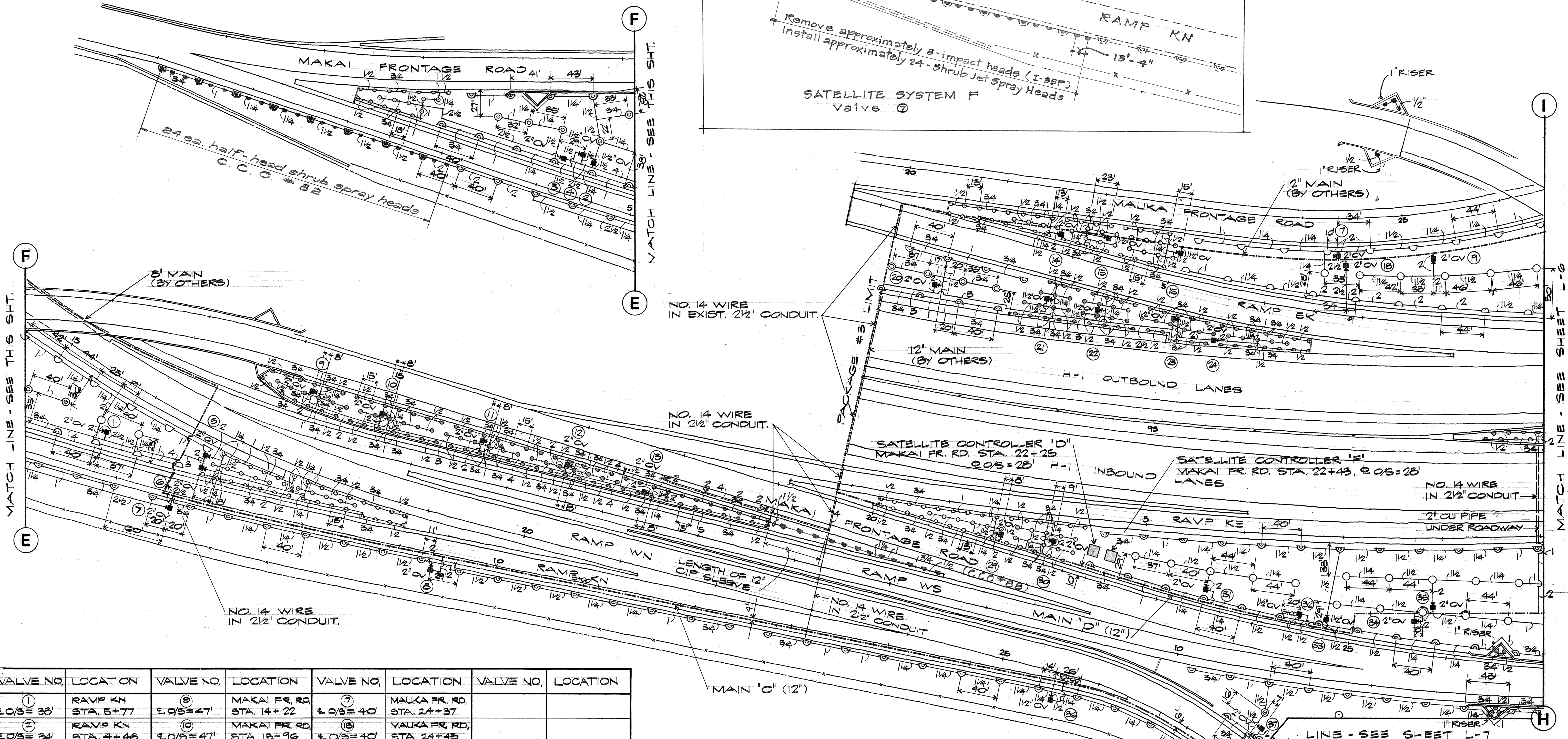
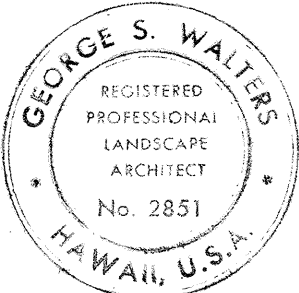


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73)15	1974	139	369



VALVE NO.	LOCATION	VALVE NO.	LOCATION	VALVE NO.	LOCATION	VALVE NO.	LOCATION
1	RAMP KN STA. 5+77	9	MAKAI FR. RD. STA. 14+22	17	MAUKA FR. RD. STA. 24+37		
2	RAMP KN STA. 4+48	10	MAKAI FR. RD. STA. 15+96	18	MAUKA FR. RD. STA. 24+45		
3	RAMP KN STA. 4+18	11	MAKAI FR. RD. STA. 16+00	19	MAUKA FR. RD. STA. 25+23		
4	RAMP KN STA. 4+36	12	MAKAI FR. RD. STA. 16+90	20	H-I STA. 92+57		
5	RAMP KN STA. 6+80	13	MAKAI FR. RD. STA. 17+72	21	H-I STA. 93+73		
6	RAMP KN STA. 6+80	14	RAMP EK STA. 3+83	22	H-I STA. 94+26		
7	RAMP KN STA. 6+60	15	RAMP EK STA. 4+30	23	H-I STA. 95+07		
8	RAMP KN STA. 9+35	16	RAMP EK STA. 5+05	24	H-I STA. 95+31		

VALVE NO.	LOCATION
25	MAKAI FR. RD. STA. 24+73
26	RAMP KE STA. 7+74
27	RAMP KE STA. 7+92
28	RAMP WN STA. 23+57
29	RAMP WN STA. 27+60



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPRINKLER PLAN
PACKAGE NO. 3

PEARL HARBOR INTERCHANGE
P.A.I. PROJ. NO. I-HI-1(73)15

SCALE: 1" = 30' DATE: DEC. 7, 1973

SHEET NO. L-5 OF 13 SHEETS

ORIGINAL PLAN
DATE:

DRAWN BY:

CHECKED BY:

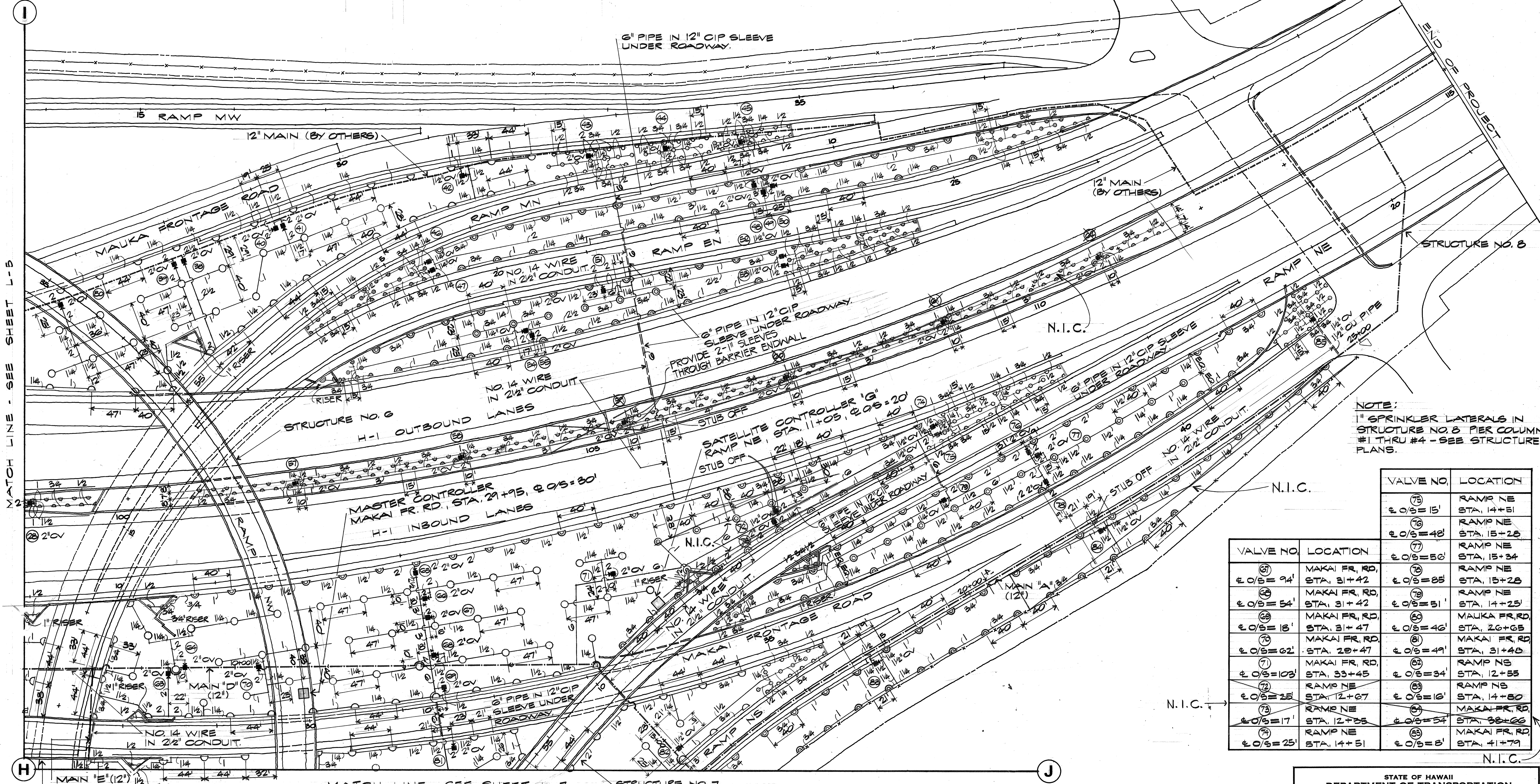
NOTE BOOK
No.

DESIGNED BY:

QUANTITIES BY:

DATE	REVISION
10/12/76	DELETED SPRINKLER SYSTEMS 59, 60, 61, 62, 72, 73 & 84.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	141-1(73)15	1974	140	369



NOTE:
1" SPRINKLER LATERALS IN
STRUCTURE NO. 8 PIER COLUMN
#1 THRU #4 - SEE STRUCTURE
PLANS.

VALVE NO.	LOCATION	VALVE NO.	LOCATION
75	RAMP NE STA. 14+51	76	RAMP NE STA. 15+25
76	RAMP NE STA. 15+25	77	RAMP NE STA. 15+34
77	RAMP NE STA. 15+34	78	RAMP NE STA. 15+28
78	RAMP NE STA. 15+28	79	RAMP NE STA. 14+25
79	RAMP NE STA. 14+25	80	MAUKA FR. RD. STA. 26+65
80	MAUKA FR. RD. STA. 26+65	81	MAUKA FR. RD. STA. 31+40
81	MAUKA FR. RD. STA. 31+40	82	RAMP NS STA. 12+55
82	RAMP NS STA. 12+55	83	RAMP NS STA. 14+80
83	RAMP NS STA. 14+80	84	MAUKA FR. RD. STA. 38+66
84	MAUKA FR. RD. STA. 38+66	85	MAUKA FR. RD. STA. 41+79

VALVE NO.	LOCATION	VALVE NO.	LOCATION	VALVE NO.	LOCATION	VALVE NO.	LOCATION	VALVE NO.	LOCATION	VALVE NO.	LOCATION	VALVE NO.	LOCATION
38	MAUKA FR. RD. STA. 20+05	42	MAUKA FR. RD. STA. 31+35	46	RAMP MN STA. 5+45	50	RAMP MN STA. 9+24	54	H-I STA. 104+55	58	H-I STA. 105+31	62	MAUKA FR. RD. STA. 26+50
39	MAUKA FR. RD. STA. 27+95	43	MAUKA FR. RD. STA. 32+65	47	RAMP MN STA. 5+45	51	RAMP EN STA. 21+10	55	H-I STA. 104+62	59	H-I STA. 107+18	63	MAUKA FR. RD. STA. 26+68
40	MAUKA FR. RD. STA. 29+11	44	MAUKA FR. RD. STA. 33+80	48	RAMP MN STA. 9+07	52	RAMP EN STA. 23+02	56	H-I STA. 101+77	60	H-I STA. 103+87	64	MAUKA FR. RD. STA. 31+35
41	MAUKA FR. RD. STA. 29+19	45	MAUKA FR. RD. STA. 34+32	49	RAMP MN STA. 9+16	53	RAMP EN STA. 23+02	57	H-I STA. 103+56	61	H-I STA. 110+76	65	MAUKA FR. RD. STA. 31+42



