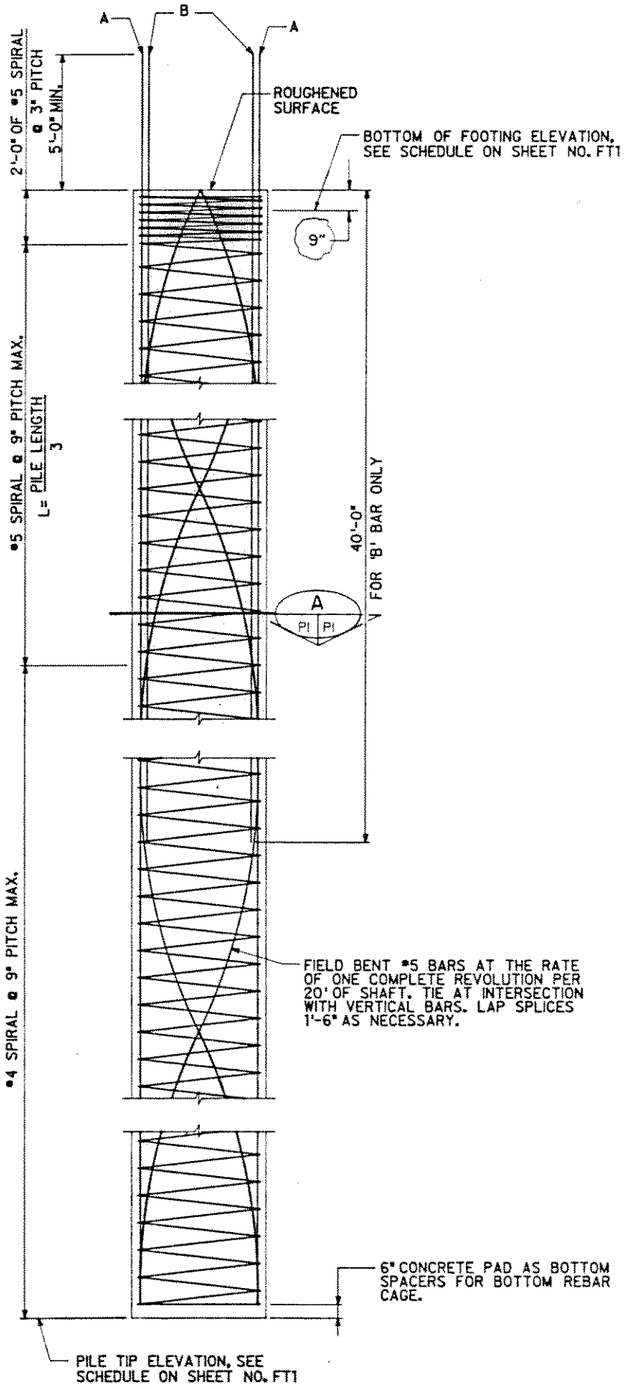
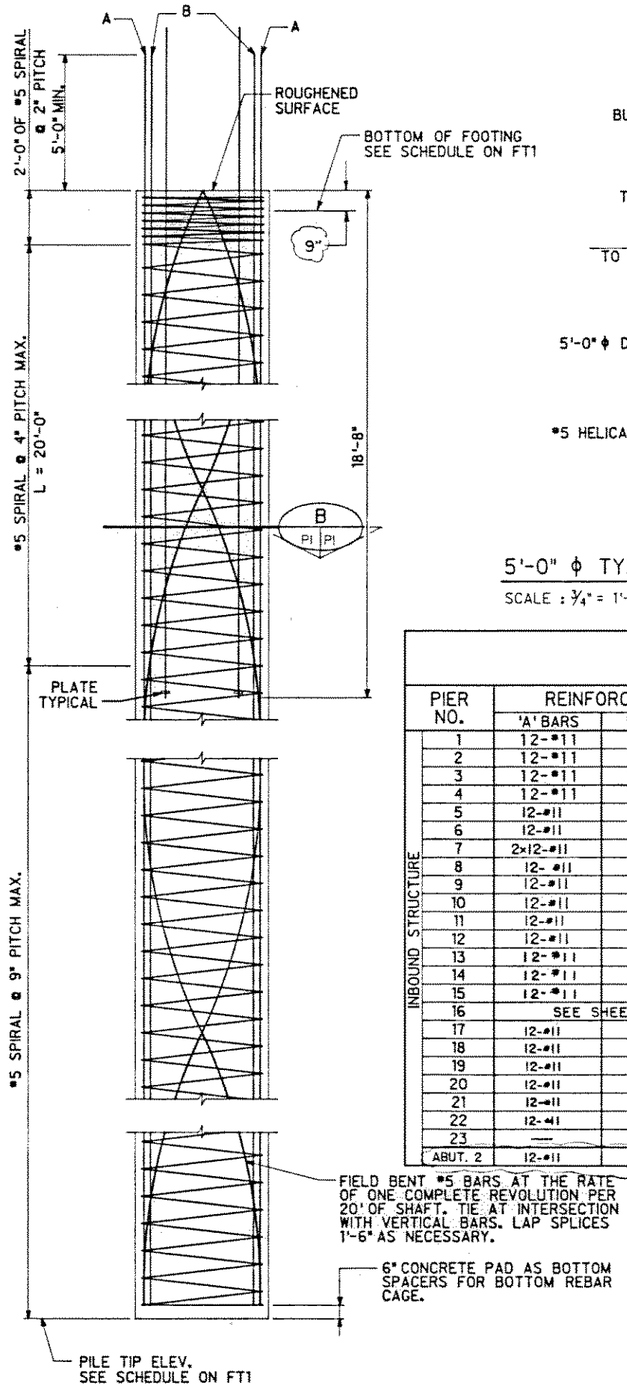
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(57)	1988		



