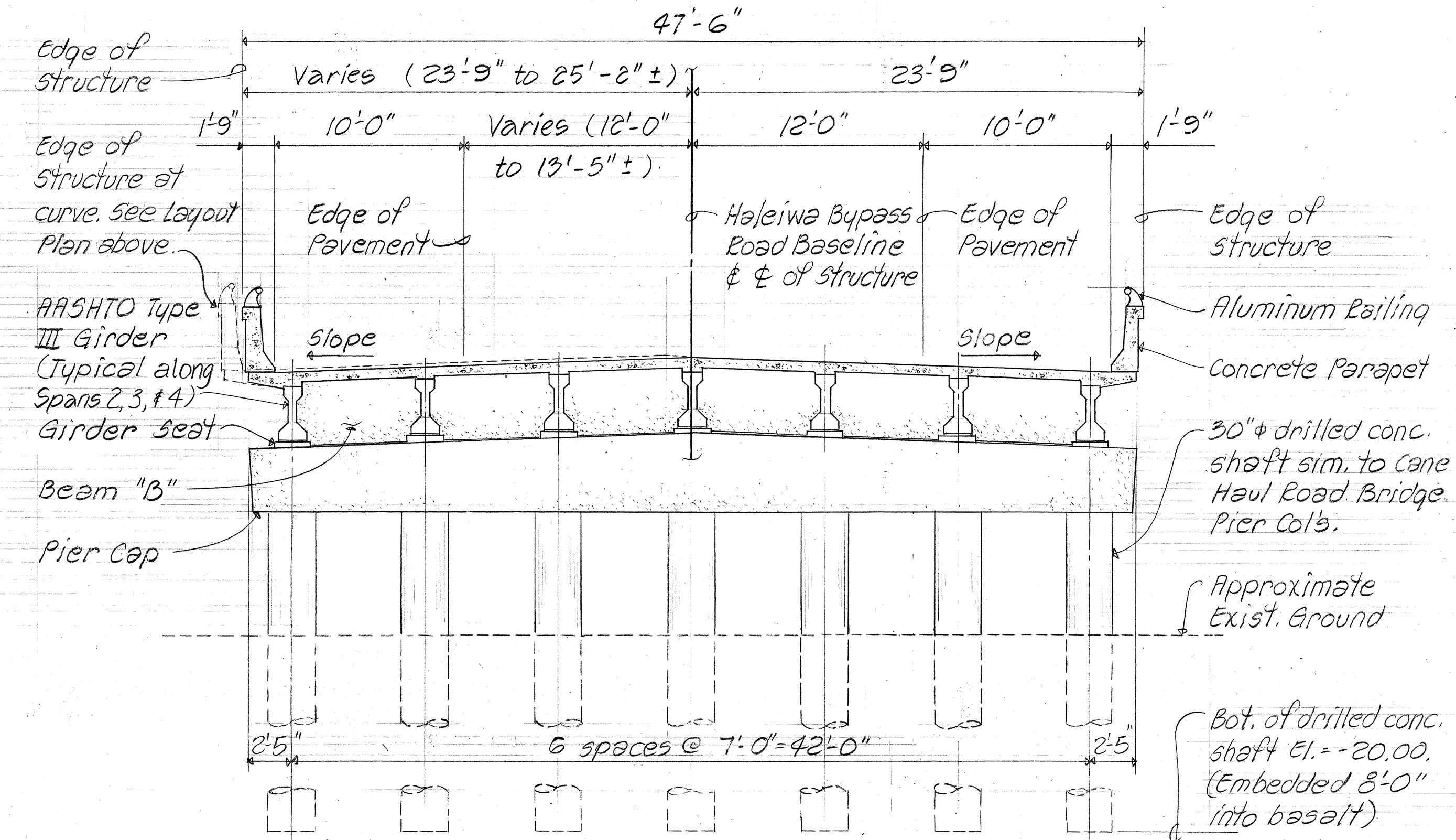
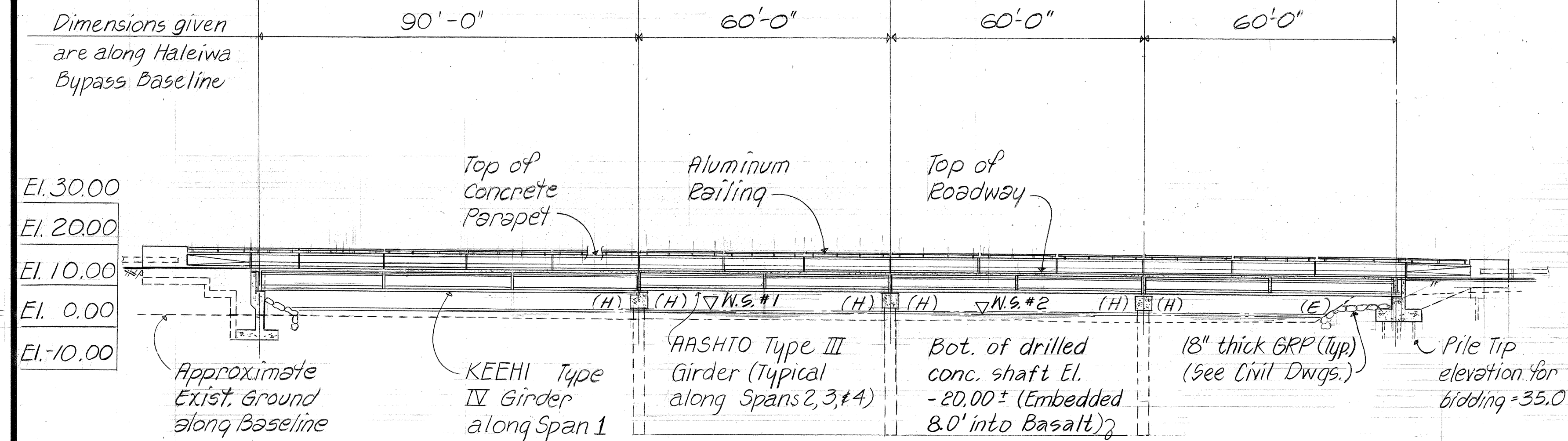