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

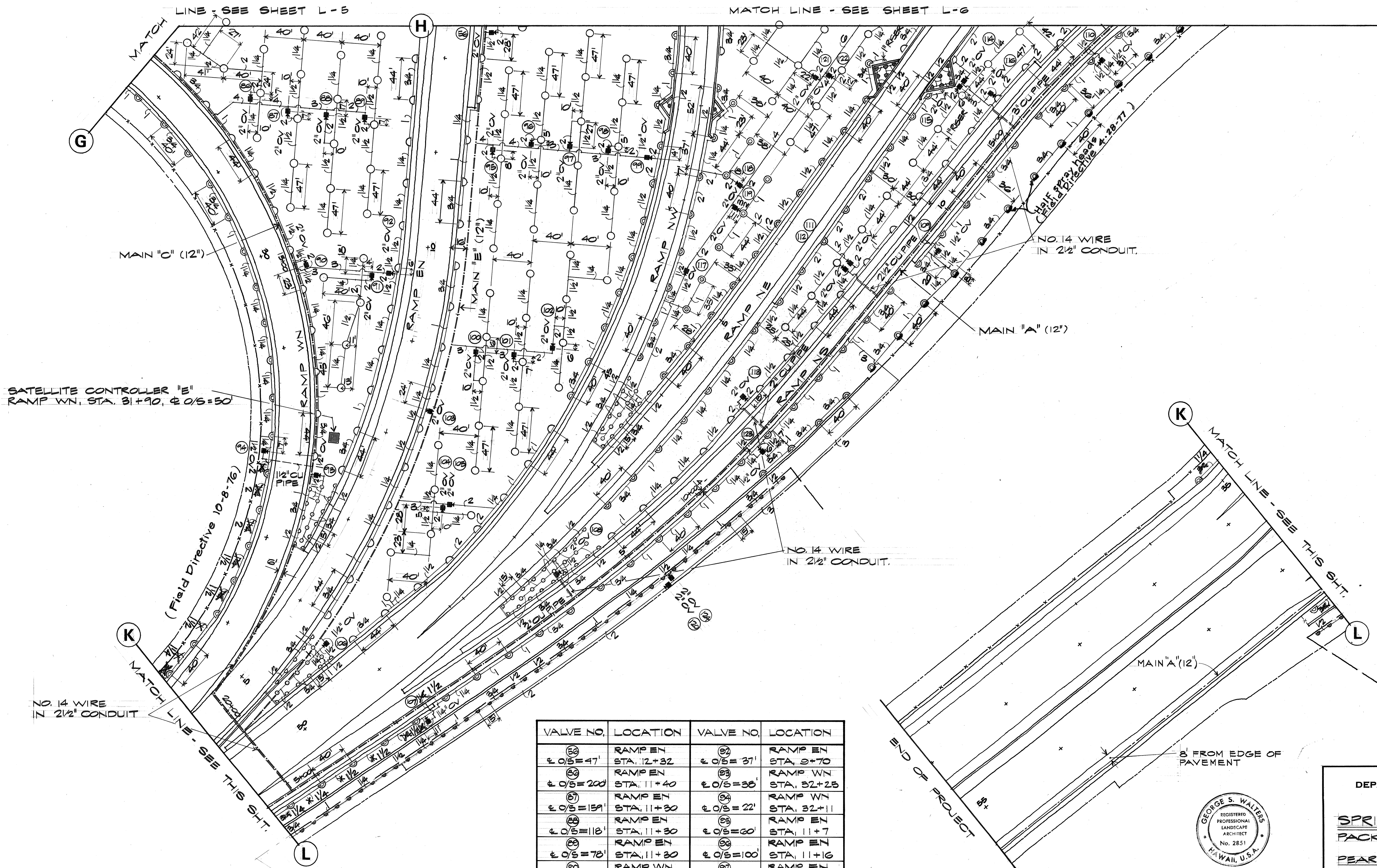
SPRINKLER PLAN
PACKAGE NO. 3

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. NO. I-H-I (73) 15

SCALE: 1" = 50' DATE: DEC. 7, 1973

SHEET NO. 140 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73)15	1974	141	369



VALVE NO.	LOCATION
10	RAMP EN STA. 11+13 E.O.S.=223'
11	RAMP EN STA. 9+05 E.O.S.=68'
12	RAMP EN STA. 9+10 E.O.S.=108'
13	RAMP EN STA. 9+25 E.O.S.=146'
14	RAMP EN STA. 8+35 E.O.S.=37'
15	RAMP EN STA. 7+53 E.O.S.=85'
16	RAMP EN STA. 7+58 E.O.S.=90'
17	RAMP EN STA. 5+81 E.O.S.=41'
18	RAMP NS STA. 2+31 E.O.S.=20'
19	RAMP NS STA. 4+30 E.O.S.=30'
20	RAMP NS STA. 9+60 E.O.S.=22'
21	RAMP NS STA. 12+27 E.O.S.=20'
22	RAMP NS STA. 8+92 E.O.S.=42'
23	RAMP NS STA. 8+84 E.O.S.=42'
24	RAMP NS STA. 7+08 E.O.S.=38'
25	RAMP NS STA. 11+15 E.O.S.=70'
26	RAMP NS STA. 11+07 E.O.S.=70'
27	RAMP NS STA. 11+22 E.O.S.=40'
28	RAMP NW STA. 43+70 E.O.S.=23'
29	RAMP NE STA. 6+13 E.O.S.=55'
30	RAMP NE STA. 6+05 E.O.S.=66'
31	RAMP NS STA. 5+16 E.O.S.=48'
32	RAMP NE STA. 7+66 E.O.S.=68'
33	RAMP NE STA. 7+75 E.O.S.=55'
34	RAMP NS STA. 6+81 E.O.S.=16'
35	RAMP NS STA. 5+22 E.O.S.=48'

VALVE NO.	LOCATION	VALVE NO.	LOCATION
36	RAMP EN	32	RAMP EN
E.O.S.=47'	STA. 12+32	E.O.S.=37'	STA. 9+70
38	RAMP EN	33	RAMP WN
E.O.S.=200'	STA. 11+40	E.O.S.=38'	STA. 32+25
37	RAMP EN	34	RAMP WN
E.O.S.=159'	STA. 11+30	E.O.S.=22'	STA. 32+11
38	RAMP EN	35	RAMP EN
E.O.S.=118'	STA. 11+30	E.O.S.=60'	STA. 11+7
39	RAMP EN	36	RAMP EN
E.O.S.=70'	STA. 11+30	E.O.S.=100'	STA. 11+16
39	RAMP WN	37	RAMP EN
E.O.S.=43'	STA. 30+25	E.O.S.=141'	STA. 11+16
41	RAMP EN	38	RAMP EN
E.O.S.=55'	STA. 9+66	E.O.S.=182'	STA. 11+16



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

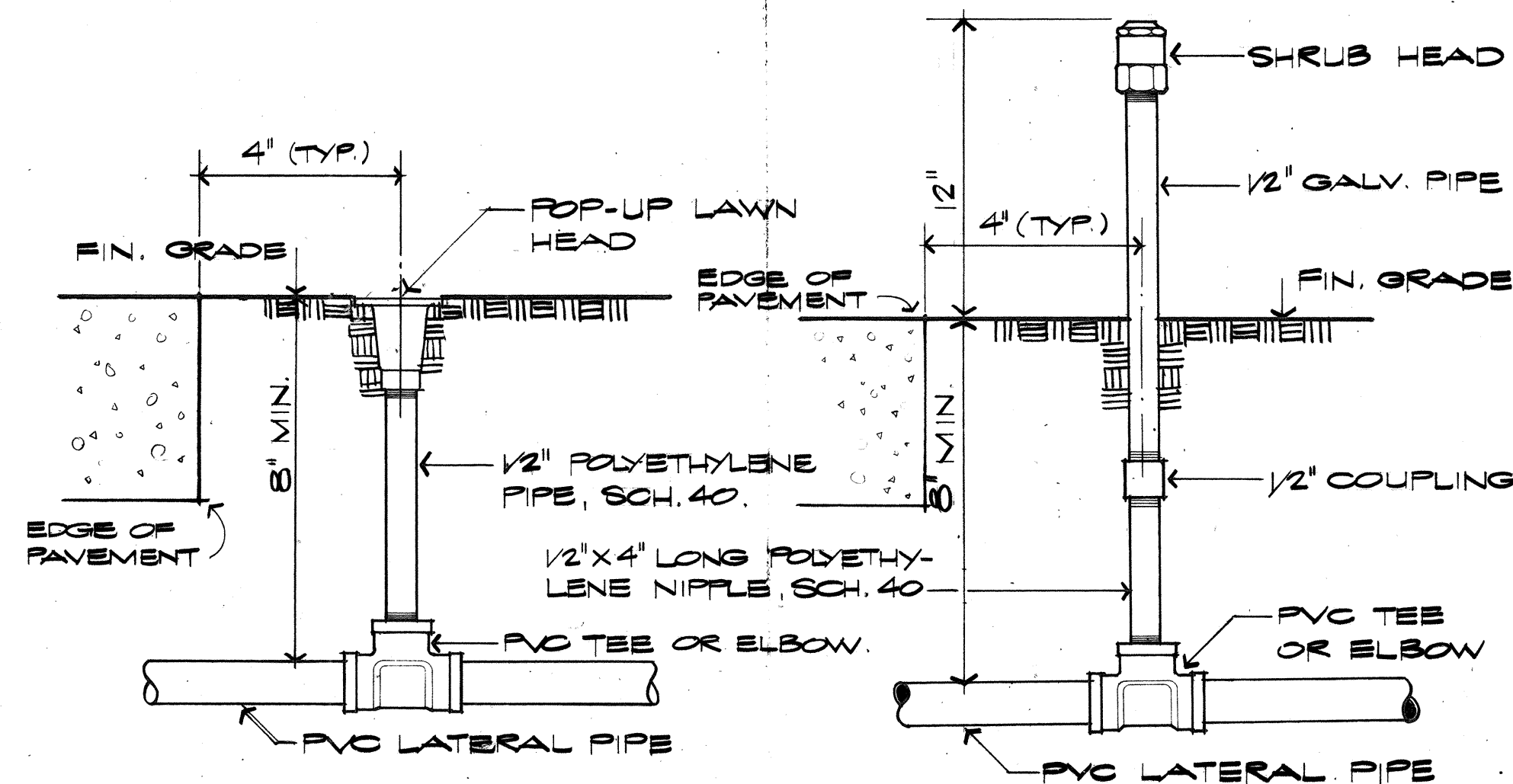
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPRINKLER PLAN
PACKAGE NO. 3