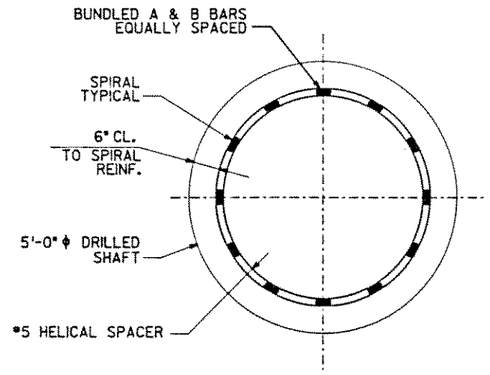
5'-0" ϕ TYPICAL PILE ELEVATION

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



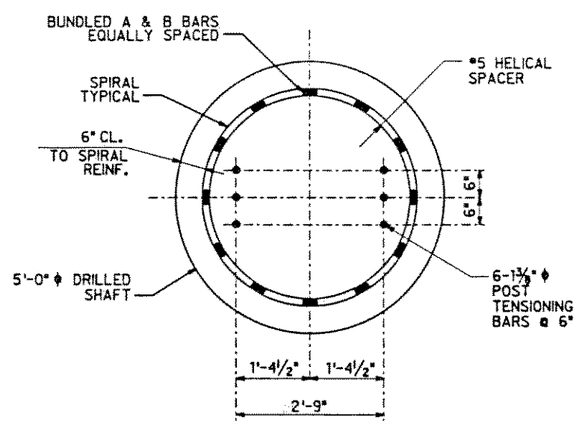
5'-0" ϕ REACTION PILE ELEVATION

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



5'-0" ϕ TYPICAL PILE SHAFT REINFORCING (A, P1 | P1)

SCALE : 3/4" = 1'-0"



5'-0" ϕ TYPICAL REACTION PILE REINFORCING (B, P1 | P1)

SCALE : 3/4" = 1'-0"

