

CONSTRUCTION NOTES

1. Wood Pole and Anchor locations to be staked out by the State and verified by HECO.
2. Excavation of Pole Holes and Anchors, installation of Poles and Anchors, and backfill of Poles and Anchors are to be done by HECO and/or its Contractor.
3. HECO is to coordinate its work with the State's Contractor in such a manner as not to impede construction.
4. For Construction Notes pertaining to City & County Street Lighting, Fire Alarm and Radio Cable adjustments, see Sheet No. 51
5. Excavation of temporary Pole Holes is to be done by the State Contractor. Installation of temporary poles, backfill of pole holes, and patching of concrete sidewalk to be done by HECO and/or its Contractor.

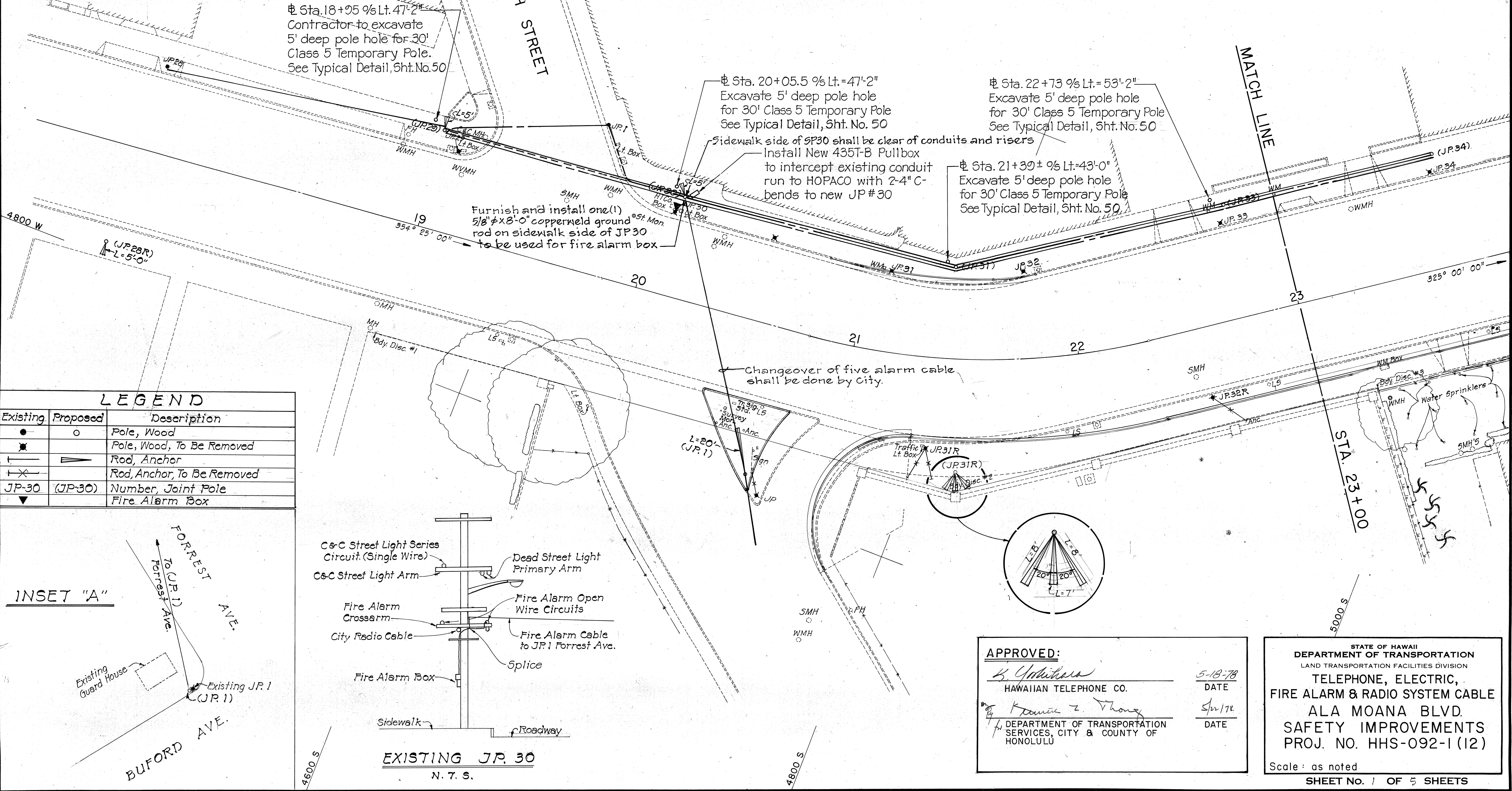
TRUE NORTH
Scale: 1" = 20'

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HHS-092-1(12)	1978	49	50

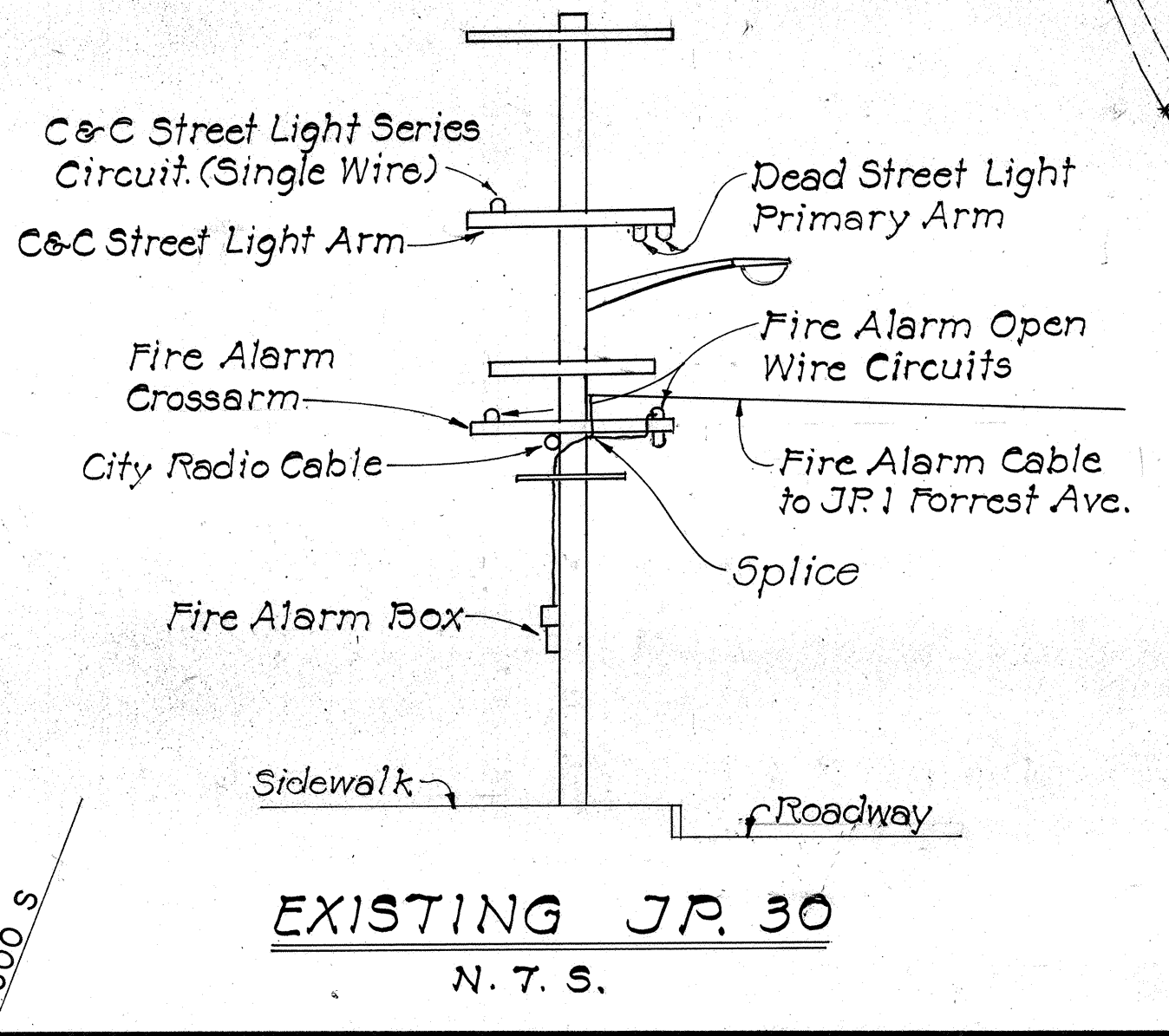
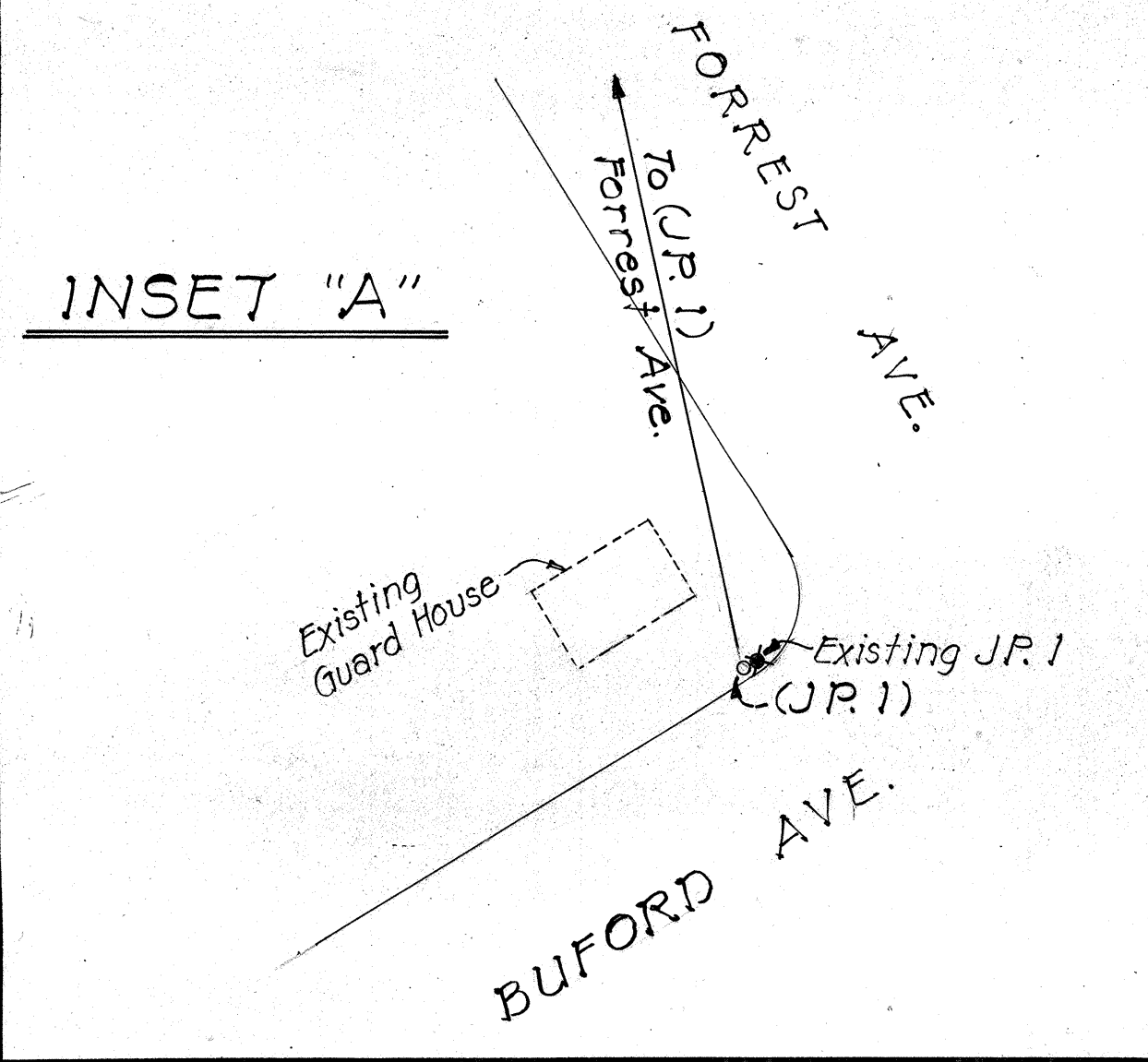
LEGEND

