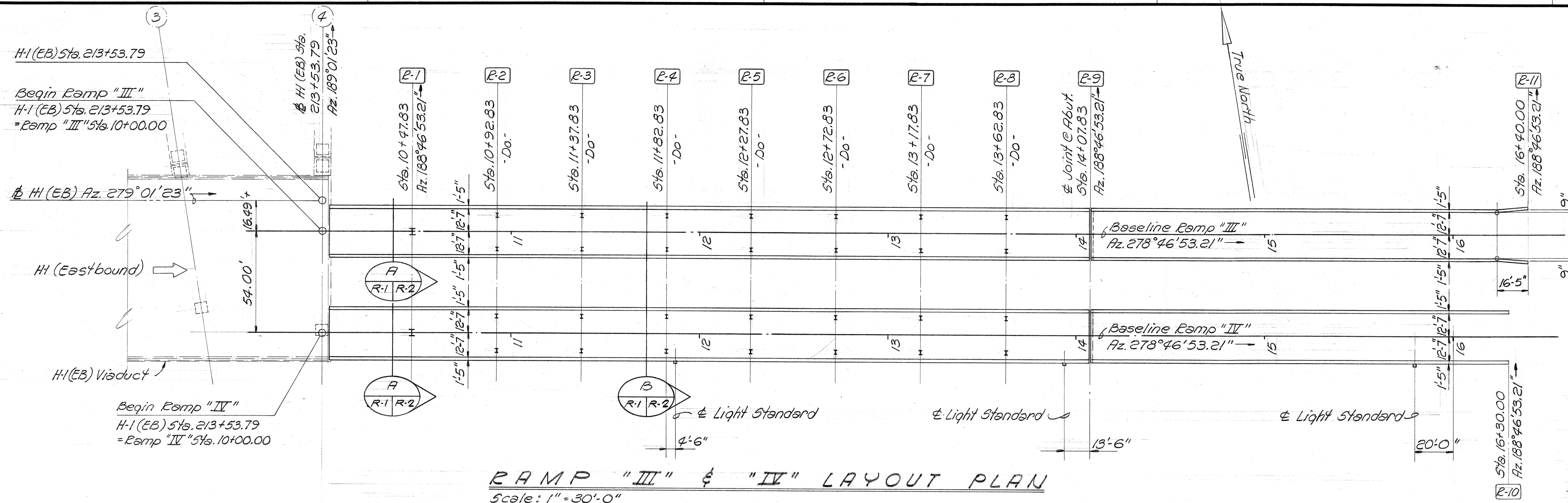
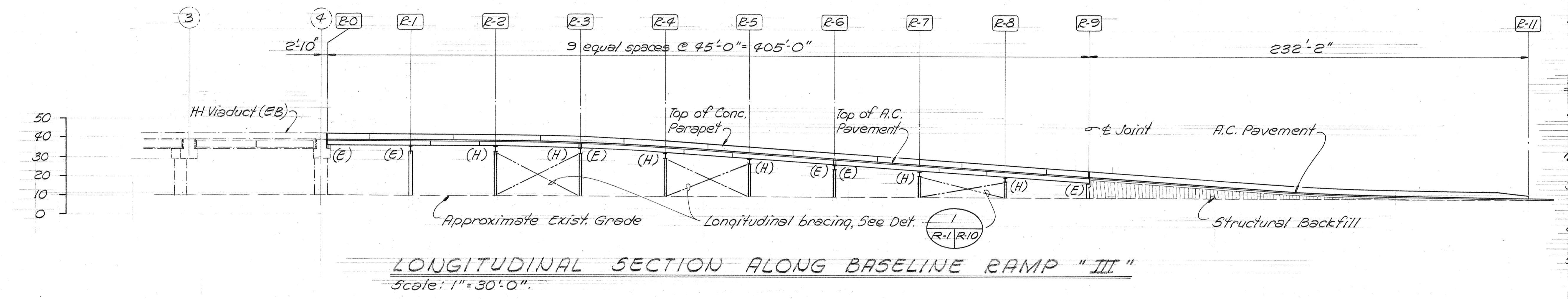


| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI(147):17 | 1980 | 286 | 330 |

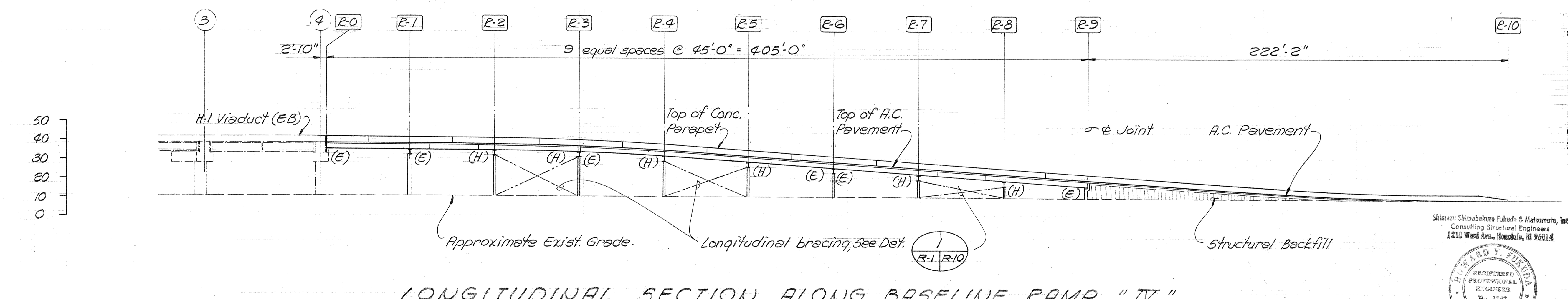
GENERAL NOTE:
RAMP IV IS NOT PART OF THIS CONTRACT.
 (TO BE CONSTRUCTED BY OTHERS)



RAMP "III" & "IV" LAYOUT PLAN
 Scale: 1" = 30'-0"



LONGITUDINAL SECTION ALONG BASELINE RAMP "III"
 Scale: 1" = 30'-0"



LONGITUDINAL SECTION ALONG BASELINE RAMP "IV"
 Scale: 1" = 30'-0"

- NOTES ON QUANTITIES**
- Concrete for tie beams are included in "Concrete in Ramp Footings".
 - Concrete for cast-in-place parapet at retaining walls are included in "Concrete in Abutments & Retaining Walls".
 - Concrete for cast-in-place portion of deck slab are included in "Precast Concrete Deck Slab".
 - Reinforcing steel for cast-in-place parapet at retaining walls are included in "Reinforcing Steel in Abutments & Retaining Walls".
 - Reinf. steel in precast slab shall be incidental to precast slab.

- NOTES**
- Pier bents are perpendicular to their respective baselines.
 - Longitudinal & transverse dimensions are measured parallel & perpendicular to their respective baselines.

- ADDITIONAL NOTES FOR TEMPORARY RAMPS:**
- All anchor bolts (hot dipped galvanized) embedded in concrete shall conform to ASTM 307.
 - For all other bolted connections use ASTM A325 bolts.
 - Unless otherwise noted all welded connections shall develop the full capacity of the member.
 - Allowable foundation pressure = 3,000 p.s.f. (gross)
 - Existing pavement which is damaged through excavation or other work shall be restored to its original condition. Pavement for this work shall be considered incidental to various contract items.
 - Structural steel, precast deck slabs & precast parapets from existing Temporary Ramp II may be utilized for reuse for portions of Temporary Ramp III (See Special Provisions).

LEGEND
 (H) = Hinge Bearing
 (E) = Expansion Bearing

| | |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |
| ORIGINAL PLAN | |
| NOTE BOOK | |
| No. | |

Shimizu Shimabekuro Futaba & Matsumoto, Inc.
 Consulting Structural Engineers
 3210 Ward Ave., Honolulu, HI 96814

HOWARD Y. FUJIMOTO
 REGISTERED PROFESSIONAL ENGINEER
 No. 1343
 HAWAII, U. S. A.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

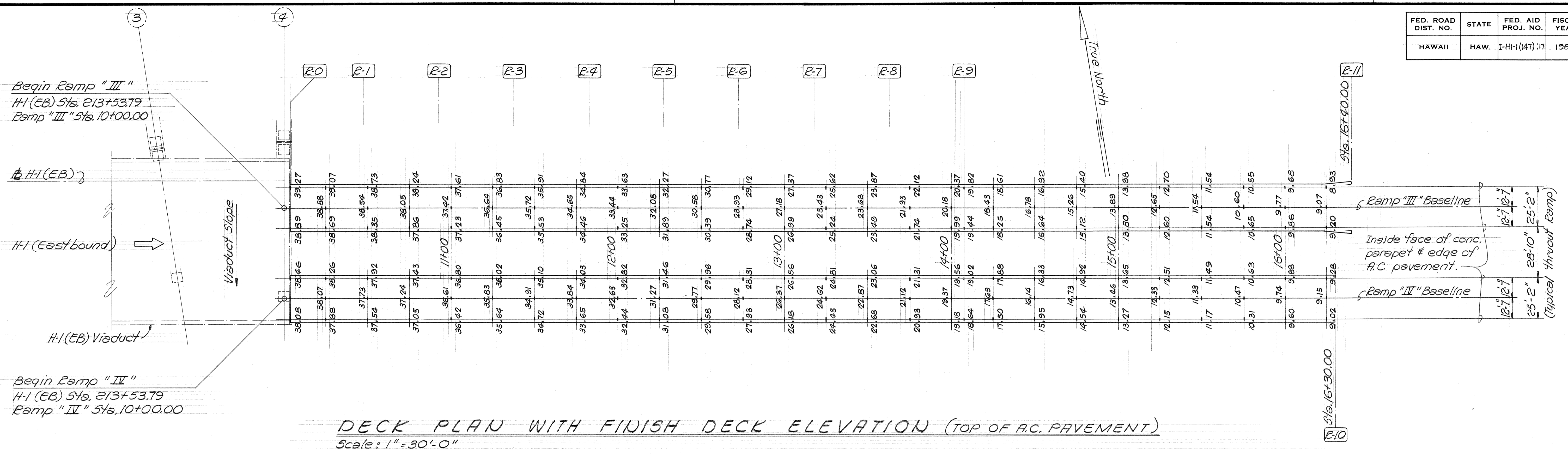
TEMPORARY RAMPS
 LAYOUT PLAN AND
 LONGITUDINAL SECTION

KEEHI INTERCHANGE
 F.A.I. PROJ. NO. I-HI-1 (147):17

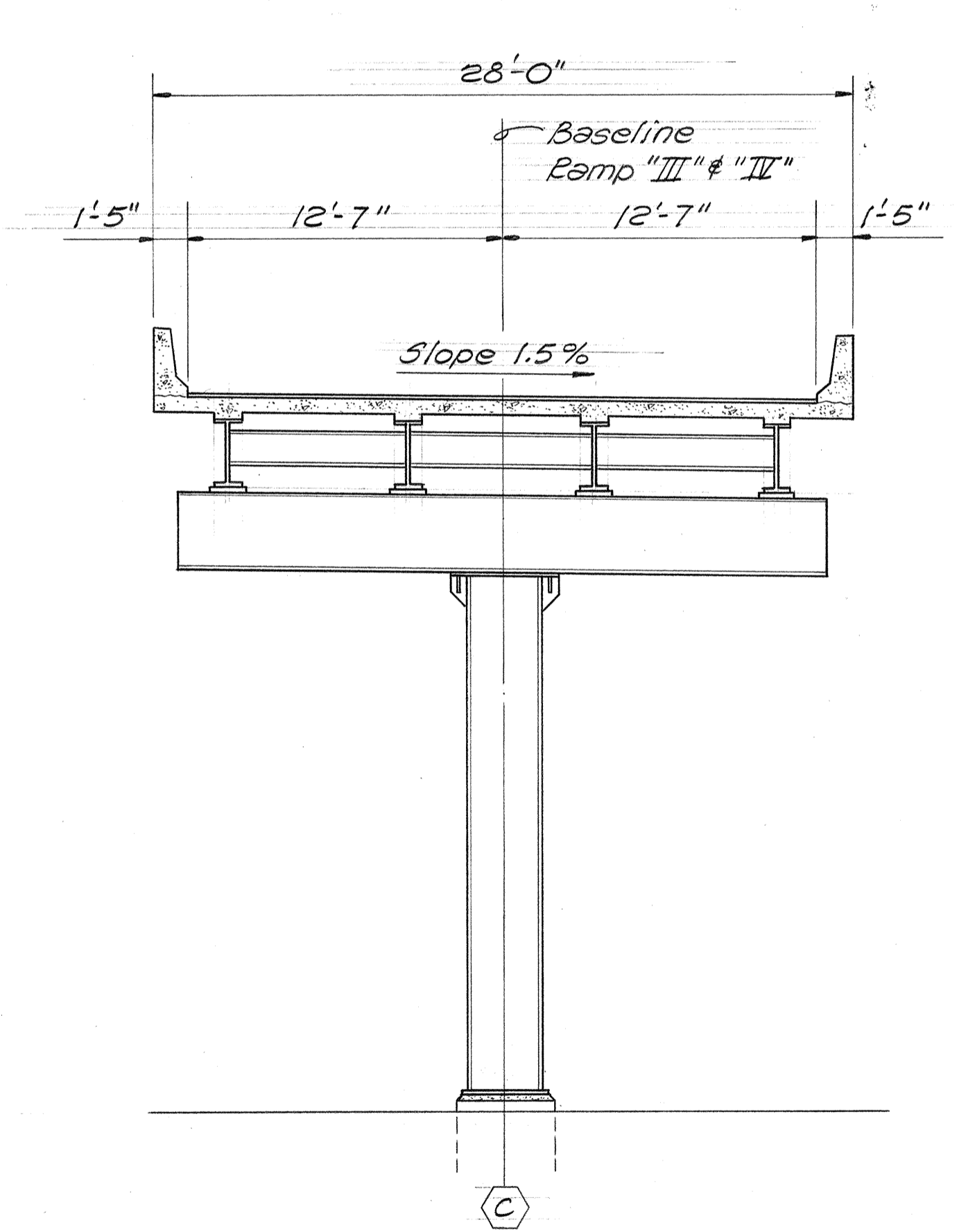
Scale: 1" = 30'-0" Date: April 2, 1979
 SHEET NO. R-1 OF 19 SHEETS

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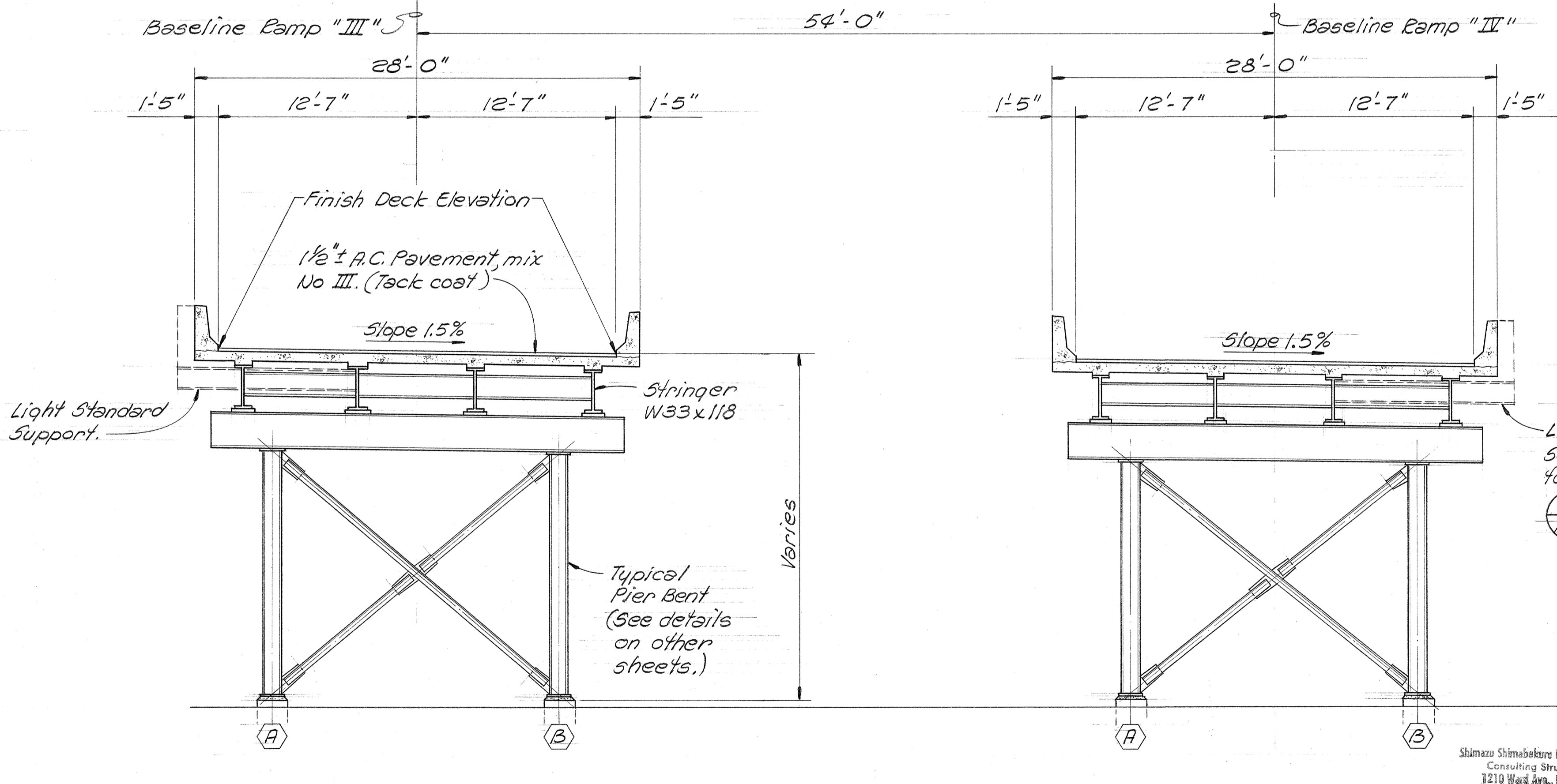
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1(147):17 | 1980 | 287 | 338 |



DECK PLAN WITH FINISH DECK ELEVATION (TOP OF R.C. PAVEMENT)
Scale: 1" = 30'-0"



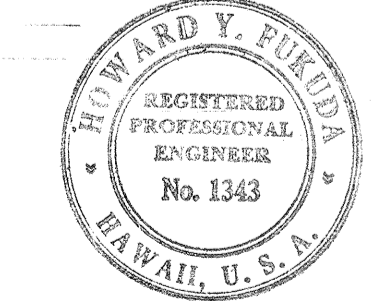
CROSS SECTION A
Scale: 3/16" = 1'-0"
R-1/R-2



TYPICAL CROSS SECTION B
Scale: 3/16" = 1'-0"
R-1/R-2

| | |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |
| NO. | |

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Consulting Structural Engineers
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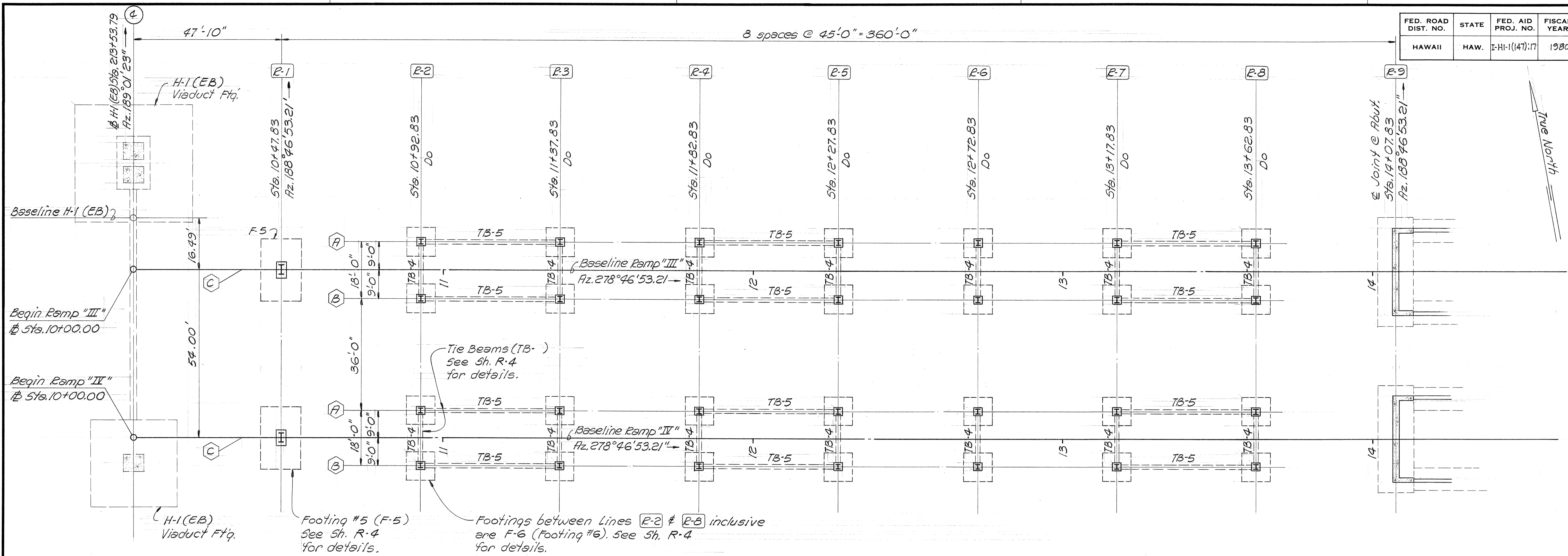
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMPORARY RAMPS
FINISH DECK ELEVATIONS
& CROSS SECTIONS

KEEHI INTERCHANGE
F.A.I. PROJ. NO. I-HI-1 (147):17

Scale: As Shown Date: April 2, 1979
SHEET NO. R-2 OF 19 SHEETS

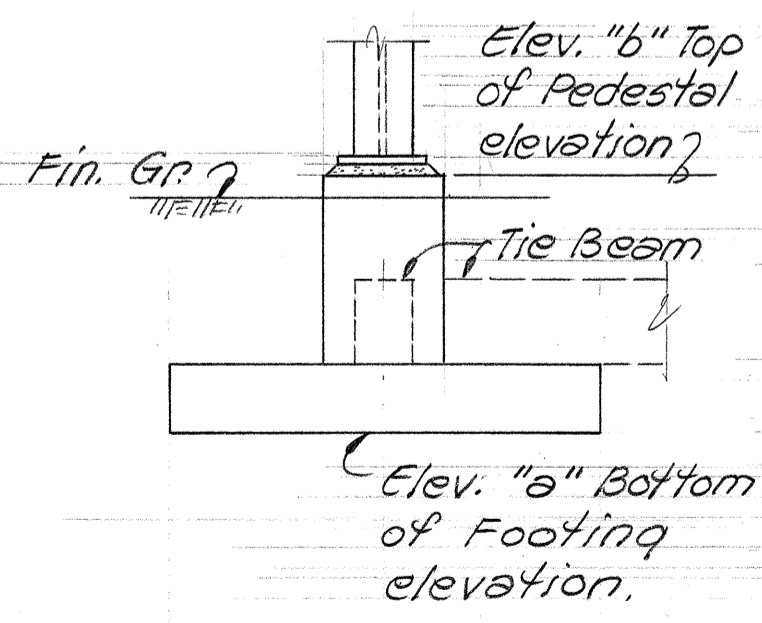
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1(147):17 | 1980 | 288 | 338 |



FOUNDATION PLAN
Scale: 1/16" = 1'-0"

FOOTING ELEVATION SCHEDULE

| PIER NO. | RAMP "III" | | | | | | RAMP "IV" | | | | | |
|----------|---------------|------|------|---------------|-------|-------|---------------|------|------|---------------|-------|-------|
| | Elevation "a" | | | Elevation "b" | | | Elevation "a" | | | Elevation "b" | | |
| | (A) | (B) | (C) | (A) | (B) | (C) | (A) | (B) | (C) | (A) | (B) | (C) |
| R-1 | — | — | 6.50 | — | — | 10.50 | — | — | 7.00 | — | — | 11.00 |
| R-2 | 6.00 | 6.00 | — | 10.00 | 10.00 | — | 6.75 | 6.75 | — | 10.75 | 10.75 | — |
| R-3 | 6.00 | 6.00 | — | 10.00 | 10.00 | — | 6.50 | 6.50 | — | 10.50 | 10.50 | — |
| R-4 | 6.00 | 6.00 | — | 10.00 | 10.00 | — | 6.50 | 6.50 | — | 10.50 | 10.50 | — |
| R-5 | 5.75 | 5.75 | — | 9.75 | 9.75 | — | 6.50 | 6.50 | — | 10.50 | 10.50 | — |
| R-6 | 5.75 | 5.75 | — | 9.75 | 9.75 | — | 6.25 | 6.25 | — | 10.25 | 10.25 | — |
| R-7 | 5.50 | 5.50 | — | 9.50 | 9.50 | — | 6.25 | 6.25 | — | 10.25 | 10.25 | — |
| R-8 | 5.50 | 5.50 | — | 9.50 | 9.50 | — | 6.00 | 6.00 | — | 10.00 | 10.00 | — |



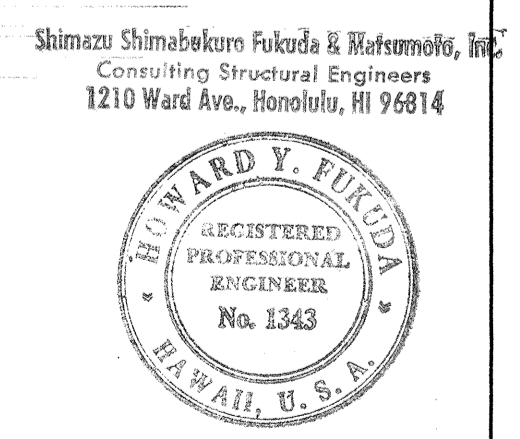
NOTES:

- Pier bents are perpendicular to their respective baselines.
- Longitudinal & transverse dimensions are measured parallel & perpendicular to their respective baselines.

LEGEND

- F-5 = Footing #5
- TB-4 = Tie Beam #4

SURVEY PLOTTED BY: _____ DATE: _____
 DRAWN BY: _____
 DESIGNED BY: _____
 QUANTITIES BY: _____
 CHECKED BY: _____
 ORIGINAL PLAN NO. _____



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STATE OF HAWAII
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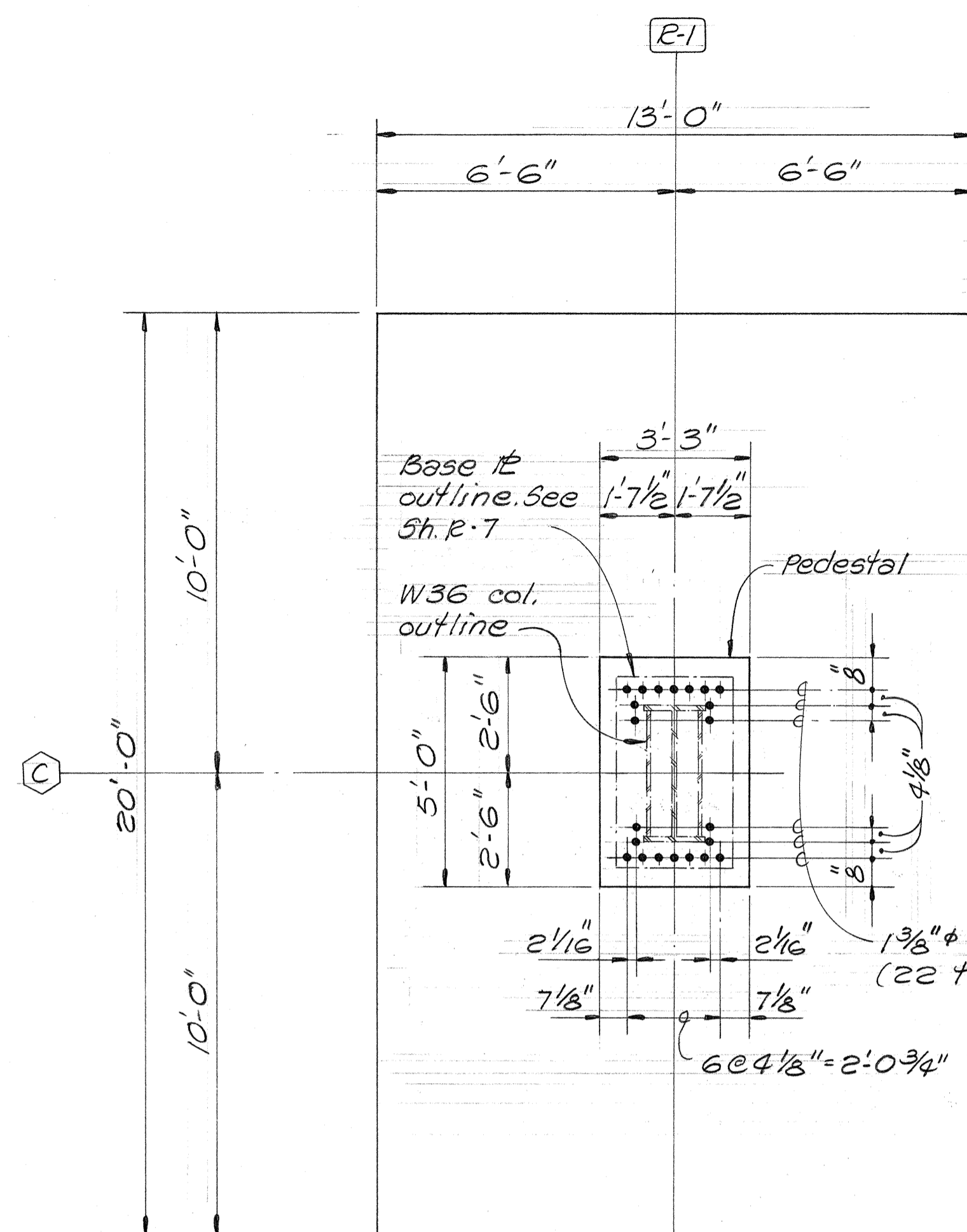
TEMPORARY RAMPS
FOUNDATION PLAN AND
FOOTING ELEVATION SCHEDULE

KEEHI INTERCHANGE
F.A.I. PROJ. NO. I-HI-1 (147):17

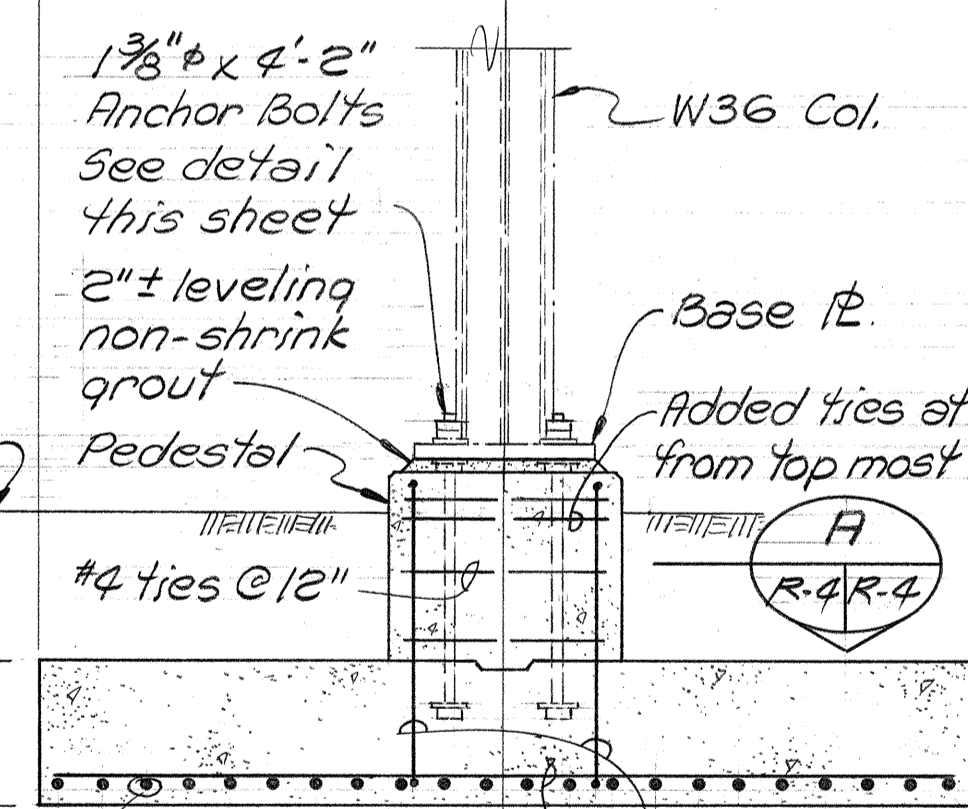
Scale: 1/16" = 1'-0" Date: April 2, 1978

SHEET NO. 2-3 OF 19 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1(147):17 | 1980 | 289 | 330 |



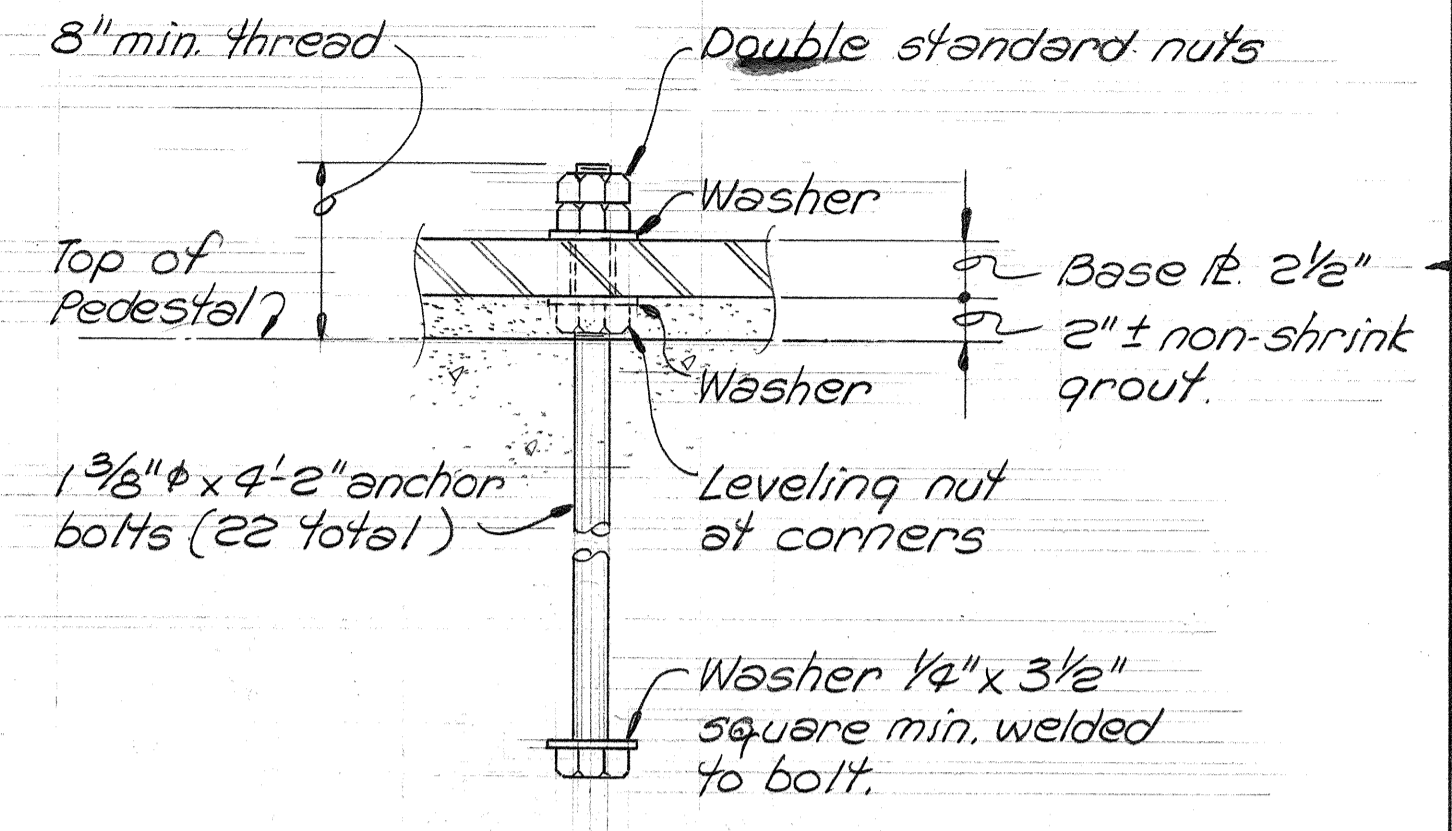
PLAN



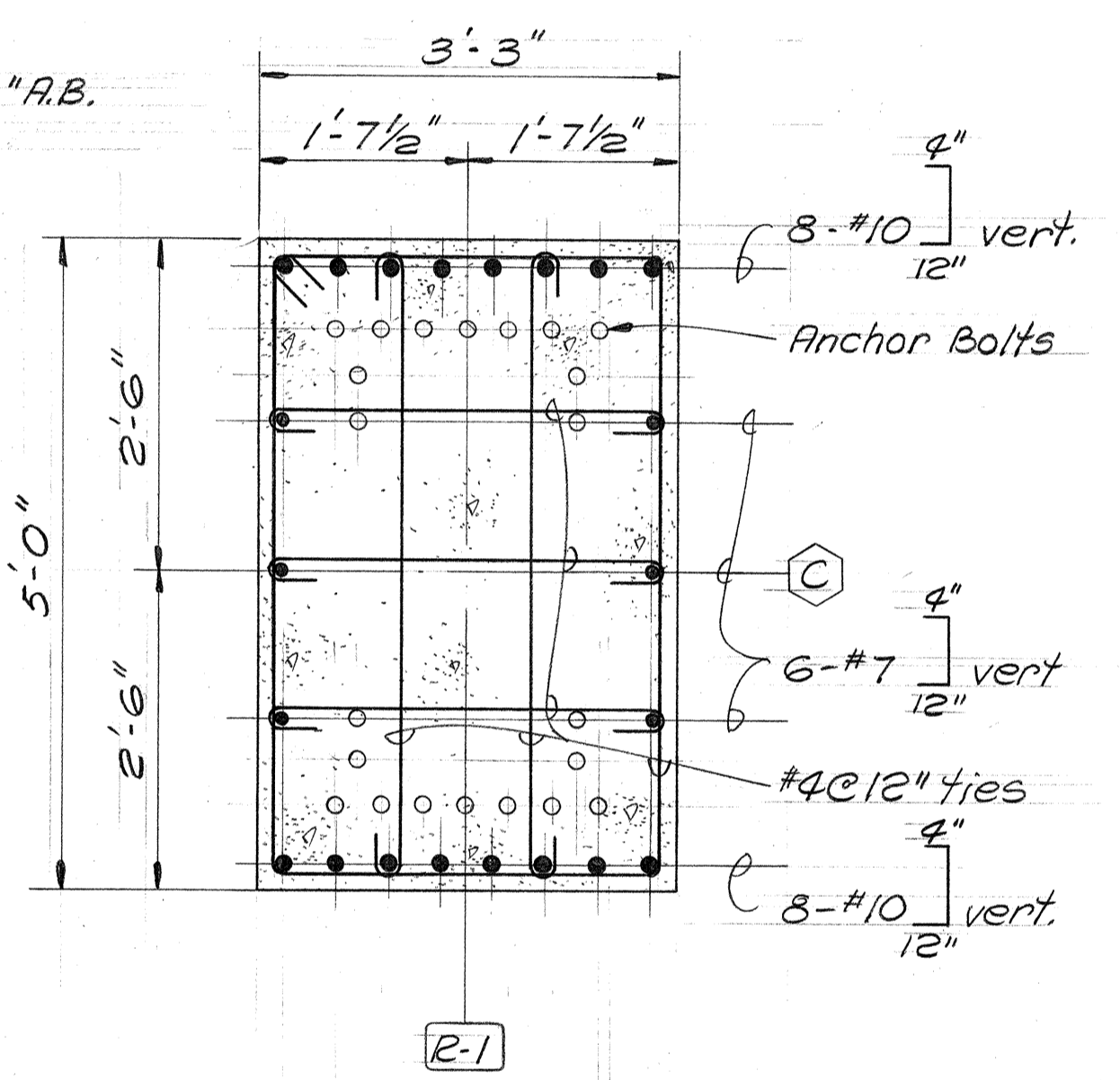
SECTION

FOOTING F-5 DETAIL
Scale: 3/8" = 1'-0"