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. NO. I-HI-1 (73) 15

SCALE: 1"=50' DATE: DEC. 7, 1973

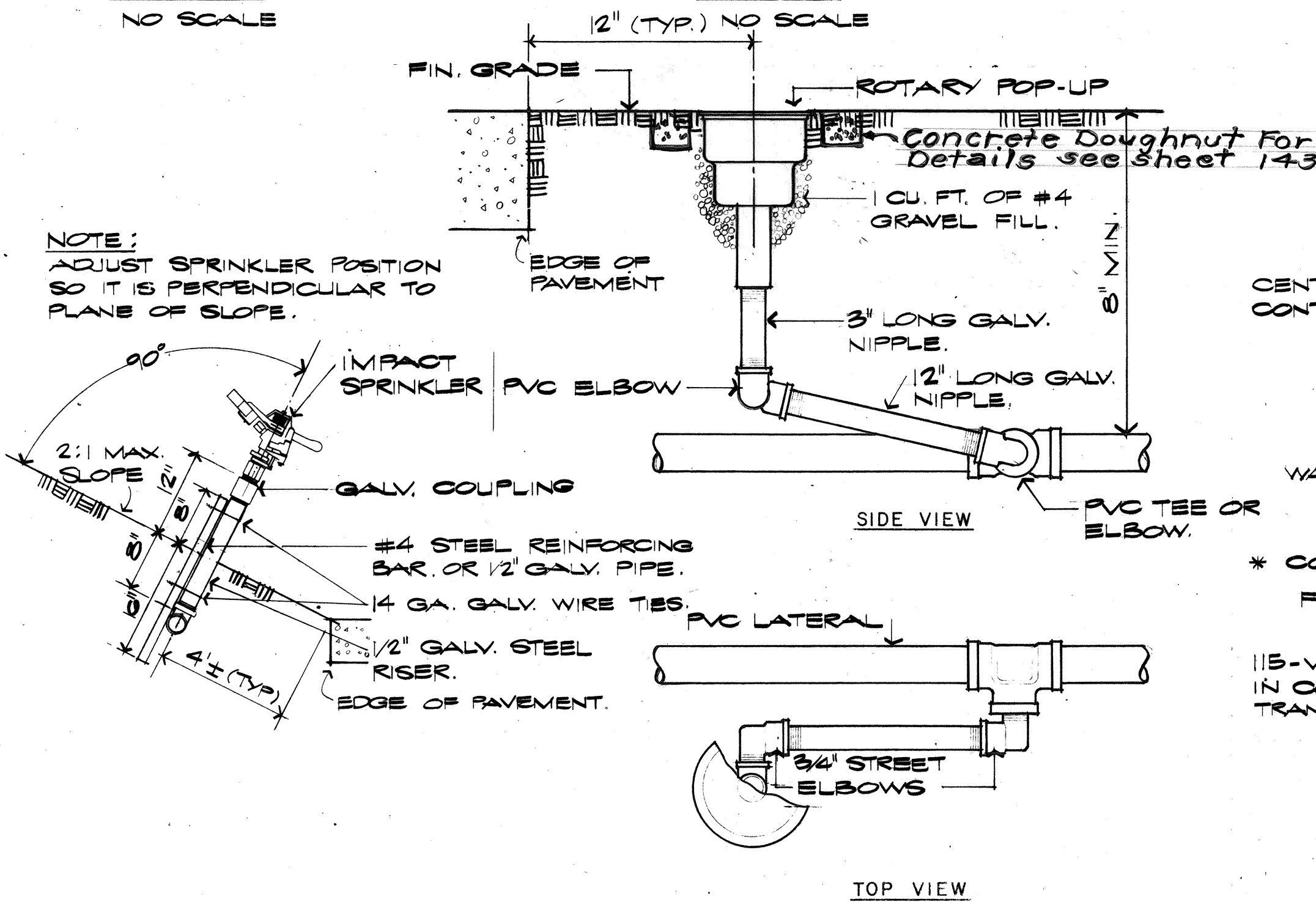
SHEET NO. L-7 OF 18 SHEETS



NOTE:
USE 1/2" POLYETHYLENE PIPE ON ALL POP-UP LAWN AND SHRUB HEADS DIRECTLY ADJACENT TO ROADWAY SHOULDERS. USE 1/2" GALV. STEEL PIPE RISER FOR REMAINING TYPES OF HEADS MENTIONED ABOVE.

TYPICAL POP-UP HEAD
DETAIL
NO SCALE

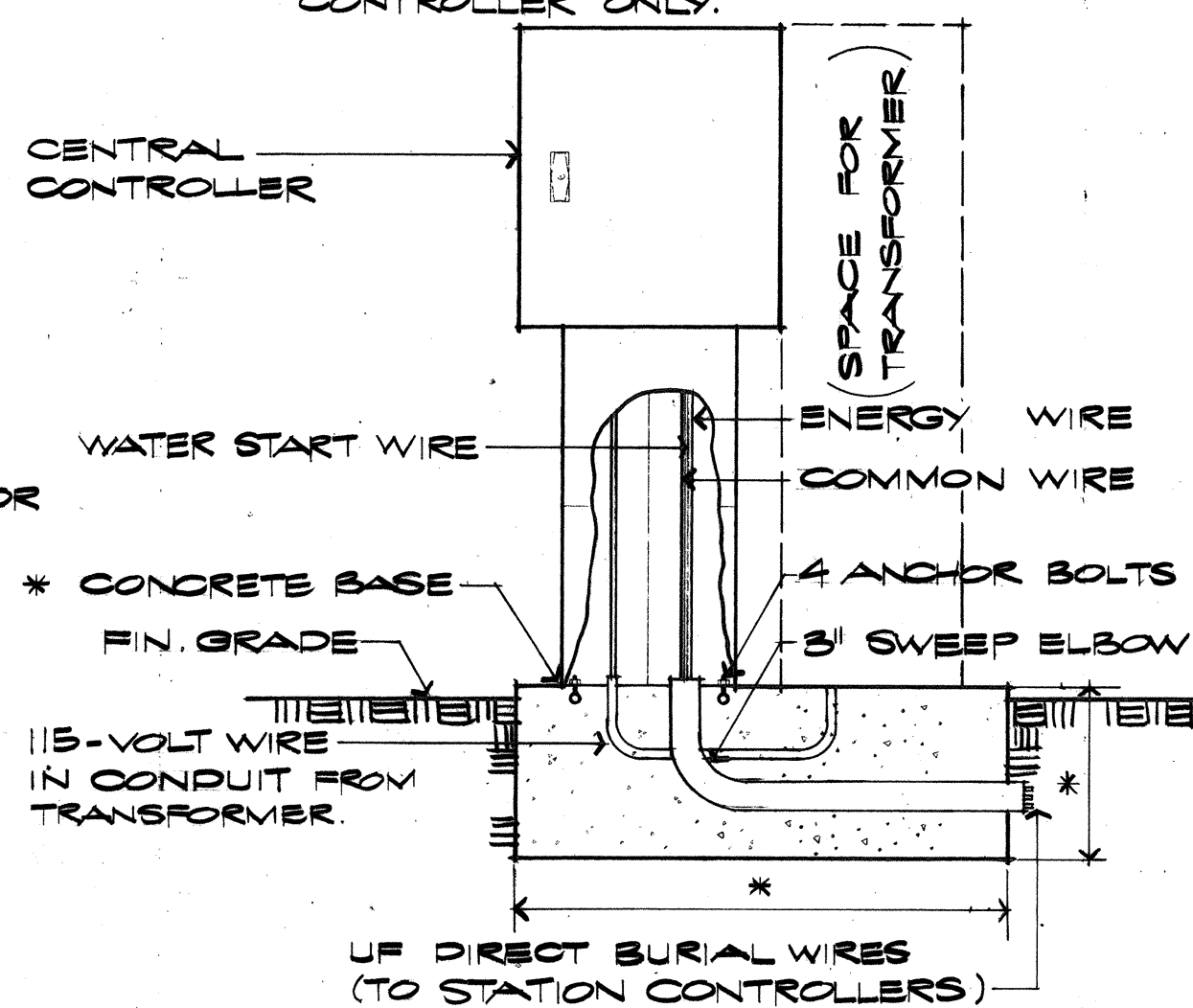
TYPICAL SHRUB HEAD
DETAIL
NO SCALE



NOTE:
ADJUST SPRINKLER POSITION SO IT IS PERPENDICULAR TO PLANE OF SLOPE.

SOLENOID VALVE DETAIL
NO SCALE

NOTE:
SEE ELECTRICAL PLANS FOR ELECTRICAL TRANSFORMER DETAILS.
ADDITIONAL CONCRETE BASE REQUIRED FOR ELECTRICAL TRANSFORMER ON CENTRAL CONTROLLER ONLY.



CONTROLLER DETAIL
NO SCALE

NOTE:
CONCRETE BASE TO BE SIZED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

TYPICAL PIPE TRENCHING DETAIL
NO SCALE

(DELETE)

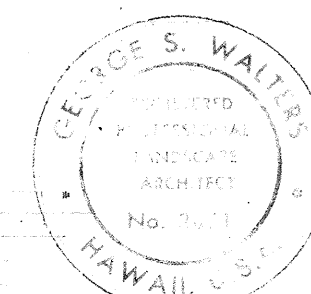
SPRINKLER LEGEND								
SPRINKLER	SYMBOL	DESCRIPTION	PRESSURE PSI.	COVERAGE FT.	FLOW GPM	NOZZLE INCHES	RISER INCHES	SPECIAL FEATURES
P-12	○	POP-UP LAWN - FULL	20	12 RAD.	3.2		1/2	2" POP-UP
P-12	◐	POP-UP LAWN - HALF	20	12 RAD.	2.5		1/2	
P-12	◑	POP-UP LAWN - QUARTER	20	12 RAD.	1.2		1/2	
S-12	●	SHRUB SPRAY - FULL	20	10 RAD.	3.0		1/2	
S-12	◐	SHRUB SPRAY - HALF	20	10 RAD.	2.5		1/2	
S-12	◑	SHRUB SPRAY - QUARTER	20	10 RAD.	1.2		1/2	
I-35F	⊙	IMPACT - FULL	30	39 RAD.	5.5	3/16	3/4	BRASS/BRONZE CONSTRUCTION W/ BRASS NOZZLE W/ BREAK- UP PIN.
I-35P	◐	IMPACT - PART	30	36 RAD.	3.1	9/64	1/2	
R-40F	⊙	ROTARY POP-UP - FULL	45	46 RAD.	9.3	7/32	1	BRASS/BRONZE CONSTRUCTION, W/ BRASS NOZZLE, BRASS HOUSING.
R-40P	◐	ROTARY POP-UP - PART	40	40 RAD.	4.6	5/32	3/4	
	⊞	CENTRAL (MASTER) AUTOMATIC CONTROLLER - 6 STATION (MIN)						PEDESTAL MOUNTED
	⊞	STATION (SATELLITE) AUTOMATIC CONTROLLER - 10 STATION (MIN)						PEDESTAL MOUNTED
	⊞	ELECTRIC REMOTE CONTROL VALVE						24V WATERPROOF SOLENOID, INSTALL IN VALVE BOX W/ COVER

NOTES TO CONTRACTOR:

- 1- ALL WIRING UNDER ROADWAY TO BE INSTALLED IN CONDUITS.
- 2- PVC PIPE AND FITTINGS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 3- NO ROCKS OR SHARP OBJECTS ONE INCH OR LARGER SHALL BE USED IN THE BACKFILLING OF TRENCHES.
- 4- FINAL LOCATIONS OF CONTROL VALVES SHALL BE DETERMINED BY THE ENGINEER.
- 5- CONTRACTOR SHALL ADJUST ALL SPRINKLER HEADS FOR PROPER COVERAGE.
- 6- CONCRETE REACTION BLOCK SHALL BE CLASS B.
- 7- PROVIDE TWO 30" LONG HEAVY PLATED IRON KEY FOR CONTROL VALVE (INCIDENTAL TO VALVE COST).
- 8- UNLESS OTHERWISE NOTED ON DRAWINGS THE STANDARD TRIANGULAR SPACING BETWEEN VARIOUS TYPES OF SPRINKLER HEADS ARE AS FOLLOWS:

POP-UP LAWN - 15' PART FULL
SHRUB SPRAY - 15' IMPACT - 40' 43'
ROTARY POP-UP - 44' 47'

- 9- TRENCH WIDTHS SHALL NOT BE LESS THAN 12".
- 10- ALL SPRINKLER LATERALS UNDER ROADWAY SHALL BE AT A DEPTH OF 2'-0".
- 11- ALL SPRINKLER SUPPLY LINES SHALL BE AT A DEPTH OF 3'-0".



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPRINKLER DETAILS PACKAGE NO. 3

