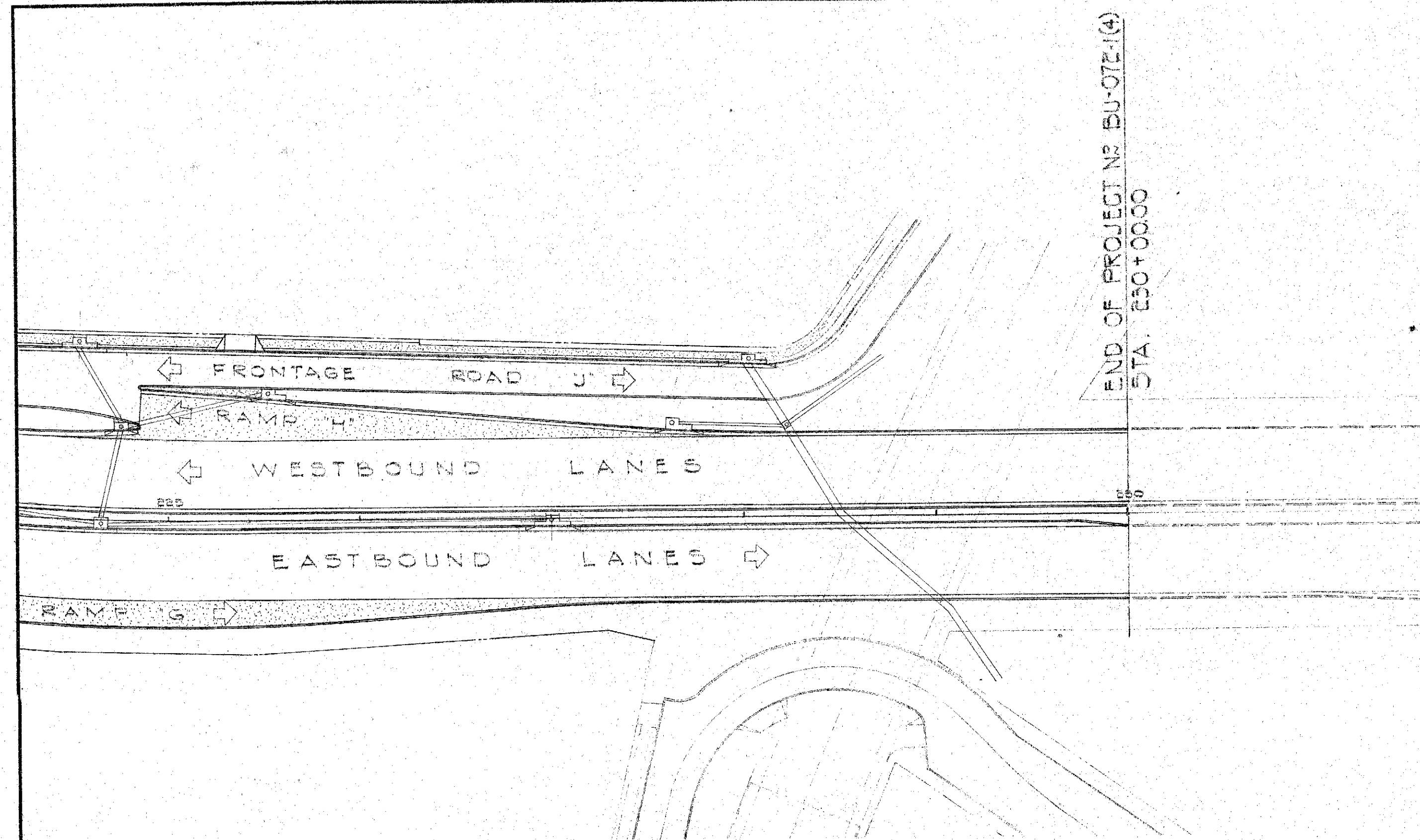
DATE	DESIGNED BY	CHECKED BY
DATE	QUANTITIES BY	CHECKED BY
DATE	NOTE BOOK	CHECKED BY

Current installation of pull box under P.O. (disputed) by change order. Cont. of frame of cover to State Highway (non-participating). State Highway to provide for & cover for installation of pull box under P.O. (disputed). Bureau of Public Works to install State for installation of cover (P.O.).

TRUE NORTH
 SCALE: 1" = 50'

END PROJECT NO. BU-072-14
 STA. 230+00.00

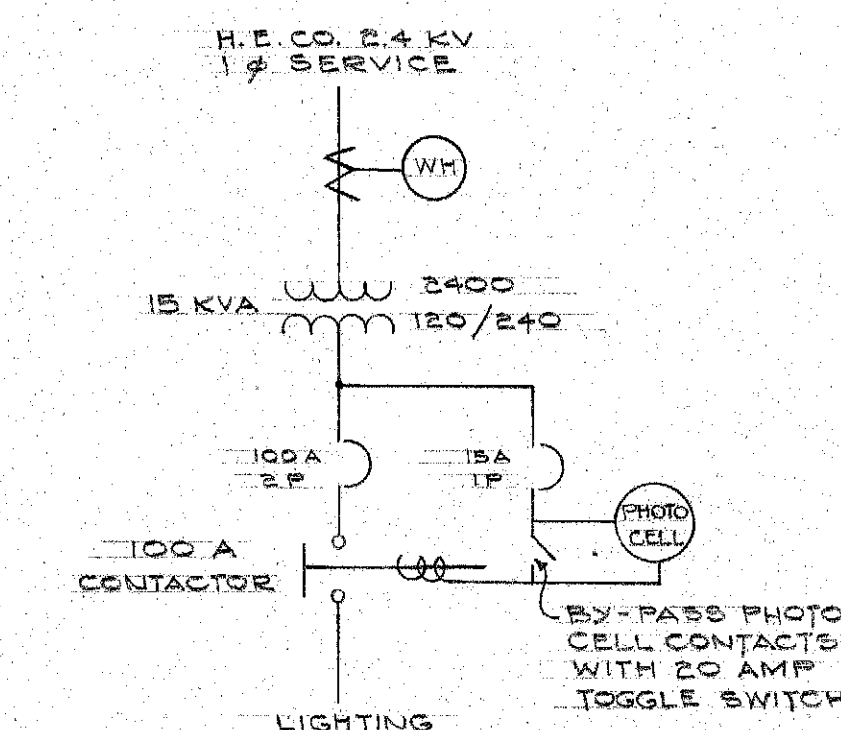
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BU-072-1(4)			