- Fire Alarm
- City Radio Cable w/messenger
- City Street Light
- Messenger only

POLE NO & STREET	BASELINE STATION-LOCATION	OFFSET FROM BASELINE TO C. OF POLE	OFFSET FROM R/W LINE
(JP28R) Ala Moana Blvd.	17 + 62	44' Right	6'-0"
(JP29) Ala Moana Blvd.	19 + 00	44' Left	6'-0"
(JP30) Ala Moana Blvd.	20 + 10.5	44' Left	6'-0"
(JP31) Ala Moana Blvd.	21 + 44±	40'-6" Left	8'-0"
(JP31R) Ala Moana Blvd.	21 + 47±	50' Right	8'-0"
(JP33) Ala Moana Blvd.	22 + 78	50' Left	6'-0"
(JP1) Forrest Ave.	26 + 69	67' Right	
(JP1) Buford Ave.	Ewa Side of Existing JP 1 Buford Ave.		



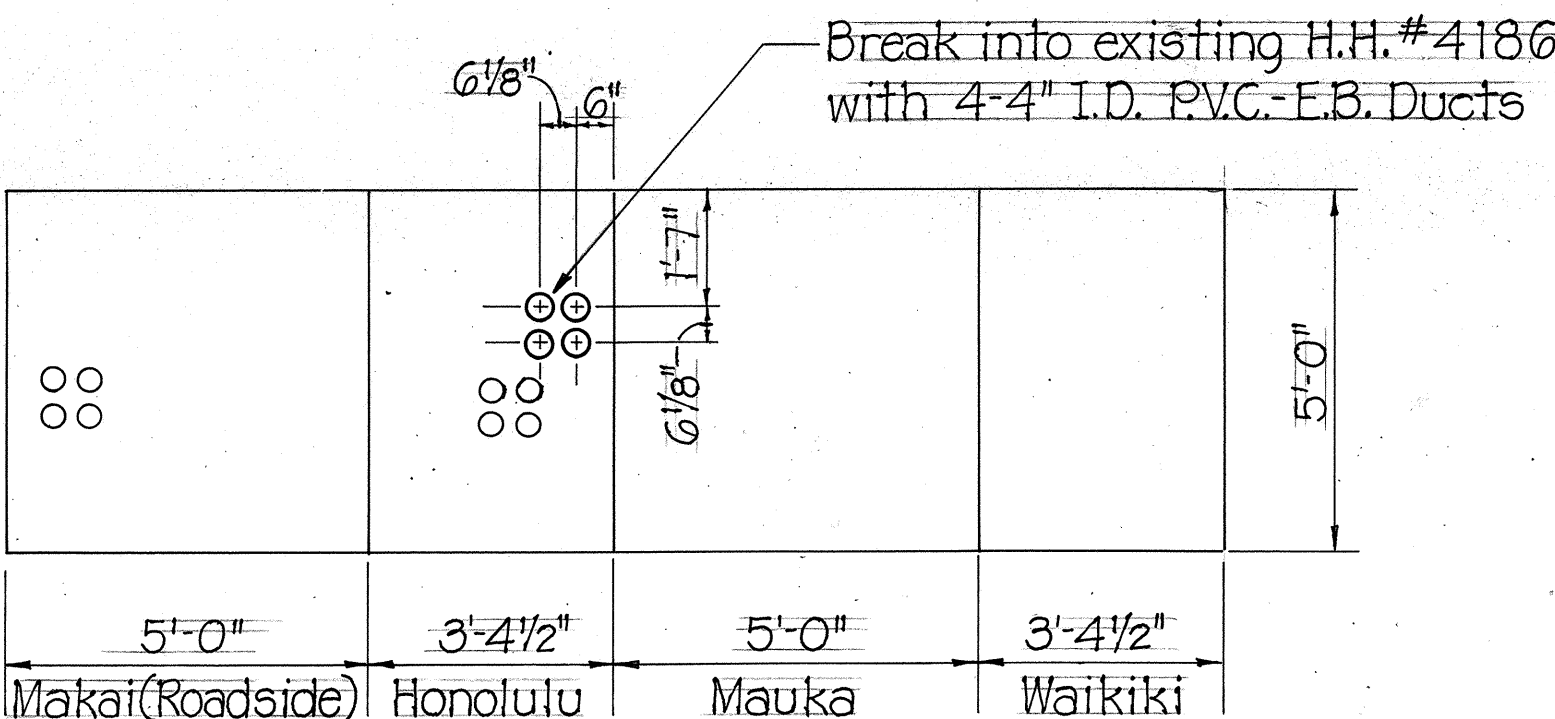
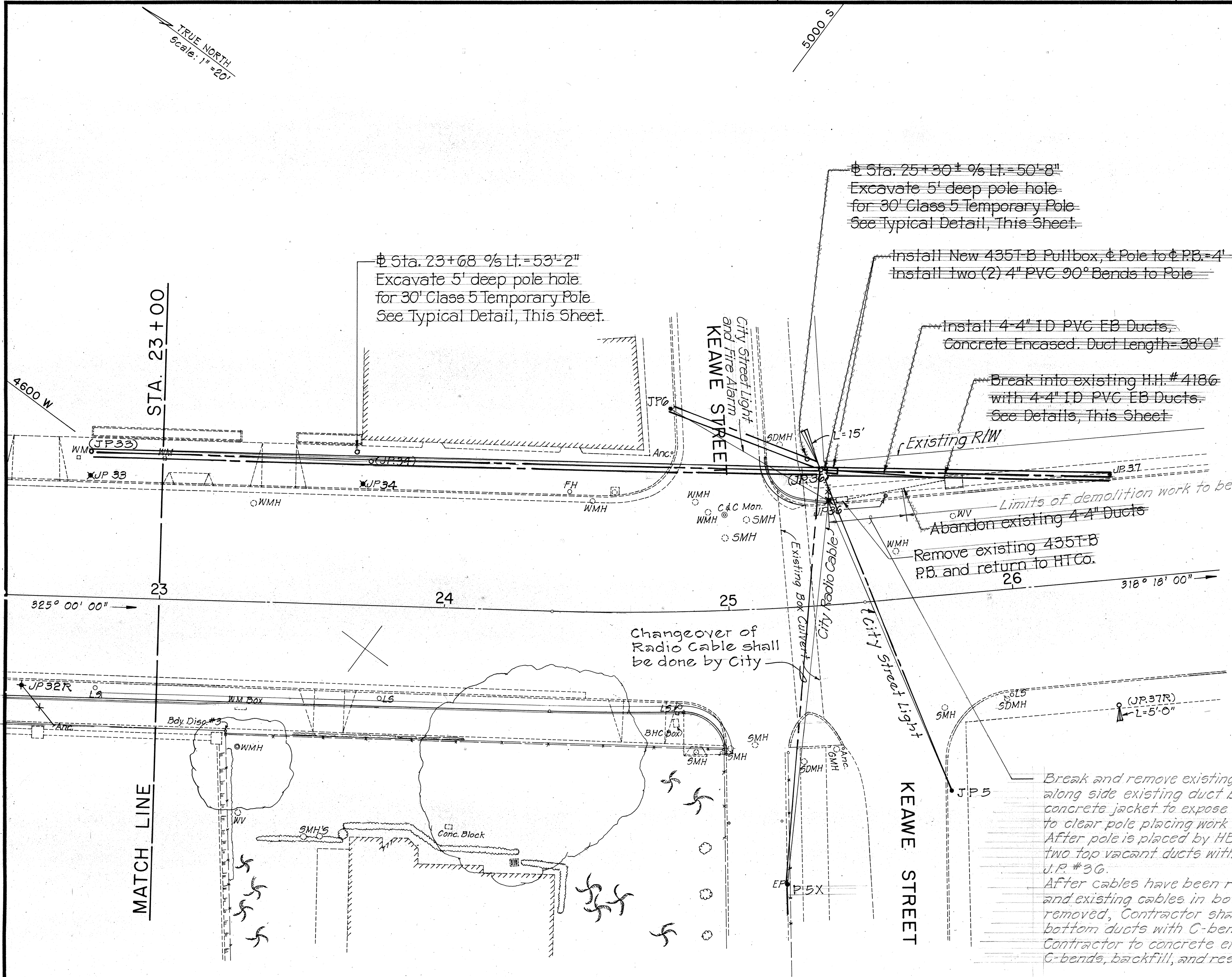
LEGEND		
Existing	Proposed	Description
●	○	Pole, Wood
✱	✱	Pole, Wood, To Be Removed
—	—	Rod, Anchor
—✱	—✱	Rod, Anchor, To Be Removed
JP-30	(JP-30)	Number, Joint Pole
▼	▼	Fire Alarm Box