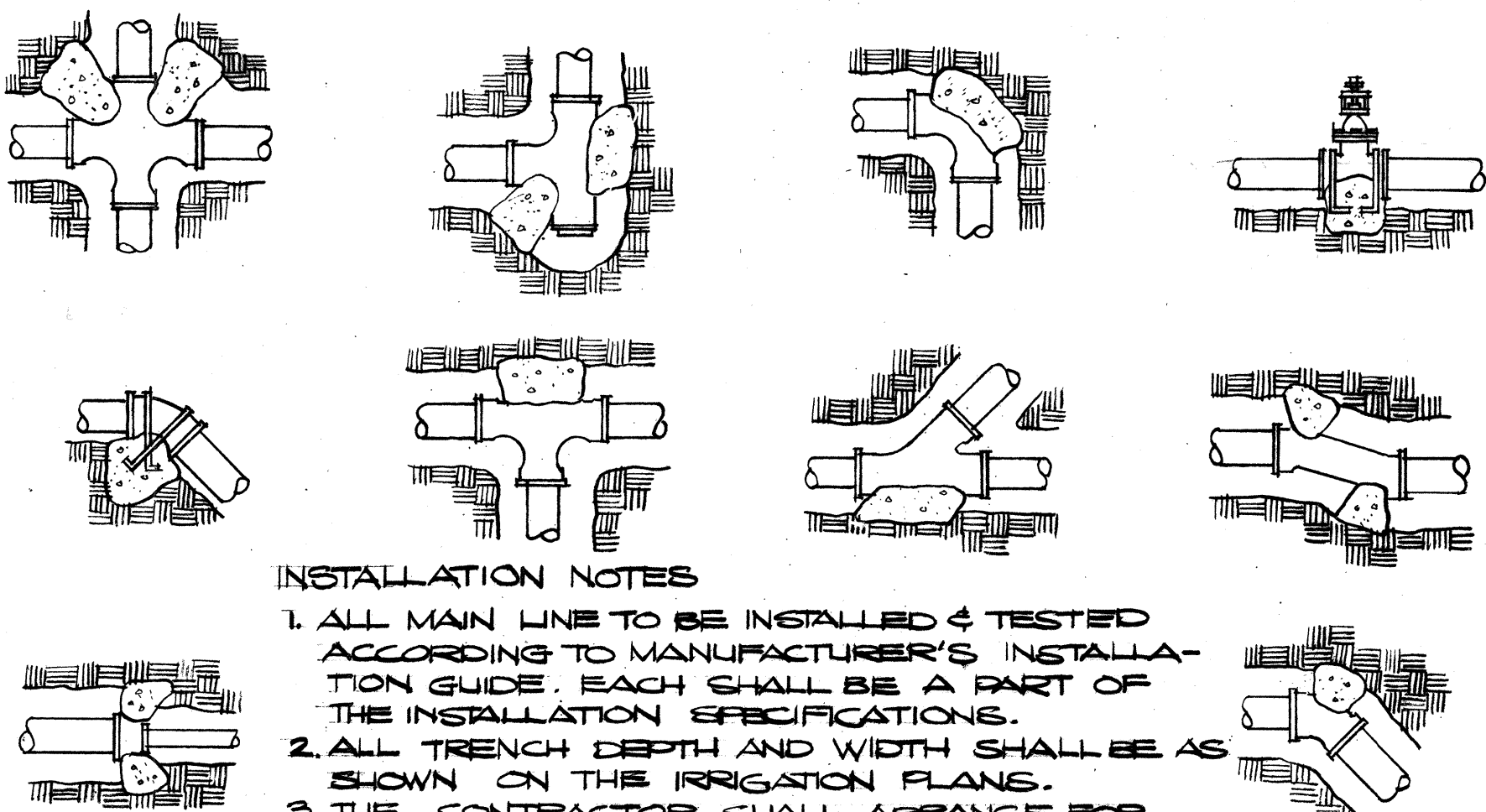
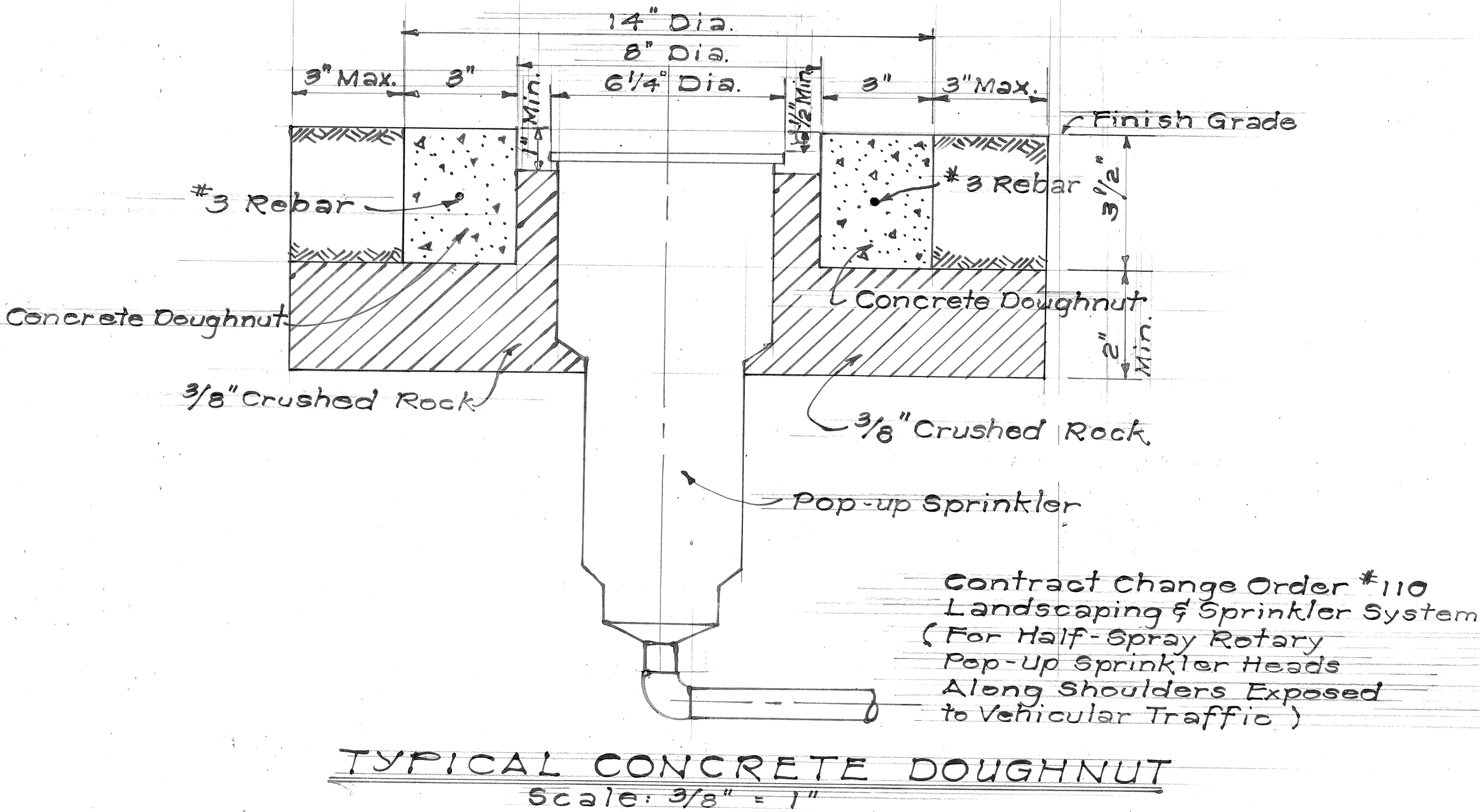
PEARL HARBOR INTERCHANGE
F.A.I., PROJ. NO. I-H-1(73)15

SCALE: NONE DATE: DEC. 7, 1973

SHEET NO. 14 OF 19 SHEETS

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(73)15	1974	143	369



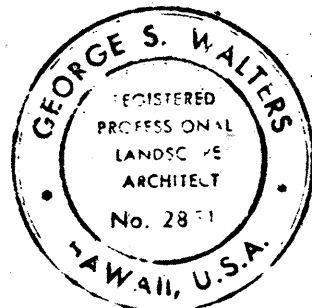
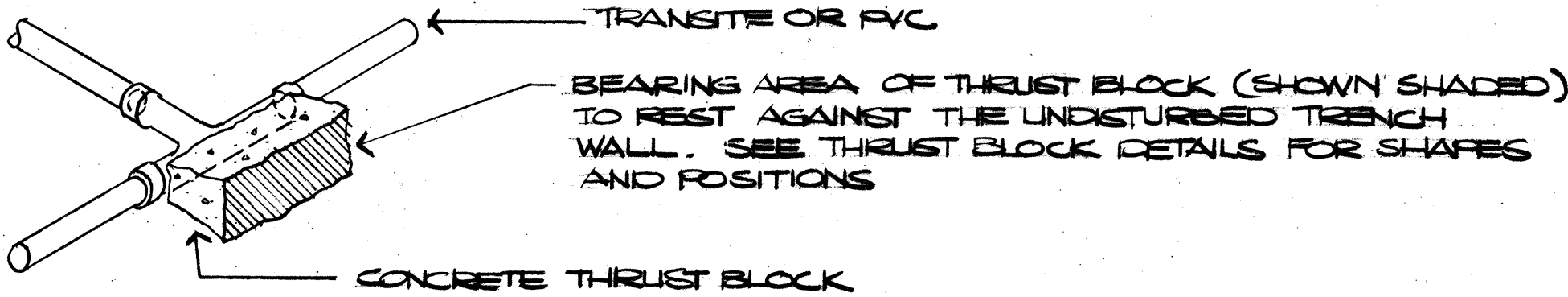
INSTALLATION NOTES

1. ALL MAIN LINE TO BE INSTALLED & TESTED ACCORDING TO MANUFACTURER'S INSTALLATION GUIDE. EACH SHALL BE A PART OF THE INSTALLATION SPECIFICATIONS.
2. ALL TRENCH DEPTH AND WIDTH SHALL BE AS SHOWN ON THE IRRIGATION PLANS.
3. THE CONTRACTOR SHALL ARRANGE FOR THE SERVICE OF THE MANUFACTURER'S QUALIFIED INSTRUCTOR.

TYPICAL THRUST BLOCK DETAILS FOR TRANSITE OR PVC PIPE

NO SCALE

BEARING AREA REQUIRED FOR THRUST BLOCKS (SQ. FT.)								
PIPE SIZE	3"	2 1/2"	2"	1 1/2"	1 1/4"	4"	6"	
TEES & CROSSES	1.00	0.50	0.50	0.50	0.50	1.25	3.00	
90° BEND	1.25	0.75	0.50	0.50	0.50	2.00	4.00	
45° BEND	0.75	0.50	0.50	0.50	0.50	1.00	2.25	



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

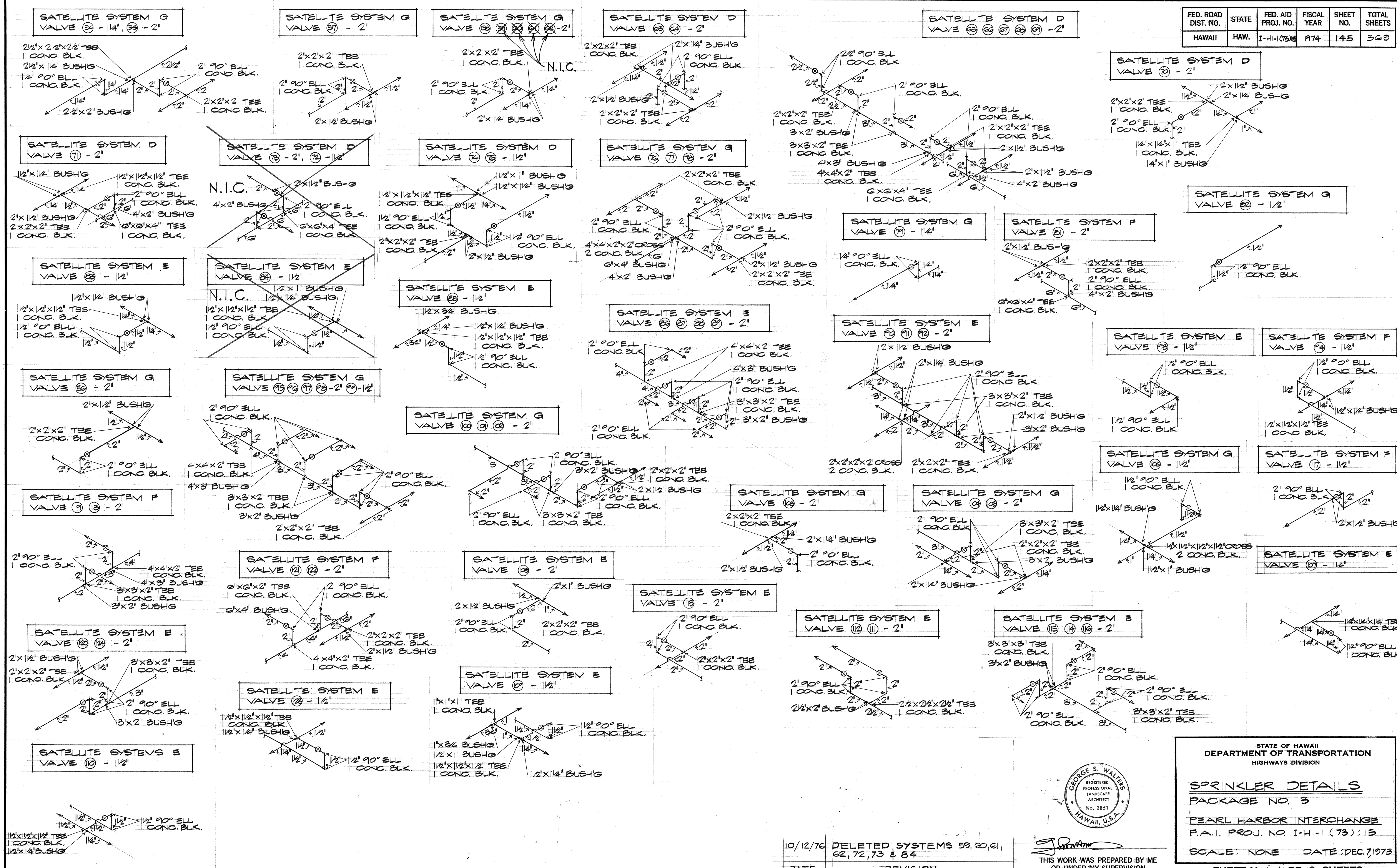
SPRINKLER DETAILS
PACKAGE NO.