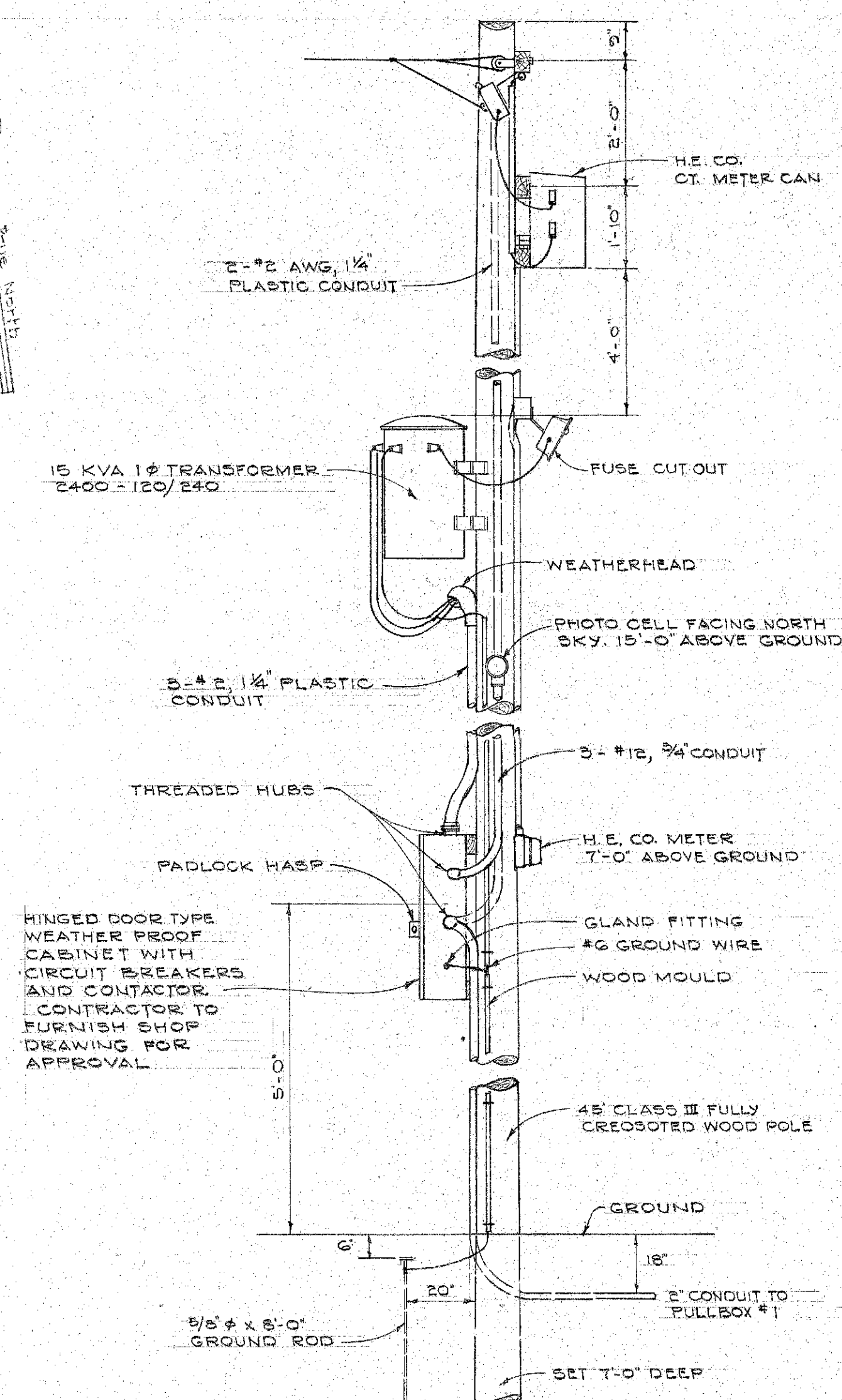
ALL LIGHTS ON THIS SHEET ON EXISTING LUNALILO CIRCUIT

CIRCUIT LOADING

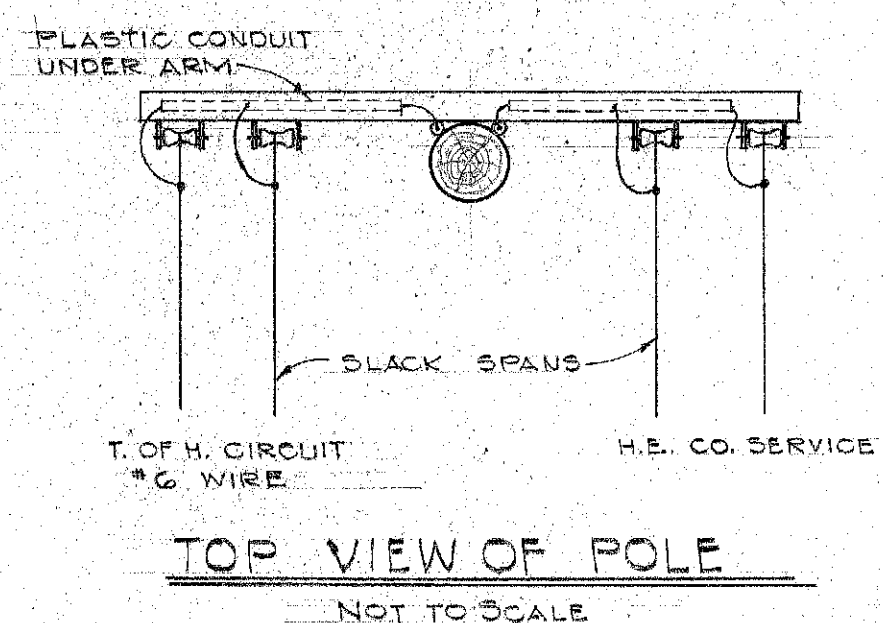
ROADWAY LIGHTS REMAINING	12 x 500 = 6000
FROM SHEET 2 OF 5	3050
THIS SHEET	
ROADWAY LIGHTING	5 x 500 = 2500
12 x 500 = 6000	
REGULATOR CAPACITY REQUIRED	= 22650 WATTS



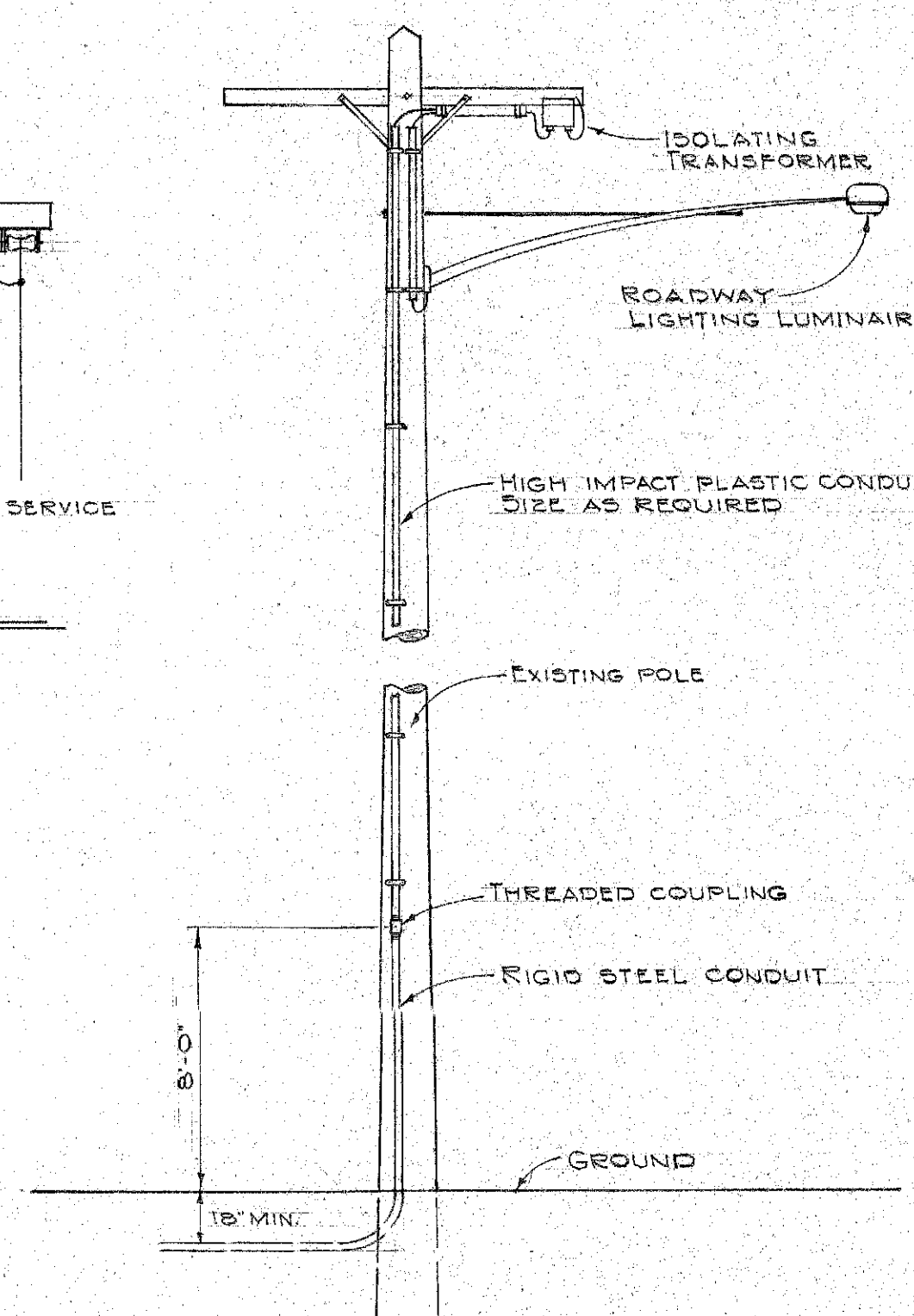
**ONE LINE DIAGRAM
METER & CONTROL POLE
AT PIIKOI STREET**



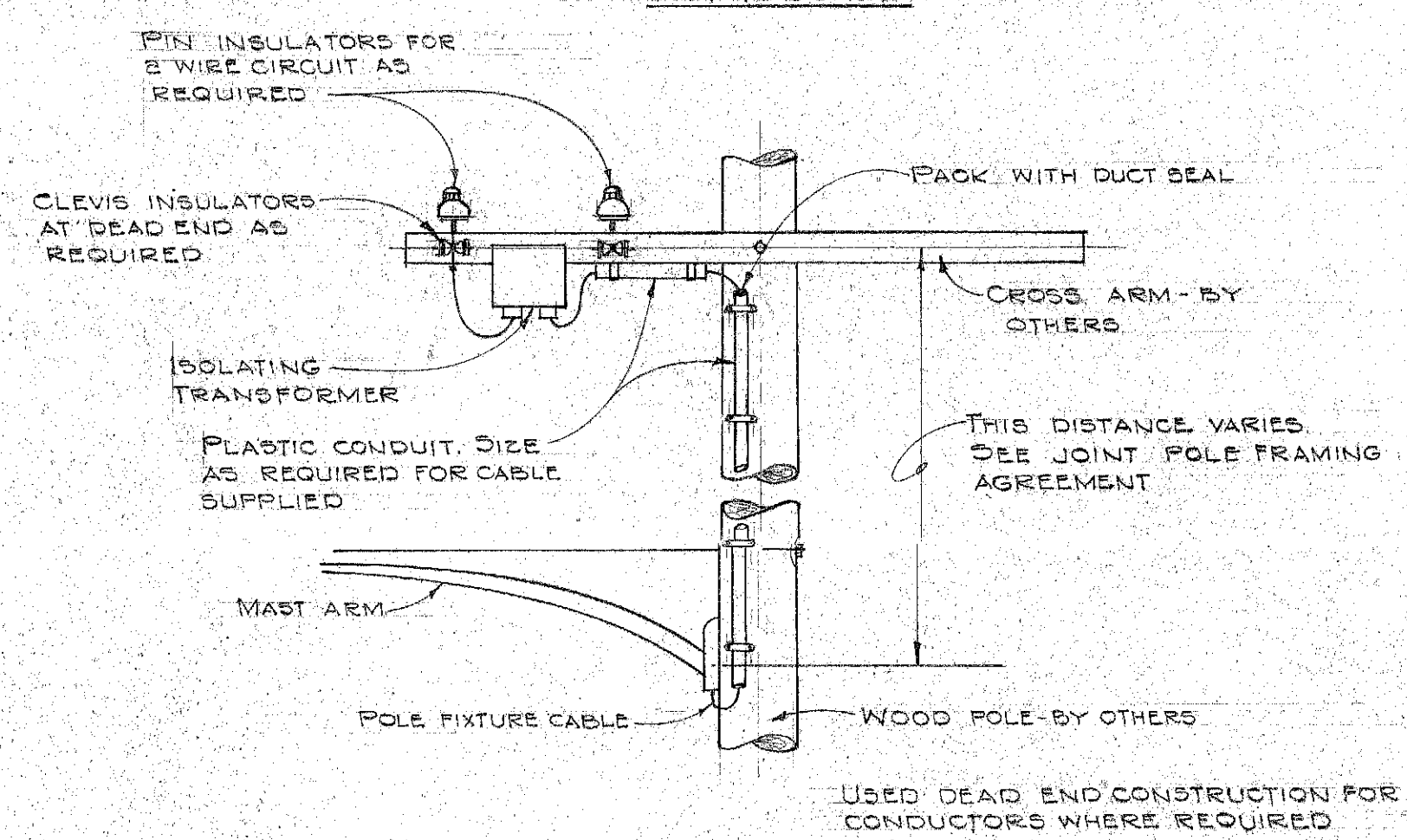
**T. OF H. METER & CONTROL
POLE DETAIL (AT PIIKOI ST.)
NOT TO SCALE**



**TOP VIEW OF POLE
NOT TO SCALE**



**TYPICAL ROADWAY LIGHTING
POLE RISER DETAIL
NOT TO SCALE**



**POLE TOP ARRANGEMENT ON
WOOD POLE FOR ROADWAY LIGHTING
NOT TO SCALE**

**TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
HIGHWAY LIGHTING SYSTEM
LUNALILO FREEWAY
PELE ST. TO KEEAUMOKU ST.
PROJECT NO. BU-072-1(4)**