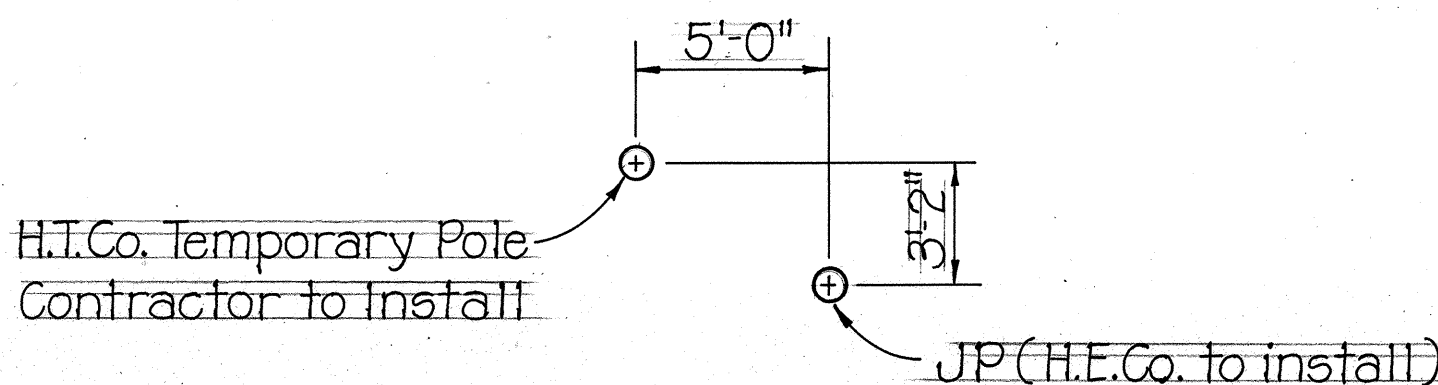
APPROVED:
K. Y. Yeh
HAWAIIAN TELEPHONE CO.
DATE 5-18-78
K. Y. Yeh
DATE 5-18-78
DEPARTMENT OF TRANSPORTATION
SERVICES, CITY & COUNTY OF HONOLULU

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
TELEPHONE, ELECTRIC,
FIRE ALARM & RADIO SYSTEM CABLE
ALA MOANA BLVD.
SAFETY IMPROVEMENTS
PROJ. NO. HHS-092-1 (12)
Scale: as noted
SHEET No. 1 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HHS-092-1(12)	1978	50	50



EXISTING HANDHOLE # 4186
Scale: 3/8"=1'-0"



TYPICAL TEMPORARY
POLE INSTALLATION
Scale: 1"=5'-0"

ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

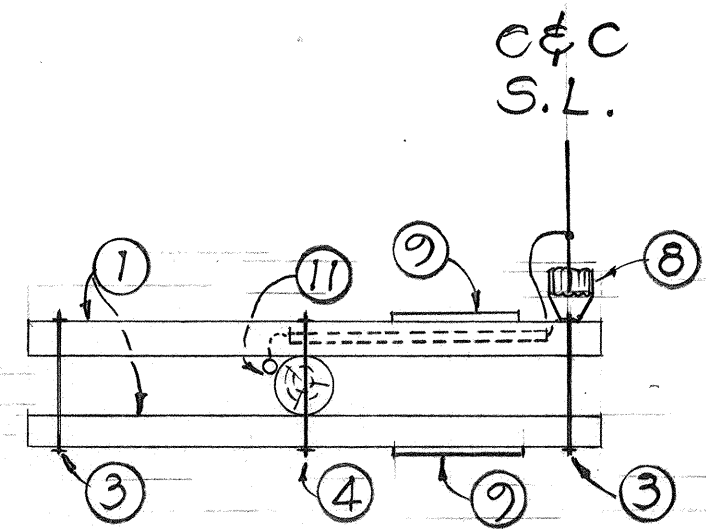
PROPOSED POLE LOCATION			
POLE NO & STREET	BASELINE STATION	OFFSET FROM BASELINE TO ϕ OF POLE	OFFSET FROM R/W LINE
(JP34) Ala Moana Blvd.	23 + 73	50' Left	6'-0"
(JP36) Ala Moana Blvd.	25 + 35 $\pm$	47'-6" Left	2'-6"
(JP37R) Ala Moana Blvd.	26 + 33 $\pm$	44'-0" Right	6'-0"

<i>B. Ushikawa</i> HAWAIIAN TELEPHONE CO.	5-18-78 DATE
<i>Kenneth Z. Zhang</i> DEPARTMENT OF TRANSPORTATION SERVICES, CITY & COUNTY OF HONOLULU	5/19/78 DATE

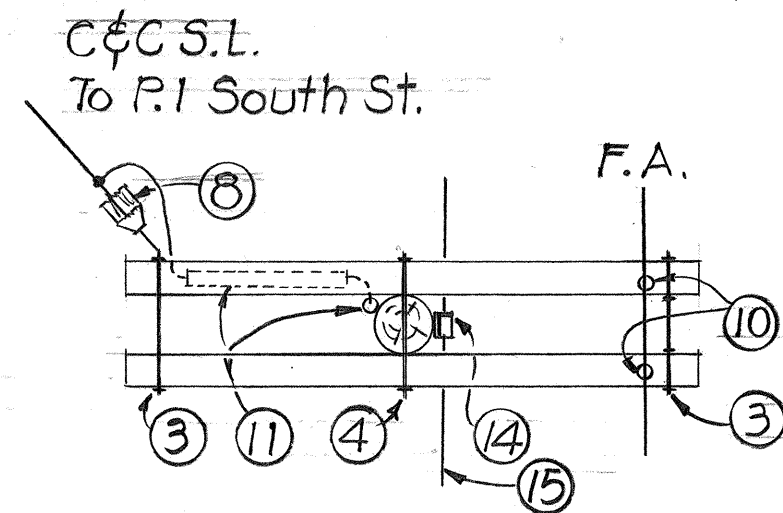
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION LAND TRANSPORTATION FACILITIES DIVISION TELEPHONE, ELECTRIC, FIRE ALARM & RADIO SYSTEM CABLE ALA MOANA BLVD. SAFETY IMPROVEMENTS PROJ. NO. HHS-092-1 (12) Scale: as noted SHEET No. 2 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HHS-092-1(12)	1978	51	59

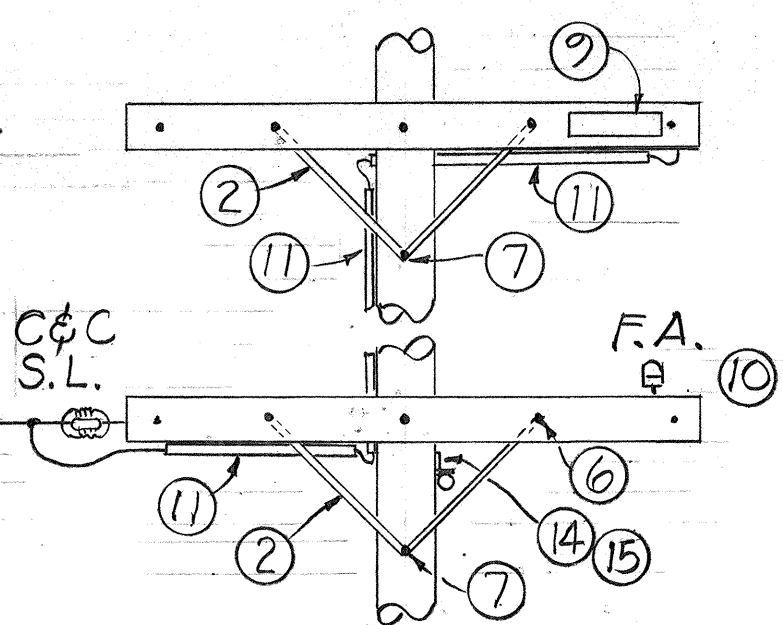
C&C PRIMARY ARM
PLAN VIEW
Sidewalk on Left
Roadway on Right



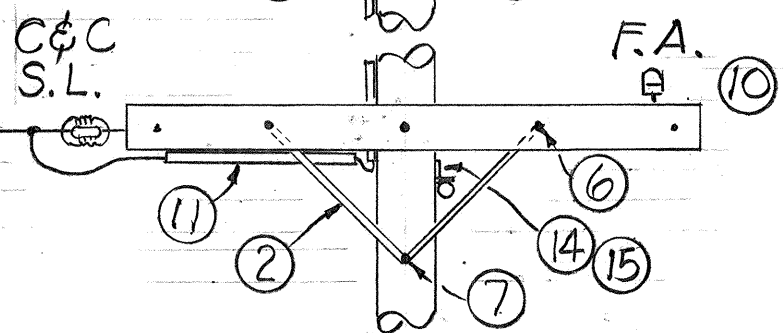
C&C SIGNAL ARM
PLAN VIEW
Sidewalk on Left
Roadway on Right



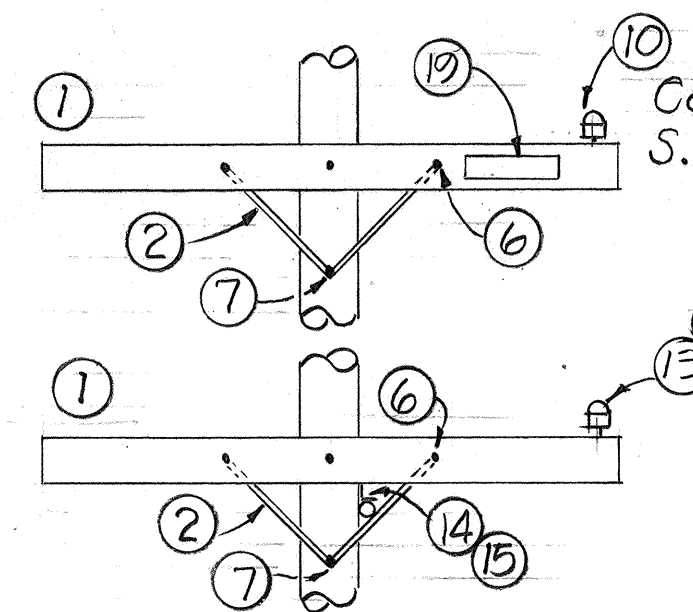
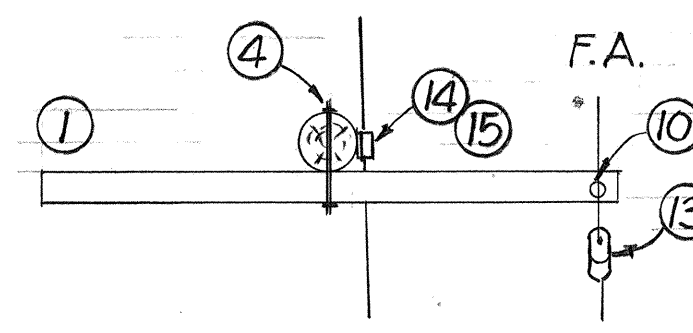
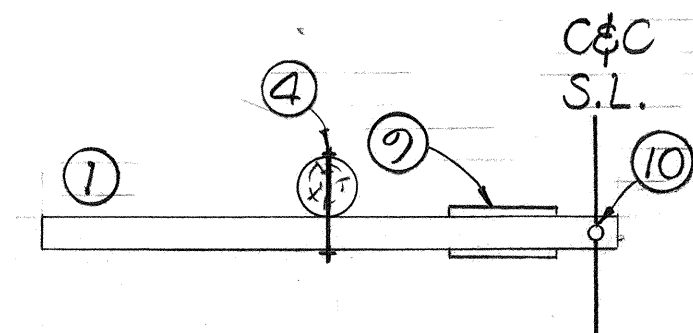
C&C PRIMARY ARM
ELEVATION VIEW



