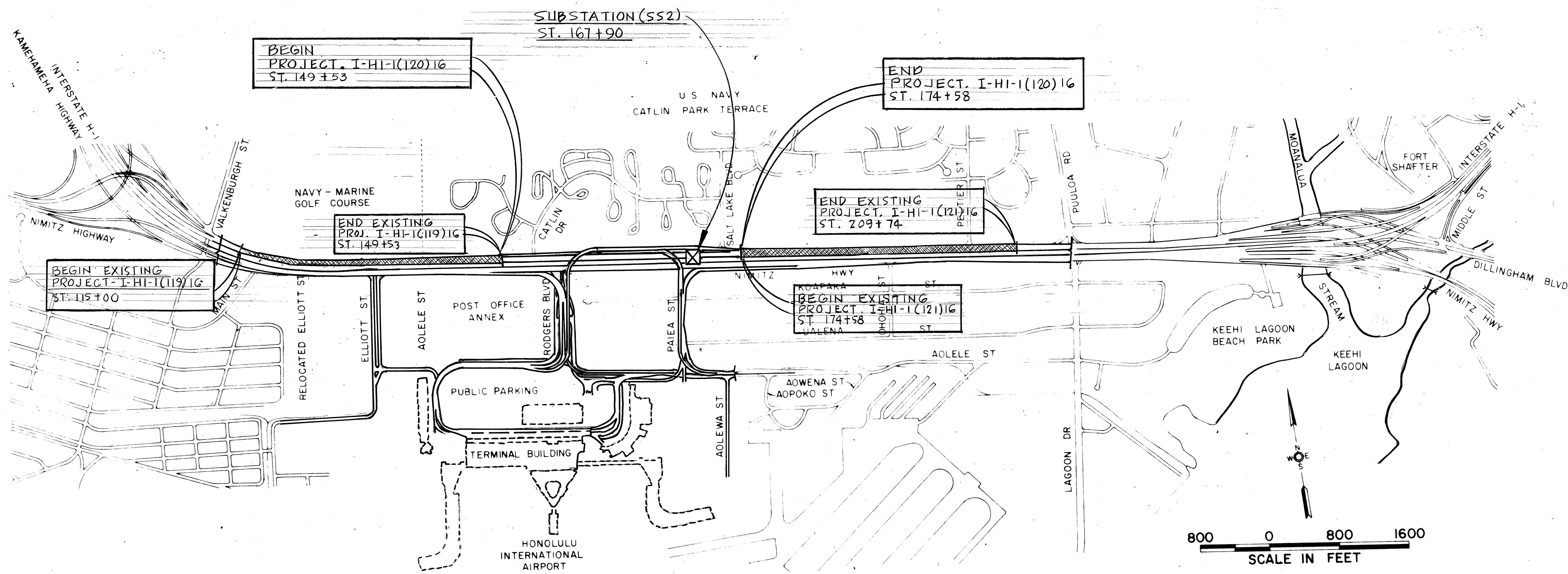


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)16	1976	45	173



- GENERAL NOTES
1. ALL NON-CURRENT CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT AND RACEWAYS SHALL BE GROUNDED. ALL NON-METALLIC CONDUIT RUNS SHALL BE PROVIDED WITH A #8 AWG, 600V.TW (GREEN) GROUNDING CONDUCTOR.
 2. ALL CONDUITS EMBEDDED IN CONCRETE STRUCTURES AND PASSING AN EXPANSION JOINT, SHALL BE INSTALLED WITH EXPANSION COUPLINGS, THE CROSSING OF EXPANSION JOINTS SHALL BE AT RIGHT ANGLE TO THE JOINT.
 3. THE CONTRACTOR SHALL FURNISH AND INSTALL LIGHTING STANDARDS AND LUMINAIRES FOR THE VIADUCT CONSTRUCTED UNDER CONTRACTS I-HI-1(119)16 AND I-HI-1(121)16. THE NUMBER, TYPE, LOCATION & WIRING OF STANDARDS AND LUMINAIRES ARE SHOWN ON THE ROADWAY LIGHTING PLANS OF CONTRACTS I-HI-1(119)16 AND I-HI-1(121)16, WHICH ARE INCLUDED AS SHEETS 13, 16, 17 AND 18.

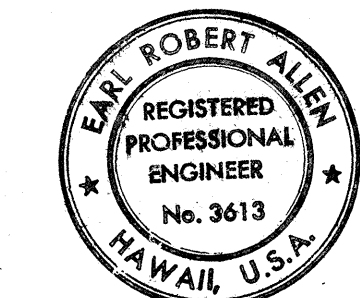
ELECTRICAL KEY PLAN

ELECTRICAL SYMBOL LIST

	SUB-STATION		EXISTING HECO MANHOLE
	CONTROLLER FOR SPRINKLER SYSTEM		CONDUIT EMBEDDED IN CONCRETE VIADUCT STRUCTURE
	TRANSFORMER		CONDUIT DIRECT BURIAL
	METER		CONDUIT CONCRETE ENCASED
	CIRCUIT BREAKER		CAPPED CONDUIT
	DISCONNECT SWITCH W/ FUSE		EMERGENCY COMMUNICATION PULL BOX
	POLE MOUNTED LUMINAIRE, 50' MTG. HT. 400W HIGH PRESS. SODIUM LAMP, 480V, TYPE 'M'		INDICATES NO. OF WIRES IN CIRCUIT
	POLE MOUNTED LUMINAIRE, 30' MTG. HT. 250W HIGH PRESS. SODIUM LAMP, 480V, TYPE 'R'	N.I.C.	NOT IN CONTRACT
	WALL MOUNTED LUMINAIRE, 15' MTG. HT. 250W HIGH PRESSURE SODIUM LAMP, 480V, TYPE 'N'	PC	PHOTOELECTRIC CELL
	WALL MOUNTED LUMINAIRE, 15' MTG. HT. 150W HIGH PRESSURE SODIUM LAMP, 480V, TYPE 'P'	TC	TIME CLOCK
			TOP HALF - DETAIL NO. BOTTOM HALF - SHEET NO.

DATE	
SURVEY PLOTTED BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	

6-7-78	CHANGE LAMP TYPES FOR WALL LUMINAIRES
DATE	REVISION



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HIGHWAYS DIVISION

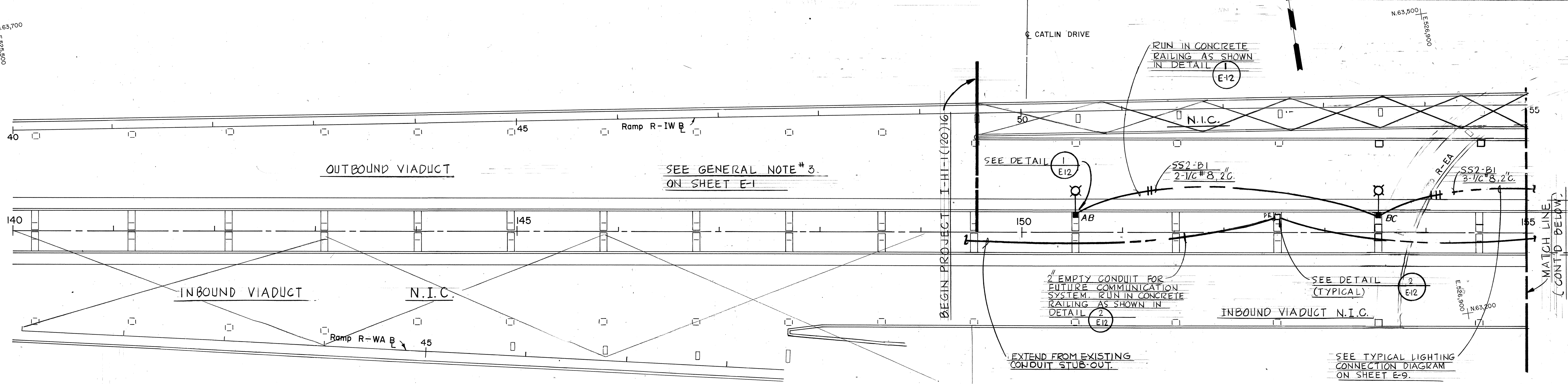
ROADWAY LIGHTING
ELECTRICAL KEY PLAN AND
SYMBOL LIST

AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(120)16

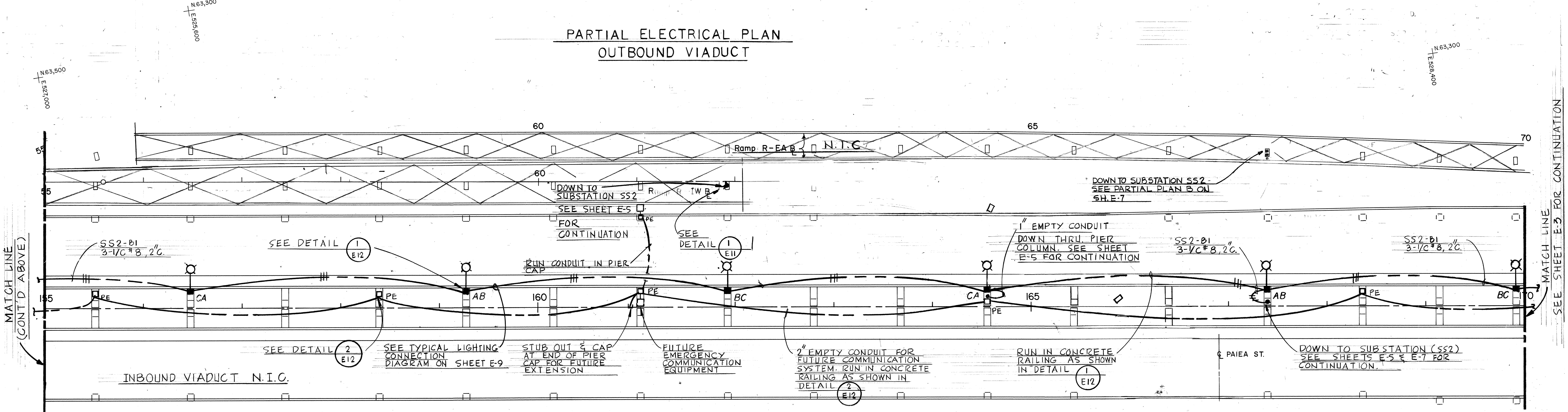
SCALE: AS SHOWN DATE: NOV. 1, 1975

SHEET No. 1 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)16	1976	46	173



PARTIAL ELECTRICAL PLAN
OUTBOUND VIADUCT



PARTIAL ELECTRICAL PLAN
OUTBOUND VIADUCT

DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
TRACED BY	_____
NOTE BOOK	_____
CHECKED BY	_____
No.	_____



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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

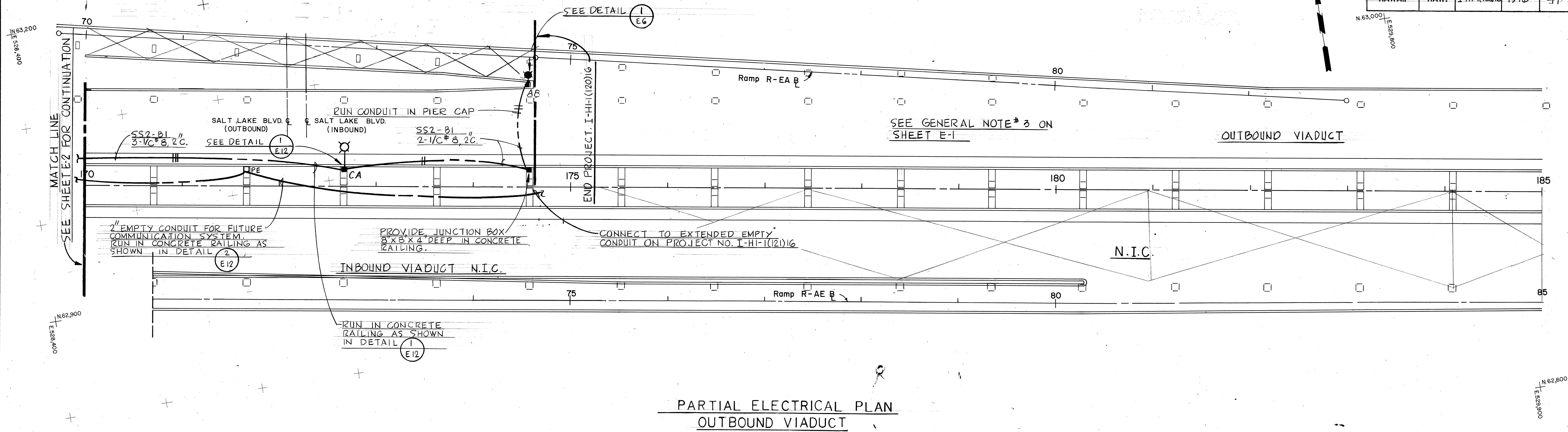
ROADWAY LIGHTING
OUTBOUND VIADUCT ST. 149+53
TO 170+00

AIRPORT INTERCHANGE
F.A.I. PROJ. NO I-HI-1(120)16

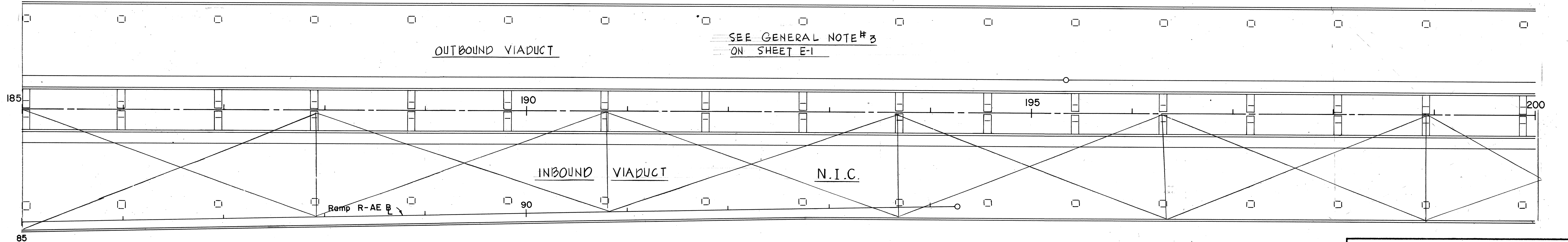
SCALE: 1"=50' DATE: NOV. 1, 1975

SHEET No. 2 OF 19 SHEETS

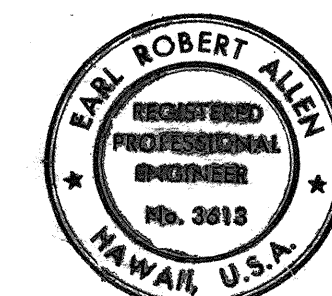
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)16	1976	47	173



PARTIAL ELECTRICAL PLAN
OUTBOUND VIADUCT



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



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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY LIGHTING
OUTBOUND VIADUCT ST. 170+00
TO 174+70

AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(120)16

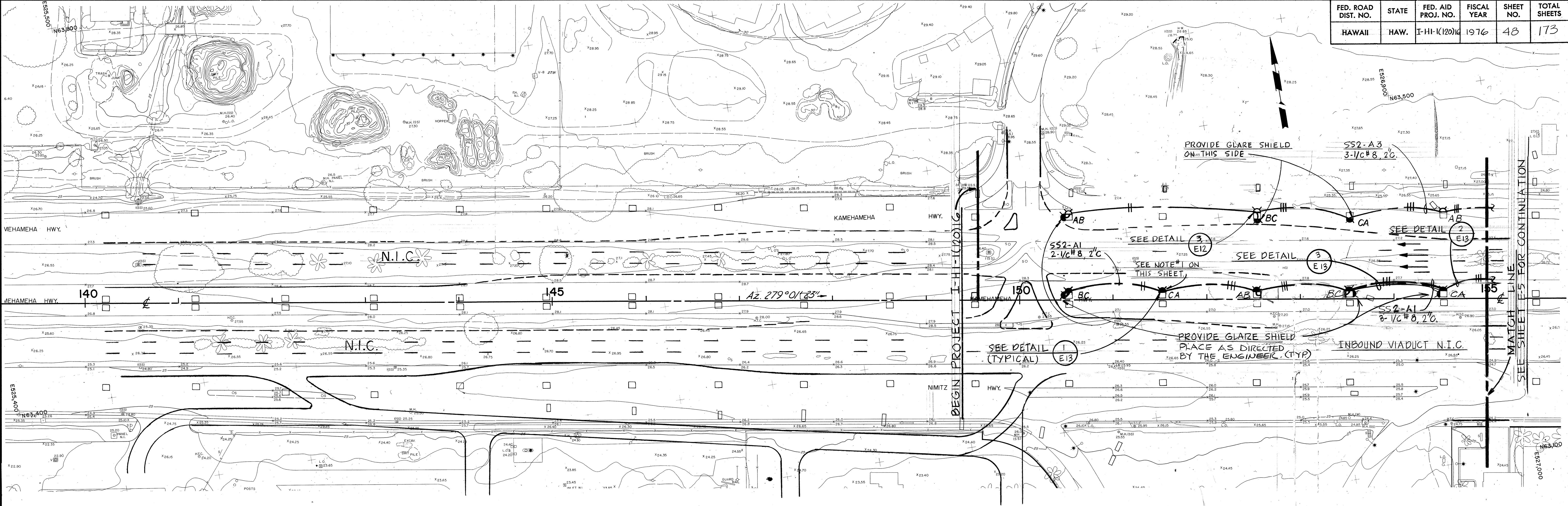
SCALE: 1"=50' DATE: NOV. 1, 1975

SHEET No. 3 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)16	1976	48	173

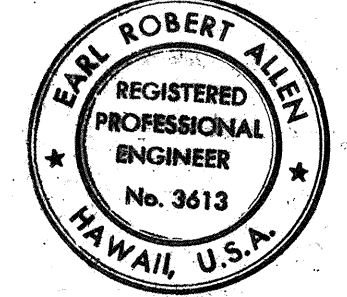
PLAN	DATE	BY
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PROFILE	DATE	BY
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PARTIAL ELECTRICAL PLAN
OUTBOUND FRONTAGE ROAD AND BIKE PATH

NOTE: 1. THE LUMINAIRE 'N' SHALL BE SO DESIGNED THAT THE GLARE SHIELD CAN BE MOVED TO OTHER SIDE AS WILL BE REQUIRED IN FUTURE CONTRACTS. FOR ALL LUMINAIRES ON MAUKA SIDE OF E COLUMNS PLACE GLARE SHIELDS ON EWA SIDE. ALL OTHERS AS DIRECTED BY THE ENGINEER.



Emil R. Allen
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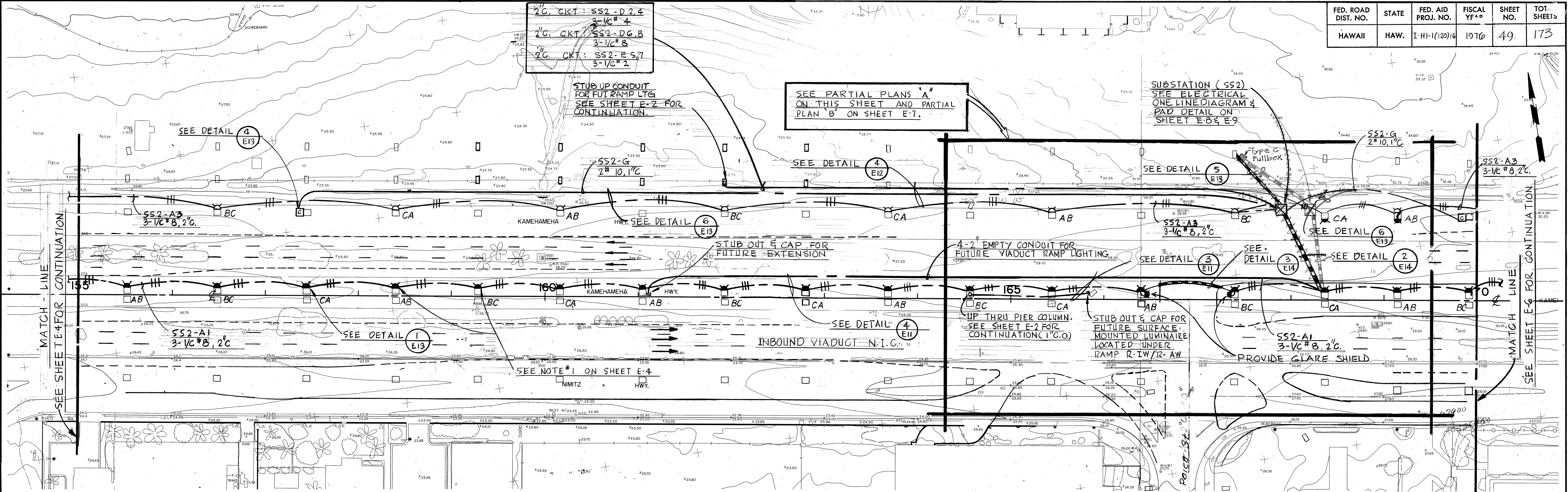
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY LIGHTING
OUTBOUND FRONTAGE ROAD
ST. 149+53 TO 155+00
AIRPORT INTERCHANGE
F.A.J. PROJ. NO. I-HI-1(120)16

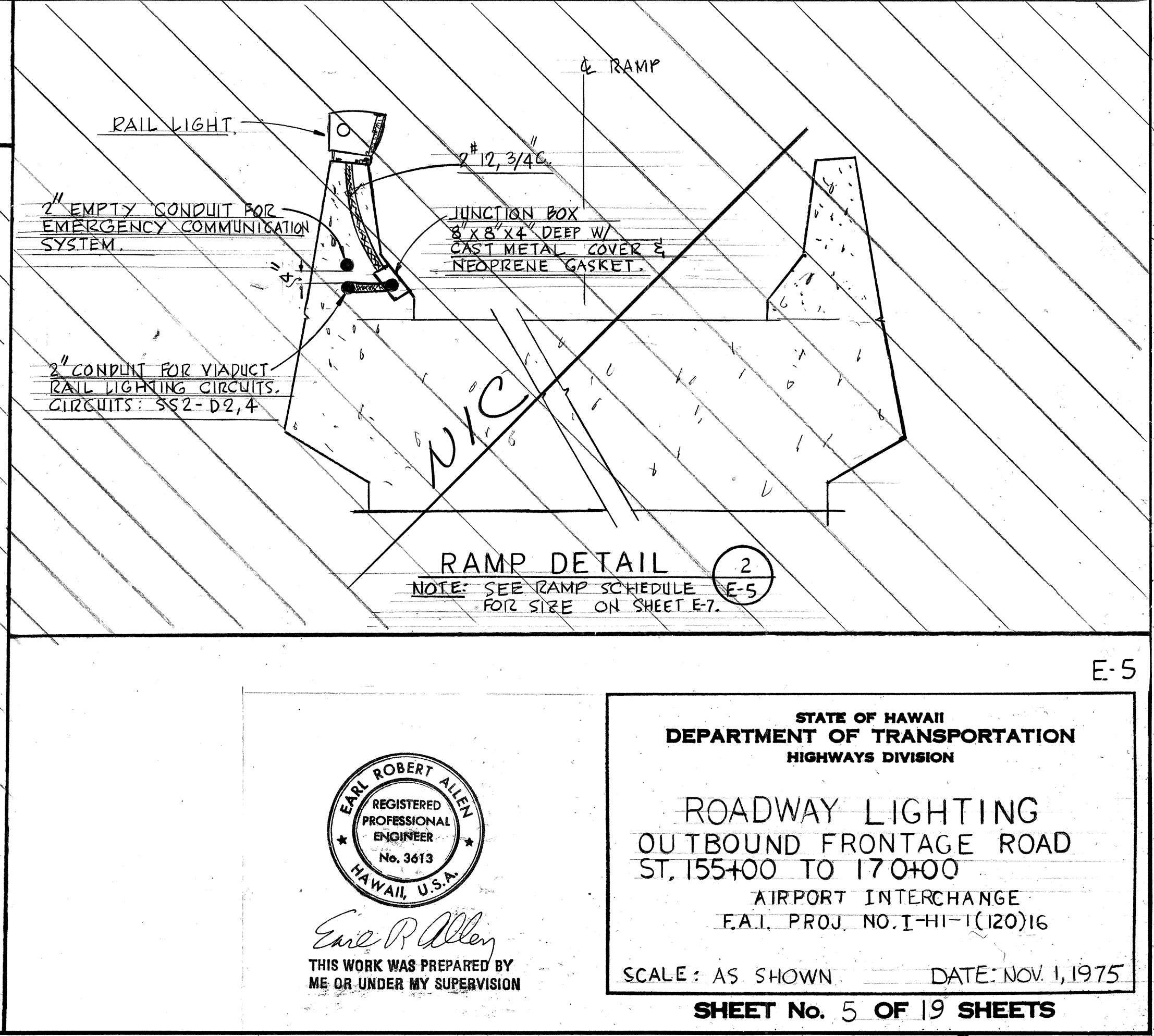
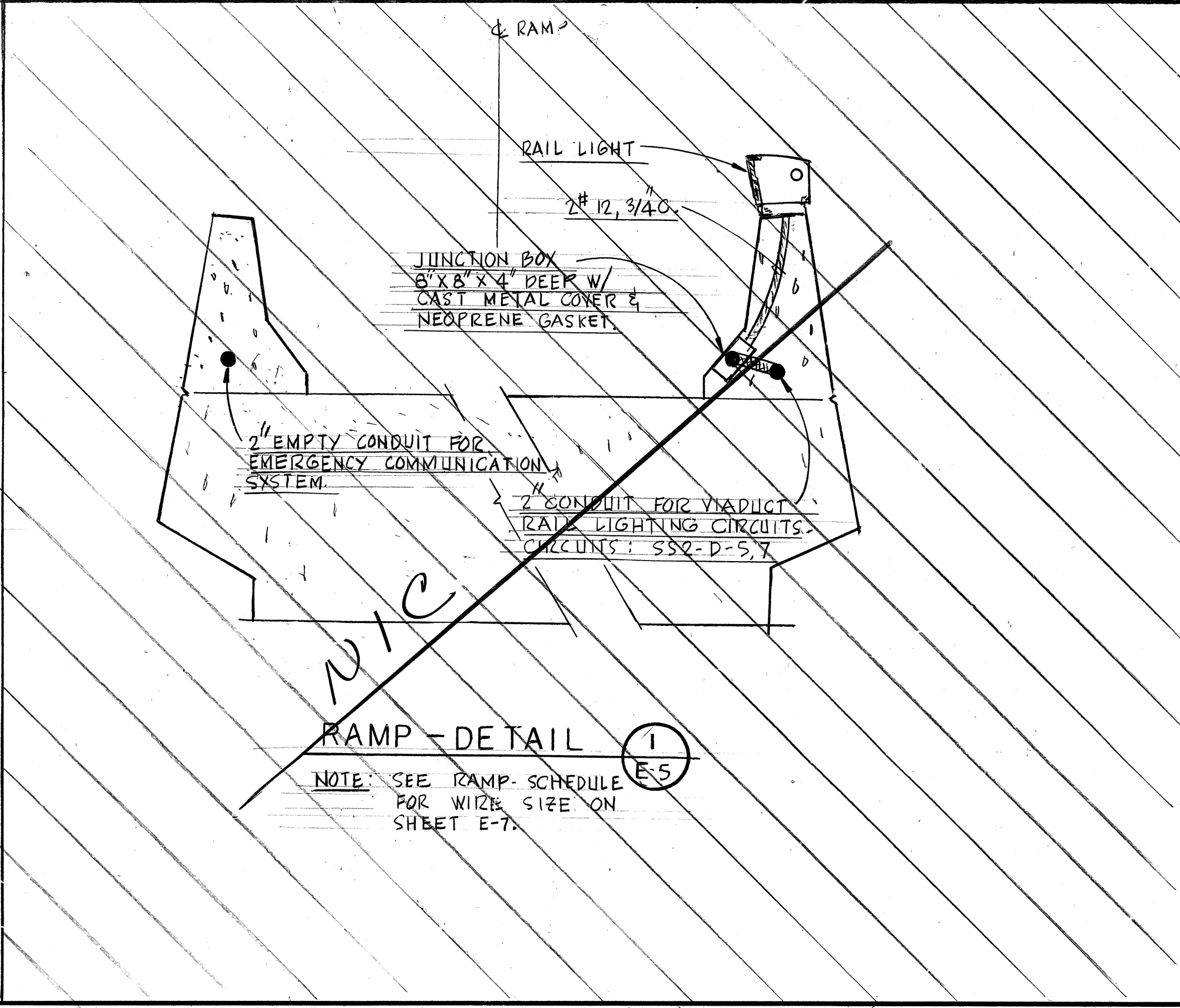
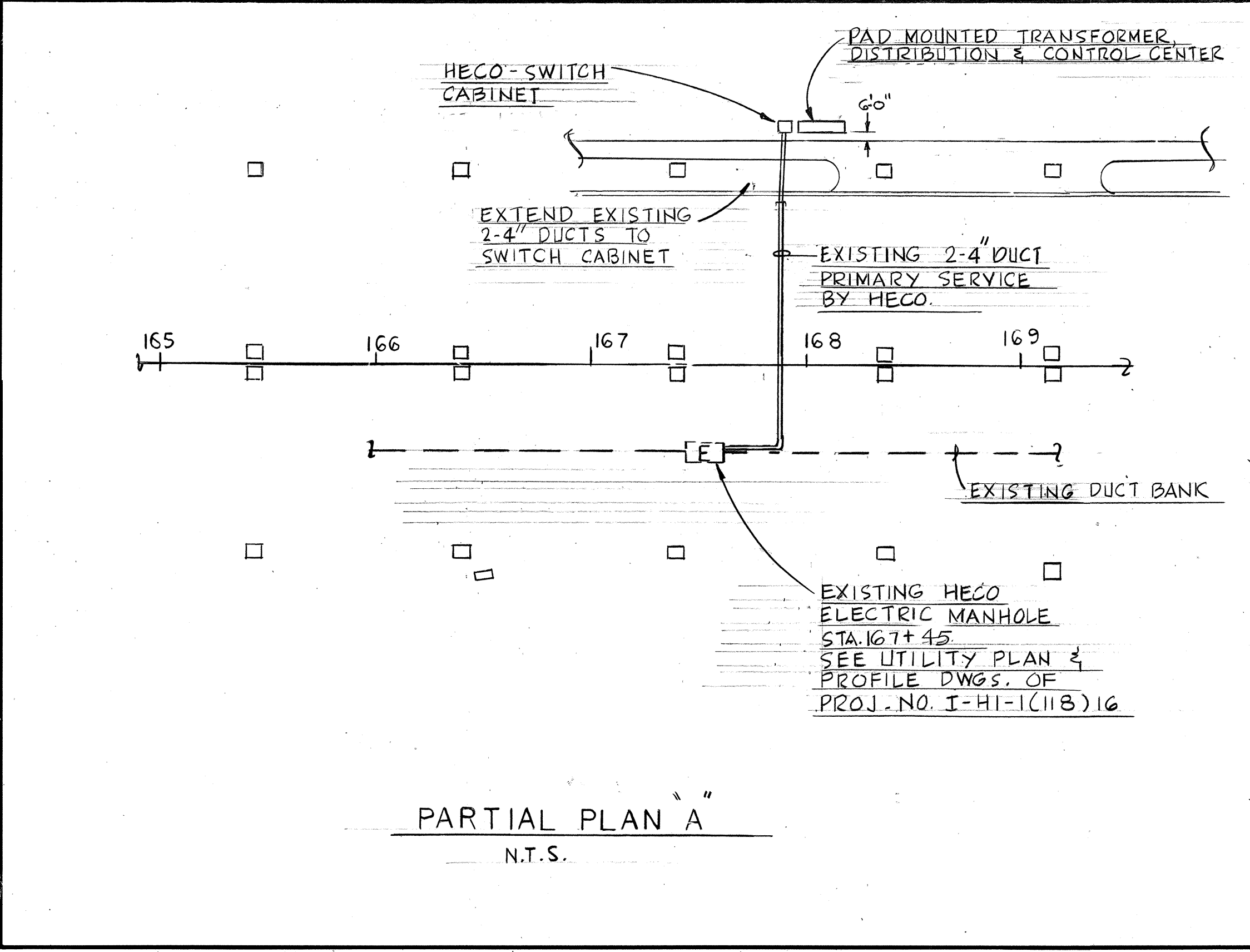
SCALE: 1"=50' DATE: NOV. 1, 1975