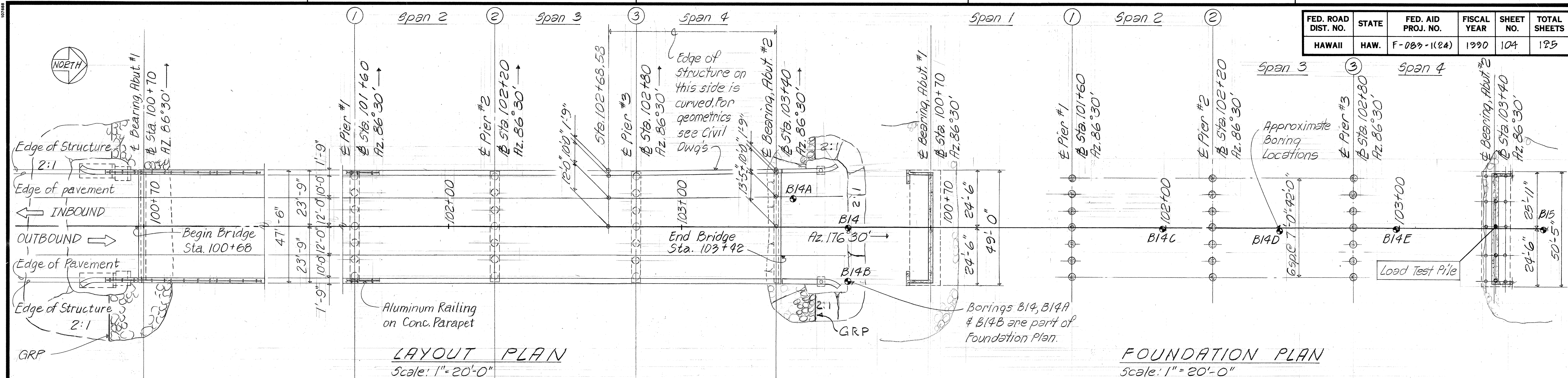