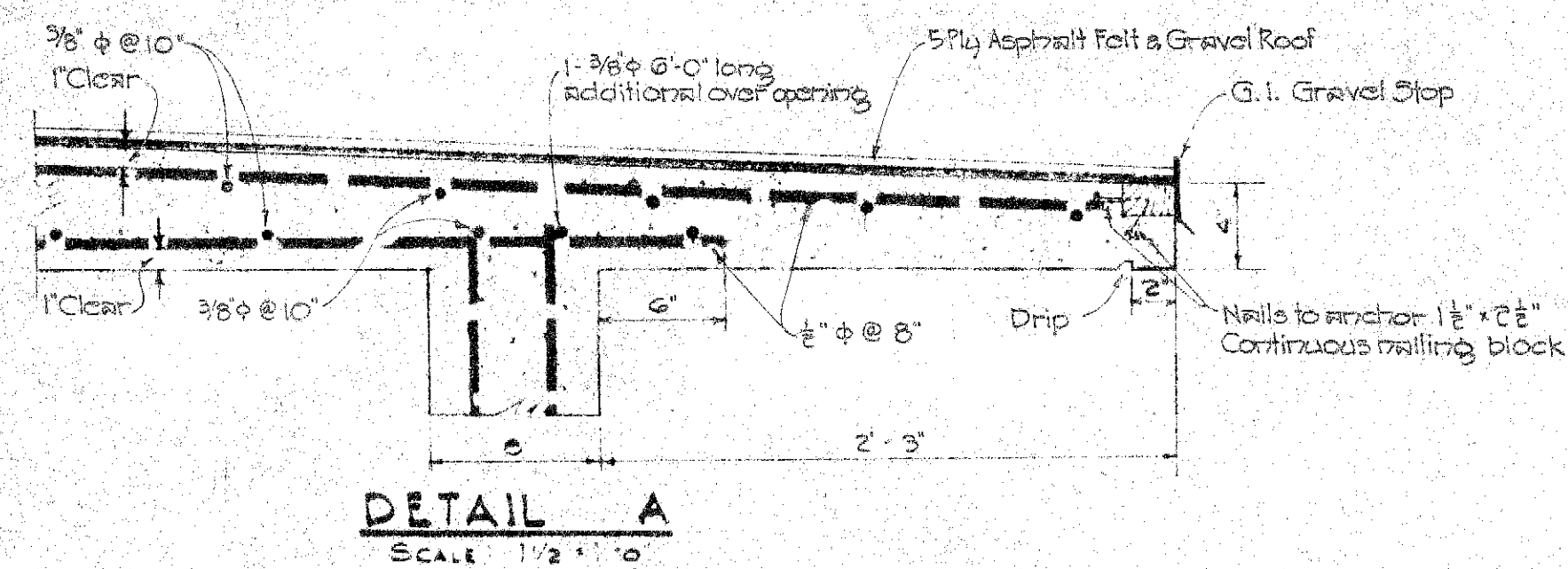
Scale: As Noted

SHEET NO. 4 OF 7 SHEETS

5927.05

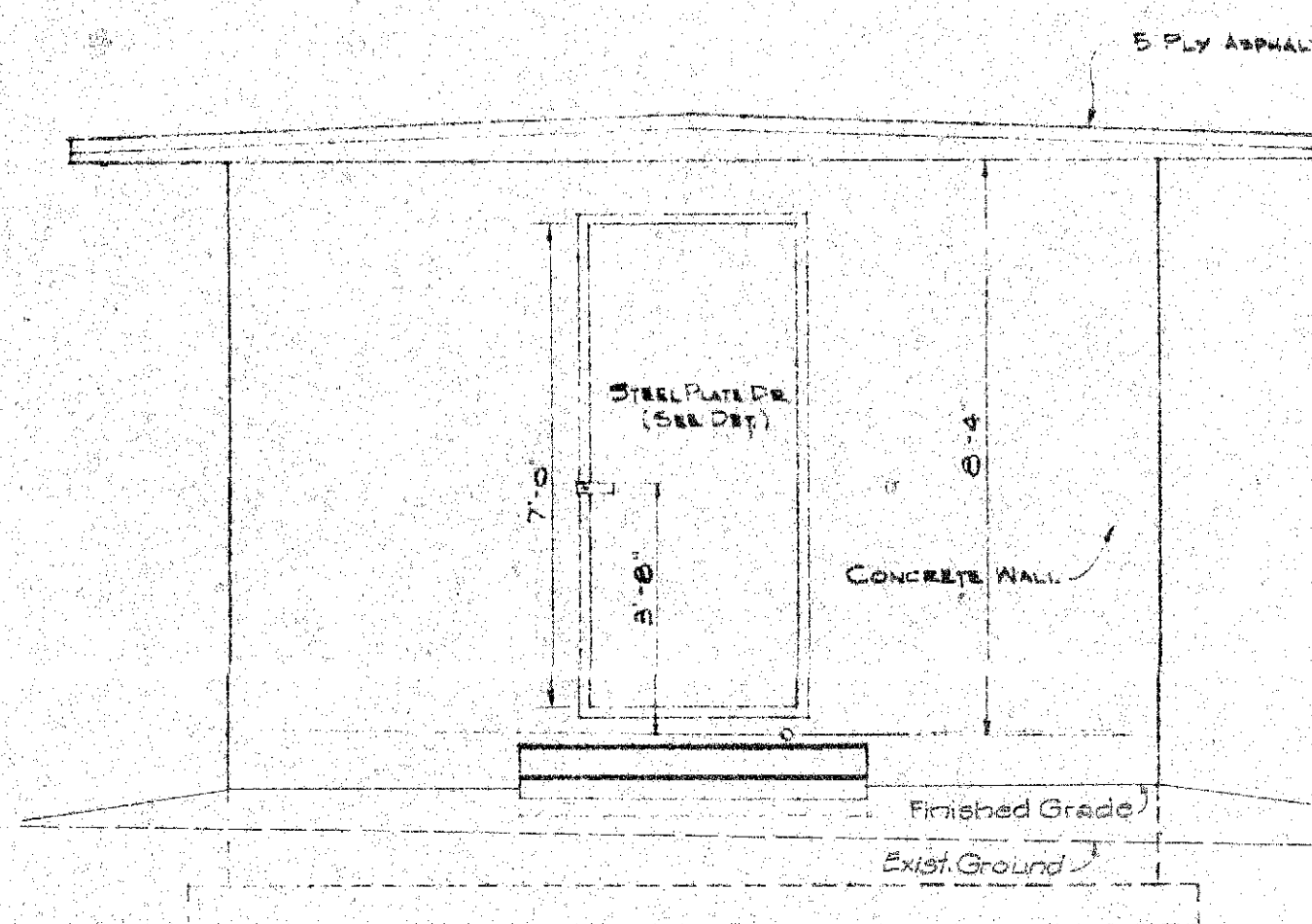
SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES CHECKED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
APPROVED BY	

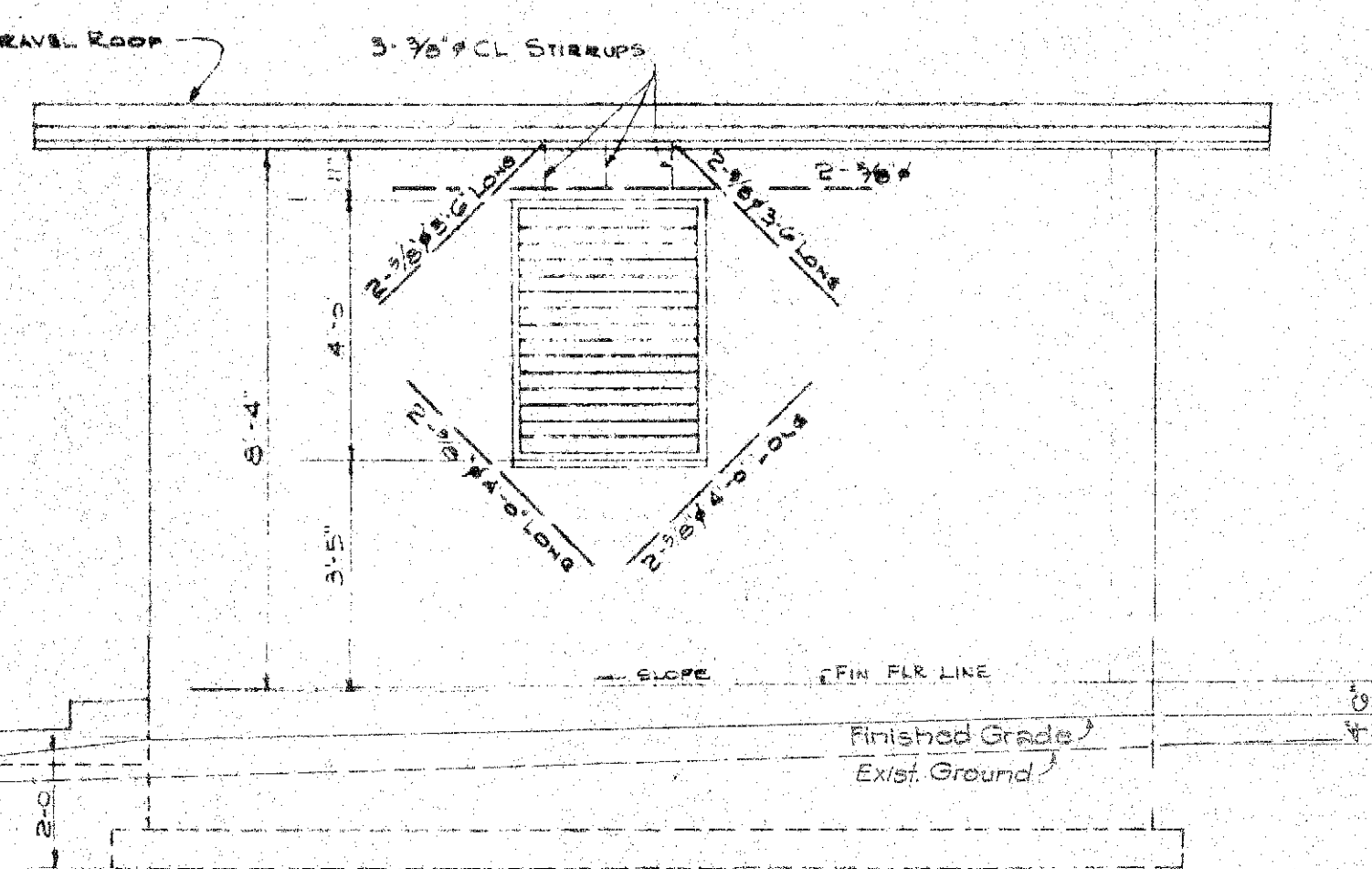


NOTE:

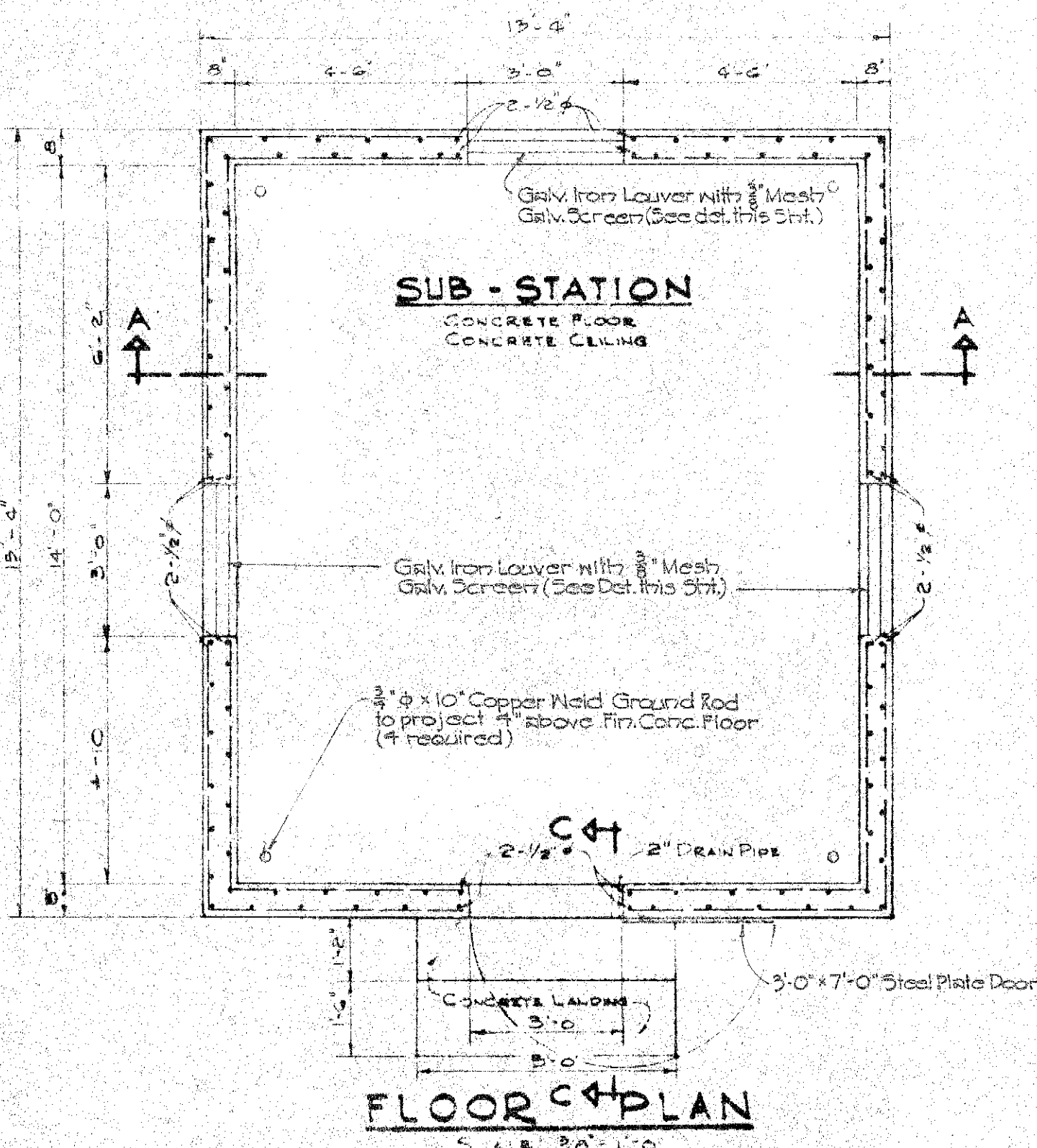
CONCRETE AND CONCRETE FINISH
ALL CONCRETE SHALL BE CLASS A-1 UNLESS OTHERWISE NOTED.
ALL EXPOSED EXTERIOR SURFACES OF CONCRETE WALLS AND ROOF
SHALL BE GIVEN CLASS 2 RUBBED FINISH.



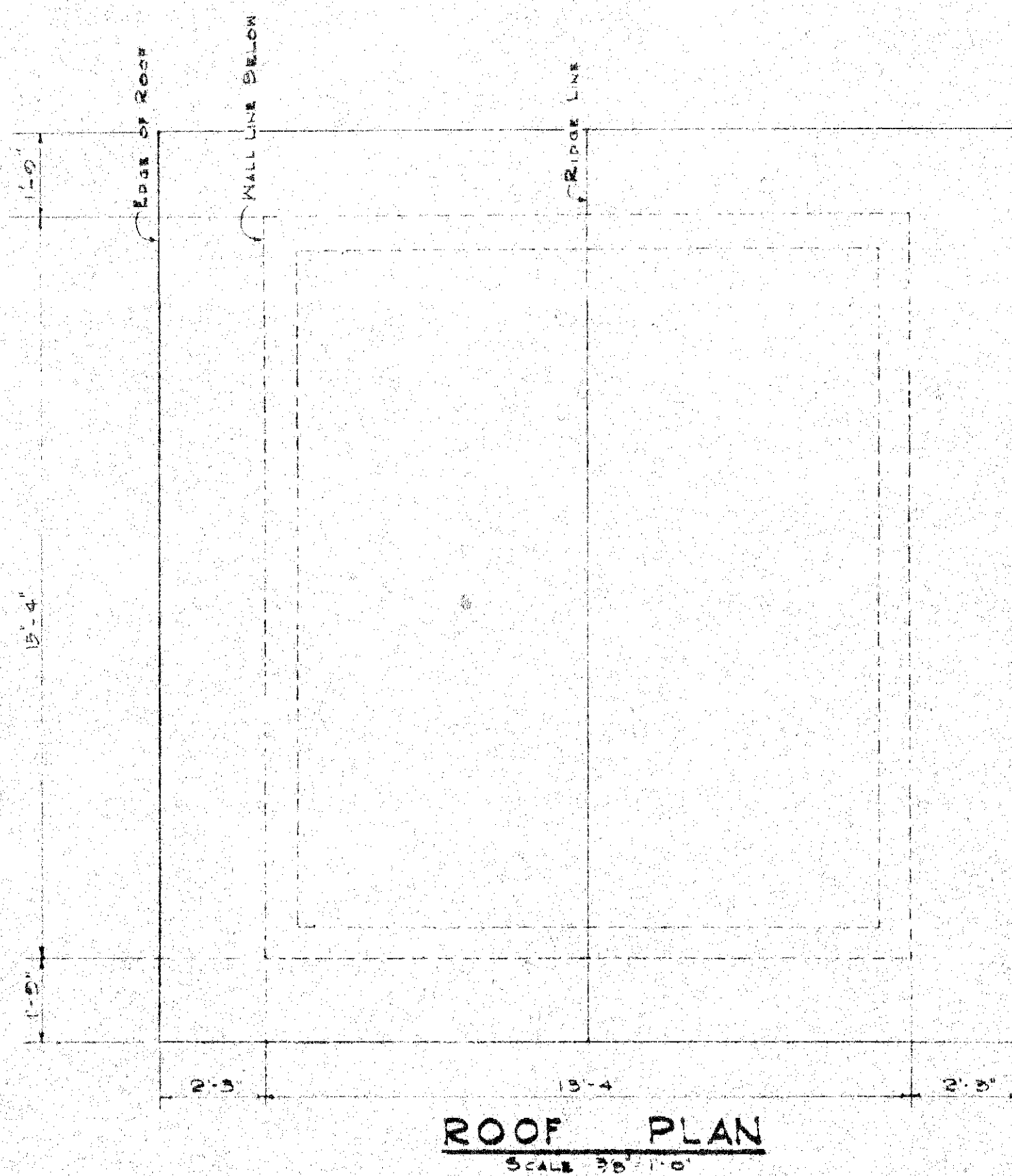
FRONT ELEVATION
SCALE: 3/8"=1'-0"