PILE SCHEDULE

	PIER NO.	REINFORCING 'A' BARS	REINFORCING 'B' BARS	PIER NO.	REINFORCING 'A' BARS	REINFORCING 'B' BARS
INBOUND STRUCTURE	1	12-#11	12-#11	1	12-#11	12-#11
	2	12-#11	12-#11	2	12-#11	12-#11
	3	12-#11	12-#11	3	12-#11	12-#11
	4	12-#11	12-#11	4	12-#11	12-#11
	5	12-#11	12-#11	5	12 - #11	12 - #11
	6	12-#11	12-#14	6	12 - #11	12 - #11
	7	2×12-#11	12-#11	7	12 - #11	12 - #11
	8	12- #11	12- #11	8	12 - #11	12 - #14
	9	12-#11	—	9	12 - #11	—
	10	12-#11	—	10	12 - #11	12 - #11
	11	12-#11	12-#11	11	12 - #11	12 - #11
	12	12-#11	—	12	12 - #11	—
	13	12-#11	12-#11	13	12-#11	12-#11
	14	12-#11	12-#11	14	12-#11	12-#11
	15	12-#11	12-#11	15	12-#11	12-#11
	16	SEE SHEET P2		16	12-#11	12-#11
	17	12-#11	12-#11	17	12-#11	—
	18	12-#11	2×12-#11	18	12-#11	12-#14
	19	12-#11	12-#14	19	12-#11	12-#11
	20	12-#11	12-#14	20	12-#11	12-#11
	21	12-#11	12-#11	21	12-#11	12-#14
	22	12-#11	12-#11	22	12-#11	12-#14
	23	—	—	23	12-#11	12-#11
	ABUT. 2	12-#11	12-#11	ABUT. 2	12-#11	12-#11

NOTES:

1. BARS SHALL NOT BE SPLICED WITHIN 30 FEET OF THE BOTTOM OF THE PILE CAP.
2. NOT MORE THAN ONE HALF OF THE BARS SHALL BE SPLICED WITHIN ONE SPLICE LENGTH. SPLICED BARS SHALL ALTERNATE WITH CONTINUOUS BARS.
3. LAP LENGTH FOR LONGITUDINAL BARS SHALL BE 6'-1" MINIMUM.
4. LAP LENGTH FOR TRANSVERSE REINFORCEMENT SHALL BE 48 BAR DIAMETERS OR 12 INCHES MINIMUM.
5. CONCRETE SPACER BLOCKS SHALL BE USED TO MAINTAIN PROPER POSITION AND CLEARANCES TO THE REINFORCING BARS.
6. PILE CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4500 PSI AT 28 DAYS OF AGE.
7. REINFORCING SHALL BE ASTM A615, GRADE 60.
8. REINFORCING STEEL FABRICATION SHALL BE IN CONFORMANCE WITH THE "MANUAL OF STANDARD PRACTICE" TWENTY FOURTH EDITION, BY CONCRETE REINFORCING STEEL INSTITUTE.
9. BAR SIZE #14 SHALL NOT BE LAP SPLICED. IF MECHANICAL SPLICES ARE USED, THEY SHALL DEVELOP NOT LESS THAN 90% OF THE SPECIFIED ULTIMATE TENSILE STRENGTH OF THE REINFORCING.
10. 2×12 #XX INDICATES 12 2-BAR BUNDLES.

JAMES R. LIBBY — REGISTERED PROFESSIONAL ENGINEER — NO. 2378 — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

DATE	REVISION
07/02/91	ADDED ABUTMENT 2.
12/13/90	ADD PIERS 21 & 22 I.B.
12/10/90	ADD PIERS 17,18,19 & 20 I.B.& O.B.
12/05/90	ADD PIERS 21,22&23 O.B.
10/25/90	ADD PIER 16 I.B.
9/26/90	ADD PIERS 9,10&12 O.B.
9/14/90	ADD PIERS 9,10&12 I.B.
8/30/90	ADD PIER 11 O.B. AND I.B.
06/29/90	ADD PIERS 5 & 6
06/22/90	ADD PIERS 7,8 I.B.