1
R-3/R-4

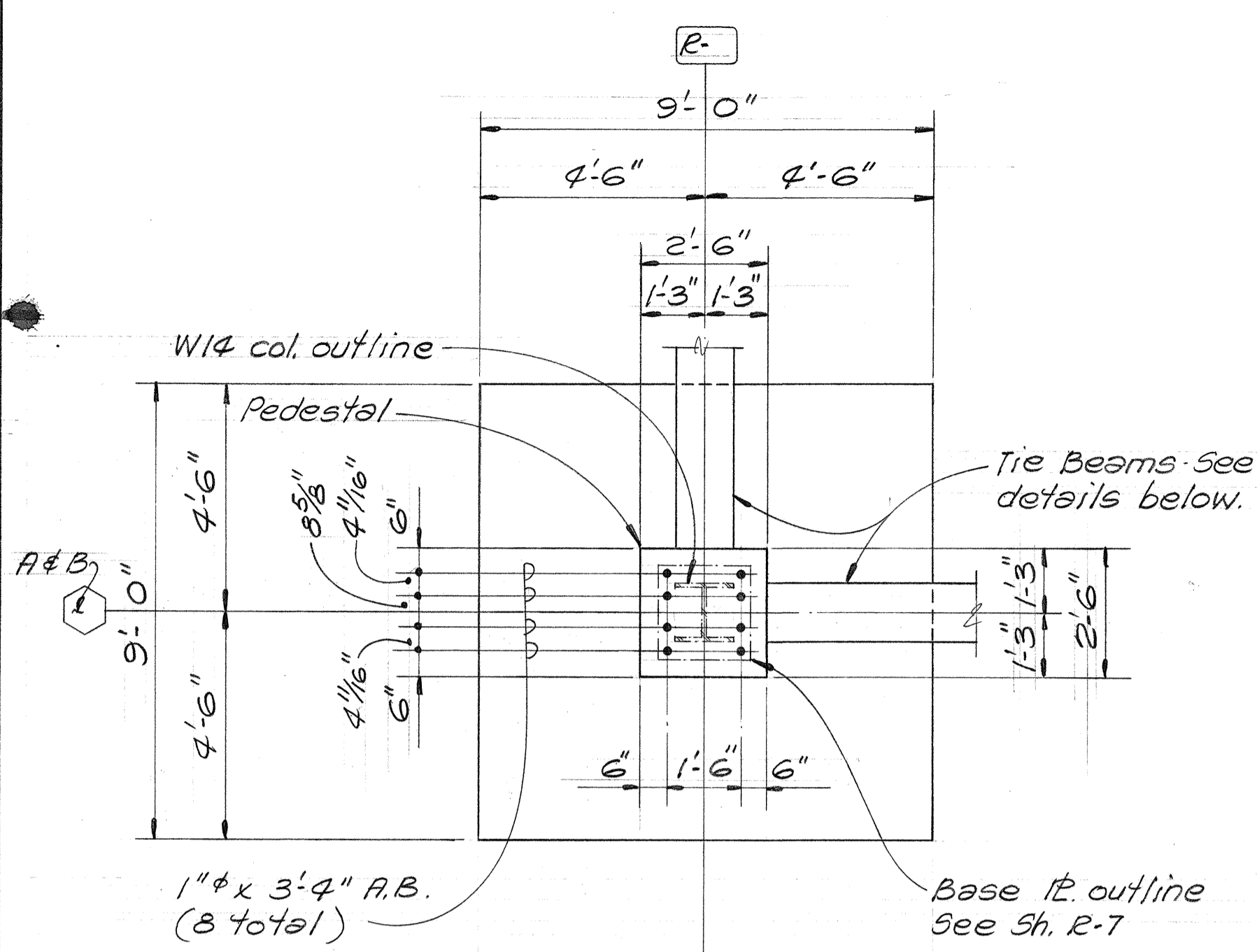


3/8" x 4-2" ANCHOR BOLT DETAIL
Scale: 1 1/2" = 1'-0"

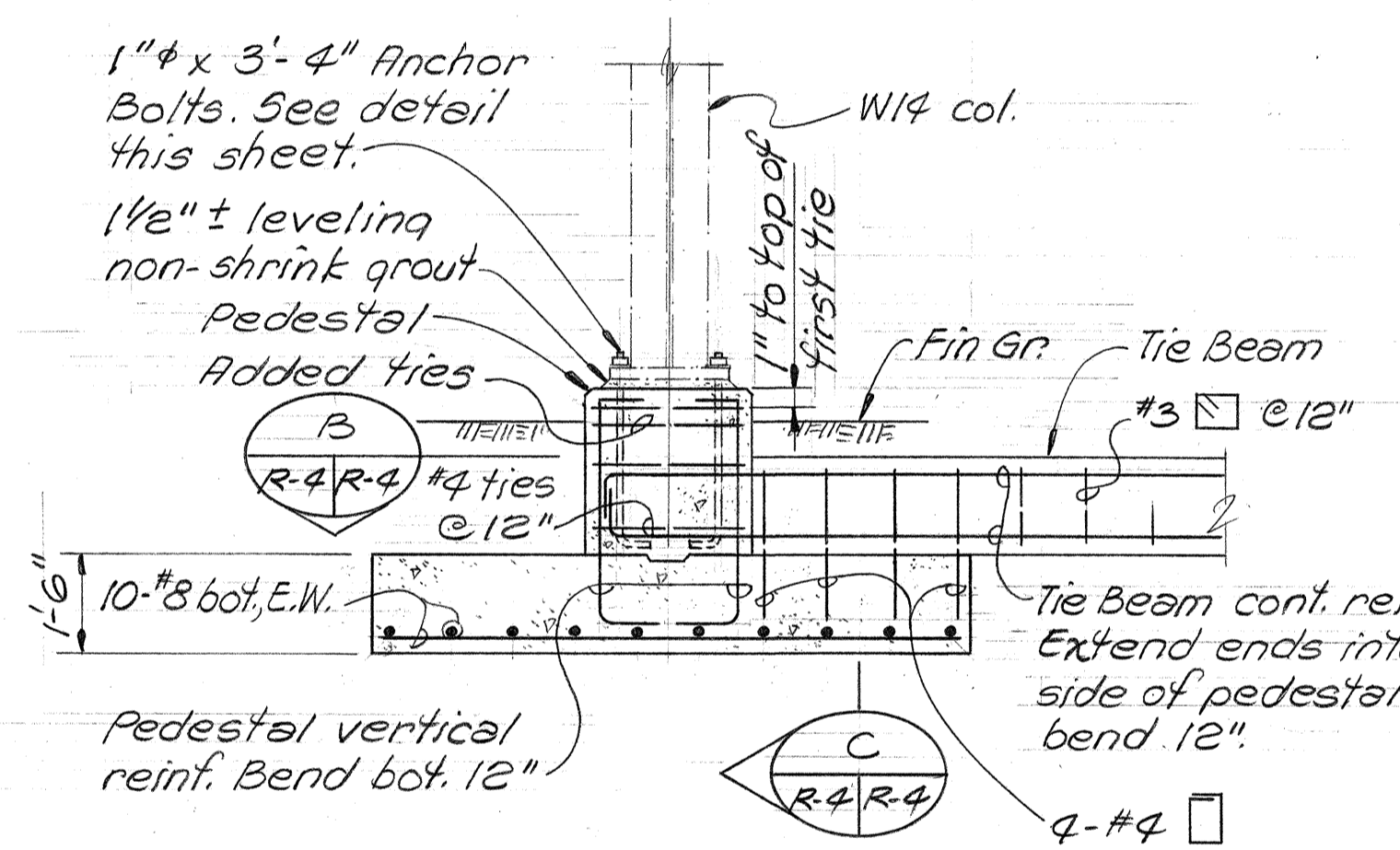


PEDESTAL-PLAN SECTION A
Scale: 3/4" = 1'-0"

A
R-4/R-4



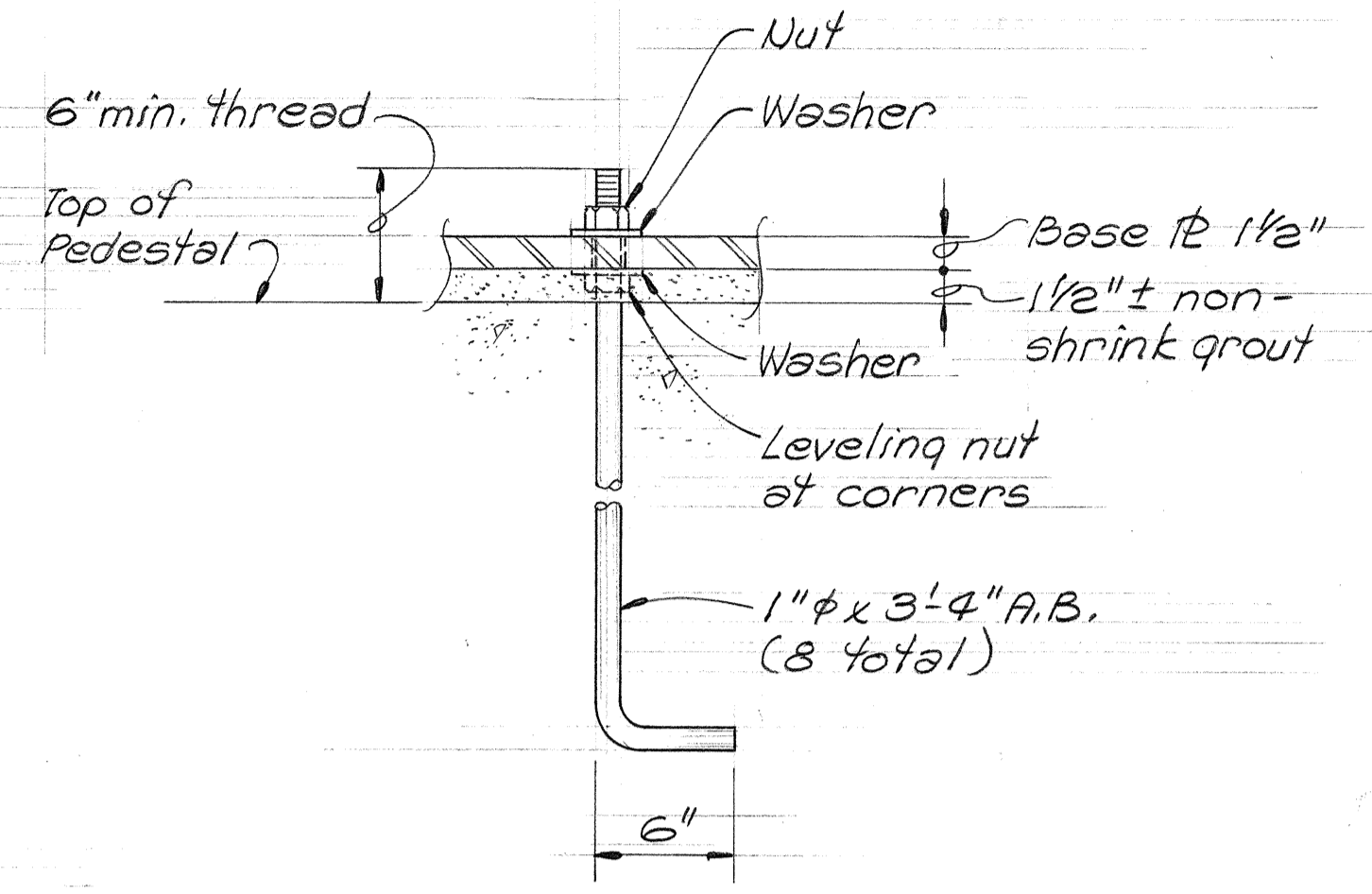
PLAN



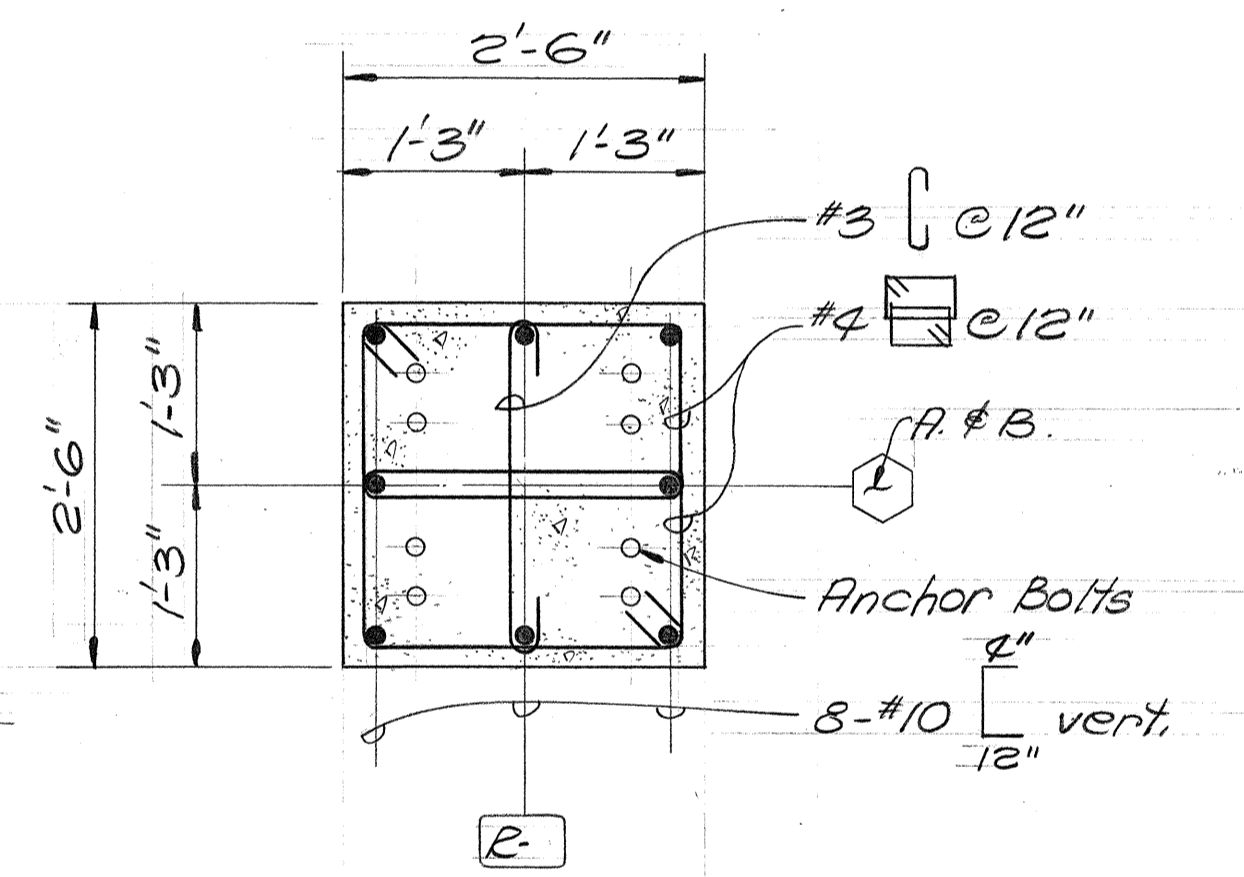
SECTION

FOOTING F-6 DETAIL
Scale: 3/8" = 1'-0"

2
R-3/R-4

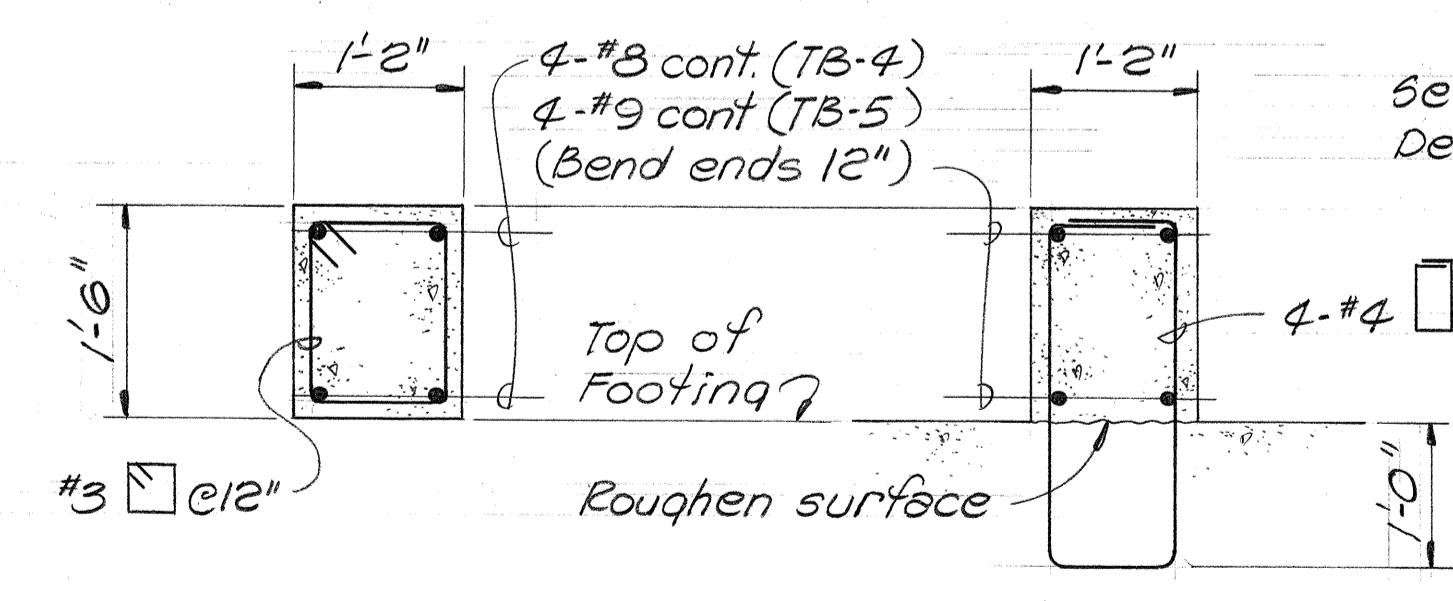


1" x 3-4" ANCHOR BOLT DETAIL
Scale: 1 1/2" = 1'-0"



PEDESTAL-PLAN SECTION B
Scale: 3/4" = 1'-0"

B
R-4/R-4



TYPICAL SECTION C
SECTION C
Scale: 3/4" = 1'-0"

C
R-4/R-4

TIE BEAM TB-4 & TB-5 DETAIL
Scale: 3/4" = 1'-0"

3
R-3/R-4

NOTE:
Cost for anchor bolts, non-shrink grout under base plates to be incidental to concrete.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMPORARY RAMPS
FOUNDATION DETAILS

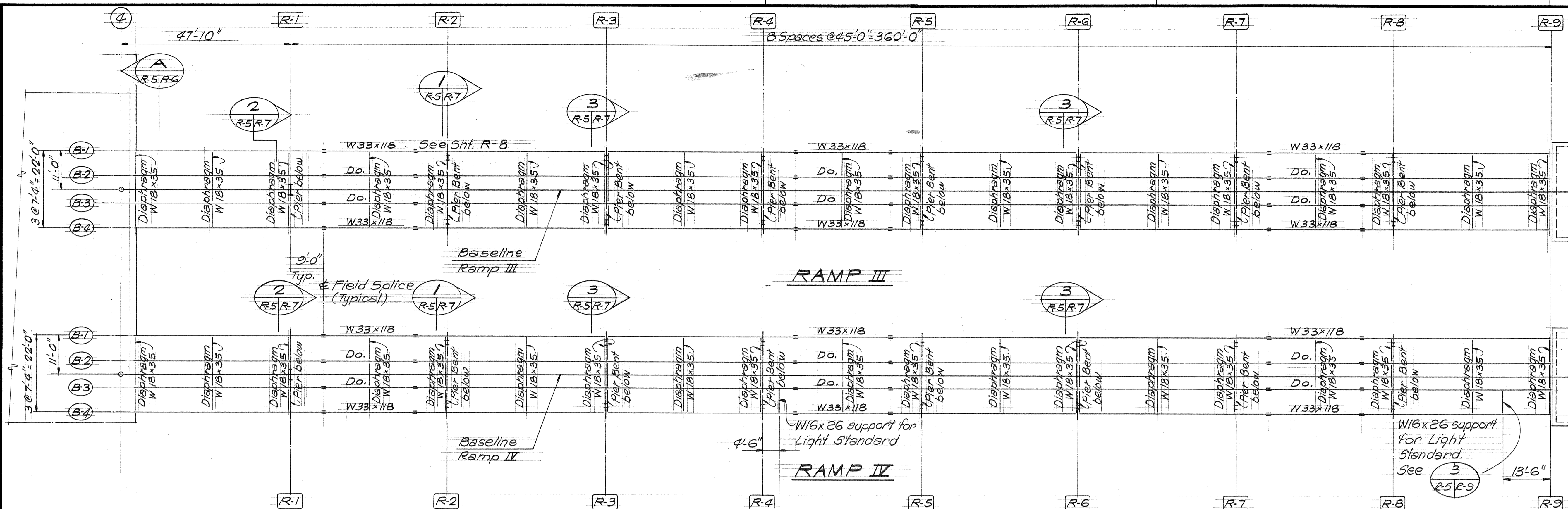
KEEHI INTERCHANGE
F.A.I. PROJ. NO. IHI-1 (147):17

Scale: As Shown Date: April 2, 1979
SHEET NO. R-4 OF 19 SHEETS

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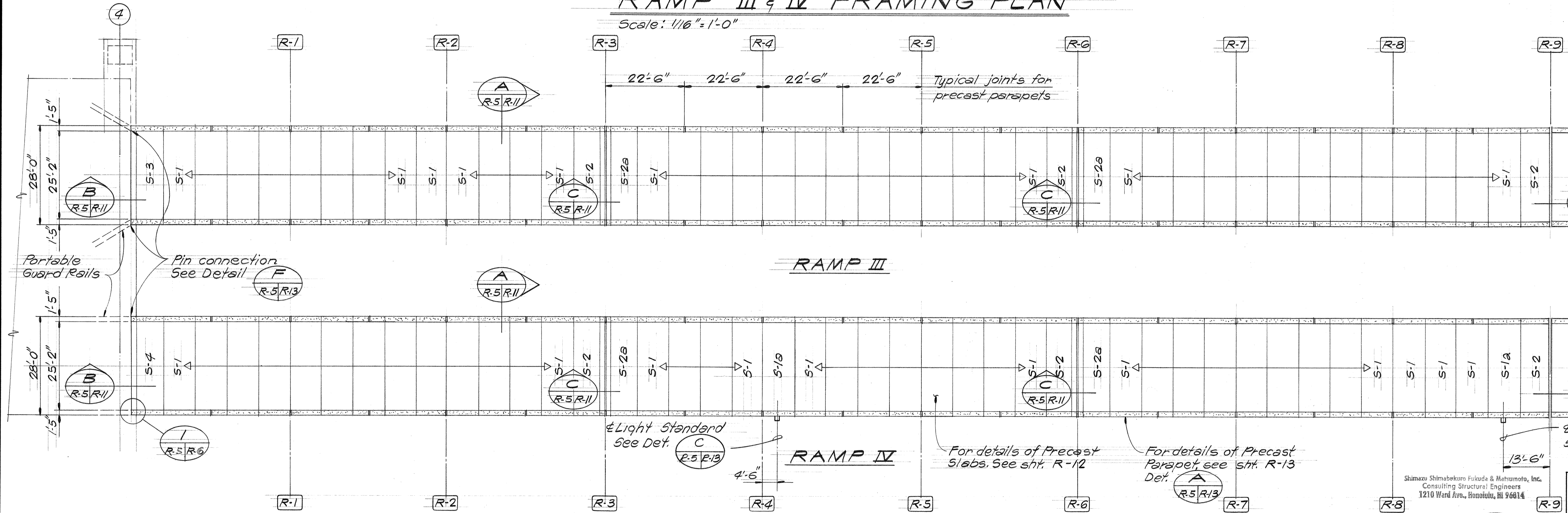
DATE: _____
SURVEY PLOTTED BY: _____
DRAWN BY: _____
CHECKED BY: _____
QUANTITIES BY: _____
NOTE BOOK NO. _____

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1(147):17 | 1980 | 290 | 330 |



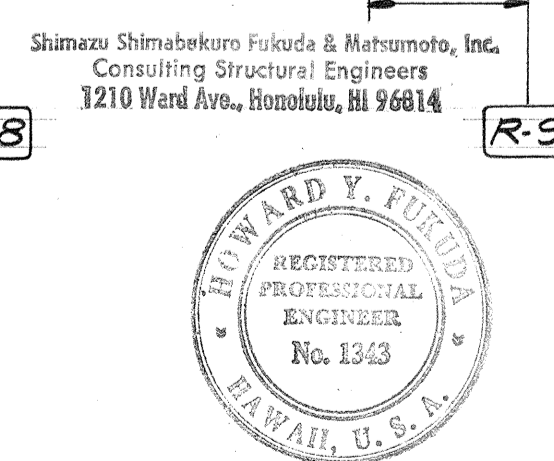
RAMP III & IV FRAMING PLAN
Scale: 1/16" = 1'-0"

- NOTES:**
1. Pier bents are perpendicular to their respective baselines.
 2. Longitudinal and transverse dimensions are measured parallel & perpendicular to their respective baselines.



RAMP III & IV PRECAST SLAB & PARAPET PLAN
Scale: 1/16" = 1'-0"

| | |
|-------------|-------|
| DATE | |
| DESIGNED BY | |
| CHECKED BY | |
| NO. | |



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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

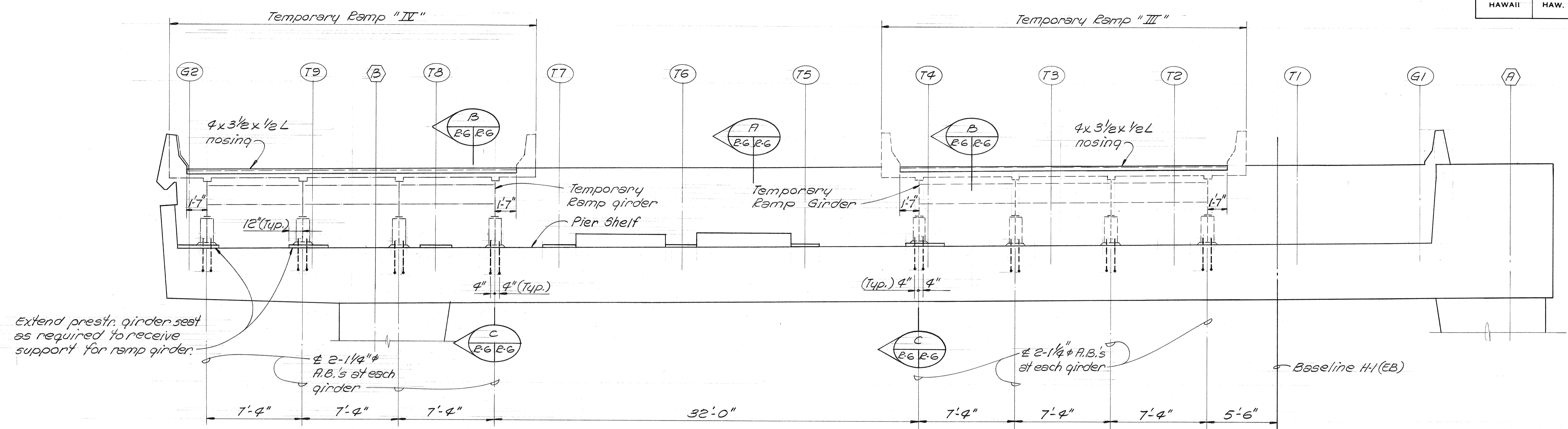
TEMPORARY RAMPS
DECK FRAMING PLANS AND
PRECAST SLAB & PARAPET PLANS

KEEHI INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(147):17

Scale: 1/16" = 1'-0" Date: April 2, 1979

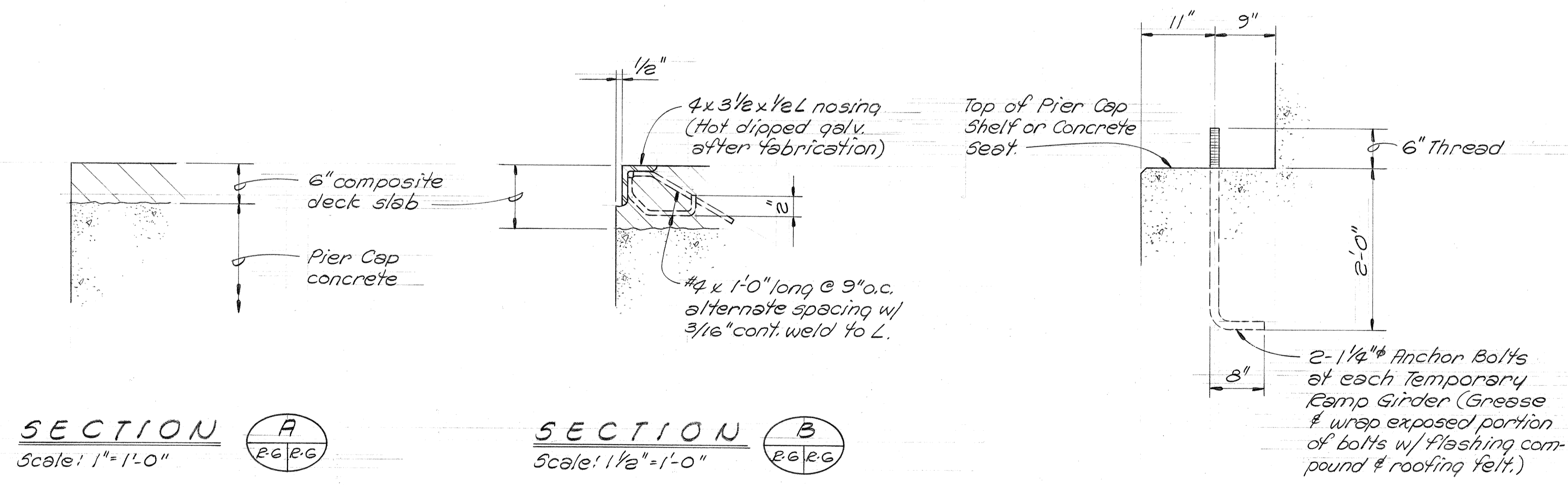
SHEET NO. R-5 OF 19 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1(147):17 | 1980 | 291 | 398 |



Extend prest. girder seat as required to receive support for ramp girder.

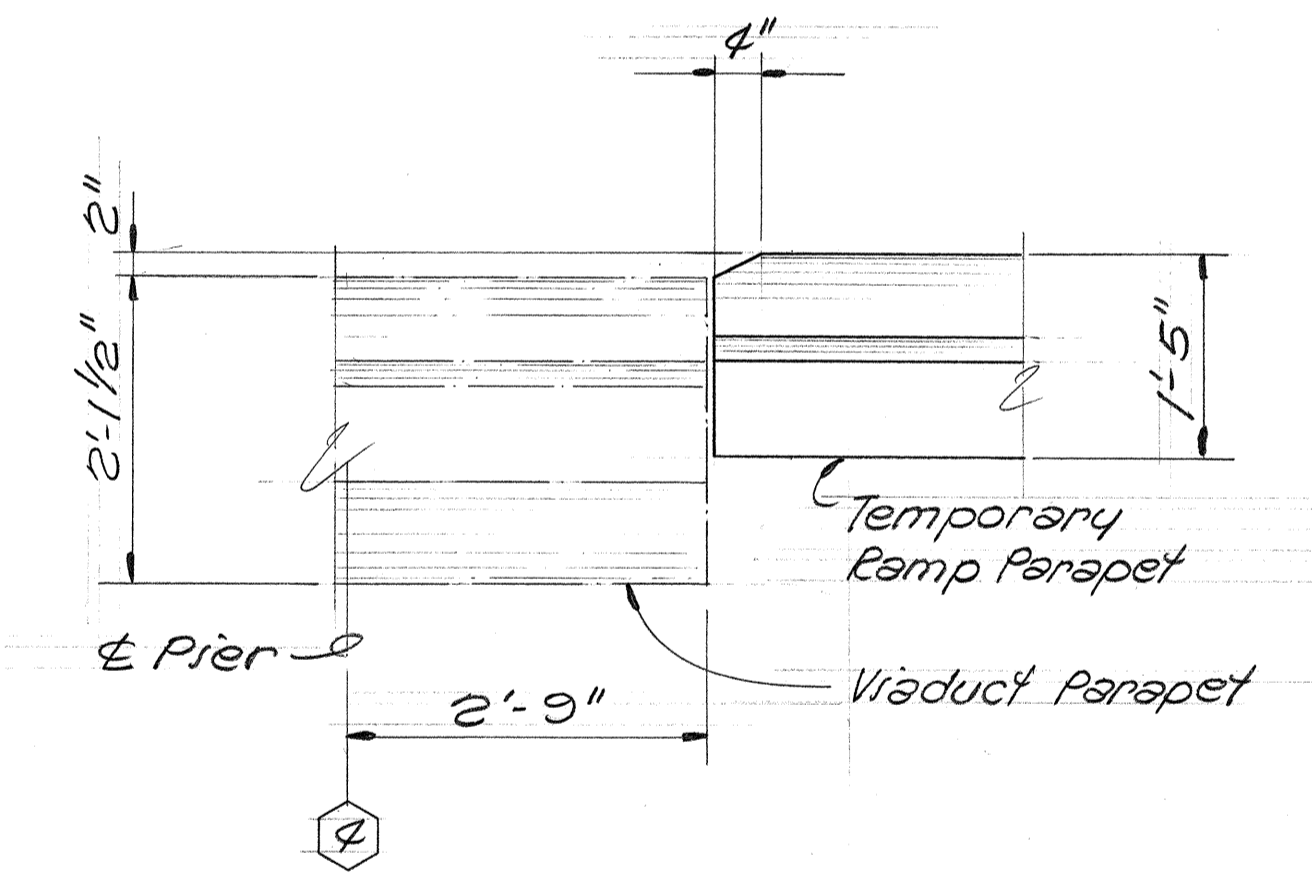
PIER ④ ELEVATION (LOOKING WESTWARD)
 Scale: 1/4" = 1'-0" A
E6/E6



SECTION A
 Scale: 1" = 1'-0" A
E6/E6

SECTION B
 Scale: 1 1/2" = 1'-0" B
E6/E6

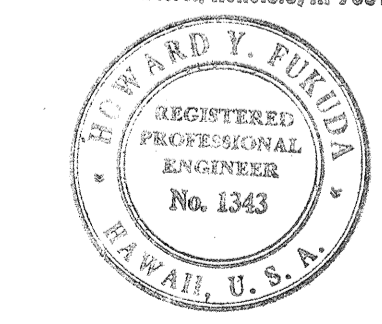
SECTION C
 Scale: 1" = 1'-0" C
E6/E6



DETAIL I
 Scale: 3/4" = 1'-0" I
E6/E6

| | |
|-------------------|-------|
| DATE | |
| SURVEY PLOTTED BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |
| NO. | |

Shimazu Shimofusa Fukuda & Matsumoto, Inc.
 Consulting Structural Engineers
 1210 Ward Ave., Honolulu, HI 96814



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 HIGHWAYS DIVISION

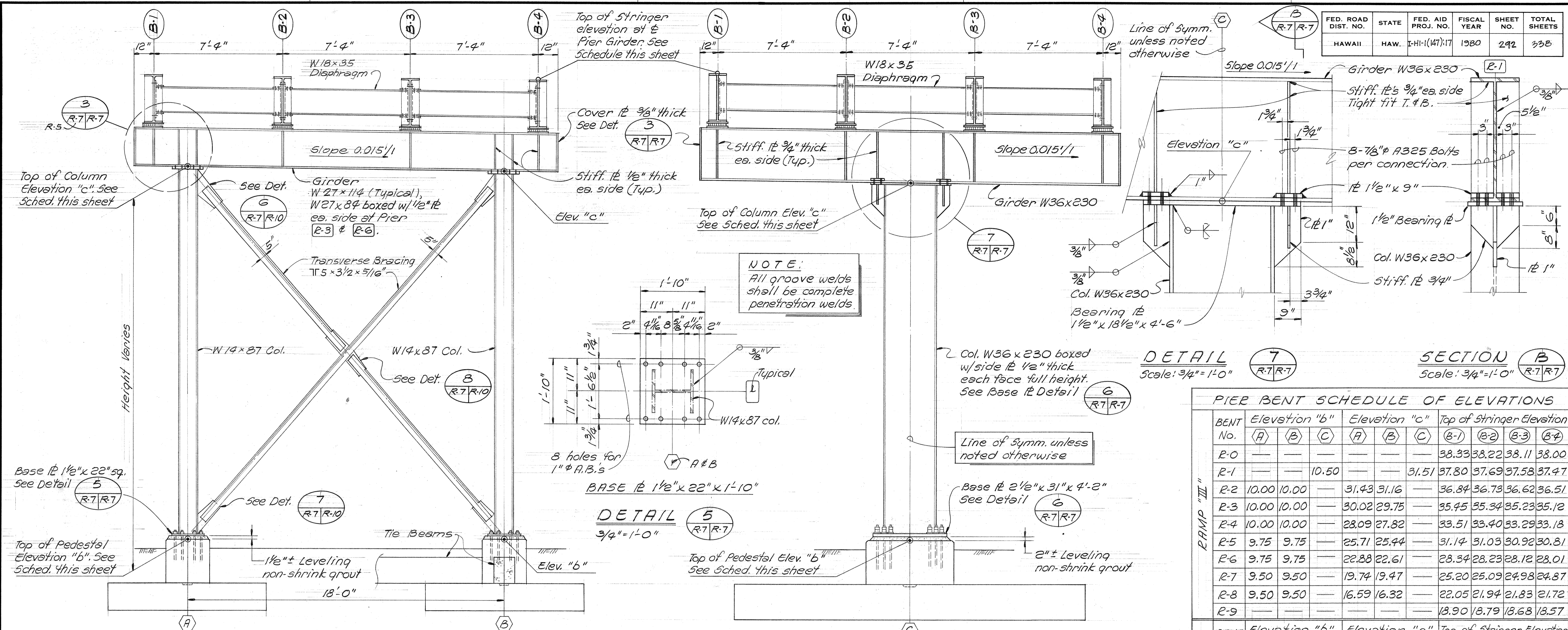
TEMPORARY RAMPS
 CONNECTION REQUIREMENTS @ PIER ④

KEEHI INTERCHANGE
 F.A.I. PROJ. NO. I-HI-1 (147) :17

Scale: As Shown Date: April 2, 1978

SHEET NO. 26 OF 19 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-H-1(147):17 | 1980 | 292 | 338 |



NOTE:
All groove welds shall be complete penetration welds.