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-083-1(24)	1990	104	125



SPECIAL NOTES

- Unless shown otherwise, all transverse dimensions are perpendicular to Haleiwa Bypass Road Baseline.
- In general bridge superstructure shall be constructed to follow the finish roadway.
- See Civil Dwg's. for top of roadway elevations not indicated on the Structural Dwg's.
- Abutment No.1 Maximum Bearing Pressure = 7.6 Ksf (GRP VII).

REFERENCE DRAWINGS

- General Notes ----- T1
- Abutment Details ----- S14 & S15
- Pier & Drilled Concrete Shaft ----- S17 & S19
- Deck Section & Details ----- S21
- Concrete Parapet ----- T4
- Aluminum Railing ----- T5
- Prestressed Girder ----- T3
- Pile Load Test Details ----- T2
- Prestressed Concrete Piles ----- T7 & T8
- See Geometric & Profile Drawings for horizontal & vertical controls.
- See Civil Drawings for grading & drainage requirements not shown.

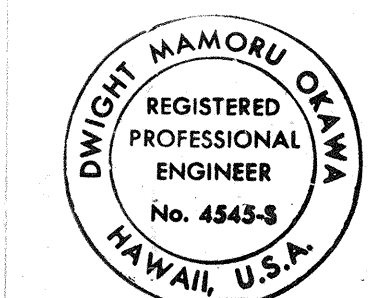
HYDRAULIC DATA

N.S. #1	Q ₁₀₀ = 2,300 cfs	V = 5.95 fps	N.S. Elev. = 5.9
N.S. #2	Q ₅₀ = 1,850 cfs	V = 6.31 fps	N.S. Elev. = 5.5