SHEET No. 4 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YFAD	SHEET NO.	TOT. SHEETS
HAWAII	HAW.	I-HI-1(120)16	1976	49	173



PARTIAL ELECTRICAL PLAN
OUTBOUND FRONTAGE ROAD AND BIKE PATH
SCALE: 1" = 50'



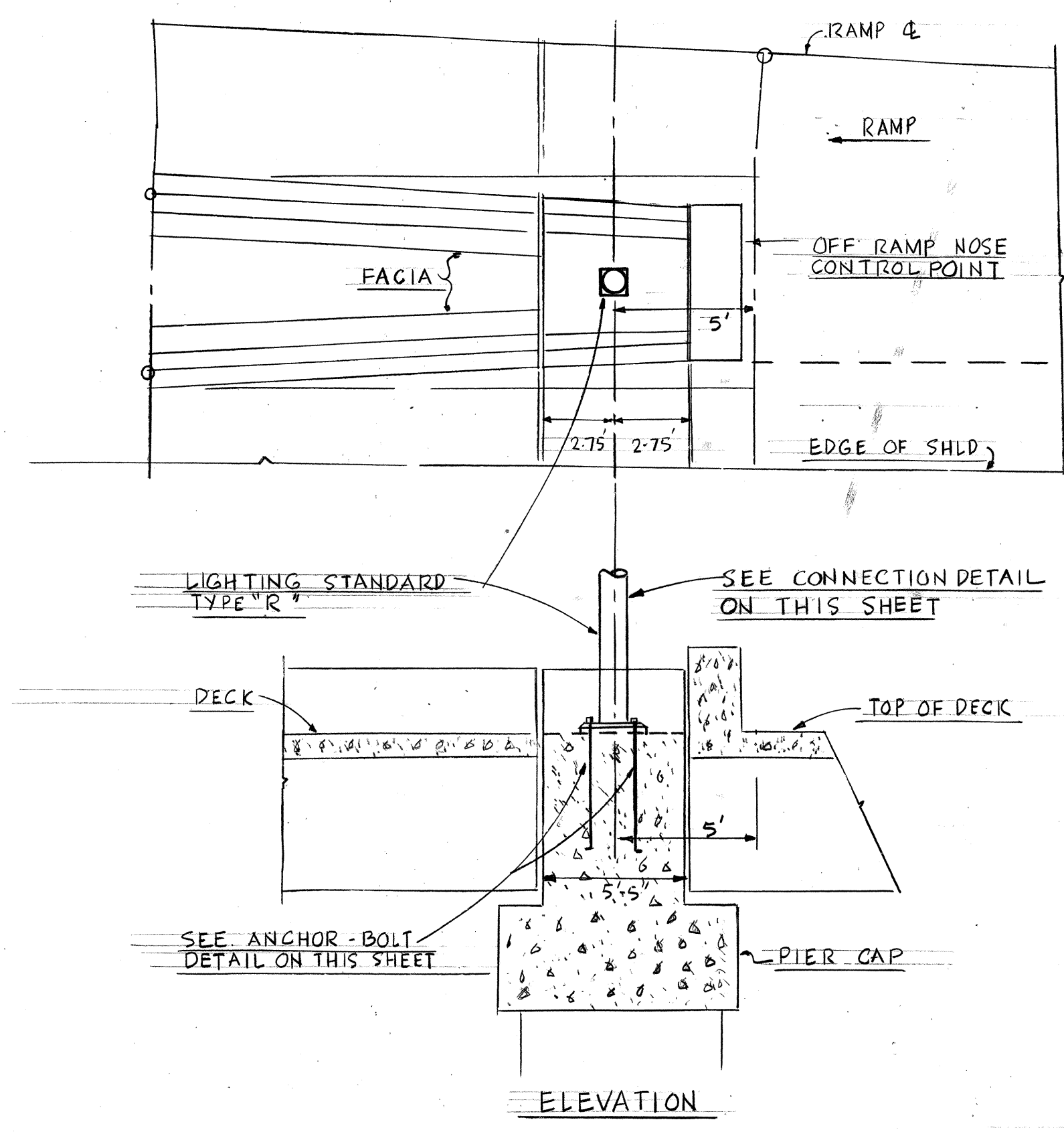
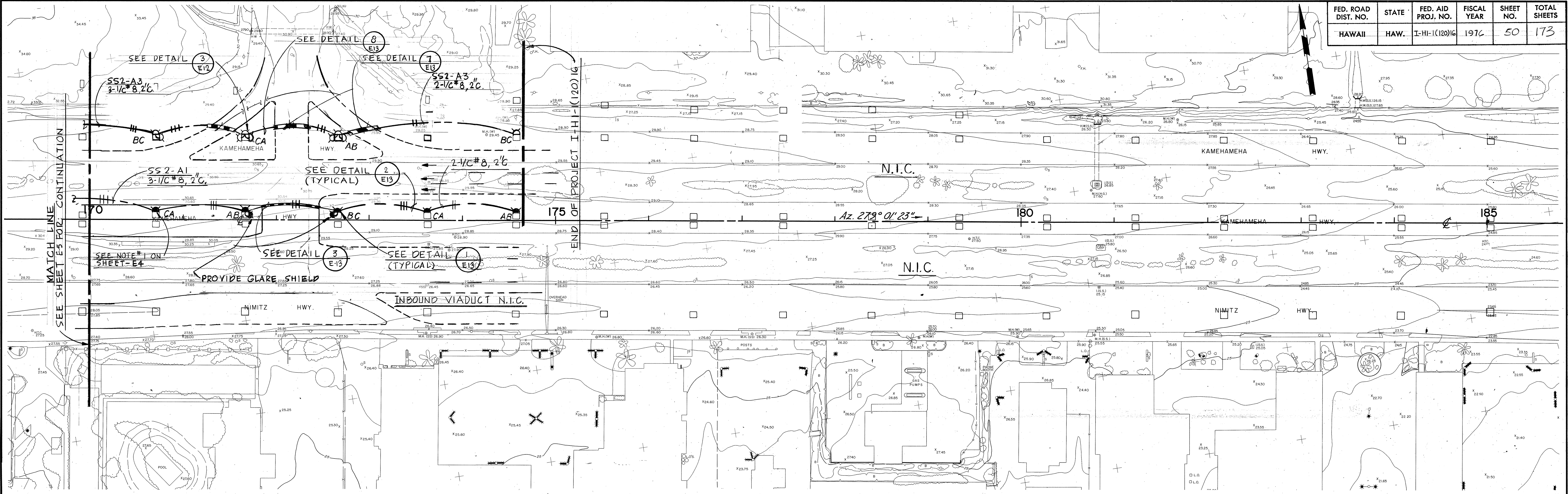
PLAN	DATE	BY	REVISION
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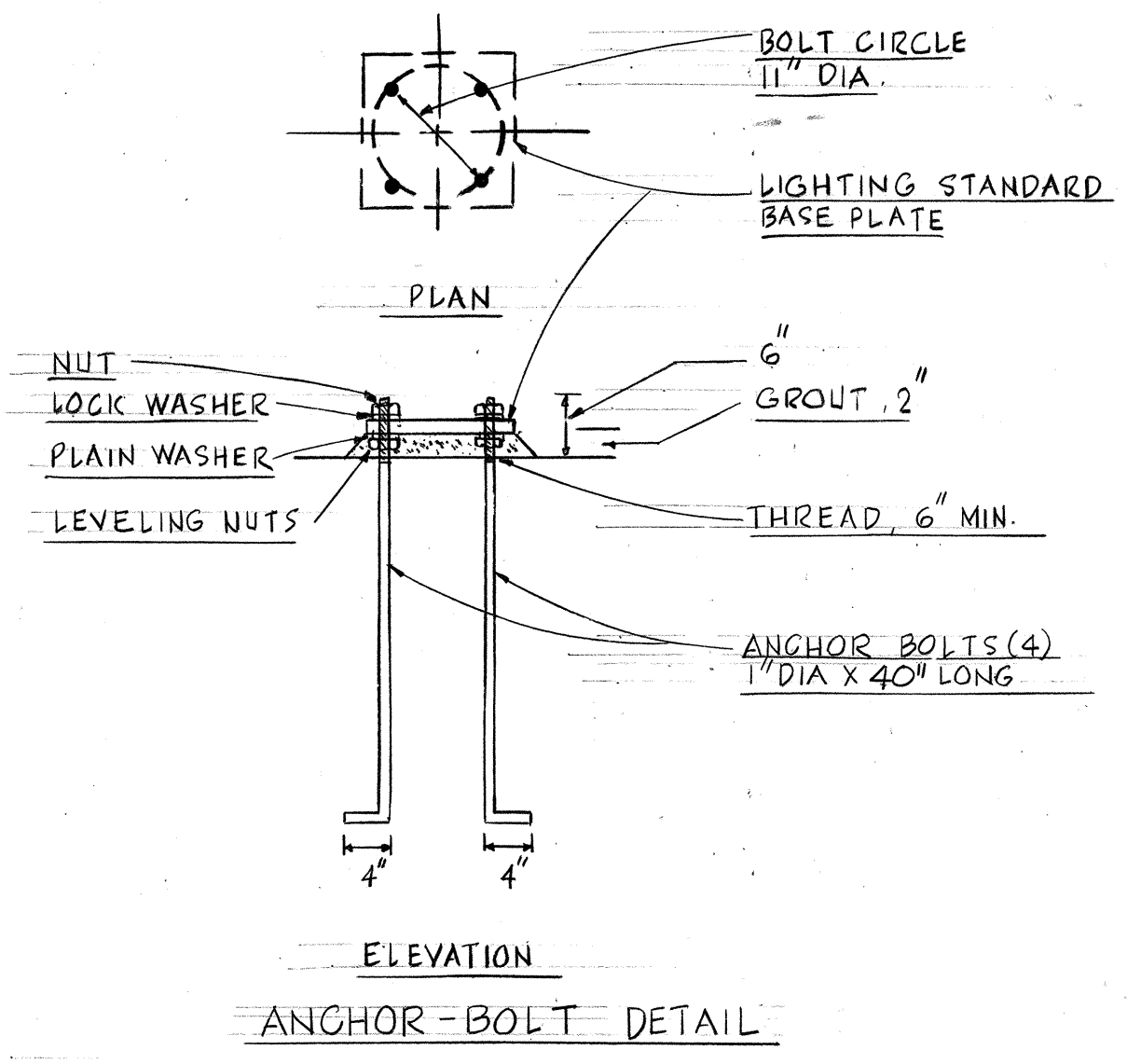
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)16	1976	50	173

PLAN	DATE	BY
SURVEYED		
PLOTTED		
NOTE BOOK		
GRADES CHECKED		
RT. OF WAY CHECKED		

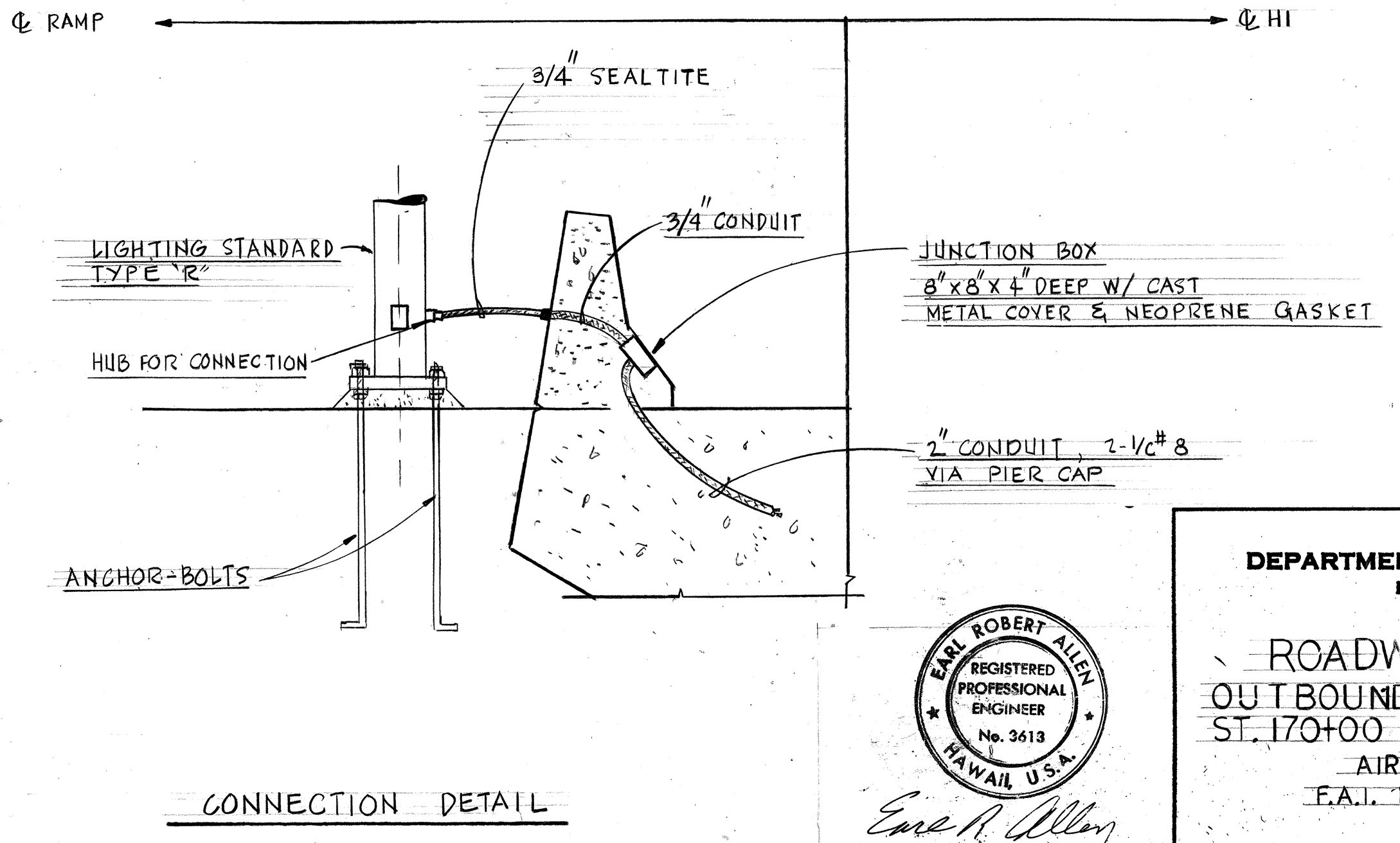
PROFILE	DATE	BY
SURVEYED		
PLOTTED		
NOTE BOOK		
GRADES CHECKED		
STRUCTURE NOTATIONS OK'D		



PARTIAL ELECTRICAL PLAN
OUTBOUND FRONTAGE ROAD AND BIKE PATH
SCALE: 1"=50'-0"



LUMINAIRE TYPE "R" - MOUNTING DETAIL
N.T.S.



CONNECTION DETAIL



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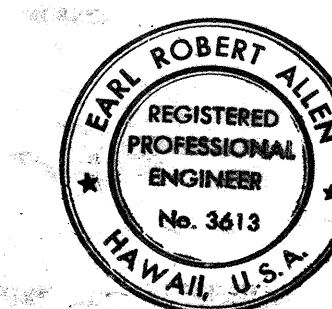
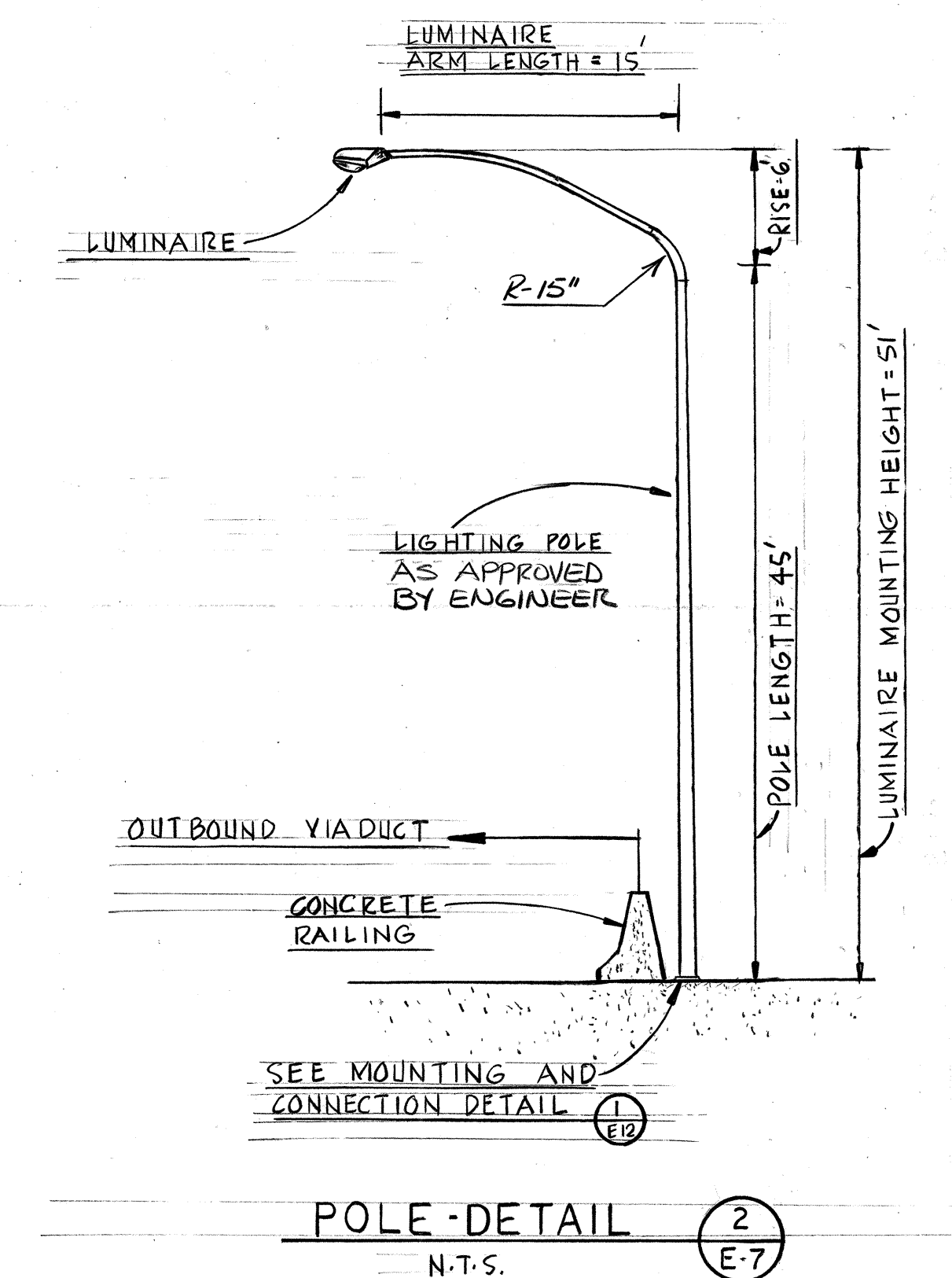
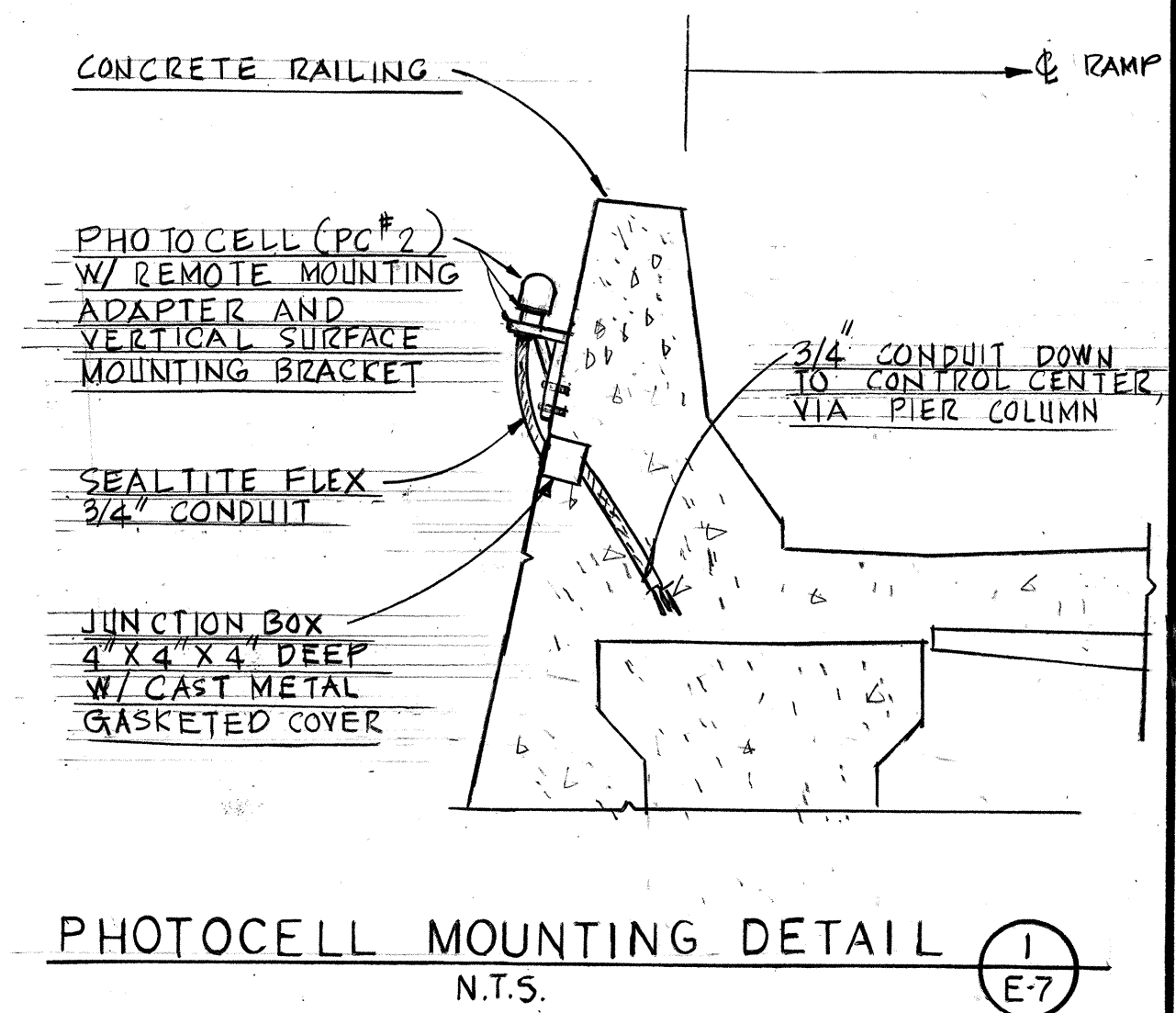
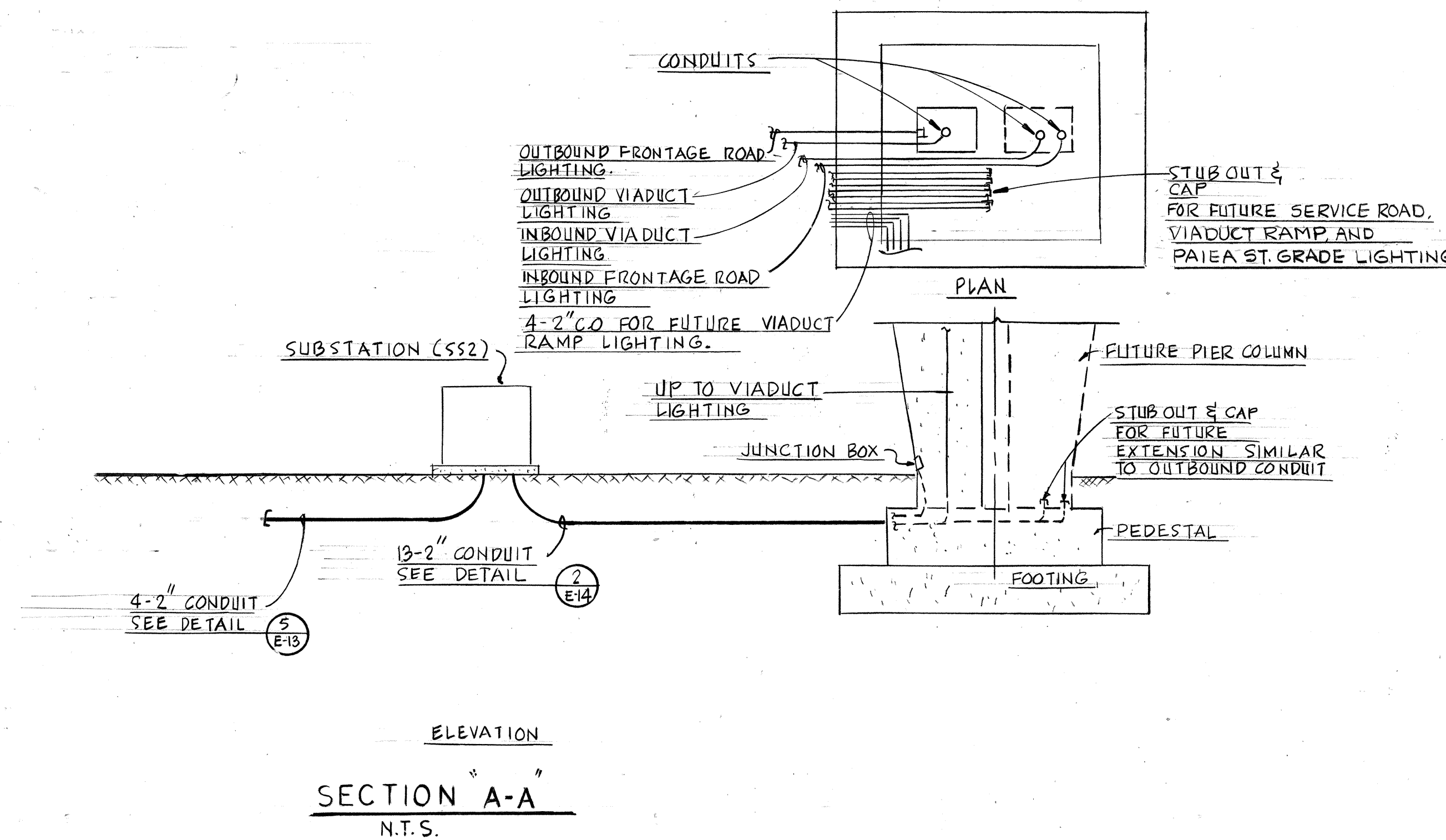
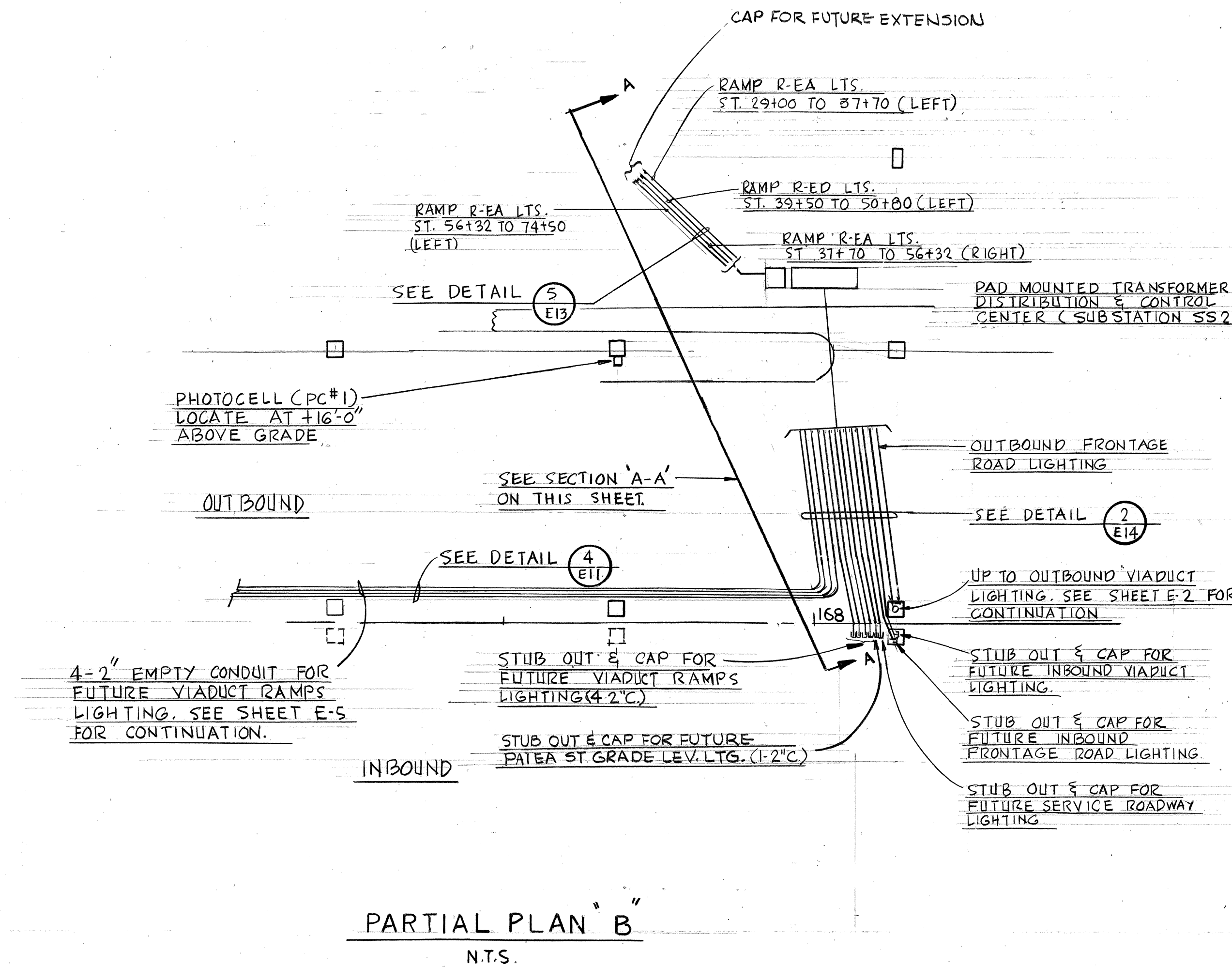
ROADWAY LIGHTING
OUTBOUND FRONTAGE ROAD
ST. 170+00 TO 174+70
AIRPORT INTERCHANGE
E.A.I. PROJ. NO. I-HI-1(120)16