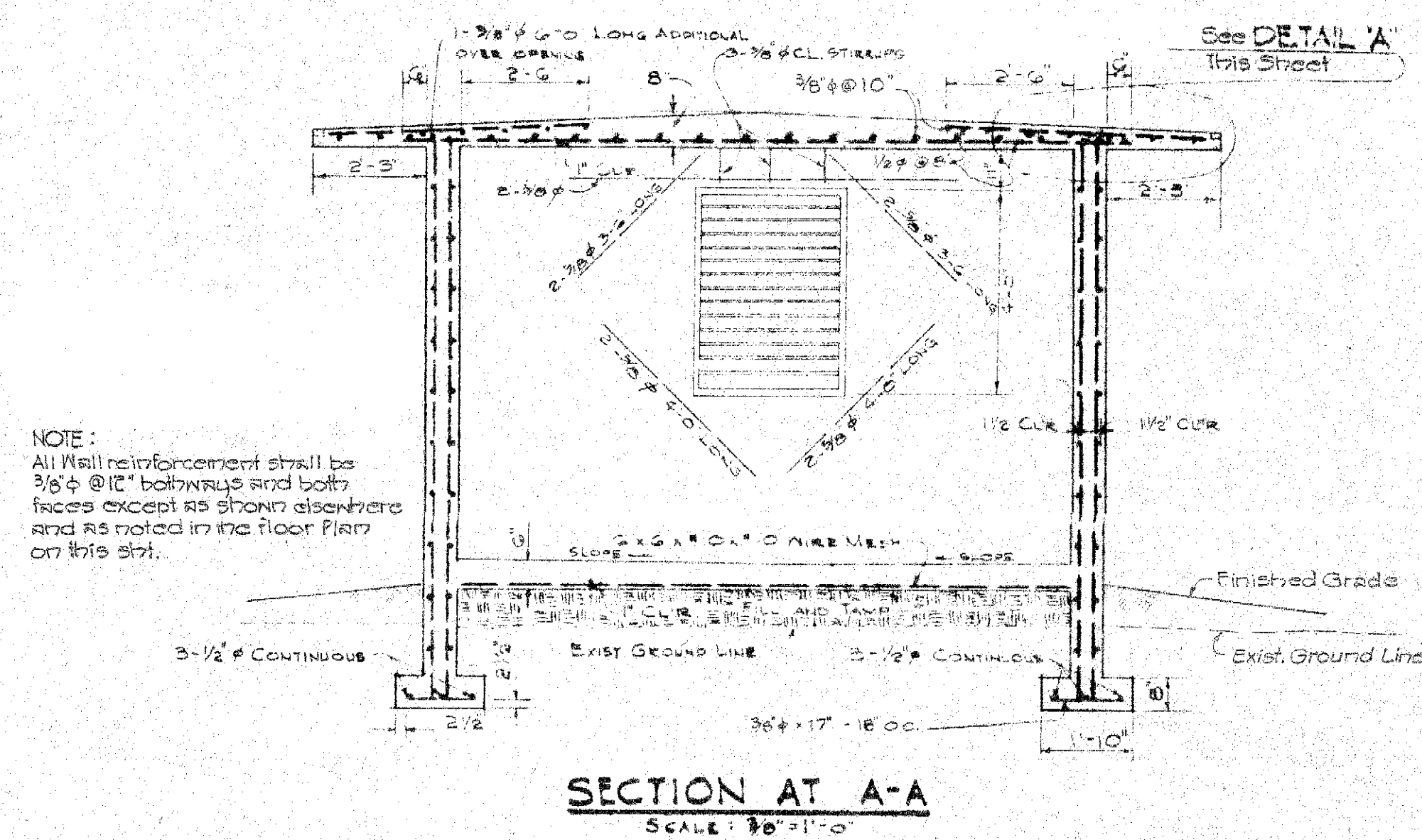
SIDE ELEVATION
SCALE: 3/8"=1'-0"



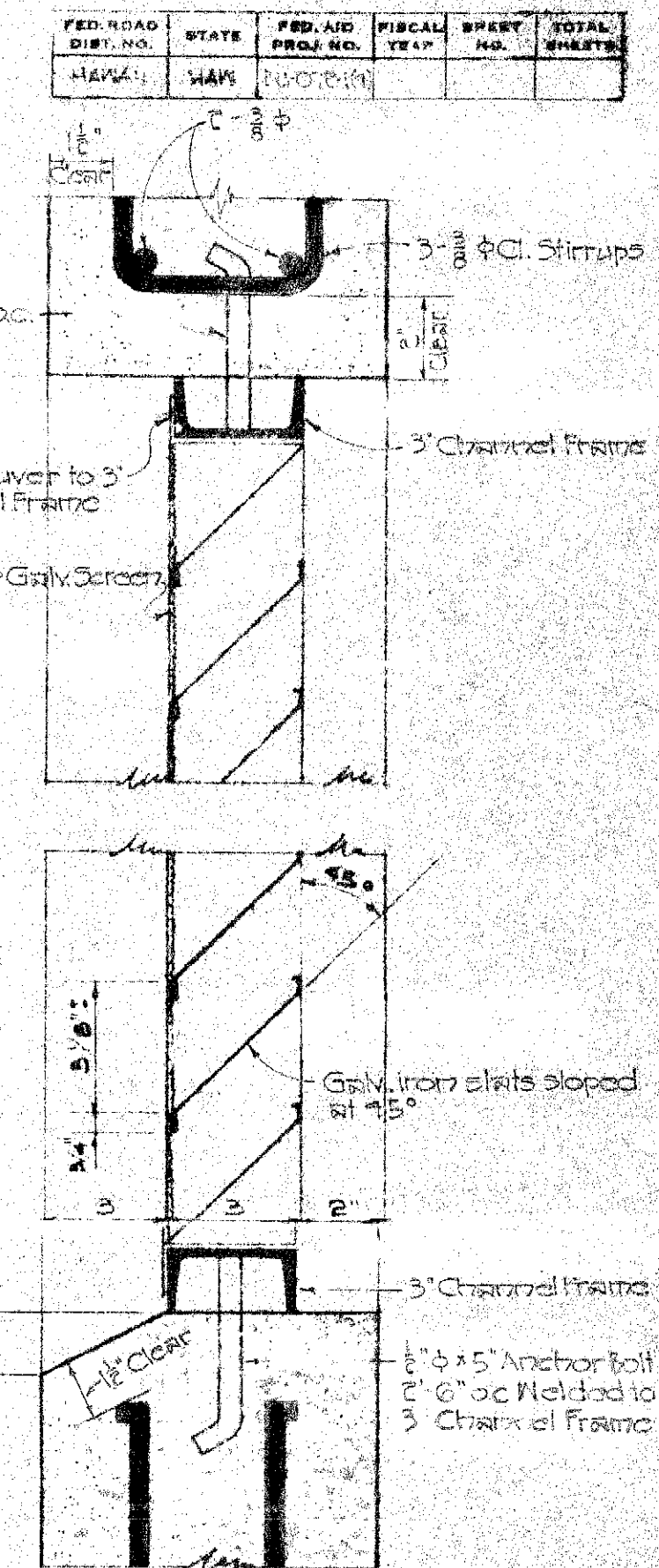
FLOOR PLAN
SCALE: 3/8"=1'-0"



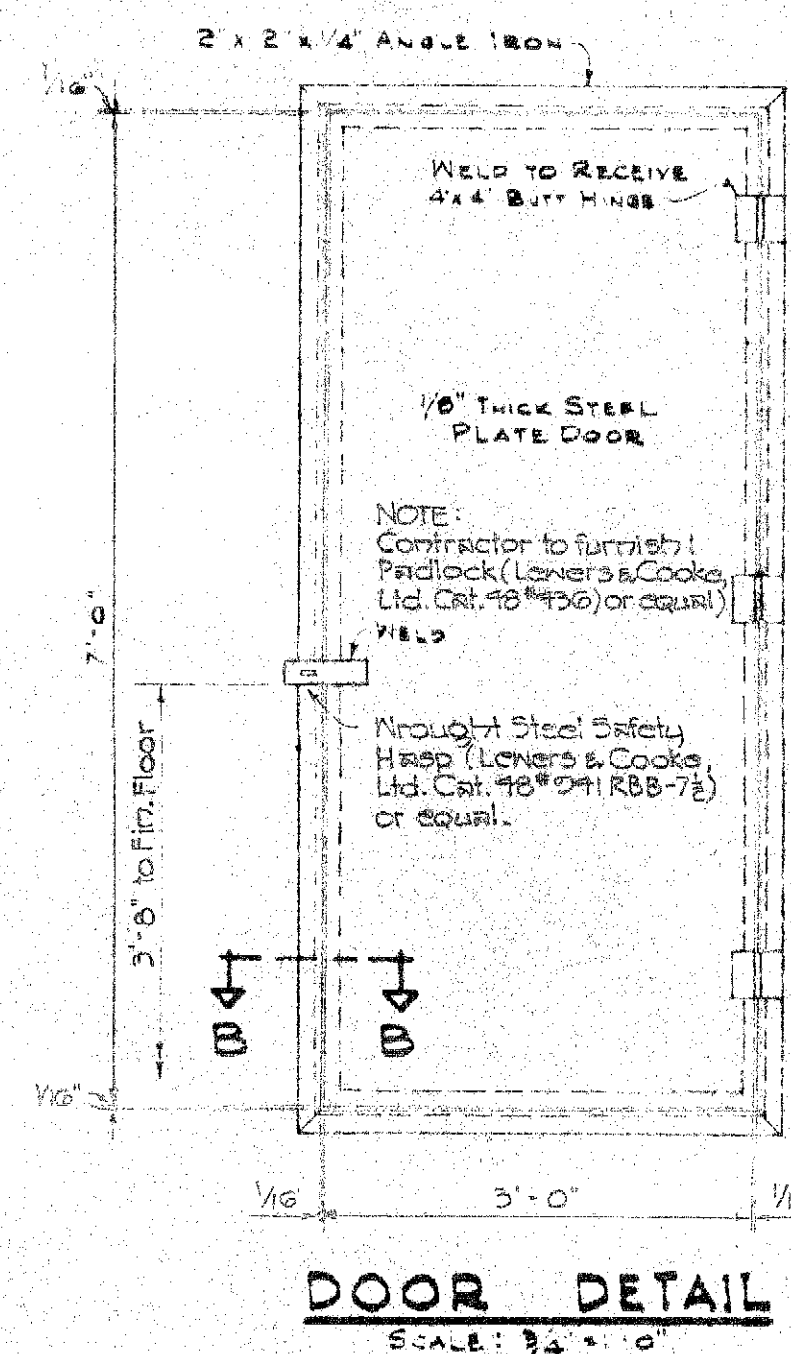
ROOF PLAN
SCALE: 3/8"=1'-0"