LEGEND

- (E) Expansion Bearing
(H) Hinge Bearing

SSFM ENGINEERS INC.
501 Sumner St., #502
Honolulu, Hawaii 96817



This work was prepared by me or under my supervision.
Dwight M. Okawa

DATE	REVISION
6-12-91	NEW SPAN LENGTH & GIRDER TYPE FOR SPAN 1

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

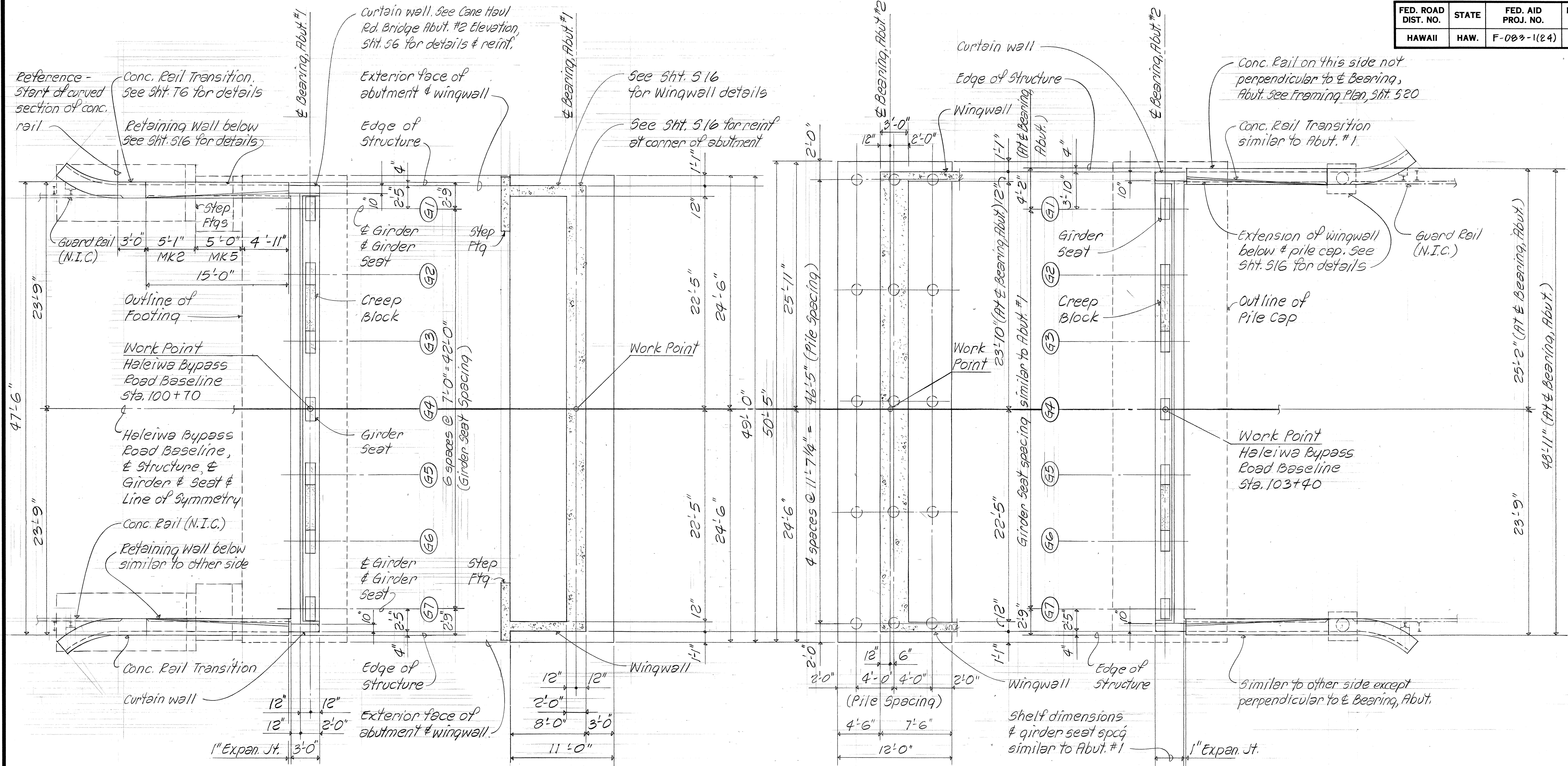
UKOA POND BRIDGE
FOUNDATION & LAYOUT PLANS & LONGIT. & TYP. BRIDGE SECTIONS

KAMEHAMEHA HIGHWAY - HELEMANO/WAIALUA JUNCTION TO HALEIWA BEACH PARK
(STRUCTURES)
FAP NO. F-083-1(24)

SHEET No. 3/3 OF SHEETS

104

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-083-1(24)	1990	105	125



PLAN AT ABUTMENT SHELF

FOUNDATION PLAN

FOUNDATION PLAN

PLAN AT ABUTMENT SHELF

ABUTMENT #1

ABUTMENT #2

Scale: 3/16"=1'-0"

Scale: 3/16"=1'-0"

- REFERENCE DRAWINGS
- 1. Abutment Shelf Details - S18
 - 2. Abutment Foundation & Wall Sections - S15
 - 3. Wingwall Sections - S16
 - 4. Prestressed Concrete Piles - T7 & T8
 - 5. Creep Block Details - S18

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

SSFM ENGINEERS INC.
501 Sumner St., #502
Honolulu, Hawaii 96817

DWIGHT HAMORU OKAWA
REGISTERED PROFESSIONAL ENGINEER
No. 4545-S
HAWAII, U.S.A.

This work was prepared by me or under my supervision.
Dwight M. Okawa

6-18-91	Changed Abut. #1 Station
11-20-90	Added Abut. curtain wall
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**UKOA POND BRIDGE
ABUT. NO. 1 & 2 FOUNDATION
& ABUT. SHELF PLANS**

KAMEHAMEHA HIGHWAY - HELEMANO/WAIALUA
JUNCTION TO HALEIWA BEACH PARK
(STRUCTURES)
FAP NO. F-083-1(24)

47'-6"

23'-9"

1'-9"

10'-0"

12'-0"

12'-0"

10'-0"

1'-9"

Edge of Structure

Edge of Pavement

Edge of Pavement

Edge of Structure

2'-9"

2'-9"

6 sp. @ 7'-0" = 42'-0" (Girder Spacing)

Aluminum Railing

Concrete Parapet

Curtain wall

Beam "D"