SCALE: AS SHOWN
DATE: NOV. 1, 1975

SHEET No. 6 OF 19 SHEETS

CIRCUIT SCHEDULE FOR FUTURE RAMP LIGHTING

RAMP	CKT. NO.	FEEDER SIZE FROM SUBSTATION TO FIRST RAIL LT.		FEEDER SIZE FROM FIRST RAIL LT. TO LAST RAIL LT.
		WIRE SIZE	STATION	
R-EA, STA. 29+00 TO ST. 37+70 (LEFT)	SS2-C-1,3	3-1/2" #1	STA. 37+70	3-1/2" #6
R-WA, STA. 36+60 TO ST. 45+60 (LEFT)	SS2-C-5,7	3-1/2" #2	STA. 45+60	3-1/2" #6
R-WI, STA. 35+50 TO 54+00 (RIGHT)	SS2-C-9,11	3-1/2" #2/0	STA. 54+00	3-1/2" #2
R-WD, STA. 40+60 TO 54+00 (LEFT)	SS2-C-2,4	3-1/2" #1	STA. 54+00	3-1/2" #6
R-ED, STA. 39+50 TO 50+80 (LEFT)	SS2-C-6,8	3-1/2" #2	STA. 50+80	3-1/2" #6
R-WA, STA. 29+00 TO 41+60 (RIGHT)	SS2-C-10,12	3-1/2" #2/0	STA. 41+60	3-1/2" #4
R-EA, STA. 37+70 TO 56+32 (RIGHT)	SS2-D-1,3	3-1/2" #1	STA. 56+00	3-1/2" #2
R-EA, STA. 56+32 TO 74+50 (RIGHT)	SS2-D-5,7	3-1/2" #8	STA. 67+40	3-1/2" #10
R-IW, STA. 49+50 TO 62+08 (LEFT)	SS2-D-2,4	3-1/2" #4	STA. 61+90	3-1/2" #6
R-AW, STA. 63+60 TO 69+50 (LEFT)	SS2-D-6,8	3-1/2" #8	STA. 62+08	3-1/2" #6
R-IW, STA. 62+08 TO 63+60 (LEFT)	SS2-D-6,8	3-1/2" #8	STA. 62+08	3-1/2" #6
R-IW, STA. 63+60 TO 69+50 (RIGHT)	SS2-D-6,8	3-1/2" #8	STA. 62+08	3-1/2" #6
R-IF, STA. 72+54 TO 85+60 (LEFT)	SS2-E-1,3	3-1/2" #4	STA. 63+20	3-1/2" #6
R-AE, STA. 63+20 TO 66+60 (RIGHT)	SS2-E-1,3	3-1/2" #4	STA. 63+20	3-1/2" #6
R-IW, STA. 68+40 TO 85+30 (LEFT)	SS2-E-5,7	3-1/2" #2	STA. 68+40	3-1/2" #6
R-AE, STA. 68+60 TO 80+30 (RIGHT)	SS2-E-2,4	3-1/2" #4	STA. 69+00	3-1/2" #8
R-AW, STA. 68+40 TO 76+00 (RIGHT)	SS2-E-6,8	3-1/2" #4	STA. 68+40	2-1/2" #6
R-PF, STA. 70+80 TO 79+00 (LEFT)	SS2-E-6,8	3-1/2" #4	STA. 68+40	2-1/2" #6
R-AW (LEFT)	SS2-E-10	2-1/2" #6	STA. 77+20	2-1/2" #8



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ROADWAY LIGHTING
ELECTRICAL DETAILS

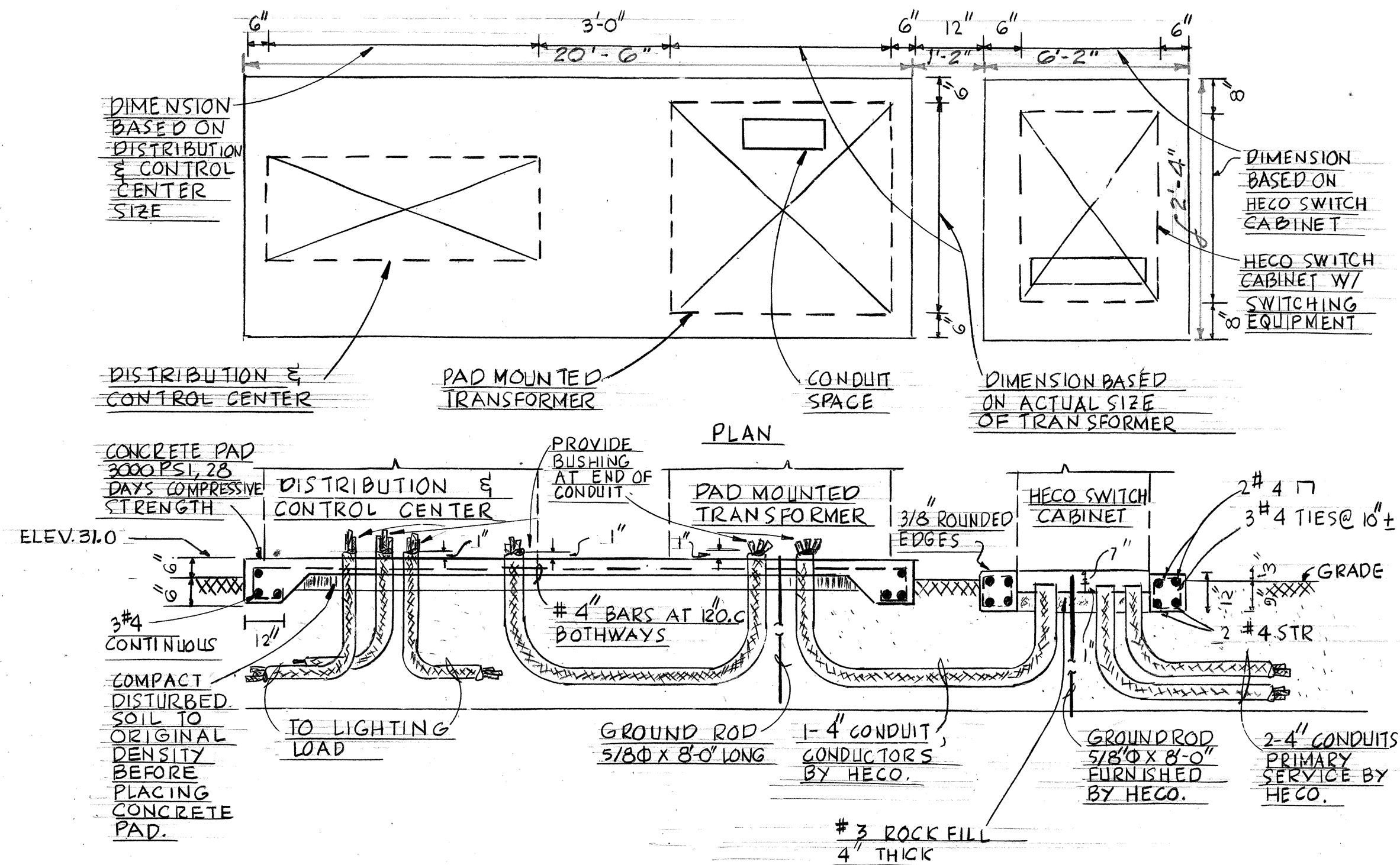
AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(120)16

SCALE: AS SHOWN DATE: NOV. 1, 1975

SHEET No. 7 OF 19 SHEETS

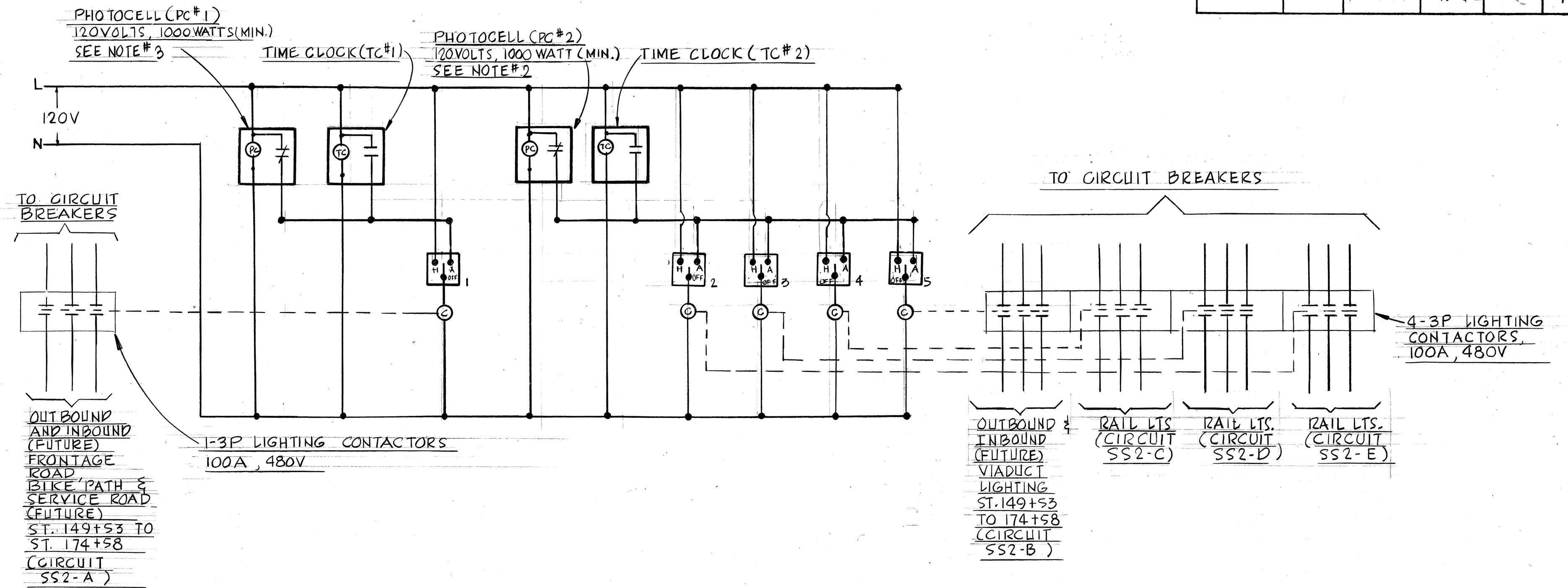
DATE
SURVEY PLOTTED BY
DRAWN BY
DESIGNED BY
NOTE BOOK
QUANTITIES BY
CHECKED BY
No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)16	1976	56	173



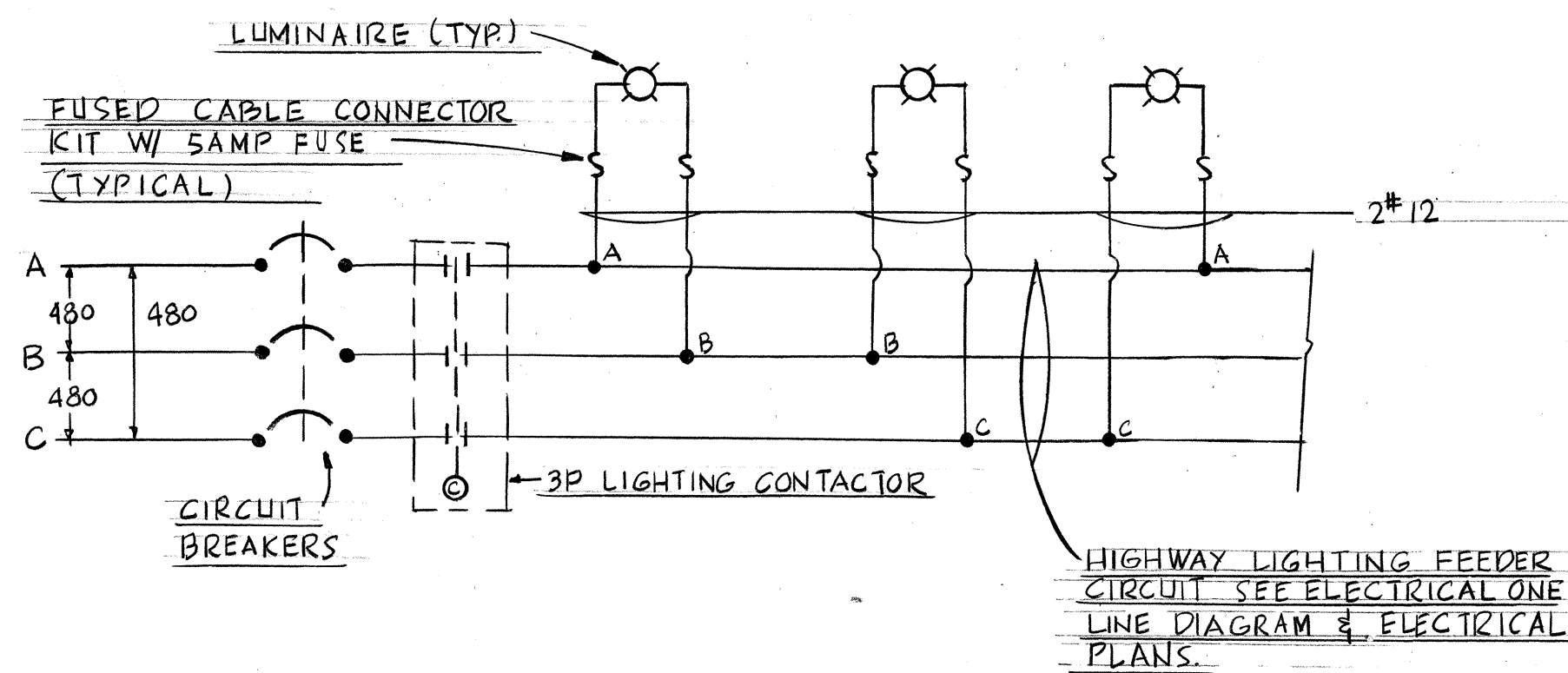
SUBSTATION PAD DETAIL

- NOTES: 1. PROVIDE ANCHOR BOLTS AND CONDUITS FOR TRANSFORMER AT LOCATIONS AS RECOMMENDED BY MANUFACTURER.
2. PROVIDE ANCHOR BOLTS AND CONDUITS FOR HECO SWITCH CABINET AT LOCATIONS AS RECOMMENDED BY MANUFACTURER & HECO.

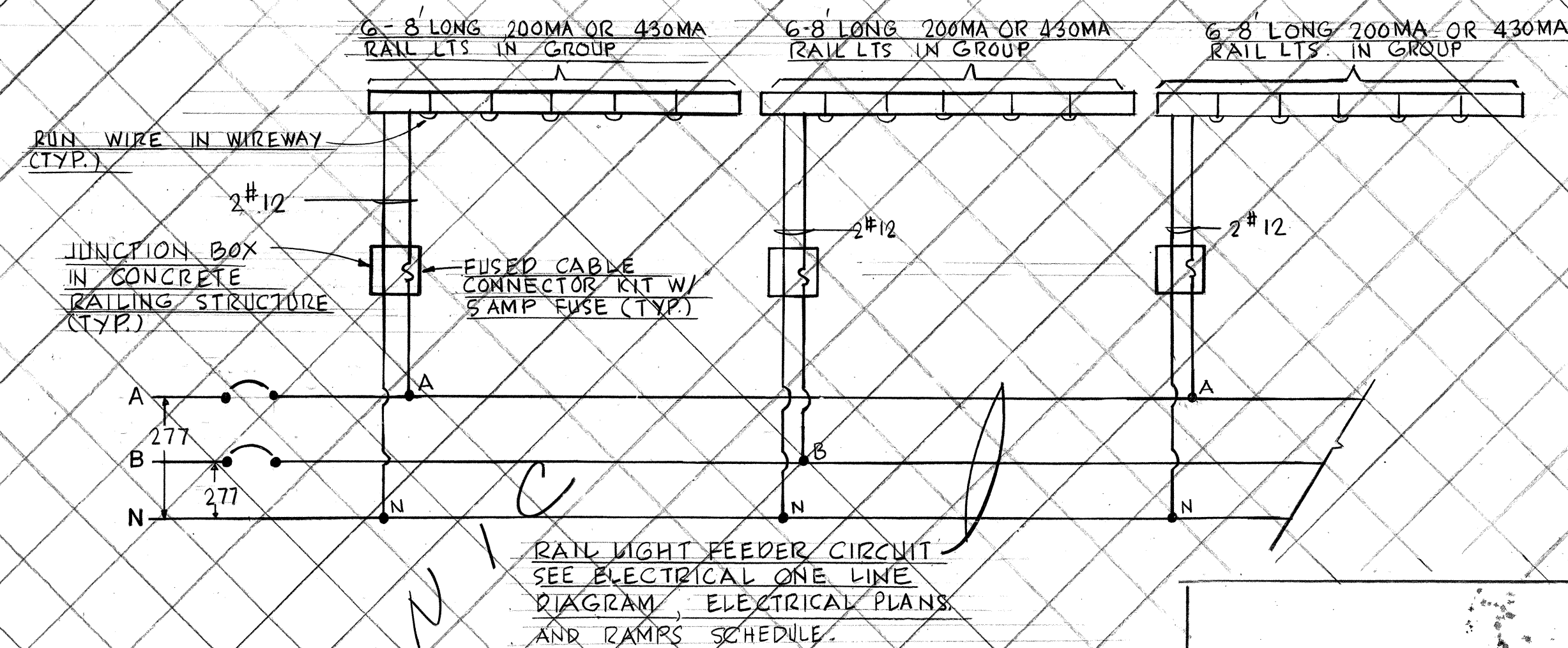


LIGHTING CONTROL DIAGRAM

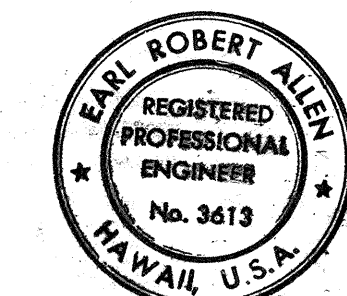
- NOTES: 1. SEE ELECTRICAL ONE LINE DIAGRAM ON SHEET E-8.
2. INSTALL PHOTOCELL (PC#2) ON EDGE OF RAILING, FACING NORTH SIDE.
3. INSTALL PHOTOCELL (PC#1) ON PIER COLUMN AT +16'-0" ABOVE GRADE.



TYPICAL LIGHTING CONNECTION DIAGRAM VIADUCT AND FRONTAGE ROAD



TYPICAL RAIL LIGHT CONNECTION DIAGRAM



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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

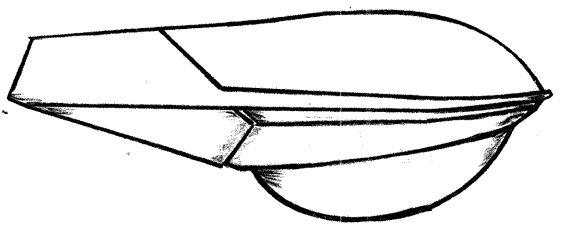
ROADWAY LIGHTING ELECTRICAL DETAILS

AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(120)16

SCALE: NONE DATE: NOV. 1, 1975

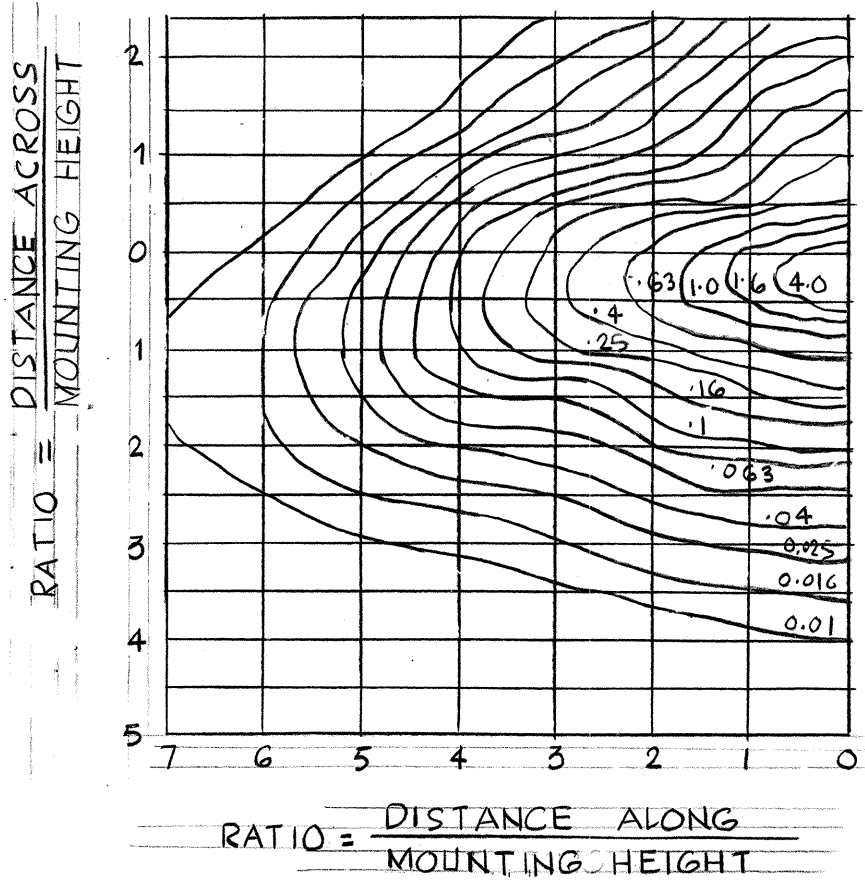
SHEET No. 9 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(120)16	1976	54	173

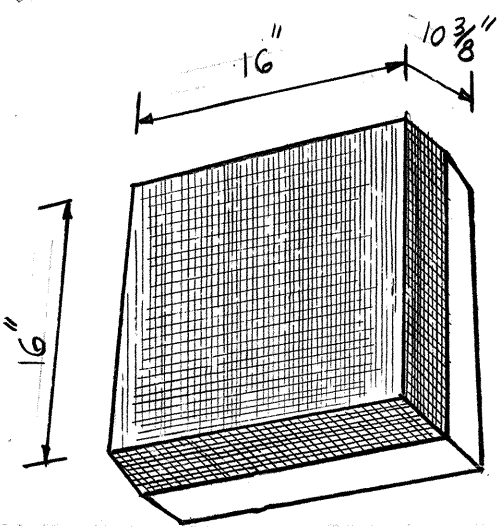


TYPE "R" FIXTURE
VIADUCT LUMINAIRE

MOUNTING HEIGHT : 30'
WATTAGE : 250W
LAMP : LU 250/BD, E-18 BULB
LUMENS @ INITIAL : 25,500 LUMENS

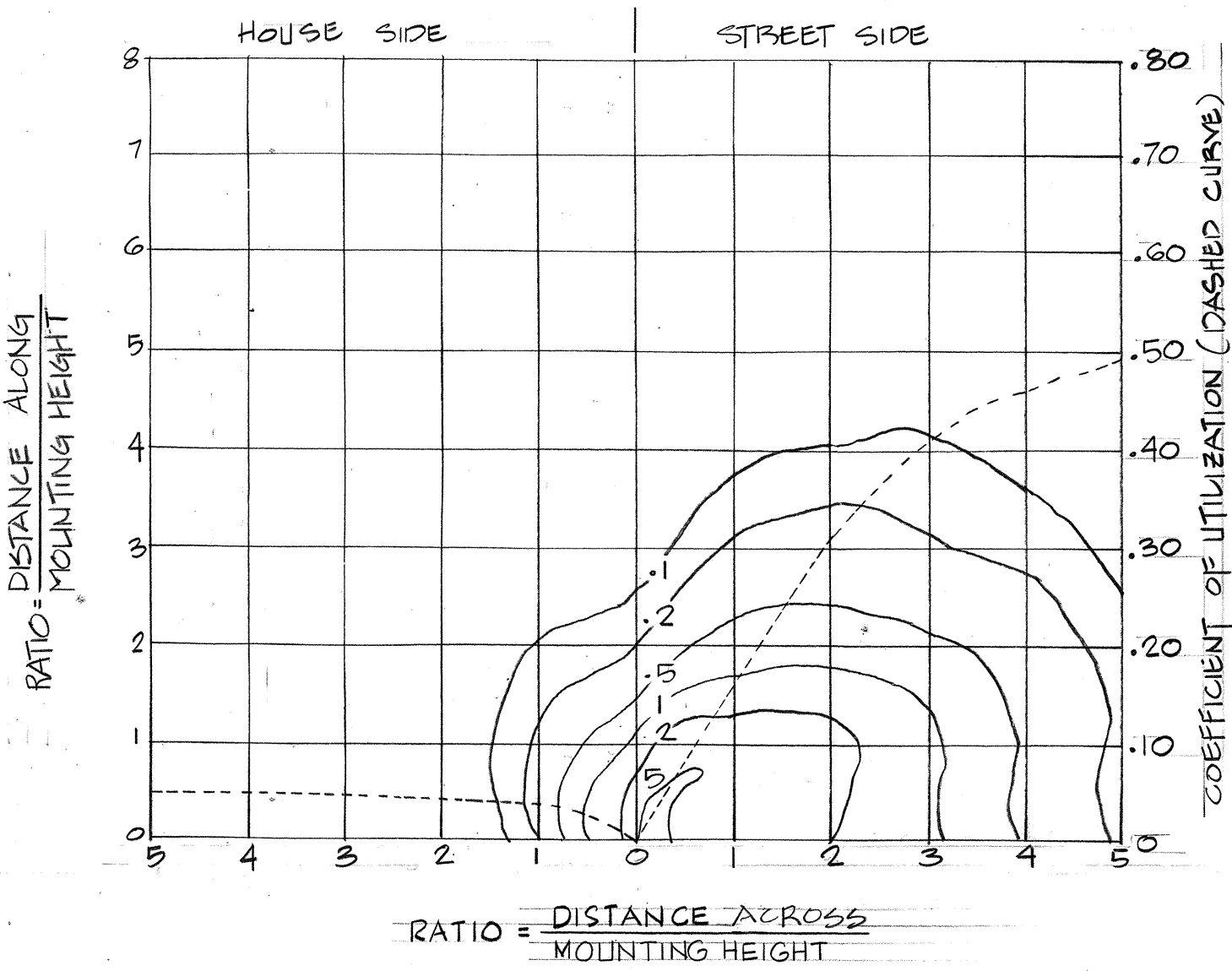


ISOFOOTCANDLE DIAGRAM

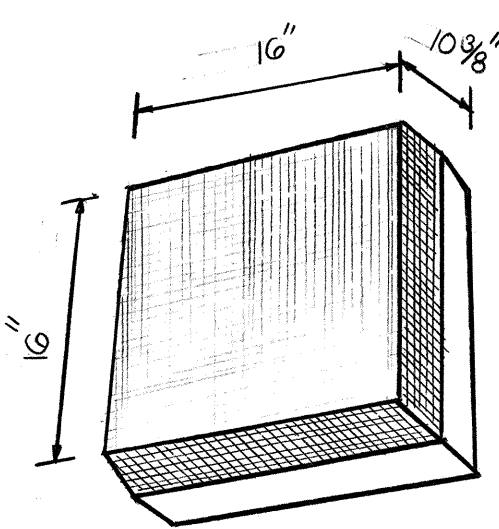


TYPE "P" FIXTURE
WALL MOUNTED LUMINAIRE

MOUNTING HEIGHT : 15'
WATTAGE : 150W
LAMP : LU 150 (HP2)
LUMENS @ INITIAL : 16,000 LUMENS

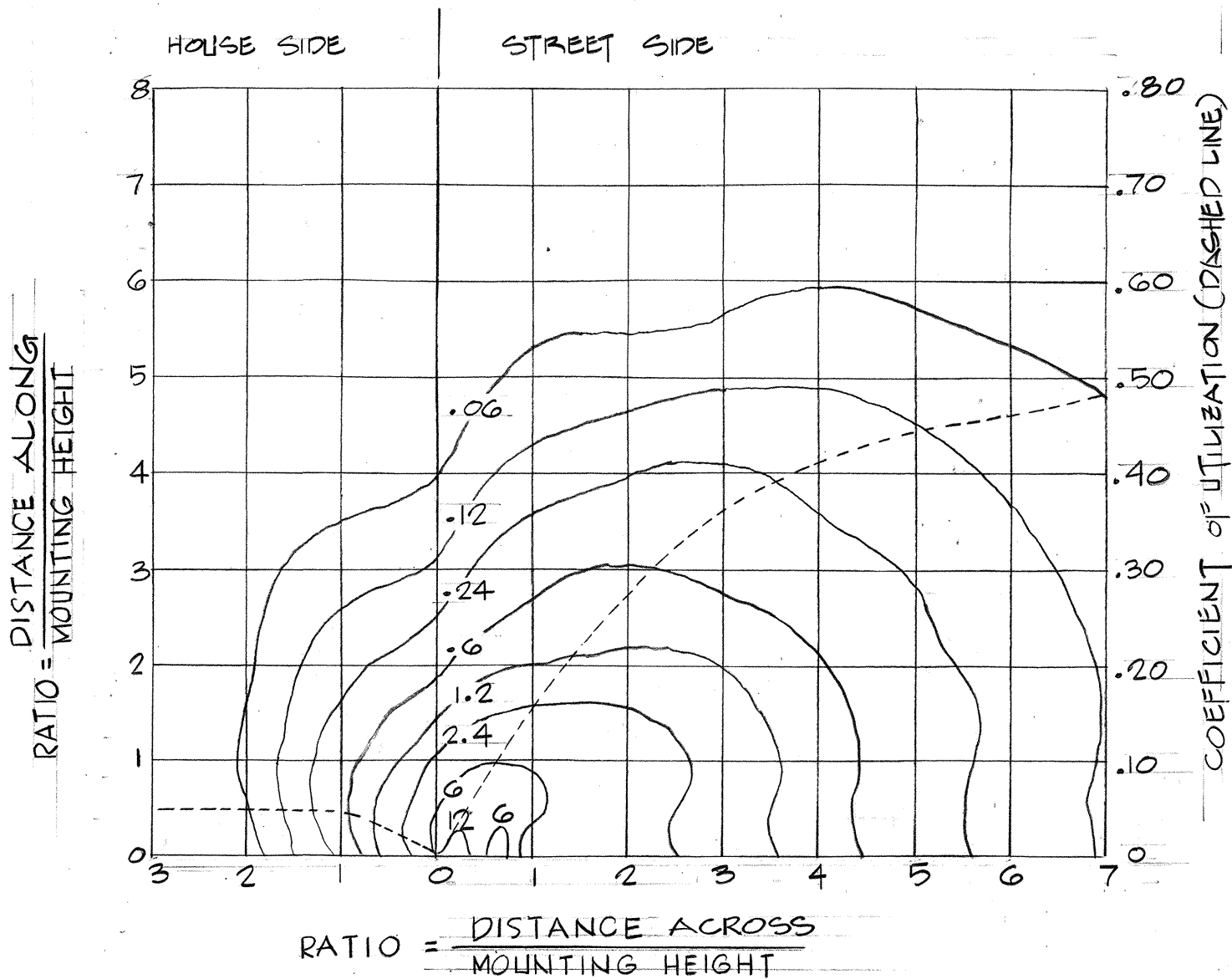


ISOFOOTCANDLE DIAGRAM



TYPE "N" FIXTURE
WALL MOUNTED LUMINAIRE

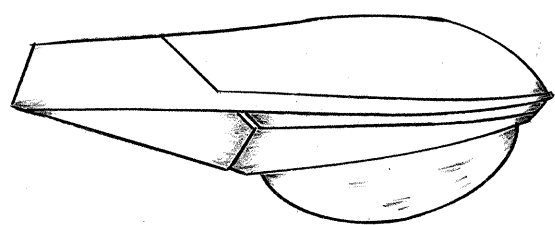
MOUNTING HEIGHT : 15'
WATTAGE : 250W
LAMP : LU 250 (HP2)
LUMENS @ INITIAL : 30,000 LUMENS
SHIELDED ONE SIDE