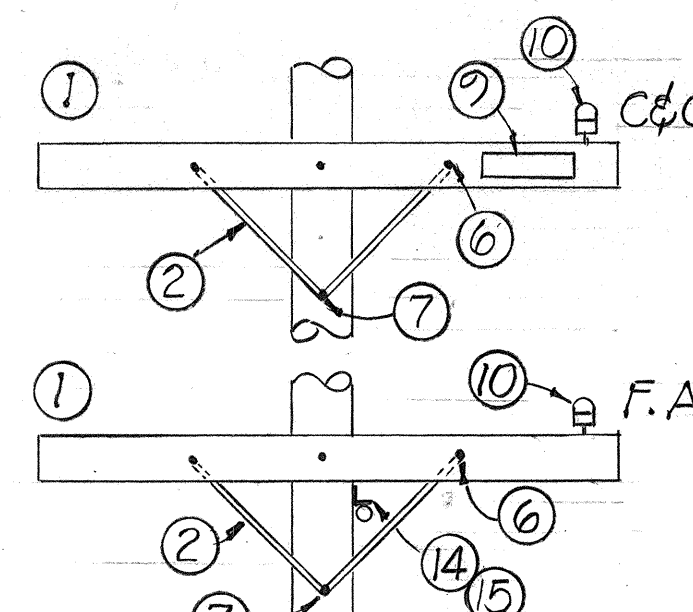
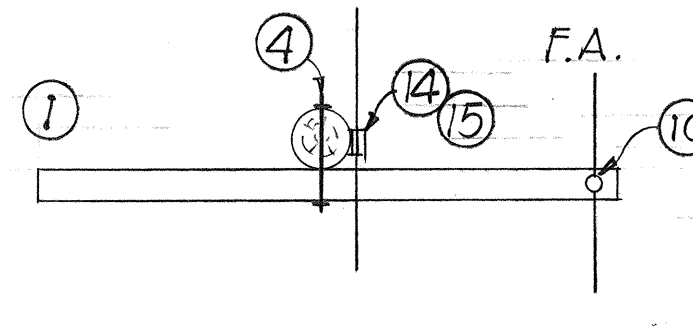
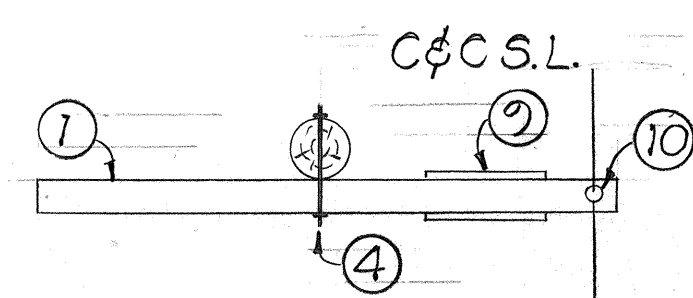
C&C SIGNAL ARM
ELEVATION VIEW



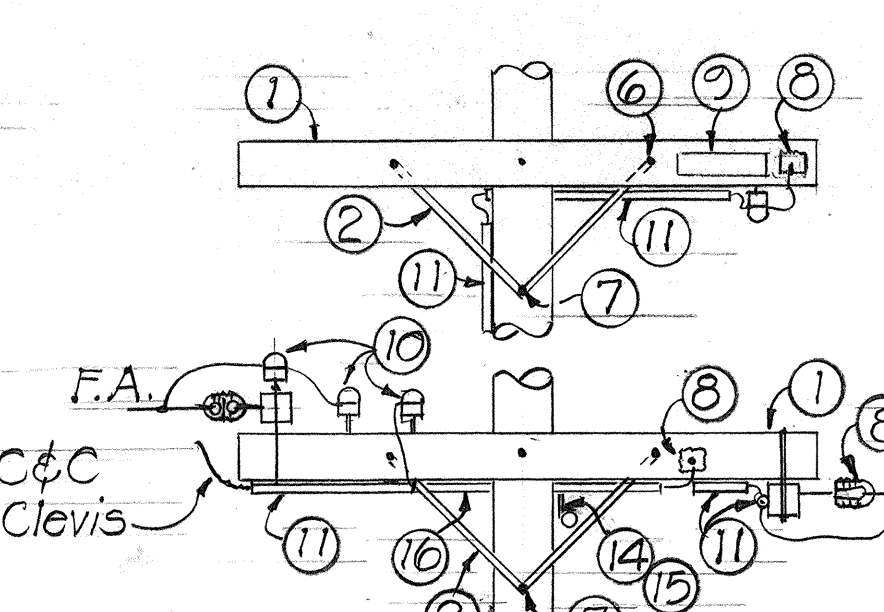
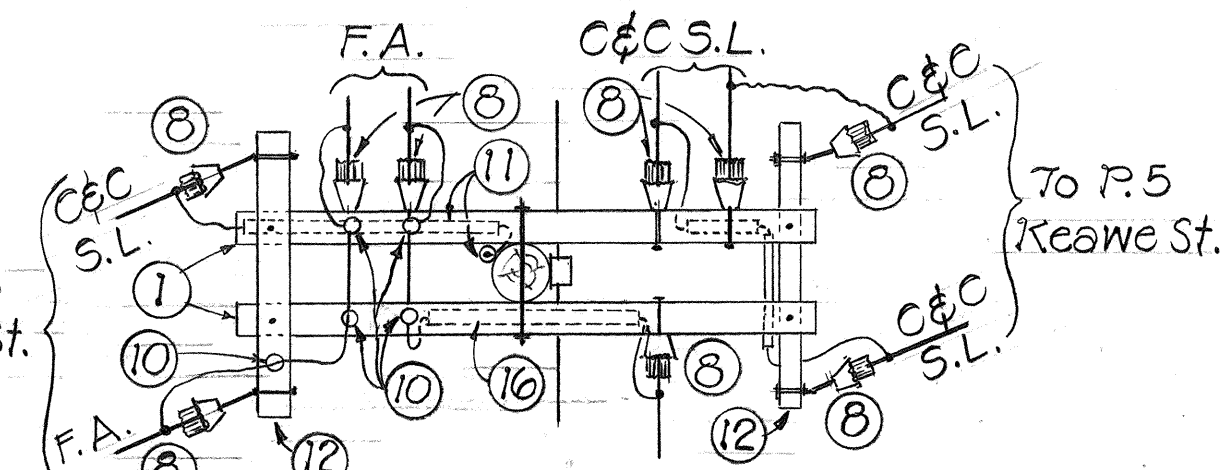
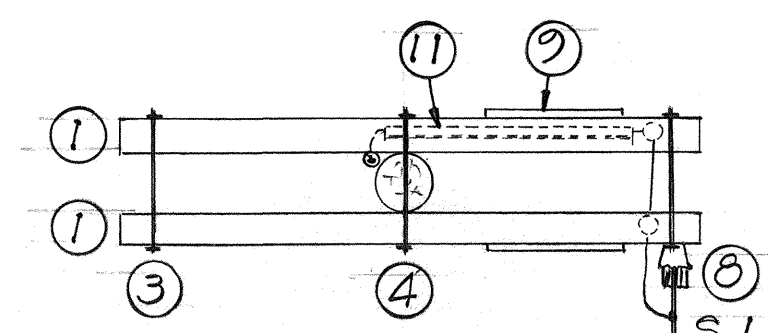
NEW POLE 29



NEW POLE 30

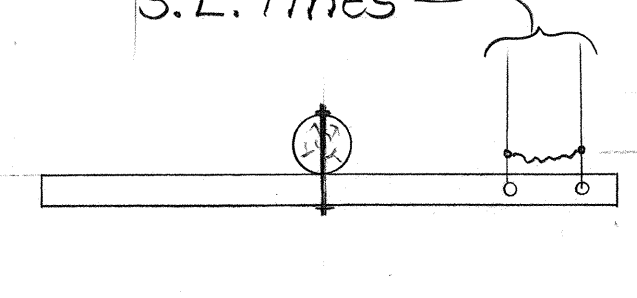


NEW POLES 31, 33 & 34

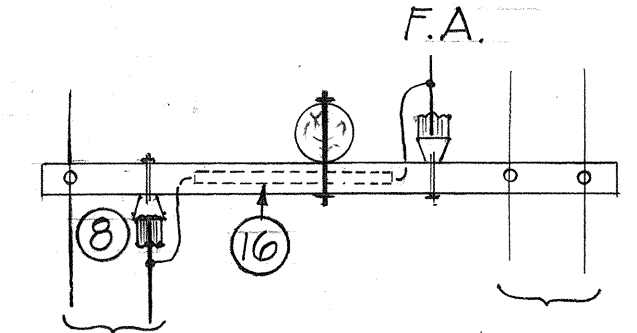


NEW POLE 36

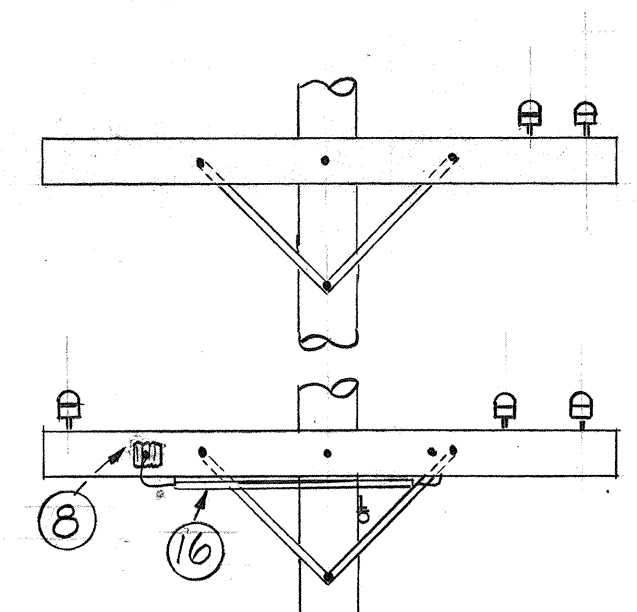
Dead C&C Primary
S.L. lines



C&C PRIMARY ARM
PLAN VIEW
Sidewalk on Left
Roadway on Right



C&C SIGNAL ARM
PLAN VIEW
Sidewalk on Left
Roadway on Right



C&C PRIMARY ARM
ELEVATION VIEW

C&C SIGNAL ARM
ELEVATION VIEW

EXISTING POLE 37

CONSTRUCTION NOTES:

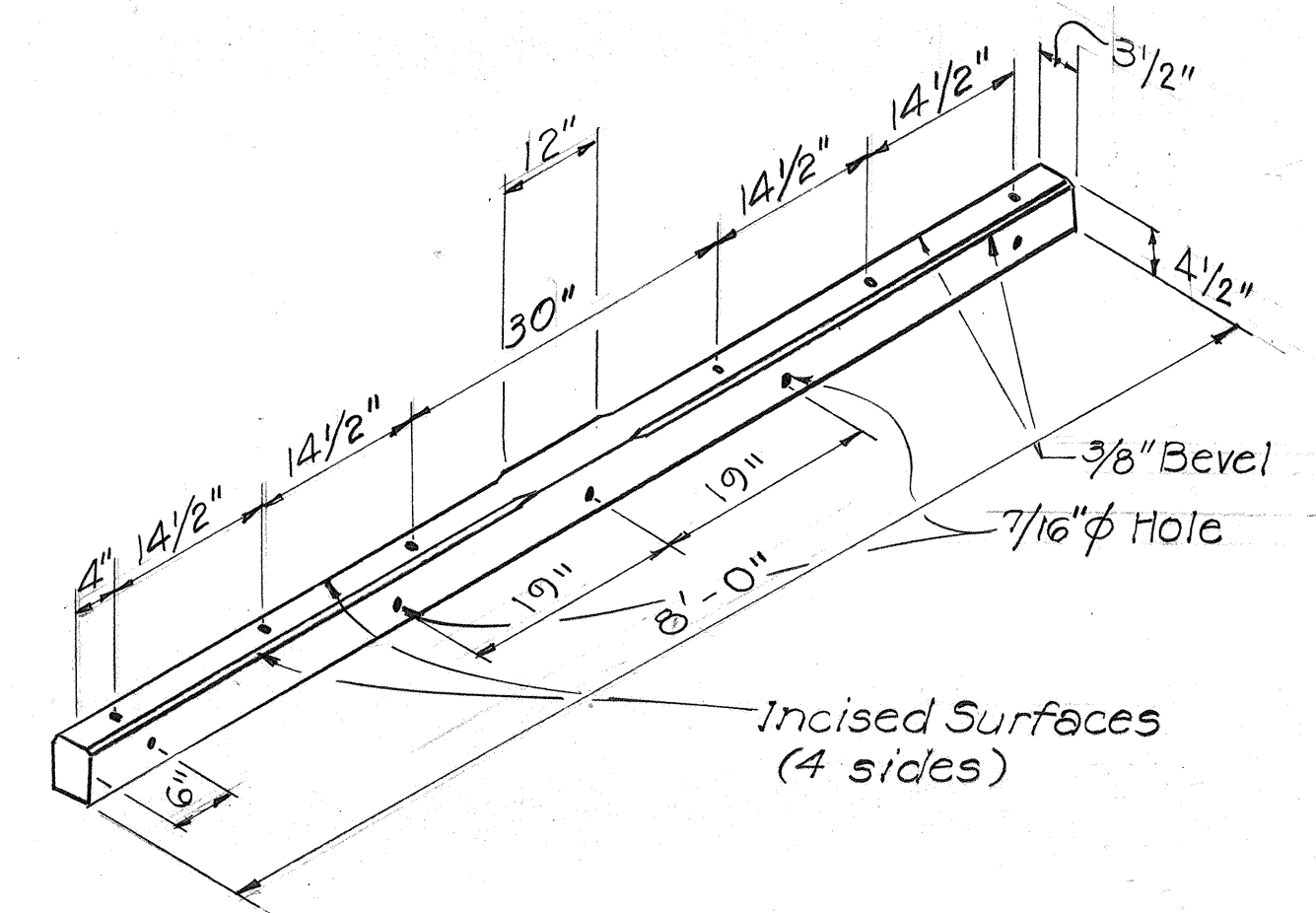
- The Fire Alarm Circuits, C&C Series Street Lighting (S.L.) circuit and C&C Radio Cable circuits shall not be interrupted at any time without the permission of the City.
- Furnish and install all new equipment for the fire alarm circuit, C&C S.L. circuit and City Radio messenger cable.
- Final connection of the new C&C S.L. circuit to existing circuit shall be done by the Contractor under the direction of the City. Contact C&C Dept. of Transportation Services (Ph. 523-4905) three (3) working days prior to making connections.
- Final connection of the new fire alarm circuit to the existing circuit shall be done by the city. Changeover of the fire alarm cable between J.P. 30 Ala Moana Blvd., and J.R. 1 Forrest Ave., shall be done by the City. Contact Dept. of Transportation Services (Ph. 523-4905) three working days prior to required date of final connection and changeover.
- Changeover of existing City Radio Cable to the new messenger cable and poles shall be done by the Contractor, under the direction of the City, unless otherwise noted on the plans. Contact C&C Dept. of Transportation Services (Ph. 523-4905) three (3) working days prior to changeover.
- Transfer of existing Fire Alarm Box to new J.P. 30 shall be done by the City.
- After cutover of all new circuits is complete, remove and dispose all old fire alarm, C&C S.L., and City Radio equipment between J.P. 28 to J.P. 37.
- All construction shall be done in accordance with National Electrical Code 1978, National Fire Protection Association Code and Standard Specification for Public Works Construction, May 1975.
- The height of the center of the C&C Primary Arm above the center of the H.E. Co. secondary cable shall be 6'-0" on poles 29 to 34 and 5'-3" on pole 36.

LEGEND

- 3 1/2" x 4 1/2" x 8'-0" Cross-Arm
- 28" Cross-Arm Brace, Galvanized
- Double Arming Bolt, 5/8" x Req. Length, Galvanized.
- Machine Bolt, 5/8" x Req. Length, Galvanized.
- Machine Bolt, 1/2" x 4 1/2", Galvanized.
- Machine Bolt, 3/8" x 4 1/2", Galvanized.
- Lag Bolt, 1/2" x 4", Galvanized.
- Dead End Clevis, with Spool, Galvanized.
- "HIGH VOLTAGE" Sign, Plastic, 3 1/2" x 14"
- Top Tie Insulator, with long shank steel pin.
- 2" PVC Conduit, Galvanized Straps and #8 AWG 5 KV Cable.
- Buck Arm 3 1/2" x 4 1/2", Length as required.
- Bob Insulator
- Messenger Hanger with Galvanized thru-bolt.
- 3/8" Galvanized Messenger, radio cable with .045 Stainless Steel Lashing Wire.
- 1" PVC Conduit, Galvanized Straps and #8 AWG Fire Alarm Wire 3/64" Polyethylene insulation.

NOTES:

- Crossarms fabricated from Douglas Fir.
- All holes 1/16" ϕ except as noted.
- Trim sidewalk side of arm on Poles 30, 31, 33 and 34 as necessary to clear building.



INCISED FIR CROSSARM

NOT TO SCALE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
NEW & EXISTING POLES DETAIL
ALA MOANA BLVD.
SAFETY IMPROVEMENTS
SOUTH ST. TO KEAWE ST.
PROJECT NO. HHS-092-1(12)