Approximate Exist. Ground

Creep Block

Vertical Hinge Restrainers

Wingwall at far side

Top of Footing El. = 0.00

Footing

Haleiwa Bypass Road Baseline & Structure & Line of Symmetry

KEEHI Type IV Girder (Typical)

Girder Seat

ARP

G1

G2

G3

G4

G5

G6

G7

φ Girder (Typical)

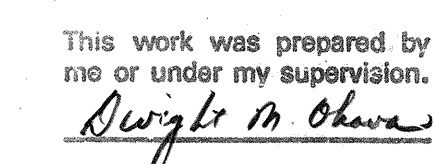
[illegible][illegible]

ABUTMENT ELEVATIONS
Scale: 3/16" = 1'-0"

Scale: $3/8" = 1'-0"$

1.	Aluminum Piling	-----	T5
2.	Concrete Parapet	-----	T4
3.	Deck Reinforcing	-----	S22
4.	Prestressed Girder	-----	T3
5.	Beam "A"	-----	S24
6.	Abutment Shelf	-----	S18
7.	Vertical Hinge Restrainers	-----	S13
8.	Pile Load Test Details	-----	T2
9.	Wingwalls	-----	S16
10.	Prestressed Concrete Piles	-----	T7 & T8
11.	Creep Block Details	-----	S18

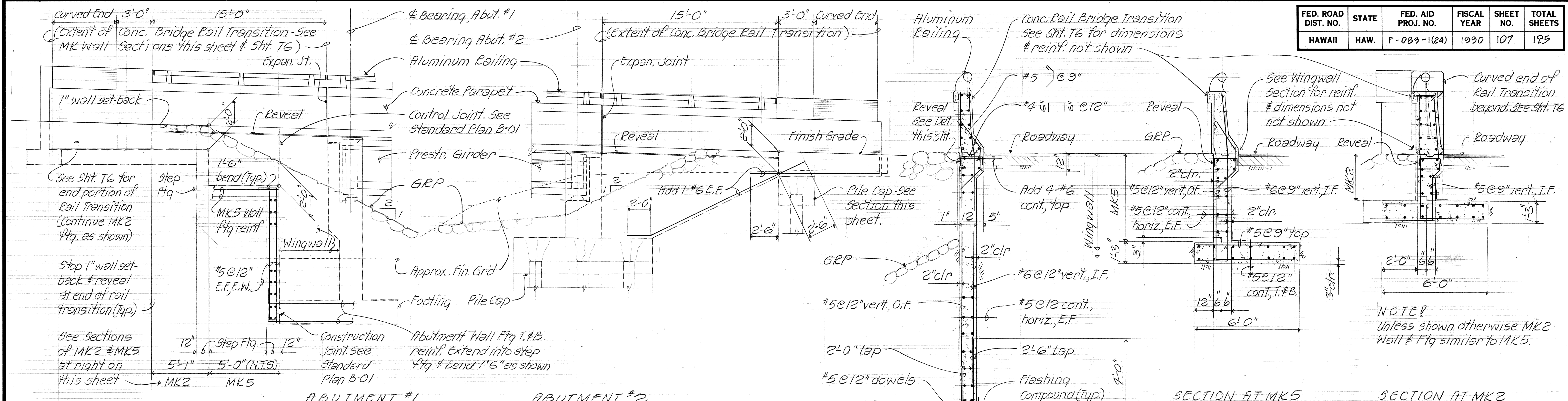
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Honolulu, Hawaii 96817