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. NO. I-H-1(73)15

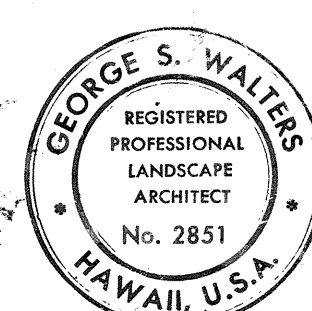
SCALE: NONE DATE: DEC. 7, 1973

SHEET NO. 143 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73)15	1974	145	369



DATE: _____
 SURVEY PLOTTED BY: _____
 DRAWN BY: _____
 TRACED BY: _____
 NOTE BOOK: _____
 QUANTITIES BY: _____
 CHECKED BY: _____



10/12/76	DELETED SYSTEMS 59, 60, 61, 62, 72, 73 & 84
DATE	REVISION

THIS WORK WAS PREPARED BY ME
 OR UNDER MY SUPERVISION

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

SPRINKLER DETAILS
 PACKAGE NO. 3

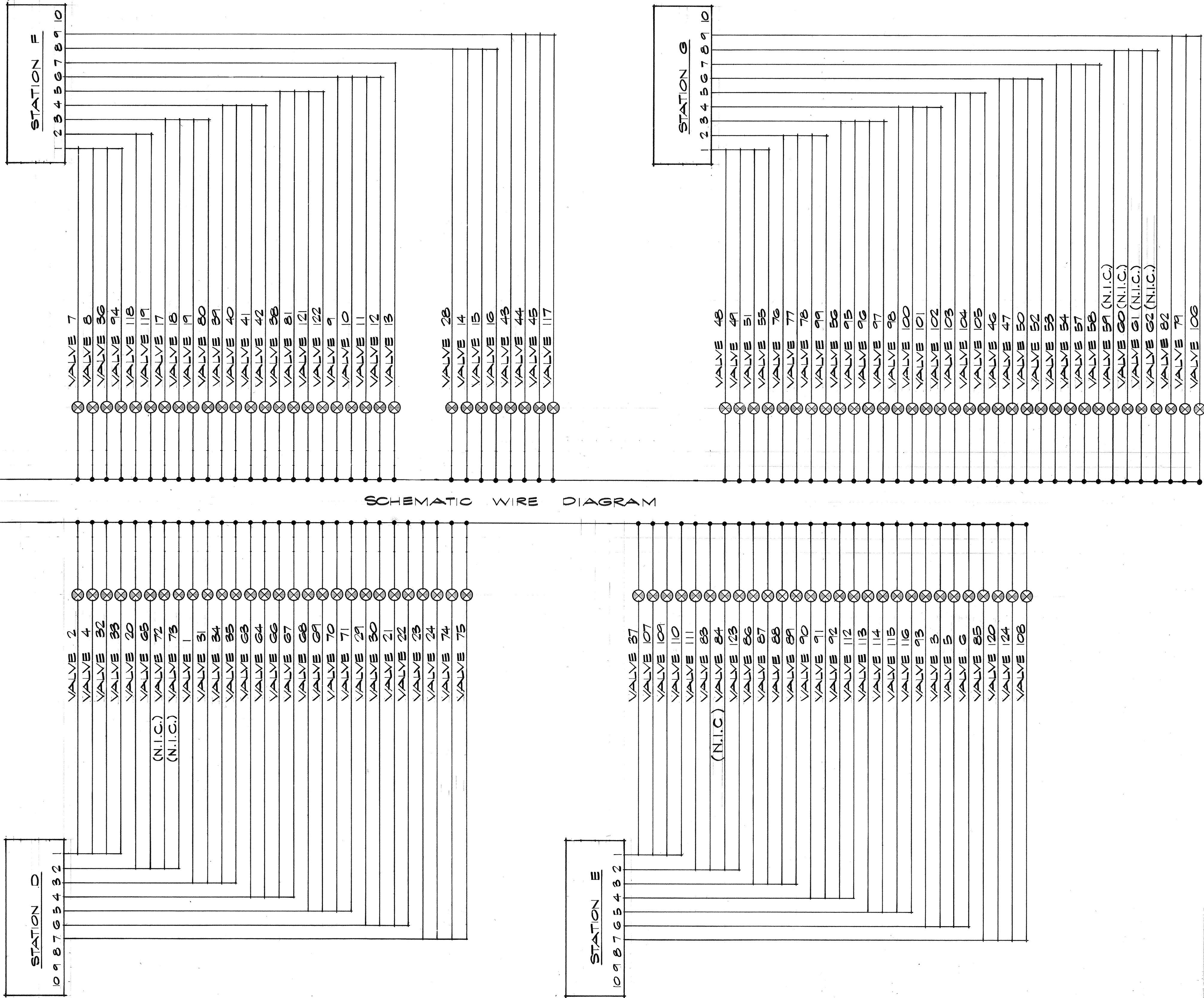
PEARL HARBOR INTERCHANGE
 F.A.I. PROJ. NO. I-HI-1 (73) : 15

SCALE: NONE DATE: DEC. 7, 1973

SHEET NO. 11 OF 18 SHEETS

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

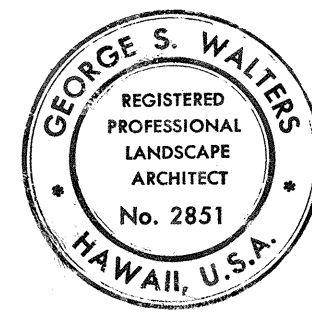
CENTRAL



NOTE:
ALL WIRES ARE NO. 14 WIRE.

FIELD DIRECTIVE FEB. 5, 1976

OPERATING SCHEDULE				
STATION NO.	D	E	F	G
DAY OF OPERATION	MTWThFS	MTWThFS	MTWThFS	MTWThFS
STARTING TIME	GET CONTROLLERS TO OPERATE ONLY 8:15 PM 8:00 AM	8:15 PM TO	11:30 PM 11:30 PM	11:30 PM 3:30 P.M.
STATION NUMBER	1	42 MIN.	42 MIN.	42 MIN.
	2	42	42	42
	3	32	32	32
	4	32	32	32
	5	32	32	32
	6	7	7	7
	7	7	7	7
	8		7	7
	9		7	7
	10			



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WIRING DIAGRAMS
PACKAGE NO. 3

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. NO. I-H-1 (73): 15

SCALE: NONE DATE: DEC. 7, 1973

SHEET NO. 12 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1 (73): 15	1974	146	369
DATE		REVISION			
10/12/76		DELETE SYSTEMS 59, 60, 61, 62, 72, 73 & 84			

SUMMARY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73)B	1974	147	369

QUANTITIES

[illegible]

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

DATE	REVISION
10/7/75	CHANGE IN DIRECT BURIAL CABLE LINEAL FOOTAGE



J. J. [Signature]
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

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

SPRINKLER SUMMARY

PACKAGE NO. 3

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. NO. I-HI-1 (73); B

SCALE: NONE DATE: DEC. 7, 1973

SHEET No. 1-3 OF 8 SHEETS

SUMMARY

ESTIMATED QUANTITIES

148R

SPRINKLER SUMMARY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1-(73)15	1974	149	369

ESTIMATED QUANTITIES

SYSTEM NO.	ITEM NO.	VALVE LOCATION																																REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
			CONCRETE FOR SPRINKLER SYSTEM	CONCRETE OTHER THAN IN BRIDGES (CLASS B)	2 1/2-INCH RIGID STEEL PIPE, ACP OR PVC PIPE CONDUIT	1 1/2-INCH GALVANIZED STEEL PIPE OR POLYETHYLENE PIPE	1 1/2-INCH GALVANIZED STEEL PIPE	3/4-INCH GALVANIZED STEEL PIPE	1-INCH GALVANIZED STEEL PIPE	1 1/4-INCH COPPER PIPE	1 1/2-INCH COPPER PIPE	2-INCH COPPER PIPE	2 1/2-INCH COPPER PIPE	3-INCH COPPER PIPE	1 1/2-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	3/4-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	1-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	1 1/4-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	2-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	2 1/2-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	3-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	1 1/2-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	2-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	2 1/2-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	3-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	4-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	6-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	8-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	10-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	12-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	14-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	16-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	18-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE		20-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	22-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	24-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	26-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	28-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	30-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	32-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	34-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	36-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	38-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	40-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	42-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	44-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	46-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	48-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	50-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	52-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	54-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	56-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	58-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	60-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	62-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	64-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	66-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	68-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	70-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	72-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	74-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	76-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	78-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	80-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	82-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	84-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	86-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	88-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	90-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	92-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	94-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	96-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	98-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE	100-INCH GALVANIZED STEEL PIPE COPPER PIPE OR PVC PIPE																																																																																																																																																																																																																																																																																																																																																																																																																																					
			CUYD	CUYD	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN. FT.	LN.

ORIGINAL PLAN

SURVEY PLOTTED BY

DATE

DRAWN BY

TRACED BY

NOTED BY

QUANTITIES BY

CHECKED BY

No.

DATE	REVISION
10/17/75	CHANGE IN DIRECT BURIAL CABLE LINEAL FOOTAGE.
10/12/76	DELETE SYSTEMS 59, 60, 61, 62, AND 72



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPRINKLER SUMMARY
PACKAGE NO. 3

PEARL HARBOR INTERCHANGE
P.A.I. PROJ. NO. I-H-1-(73)15

SCALE: NONE DATE: DEC. 7, 1973

SUMMARY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-1(73)B	1974	150	369

QUANTITIES

[illegible]

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

DATE	REVISION
10/17/75	CHANGE IN DIRECT BURIAL CABLE LINEAL FOOTAGE
10/12/76	DELETED SYSTEMS 73 & 84



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPRINKLER SUMMARY

PACKAGE NO. 3

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. NO. I-HI-1 (73):15

SCALE: NONE DATE: DEC. 7, 1973

SHEET No. 6 OF 8 SHEETS

C.O. 150R

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-11-1 (73)5	1974	151	369

[illegible]

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

DATE	REVISION
10/17/75	CHANGE IN DIRECT BURIAL CABLE LINEAL FOOTAGE



THIS WORK WAS PREPARED BY M
OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPRINKLER SUMMARY
PACKAGE NO. 3

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. NO. I-H-1 (73): 15

SCALE: NONE DATE: DEC. 7, 1973

SHEET No. 17 OF 18 SHEETS

SUMMARY

ESTIMATED QUANTITIES

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



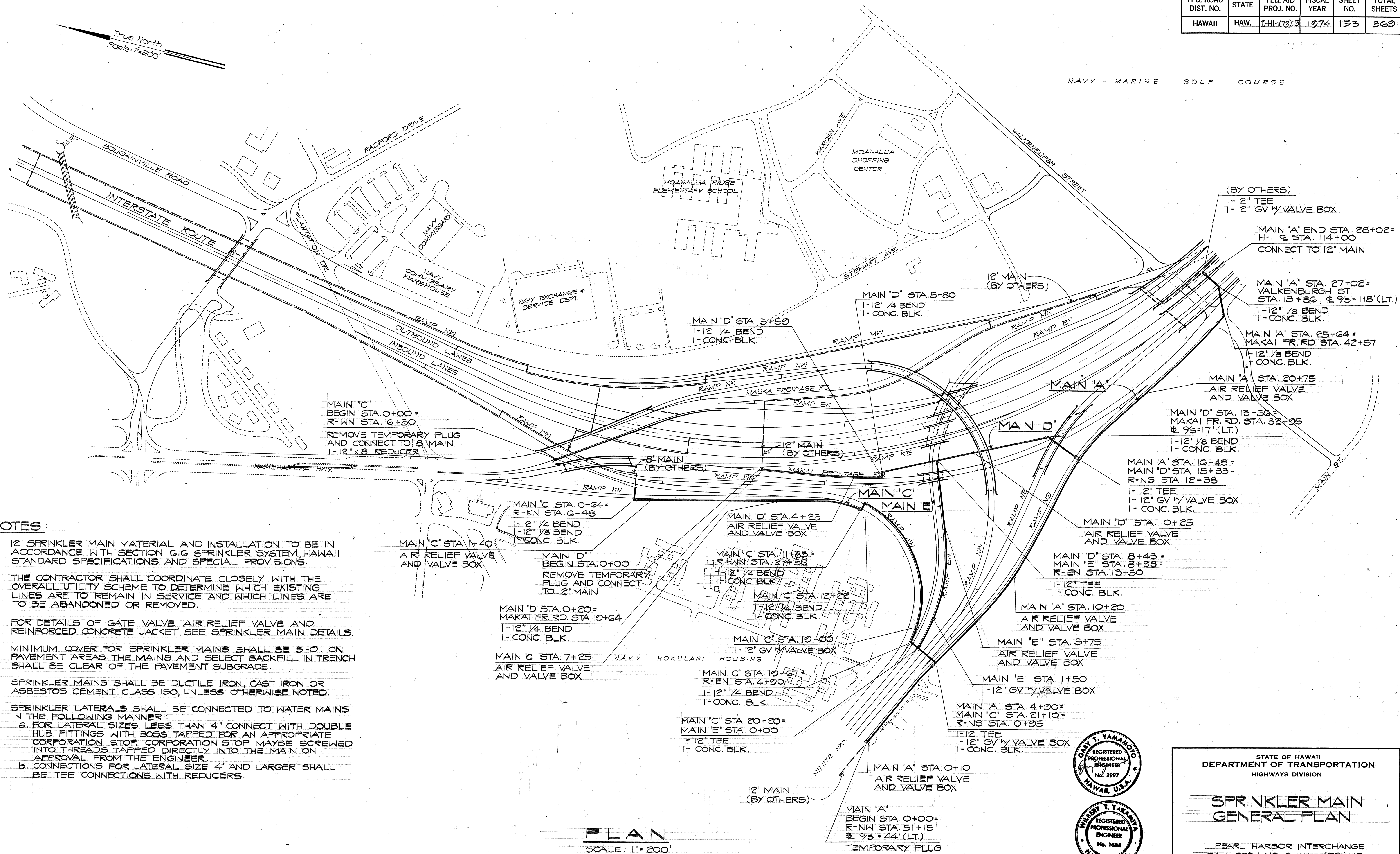
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. NO. I-HI-1 (73): 15