Not to Scale

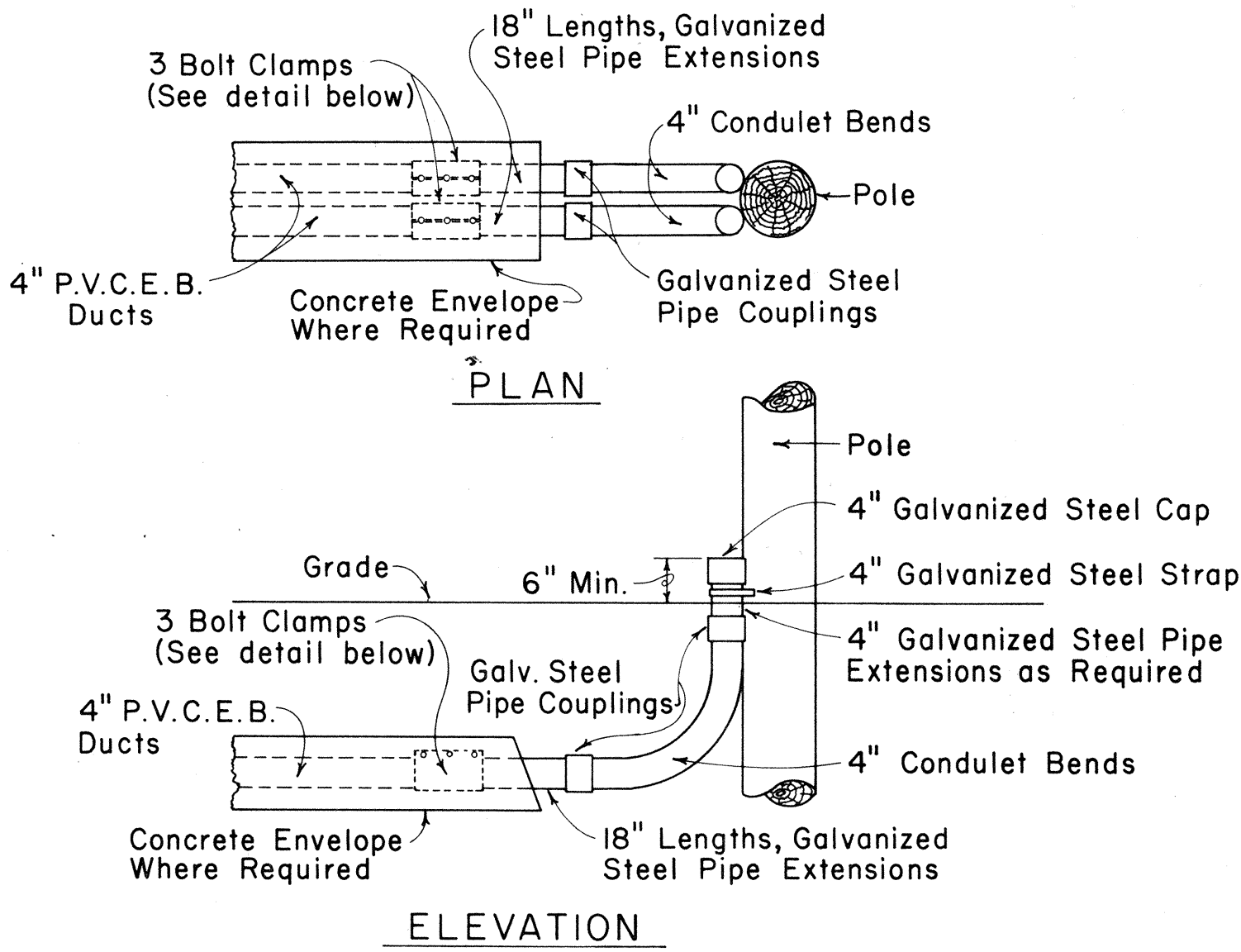
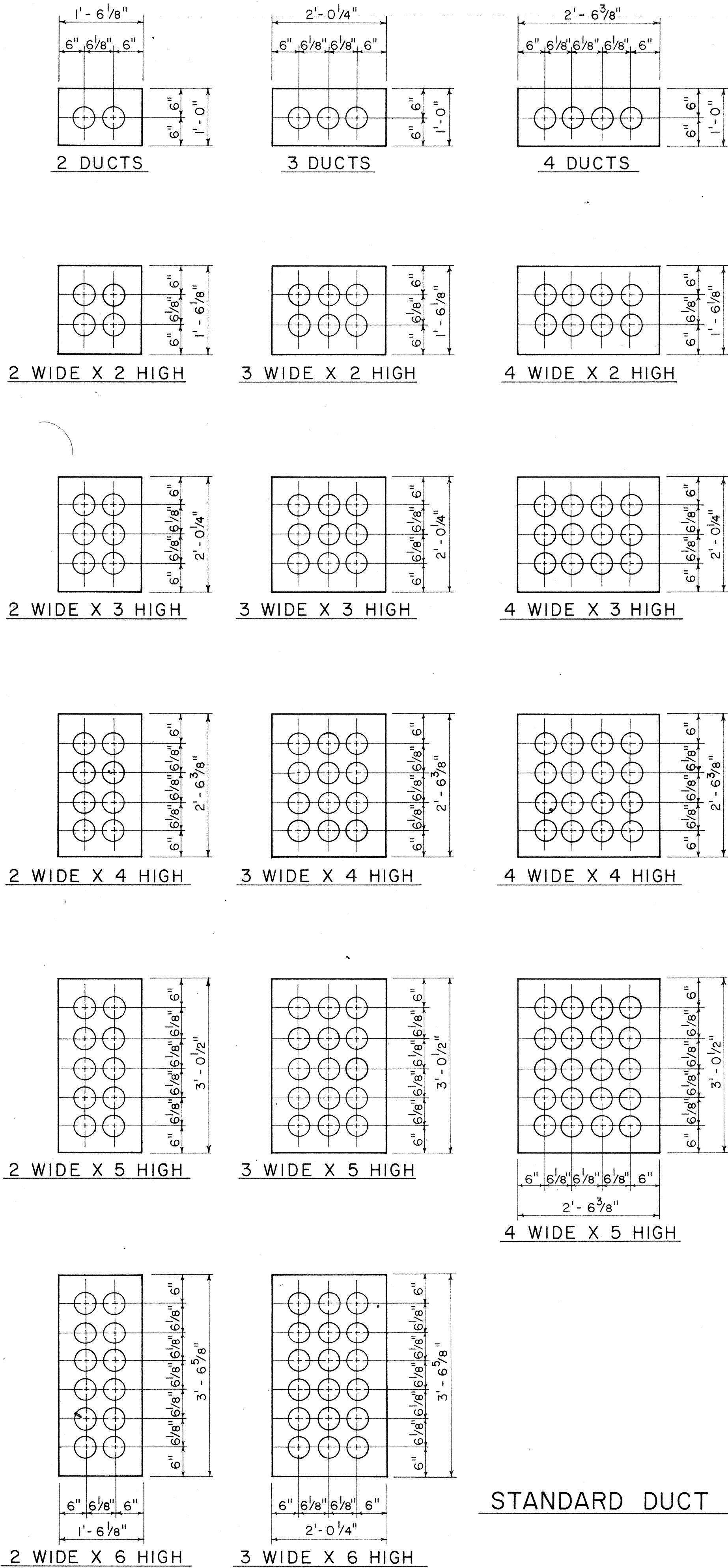
SHEET NO. 3 OF 5 SHEETS

APPROVED:

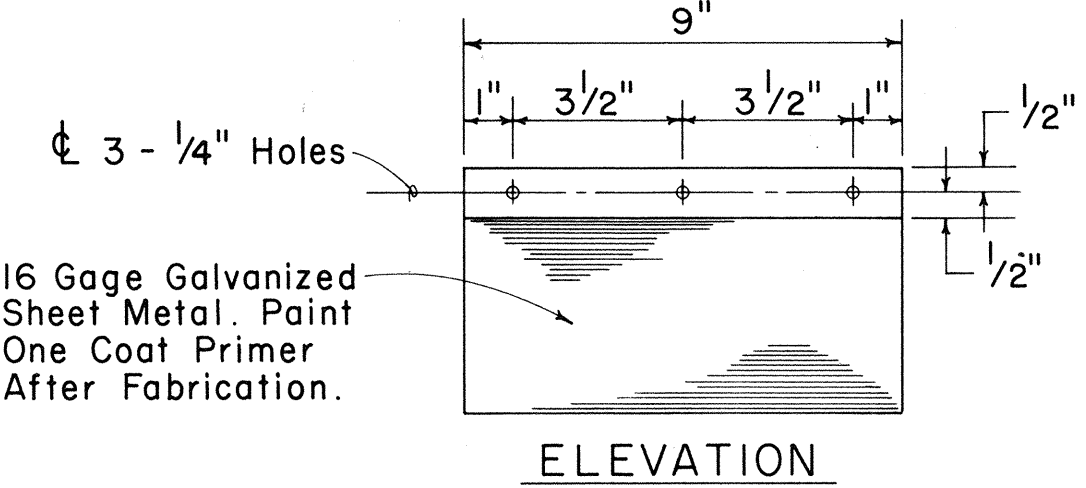
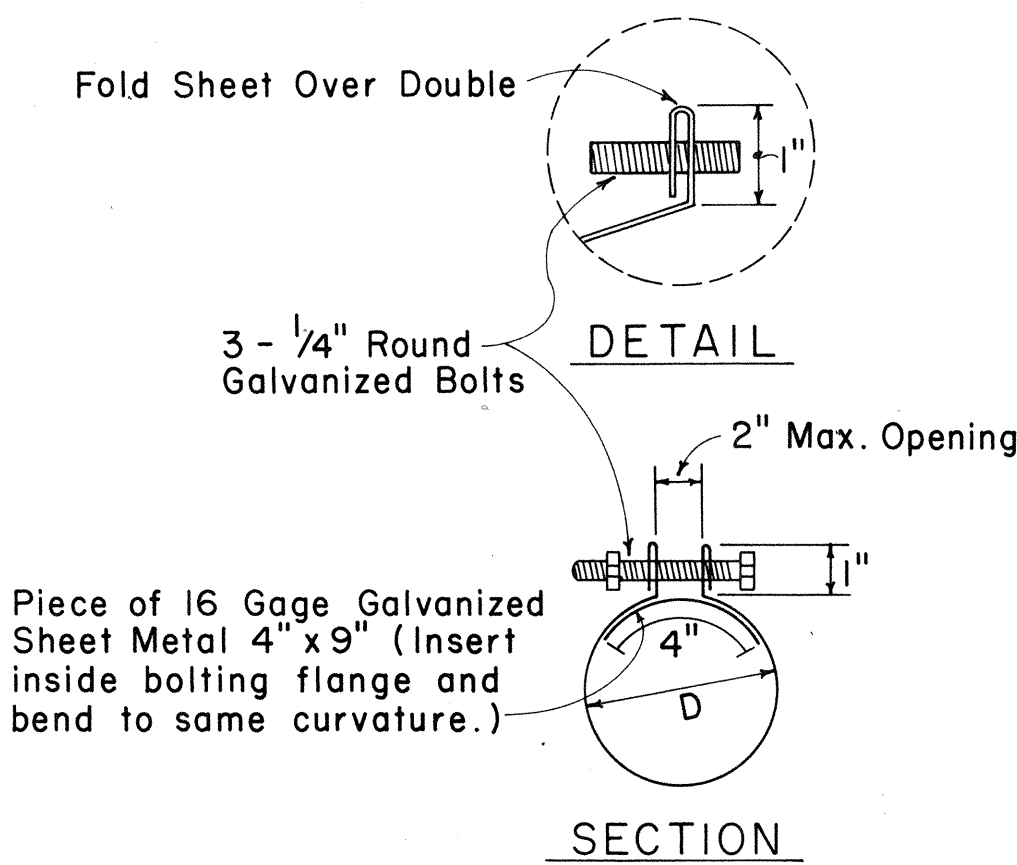
Kenneth Z. Young
Department of Transportation Services
City & County of Honolulu

5/22/78
Date

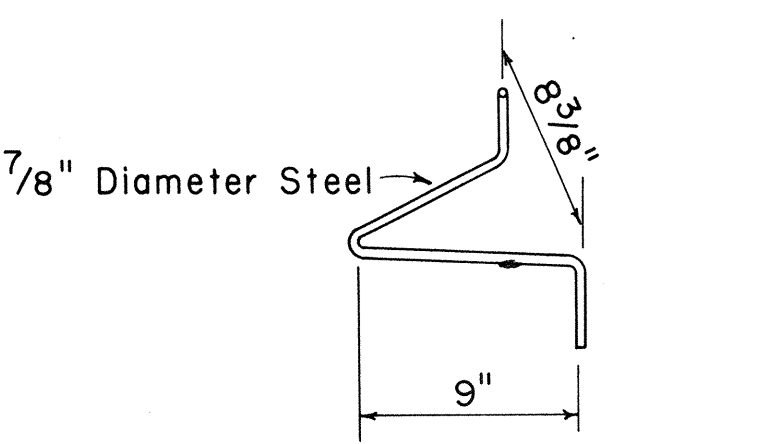
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HHS-092-1(12)	1978	53	59