ISOFOOTCANDLE DIAGRAM

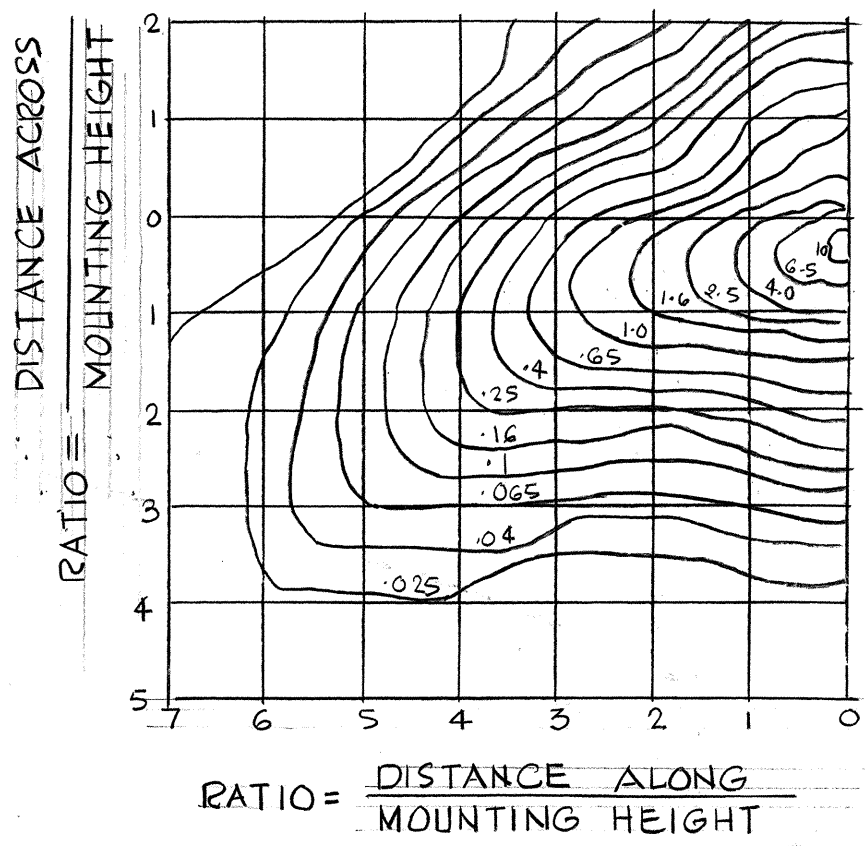
NOTES:

- CONTRACTOR, AT HIS OPTION, MAY REPLACE EXIST LUMINAIRES, WITH NEW LUMINAIRES OR REPLACE BALLASTS, OPTICAL ASSEMBLIES AND LAMPS, WHICHEVER IS LESS EXPENSIVE.
- IF EXISTING LUMINAIRES ARE REPLACED, RETURN EXISTING LUMINAIRES TO STATE OF HAWAII. IF PARTS ARE REPLACED RETURN REMOVED PARTS TO THE STATE.



TYPE "M" FIXTURE
VIADUCT LUMINAIRE

MOUNTING HEIGHT : 50'
WATTAGE : 400W
LAMP : LU 400/BD, E-18 BULB
LUMENS @ INITIAL : 50,000 LUMENS



ISOFOOTCANDLE DIAGRAM

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



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ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

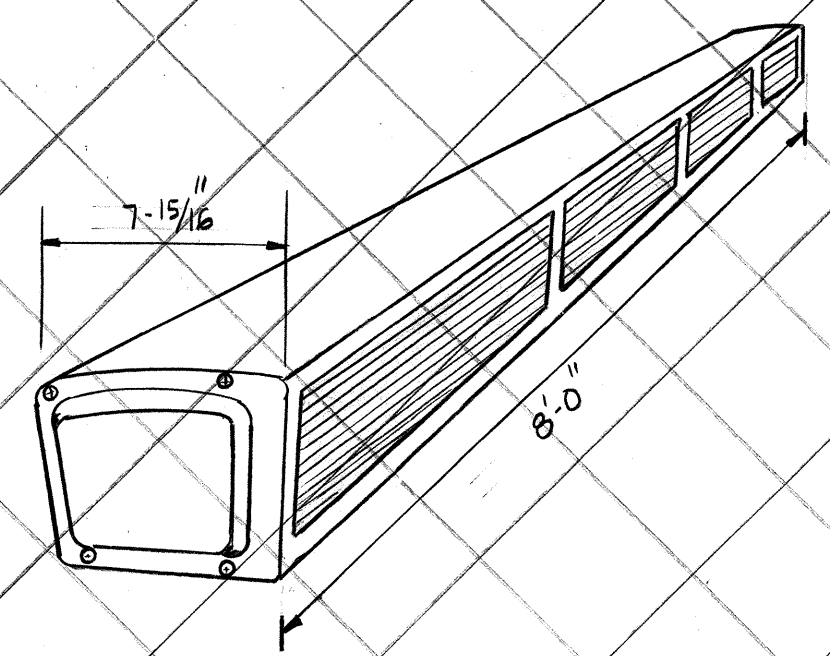
ROADWAY LIGHTING
ELECTRICAL DETAILS

AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-H-1(120)16

SCALE: NONE DATE: NOV. 1, 1975

SHEET No. 10 OF 1 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)16	1976	55	173



TYPE "S" FIXTURE

GUARDRAIL MOUNTED LUMINAIRE

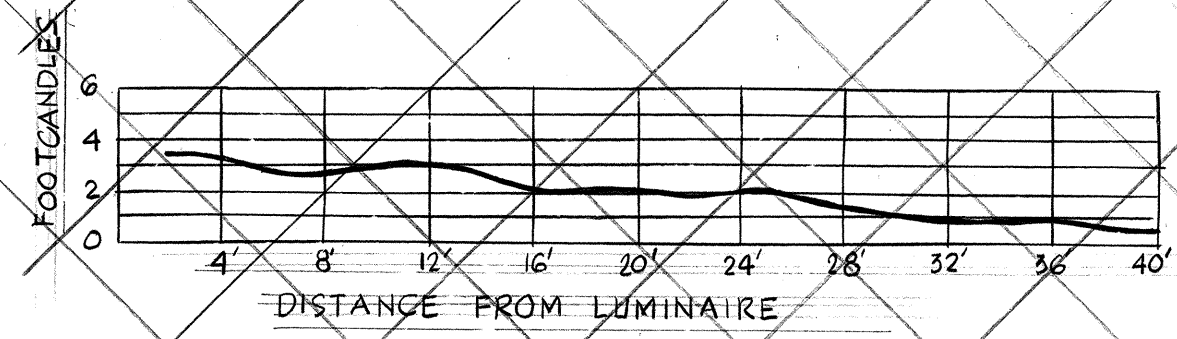
MOUNTING HEIGHT: 33" TO CENTERLINE
WATTAGE: 430MA-11.6W/FT
LAMP: FA96-T12/CW/HO-30

TYPE "T" FIXTURE

GUARDRAIL MOUNTED LUMINAIRE

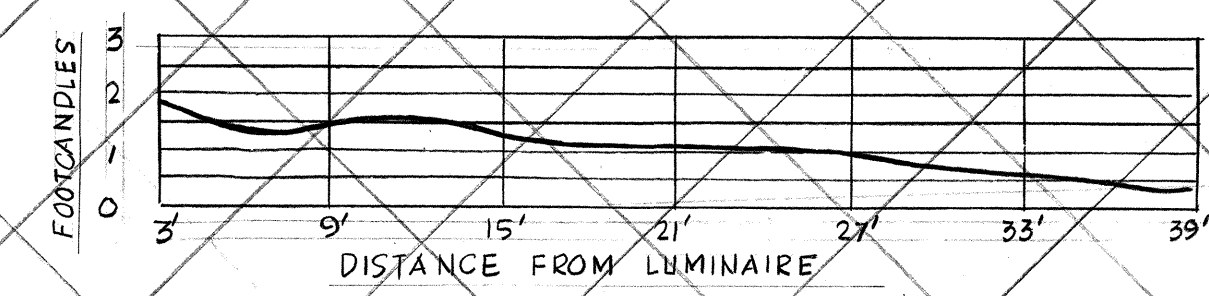
MOUNTING HEIGHT: 33" TO CENTERLINE
WATTAGE: 200MA-6.9W/FT
LAMP: FA96-T12/CW/HO-30

NIC



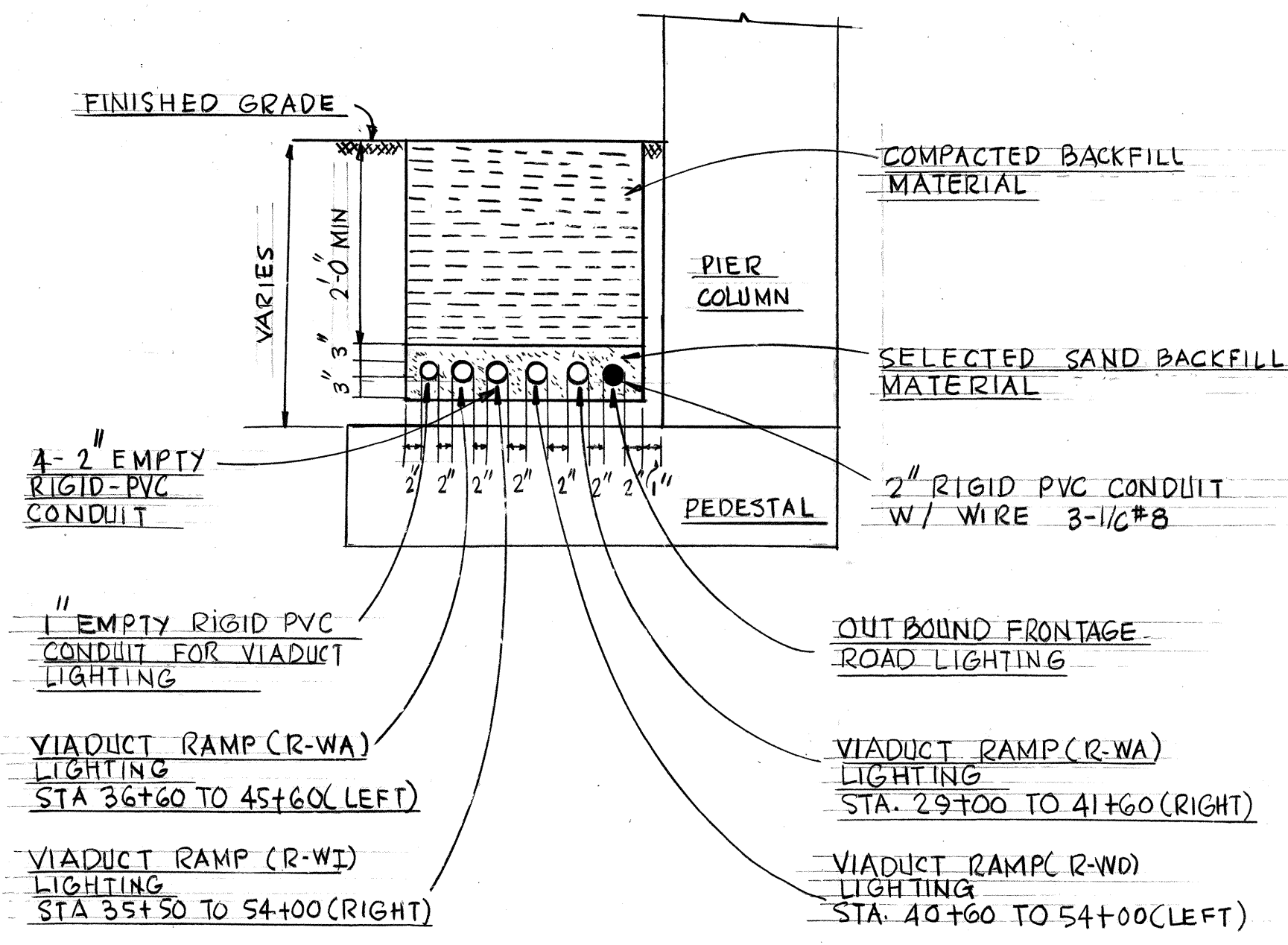
HORIZONTAL FOOTCANDLES ON PAVEMENT

FIXTURE WITH 430MA BALLAST
CONTINUOUS ROW ON ONE SIDE



HORIZONTAL FOOTCANDLES ON PAVEMENT

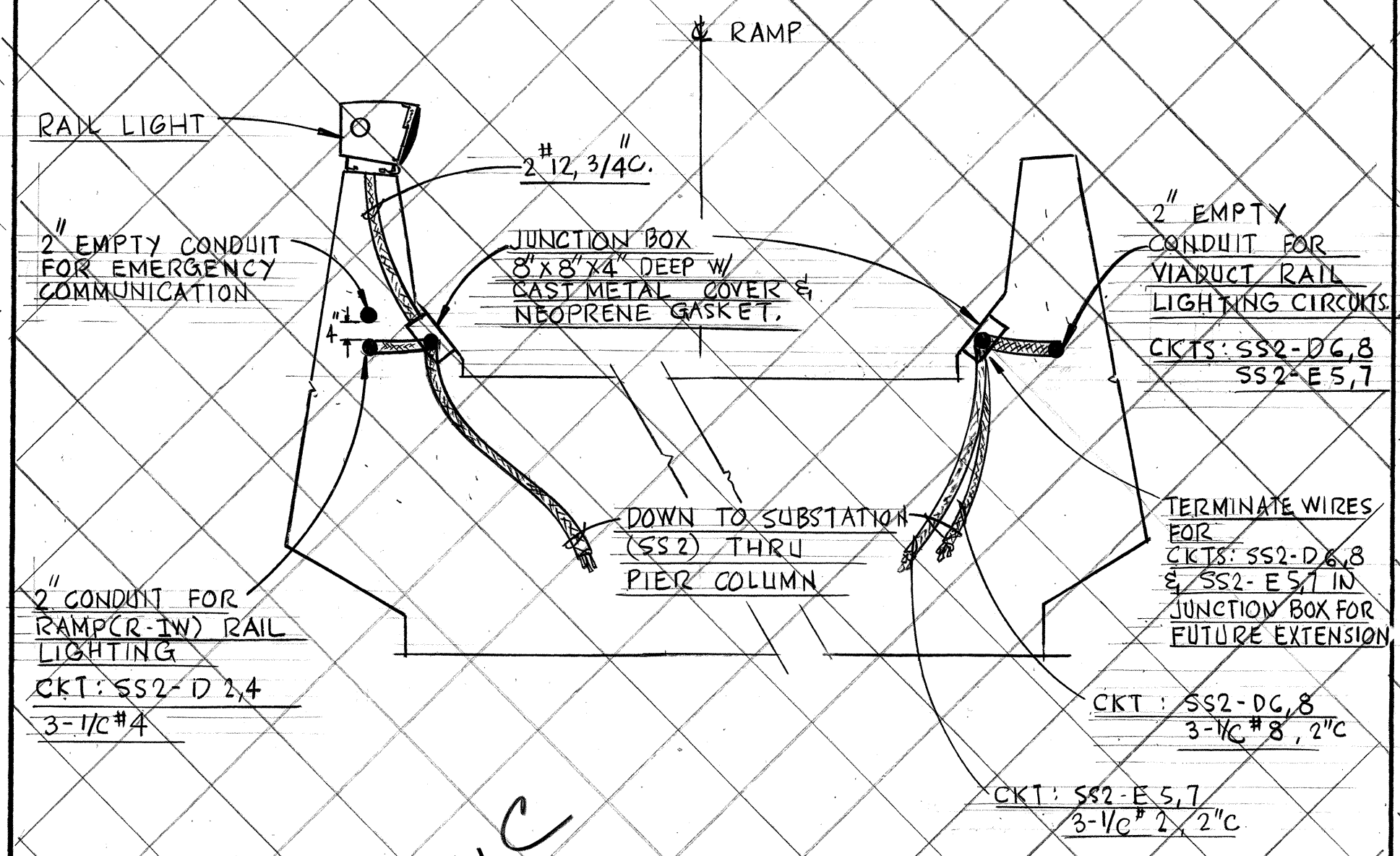
FIXTURE WITH 200MA BALLAST
CONTINUOUS ROW ON ONE SIDE



ELECTRICAL TRENCH BURIAL DETAIL

N.T.S.

(3)
EII

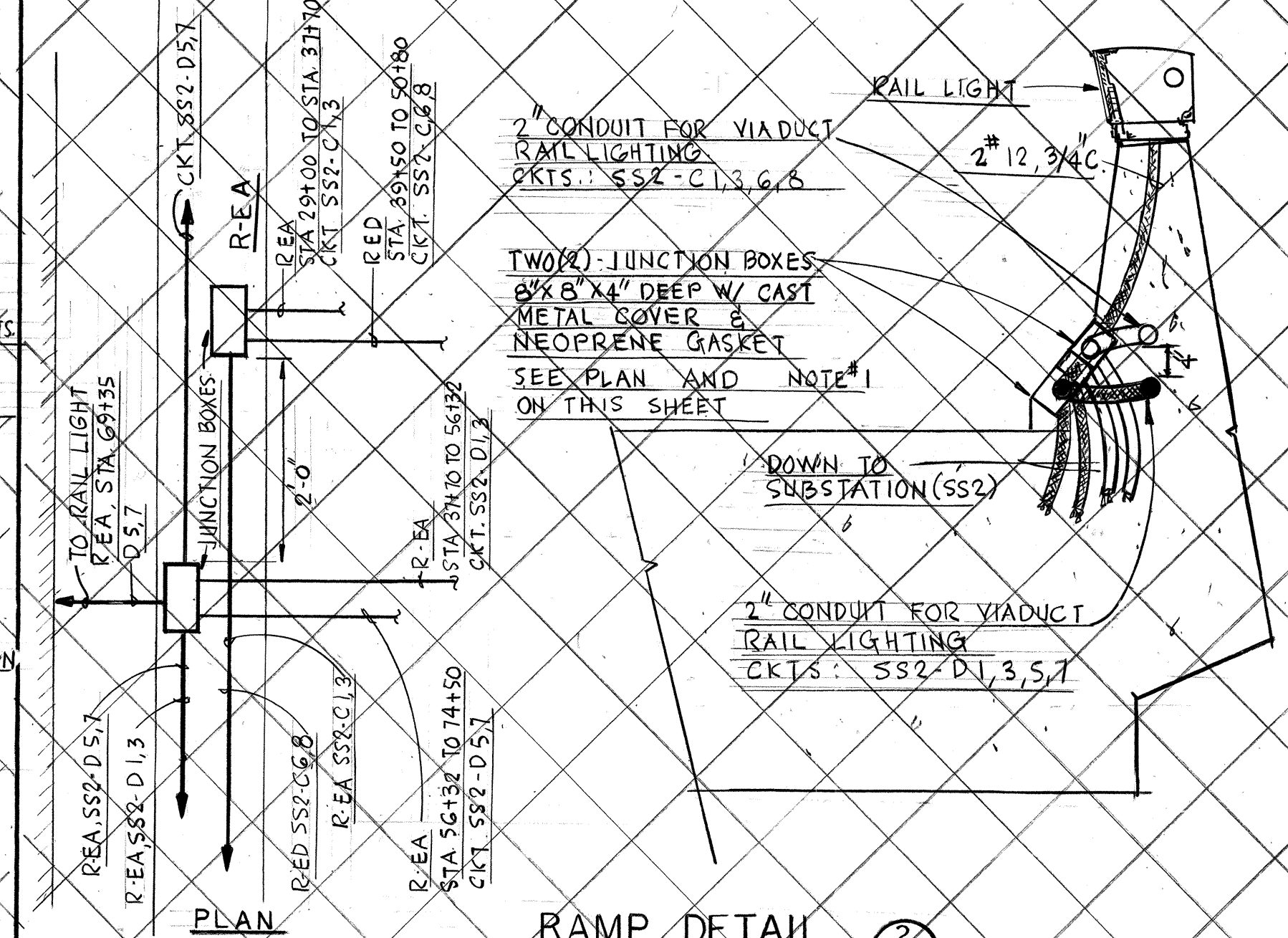


NIC

RAMP DETAIL

N.T.S.

(1)
EII

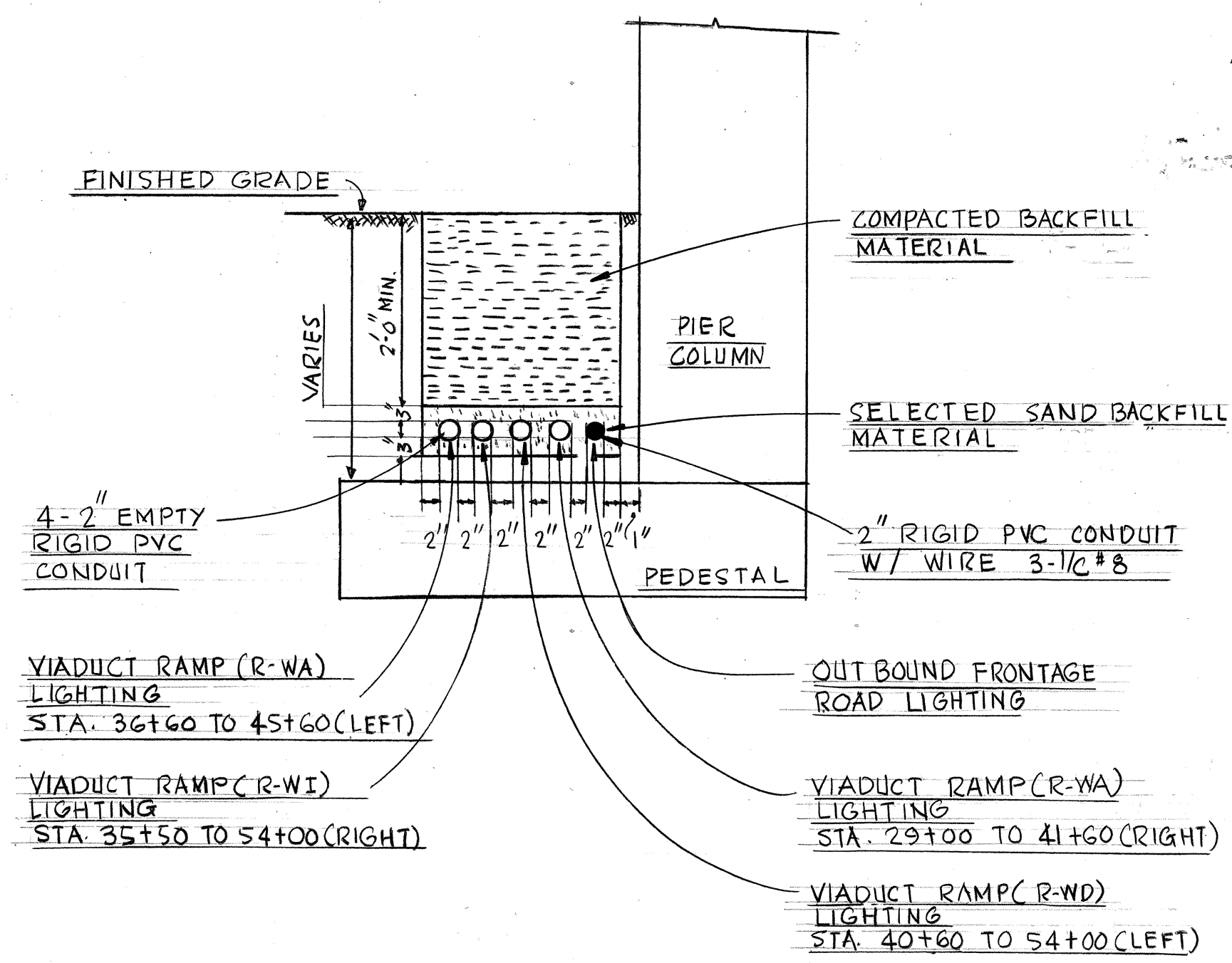


RAMP DETAIL

N.T.S.

(2)
EII

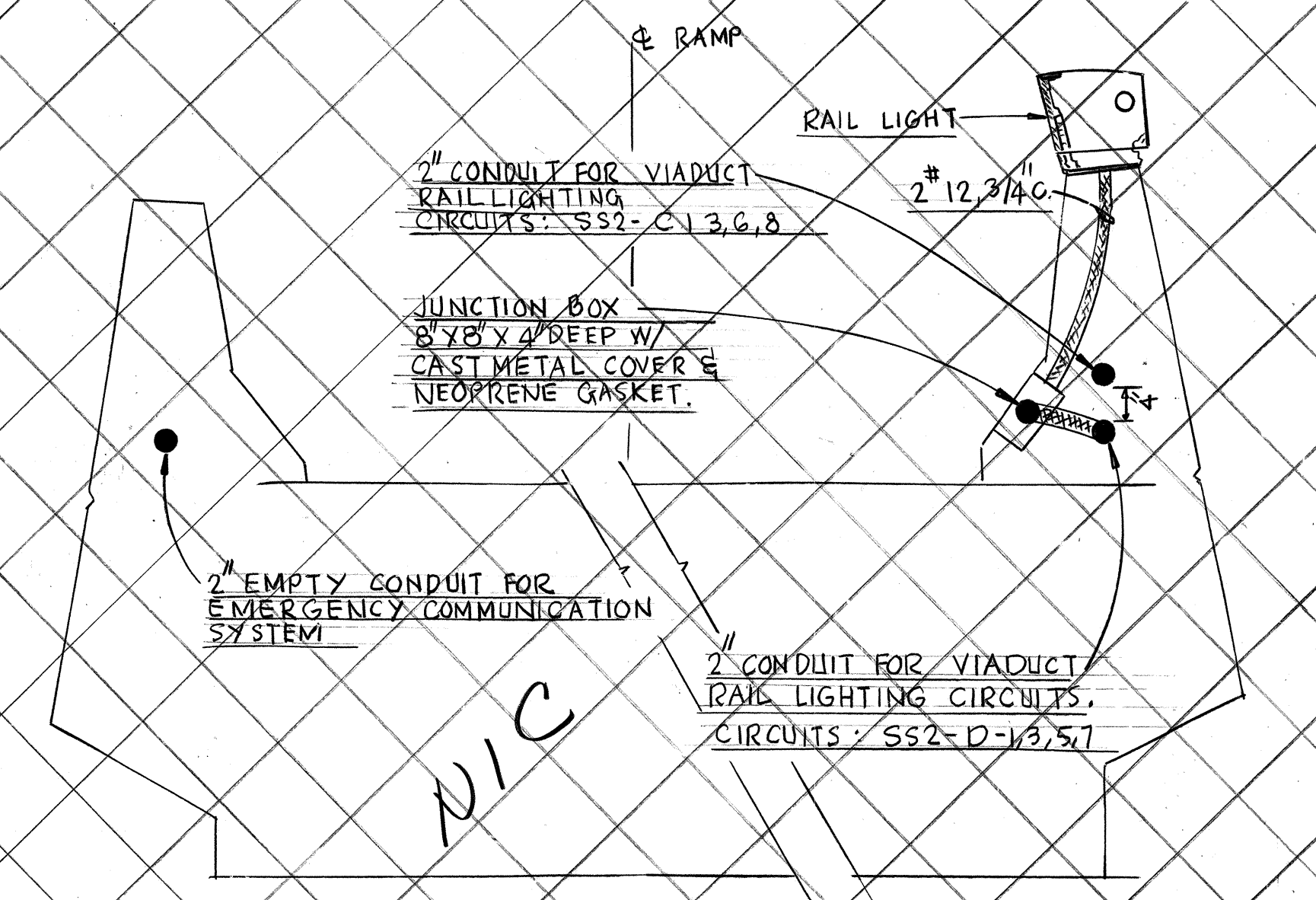
NOTES: 1. LOCATE JUNCTION BOX FOR CKTS: SS2-C 1,3,6,8 ADJACENT TO AND ABOVE ANOTHER JUNCTION BOX FOR CKTS: SS2-D 1,3,5,7.
2. SEE RAMP SCHEDULE FOR WIRE SIZE ON SHEET E-7.