UKOA POND BRIDGE ABUTMENT NO. 1 & NO. 2 ELEVATIONS & SECTIONS

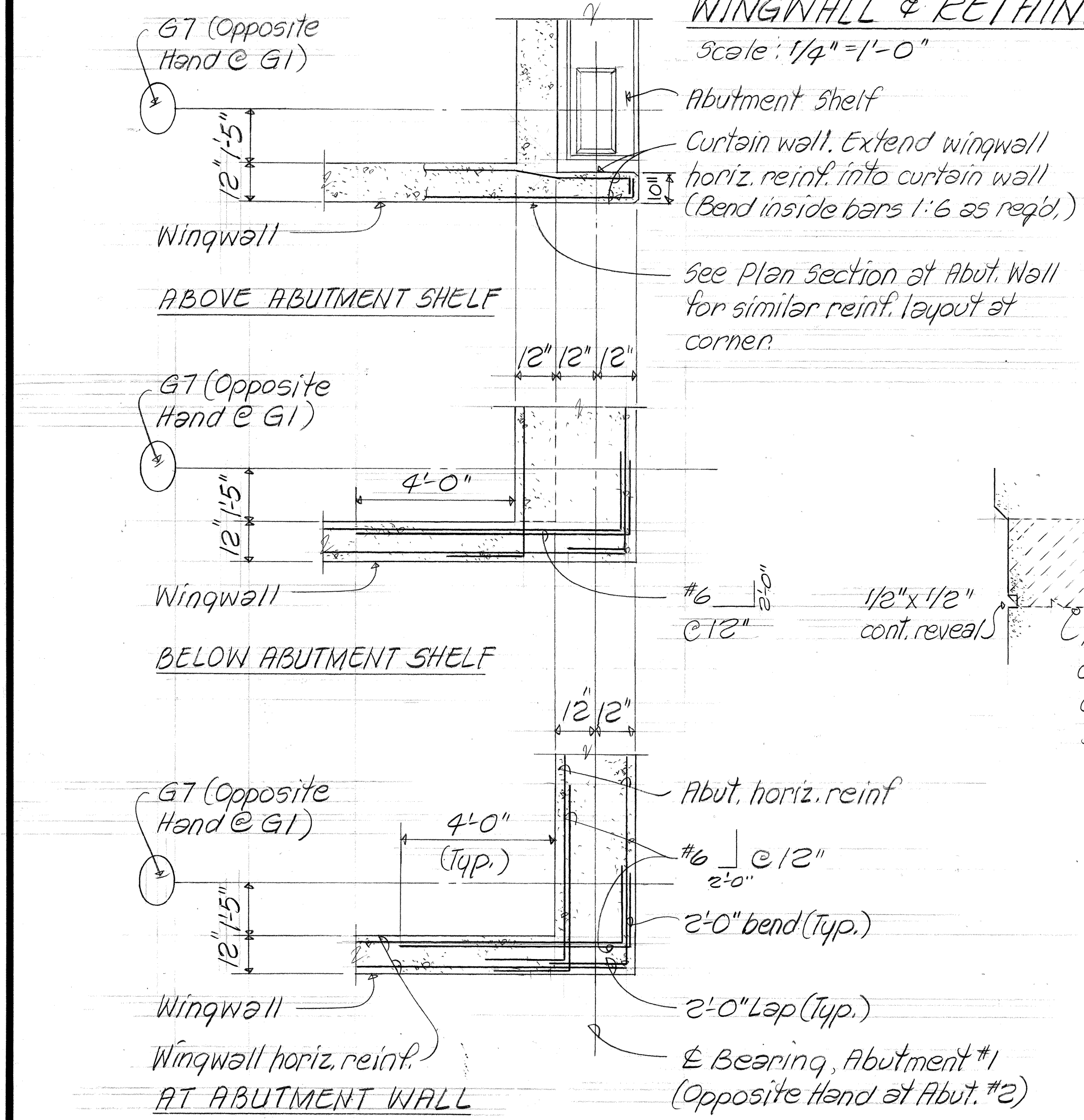
SHEET No. 515 OF SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-083-1(24)	1990	107	125