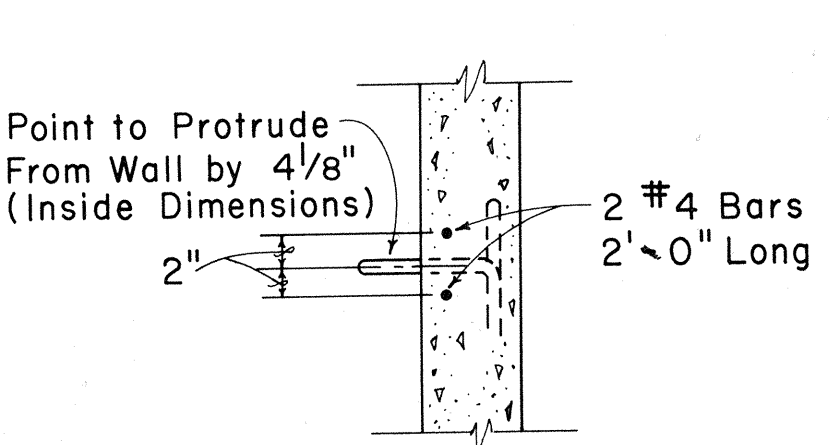
TYPICAL INSTALLATION DETAILS



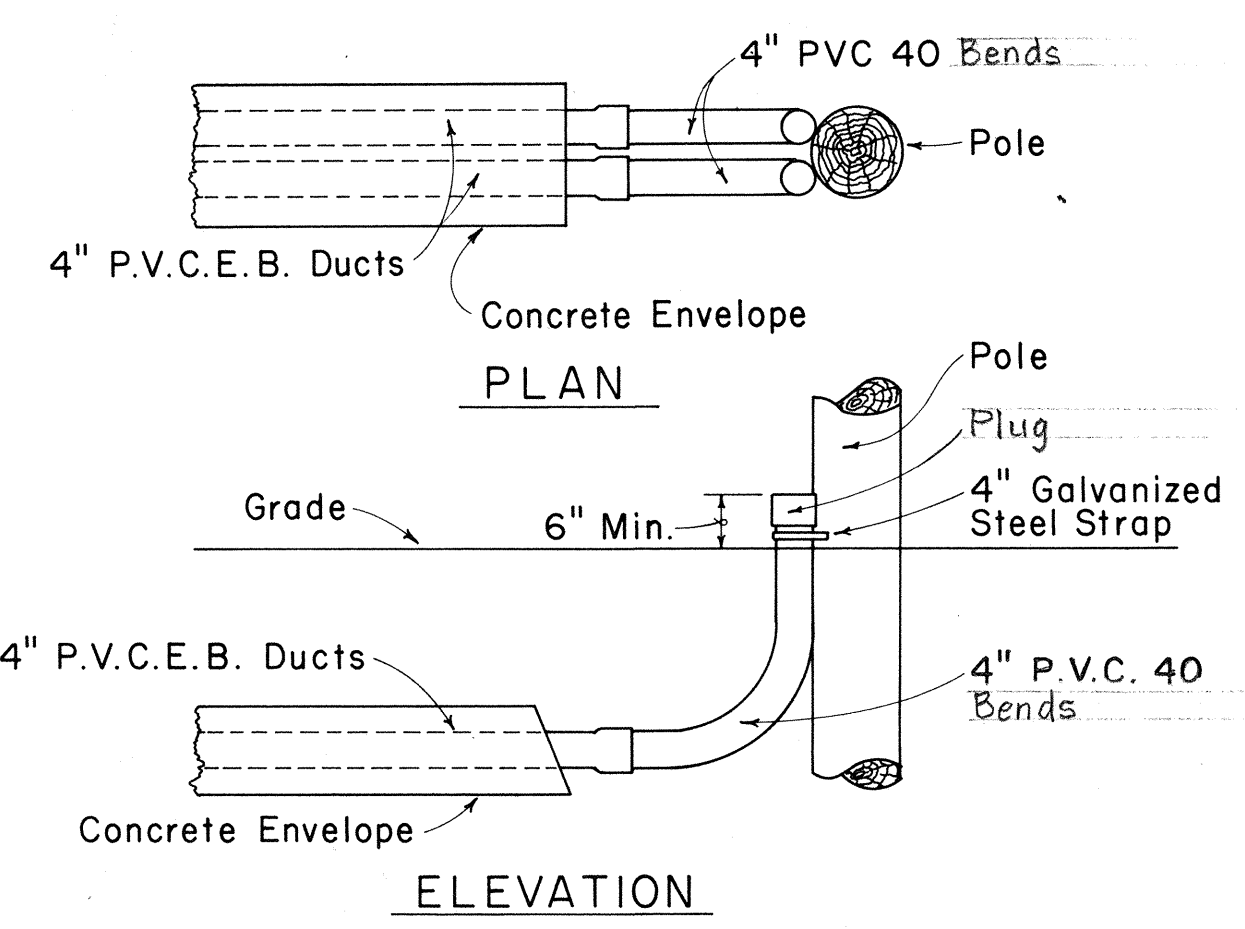
3-BOLT CLAMP ADAPTOR DETAIL



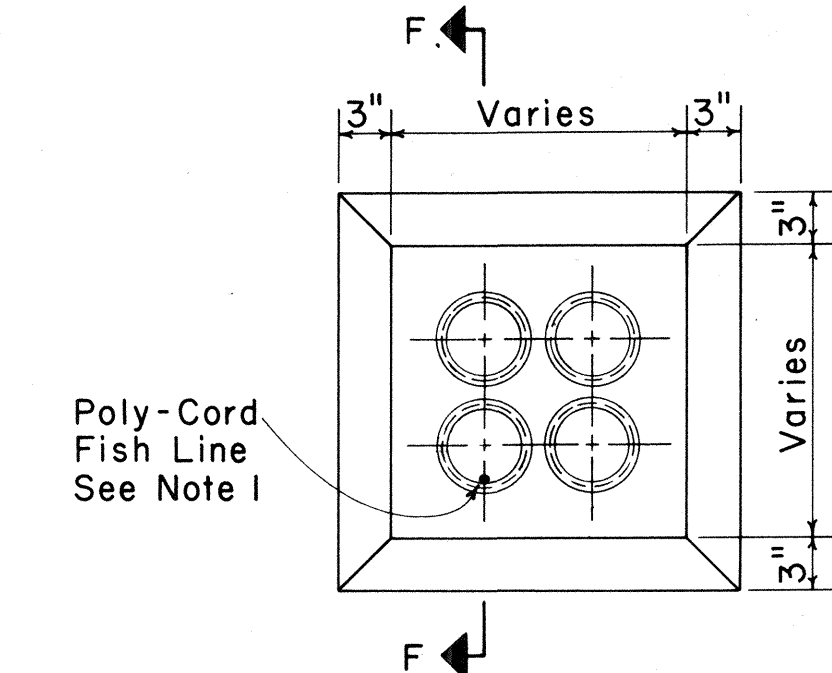
PULLING-IN IRON



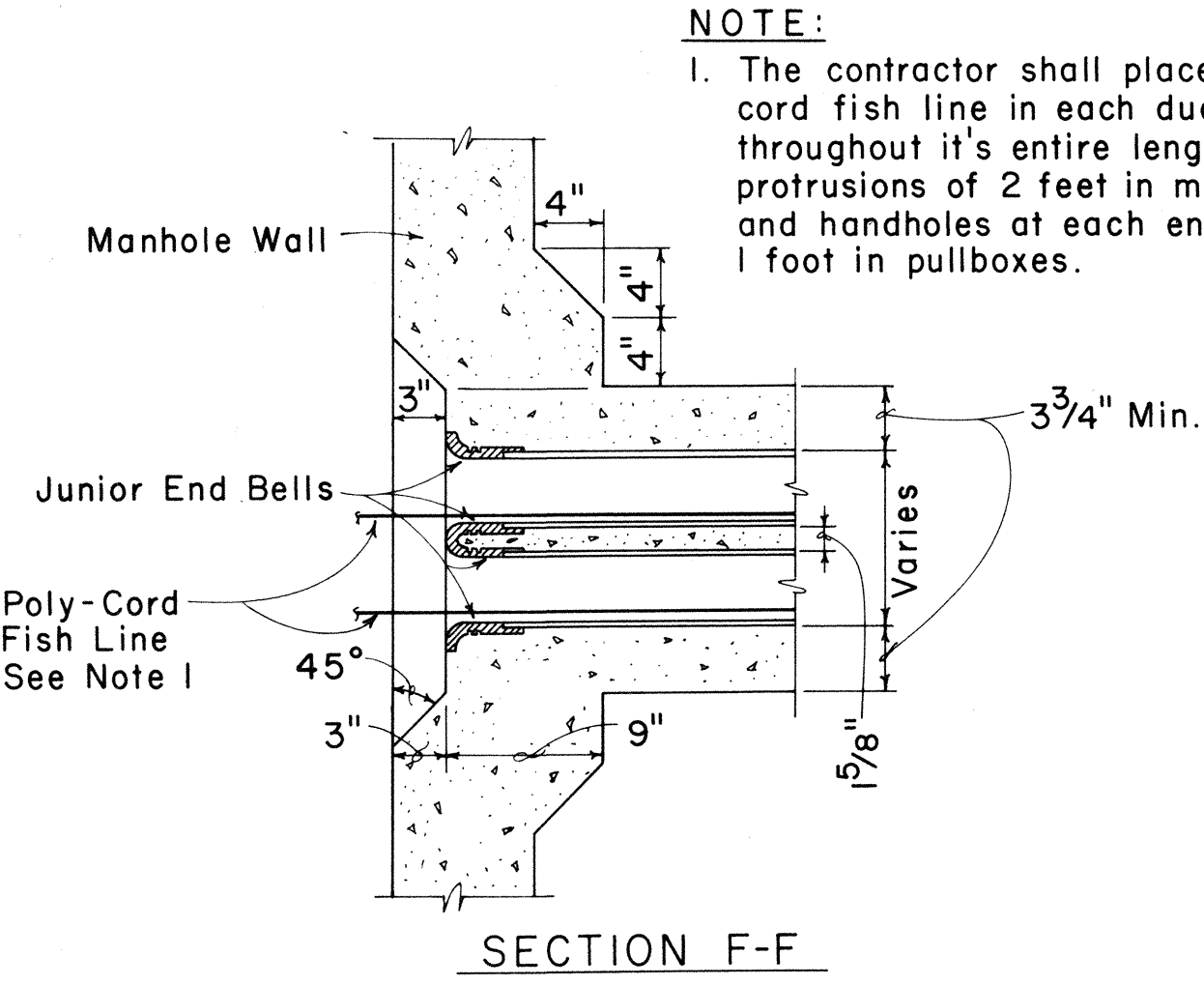
SECTIONAL VIEW OF PULLING-IN-IRON



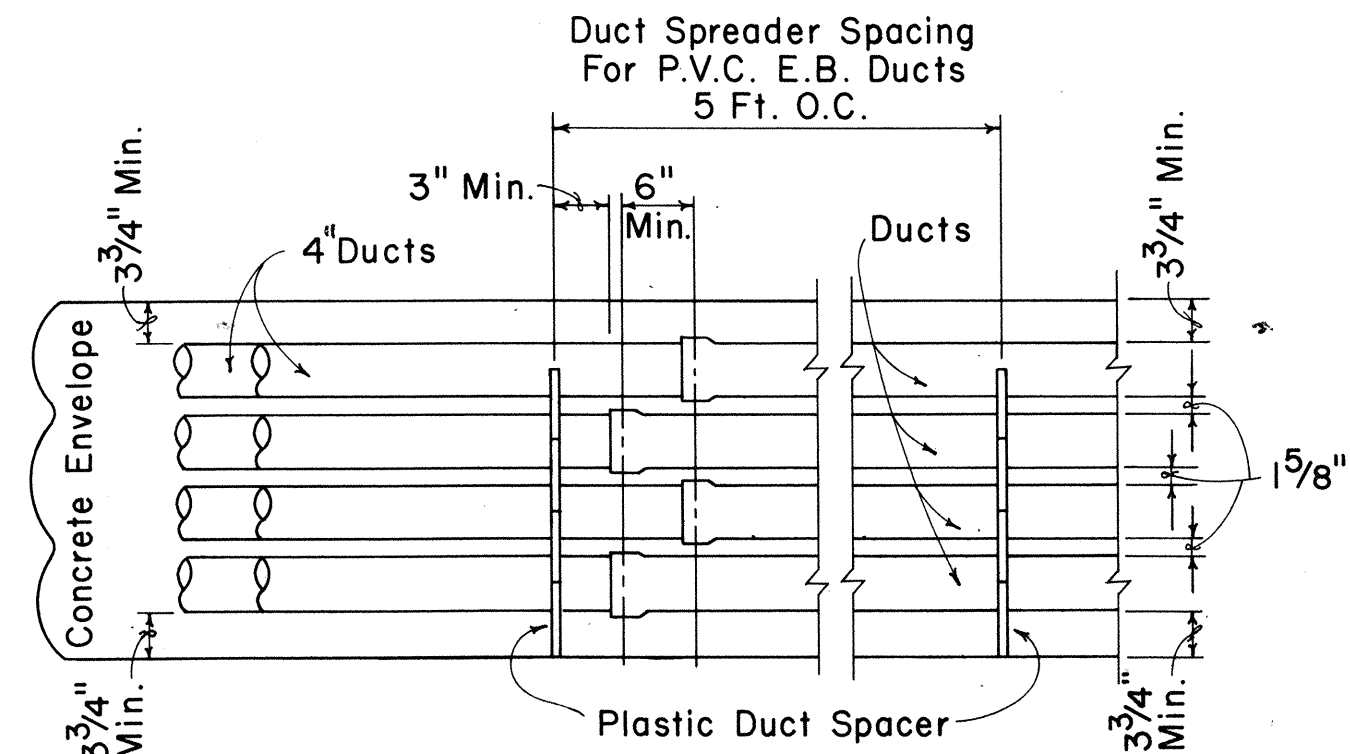
TYPICAL CONDUIT BEND INSTALLATION DETAILS



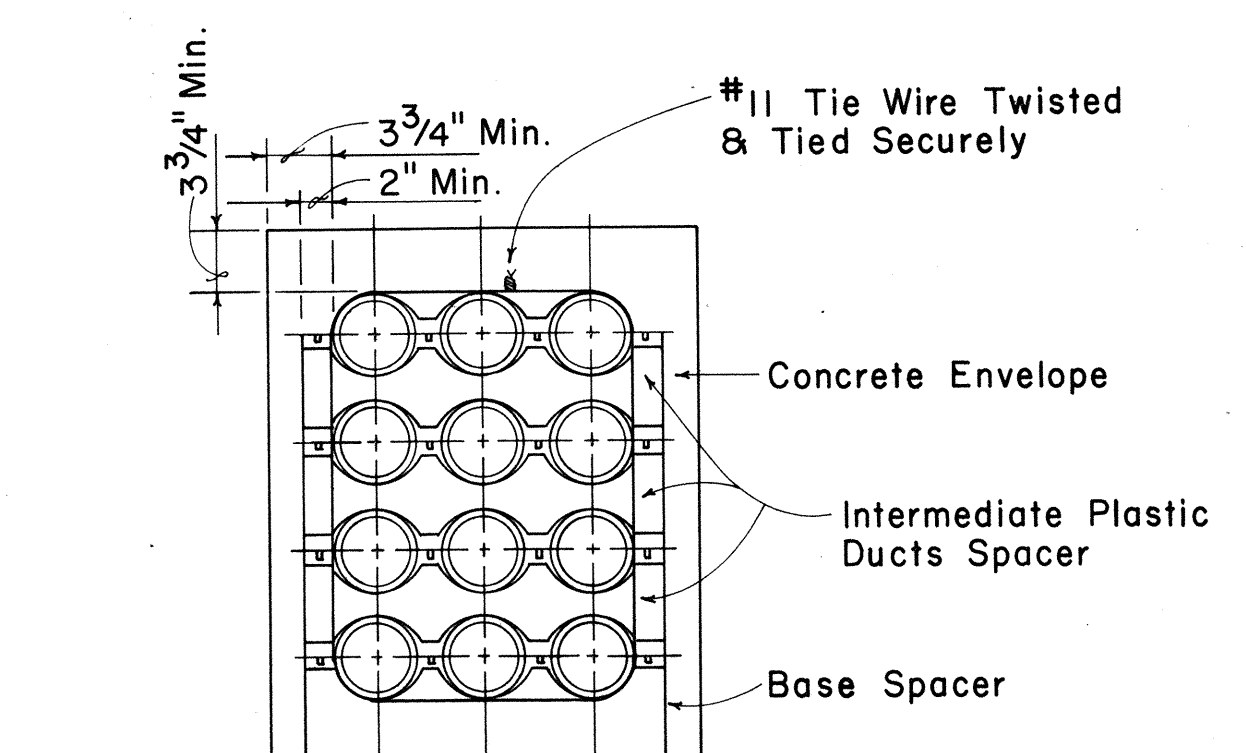
TYPICAL MANHOLE DUCT WINDOW



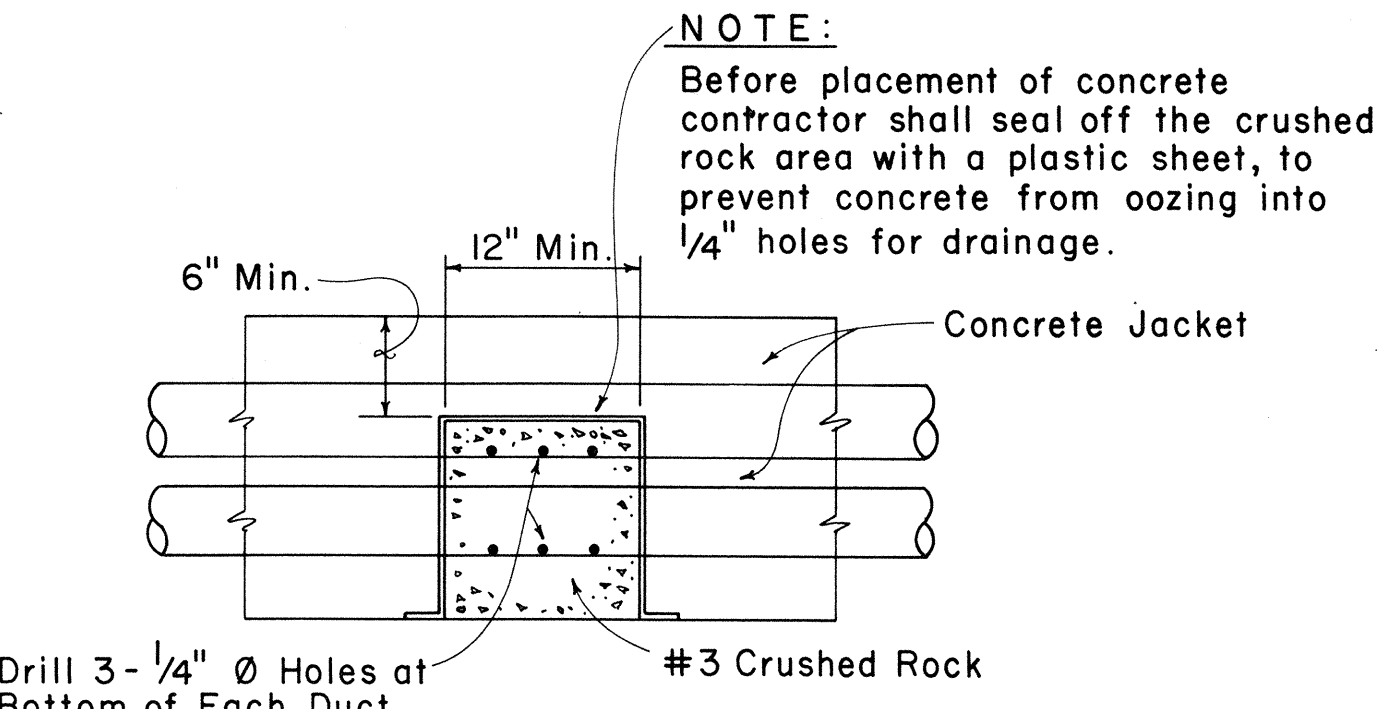
TYPICAL DUCT WINDOW DETAIL & JUNIOR END BELL