DETAIL 7
Scale: 3/4" = 1'-0"

SECTION B
Scale: 3/4" = 1'-0"

PIER BENT SCHEDULE OF ELEVATIONS

| BENT No. | Elevation "b" | | | Elevation "c" | | | Top of Stringer Elevation | | | |
|----------|---------------|-------|-------|---------------|-------|-------|---------------------------|-------|-------|-------|
| | A | B | C | A | B | C | (B-1) | (B-2) | (B-3) | (B-4) |
| R-0 | | | | | | | 38.33 | 38.22 | 38.11 | 38.00 |
| R-1 | | | 10.50 | | | 31.51 | 37.80 | 37.69 | 37.58 | 37.47 |
| R-2 | 10.00 | 10.00 | | 31.43 | 31.16 | | 36.84 | 36.73 | 36.62 | 36.51 |
| R-3 | 10.00 | 10.00 | | 30.02 | 29.75 | | 35.45 | 35.34 | 35.23 | 35.12 |
| R-4 | 10.00 | 10.00 | | 28.09 | 27.82 | | 33.51 | 33.40 | 33.29 | 33.18 |
| R-5 | 9.75 | 9.75 | | 25.71 | 25.44 | | 31.14 | 31.03 | 30.92 | 30.81 |
| R-6 | 9.75 | 9.75 | | 22.88 | 22.61 | | 28.34 | 28.23 | 28.12 | 28.01 |
| R-7 | 9.50 | 9.50 | | 19.74 | 19.47 | | 25.20 | 25.09 | 24.98 | 24.87 |
| R-8 | 9.50 | 9.50 | | 16.59 | 16.32 | | 22.05 | 21.94 | 21.83 | 21.72 |
| R-9 | | | | | | | 18.90 | 18.79 | 18.68 | 18.57 |

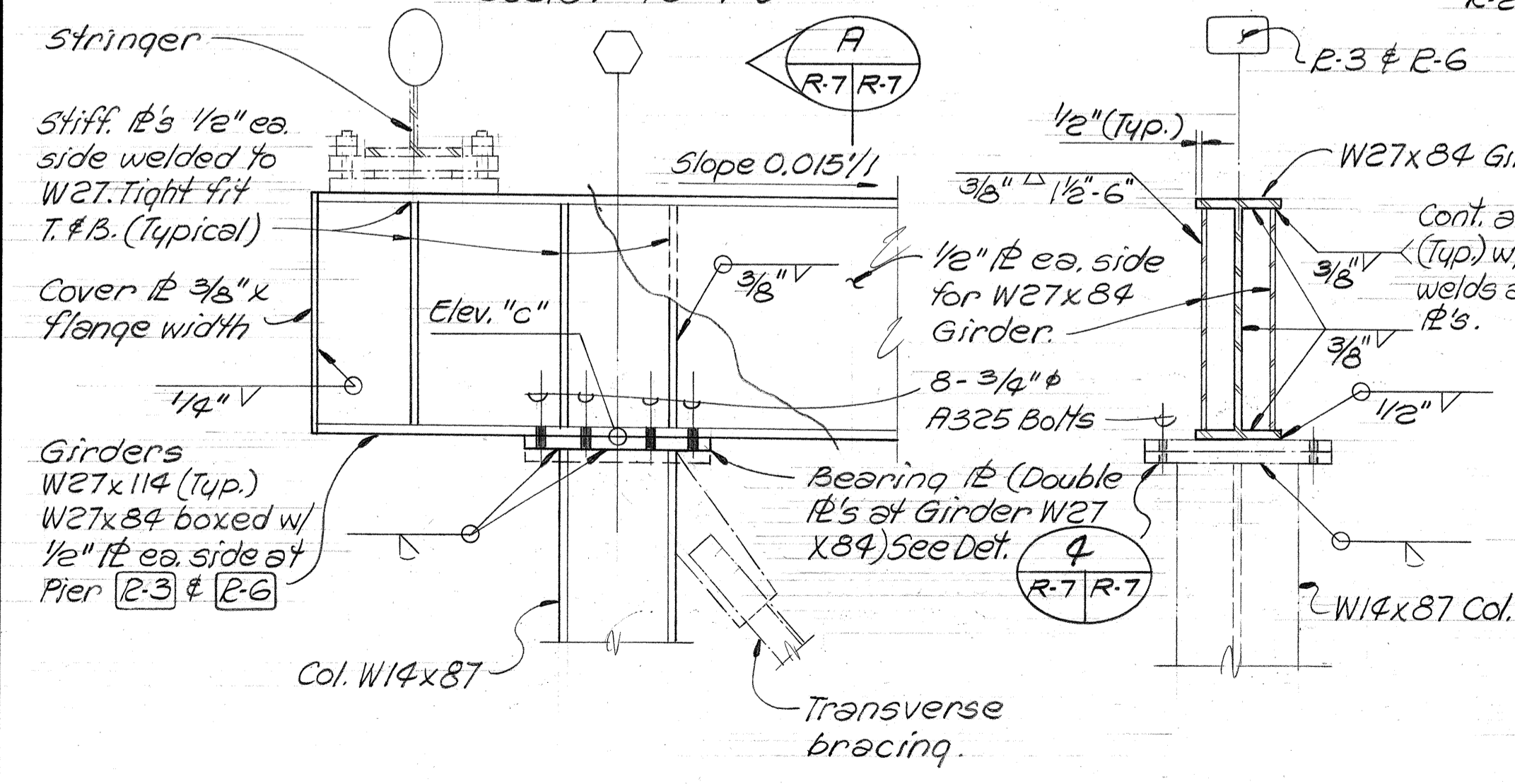
PIER BENT AT LINE R-1 RAMP "III" & "II"

| BENT No. | Elevation "b" | | | Elevation "c" | | | Top of Stringer Elevation | | | |
|----------|---------------|-------|-------|---------------|-------|-------|---------------------------|-------|-------|-------|
| | A | B | C | A | B | C | (B-1) | (B-2) | (B-3) | (B-4) |
| R-0 | | | | | | | 37.52 | 37.41 | 37.30 | 37.19 |
| R-1 | | | 11.00 | | | 30.70 | 36.99 | 36.88 | 36.77 | 36.66 |
| R-2 | 10.75 | 10.75 | | 30.62 | 30.35 | | 36.03 | 35.92 | 35.81 | 35.70 |
| R-3 | 10.50 | 10.50 | | 29.21 | 28.94 | | 34.64 | 34.53 | 34.42 | 34.31 |
| R-4 | 10.50 | 10.50 | | 27.28 | 27.01 | | 32.70 | 32.59 | 32.48 | 32.37 |
| R-5 | 10.50 | 10.50 | | 24.90 | 24.63 | | 30.33 | 30.22 | 30.11 | 30.00 |
| R-6 | 10.25 | 10.25 | | 22.07 | 21.80 | | 27.53 | 27.42 | 27.31 | 27.20 |
| R-7 | 10.25 | 10.25 | | 18.95 | 18.68 | | 24.39 | 24.28 | 24.17 | 24.06 |
| R-8 | 10.00 | 10.00 | | 15.80 | 15.53 | | 21.24 | 21.13 | 21.02 | 20.91 |
| R-9 | | | | | | | 18.10 | 17.99 | 17.88 | 17.77 |

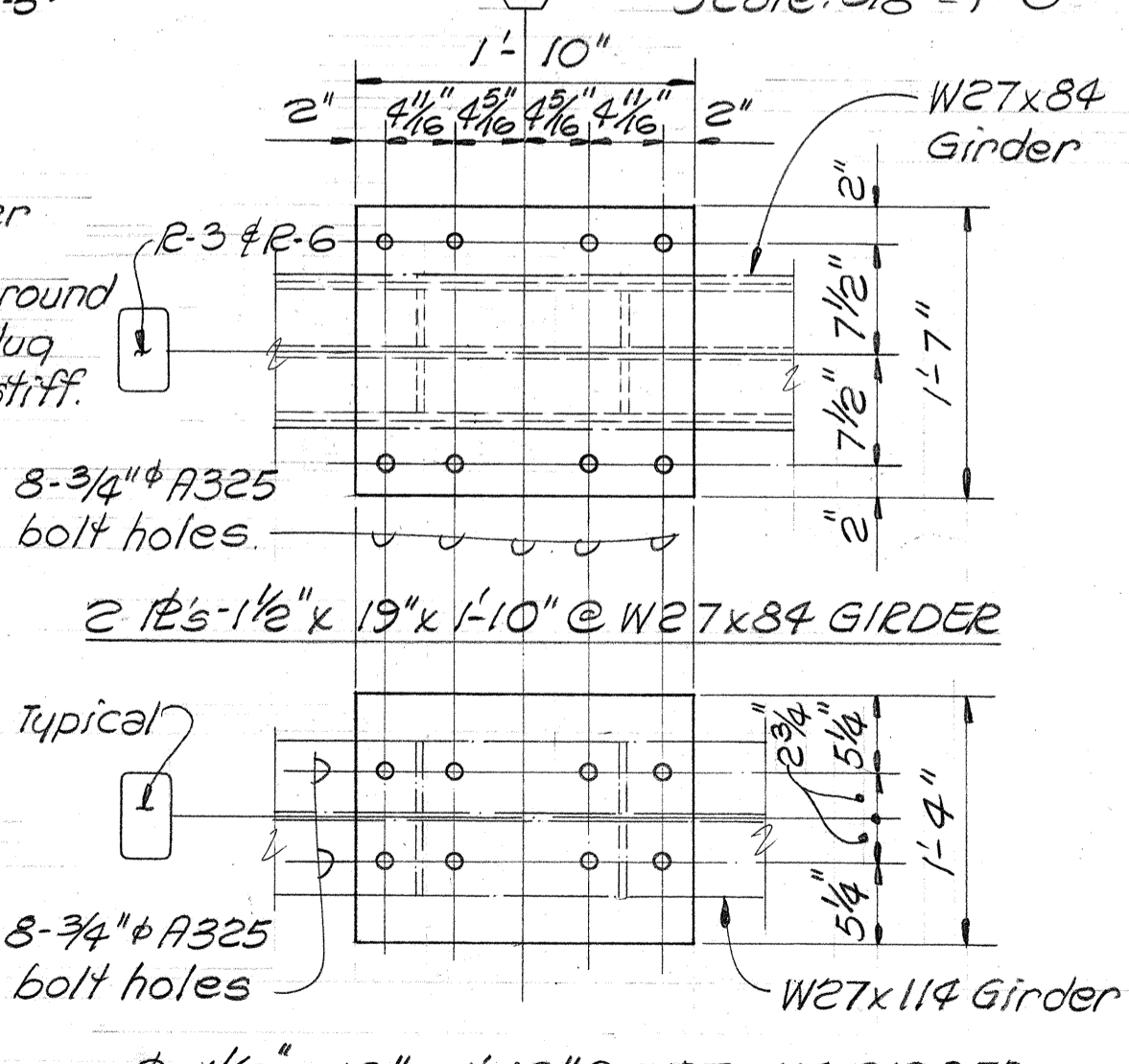
TYPICAL PIER BENT DETAIL 1
Scale: 3/8" = 1'-0"

PIER BENT AT LINE R-1 RAMP "III" & "II" 2
Scale: 3/8" = 1'-0"

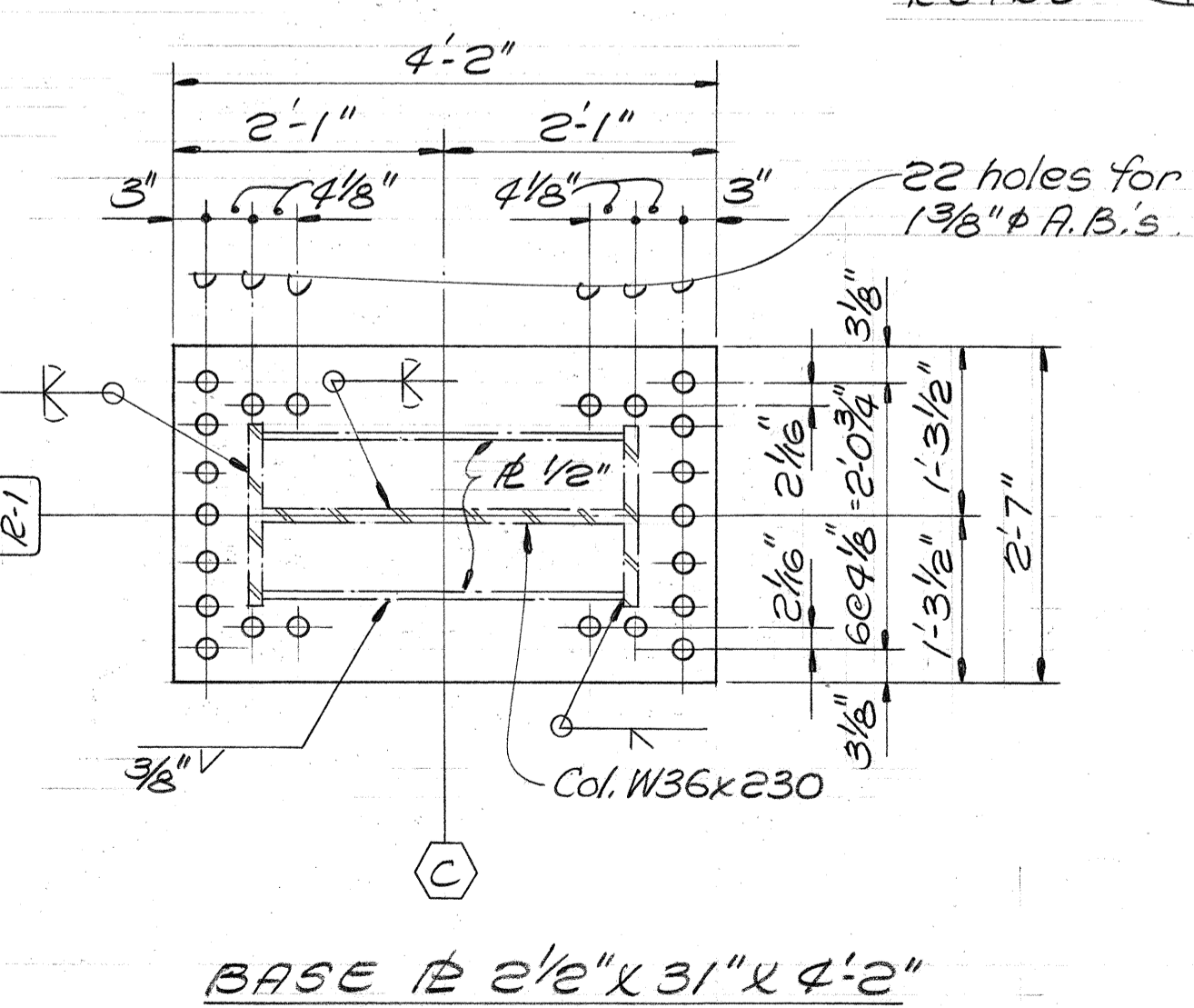
SURVEY PLOTTED BY: _____
 DATE: _____
 ORIGINAL DRAWN BY: _____
 TRACED BY: _____
 DESIGNED BY: _____
 CHECKED BY: _____
 NO. _____



DETAIL 3
3/4" = 1'-0"

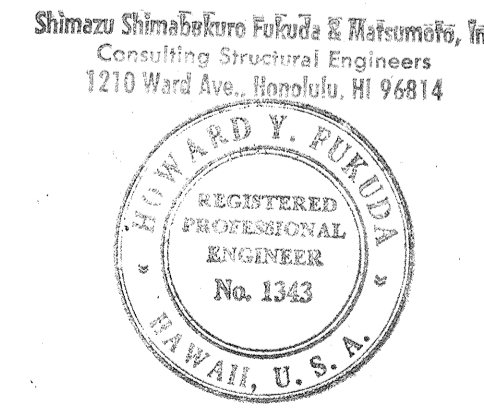


BEARING PLATE DETAIL 4
1" = 1'-0"



DETAIL 6
3/4" = 1'-0"

SECTION A
3/4" = 1'-0"

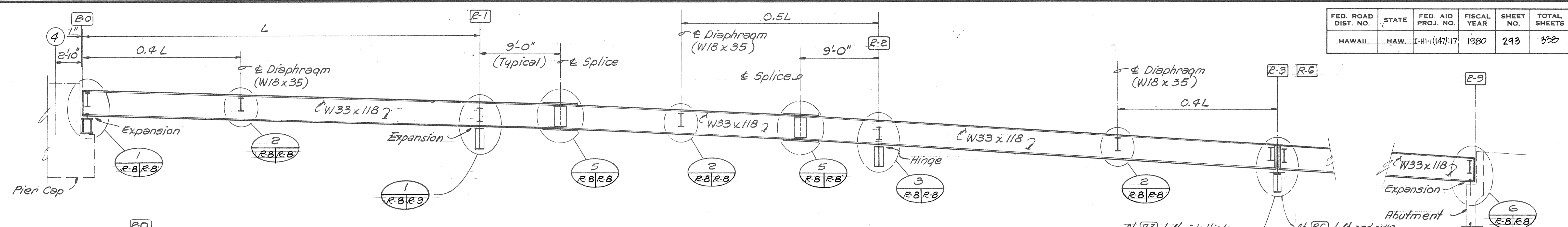


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

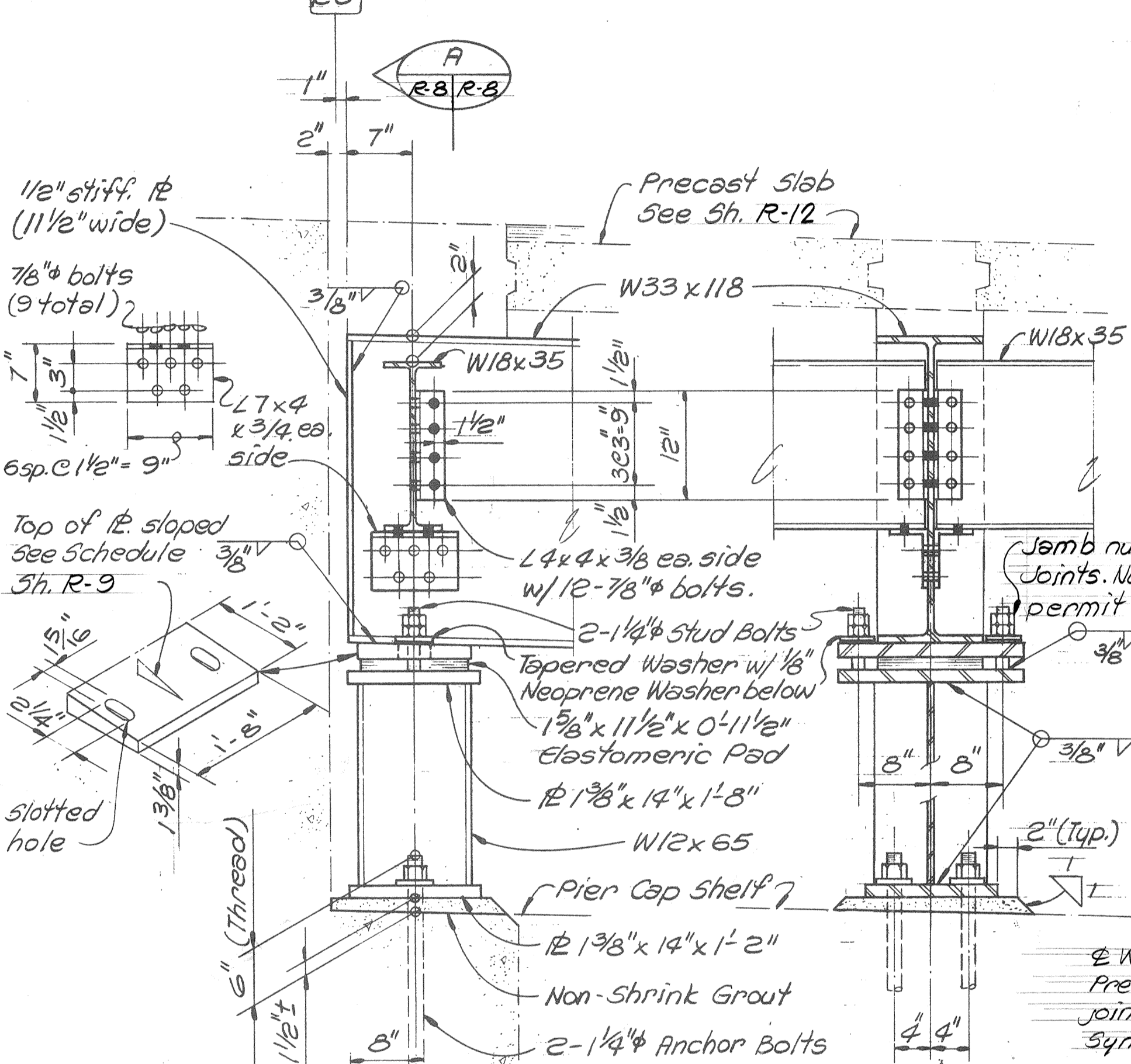
TEMPORARY RAMP
PIER BENT SECTIONS, DETAILS & SCHEDULE

KEEHI INTERCHANGE
F.A.I. PROJ. NO I-H-1 (147) :17
Scale: As Shown Date: April 2, 1979
SHEET NO. R-7 OF 19 SHEETS

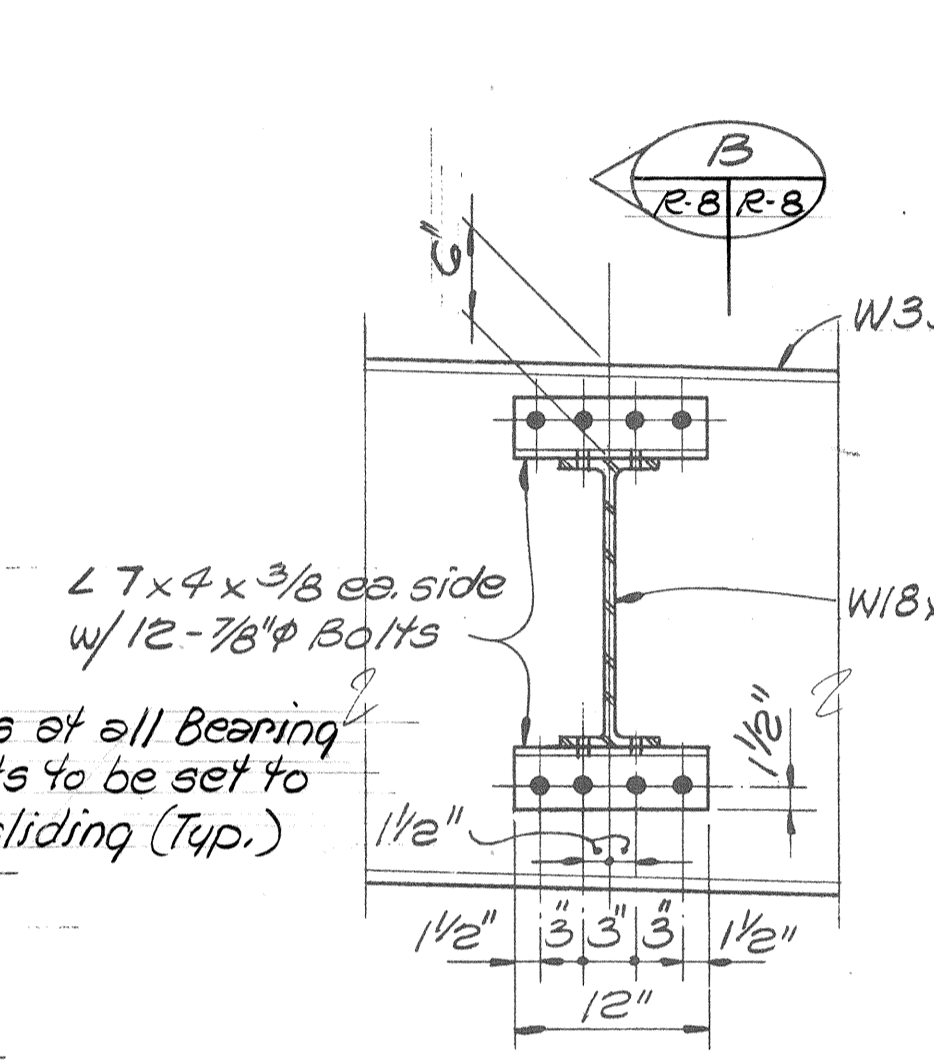
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1(147):17 | 1980 | 293 | 390 |



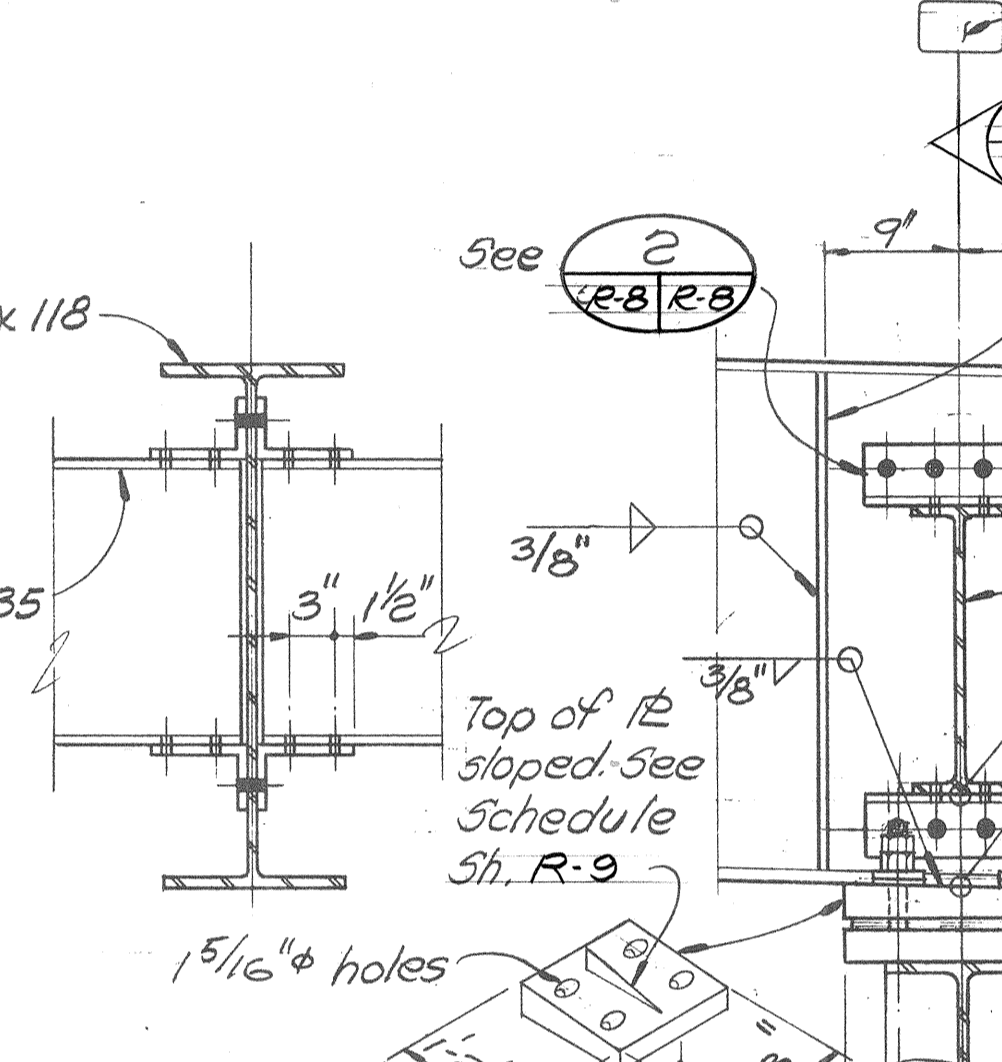
W33 X 118 STRINGER ELEVATION
Scale: 3/16" = 1'-0"



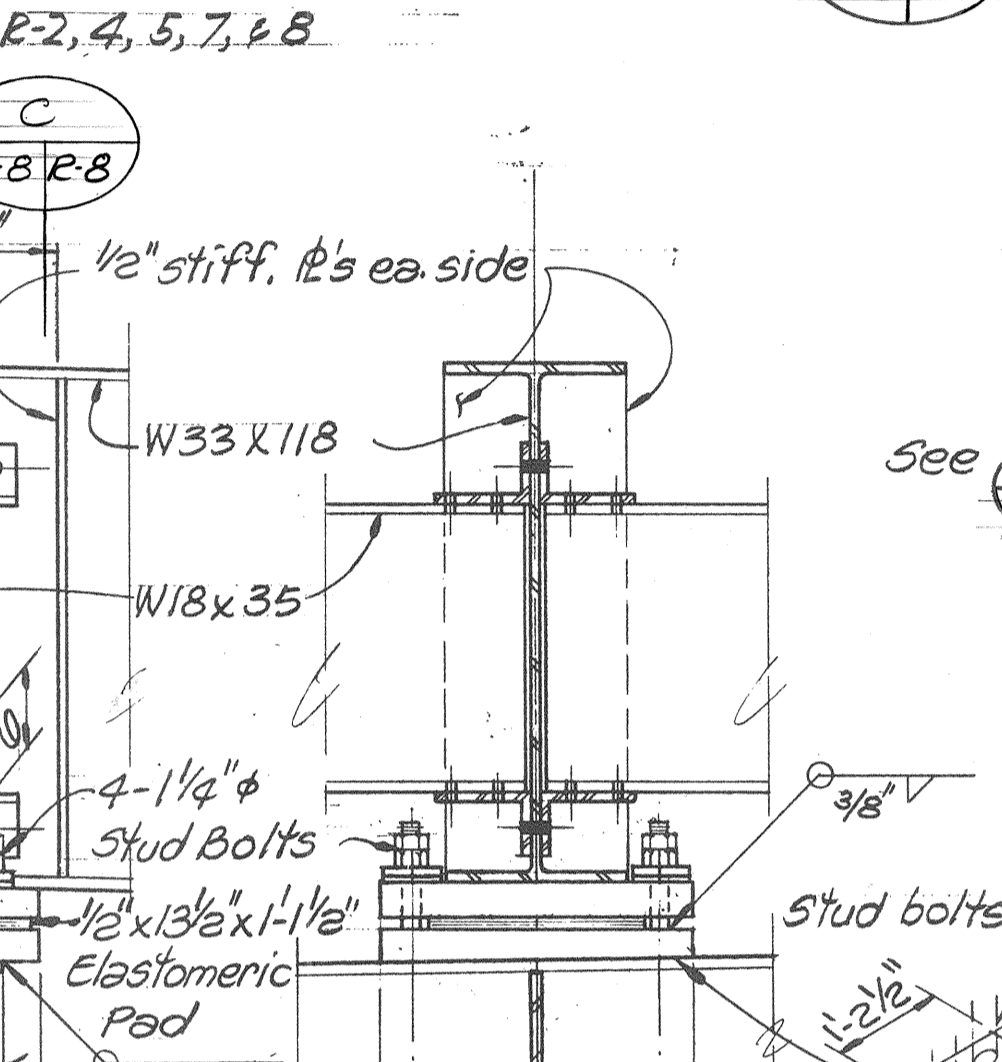
DETAIL 1
Scale: 1" = 1'-0"



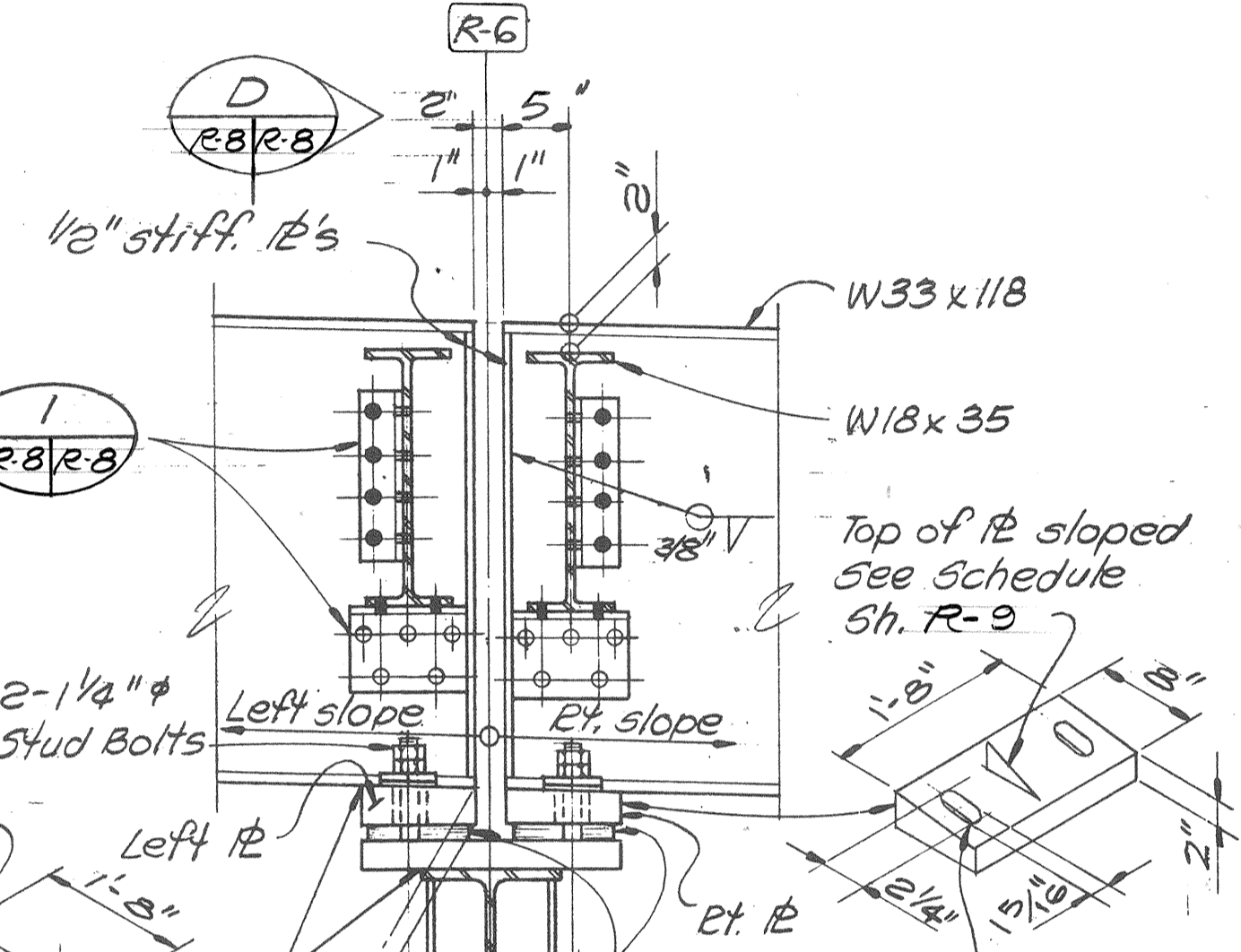
SECTION B
Scale: 1" = 1'-0"



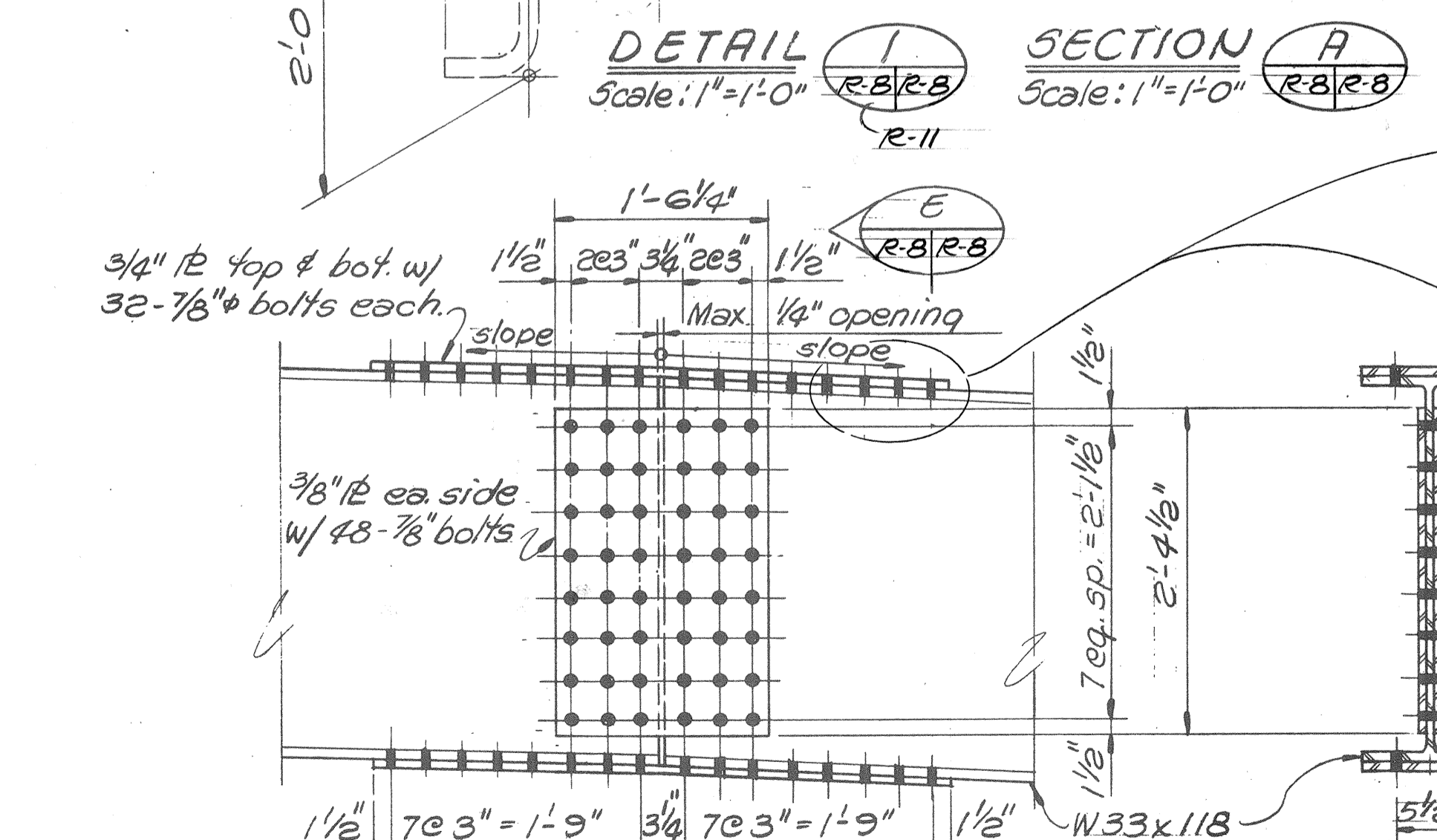
DETAIL 3
Scale: 1" = 1'-0"