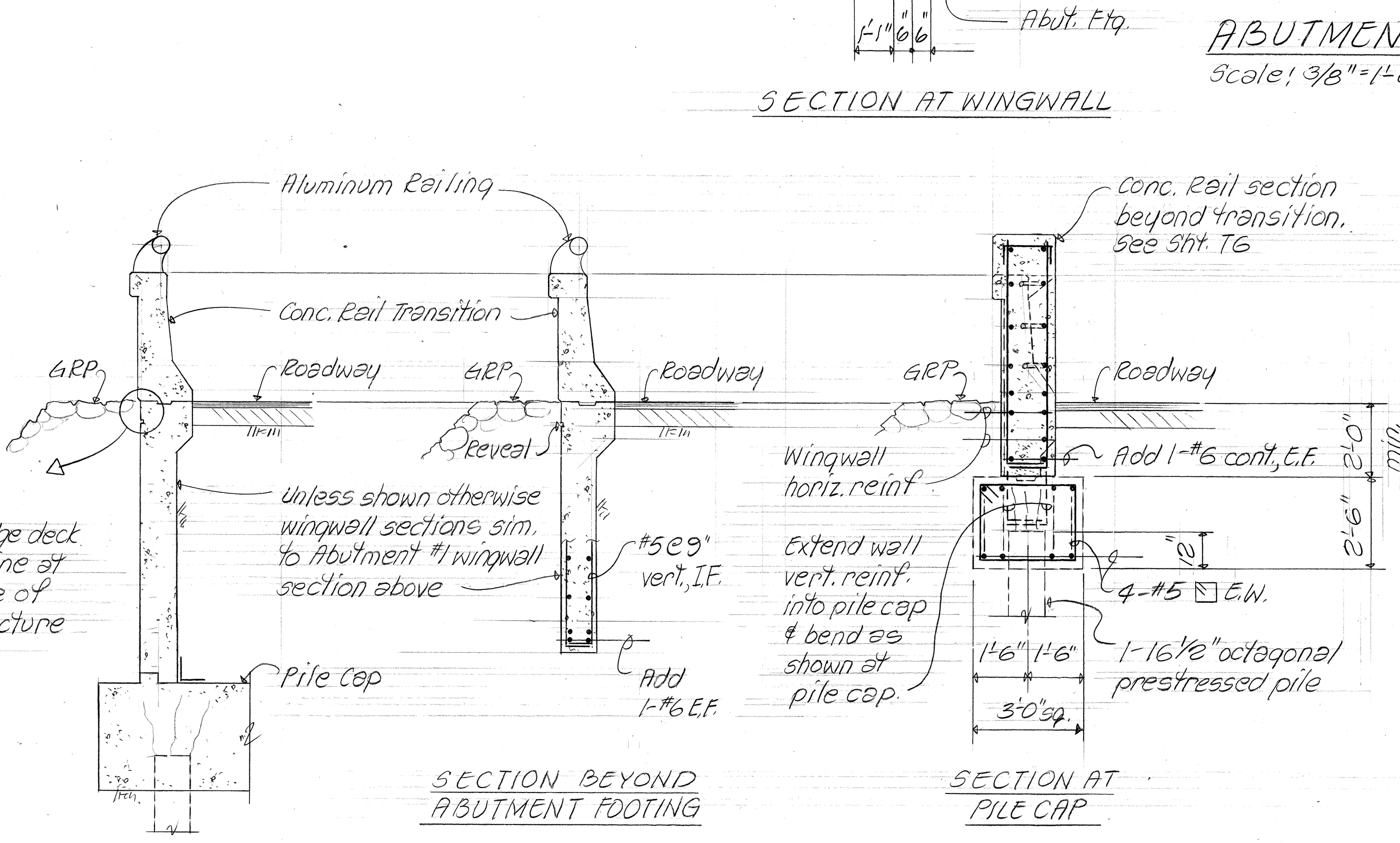
WINGWALL & RETAINING WALL ELEVATIONS

Scale: 1/4" = 1'-0"



PLAN SECTIONS AT ABUTMENT/WINGWALL CORNER

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



ABUTMENT #2 WINGWALL SECTIONS

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

SSFM ENGINEERS INC.
501 Sumner St., #502
Honolulu, Hawaii 96817



This work was prepared by me or under my supervision.
Dwight M. Oshawa

11-20-90	Added Abut. curtain wall
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UKOA POND BRIDGE
WINGWALL ELEVATIONS & SECTIONS

KAMEHAMEHA HIGHWAY - HELEMANO/WAIALUA
JUNCTION TO HALEIWA BEACH PARK
(STRUCTURES)
FAP NO. F-083-1(24)

SHEET No. 316 OF SHEETS

ADD. 107