ELECTRICAL TRENCH BURIAL DETAIL

N.T.S.

(4)
EII



RAMP DETAIL

N.T.S.

(5)
EII

NOTE: SEE RAMP SCHEDULE FOR WIRE SIZE ON SHEET E-7.



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STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

ROADWAY LIGHTING ELECTRICAL DETAILS

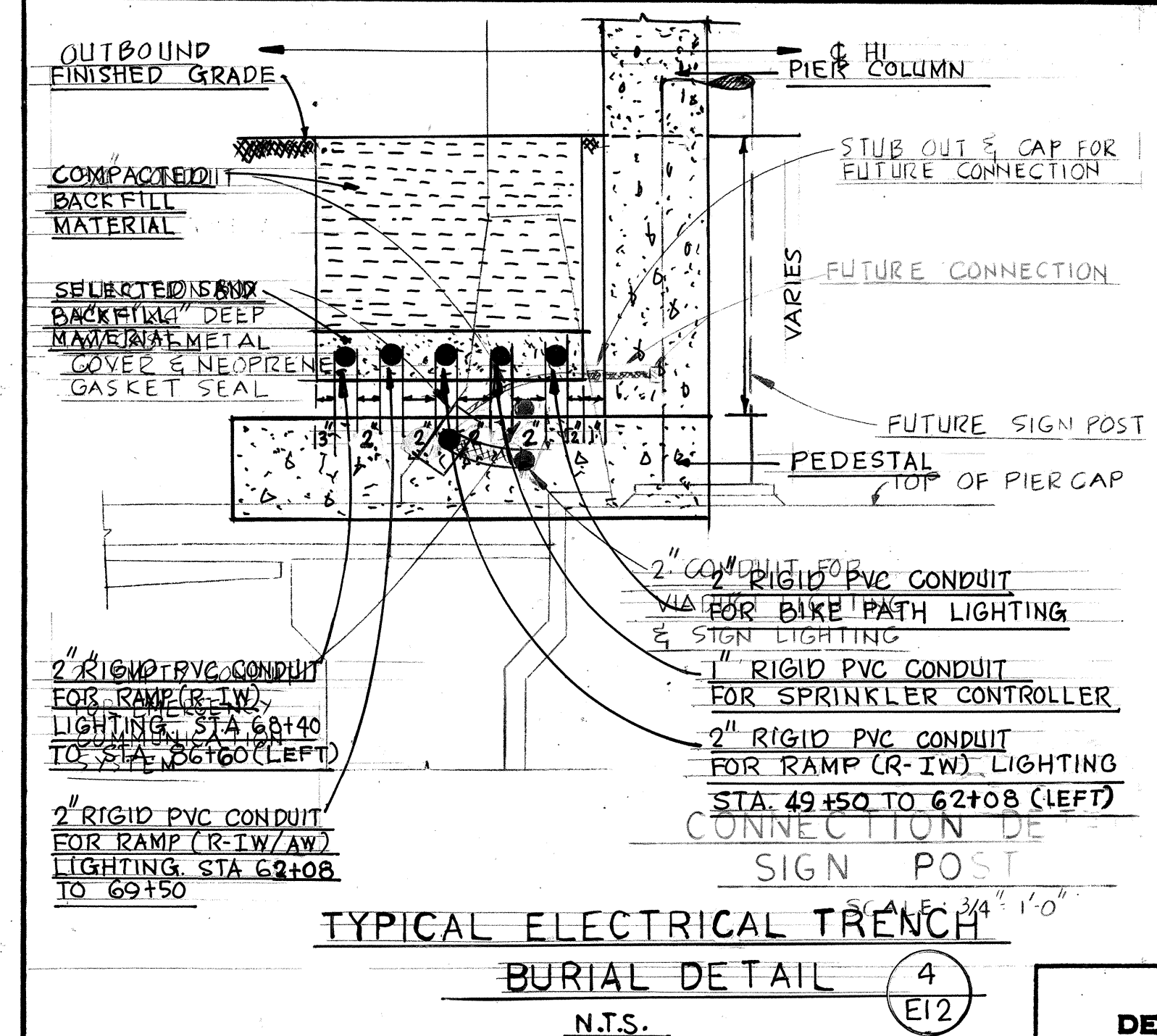
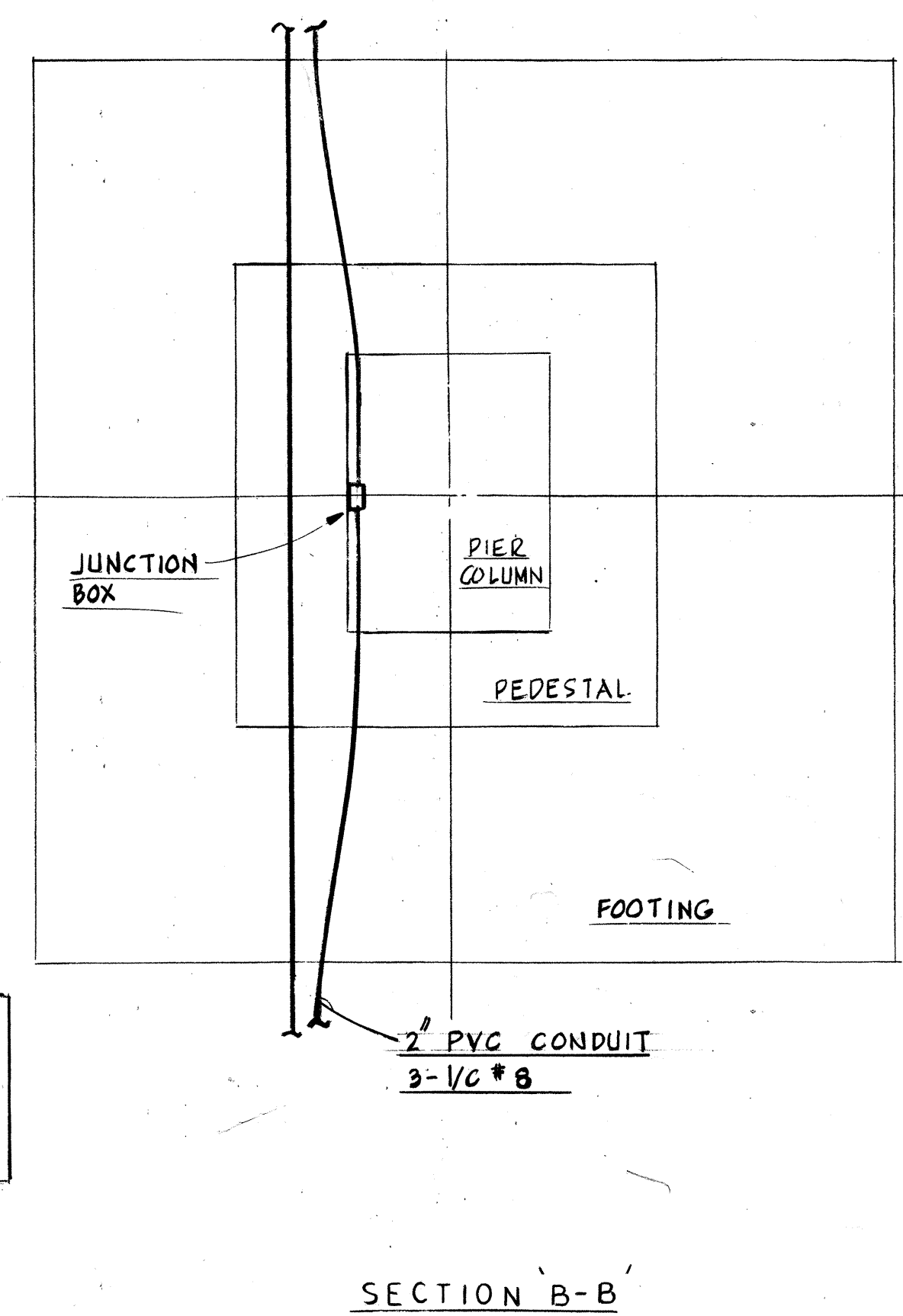
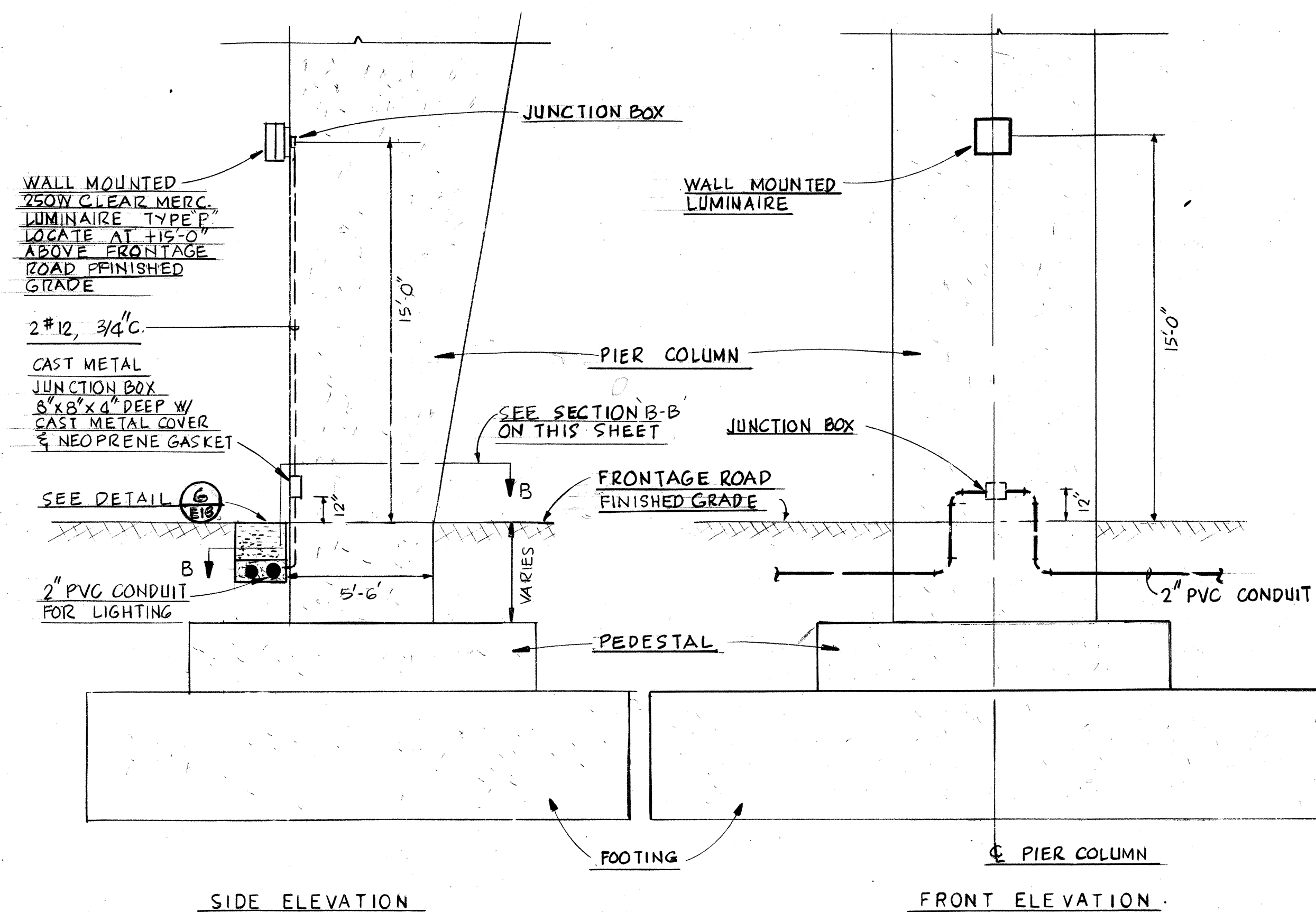
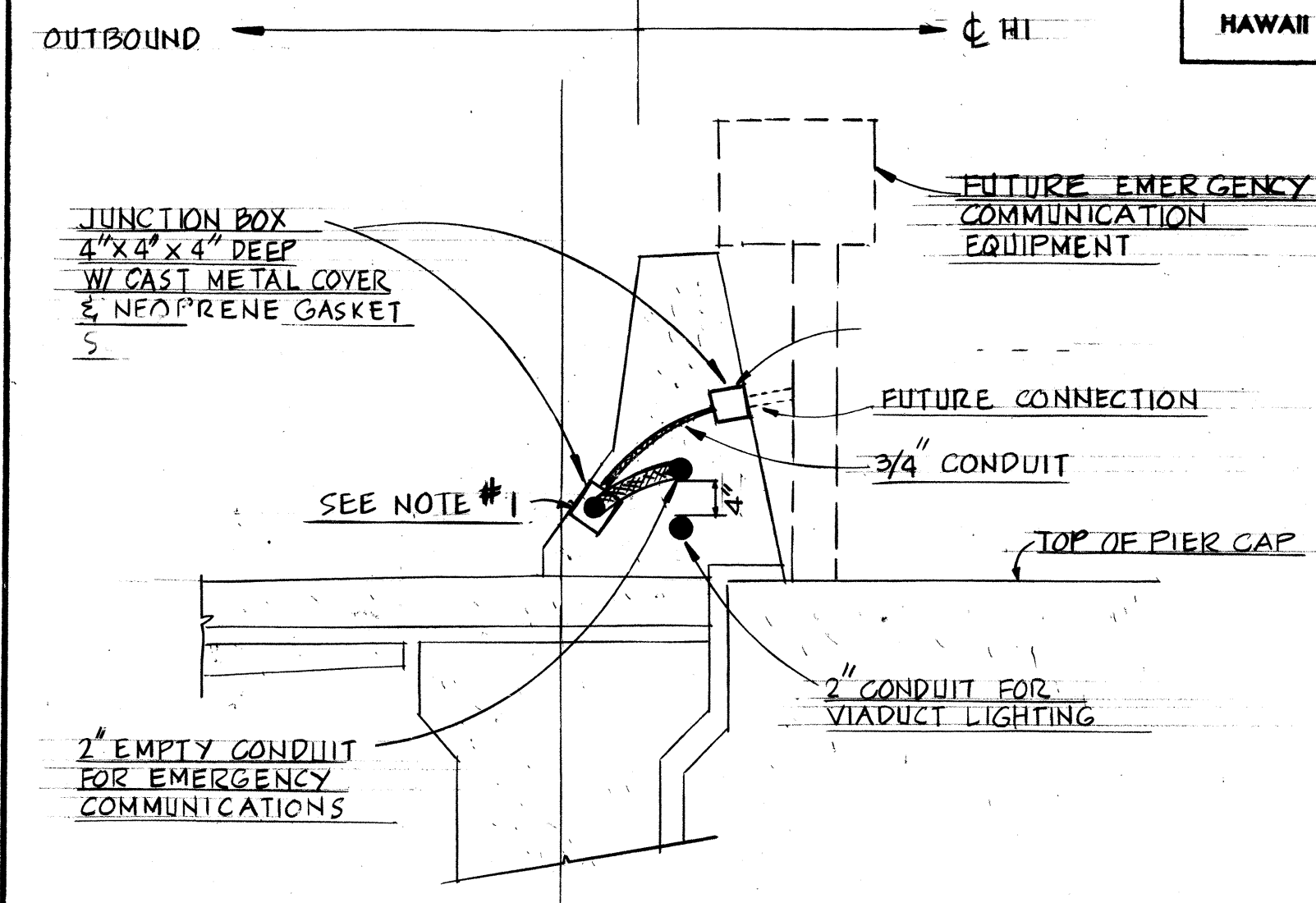
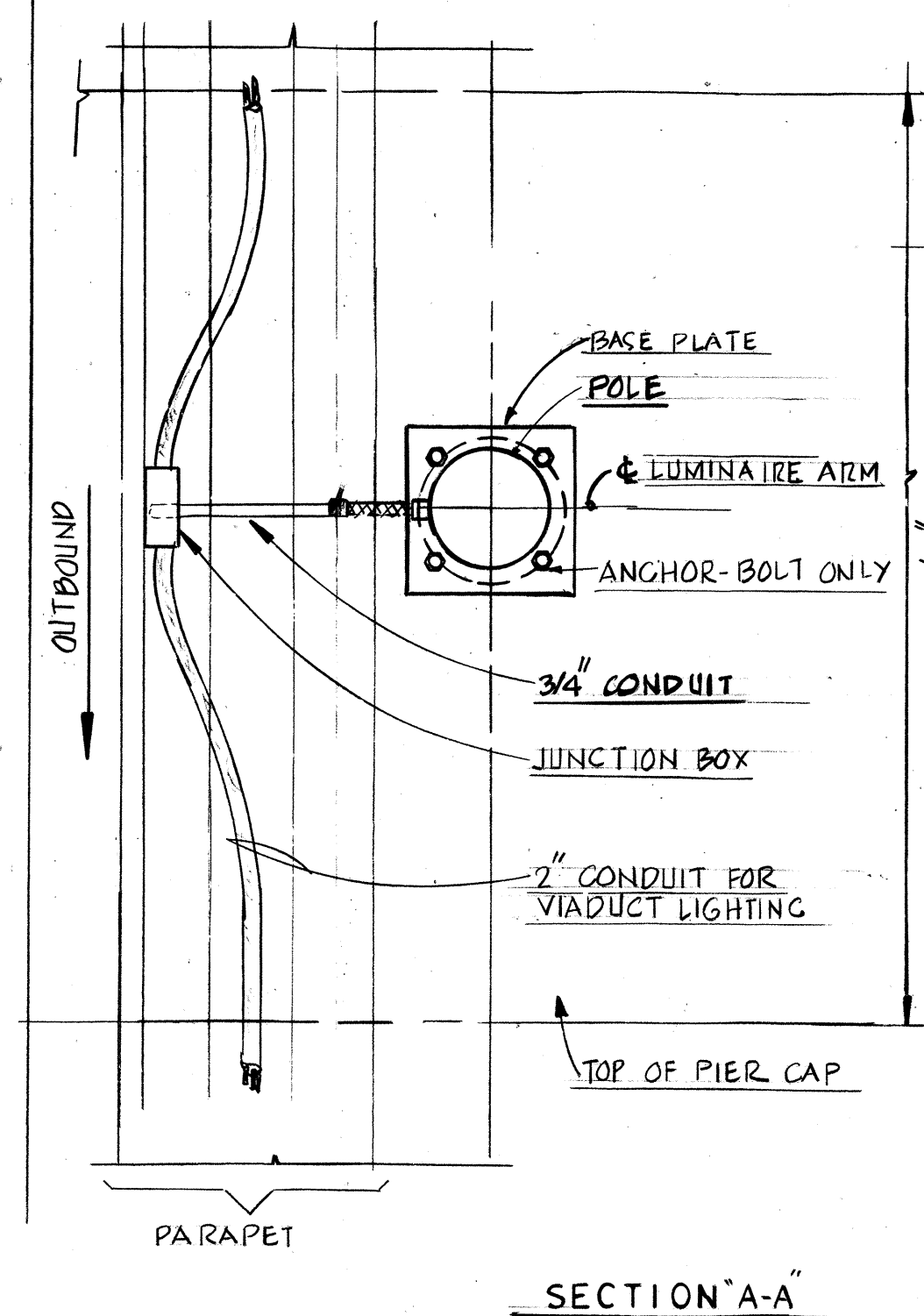
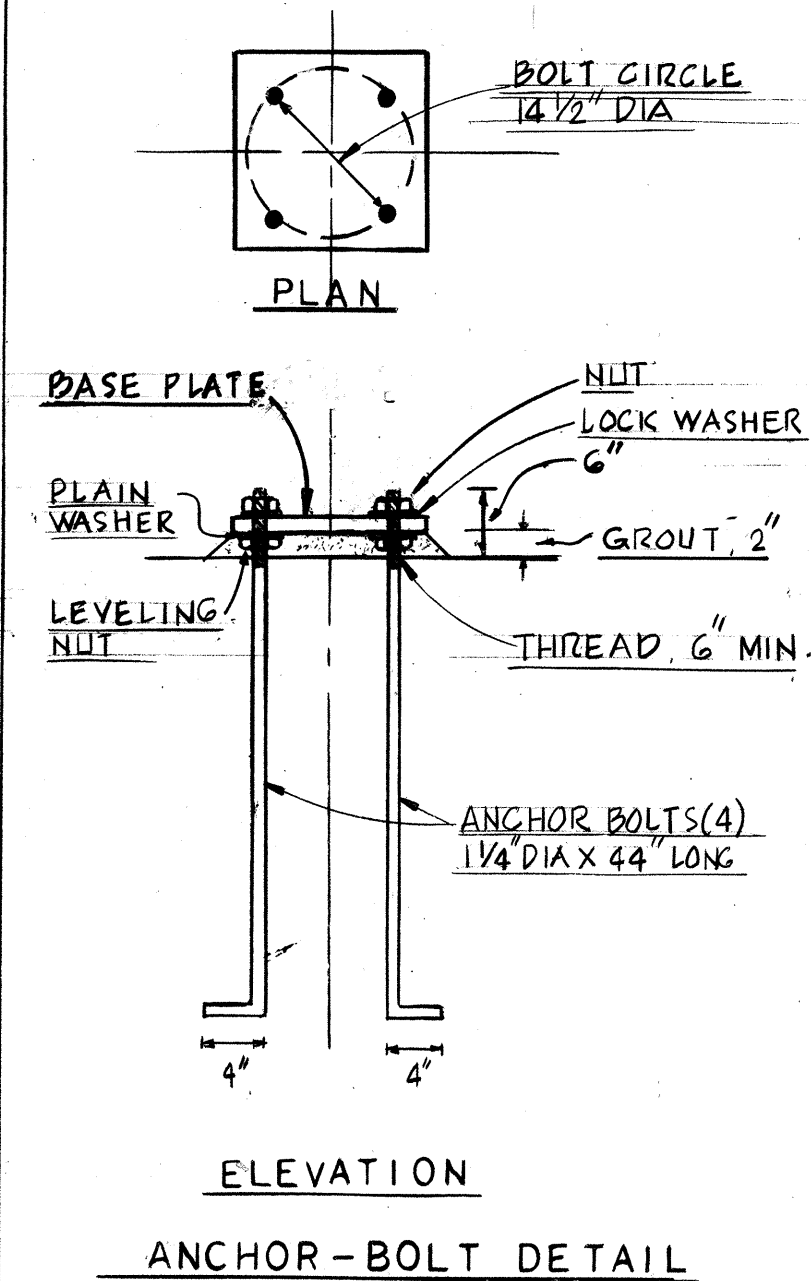
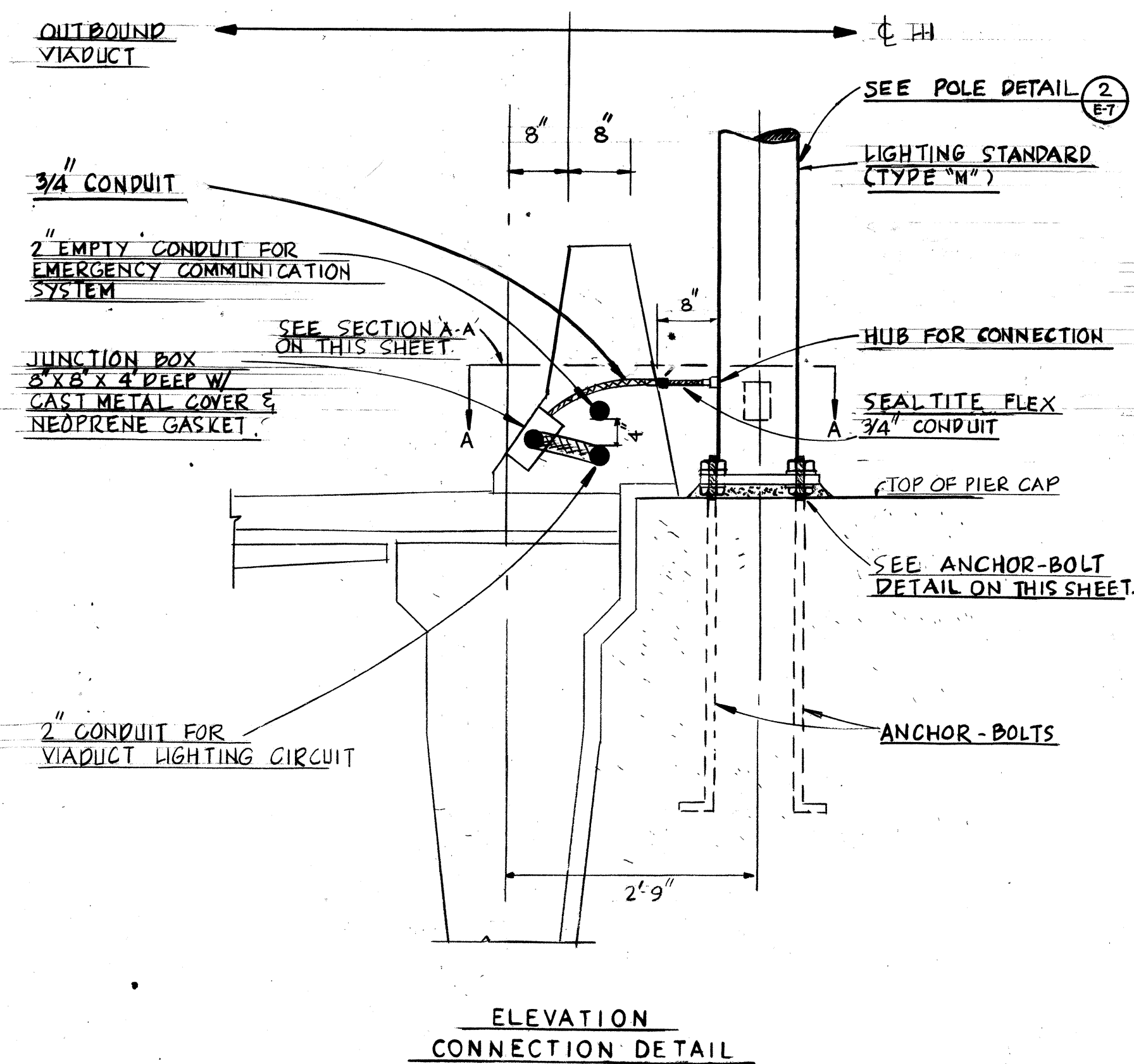
AIRPORT INTERCHANGE
F.A.T. PROJ. NO I-HI-1(120)16

SCALE: AS SHOWN DATE: NOV. 1, 1975

SHEET No. 11 OF 19 SHEETS

DATE	_____
DESIGNED BY	_____
TRACED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
No.	_____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)16	1976	56	173



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

MOUNTING AND CONNECTION DETAIL
BIKE PATH LIGHTING TYPE "P"
SCALE: 1/4" = 1'-0"



**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION**

ROADWAY LIGHTING ELECTRICAL DETAILS

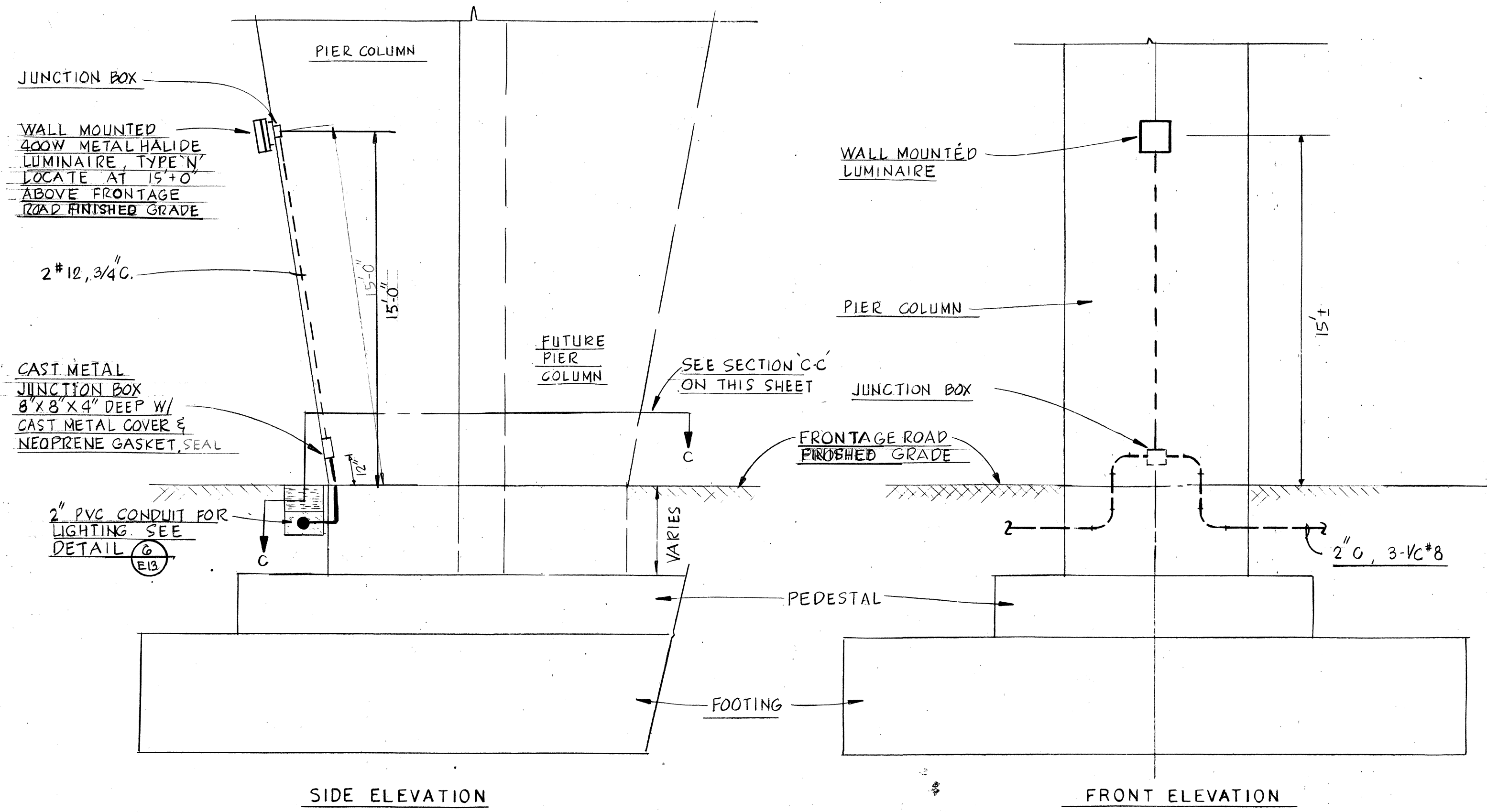
AIRPORT INTERCHANGE
F.A.I. PROJ. NO I-HI-1(1120)16