SHEET No. L-8 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-H1-(73)15	1974	153	369

NAVY - MARINE GOLF COURSE



NOTES:

- 12" SPRINKLER MAIN MATERIAL AND INSTALLATION TO BE IN ACCORDANCE WITH SECTION GIG SPRINKLER SYSTEM, HAWAII STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL COORDINATE CLOSELY WITH THE OVERALL UTILITY SCHEME TO DETERMINE WHICH EXISTING LINES ARE TO REMAIN IN SERVICE AND WHICH LINES ARE TO BE ABANDONED OR REMOVED.
- FOR DETAILS OF GATE VALVE, AIR RELIEF VALVE AND REINFORCED CONCRETE JACKET, SEE SPRINKLER MAIN DETAILS.
- MINIMUM COVER FOR SPRINKLER MAINS SHALL BE 3'-0" ON PAVEMENT AREAS THE MAINS AND SELECT BACKFILL IN TRENCH SHALL BE CLEAR OF THE PAVEMENT SUBGRADE.
- SPRINKLER MAINS SHALL BE DUCTILE IRON, CAST IRON OR ASBESTOS CEMENT, CLASS 150, UNLESS OTHERWISE NOTED.
- SPRINKLER LATERALS SHALL BE CONNECTED TO WATER MAINS IN THE FOLLOWING MANNER:
 - a. FOR LATERAL SIZES LESS THAN 4" CONNECT WITH DOUBLE HUB FITTINGS WITH BOSS TAPPED FOR AN APPROPRIATE CORPORATION STOP. CORPORATION STOP MAYBE SCREWED INTO THREADS TAPPED DIRECTLY INTO THE MAIN ON APPROVAL FROM THE ENGINEER.
 - b. CONNECTIONS FOR LATERAL SIZE 4" AND LARGER SHALL BE TEE CONNECTIONS WITH REDUCERS.

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



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

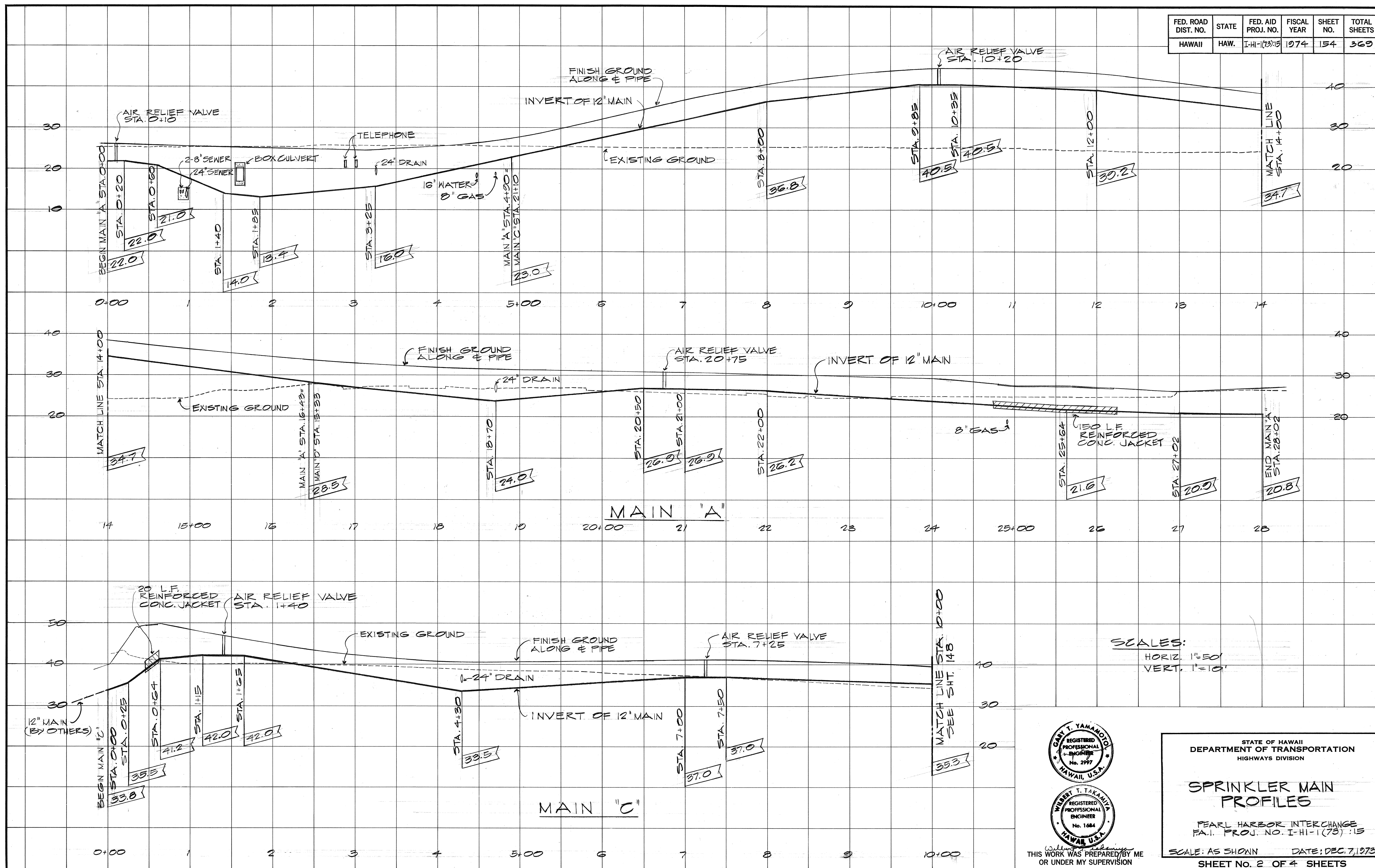
SPRINKLER MAIN GENERAL PLAN

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. NO. 1-H1-(73)15

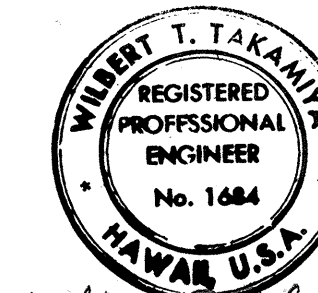
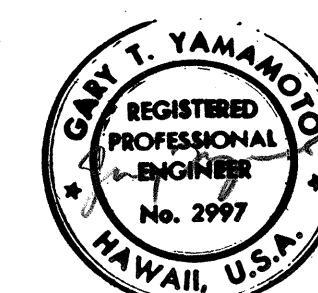
SCALE: AS SHOWN DATE: DEC. 7, 1973

SHEET NO. 1 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73)15	1974	154	369



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



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

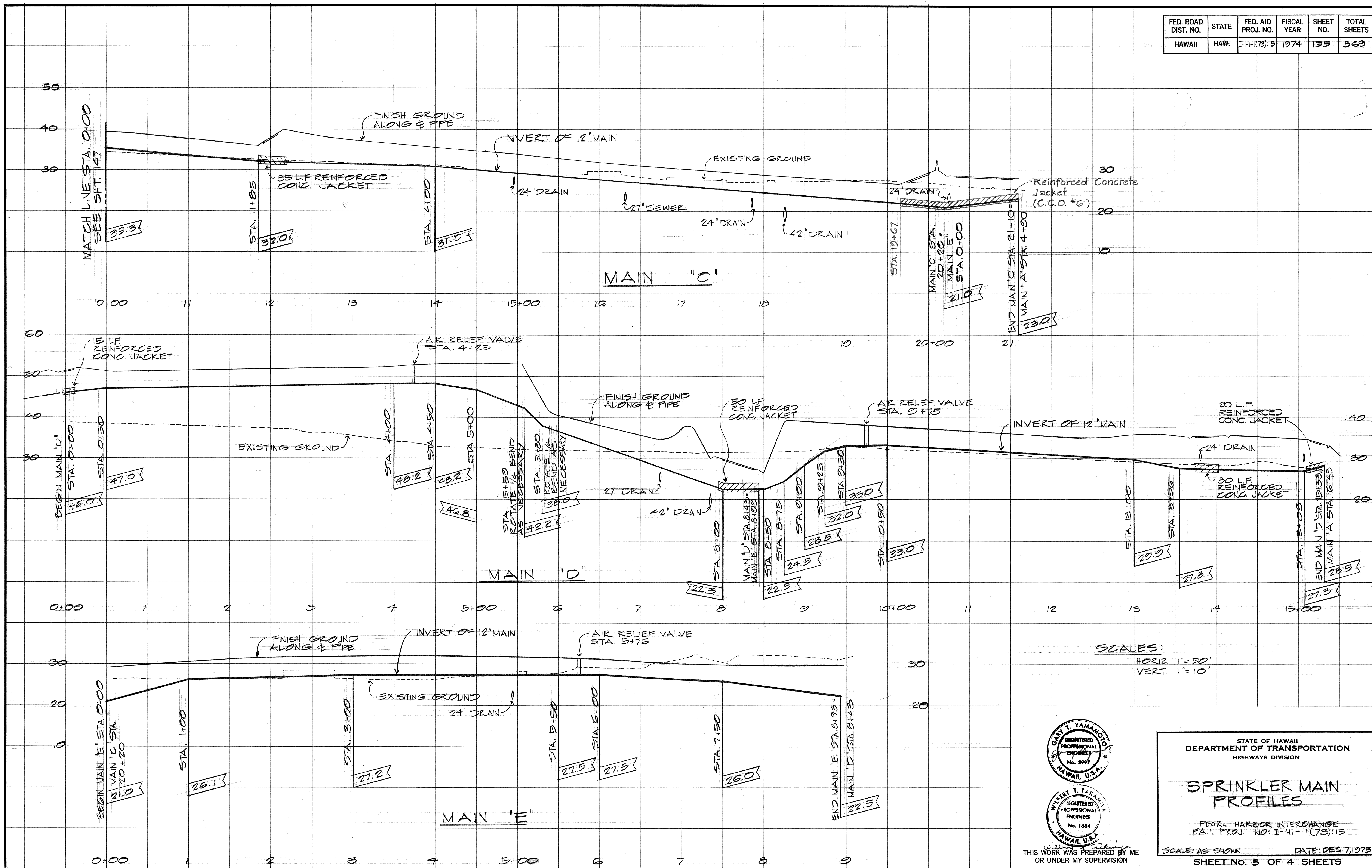
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPRINKLER MAIN PROFILES

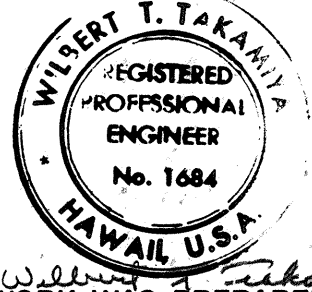
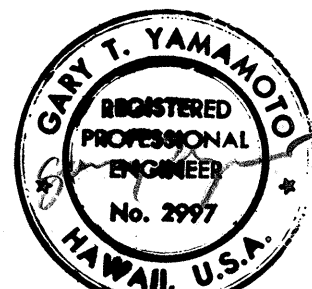
PEARL HARBOR INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(73)15

SCALE: AS SHOWN DATE: DEC. 7, 1973
SHEET NO. 2 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73)-15	1974	155	369