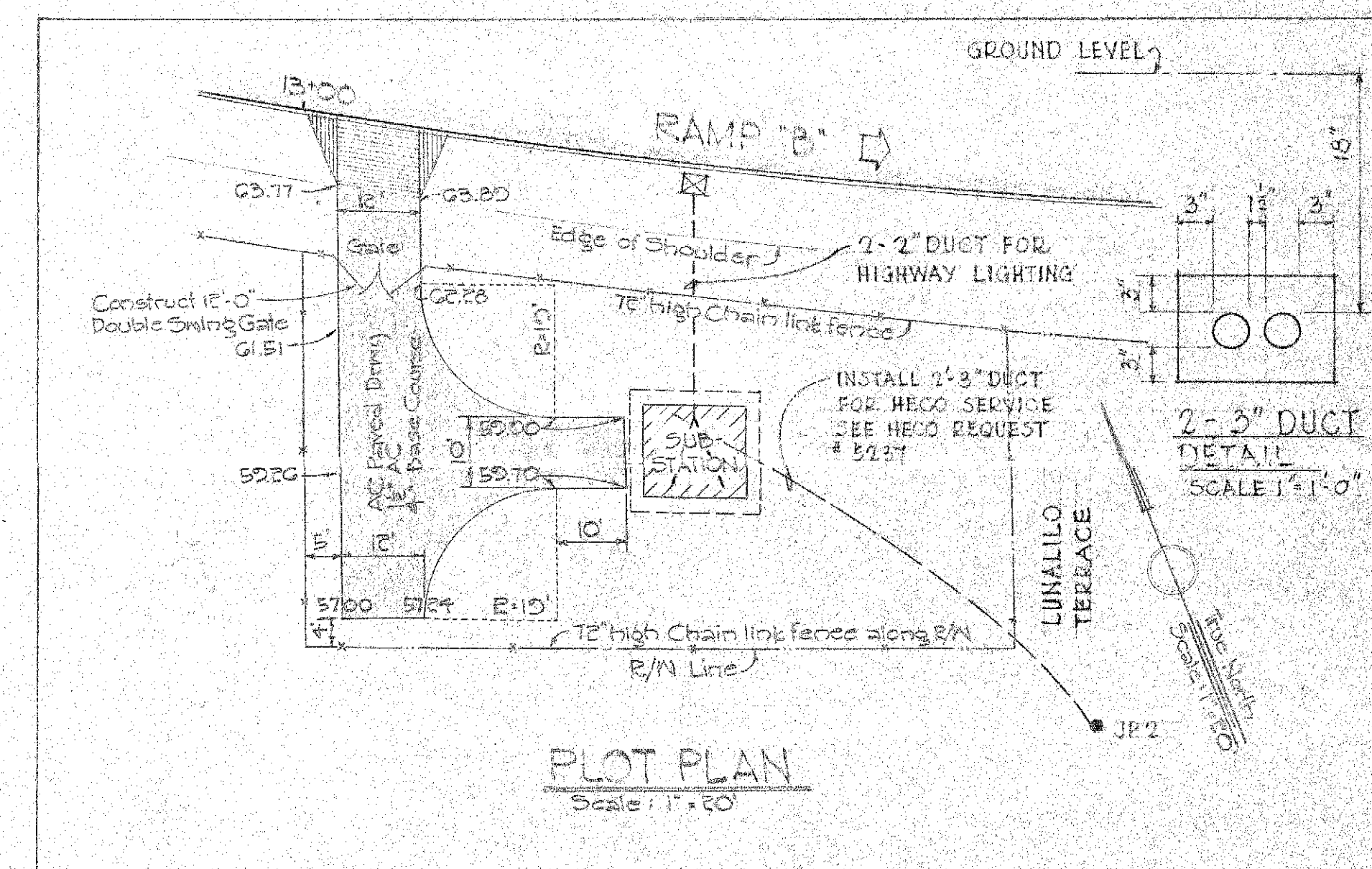
SECTION AT A-A
SCALE: 3/8"=1'-0"



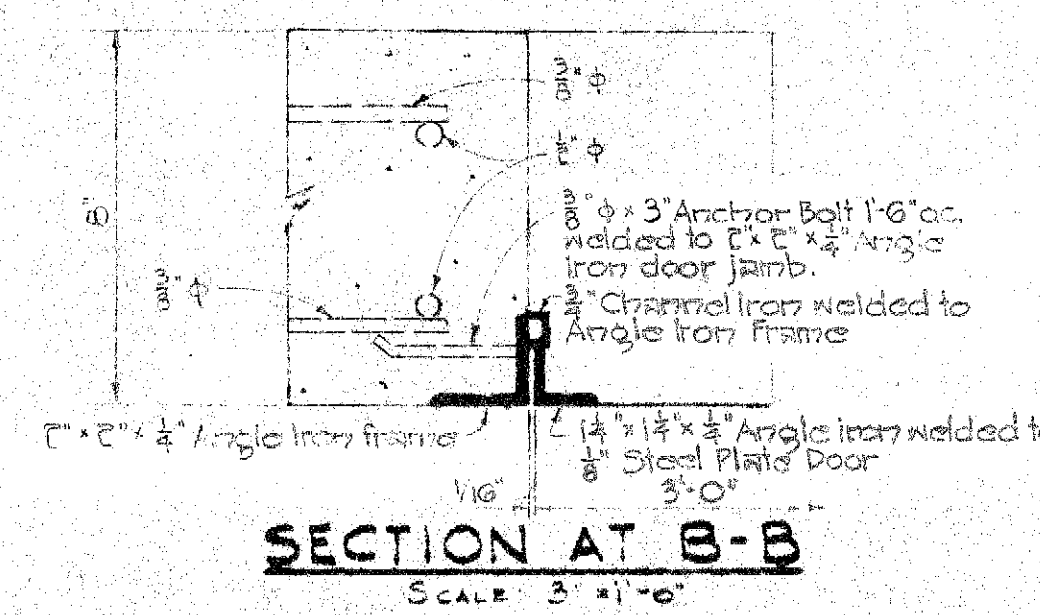
LOUVER DETAIL
SCALE: 3/8"=1'-0"



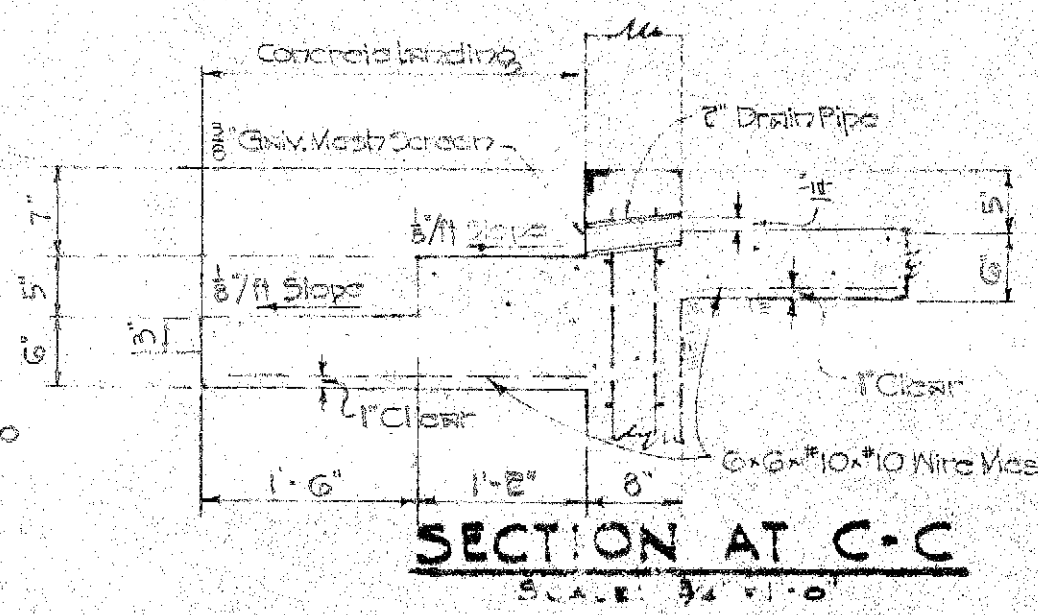
DOOR DETAIL
SCALE: 3/8"=1'-0"



PLOT PLAN
Scale: 1"=60'



SECTION AT B-B
SCALE: 3/8"=1'-0"