SCALE: AS SHOWN

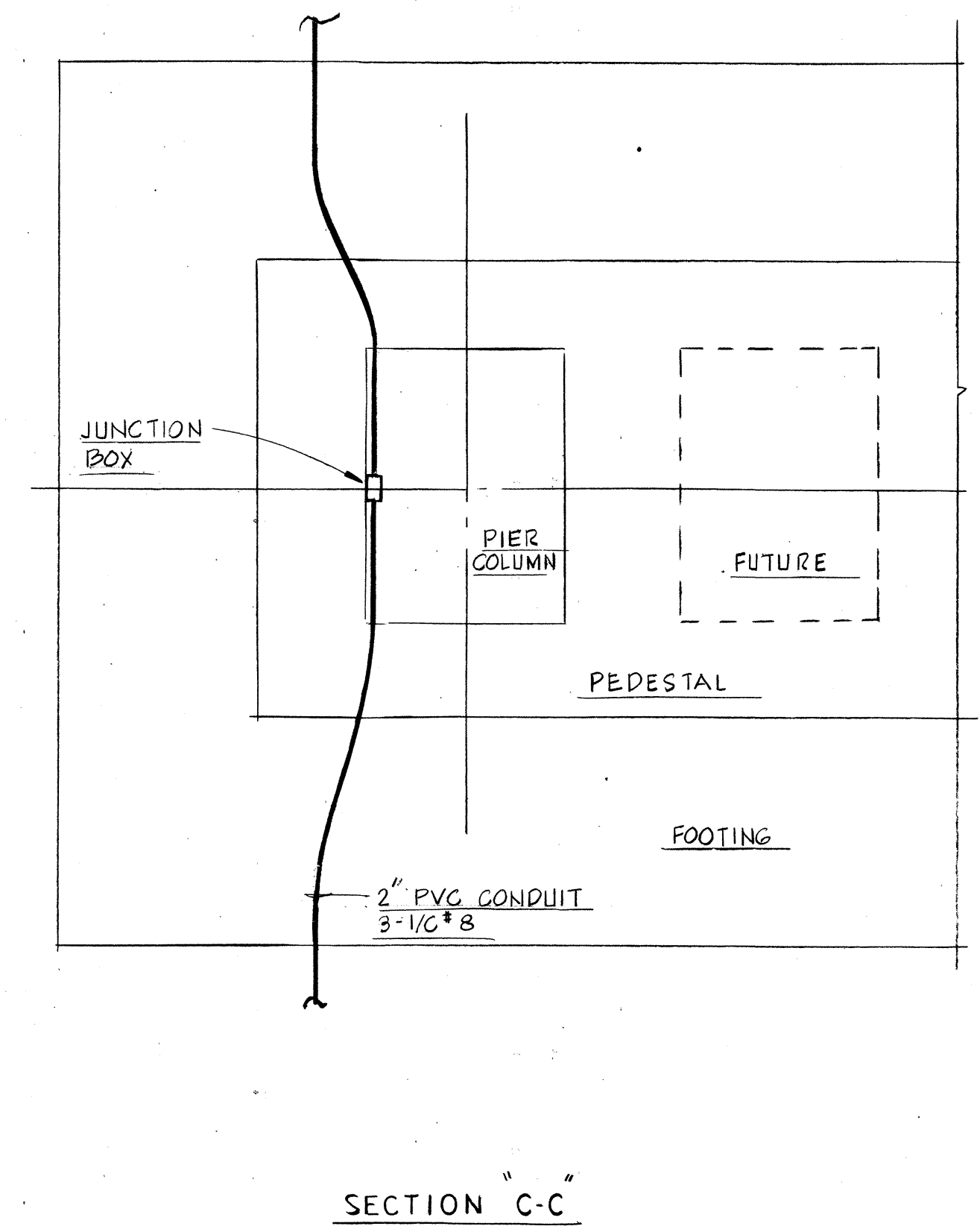
DATE: NOV. 1, 1975

SHEET No. | 2 OF | 9 SHEETS

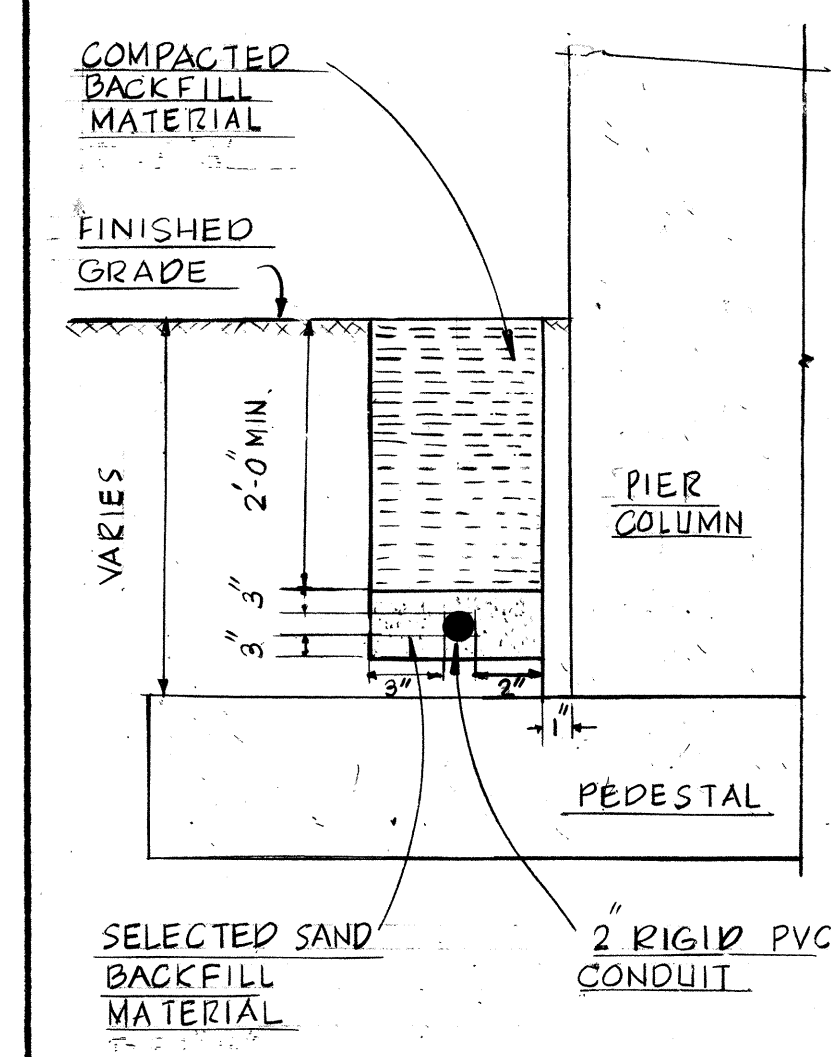
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)14	1976	57	173



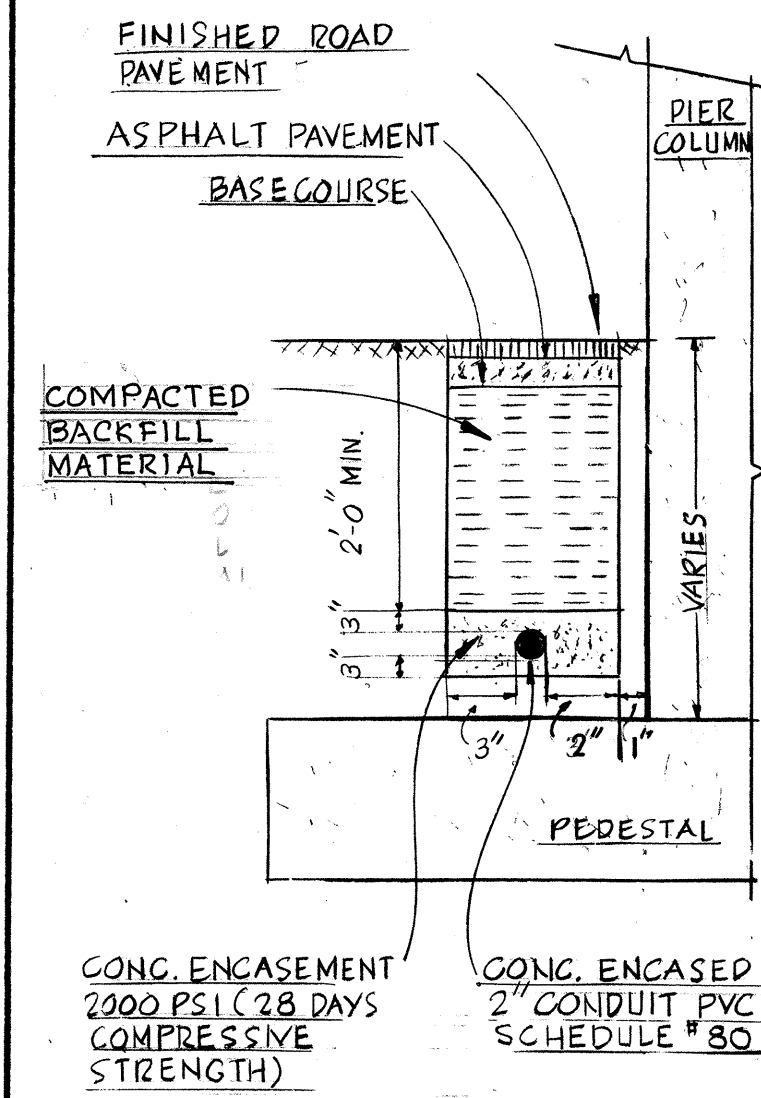
MOUNTING AND CONNECTION DETAIL
OUTBOUND FRONTAGE ROAD LIGHT-TYPE "N"
SCALE: 1/4" = 1'-0"



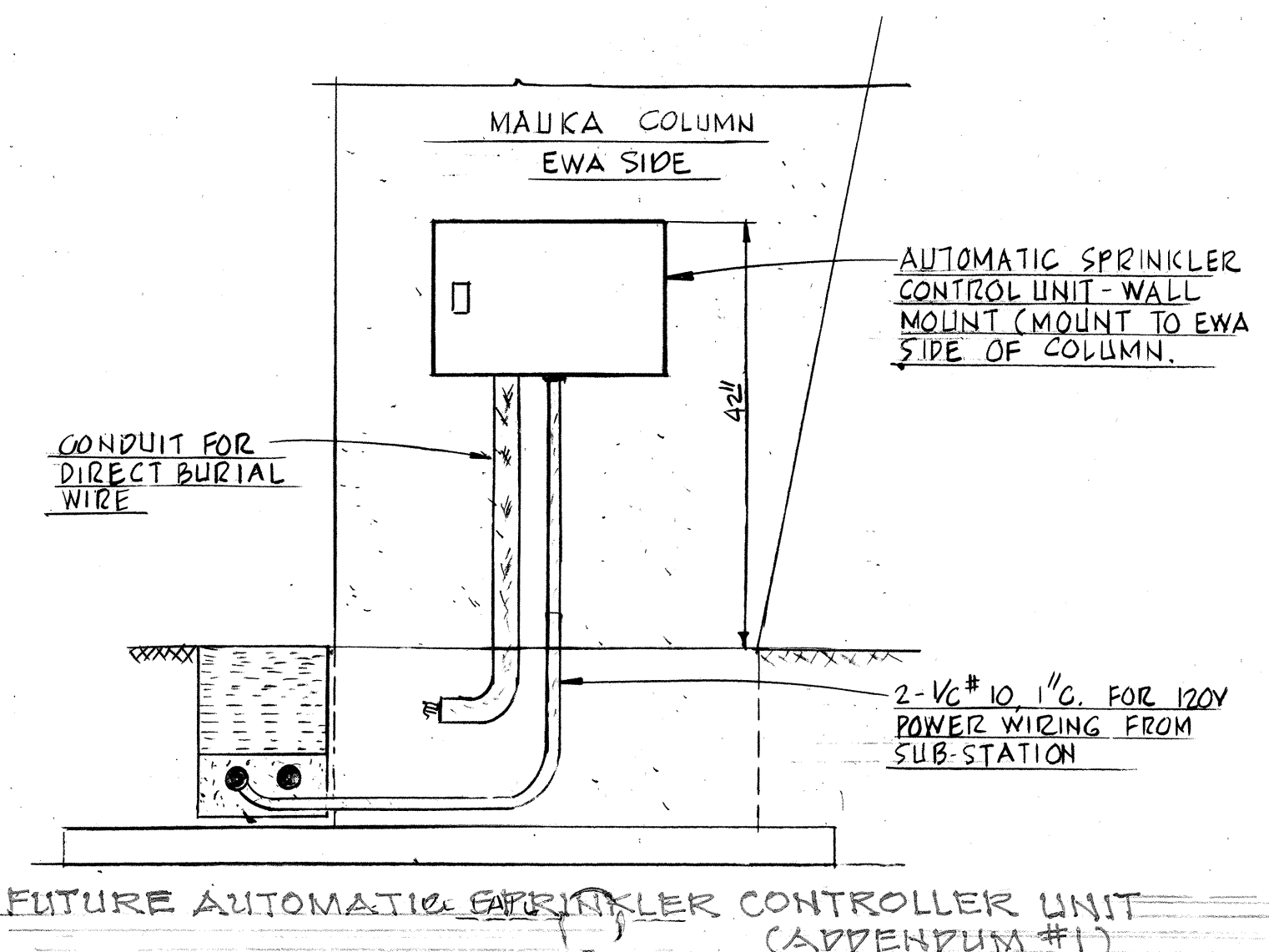
SECTION "C-C"



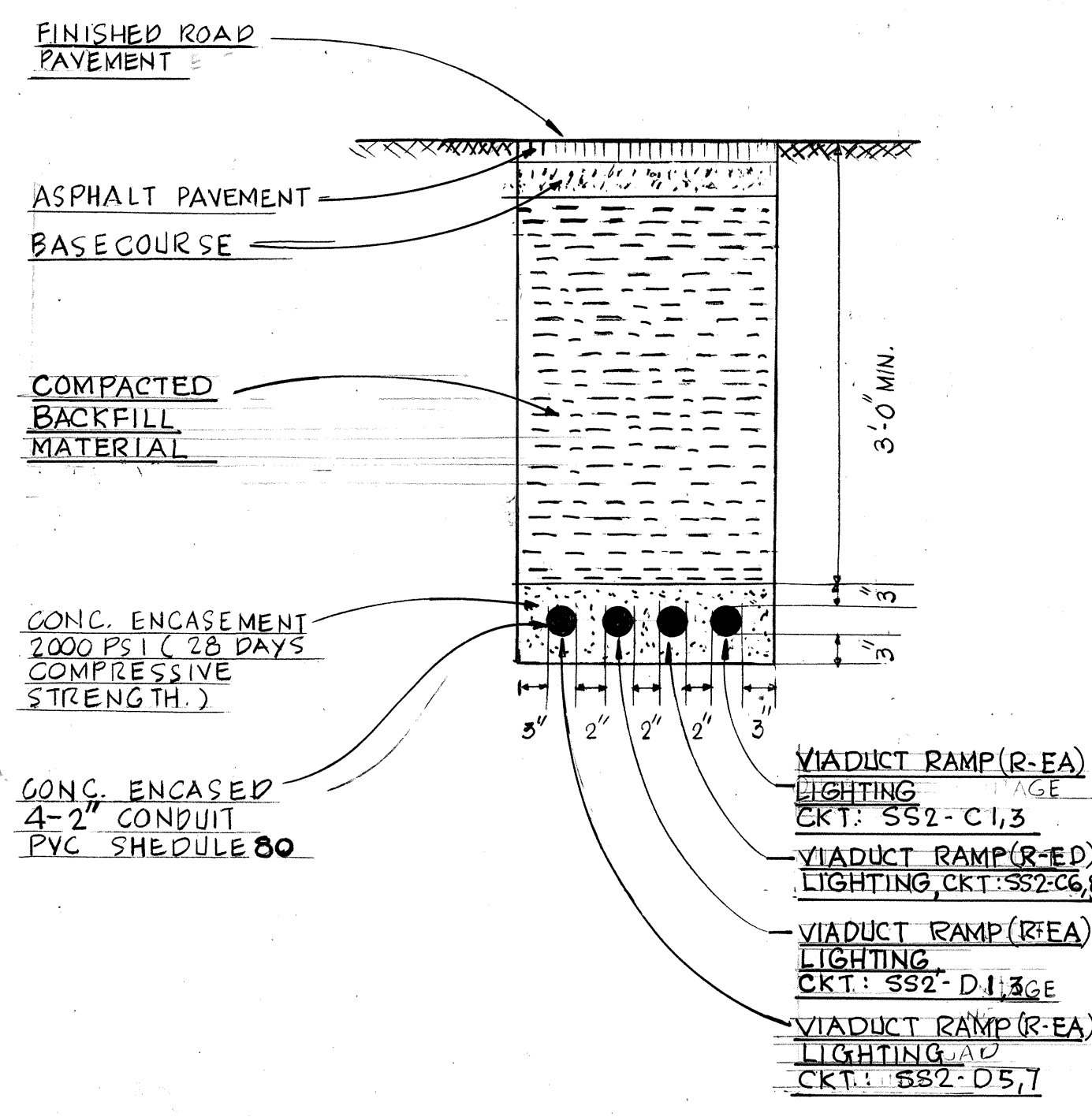
TYPICAL ELECTRICAL TRENCH BURIAL DETAIL
N.T.S.



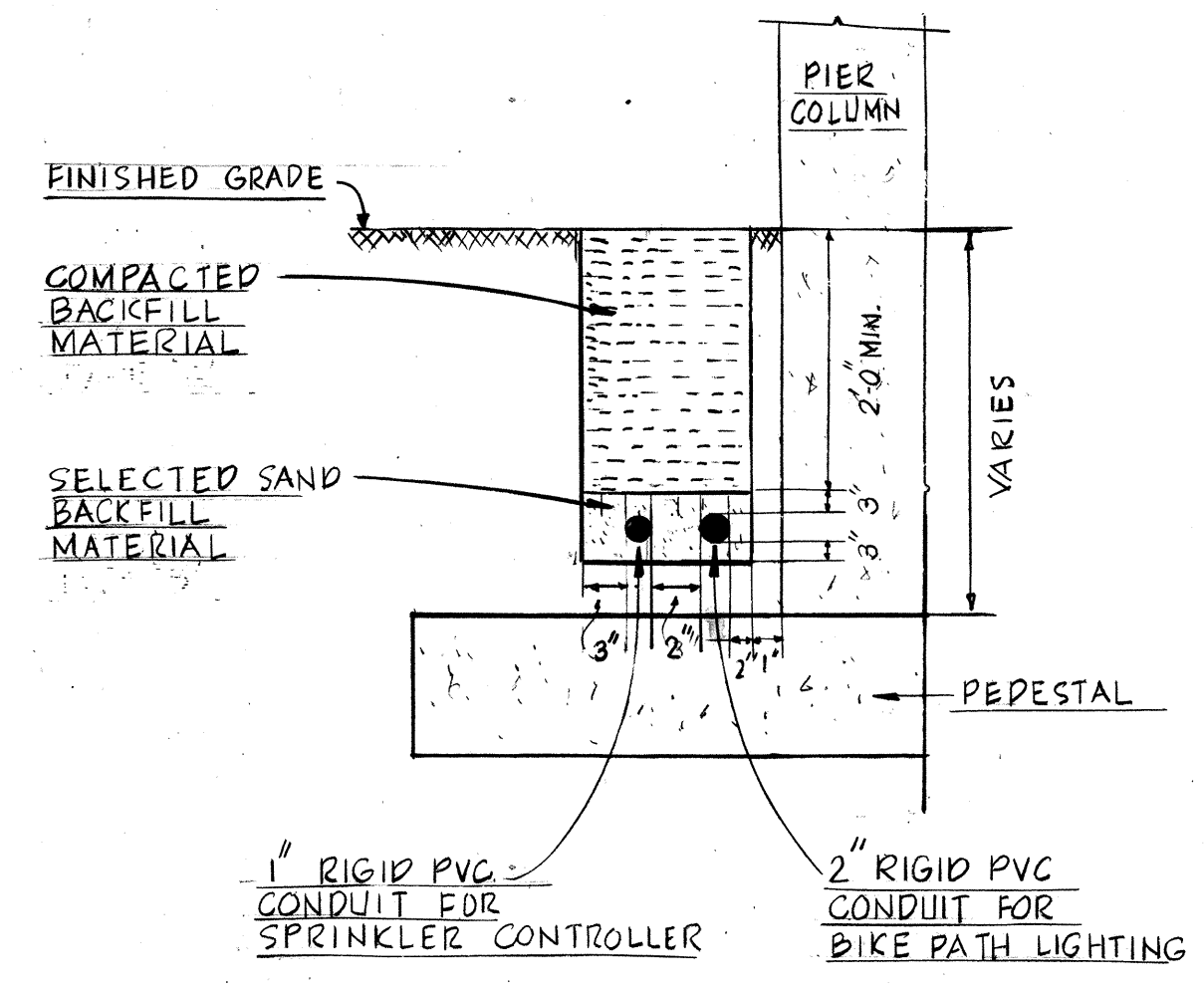
TYPICAL CONCRETE ENCASED RACEWAY DETAIL
N.T.S.



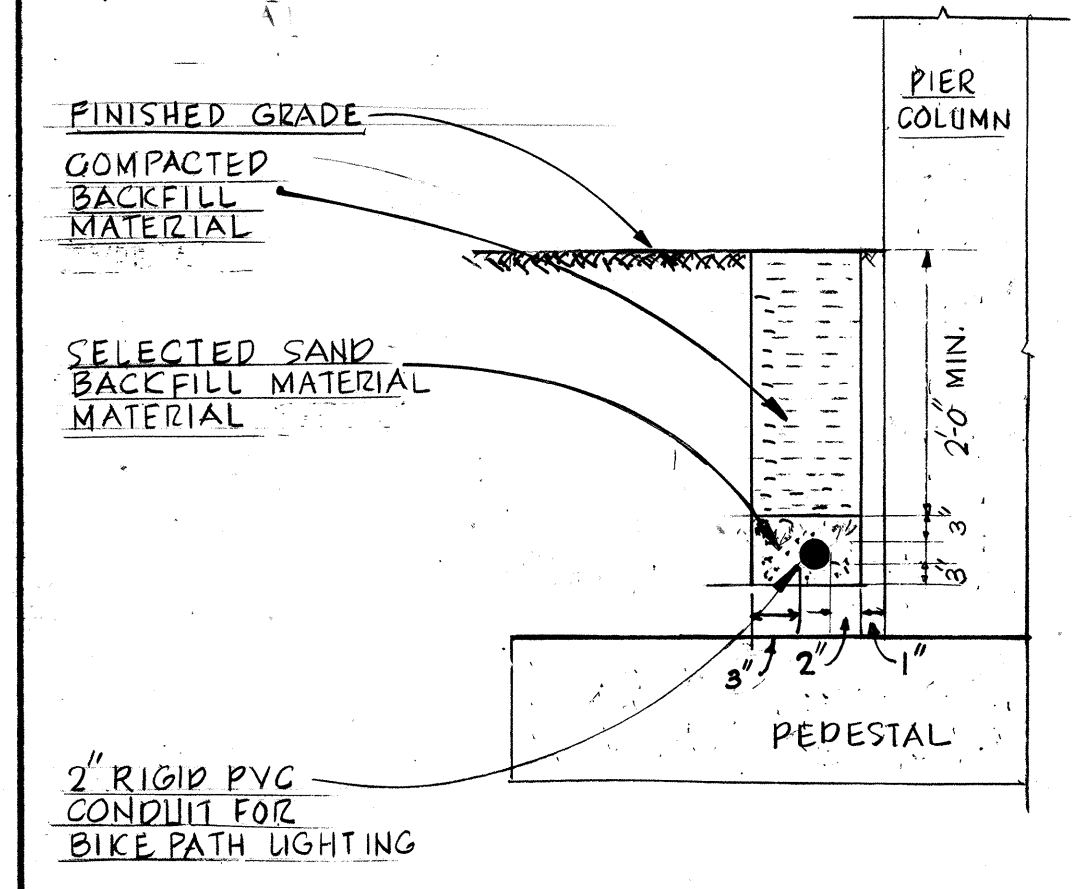
SPRINKLER CONTROLLER DETAIL
N.T.S.



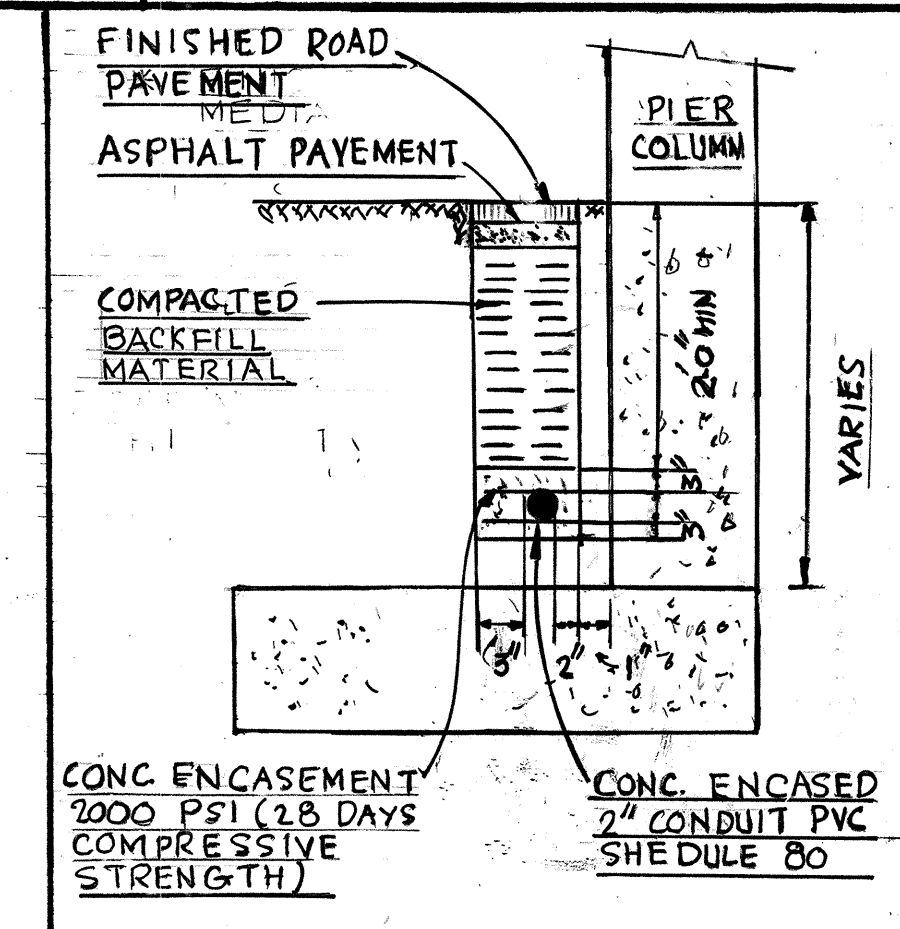
TYPICAL CONCRETE ENCASED RACEWAY DETAIL
N.T.S.



TYPICAL ELECTRICAL TRENCH BURIAL DETAIL
N.T.S.



TYPICAL ELECTRICAL TRENCH BURIAL DETAIL
N.T.S.



TYPICAL CONCRETE ENCASED RACEWAY DETAIL
N.T.S.