J. MULLER INTERNATIONAL — Libby Engineers

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

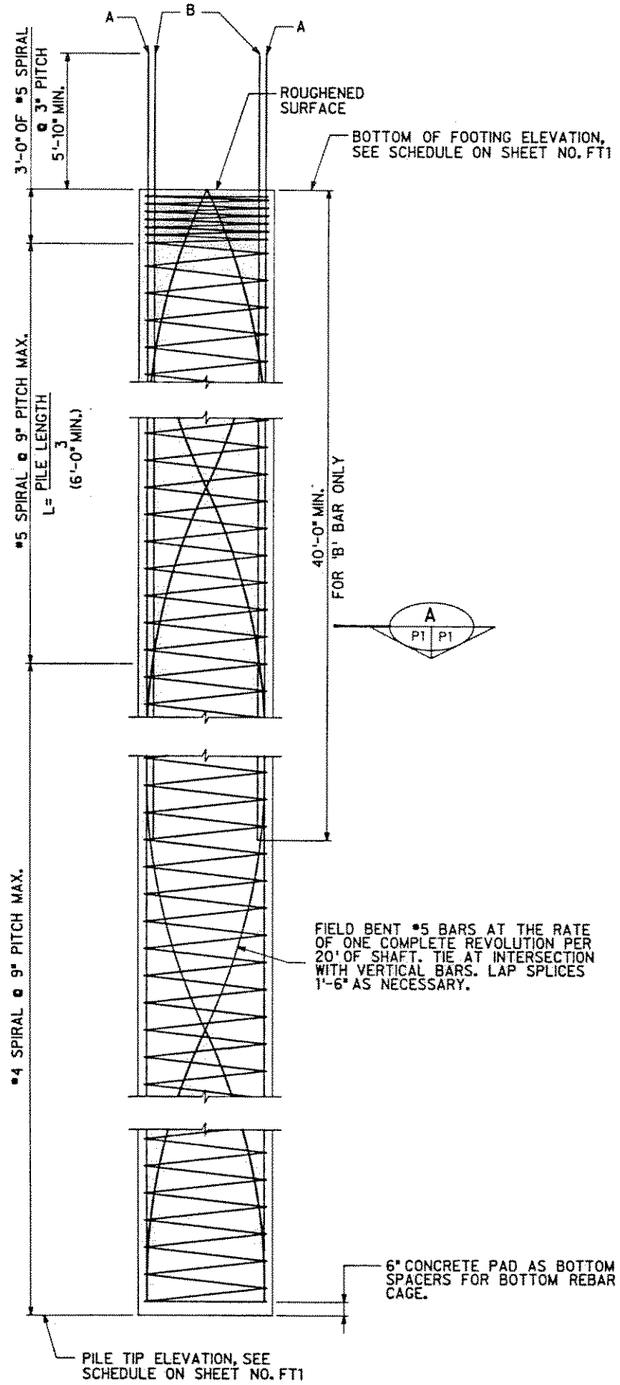
5'-0" PILE DETAILS

INTERSTATE ROUTE H-3
F.A.I. PROJECT No. I-H3-1(57)
F.A.I. PROJECT No. I-H3-1(58)
SCALE : AS NOTED DATE : JUNE 1990

SHEET No. P1 OF SHEETS

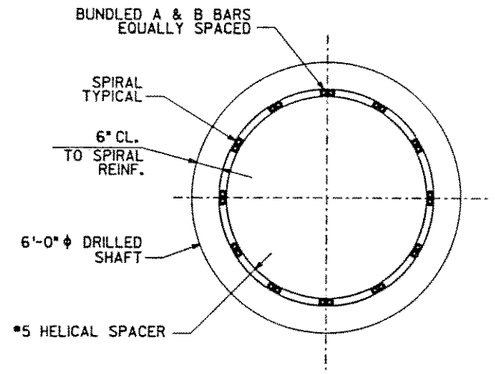
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTE BOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(57)	1988		



6'-0" ϕ TYPICAL PILE ELEVATION

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



6'-0" ϕ TYPICAL PILE SHAFT REINFORCING

SCALE : 3/4" = 1'-0"

A
P1 P1

PILE SCHEDULE

	PIER NO.	REINFORCING 'A' BARS	REINFORCING 'B' BARS	PIER NO.	REINFORCING 'A' BARS	REINFORCING 'B' BARS
INBOUND STRUCTURE	16	12-#11	2x12-#11	OUTBOUND STRUCTURE		

NOTES:
FOR PILE NOTES SEE SHEET P1

JAMES R. LIBBY REGISTERED PROFESSIONAL ENGINEER No. 7375 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

DATE	REVISION
11/29/90	GENERAL

J. MULLER INTERNATIONAL | Libby Engineers

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

6'-0" PILE DETAILS

INTERSTATE ROUTE H-3
F.A.I. PROJECT No. I-H3-1(57)
F.A.I. PROJECT No. I-H3-1(58)
SCALE : AS NOTED DATE : OCT. 1990

SHEET NO. P2 OF SHEETS