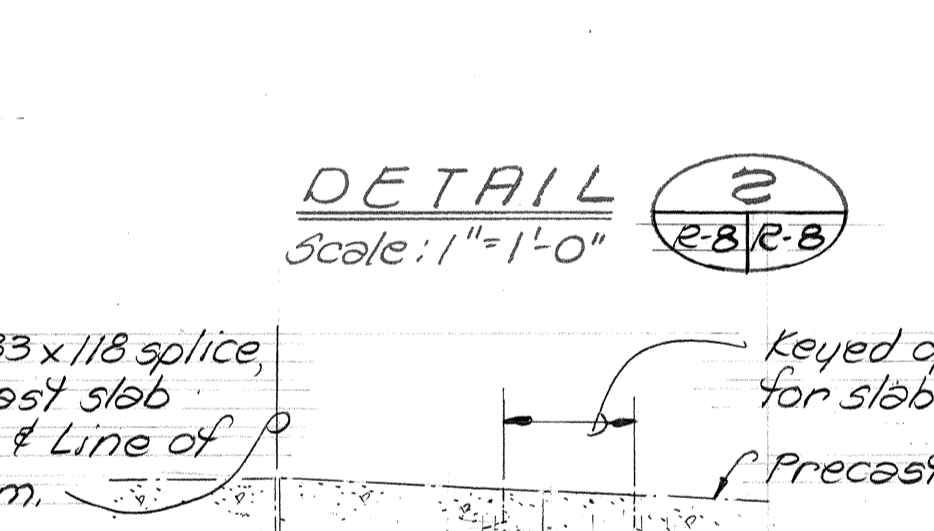
SECTION C
Scale: 1" = 1'-0"



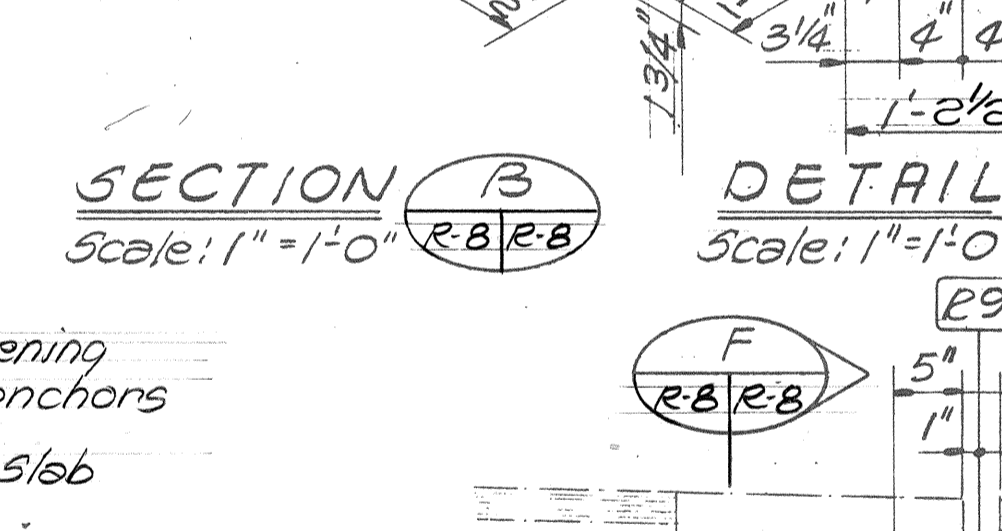
DETAIL 4
Scale: 1" = 1'-0"



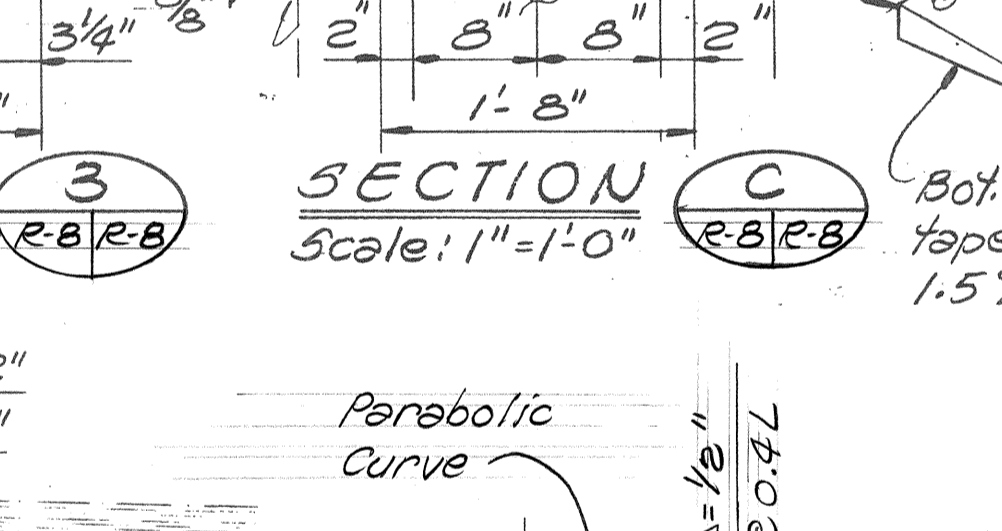
DETAIL 5
Scale: 1" = 1'-0"



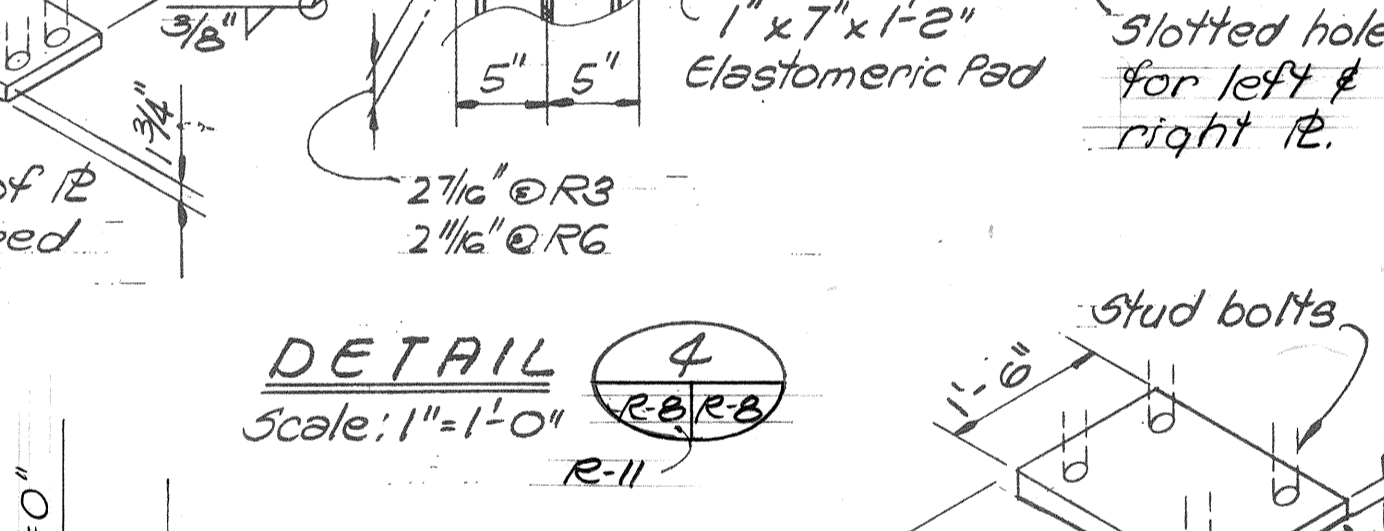
SECTION A
Scale: 1" = 1'-0"



SECTION F
Scale: 1" = 1'-0"



DETAIL 6
Scale: 1" = 1'-0"



SECTION D
Scale: 1" = 1'-0"

DATE: _____
SURVEY PLOTTED BY: _____
DRAWN BY: _____
TRACED BY: _____
DESIGNED BY: _____
CHECKED BY: _____
NO. _____

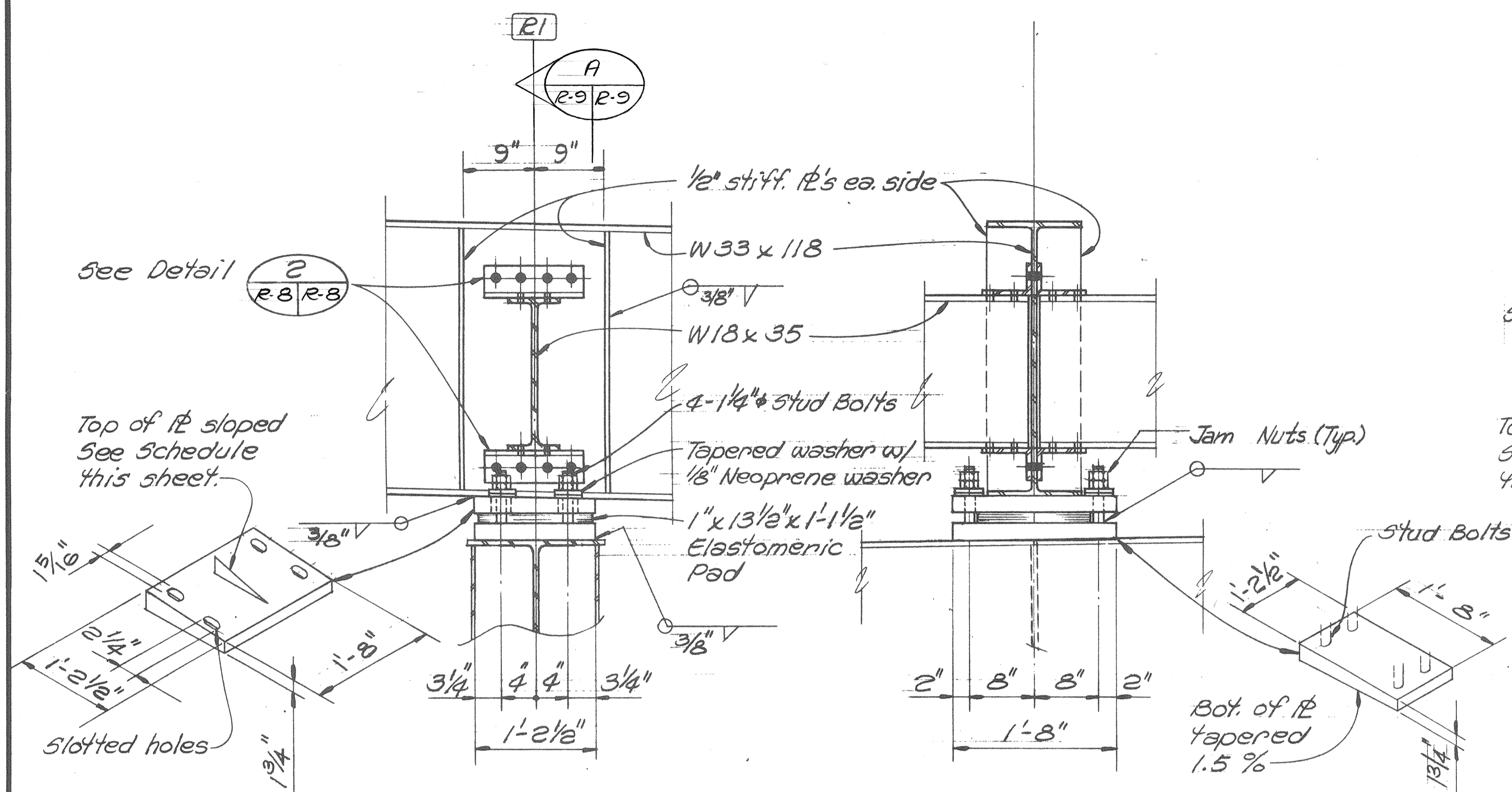


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TEMPORARY RAMPS
DECK STRINGER DETAILS

KEEHI INTERCHANGE
F.A.I. PROJ. NO. I-HI-1 (147):17

Scale: As Shown Date: April 2, 1979
SHEET NO. R-8 OF 19 SHEETS

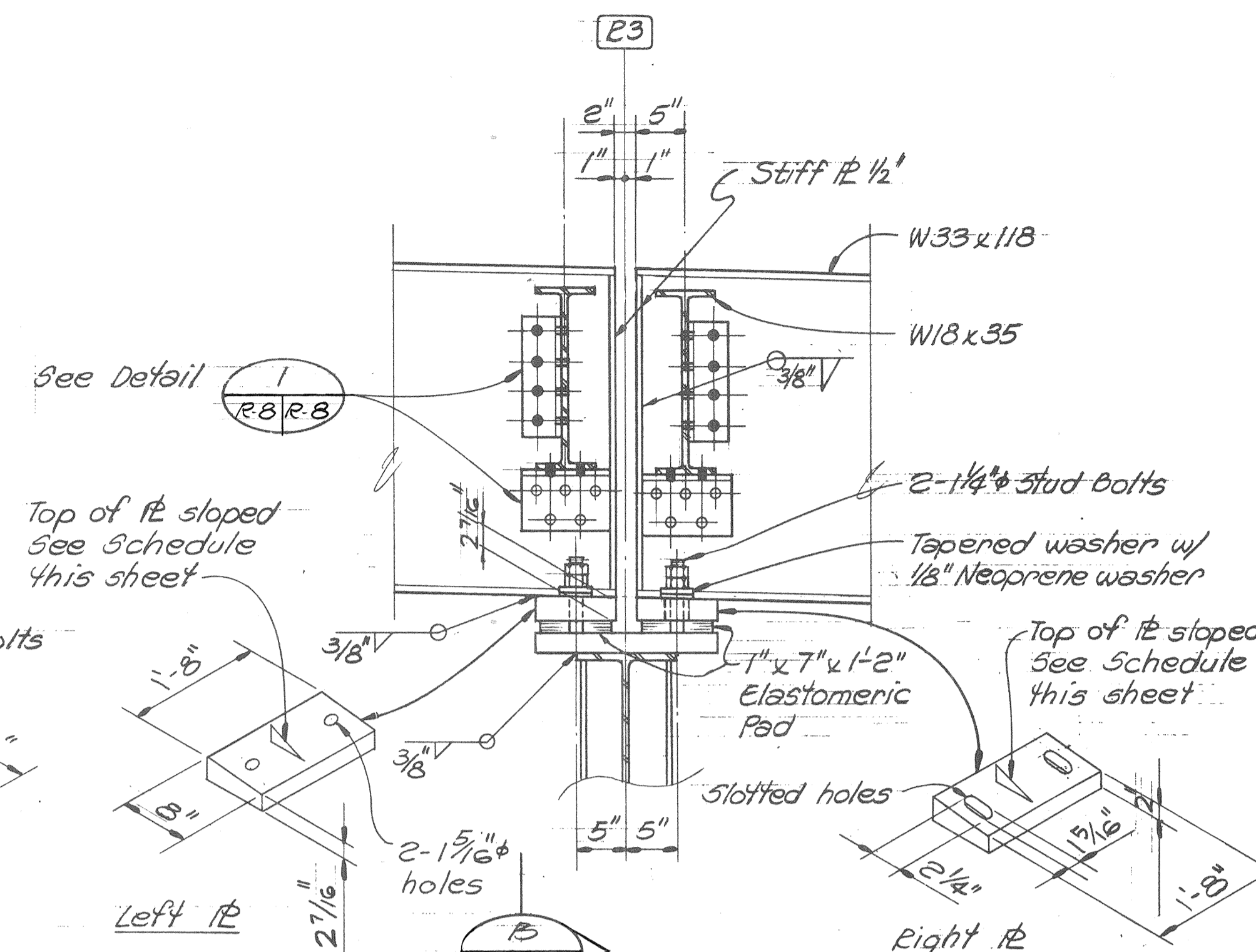
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | HI-1(147):17 | 1980 | 294 | 330 |



RAMP III & IV @ LINE R1

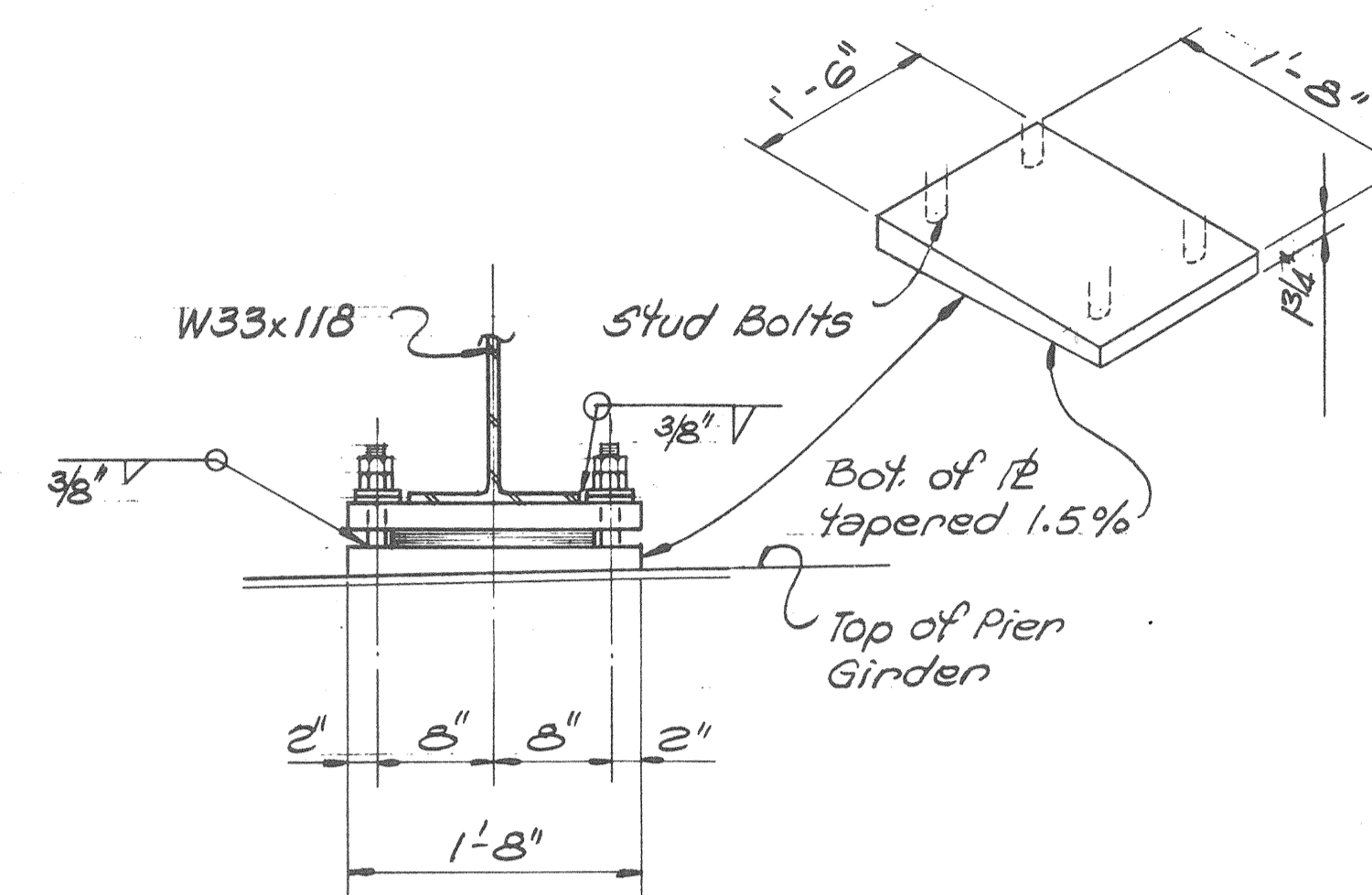
DETAIL 1
Scale: 1"=1'-0"

SECTION A
Scale: 1"=1'-0"

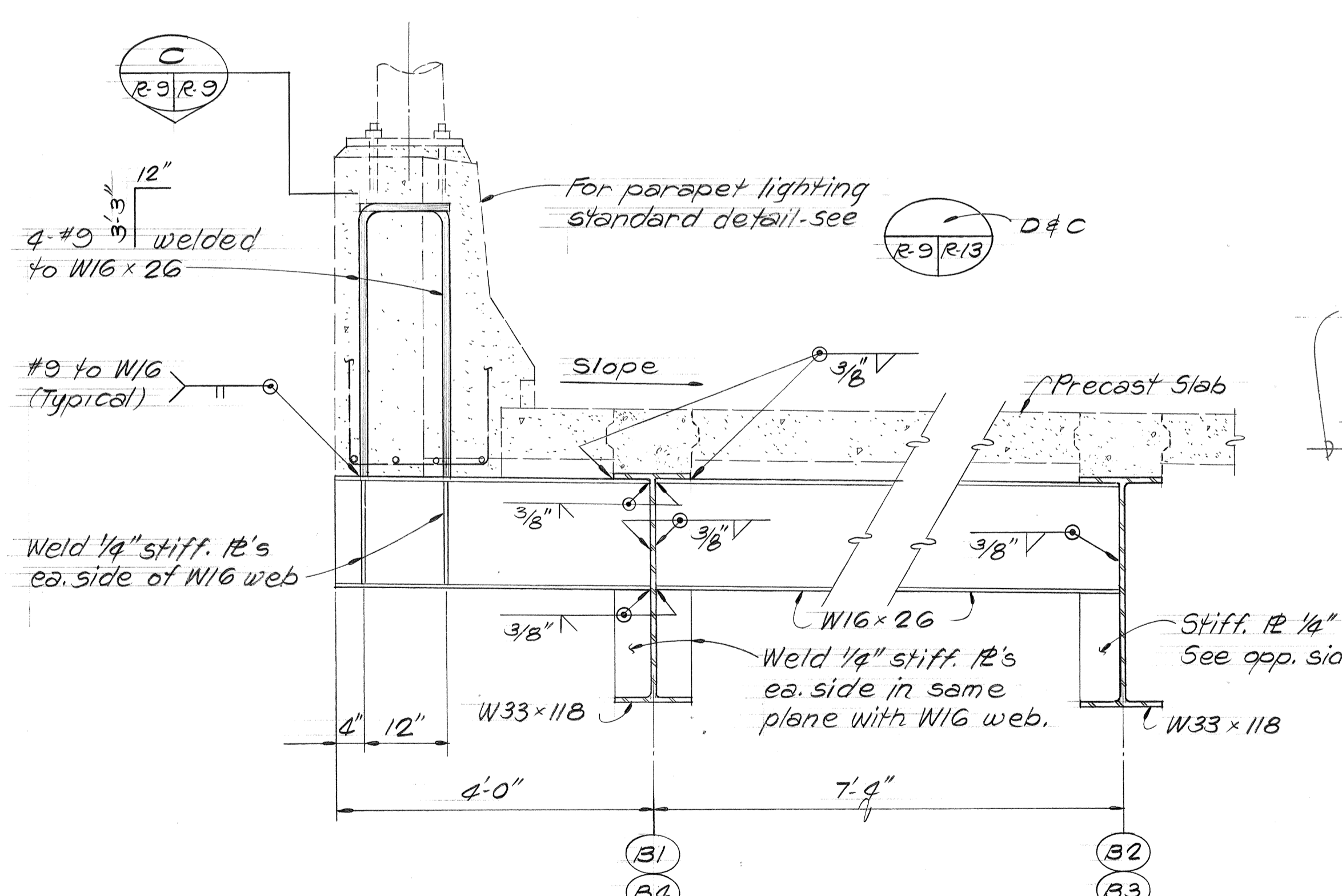


RAMP III & IV @ LINE R3

DETAIL 2
Scale: 1"=1'-0"

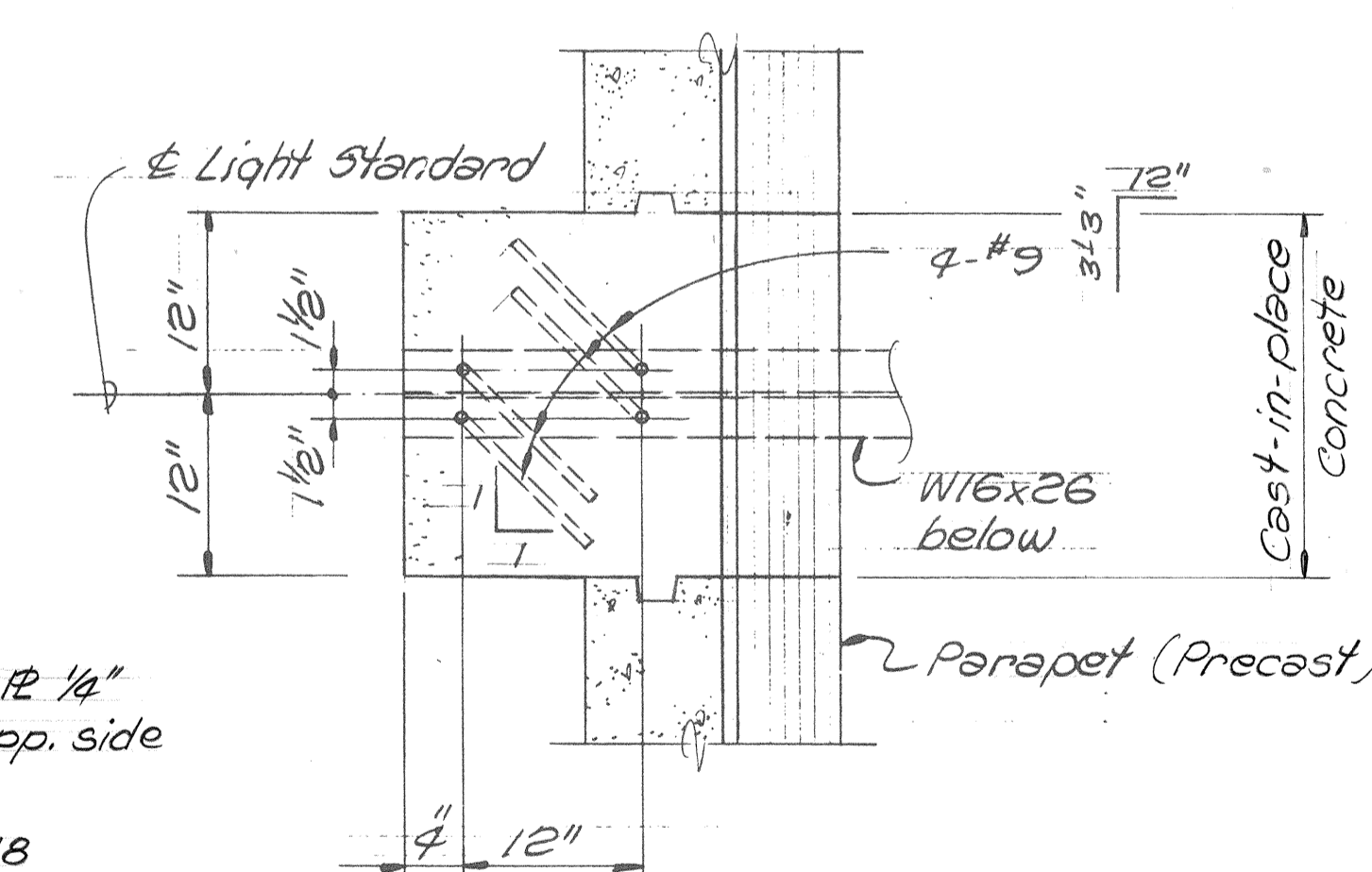


SECTION B
Scale: 1"=1'-0"



LIGHT STANDARD SUPPORT

DETAIL 3
Scale: 3/4"=1'-0"



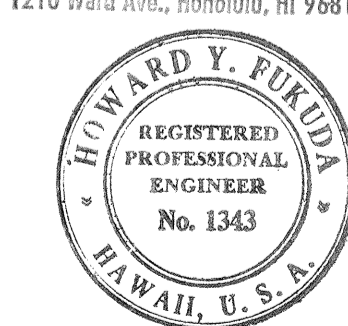
SECTION C
Scale: 1"=1'-0"

TOP OF RAMP SLOPE SCHEDULE

| PIER LINE | PLATE | SLOPE | |
|-----------|-------|------------|------------|
| | | RAMP III | RAMP IV |
| R0 | | 5/32 : 12 | 5/32 : 12 |
| R1 | | 5/32 : 12 | 5/32 : 12 |
| R2 | | 3/8 : 12 | 3/8 : 12 |
| R3 | Left | 3/8 : 12 | 3/8 : 12 |
| | Right | 17/32 : 12 | 17/32 : 12 |
| R4 | | 17/32 : 12 | 17/32 : 12 |
| R5 | | 3/4 : 12 | 3/4 : 12 |
| R6 | Left | 27/32 : 12 | 27/32 : 12 |
| | Right | 27/32 : 12 | 27/32 : 12 |
| R7 | | 27/32 : 12 | 27/32 : 12 |
| R8 | | 27/32 : 12 | 27/32 : 12 |
| R9 | | 27/32 : 12 | 27/32 : 12 |

SURVEY PLOTTED BY: _____ DATE: _____
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 NOTE BOOK QUANTITIES BY: _____
 CHECKED BY: _____
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 1210 Ward Ave., Honolulu, HI 96814



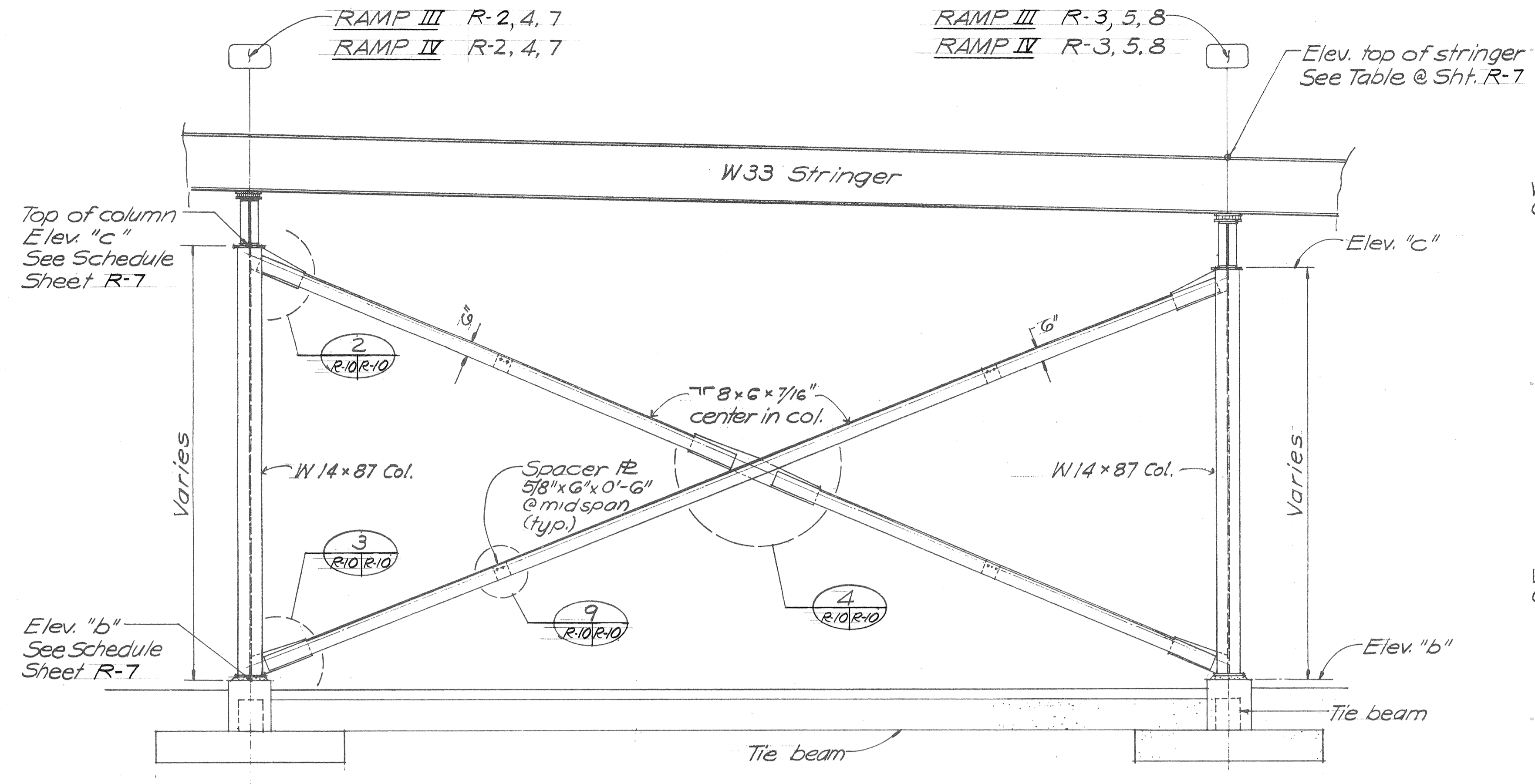
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
TEMPORARY RAMPS
 DECK STRINGER DETAILS

KEEHI INTERCHANGE
 F.A.I. PROJ. NO. HI-1(147):17

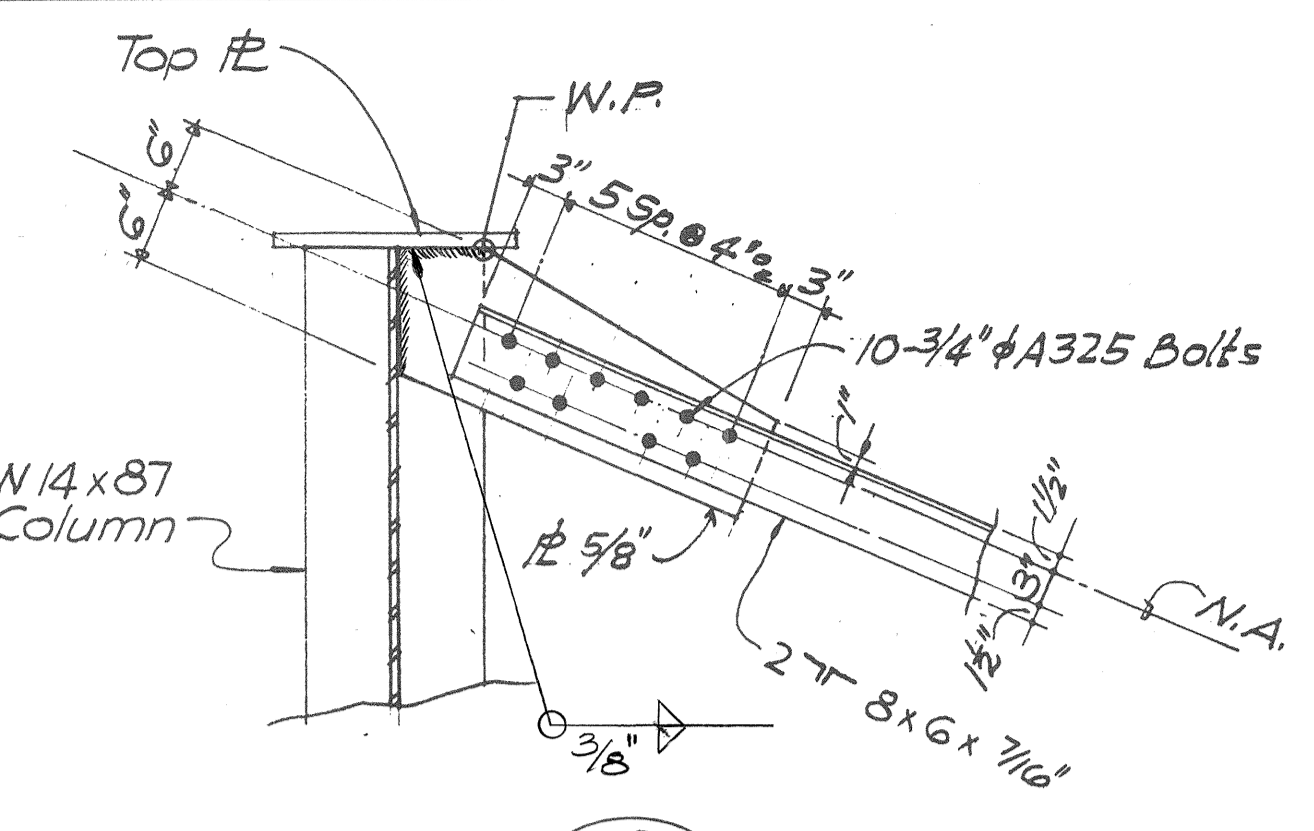
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Scale: As Shown Date: April 2, 1979
 SHEET NO. R-29 OF 19 SHEETS

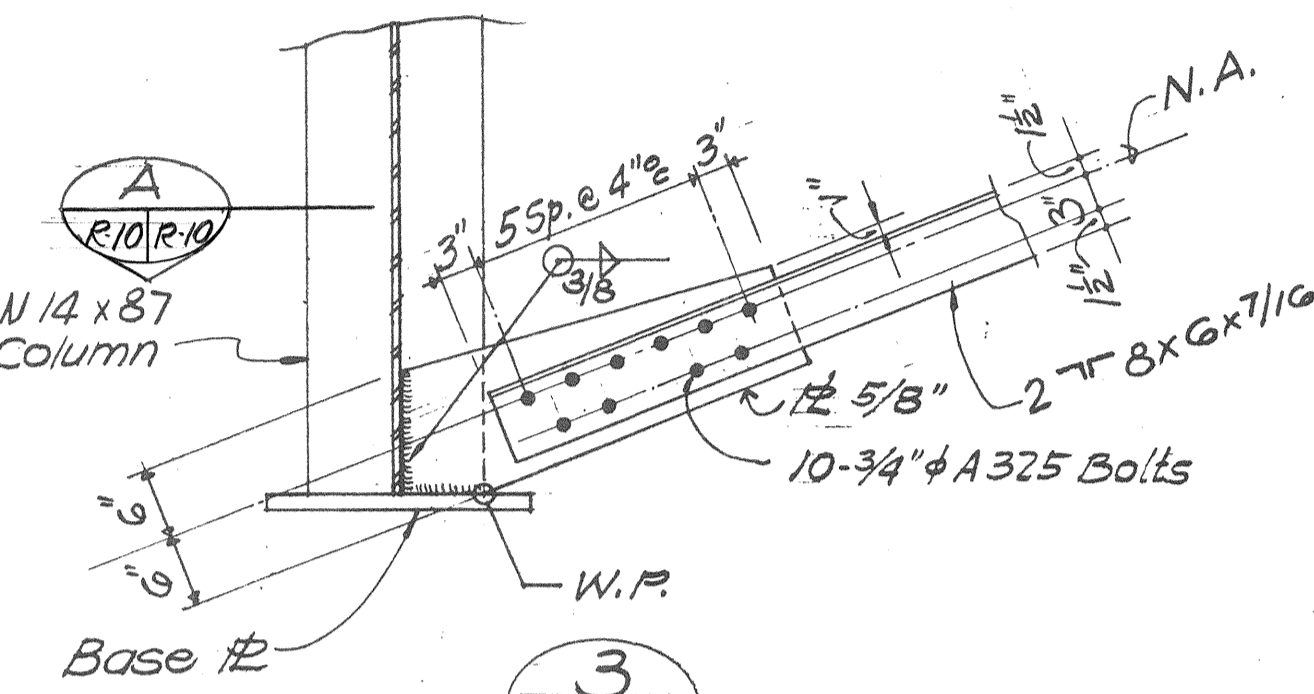
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1(147):17 | 1980 | 295 | 330 |