DATE	_____
DESIGNED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY LIGHTING ELECTRICAL DETAILS

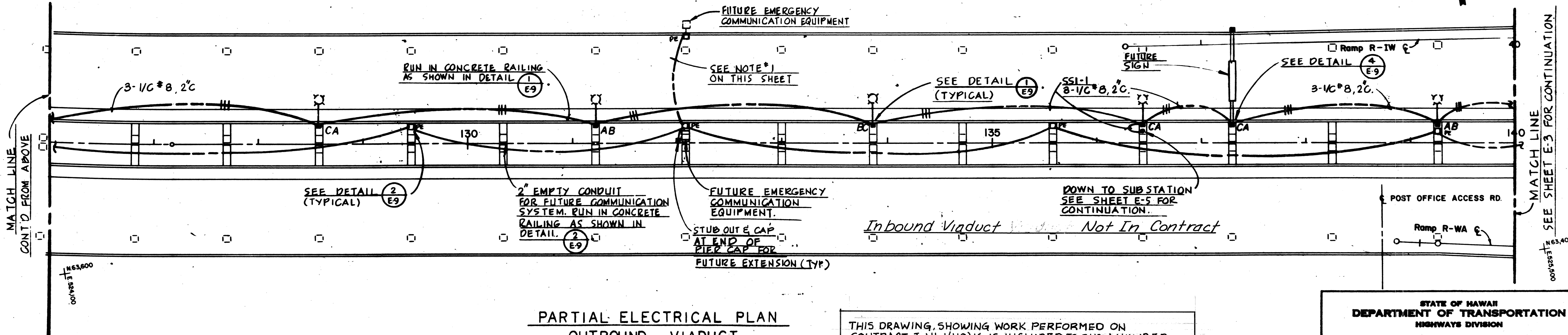
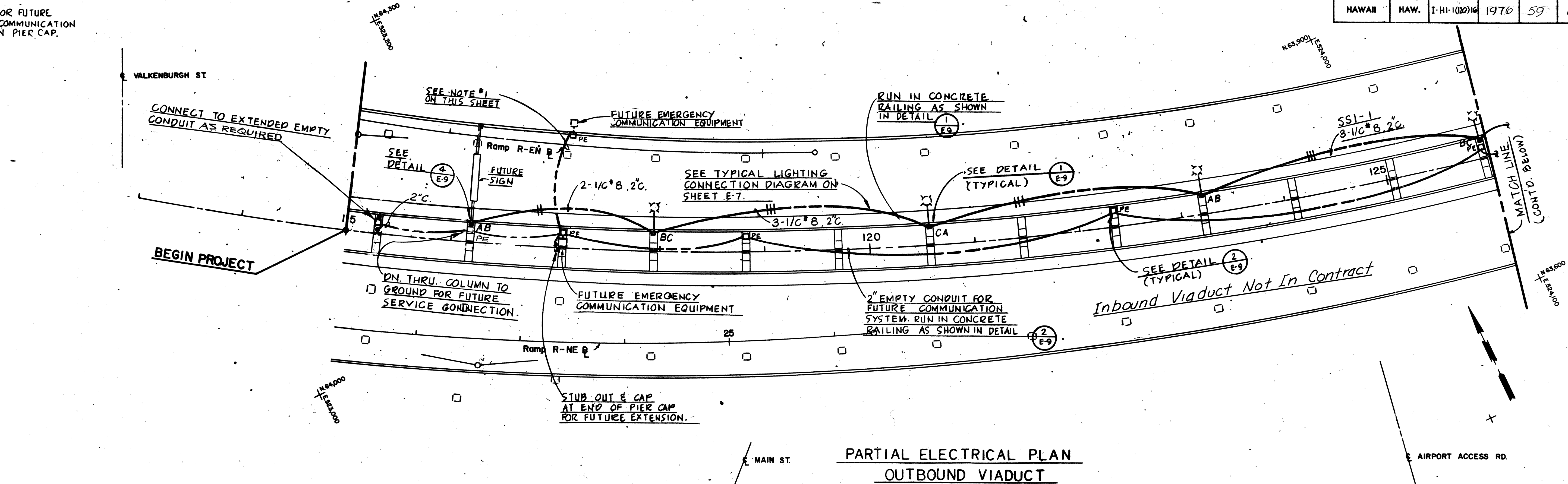
AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(120)16

SCALE: AS SHOWN DATE: NOV. 1, 1975

SHEET No. 13 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)16	1970	59	173

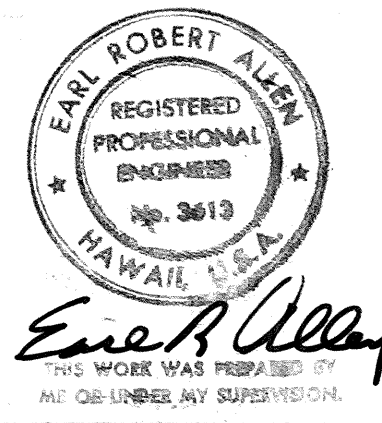
NOTES: 1 RUN 2" C.O. FOR FUTURE EMERGENCY COMMUNICATION EQUIPMENT IN PIER CAP.



DATE	
DESIGNED BY	
DRAWN BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

PARTIAL ELECTRICAL PLAN
OUTBOUND VIADUCT

THIS DRAWING, SHOWING WORK PERFORMED ON CONTRACT I-HI-1(119)16, IS INCLUDED TO SHOW NUMBER AND LOCATION OF VIADUCT LIGHTING UNITS TO BE FURNISHED AND INSTALLED ON CONTRACT I-HI-1(120)16.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY LIGHTING
OUTBOUND VIADUCT ST. 115+00
TO 140+00

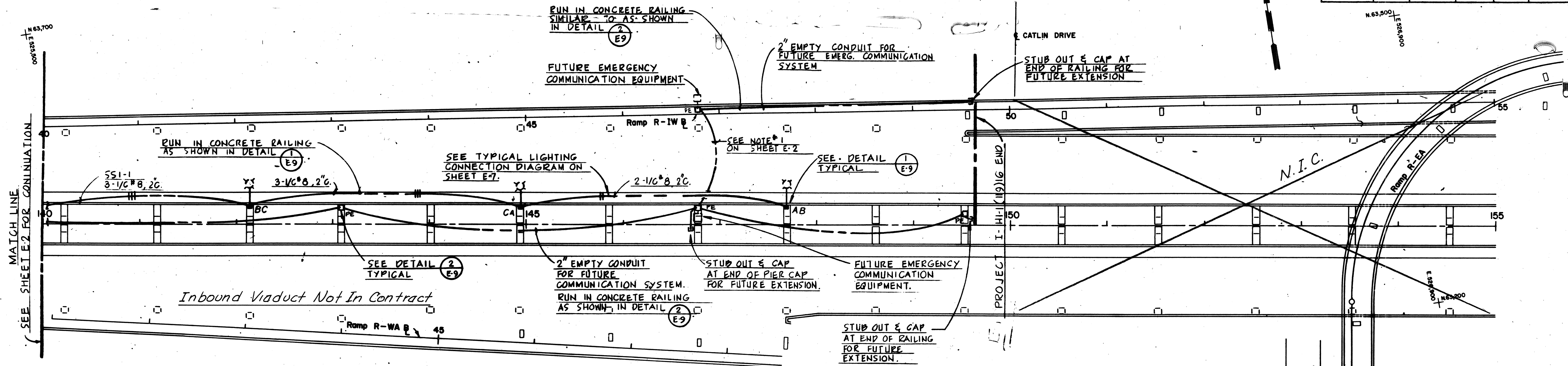
AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(120)16

SCALE: 1"=50'

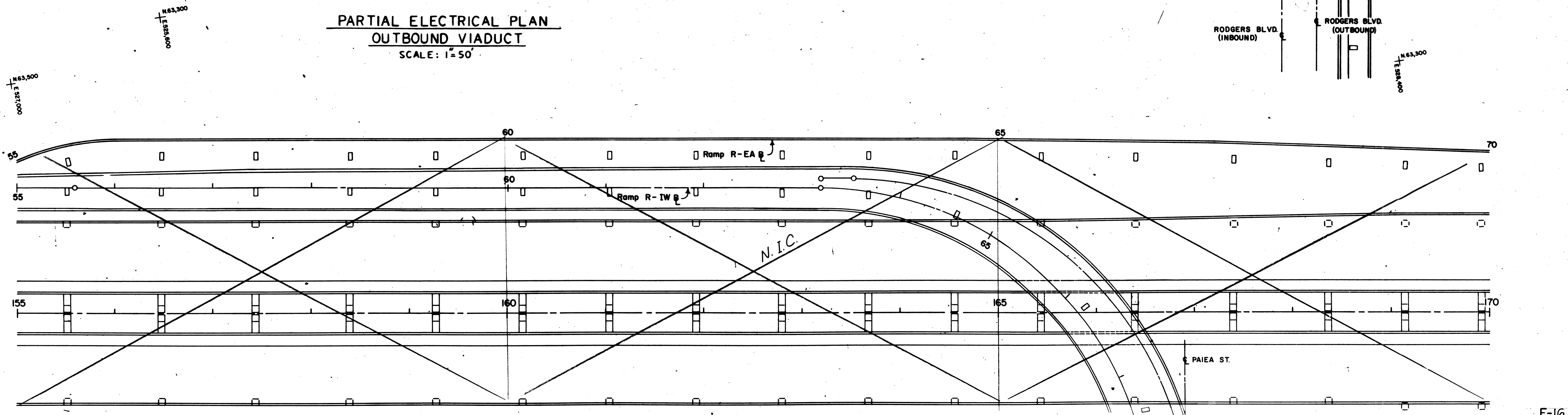
DATE: NOV. 1, 1975

SHEET No. 15 OF 19 SHEETS

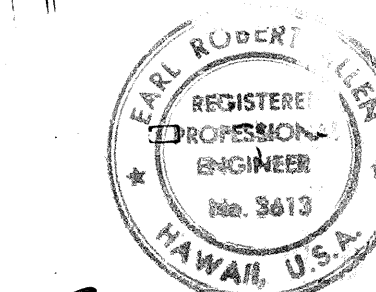
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)16	1976	60	173



**PARTIAL ELECTRICAL PLAN
OUTBOUND VIADUCT**
SCALE: 1"=50'



THIS DRAWING, SHOWING WORK PERFORMED ON CONTRACT I-HI-1(119)16, IS INCLUDED TO SHOW THE NUMBER AND LOCATION OF VIADUCT LIGHTING UNITS TO BE FURNISHED AND INSTALLED ON CONTRACT I-HI-1(120)16.



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**ROADWAY LIGHTING
OUTBOUND VIADUCT ST. 140+00
TO 149+53**

AIRPORT INTERCHANGE
F.A.I. PROJ. NO I-HI-1(120)16

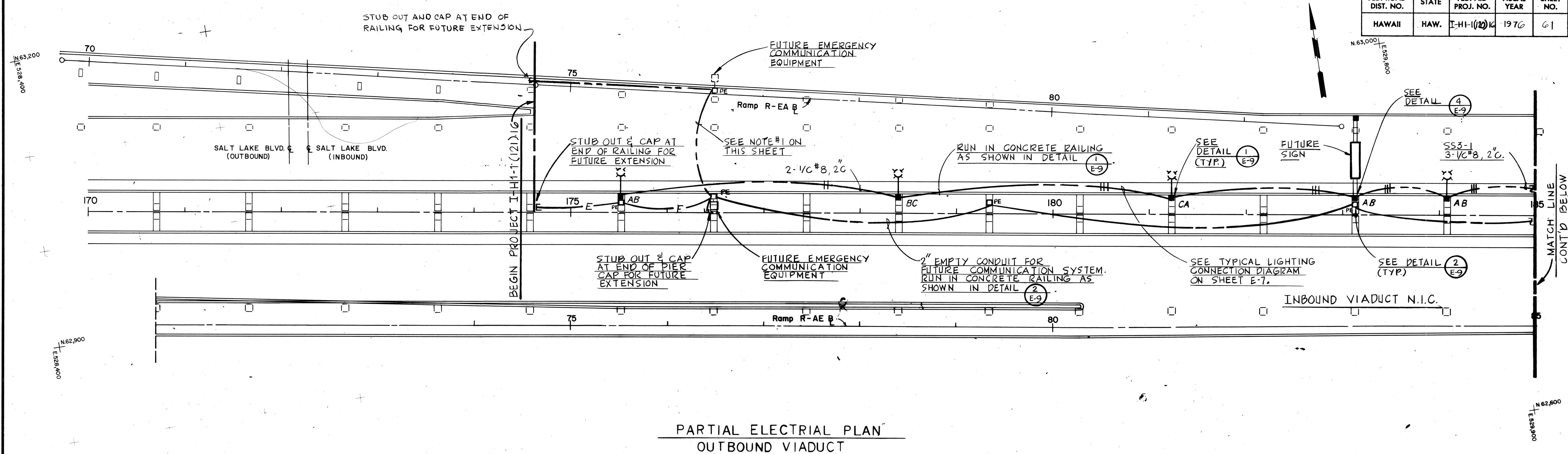
SCALE: 1"=50'

DATE: NOV. 1, 1975

SHEET No. 16 OF 19 SHEETS

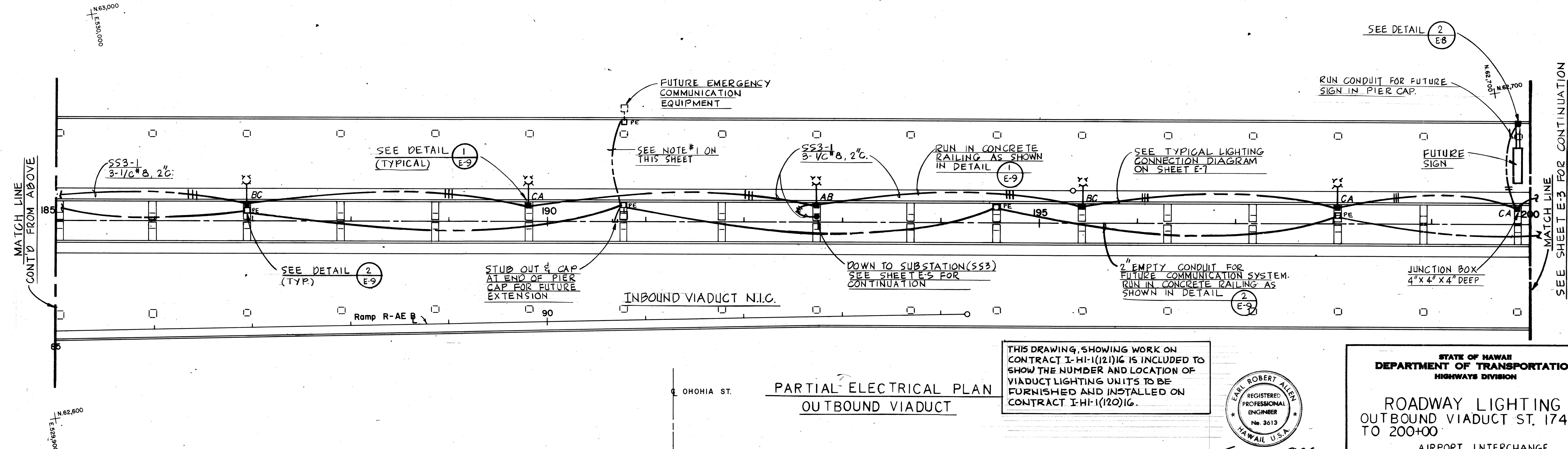
DESIGNED BY	DATE
CHECKED BY	
NOTED BY	
ORIGINAL PLAN	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)16	1976	41	173



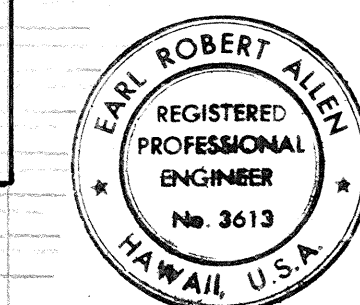
PARTIAL ELECTRICAL PLAN OUTBOUND VIADUCT

NOTES: 1. RUN 2" CONDUIT FOR FUTURE EMERGENCY COMMUNICATION EQUIPMENT IN PIER CAP.



PARTIAL ELECTRICAL PLAN OUTBOUND VIADUCT

THIS DRAWING, SHOWING WORK ON CONTRACT I-HI-1(121)16 IS INCLUDED TO SHOW THE NUMBER AND LOCATION OF VIADUCT LIGHTING UNITS TO BE FURNISHED AND INSTALLED ON CONTRACT I-HI-1(120)16.



Earl R. Allen
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY LIGHTING
OUTBOUND VIADUCT ST. 174+70 TO 200+00

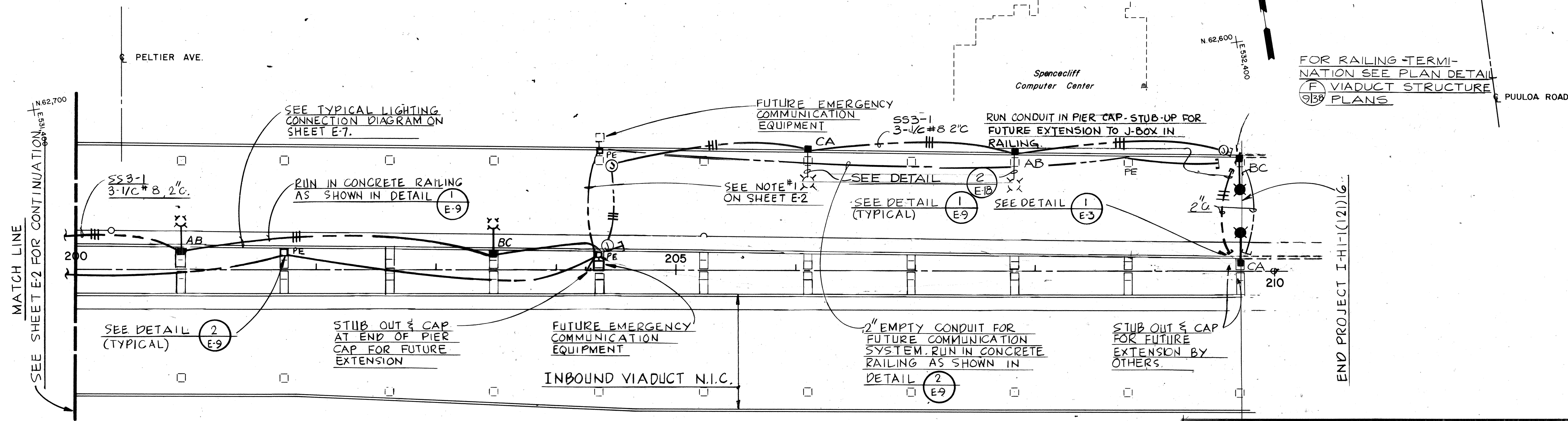
AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(120)16

SCALE: 1"=50' DATE: NOV. 1, 1975

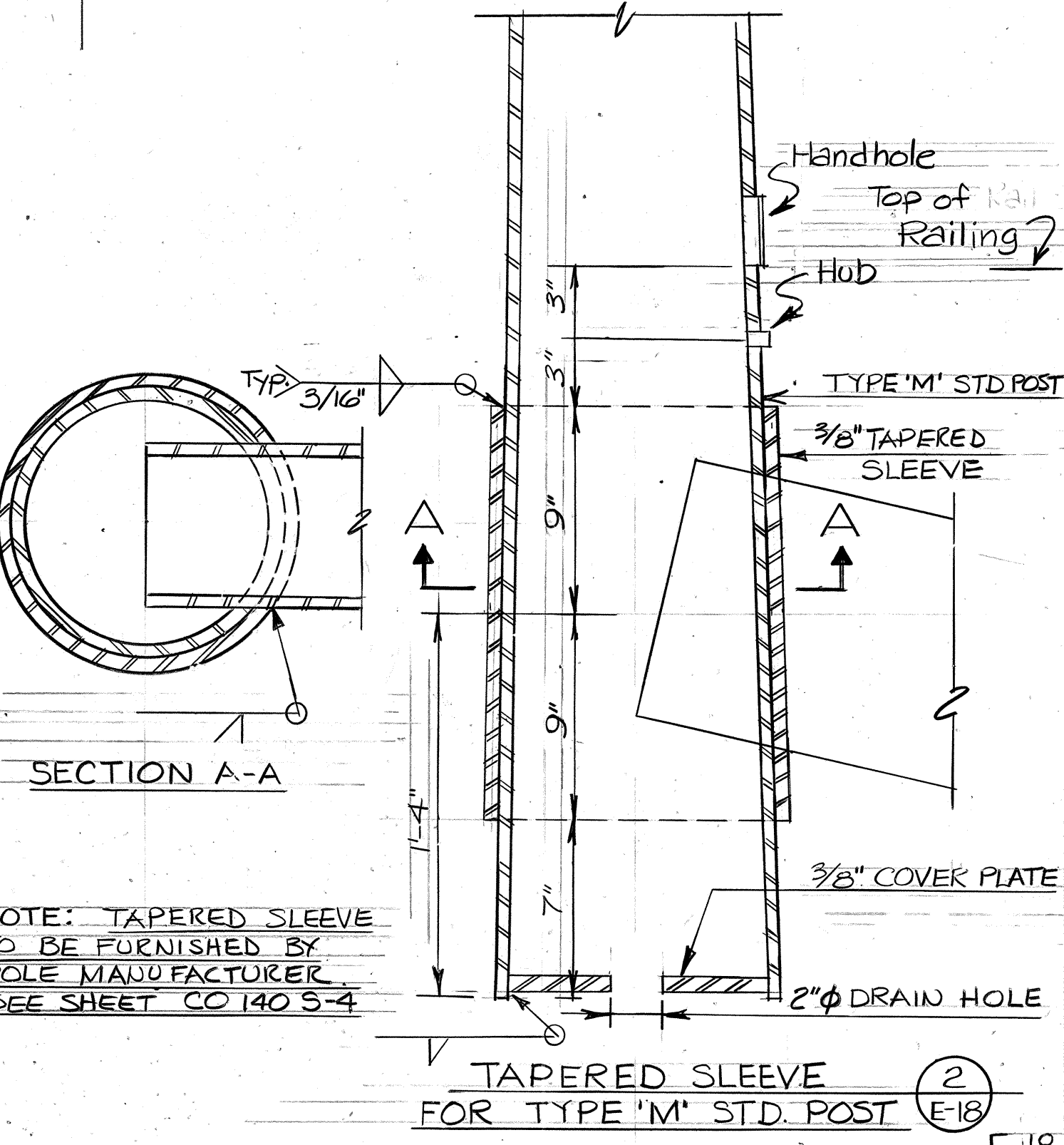
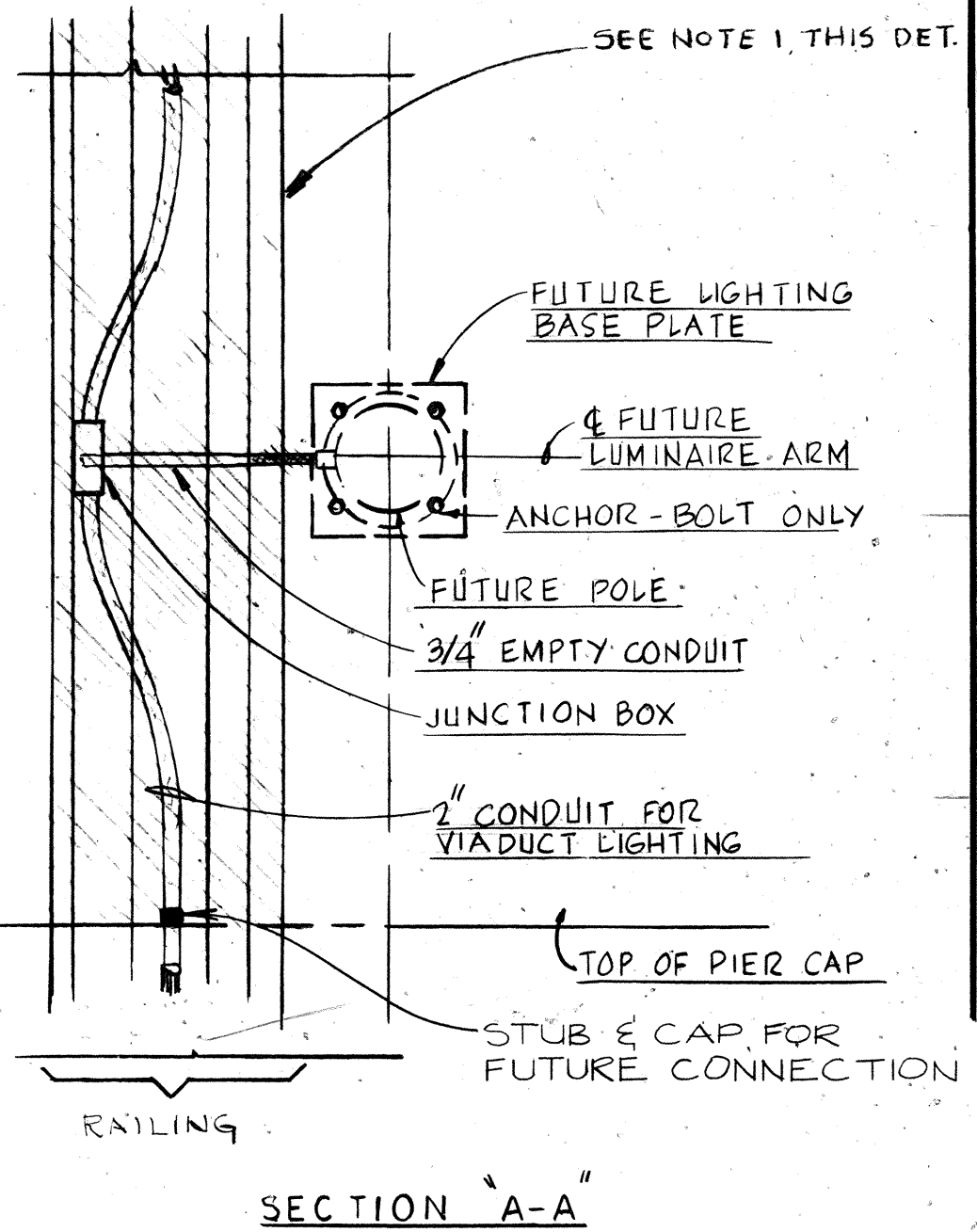
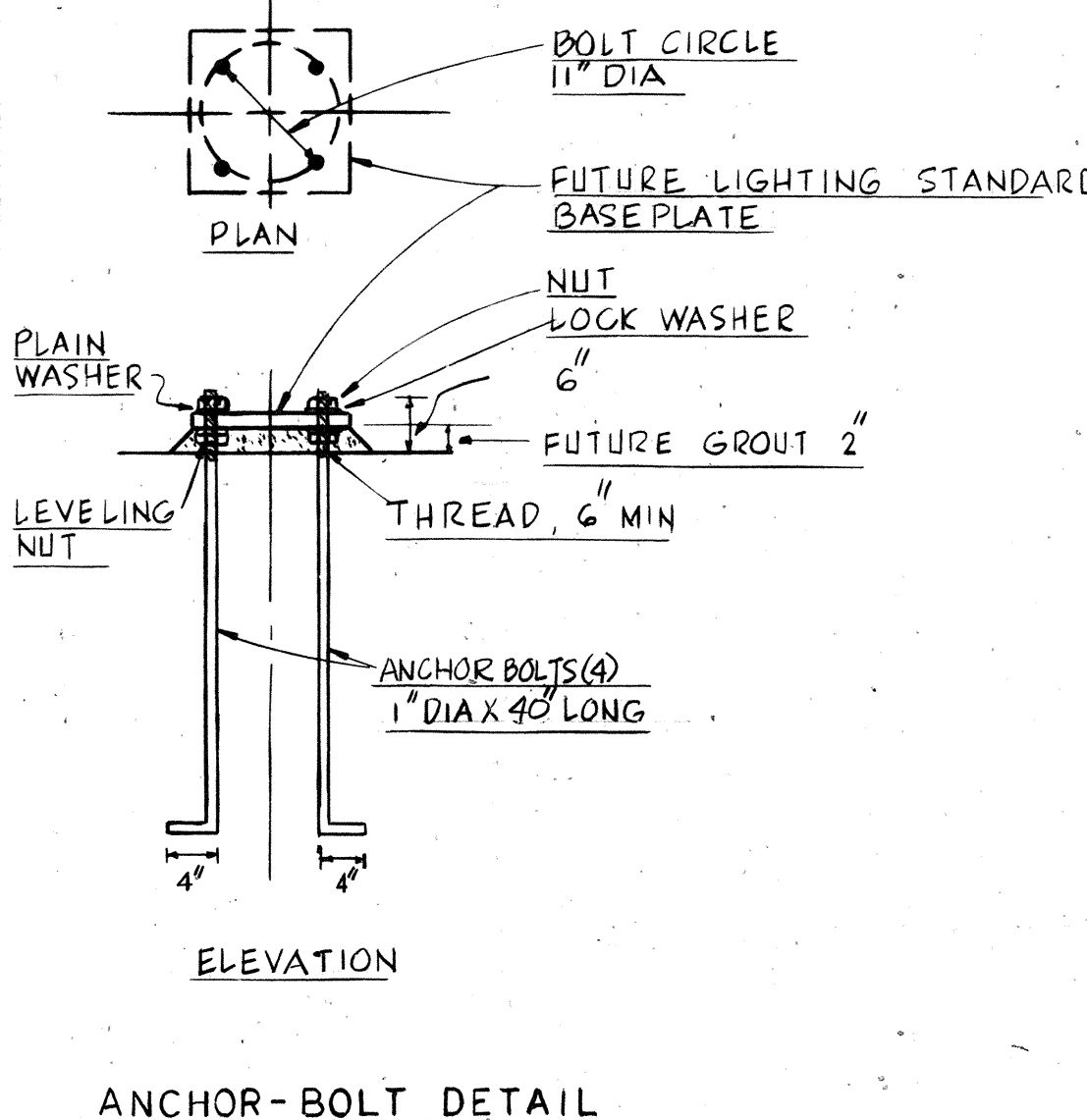
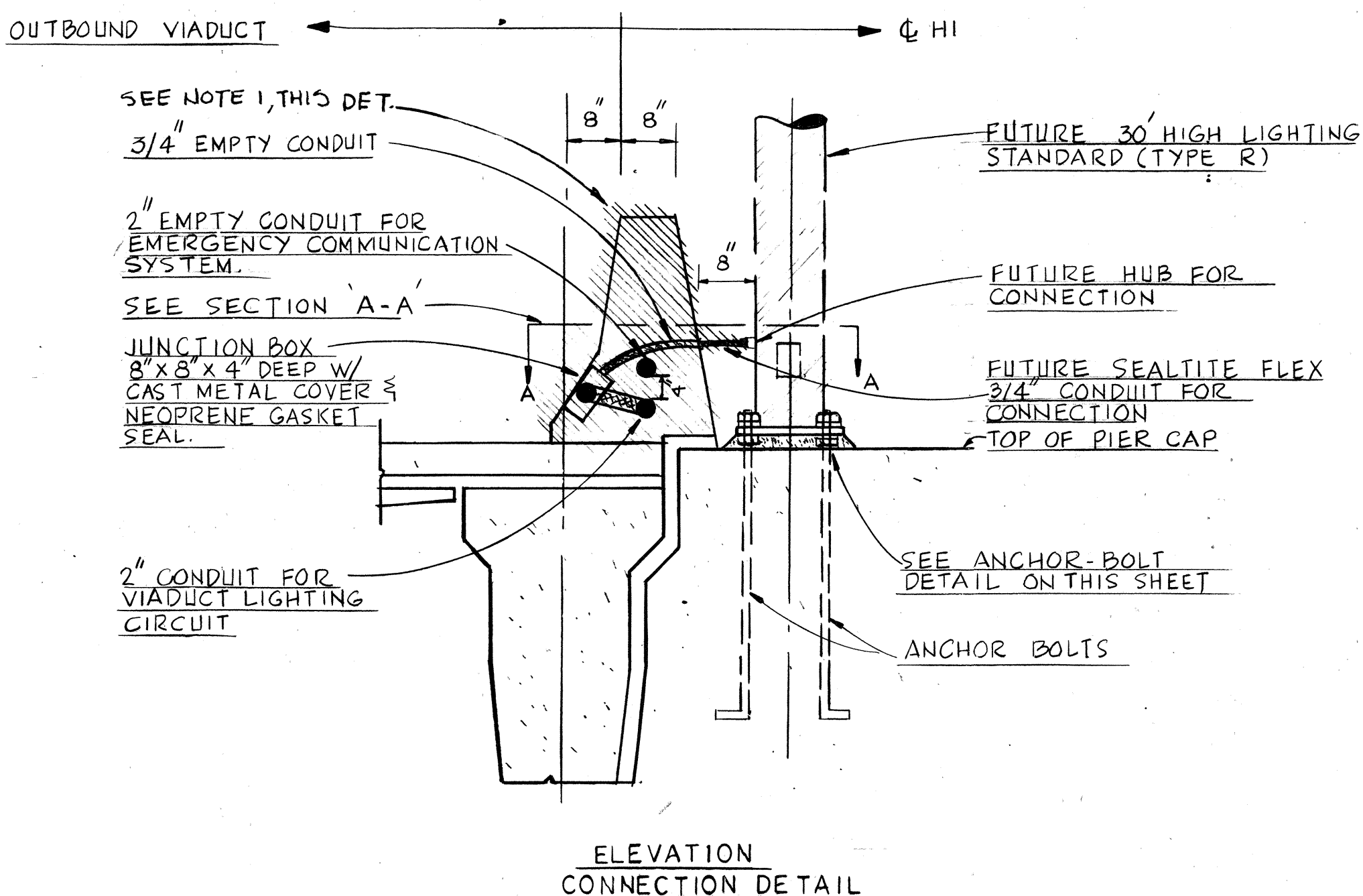
SHEET No. 17 OF 19 SHEETS

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
APPROVED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(120)6	1976	62	173



PARTIAL ELECTRICAL PLAN
OUTBOUND VIADUCT
SCALE: 1" = 50'

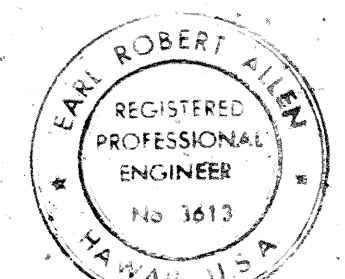


NOTES:
1. WORK IN CROSS-HATCHED AREA IS NIC AND WILL BE ACCOMPLISHED UNDER A FUTURE CONTRACT.