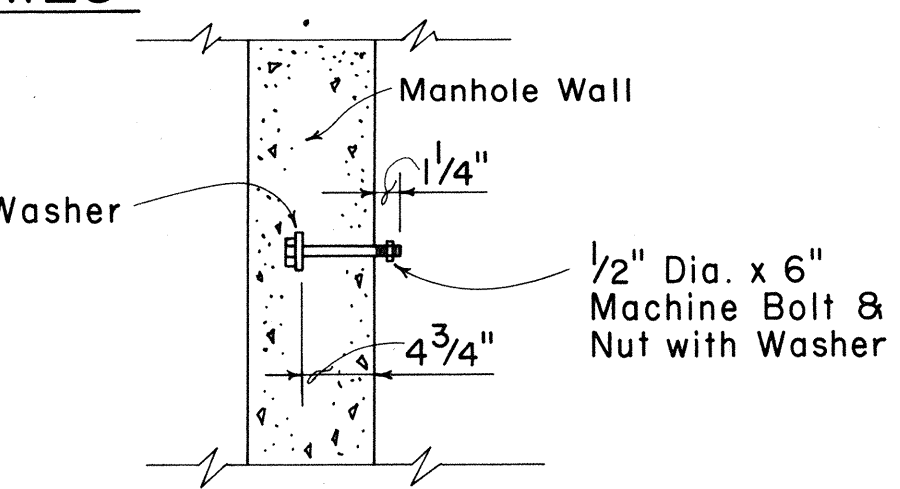
TYPICAL DUCT ENVELOPE ELEVATION ARRANGEMENT OF PLASTIC SPACERS



SECTION SHOWING INTER-LOCKING SPACERS



ELEVATION VIEW OF DUCT DRAIN DETAIL



CABLE RACK STUD BOLT DETAIL

APPROVED: *B. J. [Signature]* 5-30-78
Hawaiian Telephone Co., Ltd. Date

H.T. Co., Ltd. Drawing No. 34028

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
STANDARD DUCT FORMATIONS

Not to Scale
SHEET No. 5 OF 5 SHEETS

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