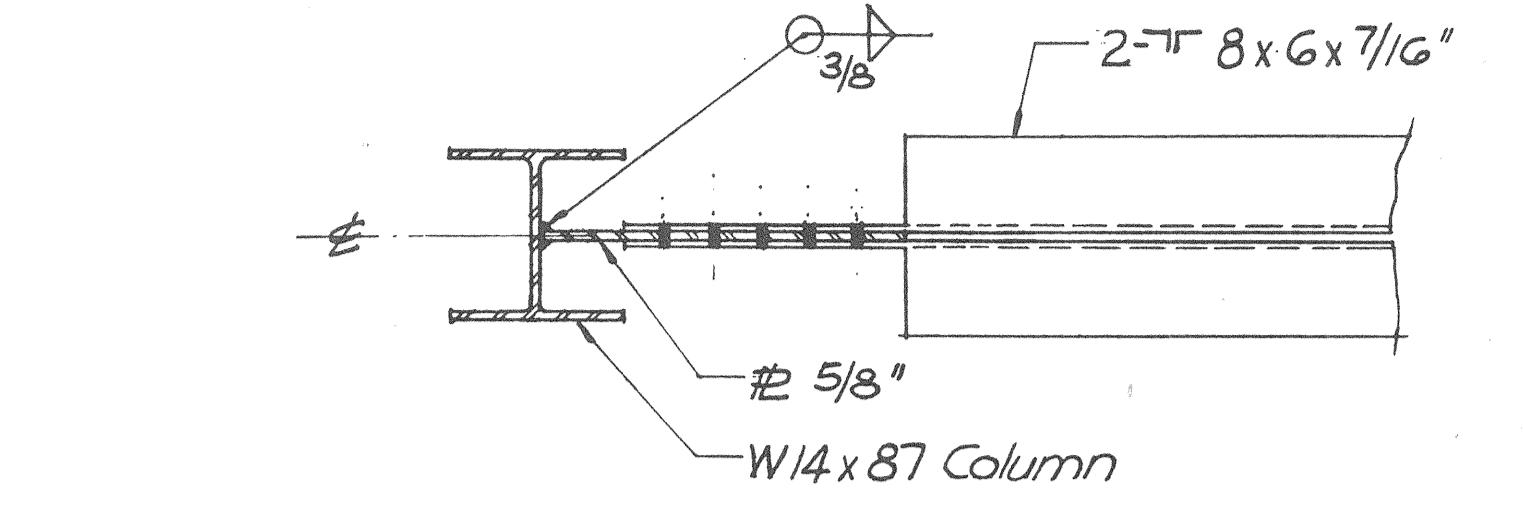
LONGITUDINAL BRACING DETAIL (R-1/R-10)
Scale: 1/4" = 1'-0"



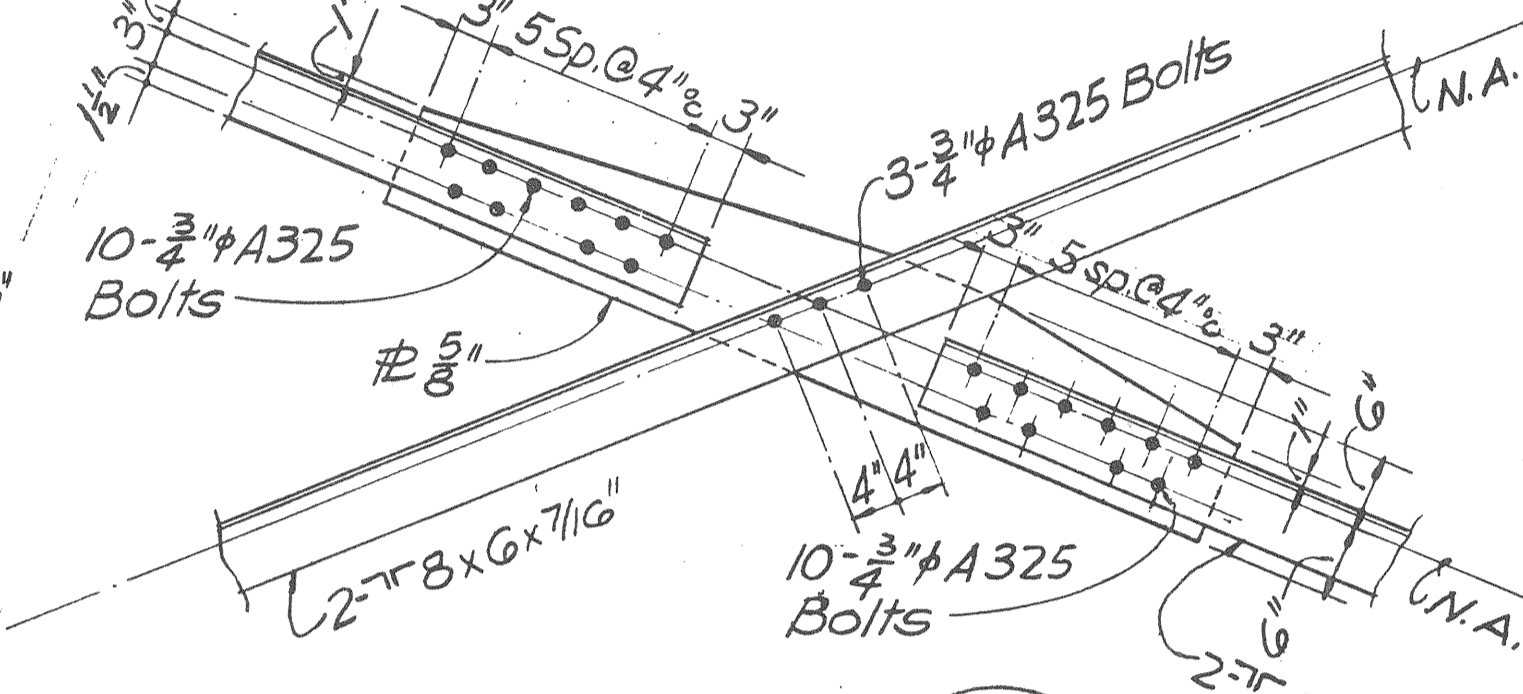
DETAIL 2 (R-10/R-10)
Scale: 3/4" = 1'-0"



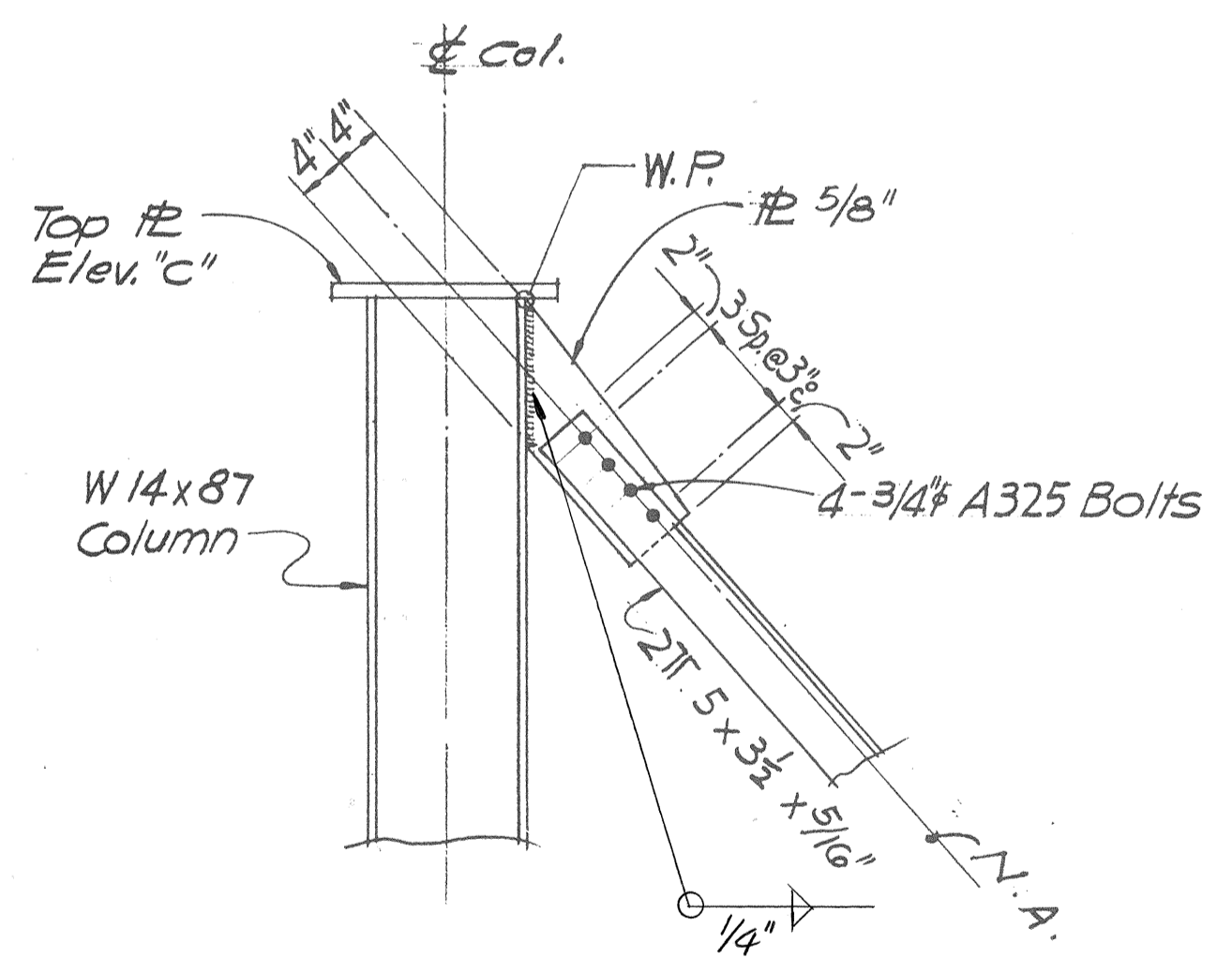
DETAIL 3 (R-10/R-10)
Scale: 3/4" = 1'-0"



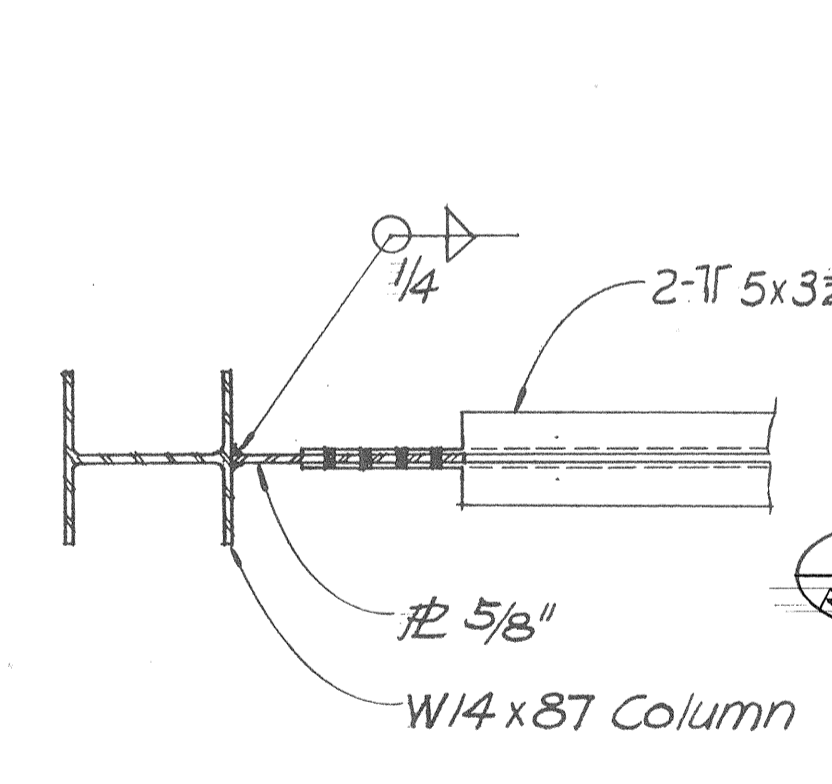
SECTION A (R-10/R-10)
Scale: 3/4" = 1'-0"



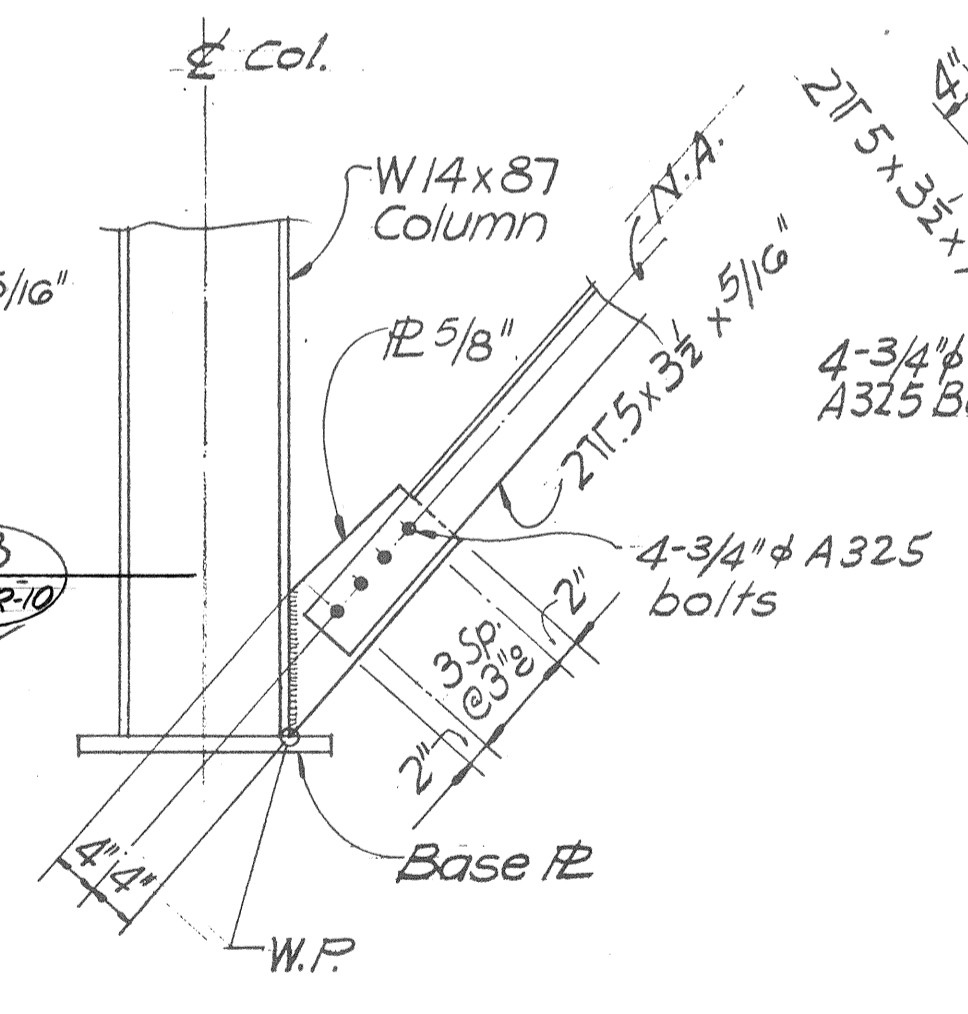
DETAIL 4 (R-10/R-10)
Scale: 3/4" = 1'-0"



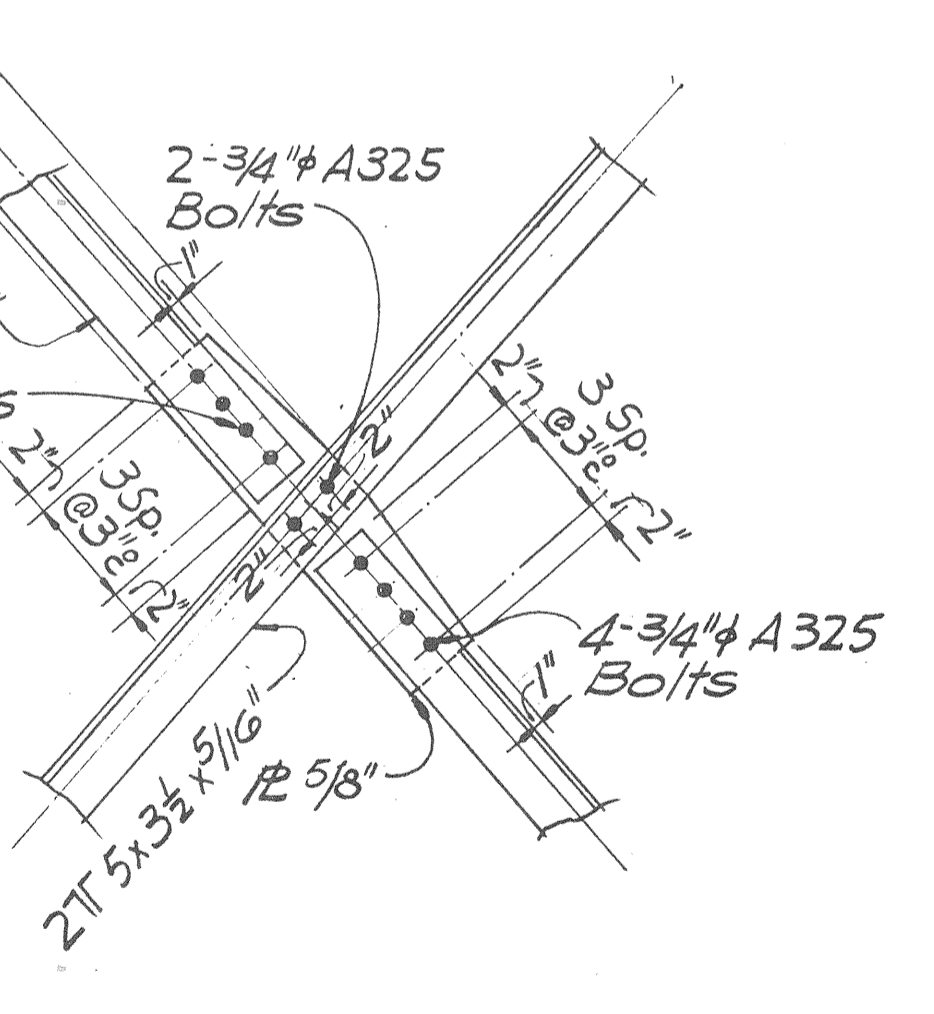
DETAIL 6 (R-7/R-10)
Scale: 3/4" = 1'-0"



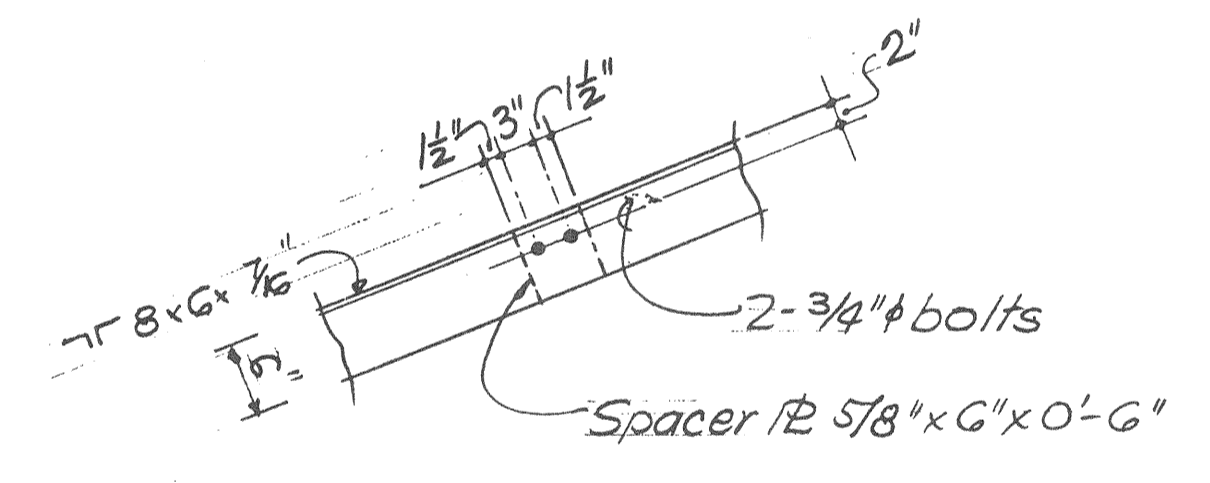
SECTION B (R-10/R-10)
Scale: 3/4" = 1'-0"



DETAIL 7 (R-7/R-10)
Scale: 3/4" = 1'-0"



DETAIL 8 (R-7/R-10)
Scale: 3/4" = 1'-0"



DETAIL 9 (R-10/R-10)
Scale: 3/4" = 1'-0"

TRANSVERSE BRACING DETAILS
Scale as noted

SURVEY PLOTTED BY: _____ DATE: _____
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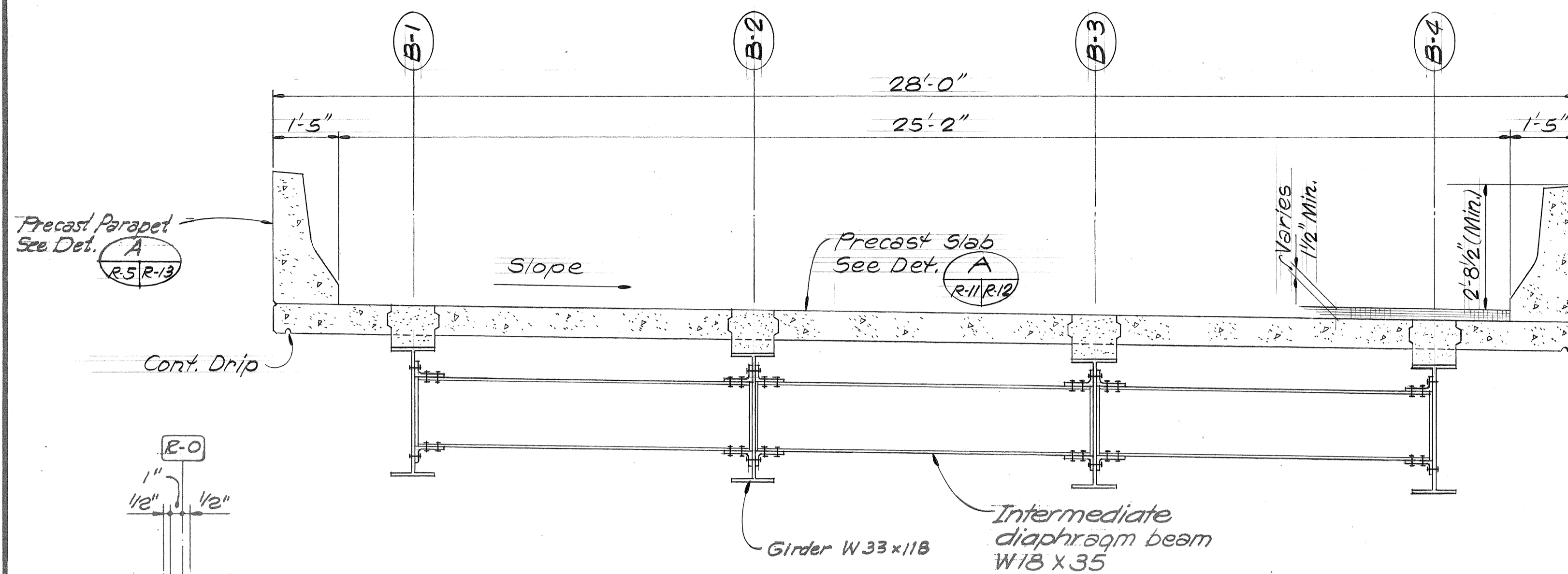
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**TEMPORARY RAMPS
BRACING DETAILS**

KEEHI, INTERCHANGE
F.A.I. PROJ. NO. I-HI-1 (147):17

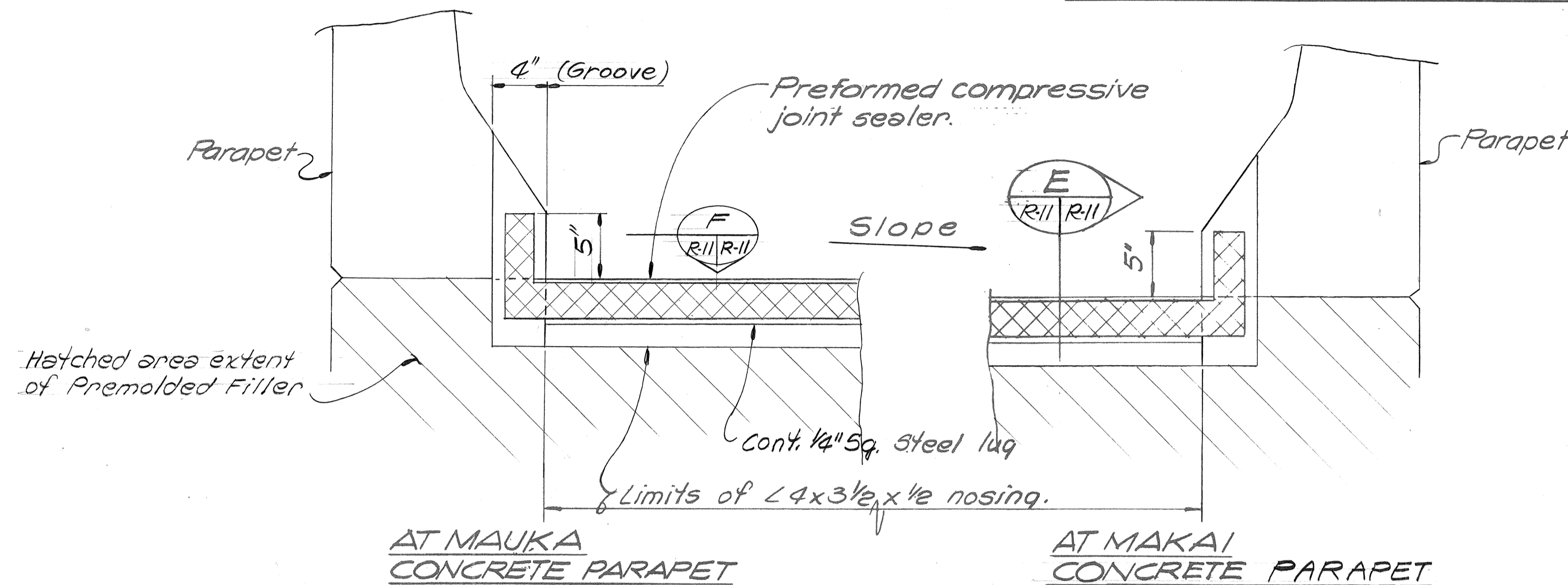
Scale: As shown Date: April 2, 1979
SHEET NO. R-10 OF 19 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1(147):17 | 1980 | 296 | 338 |



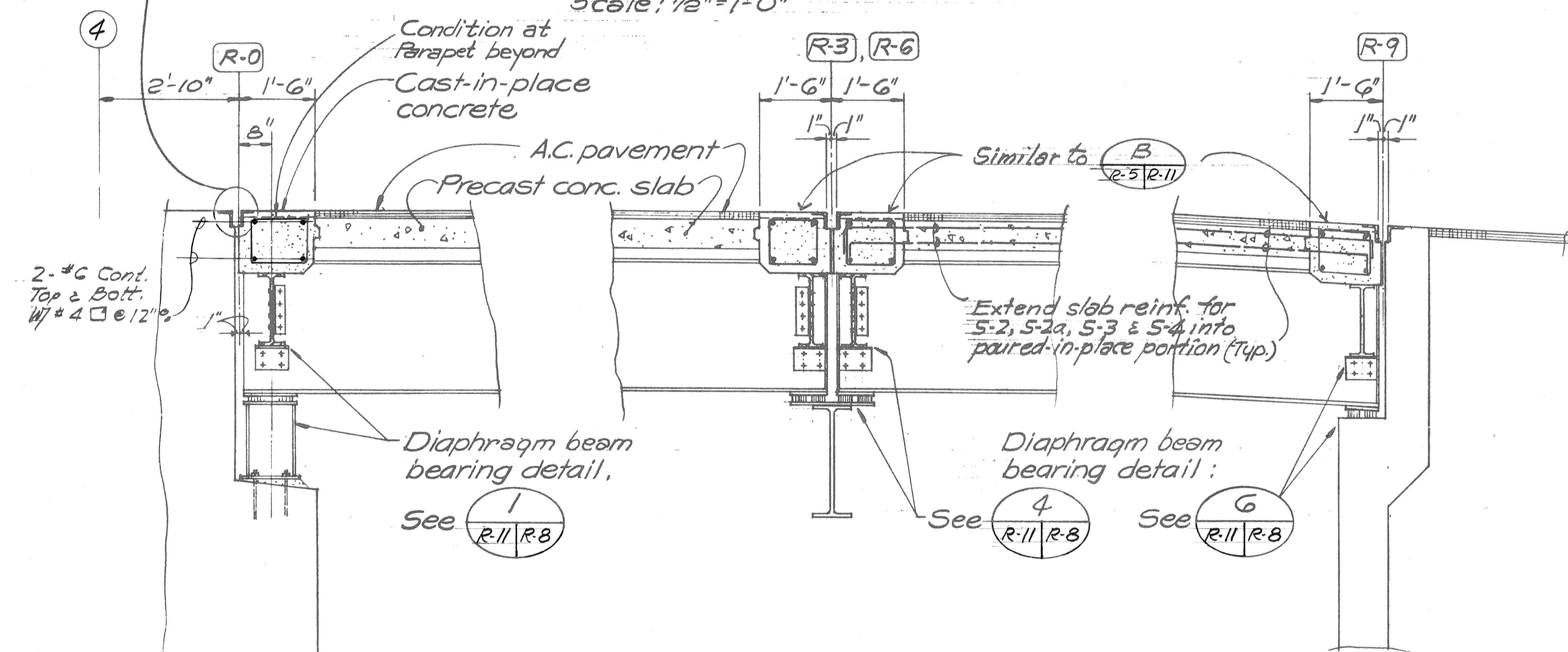
TYPICAL DECK SECTION THRU SLAB ANCHOR SLOTS

Scale: 1/2" = 1'-0"



ELEVATION OF TRANSVERSE EXPANSION JOINT

Scale: 1/2" = 1'-0"



SECTION B

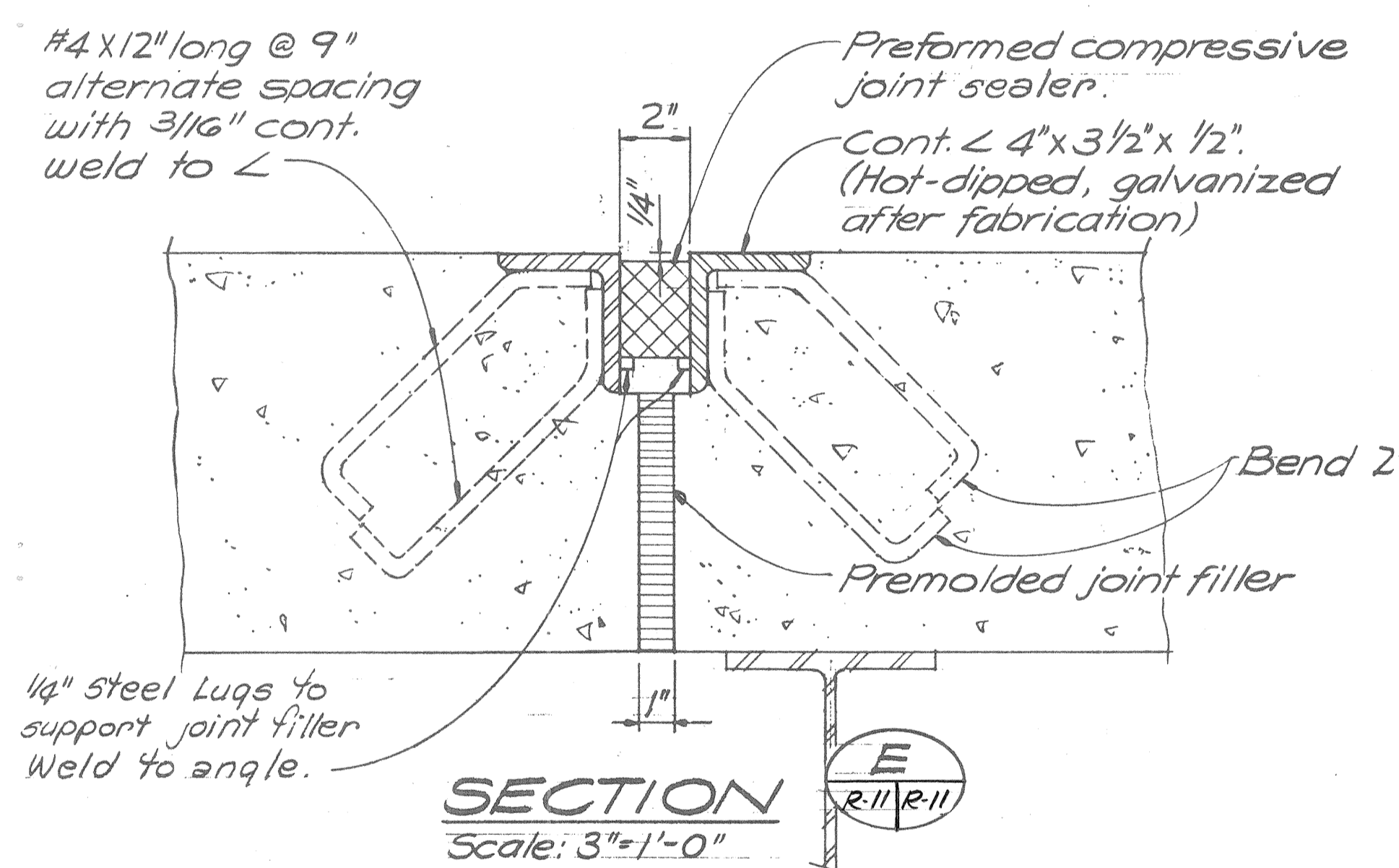
Scale: 1/2" = 1'-0"

SECTION C

Scale: 1/2" = 1'-0"

SECTION D

Scale: 1/2" = 1'-0"

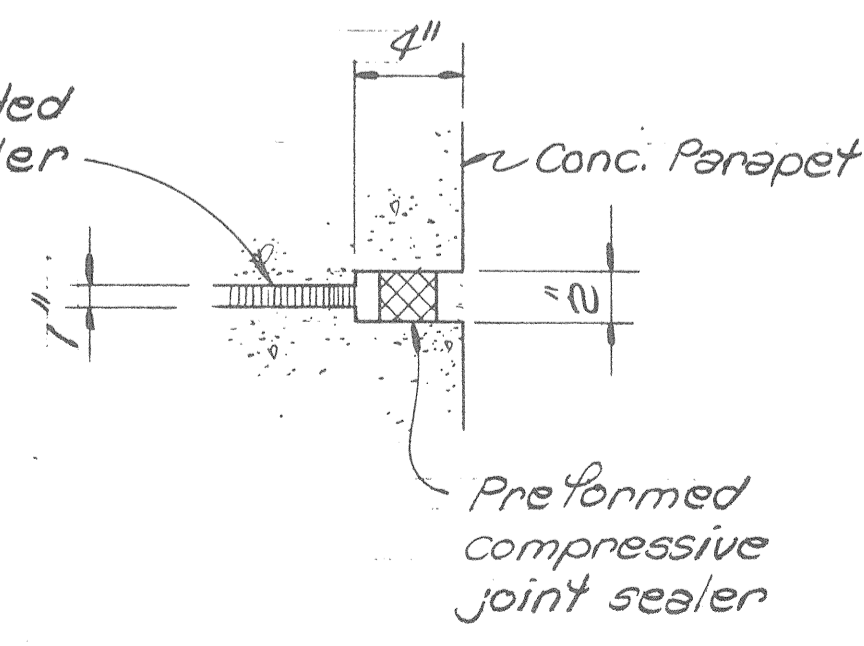


SECTION E

Scale: 3" = 1'-0"

NOTE:
1. Cont. steel angle protective nosing assembly & preformed compressive joint sealer incidental to precast concrete slab & will not be paid for separately.

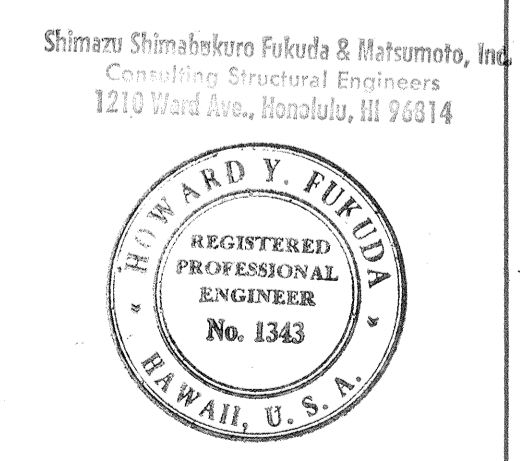
DECK EXPANSION JOINT AND JOINT SEALER DETAIL



SECTION F

Scale: 1/2" = 1'-0"

| | |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |
| NO. | |



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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

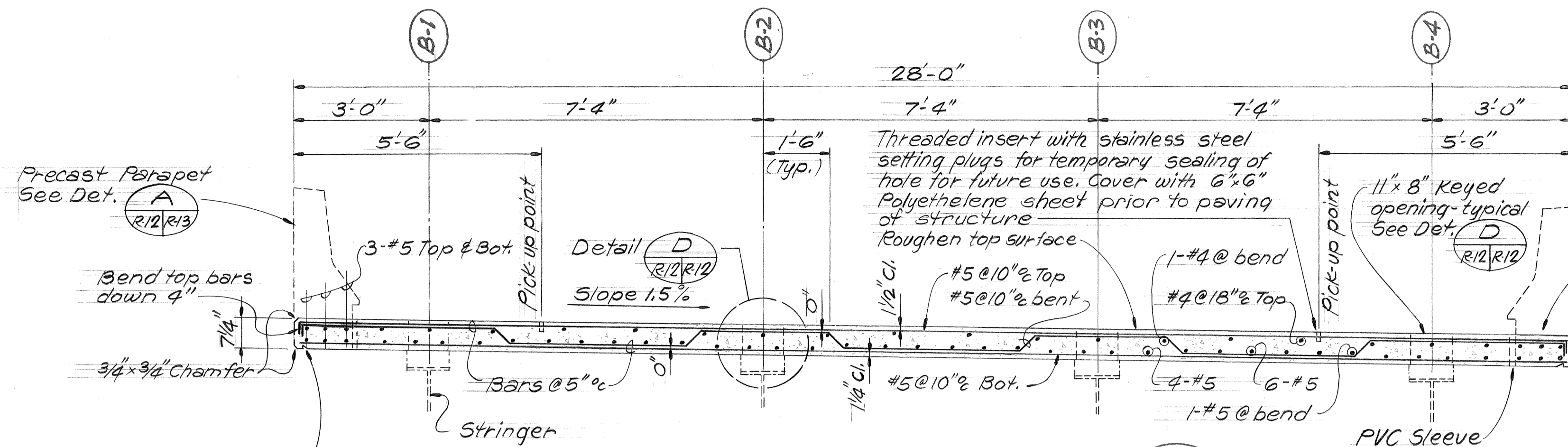
TEMPORARY RAMPS
TYPICAL DECK SECTION & DETAILS

KEEHI INTERCHANGE
F.A.I. PROJ. NO. I-HI-1 (147):17

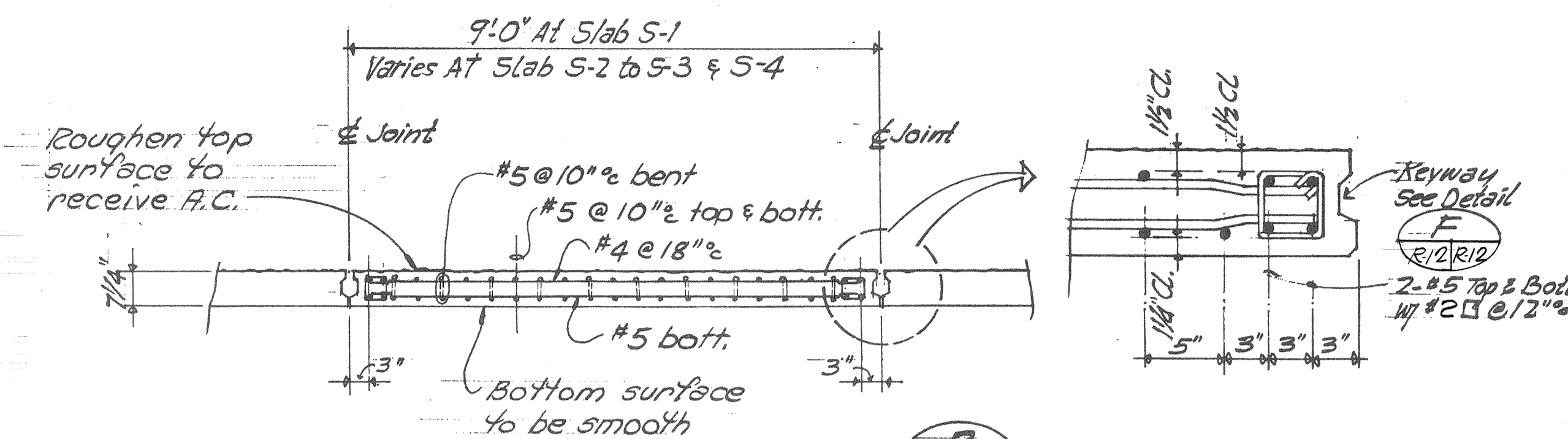
Scale: As shown Date: April 2, 1979.