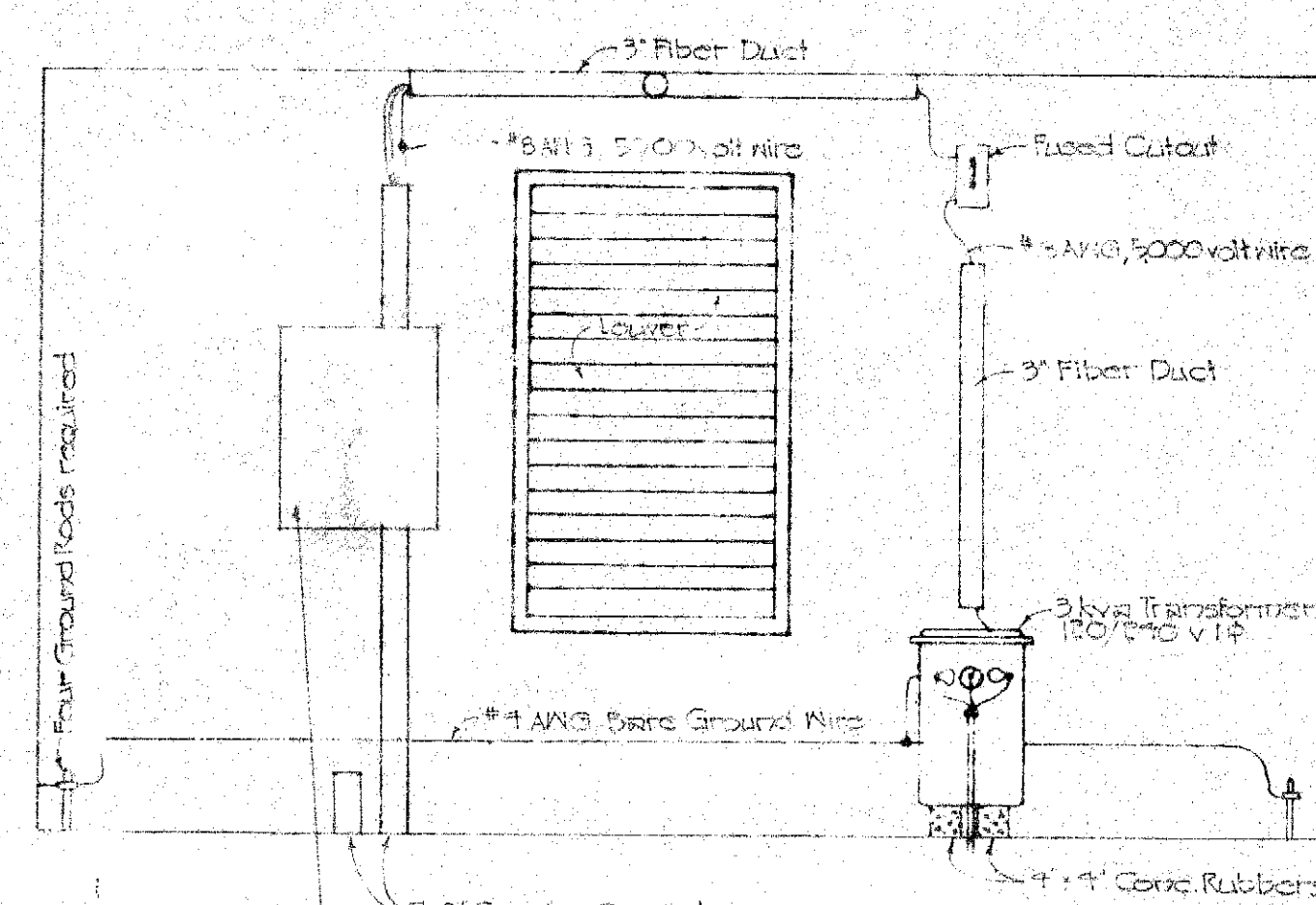
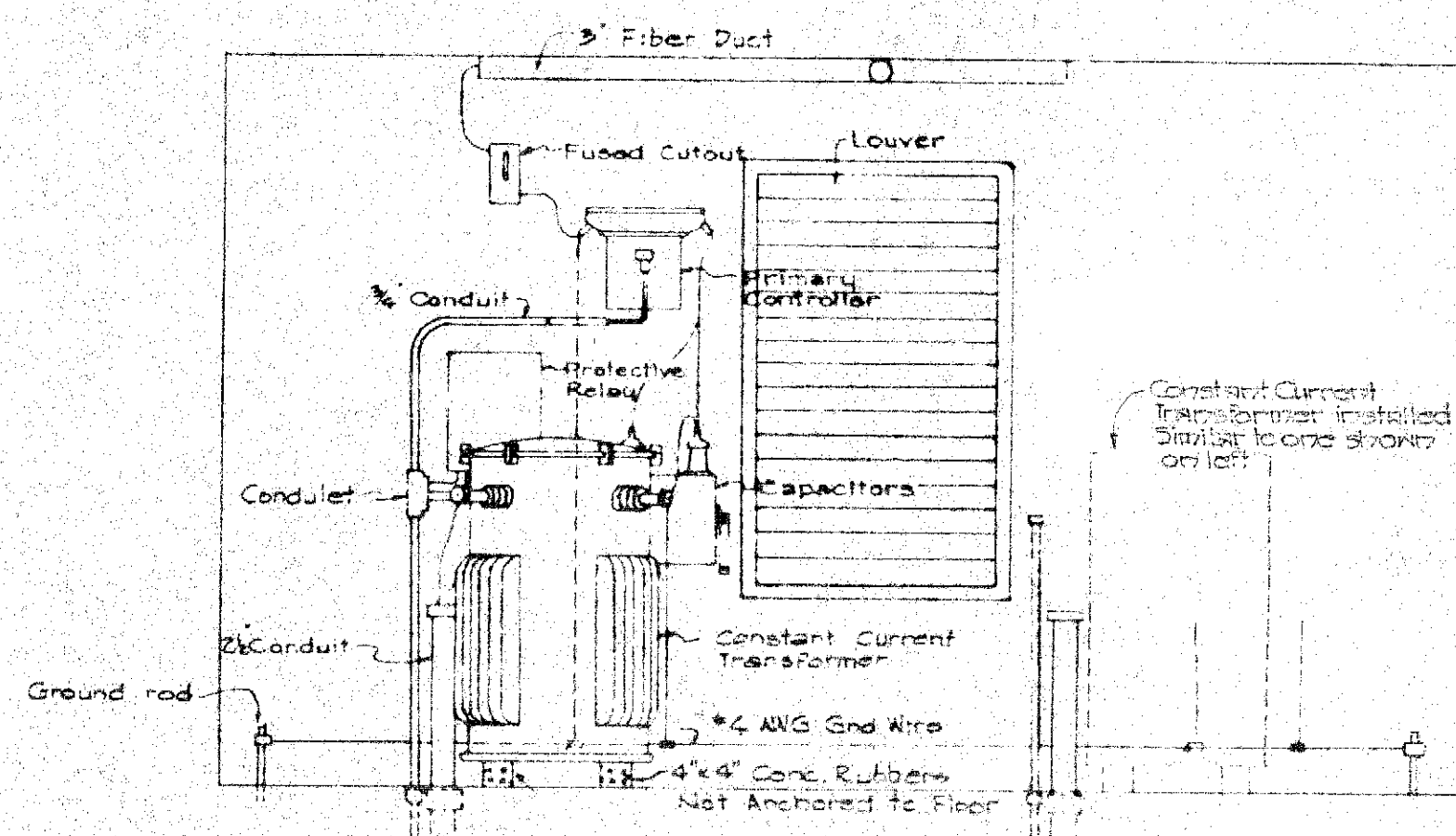
SECTION AT C-C
SCALE: 3/8"=1'-0"

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
HIGHWAY LIGHTING SYSTEM
SUB-STATION DETAILS
LUNALILO FREEMAN
PELE ST. TO KEEAUMOKU ST.
PROJECT N9DU-072-1(4)
Circle: As Noted

SHEET NO 5 OF 7 SHEETS

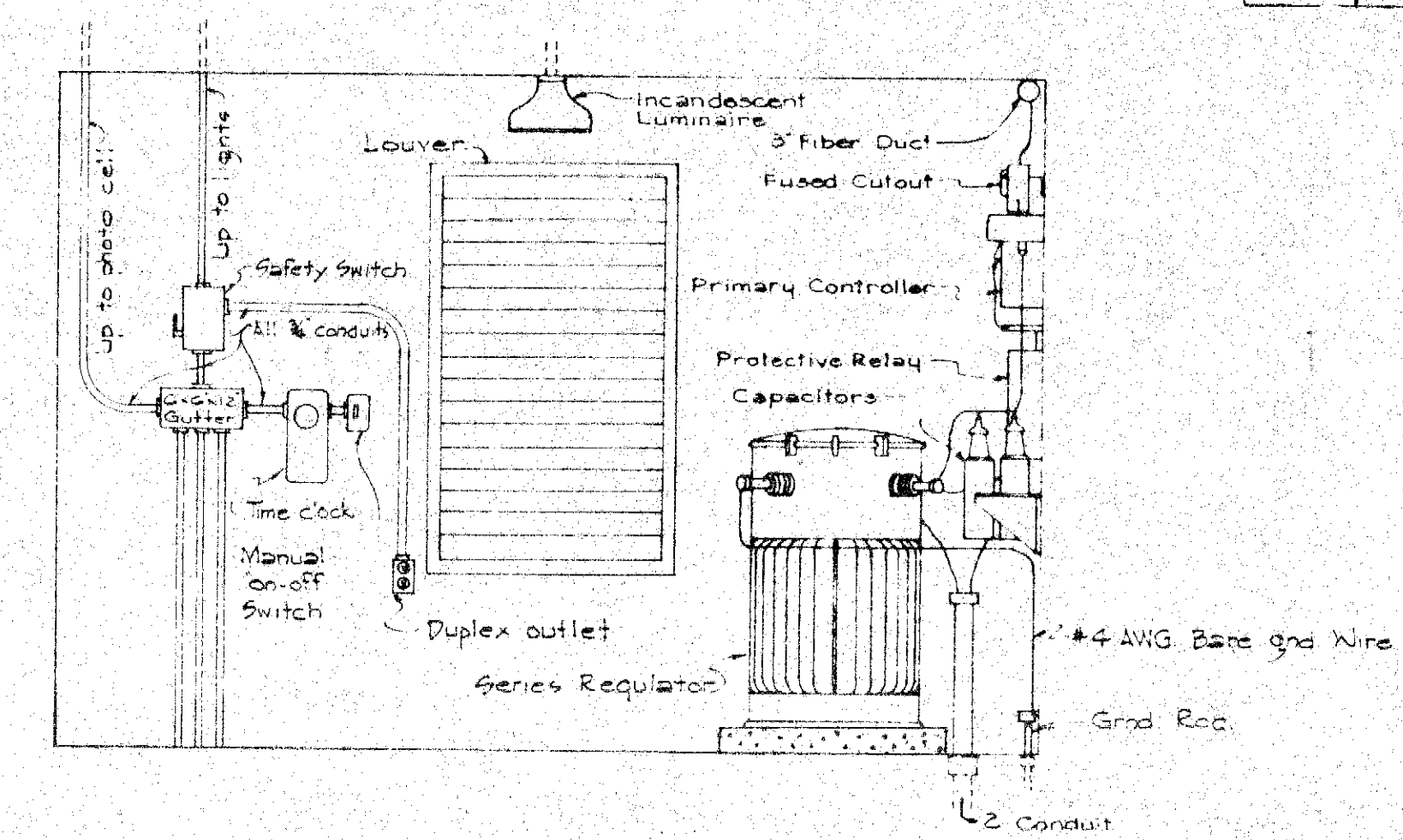
5927.