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



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

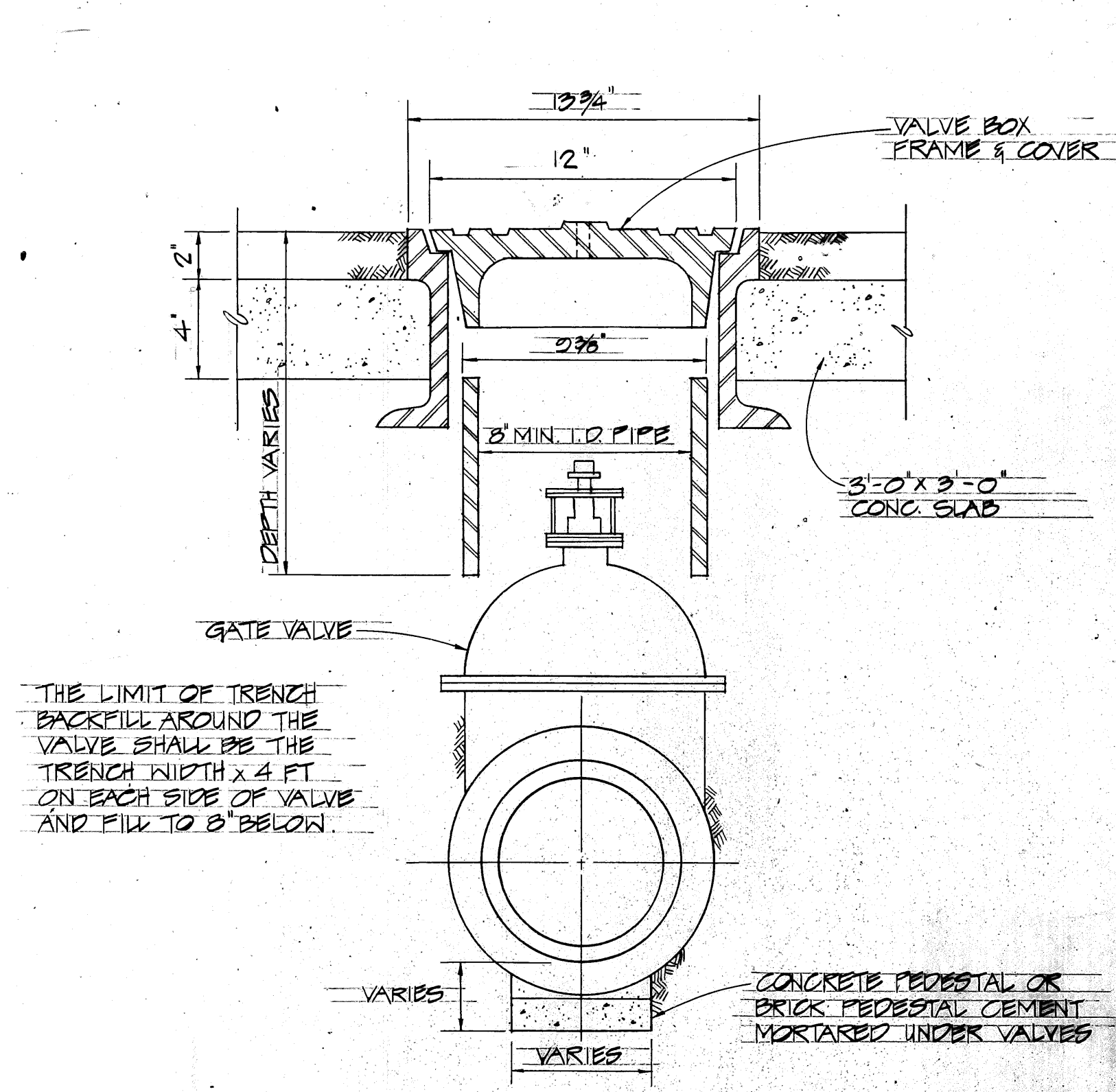
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPRINKLER MAIN PROFILES

PEARL HARBOR INTERCHANGE
P.A.I. PROJ. NO: I-HI-1(73)-15

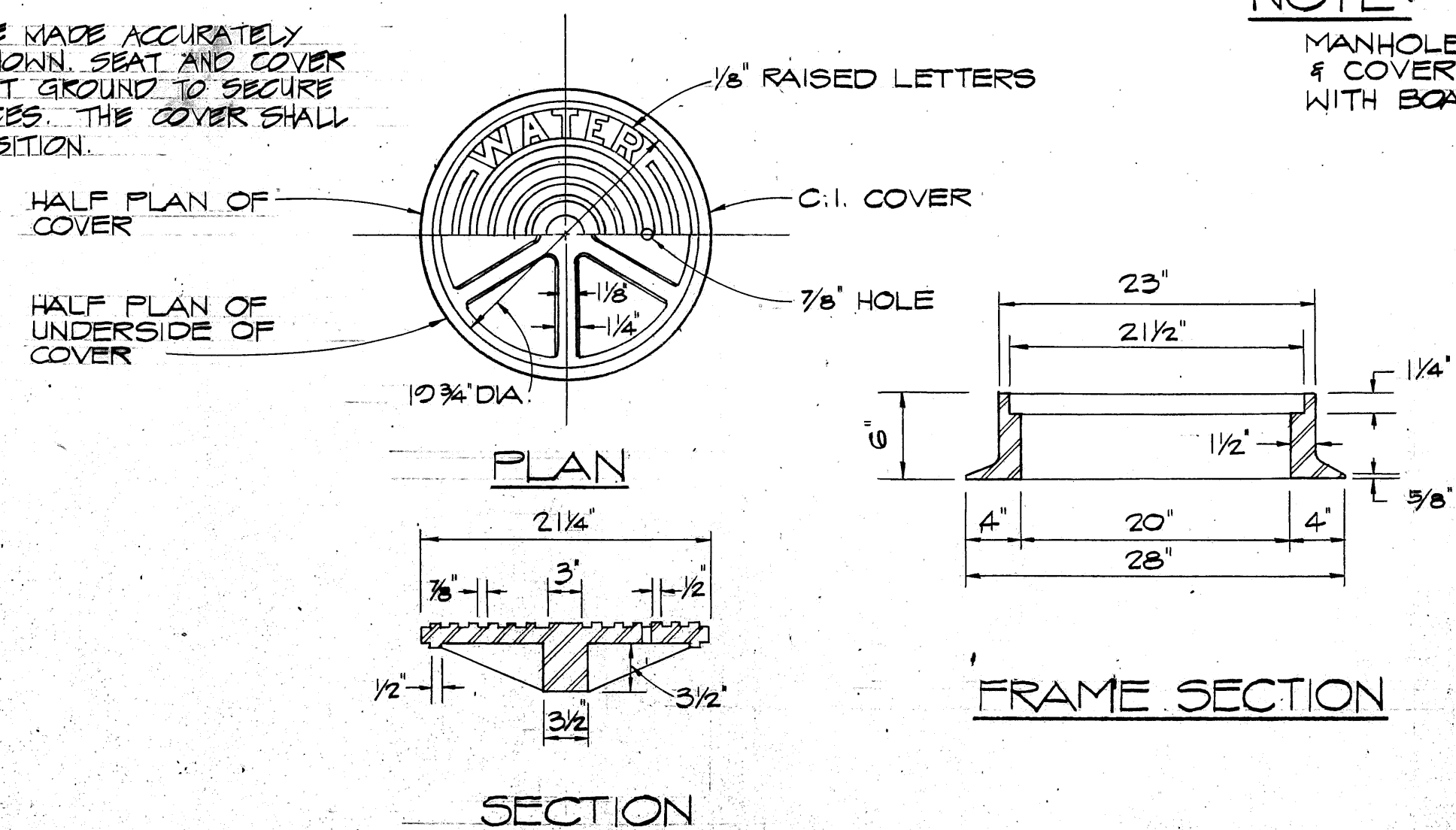
SCALE: AS SHOWN DATE: DEC. 7, 1973
SHEET NO. 3 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73)15	1974	156	369



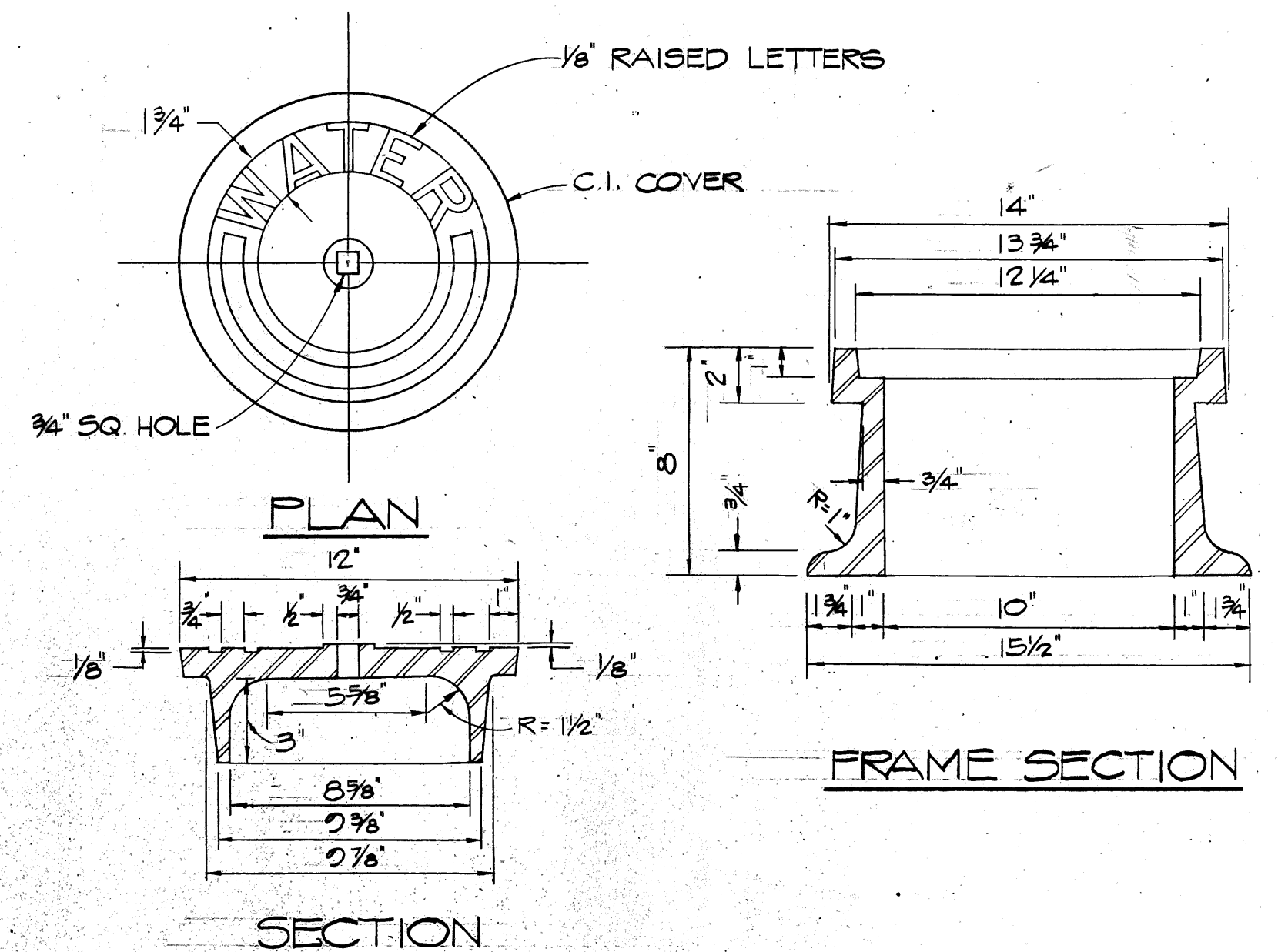
GATE VALVE AND VALVE BOX
NOT TO SCALE

NOTE:
ALL CASTINGS SHALL BE MADE ACCURATELY TO THE DIMENSIONS SHOWN. SEAT AND COVER SHALL BE MACHINED, NOT GROUND TO SECURE FLAT AND TRUE SURFACES. THE COVER SHALL NOT RATTLE IN ANY POSITION.