SHEET NO. R-11 OF 19 SHEETS

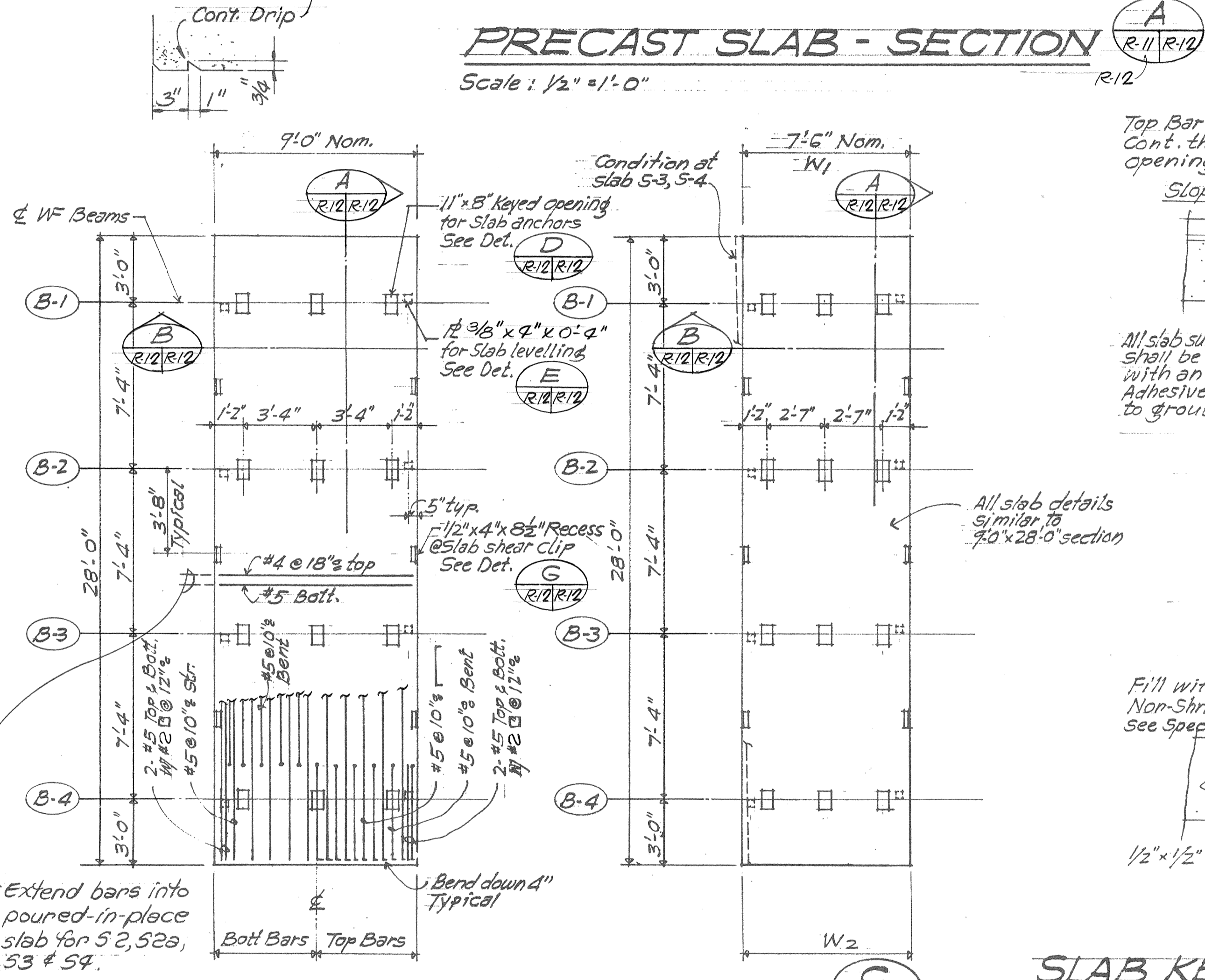
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1 (147)-17 | 1980 | 297 | 338 |



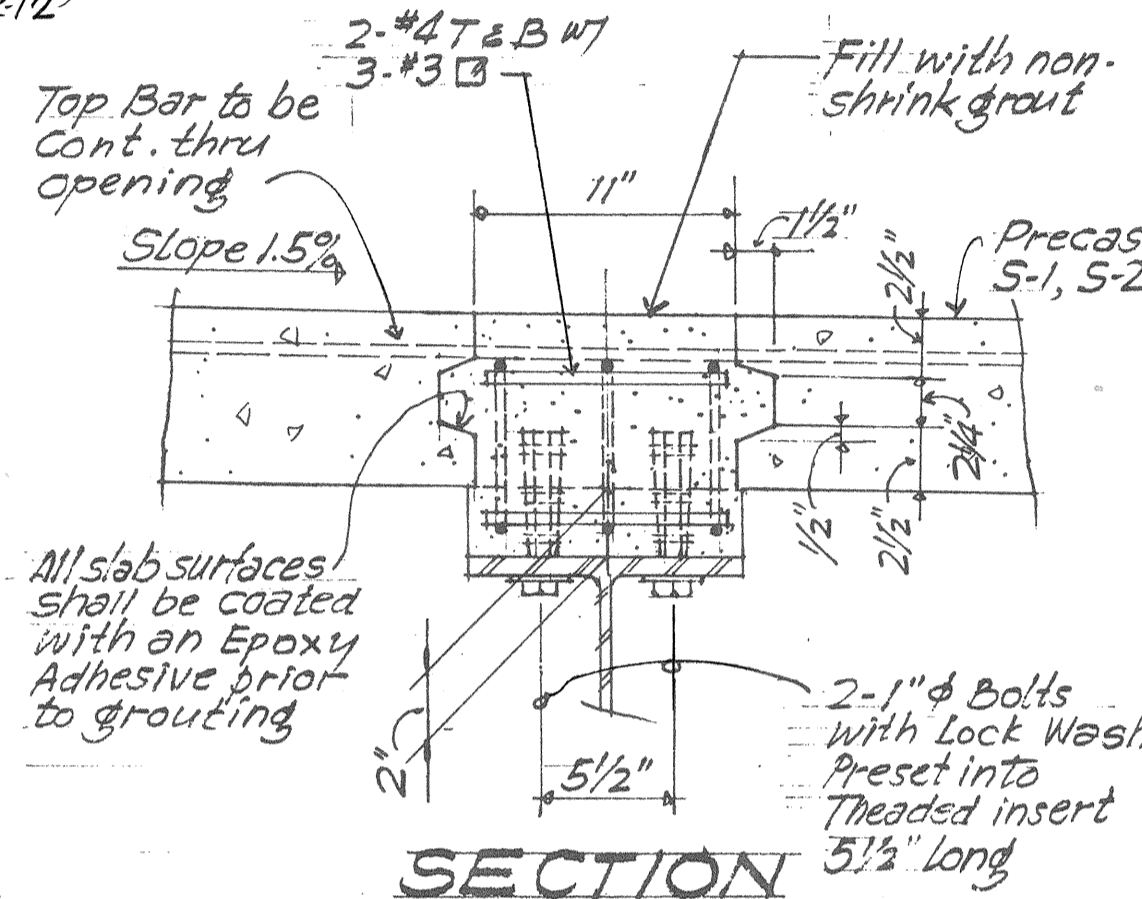
PRECAST SLAB - SECTION A
Scale: 1/2" = 1'-0"



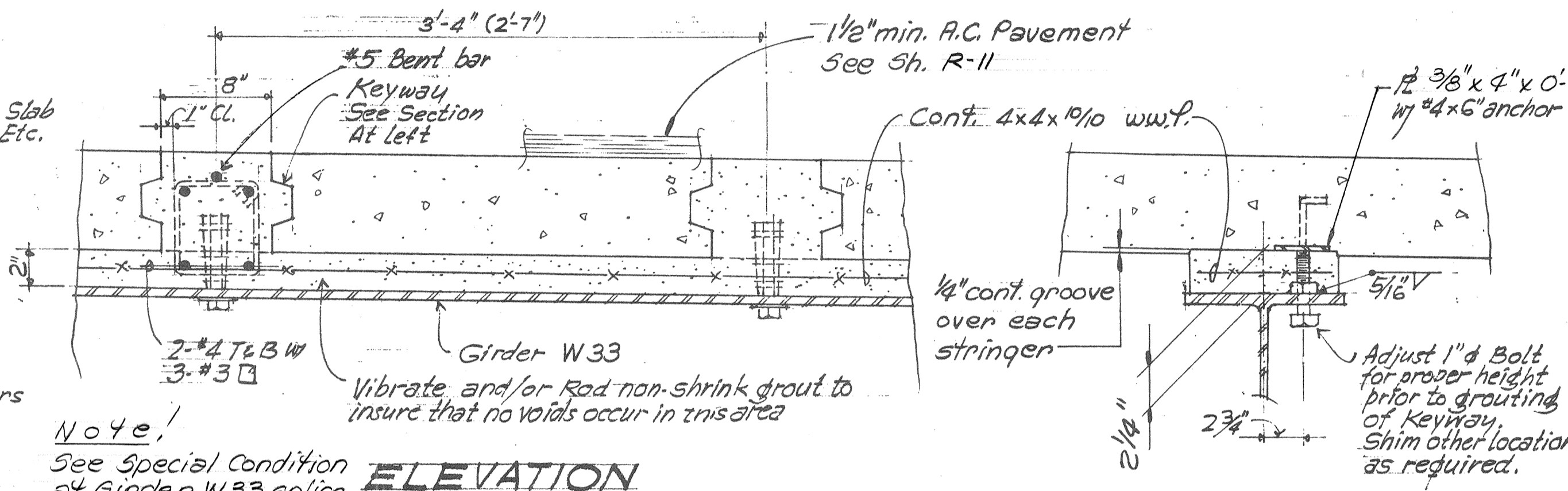
PRECAST SLAB - SECTION B
Scale: 1/2" = 1'-0"



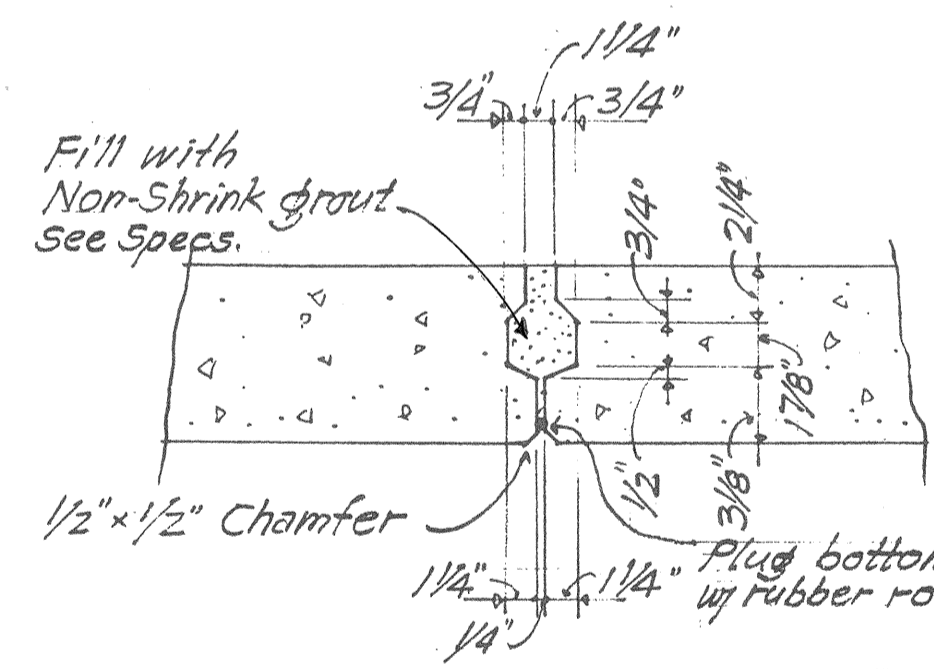
PRECAST SLAB - PLAN DETAIL C
Scale: 1/4" = 1'-0"



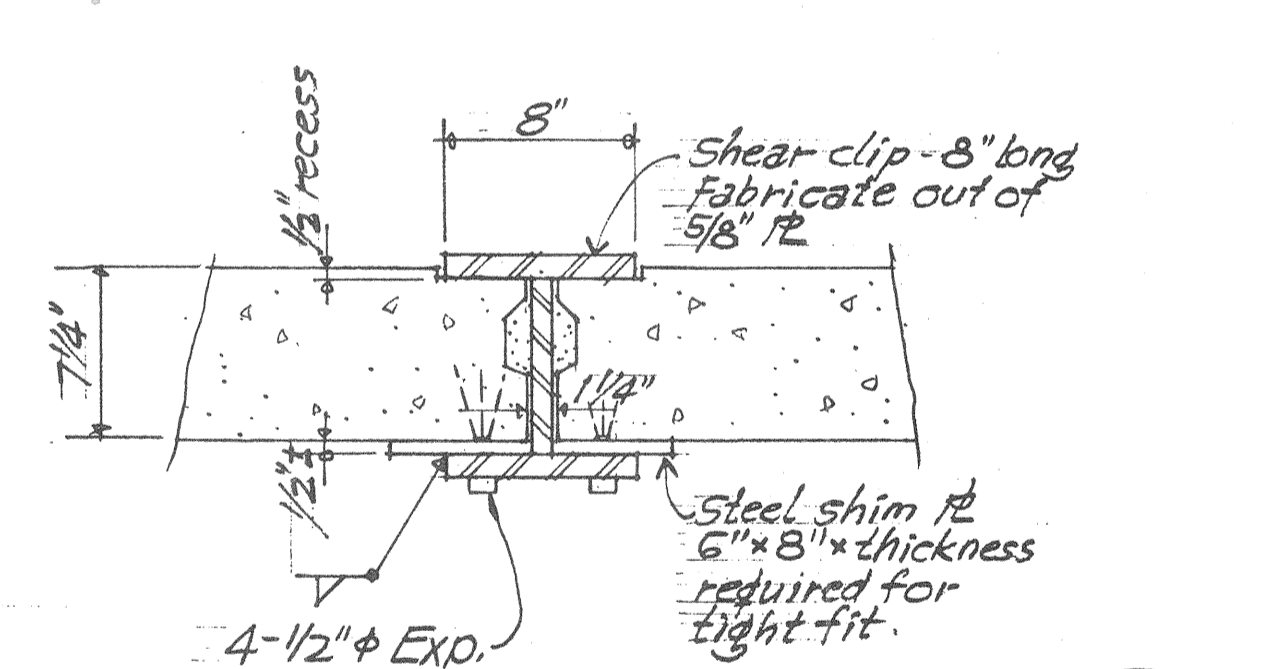
SLAB ANCHOR DETAILS D
Scale: 1/2" = 1'-0"



SLAB LEVELLING DET. E
Scale: 1/2" = 1'-0"

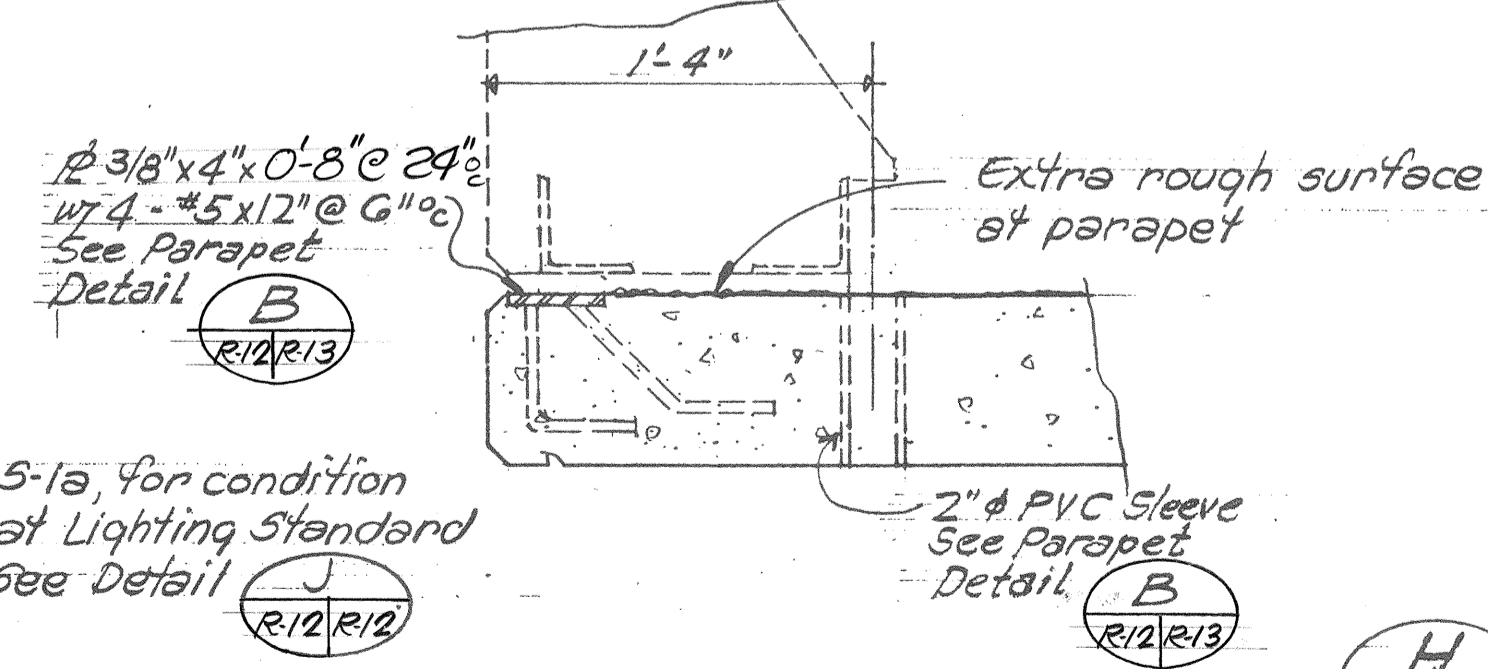


SLAB KEYWAY DETAIL F
Scale: 1/2" = 1'-0"

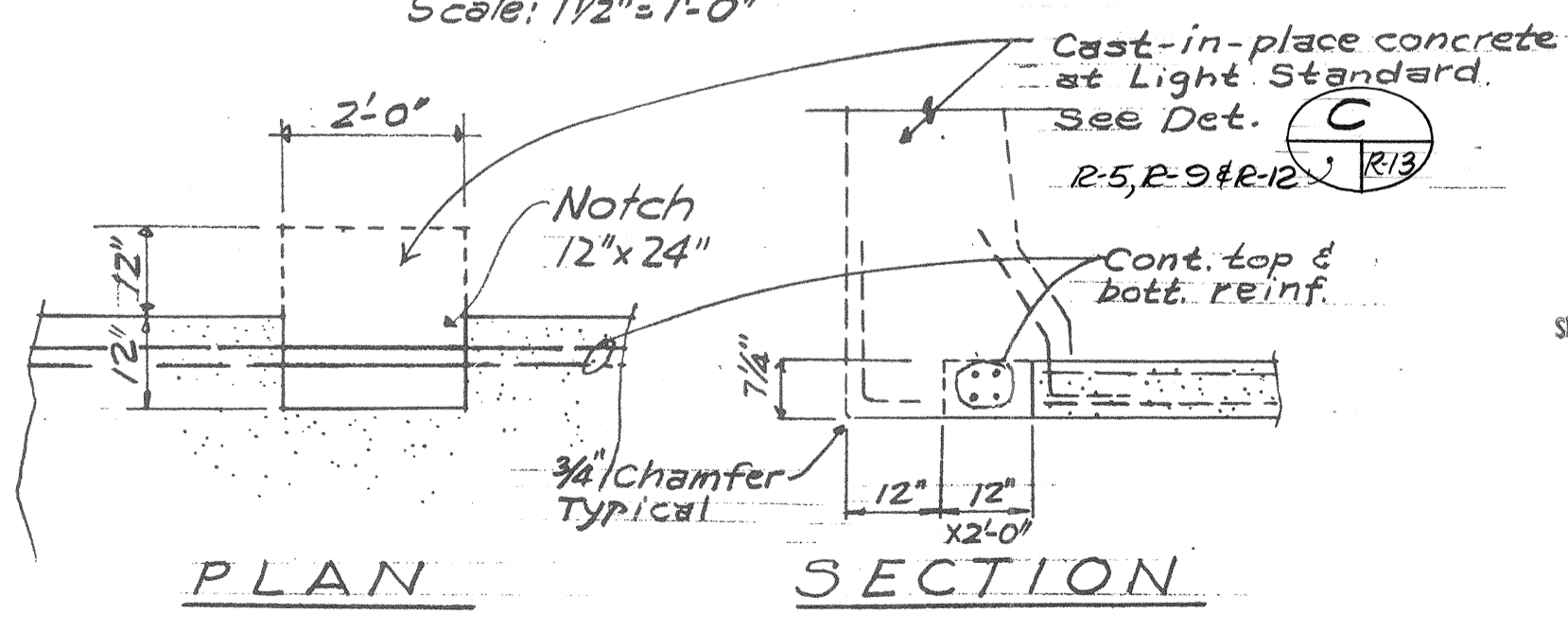


SLAB SHEAR CLIP DET. G
Scale: 1/2" = 1'-0"

| SLAB | LENGTH | W ₁ | W ₂ | REMARKS |
|------|--------|----------------|----------------|--|
| S-1 | 28'-0" | 9'-0" | 9'-0" | |
| S-2 | 28'-0" | 7'-6" | 7'-6" | S-2a, Similar to S-2 except opposite hand. |
| S-3 | 28'-0" | 7'-7 1/2" | 7'-4 1/2" | |
| S-4 | 28'-0" | 7'-9 3/4" | 7'-2 3/4" | |



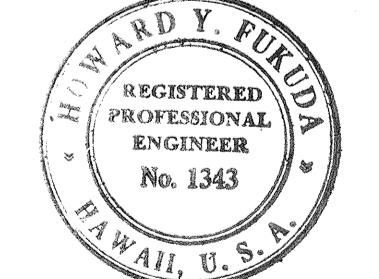
PARAPET KEYWAY DETAIL H
Scale: 1/2" = 1'-0"



PRECAST SLAB DETAIL AT LIGHTING STANDARD J
Scale: 1/2" = 1'-0"

- NOTES:**
- For Precast slabs, all concrete shall have a 28 day compressive strength of 4,000 p.s.i. Do not lift precast slabs until the concrete has attained a strength of 3,000 p.s.i. or has cured for min. of 7 days.
 - Grout for slab keyway and anchors shall be non-metallic, non-shrink grout. See Specs.
 - Slab anchor inserts shall be Type EC-2 threaded insert as manufactured by "Richmond Screw Anchor Co., Inc." or other approved equal.
 - All bolts, inserts, shear clips, and miscellaneous hardware shall be hot-dipped galvanized.
 - Non-shrink grout shall be incidental to cost of precast concrete deck slab.
 - Reinforcing steel incidental to concrete.

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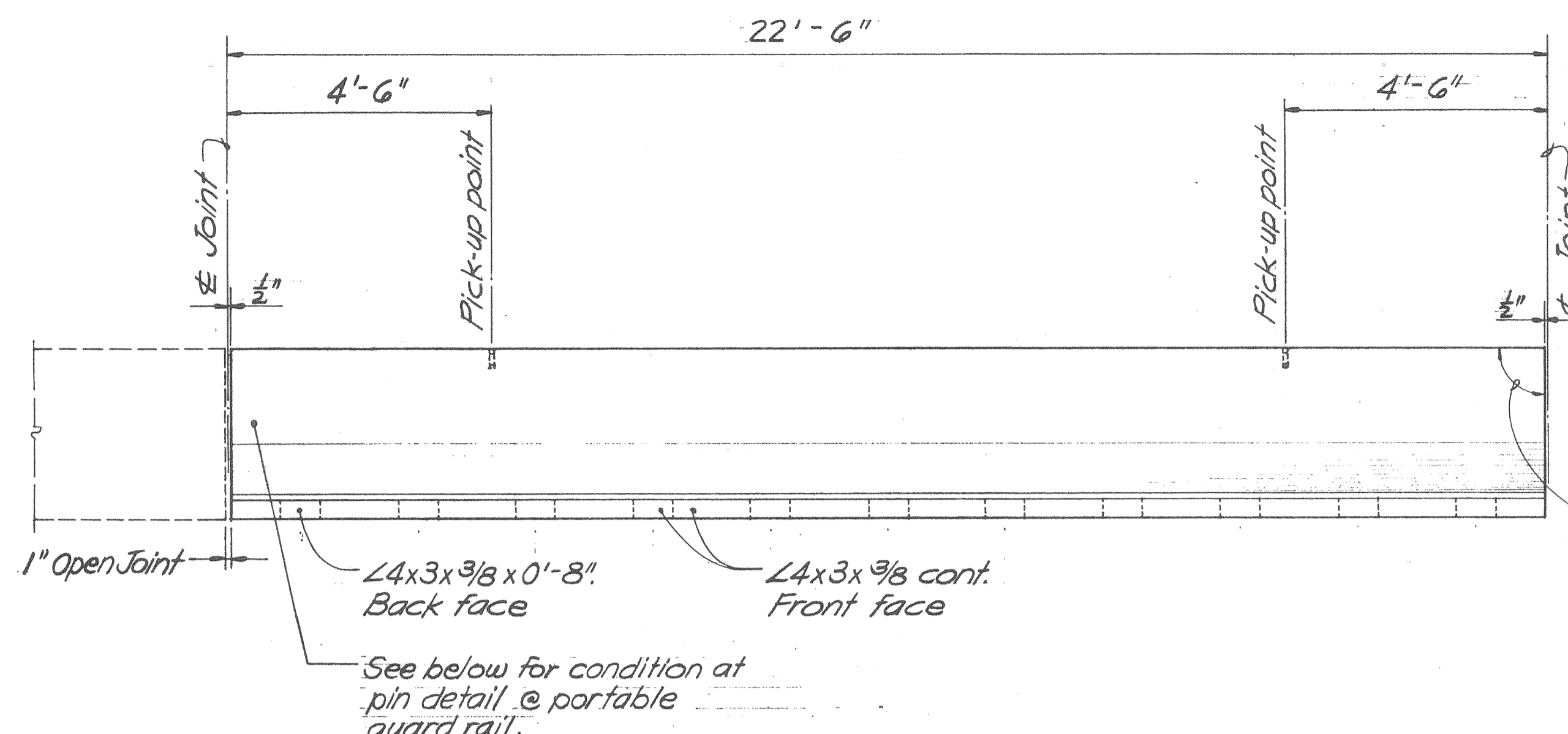
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMPORARY RAMPS
PRECAST CONCRETE DECK
SLAB DETAILS

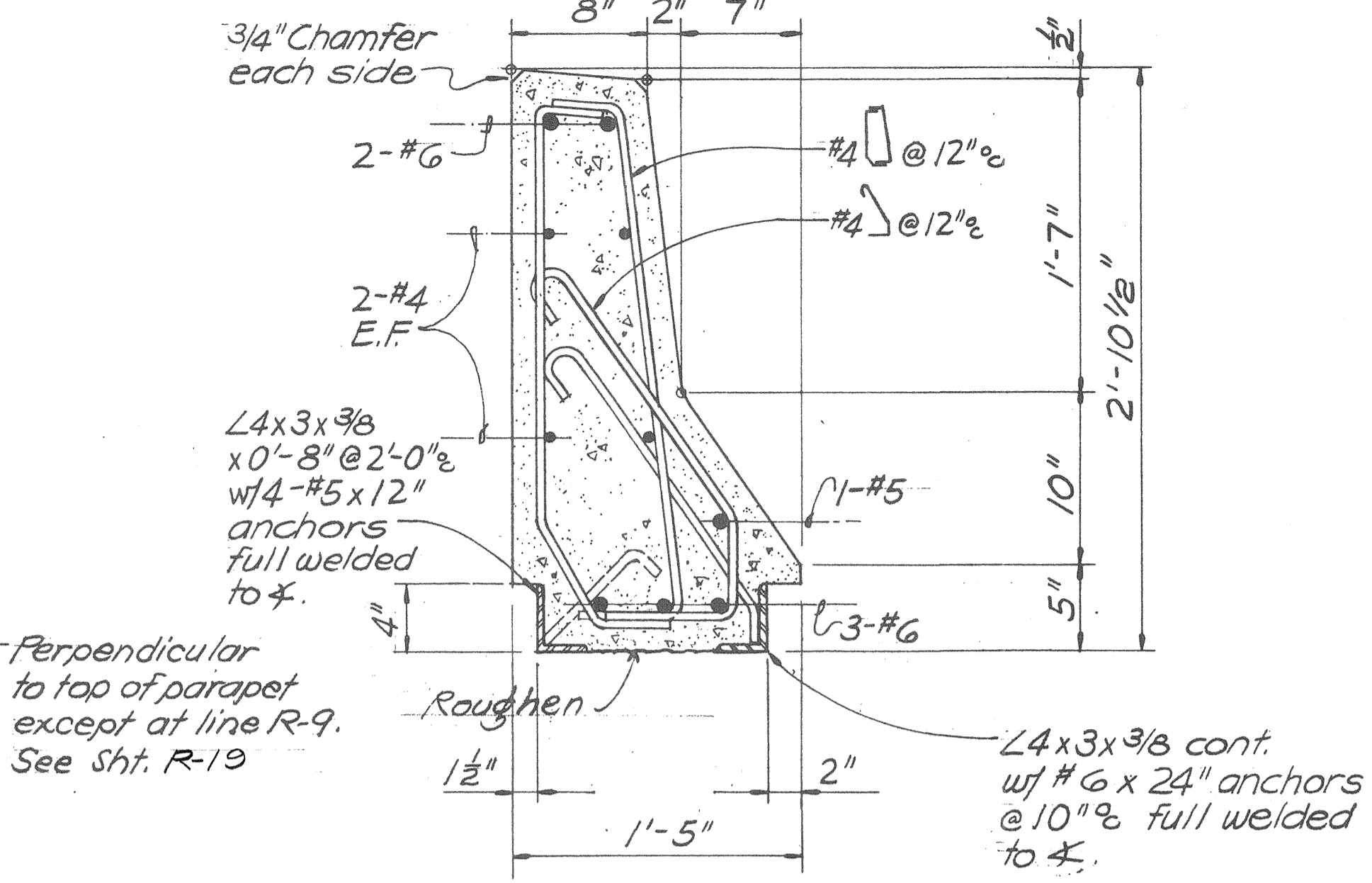
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F.A.I. PROJ. NO. I-HI-1 (147)-17

Scale: As shown Date: April 2, 1979
SHEET NO. R-12 OF 19 SHEETS

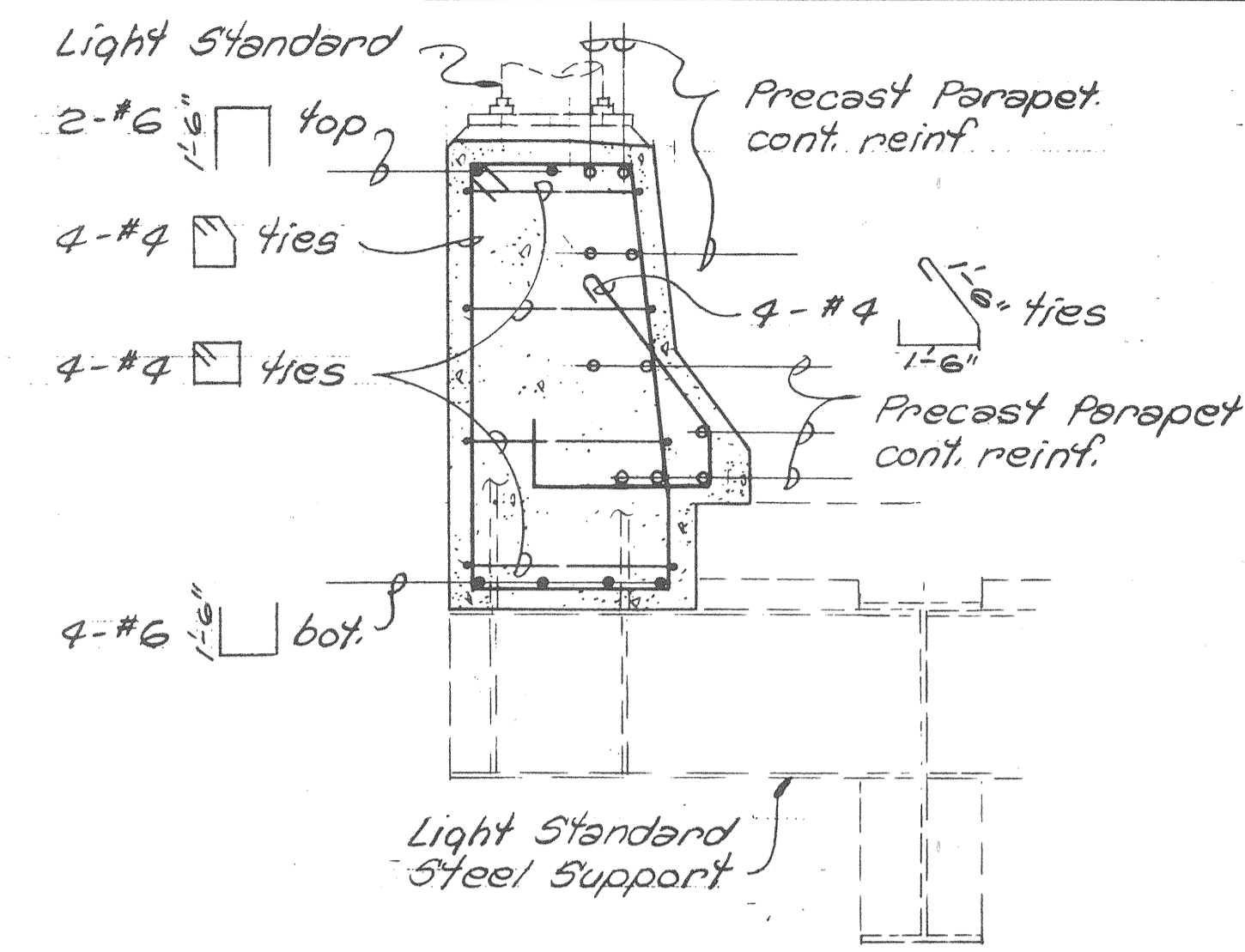
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1(147)17 | 1980 | 298 | 330 |



ELEVATION
Scale: 1/2" = 1'-0"



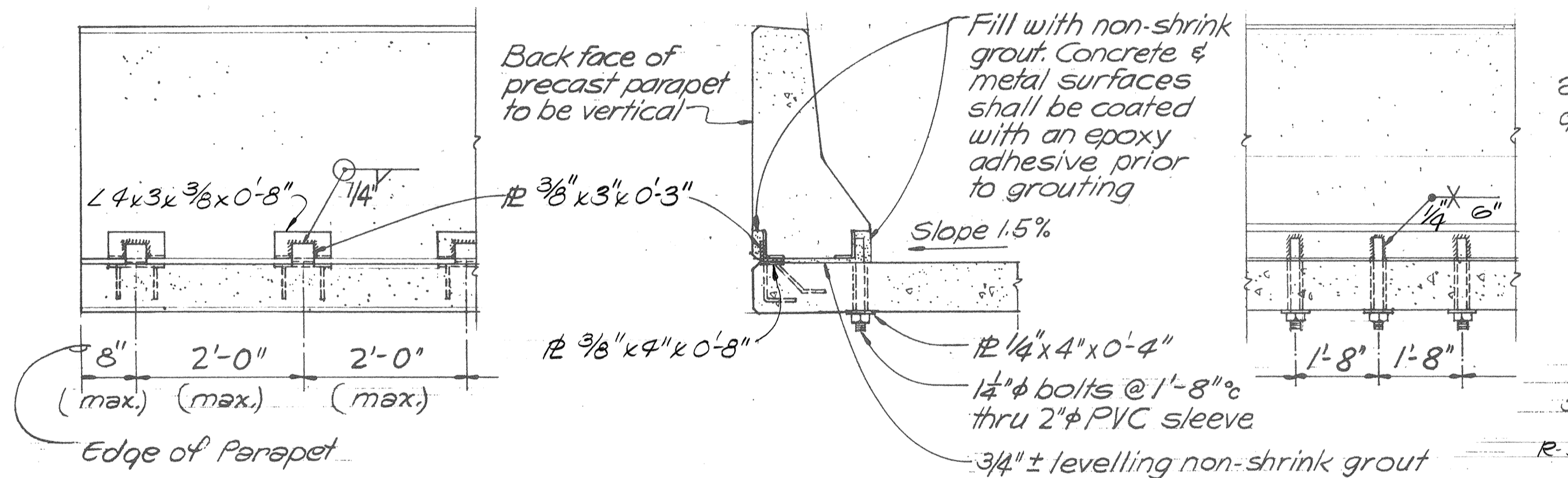
SECTION
Scale: 1 1/2" = 1'-0"



PARAPET LIGHTING STANDARD REINF.