NOTE
All taps from 2400 volt bus to equipment to be #8 AWG, 6000-7000 volt wire

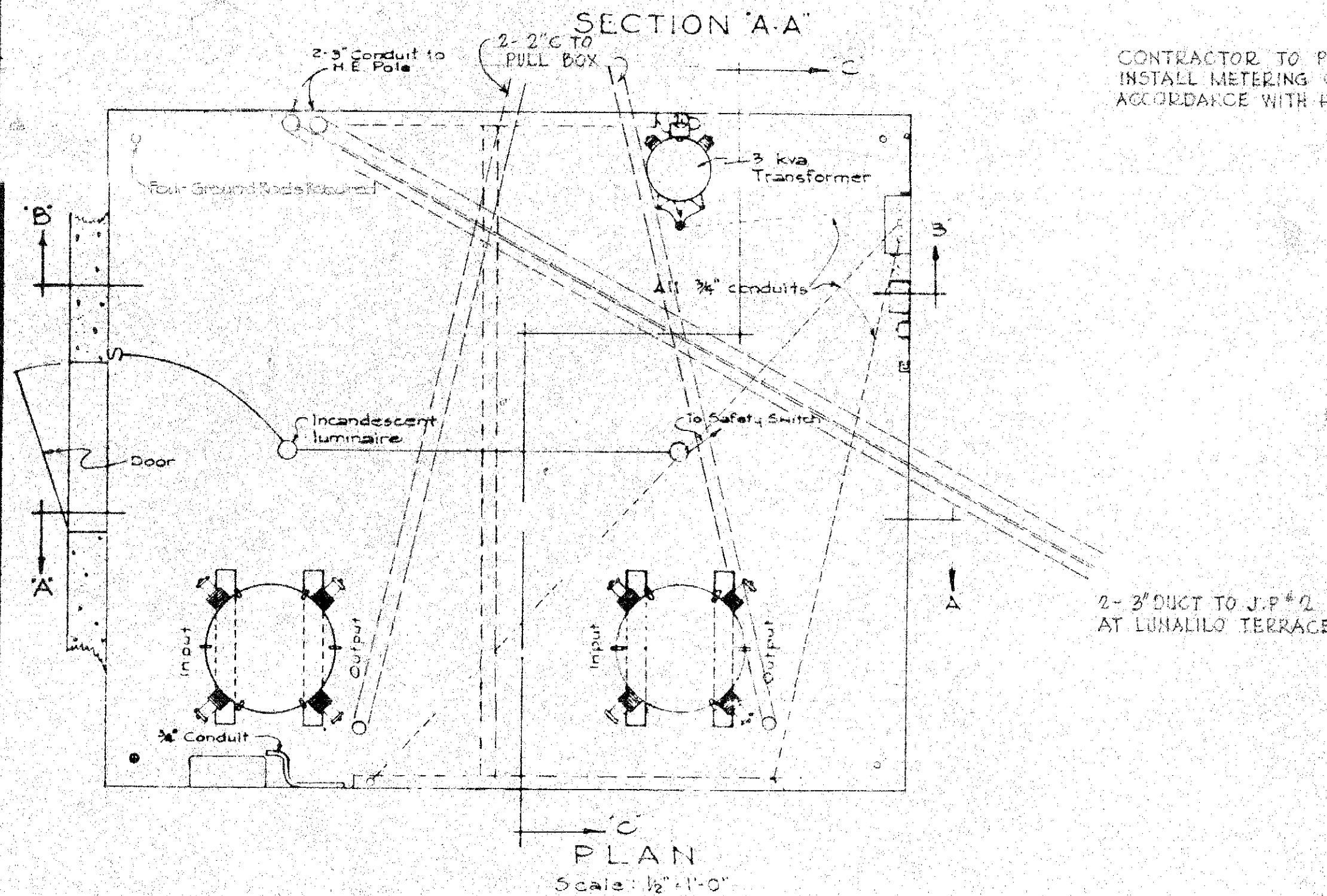


CONTRACTOR TO PROVIDE AND INSTALL METERING CAN IN ACCORDANCE WITH HECO DWG U-41102

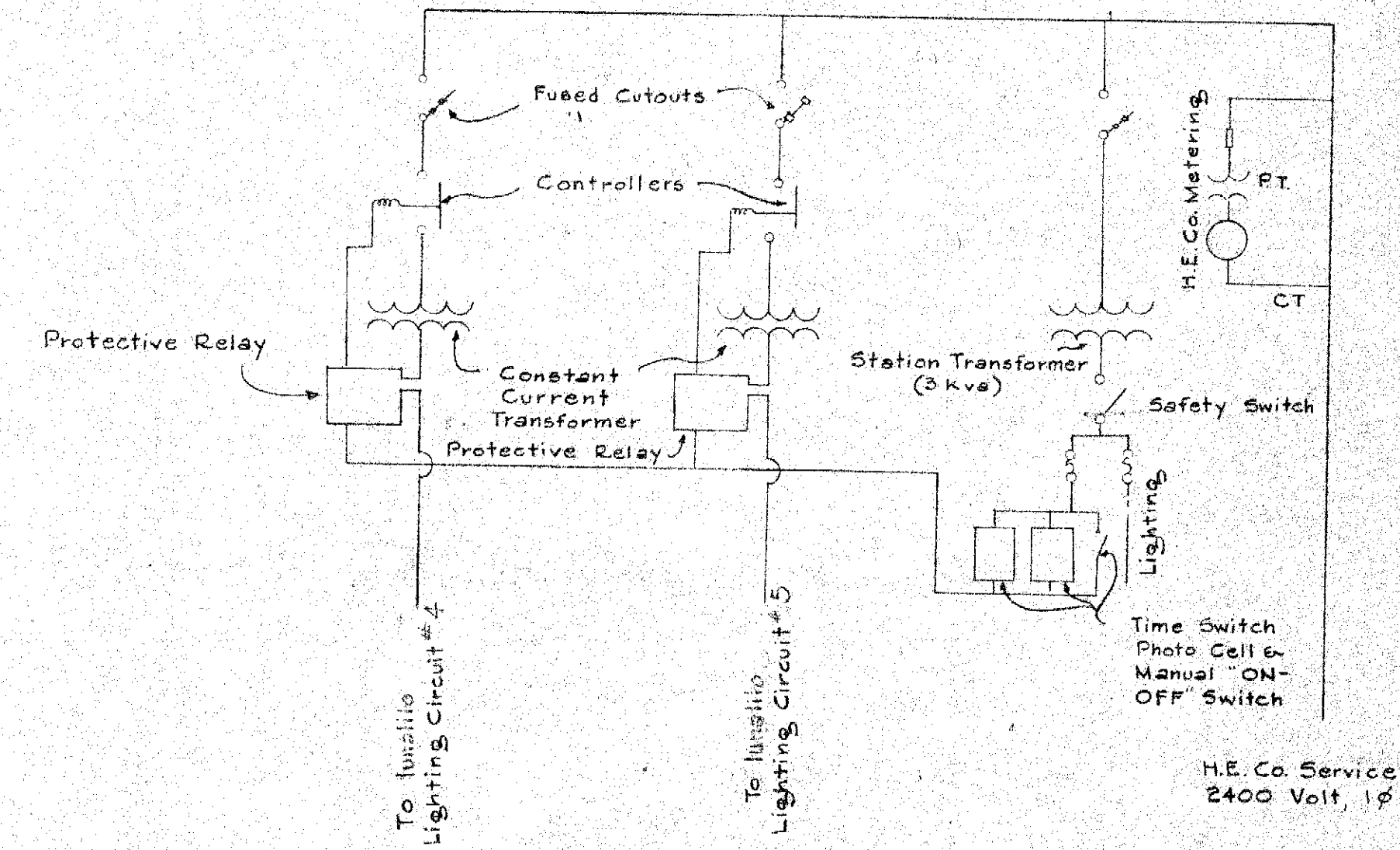
SECTION B-B



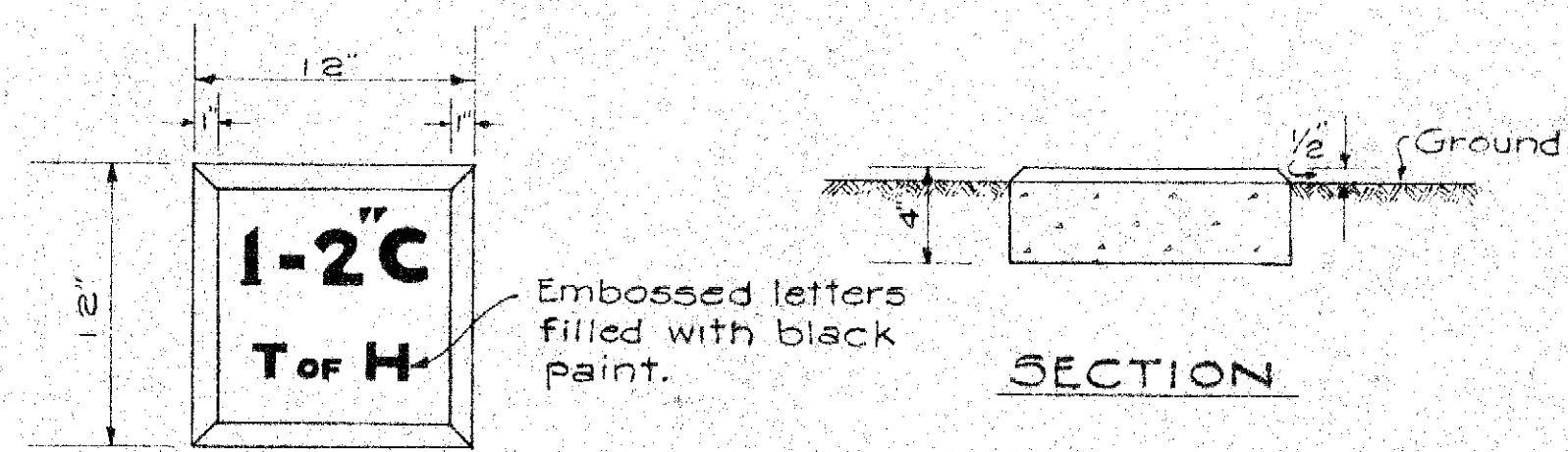
SECTION C-C



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



WIRING DIAGRAM
Not to Scale



PLAN

SECTION

CONDUIT MARKER DETAIL
Scale: 1 1/2"=1'-0"

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
HIGHWAY LIGHTING SYSTEM
SUB-STATION DETAILS
LUNALILO FREEWAY
PELE ST. TO KEEAUMOKU ST
PROJECT NO. BU-0781(4)
Scale: As Noted

SHEET NO. 6 OF 7 SHEETS

5927