MOUNTING AND CONNECTION DETAIL
OUTBOUND VIADUCT LIGHT TYPE "R"
N.T.S.

THIS DRAWING, SHOWING WORK PERFORMED ON CONTRACT I-HI-1(121)16 IS INCLUDED TO SHOW NUMBER & LOCATIONS OF VIADUCT LIGHTING UNITS TO BE FURNISHED AND INSTALLED ON CONTRACT I-HI-1(120)16.

4-1-77 12-28-76	ADDED HUB & HANDHOLE @ DETAIL 2-E18 RELOCATED (2) STD. POLES AT PIERS 100 & 102 TO MAUKA RAILING. ADDED DETAIL 2-E18.
DATE	REVISION



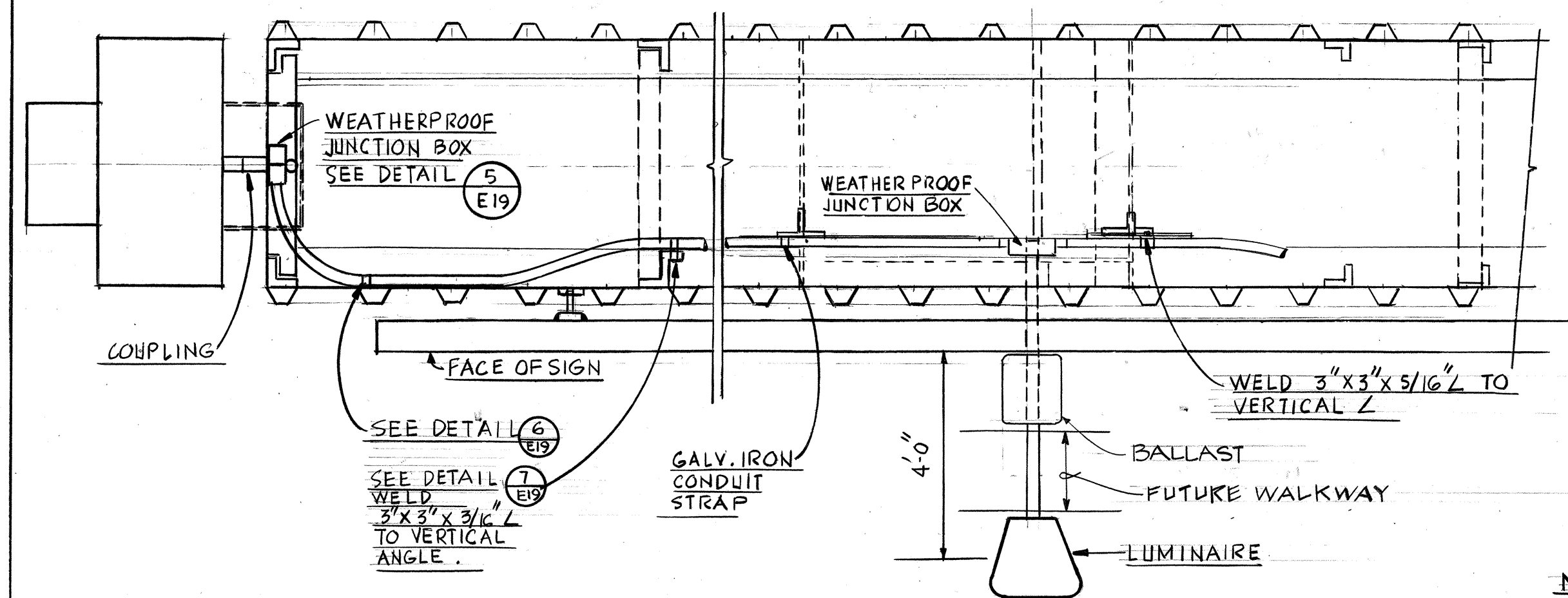
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY LIGHTING
OUTBOUND VIADUCT ST. 200+00 TO 210+00
AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(120)16
SCALE: AS SHOWN
DATE: NOV. 1, 1975
SHEET No. 18 OF 19 SHEETS

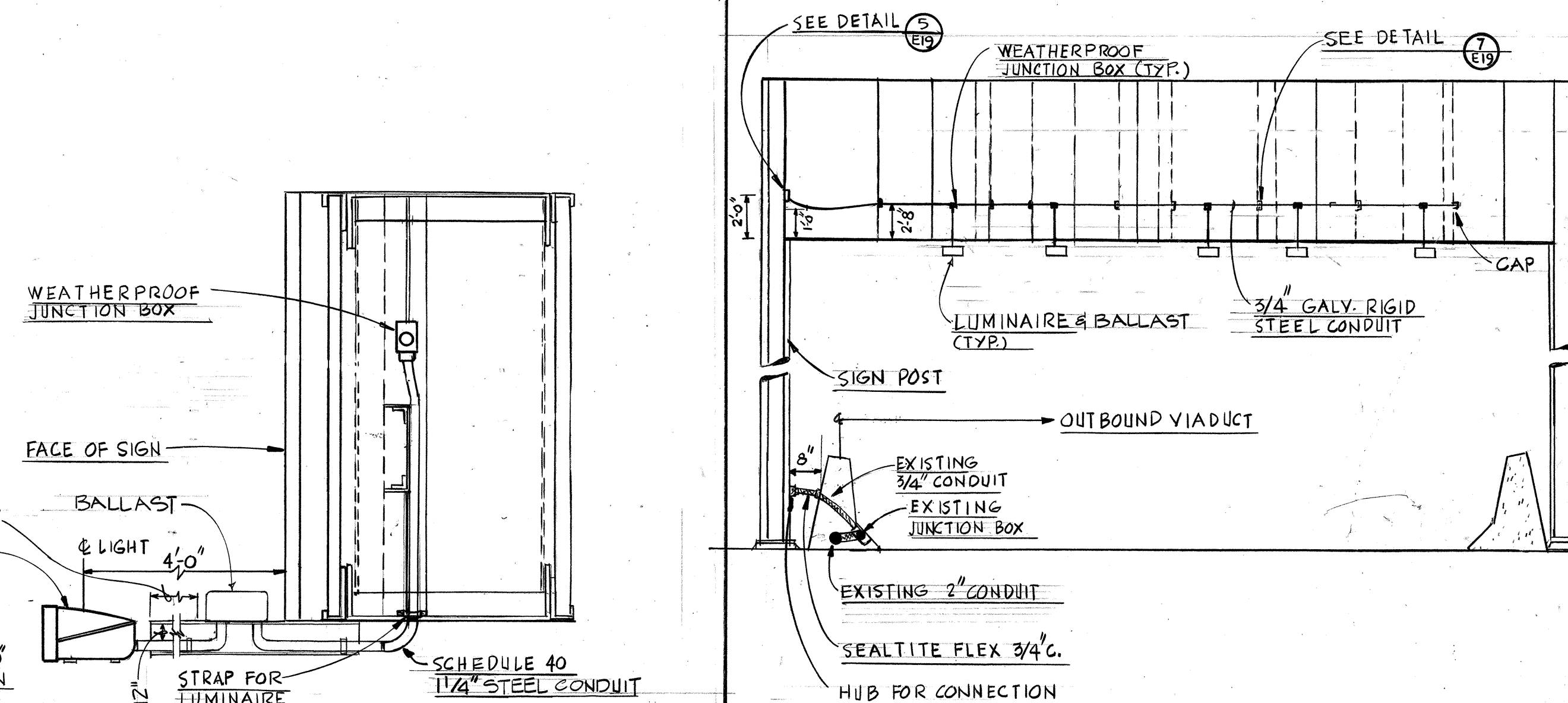
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(20)16	1976	63	173

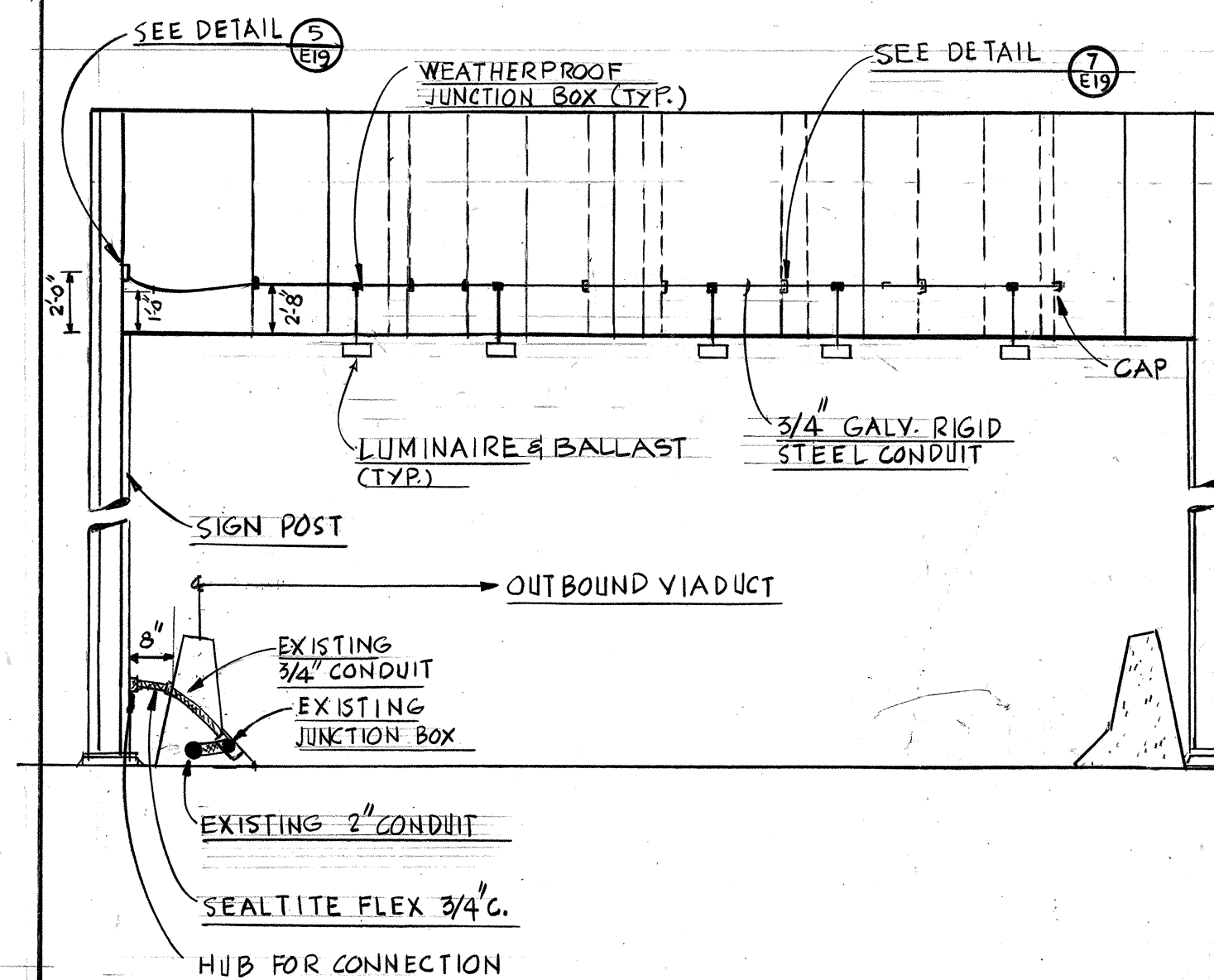


NOTE: 1. SUPPORT CONDUITS AT ±10'-0" MAX INTERVALS. SUPPORT CONDUITS 3'-0" MAX. FROM JUNCTION BOX.

CONDUIT ROUTING DETAIL 1 E19
N.T.S.



LUMINAIRE MOUNTING LOCATION DETAIL 2 E19
N.T.S.



SIGN E3 CONDUIT ROUTING DETAIL 3 E19
(OTHER SIGNS SIMILAR)
N.T.S.

CONTRACT CHANGE ORDER NO. 43

E-19

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGN LIGHTING ELECTRICAL DETAILS

AIRPORT INTERCHANGE
F.A.I. PROJ. NO I-HI-1(120)16

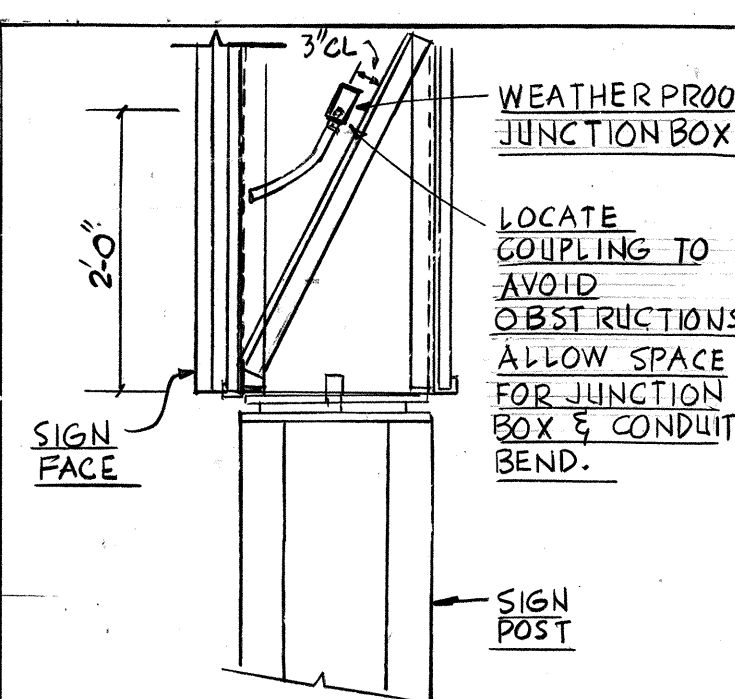
SCALE: NONE DATE:
SHEET No. 19 OF 19 SHEETS



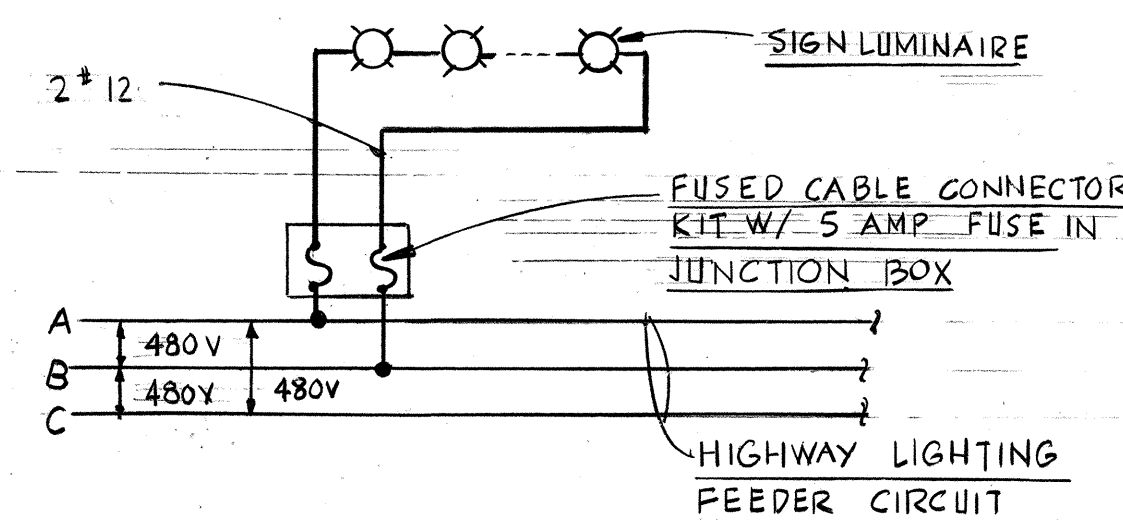
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION

8-29-78	Relocated Ballast Box
9-10-76	Luminaire Location for Sign E-1, E-3 & E-5 changed.
DATE	REVISION

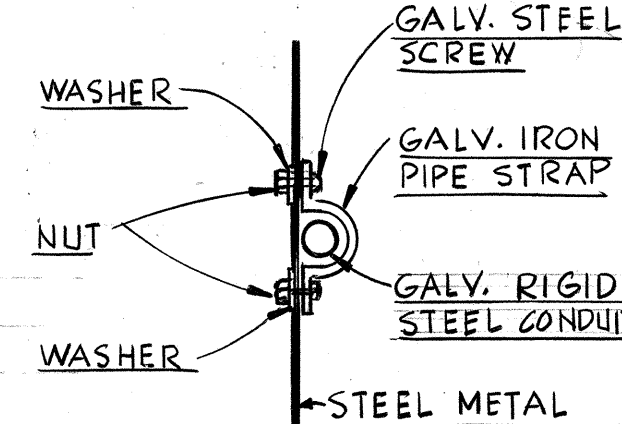
CONDUIT SUPPORT AT VERTICAL ANGLE DETAIL 7 E19



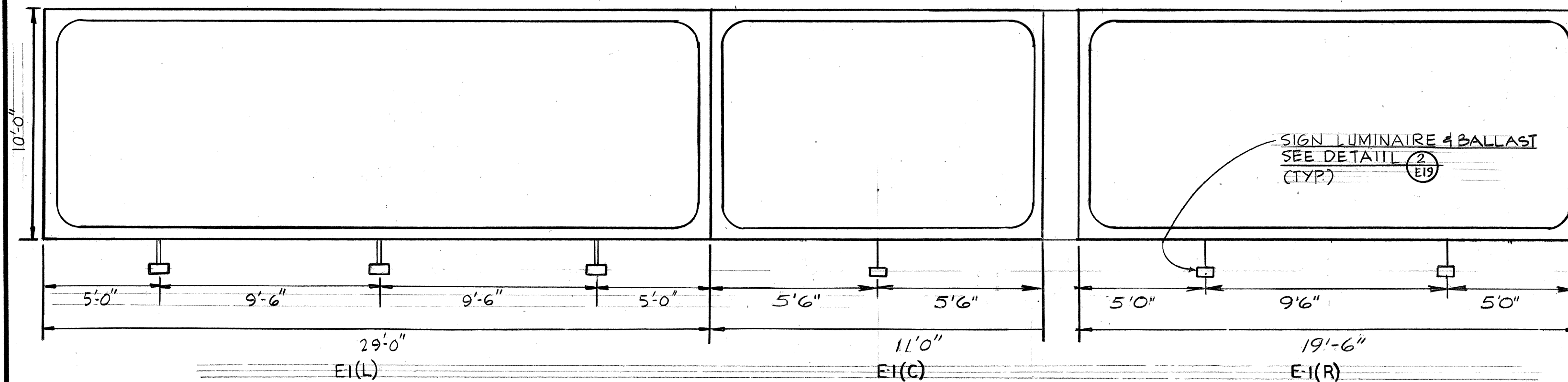
DETAIL 5 E19
N.T.S.



SIGN LIGHT WIRING DIAGRAM

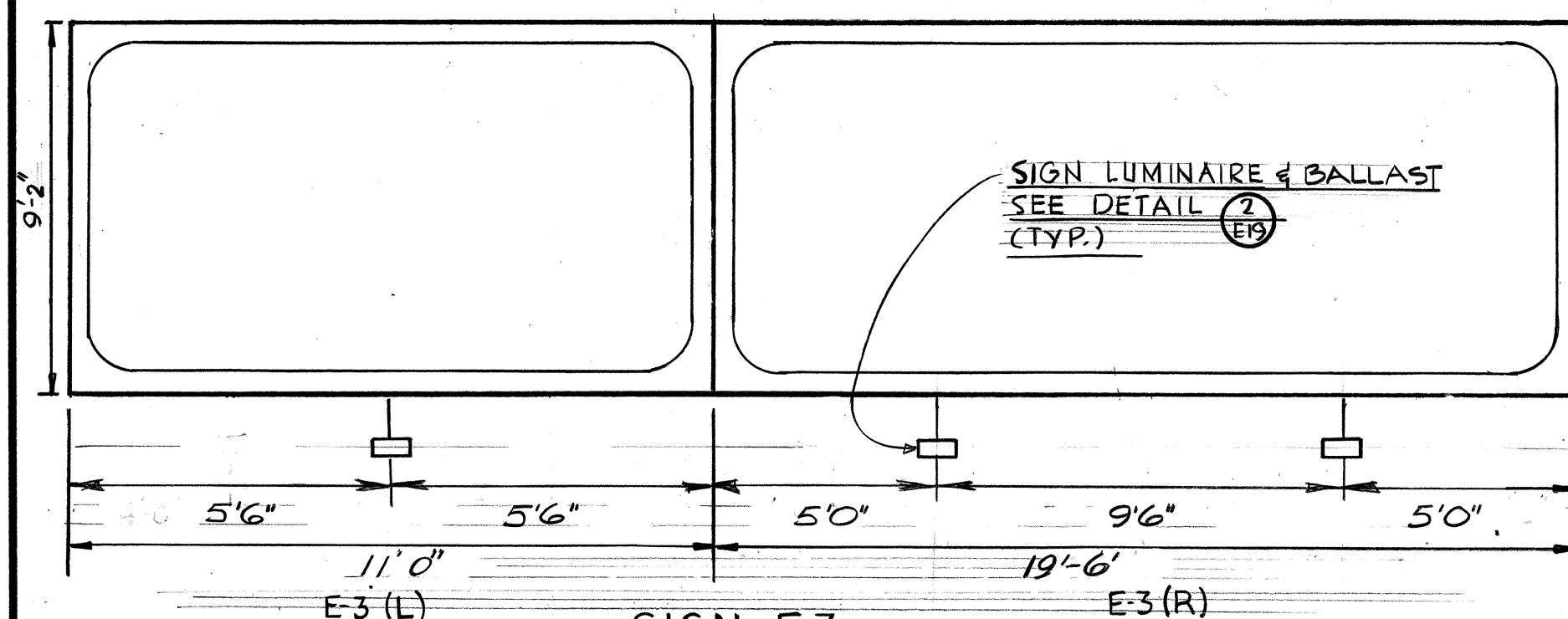


CONDUIT STRAP DETAIL 6 E19
N.T.S.

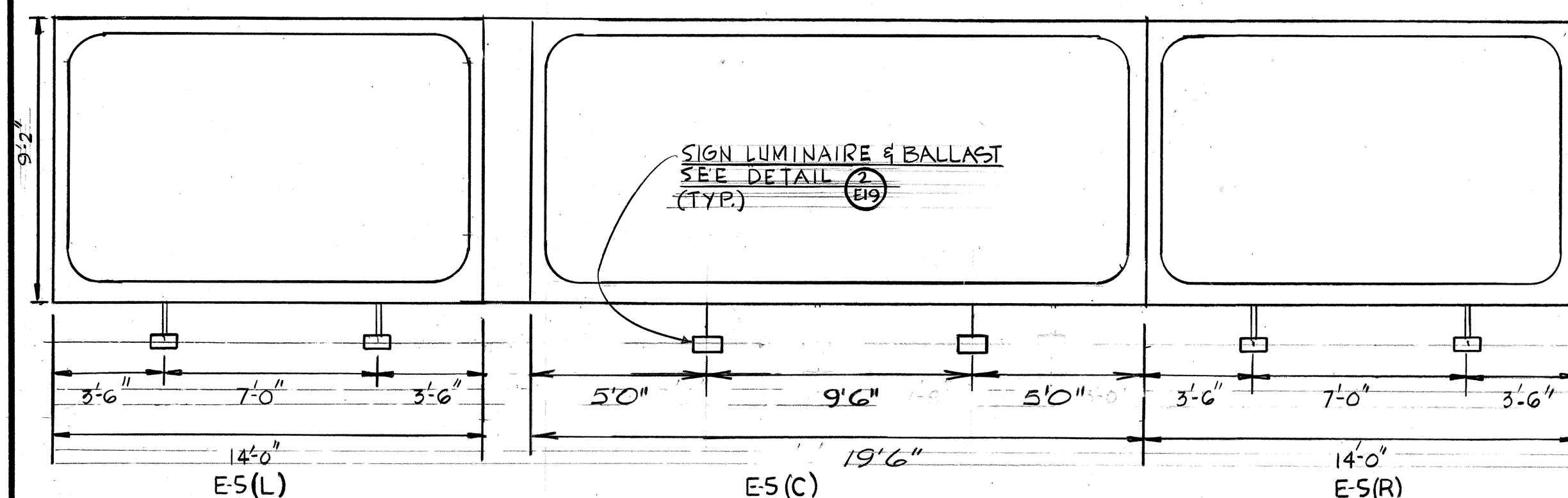


SIGN E-1
STA. 116+18 (OUTBOUND)
(CCT. SS1*1)
N.T.S.

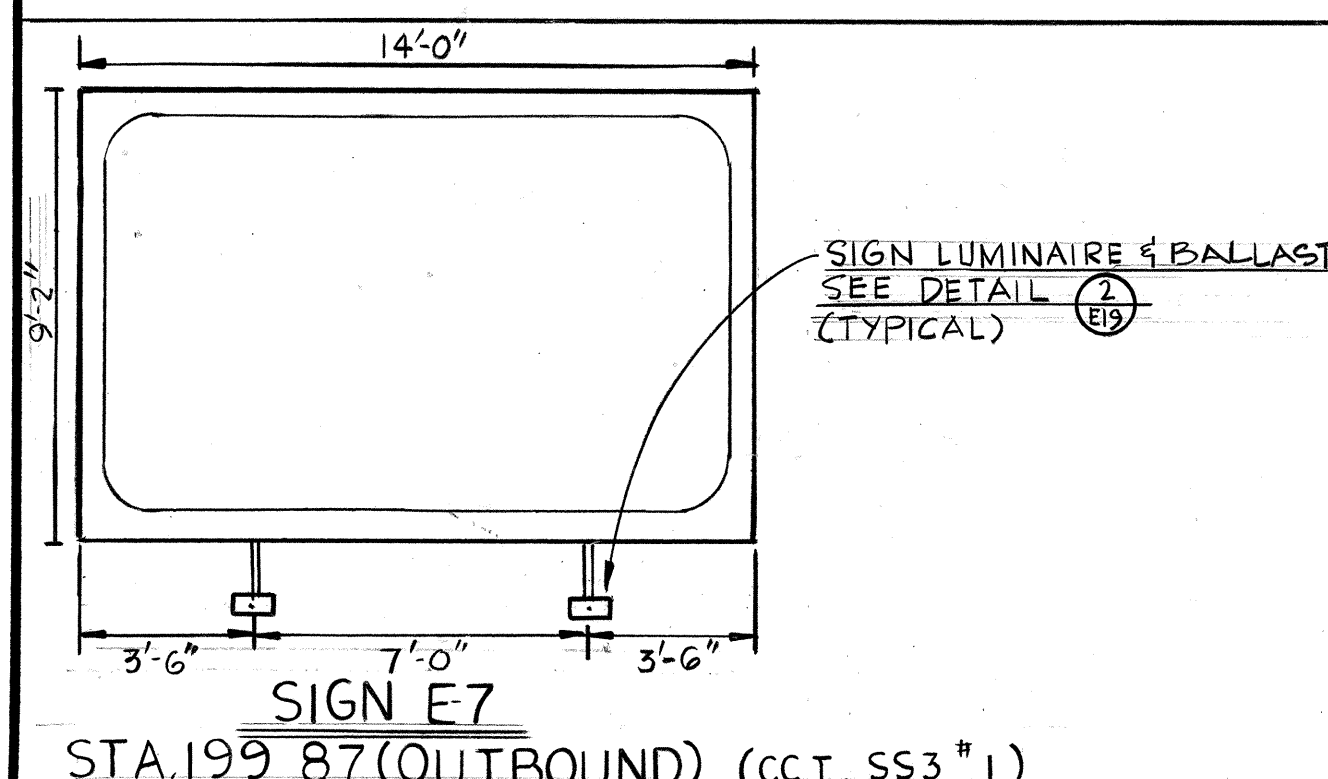
GENERAL NOTE: SEE PANEL LAYOUT
DRAWING FOR SIGNS ON SHEET NO. 7



SIGN E-3
STA. 137+30 (OUTBOUND)
(CCT. SS1*1)
N.T.S.



SIGN E-5
STA. 183+13 (OUTBOUND)
(CCT. SS3*1)
N.T.S.



DATE	DESIGNED BY	CHECKED BY
ORIGINAL PLAN	DESIGNED BY	CHECKED BY
NOTE BOOK	DESIGNED BY	CHECKED BY
DATE	DESIGNED BY	CHECKED BY