PRECAST CONCRETE PARAPET DETAIL

Scale: As Noted



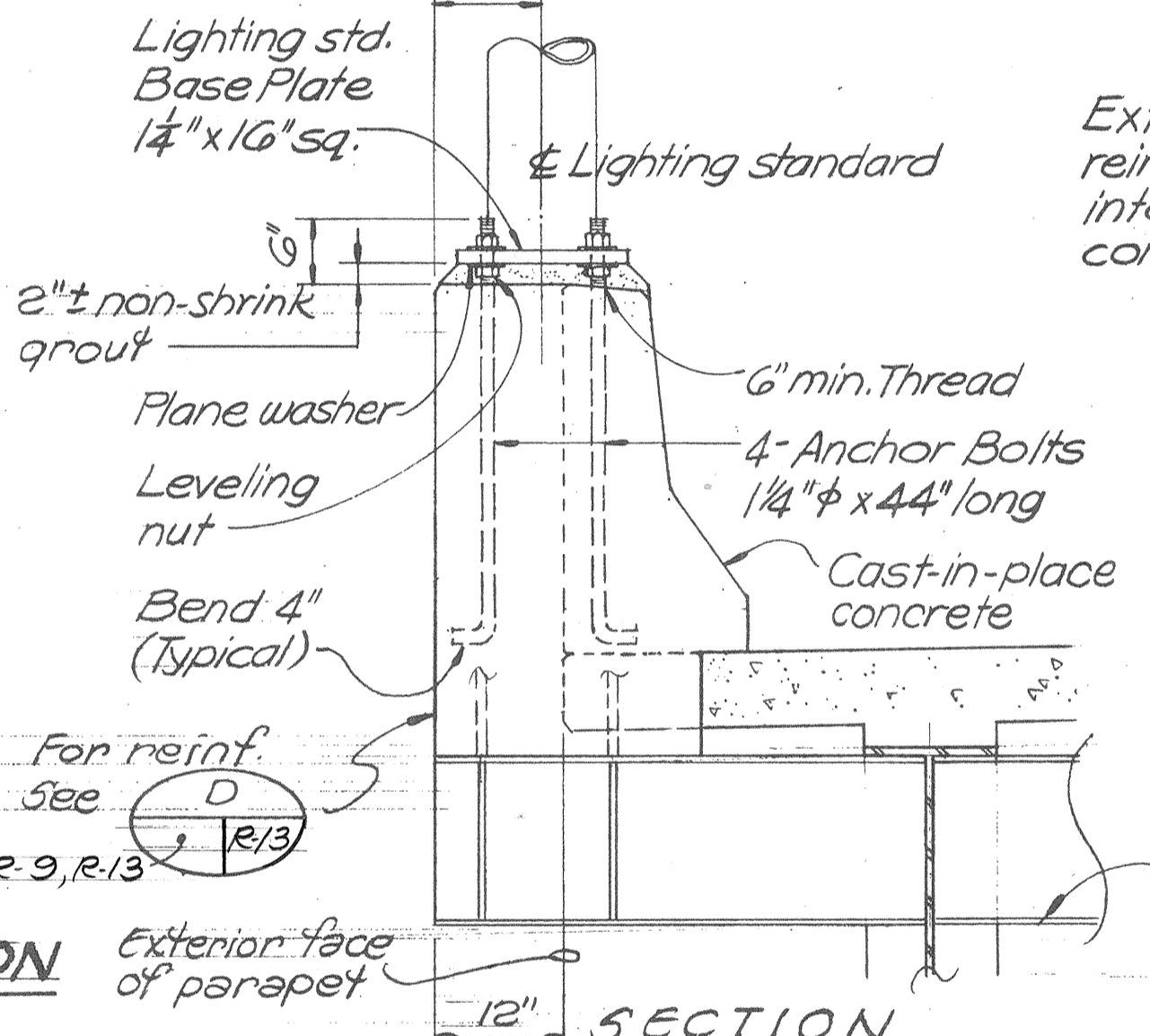
REAR ELEVATION

SECTION

FRONT ELEVATION

PARAPET ANCHORAGE DETAIL

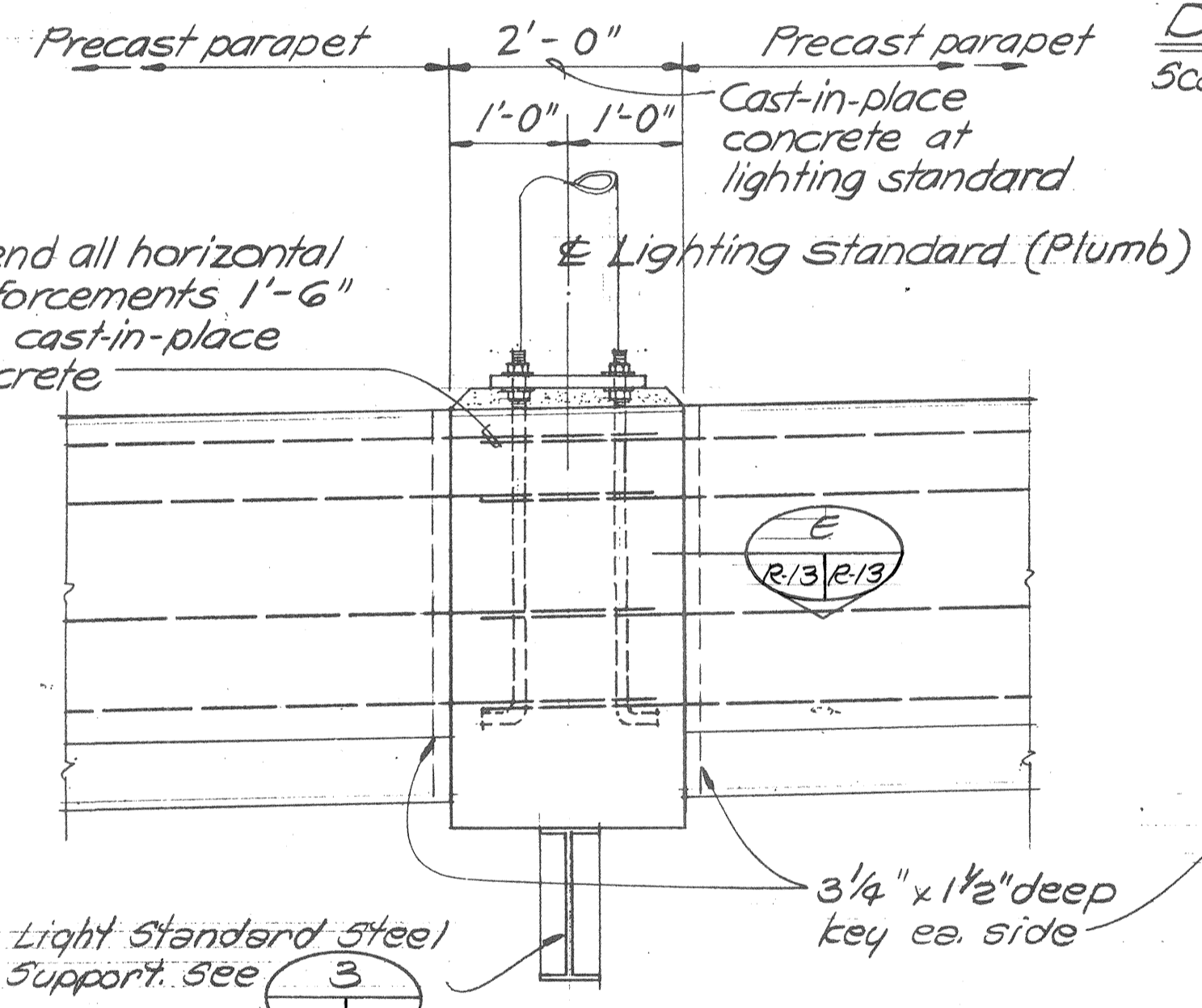
Scale: 3/4" = 1'-0"



SECTION

PARAPET LIGHTING STANDARD DETAIL

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

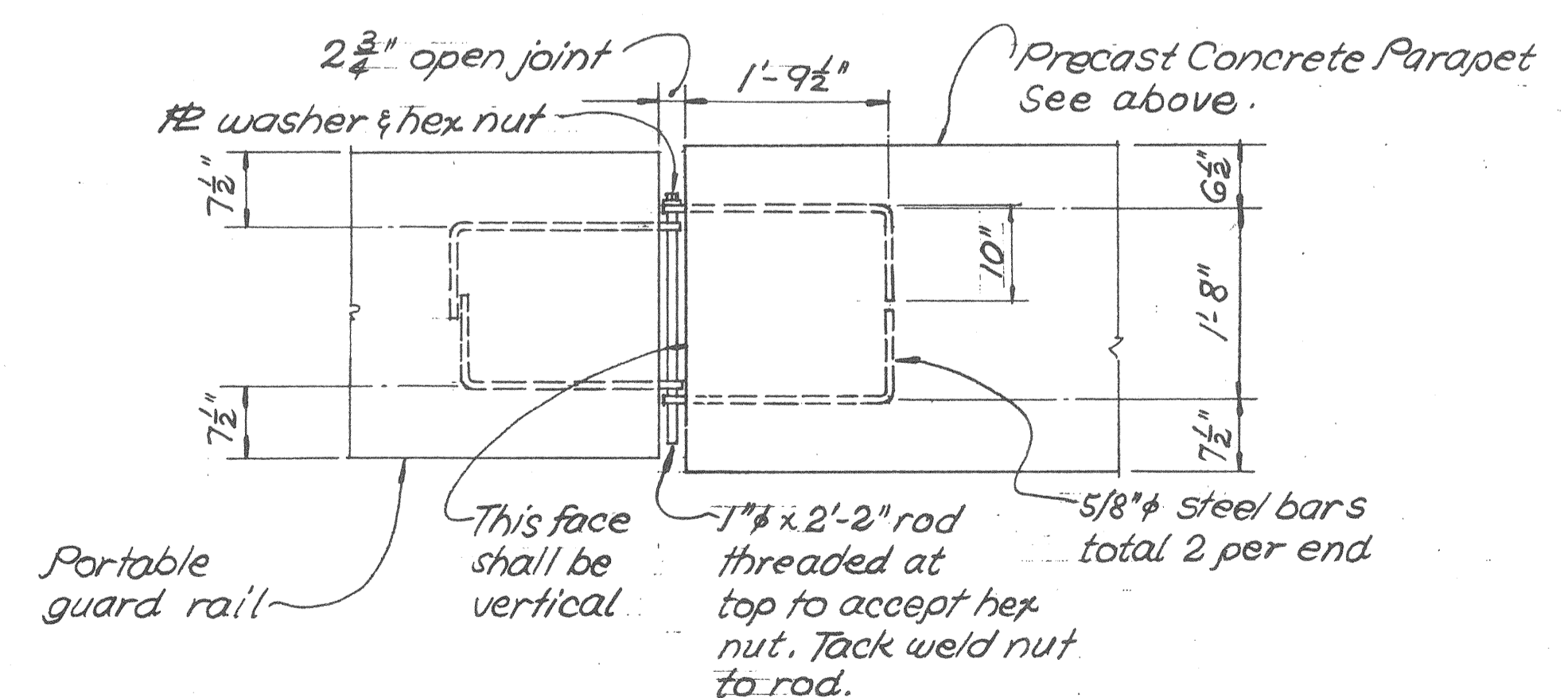


PARTIAL ELEVATION

DETAIL

Scale: 3/4" = 1'-0"
R-9, R-13

SECTION
Scale: 3" = 1'-0"
R/3 R/3

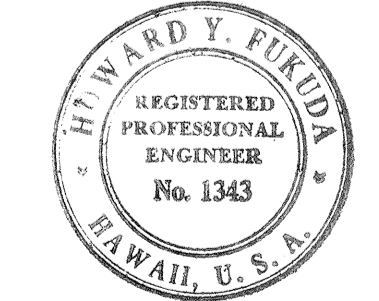


DETAIL F
Scale: 3/4" = 1'-0"
R/3 R/3

NOTE:
All bolts, inserts & miscellaneous hardware shall be hot-dipped galvanized.

NOTE:
Cost of parapet anchors, non-shrink grout & welding of attachments to be incidental to precast concrete parapet.

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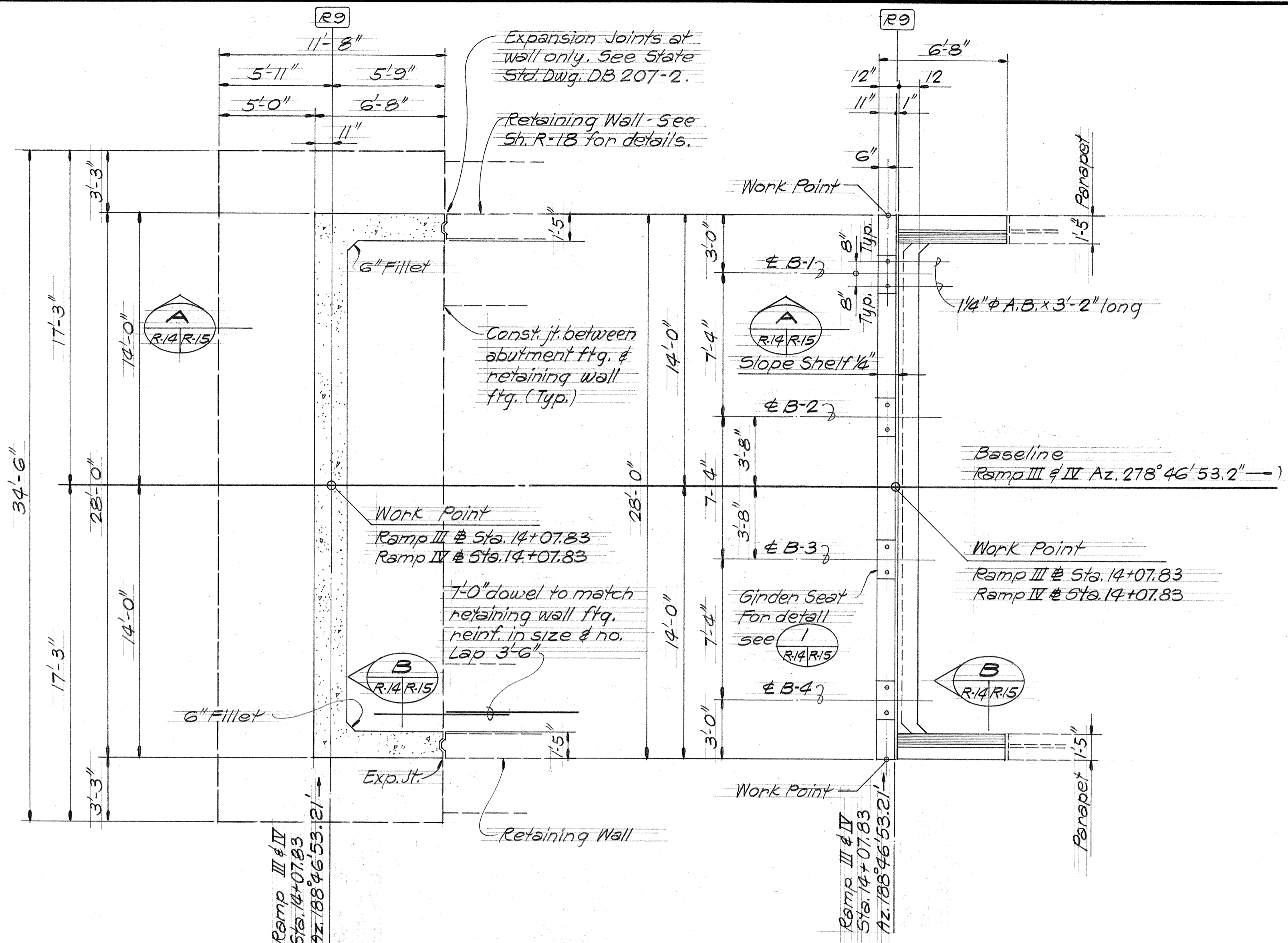
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**TEMPORARY RAMPS
PRECAST PARAPET DETAILS**

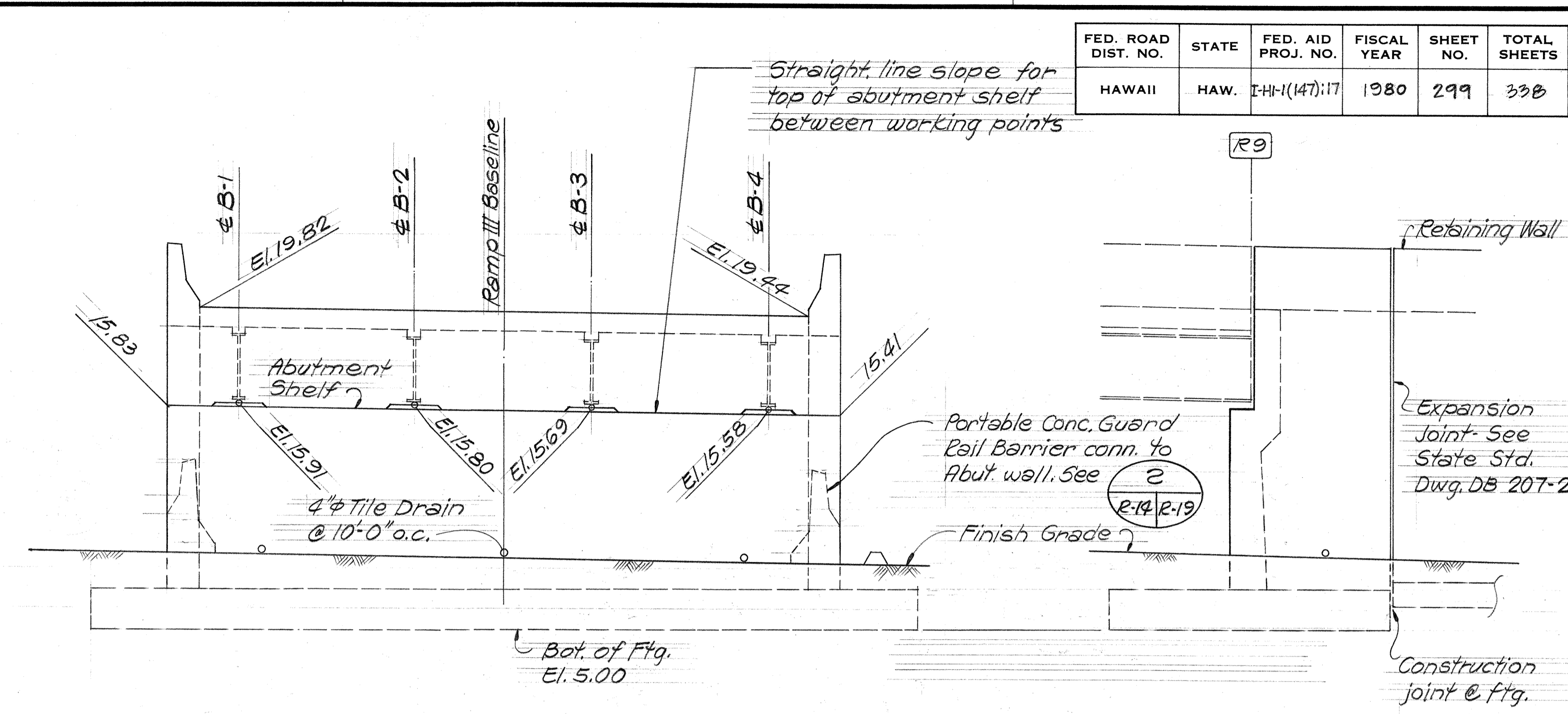
KEEHI INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(147) 17

Scale: As shown Date: April 2, 1979
SHEET No. R-13 OF 19 SHEETS

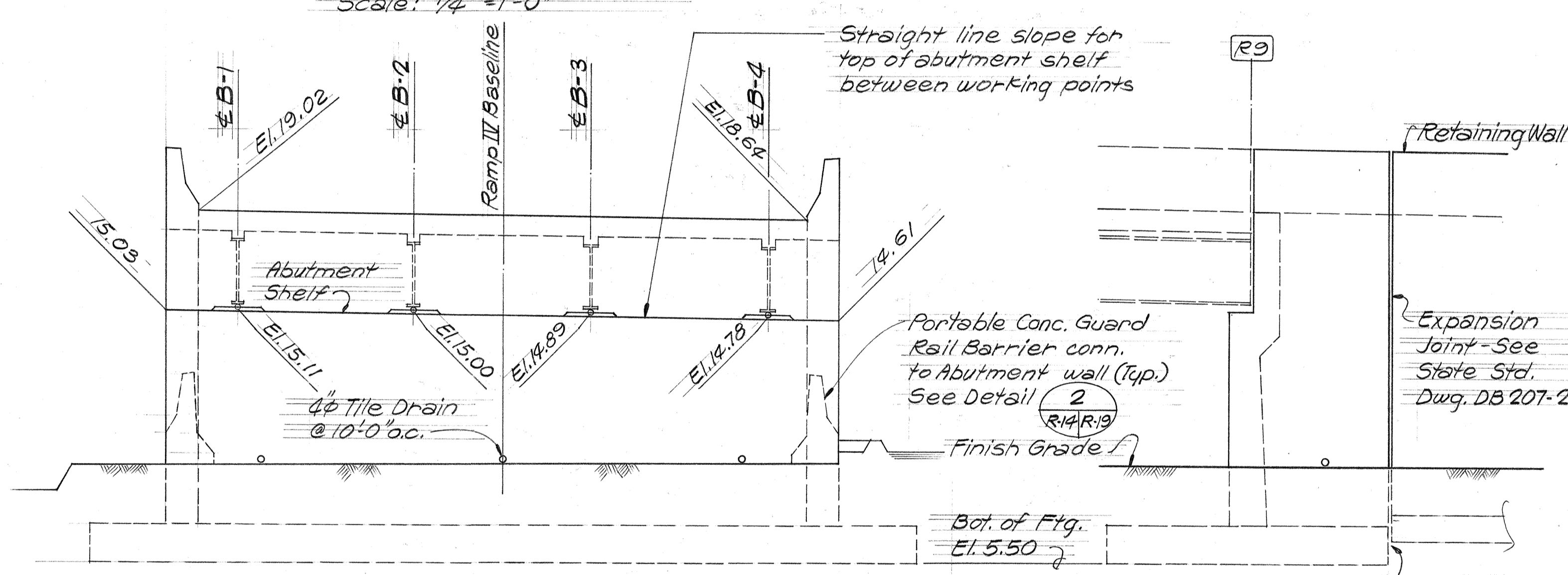
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-H-1(147):17 | 1980 | 299 | 338 |



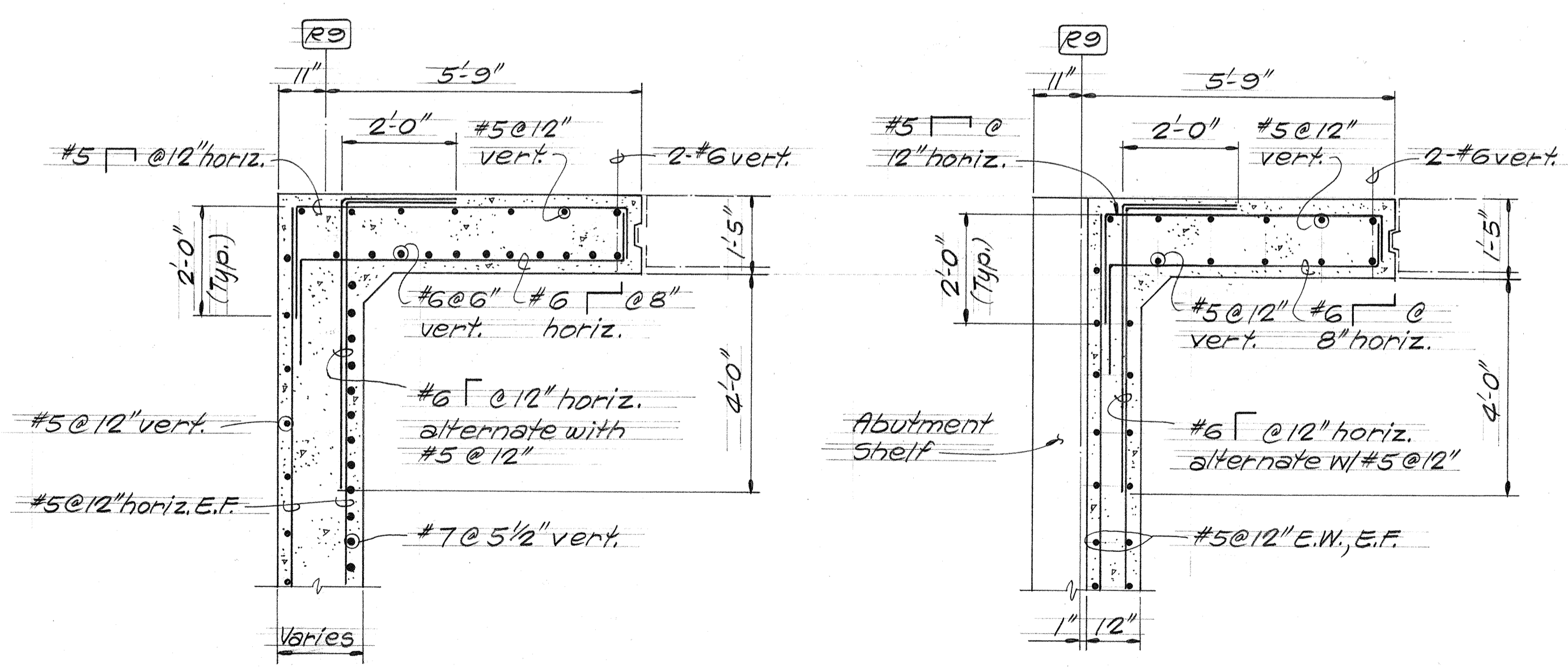
FOUNDATION PLAN
PLAN AT SHELF
ABUTMENT PLANS
Scale: 1/4" = 1'-0"



FRONT
RAMP III ABUTMENT ELEVATIONS
Scale: 1/4" = 1'-0"



FRONT
RAMP IV ABUTMENT ELEVATIONS
Scale: 1/4" = 1'-0"

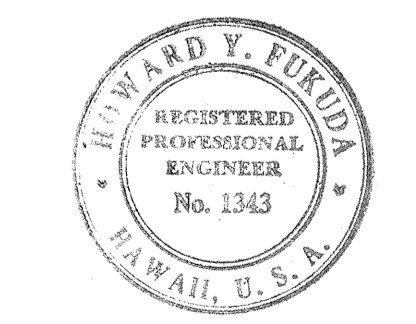


SECTION A
Scale: 1/2" = 1'-0"

SECTION B
Scale: 1/2" = 1'-0"

| | |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |

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HIGHWAYS DIVISION

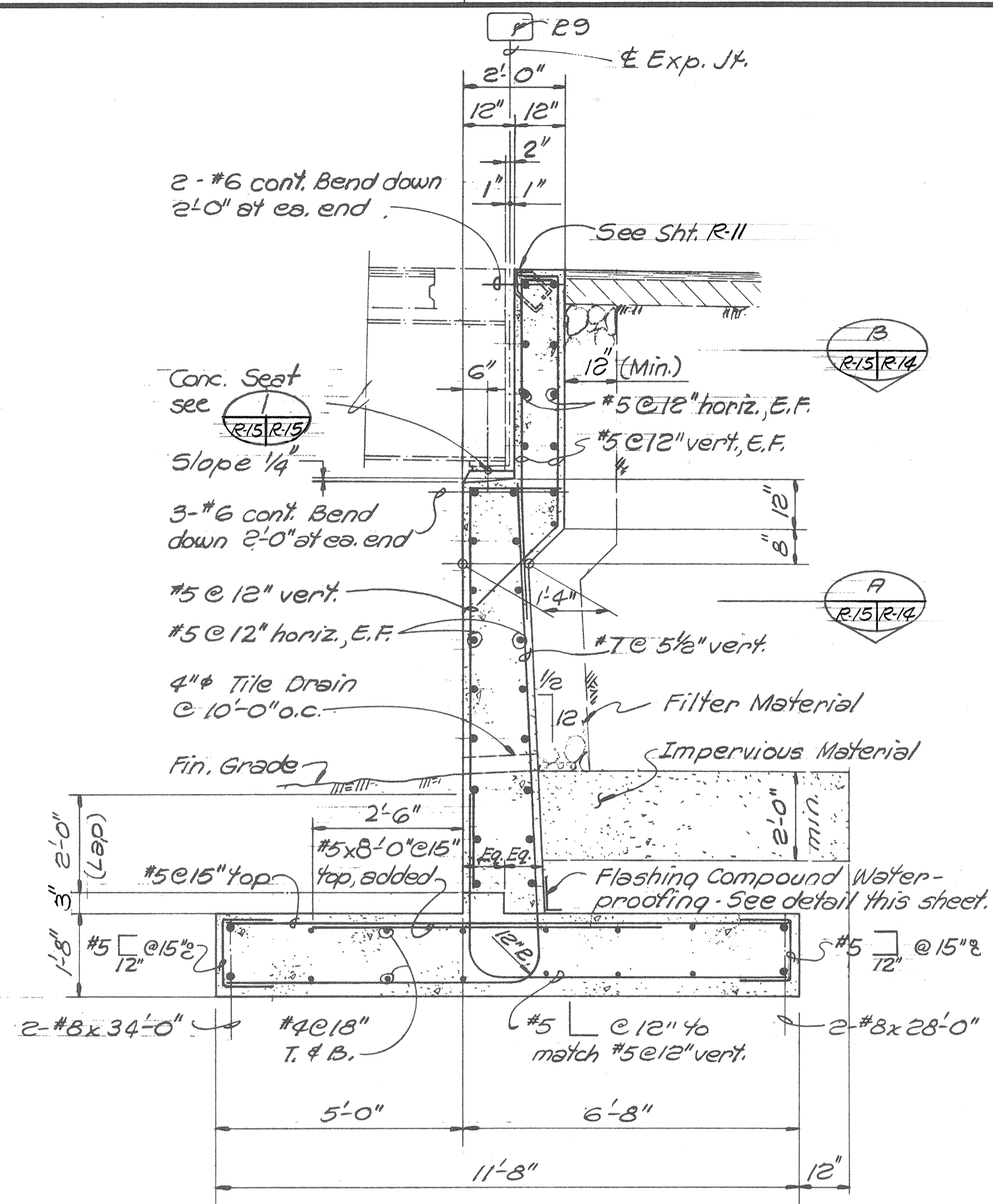
TEMPORARY RAMPS
ABUTMENT PLANS, ELEVATIONS
AND SECTIONS

KEEP! INTERCHANGE
F.A.I. PROJ. NO. I-H-1 (147):17

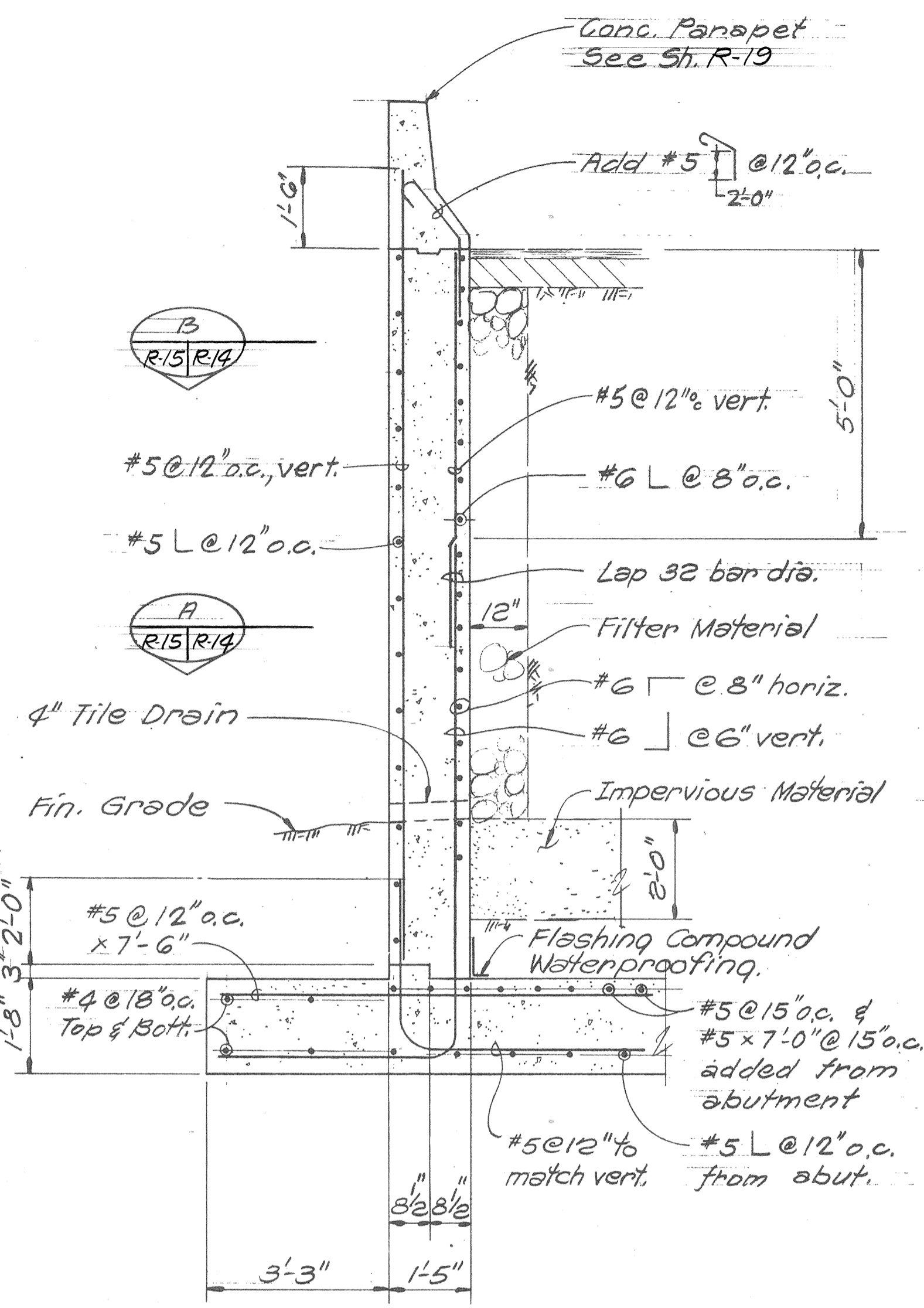
This work was prepared by
me or under my supervision
Howard Y. Fukuda

Scale: As Shown Date: April 2, 1979
SHEET NO. 14 OF 19 SHEETS

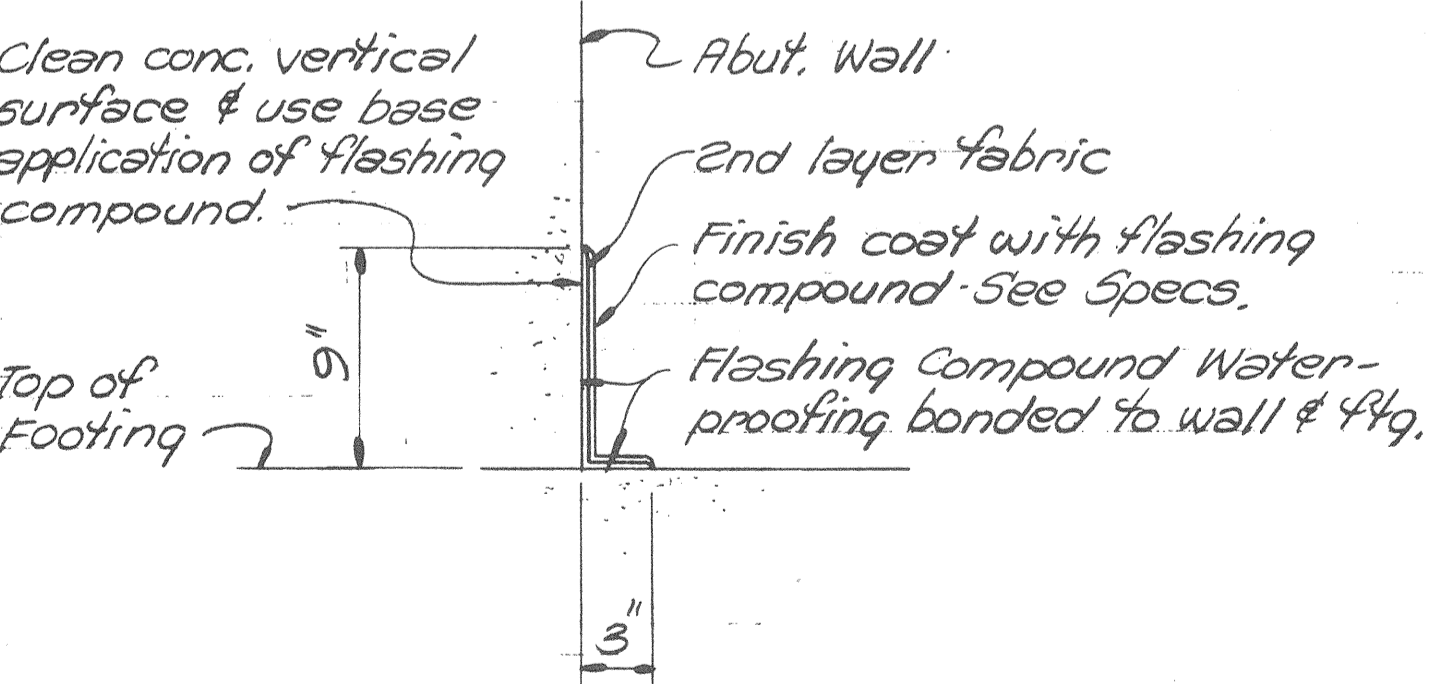
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|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1(147)17 | 1980 | 300 | 338 |