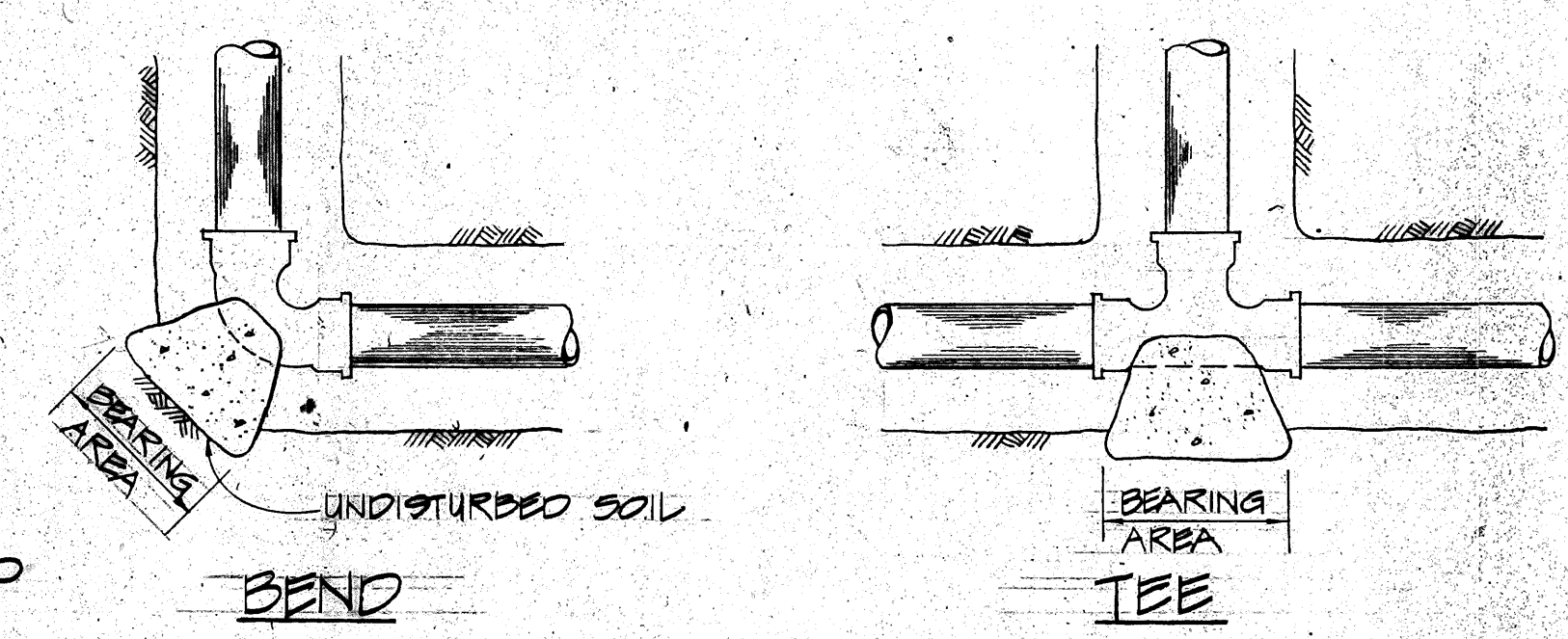
TYPICAL MANHOLE FRAME & COVER
NOT TO SCALE

NOTE:
MANHOLE AND VALVE BOX FRAME & COVER TO BE IN ACCORDANCE WITH BOARD OF WATER SUPPLY STANDARDS.

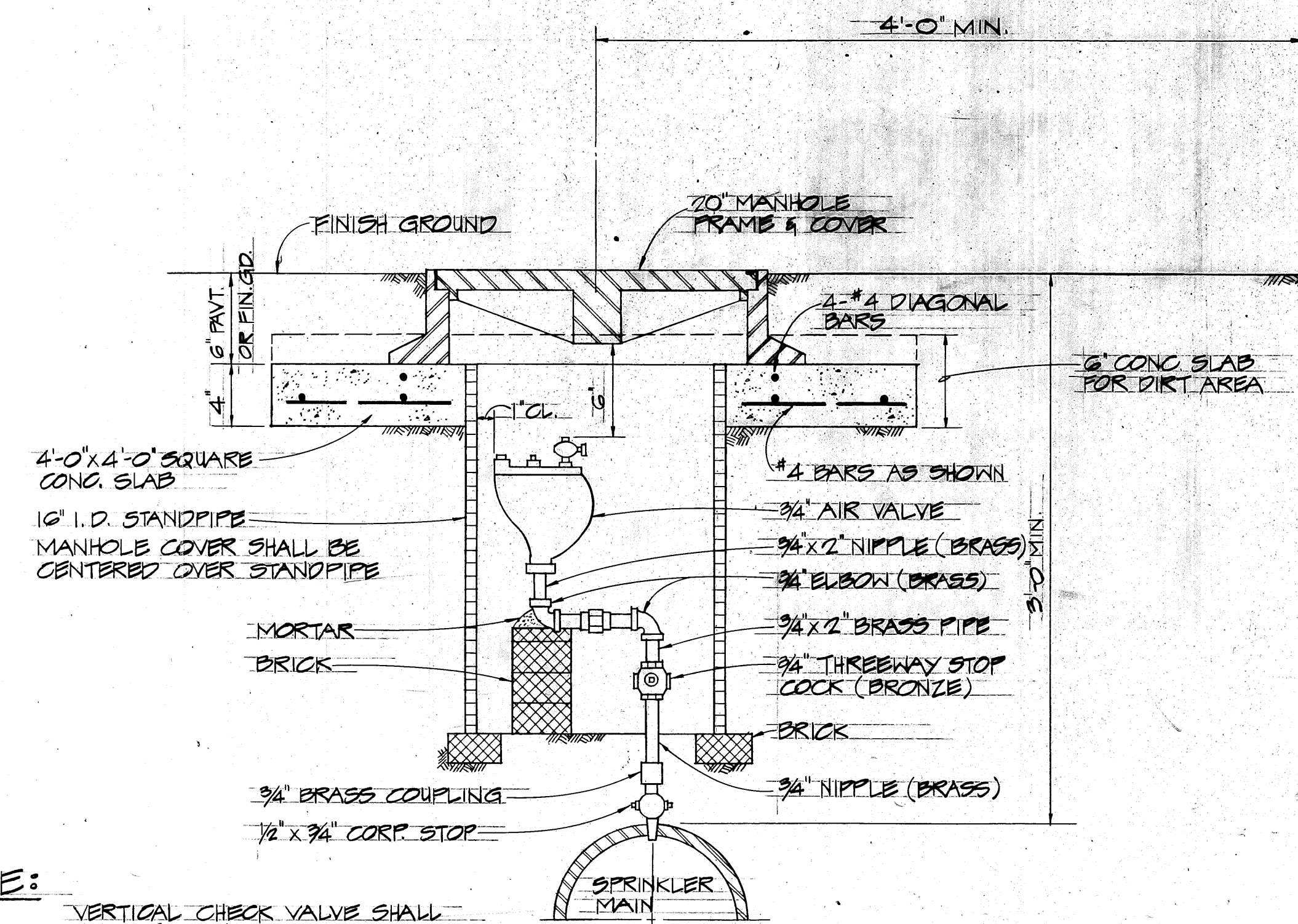


TYPICAL VALVE BOX FRAME & COVER
NOT TO SCALE

NOTE:
BEARING AREA 4 SQ. FT. MINIMUM

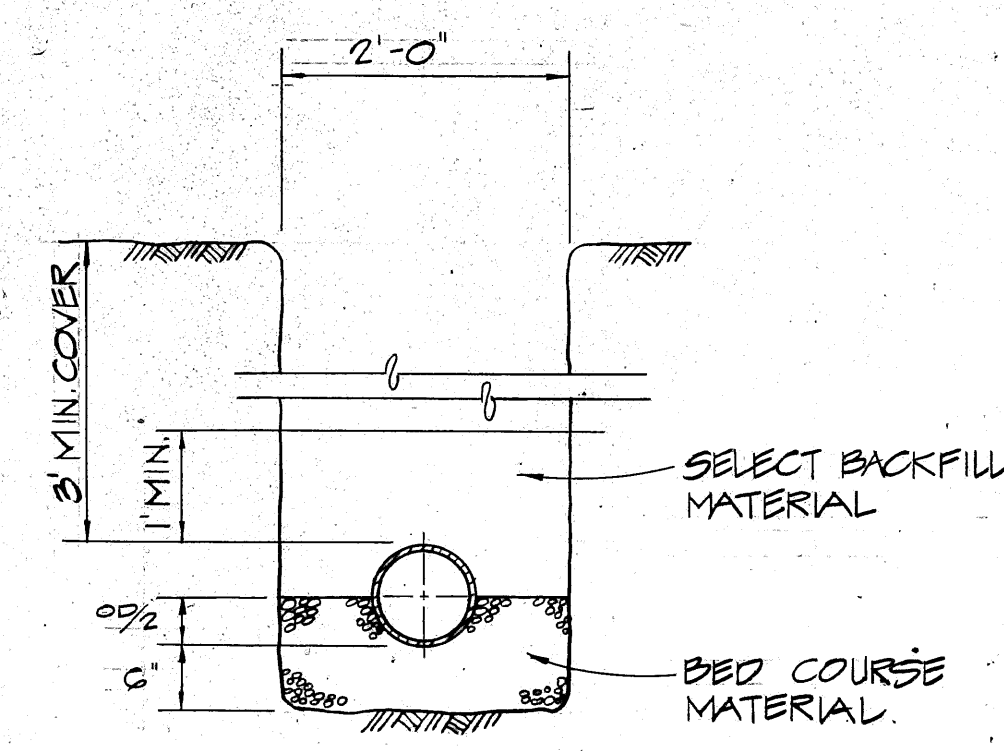


CONCRETE BLOCK DETAILS
(FOR HORIZONTAL BENDS)
NOT TO SCALE

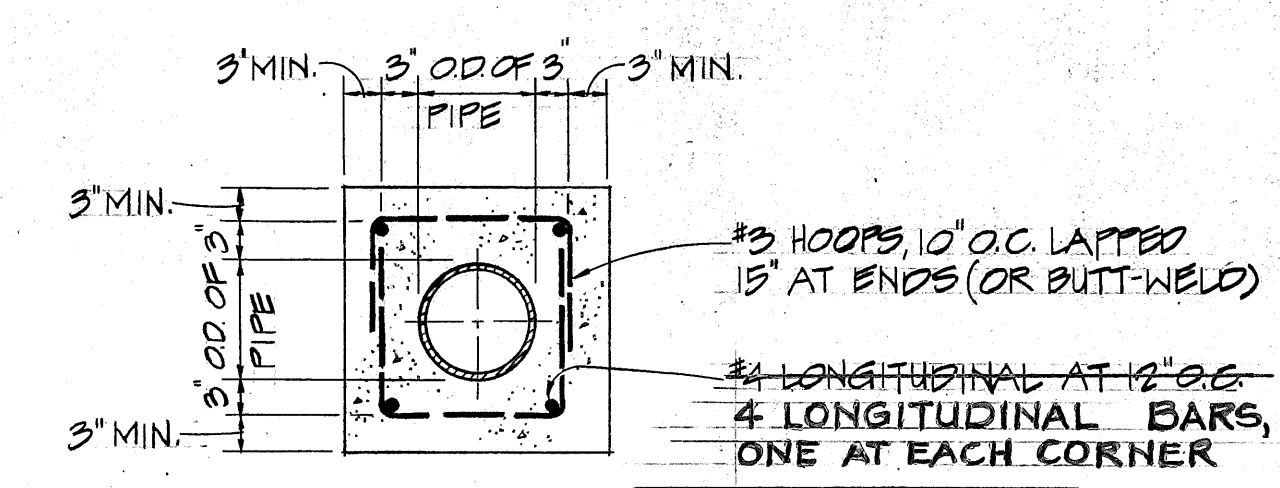


AIR RELIEF VALVE AND VALVE BOX
NOT TO SCALE

NOTE:
VERTICAL CHECK VALVE SHALL BE USED IN LIEU OF COUPLING WHEN THREEWAY STOP COCK IS IMMERSSED IN WATER.

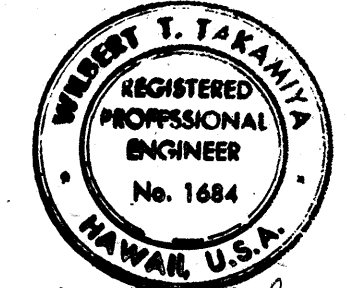
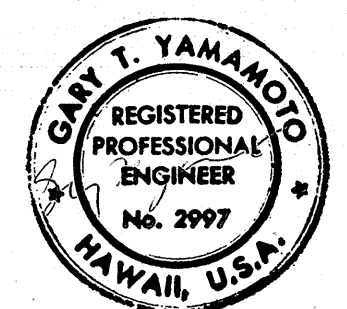


TRENCH DETAIL
NOT TO SCALE



REINFORCED CONCRETE JACKET
NOT TO SCALE

FIELD DIRECTIVE
JAN. 15, 1975



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPRINKLER MAIN DETAILS

PEARL HARBOR INTERCHANGE
F.A.I. Proj. No. I-HI-1(73)15

Scale: As Shown Date: DEC. 7, 1973

SHEET NO. 4 OF 4 SHEETS

DATE	_____
SURVEY PLOTTED BY	_____
PLAN	_____
DESIGNED BY	_____
NOTED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____