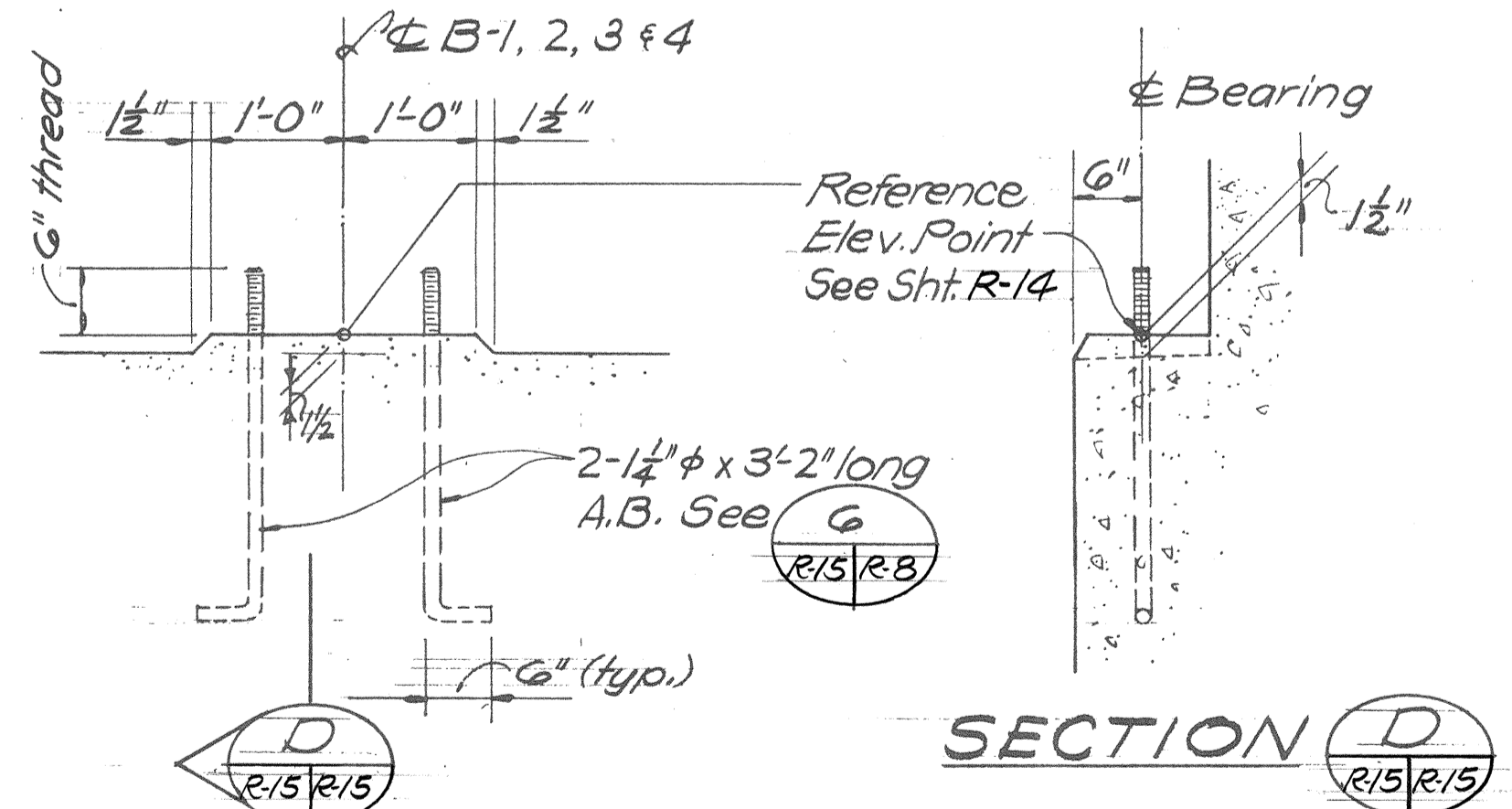
TYPICAL ABUTMENT SECTION
Scale: 1/2" = 1'-0"



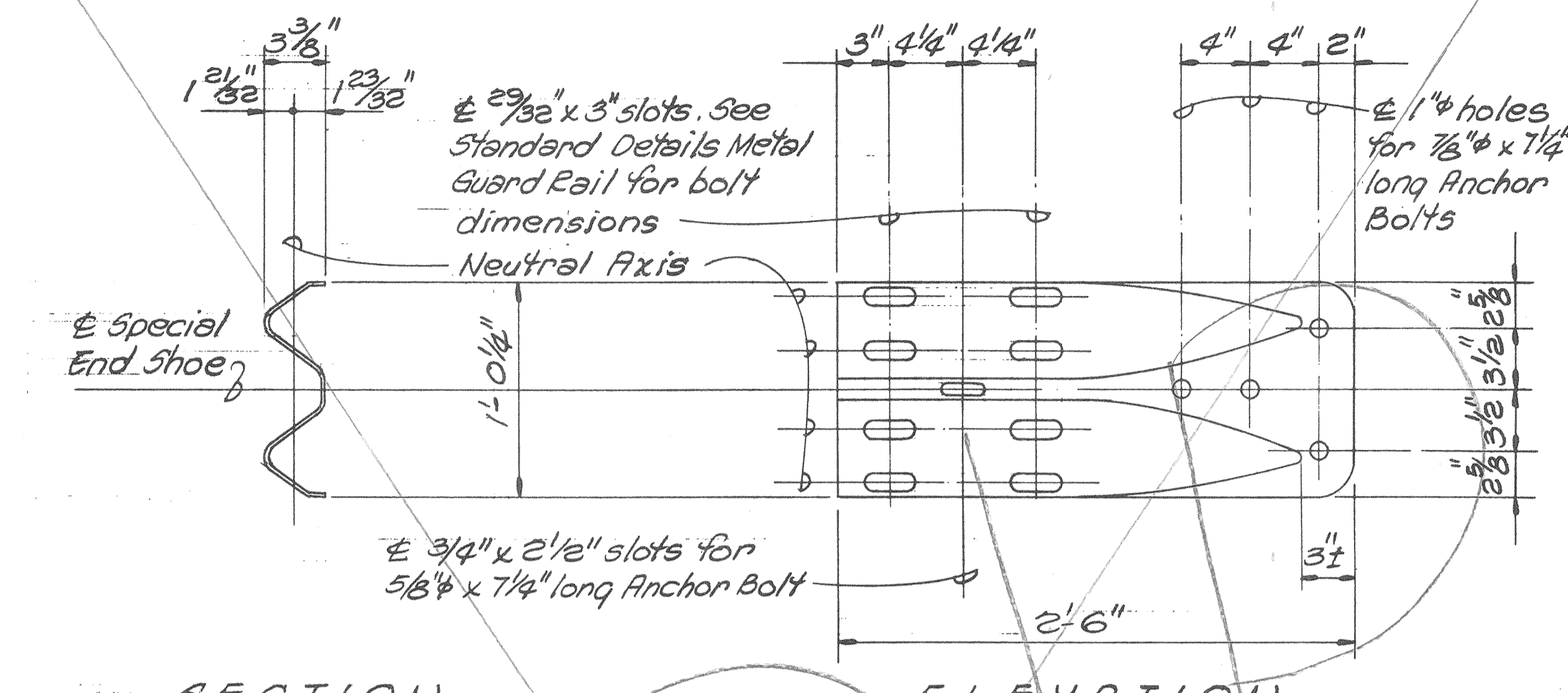
SECTION
Scale: 1/2" = 1'-0"



FLASHING COMPOUND WATERPROOFING DETAIL
Scale: 1/2" = 1'-0"

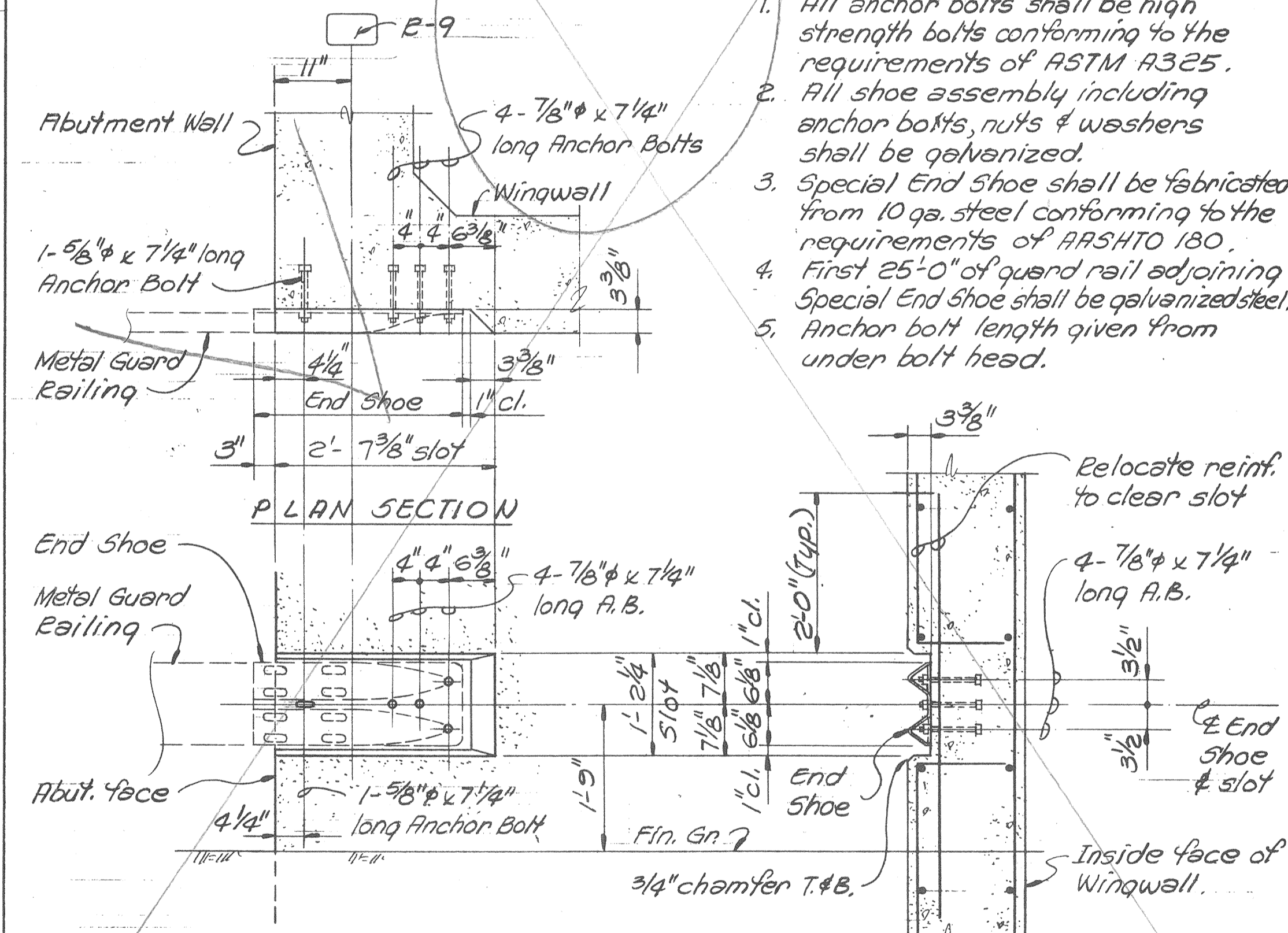


SEAT DETAIL
Scale: 3/4" = 1'-0"



SPECIAL END SHOE DETAILS
Scale: 1/2" = 1'-0"

- NOTES**
- All anchor bolts shall be high strength bolts conforming to the requirements of ASTM A325.
 - All shoe assembly including anchor bolts, nuts & washers shall be galvanized.
 - Special End Shoe shall be fabricated from 10 ga. steel conforming to the requirements of ARSHTO 180.
 - First 25'-0" of guard rail adjoining Special End Shoe shall be galvanized steel.
 - Anchor bolt length given from under bolt head.



S LOT IN ABUTMENT WALL FOR SPECIAL END SHOE
Scale: 3/4" = 1'-0"

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

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 Consulting Structural Engineers
 1210 Ward Ave., Honolulu, HI 96814

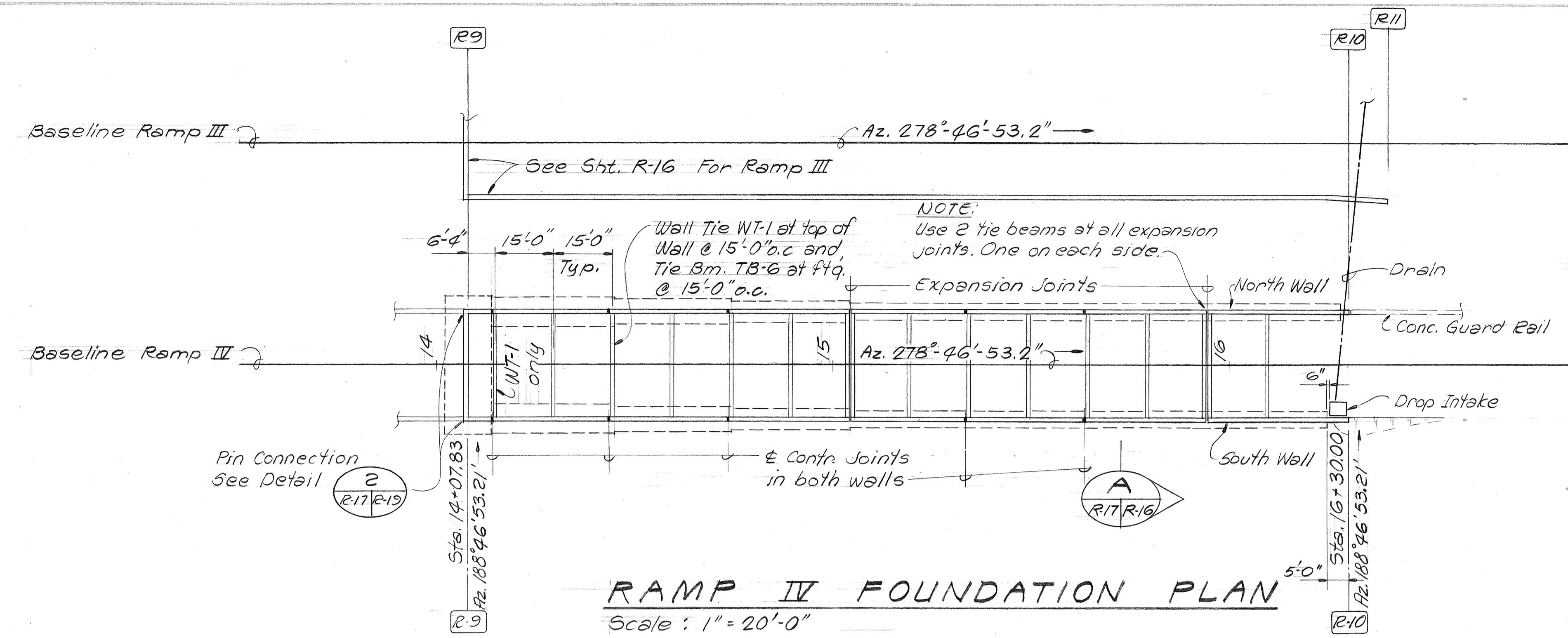


STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
TEMPORARY RAMPS
 ABUTMENT DETAILS

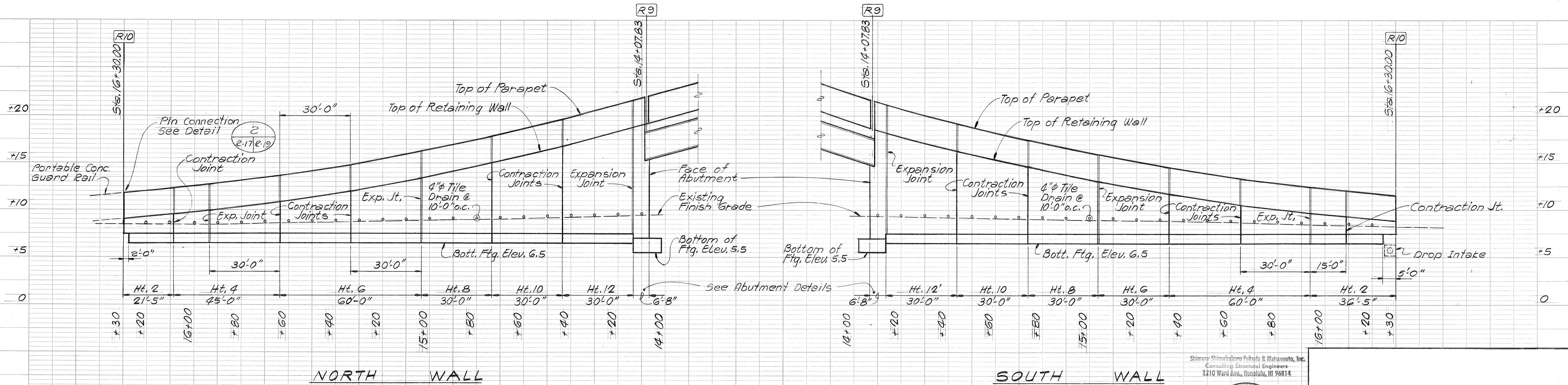
KEEHI INTERCHANGE
 F.A.I. PROJ. NO. I-HI-1(147)17
 Scale: As Shown Date: April 2, 1979
 SHEET No. R-15 OF 19 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1(147):17 | 1980 | 302 | 338 |

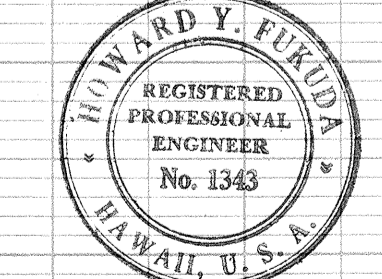
| | | |
|------|--------------------|------|
| PLAN | SURVEYED | DATE |
| | PLOTTED | BY |
| | ALIGNMENT CHECKED | |
| | RT. OF WAY CHECKED | |
| | NO. | |



| | | |
|---------|--------------------------|------|
| PROFILE | SURVEYED | DATE |
| | PLOTTED | BY |
| | GRADES CHECKED | |
| | STRUCTURE NOTATIONS CHKD | |
| | NO. | |



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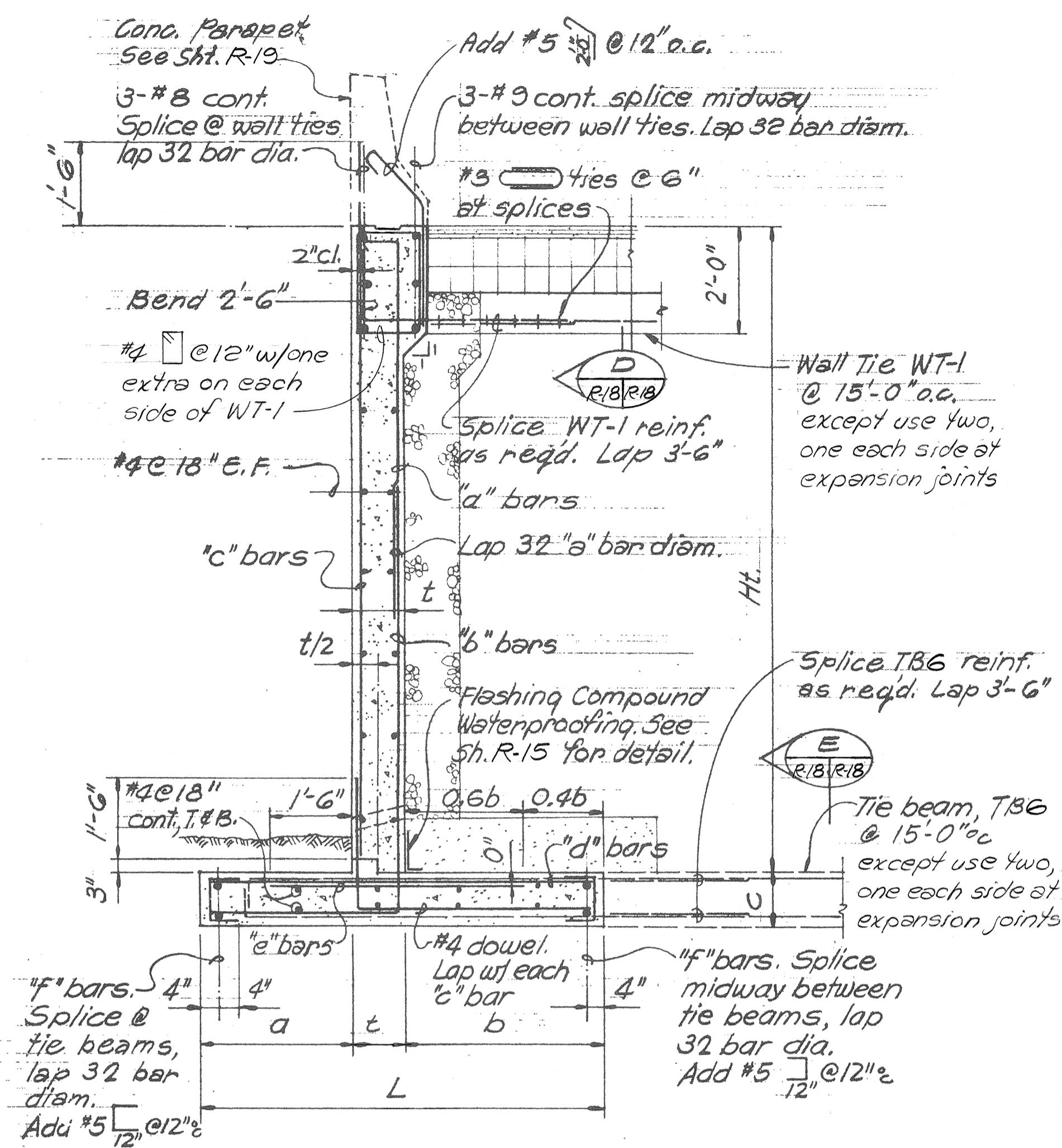
TEMPORARY RAMPS
RAMP IV RETAINING WALL
PLAN & PROFILE

KEEHI INTERCHANGE
F.A.I. PROJ. No. 1, HI-1 (147):17

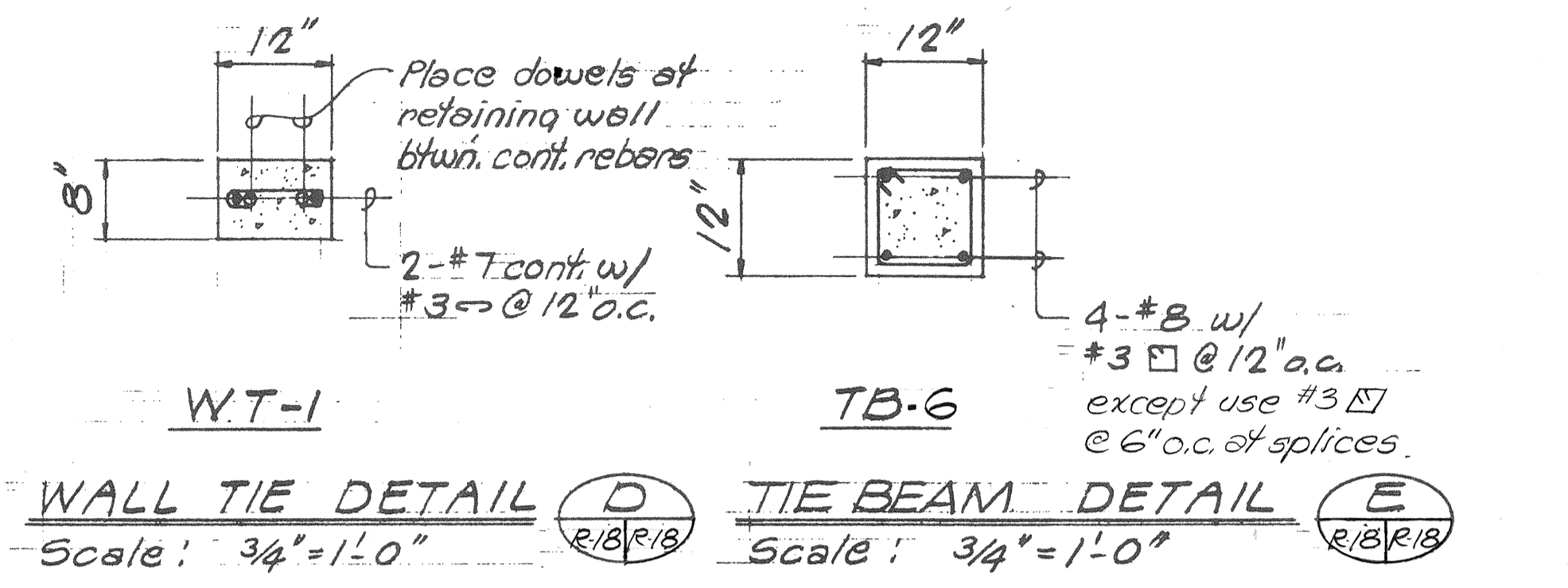
Scale: As Shown Date: April 2, 1979

SCHEDULE OF DIMENSIONS & REINFORCING

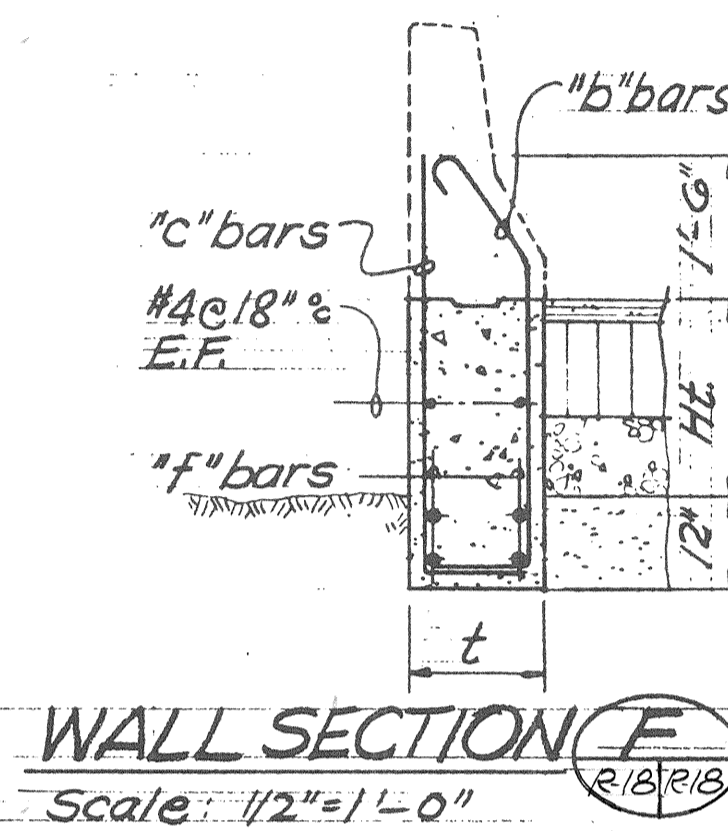
| Maximum Ht. | 14' | 12' | 10' | 8' | 6' | 4' | 2' | 1' |
|-------------|------------|------------|------------|------------|------------|------------|------------|------------|
| t | 17" | 14" | 12" | 12" | 1'-5" | 1'-5" | 1'-5" | 1'-5" |
| L | 8'-6" | 7'-6" | 6'-3" | 5'-6" | 4'-0" | 4'-0" | 4'-0" | 1'-5" |
| a | 3'-3" | 2'-9" | 2'-6" | 2'-0" | 1'-3" | 12" | 12" | — |
| b | 3'-10" | 3'-7" | 2'-9" | 2'-6" | 1'-4" | 1'-7" | 1'-7" | — |
| c | 17" | 14" | 12" | 12" | 12" | 12" | 12" | — |
| "a" bars | #5@12" | #5@12" | #5@12" | #5@12" | — | — | — | — |
| "b" bars | #7@6" | #6@6" | #5@6" | #5@12" | #5@12" | #5@12" | #5@12" | #5@12" |
| "c" bars | #4@10" | #4@12" | #4@12" | #4@12" | #4@12" | #4@12" | #4@12" | #4@12" |
| "d" bars | #5@16" | #5@17" | #4@16" | #4@12" | #4@14" | #4@14" | #4@14" | — |
| "e" bars | #5@16" | #5@17" | #4@16" | — | — | — | — | — |
| "f" bars | 2-#6 cont. | 2-#6 cont. | 2-#6 cont. | 2-#5 cont. | 2-#5 cont. | 2-#5 cont. | 2-#5 cont. | 2-#5 cont. |
| Wall Sect. | A/R-18 | A/R-18 | A/R-18 | A/R-18 | B/R-18 | B/R-18 | C/R-18 | F/R-18 |



WALL SECTION A
Scale: 1/2" = 1'-0"



WALL TIE DETAIL D Scale: 3/4" = 1'-0"
TIE BEAM DETAIL E Scale: 3/4" = 1'-0"

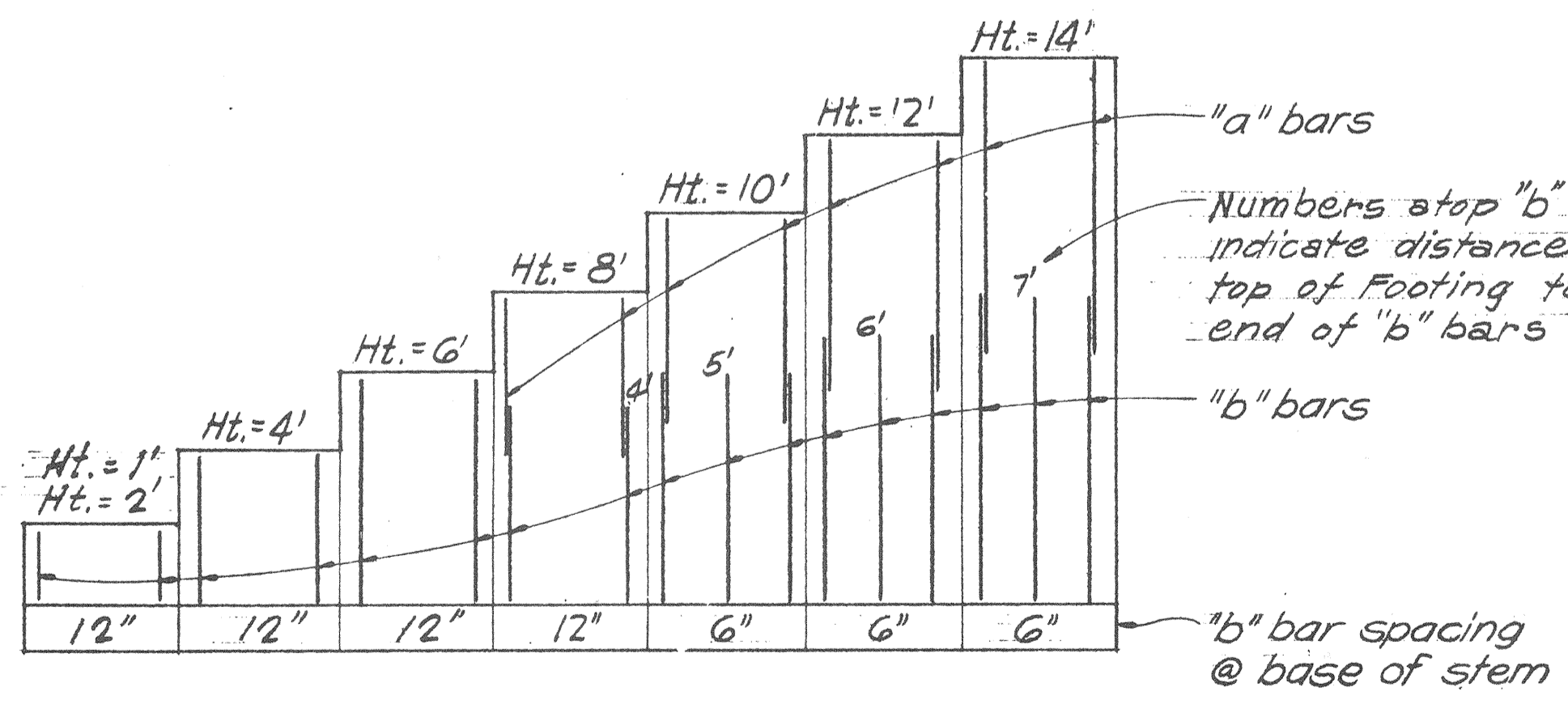


WALL SECTION E
Scale: 1/2" = 1'-0"

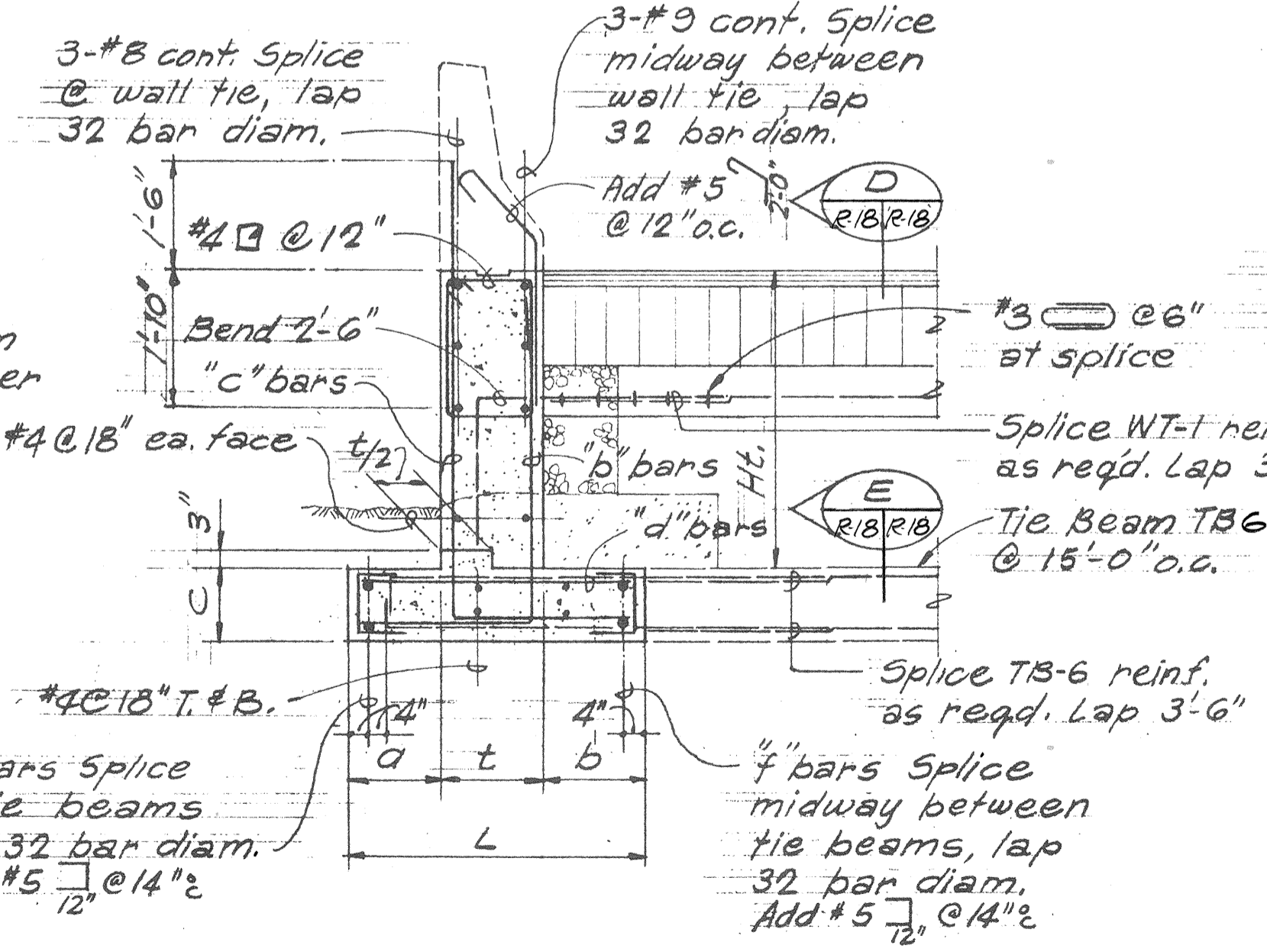
- NOTES**
1. Concrete for footings & walls to be Class "A".
 2. Reinforcing to be ASTM A615 Grade 40.

CONSTRUCTION SEQUENCE FOR RETAINING WALLS

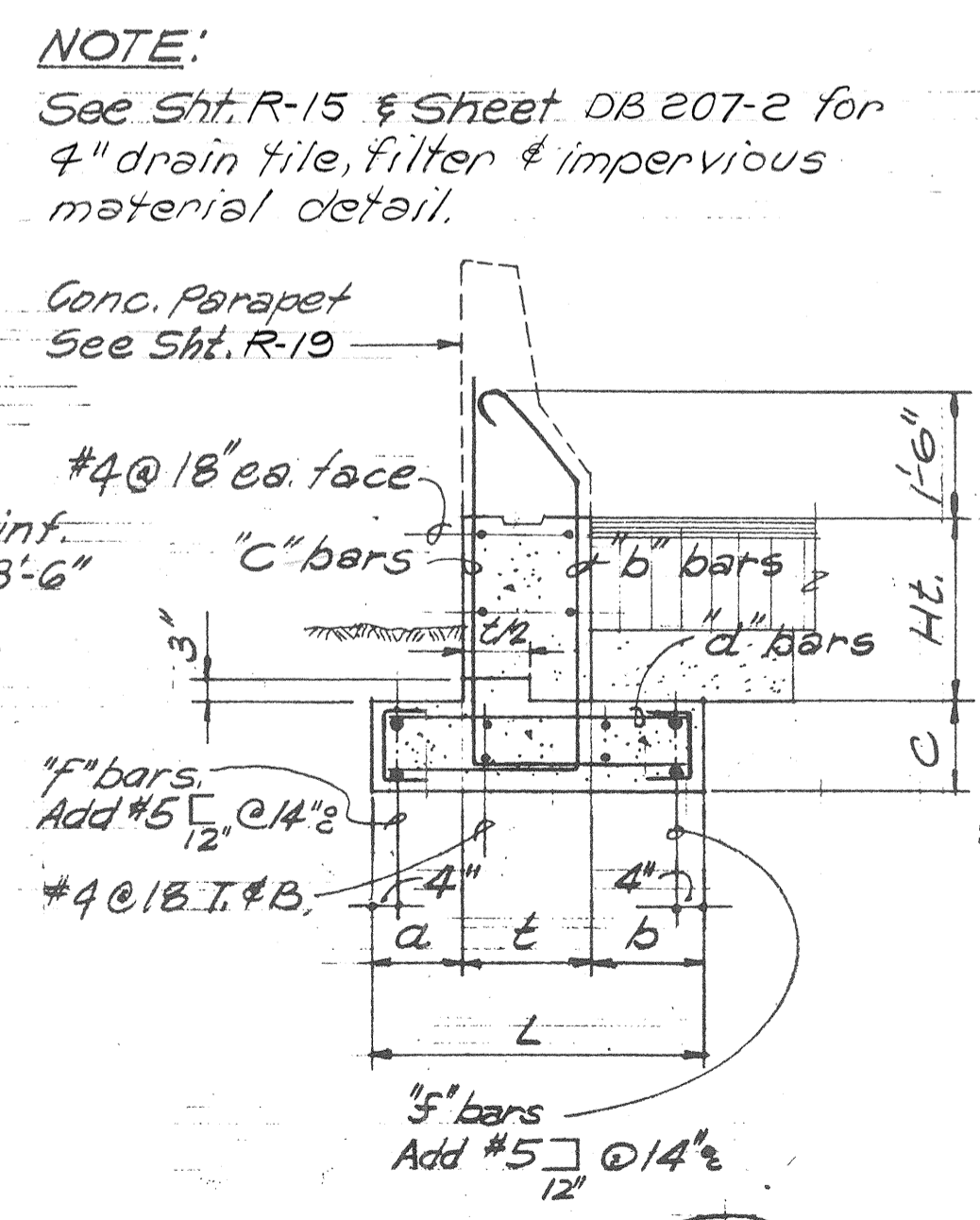
1. Pour wall footings & Tie Bm. TB-6.
2. Pour stem to bottom of parapet.
3. Fill with structural backfill to bottom of wall tie WT-1.
4. Pour Wall Tie WT-1.
5. Complete balance of backfilling.



VERTICAL REINFORCING ARRANGEMENT



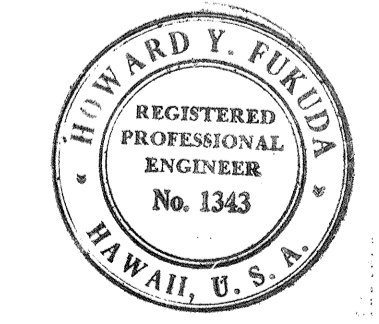
WALL SECTION B
Scale: 1/2" = 1'-0"



WALL SECTION C
Scale: 1/2" = 1'-0"

NOTE:
See Sht. R-15 & Sheet DB 207-2 for 4" drain tile, filter & impervious material detail.

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HIGHWAYS DIVISION

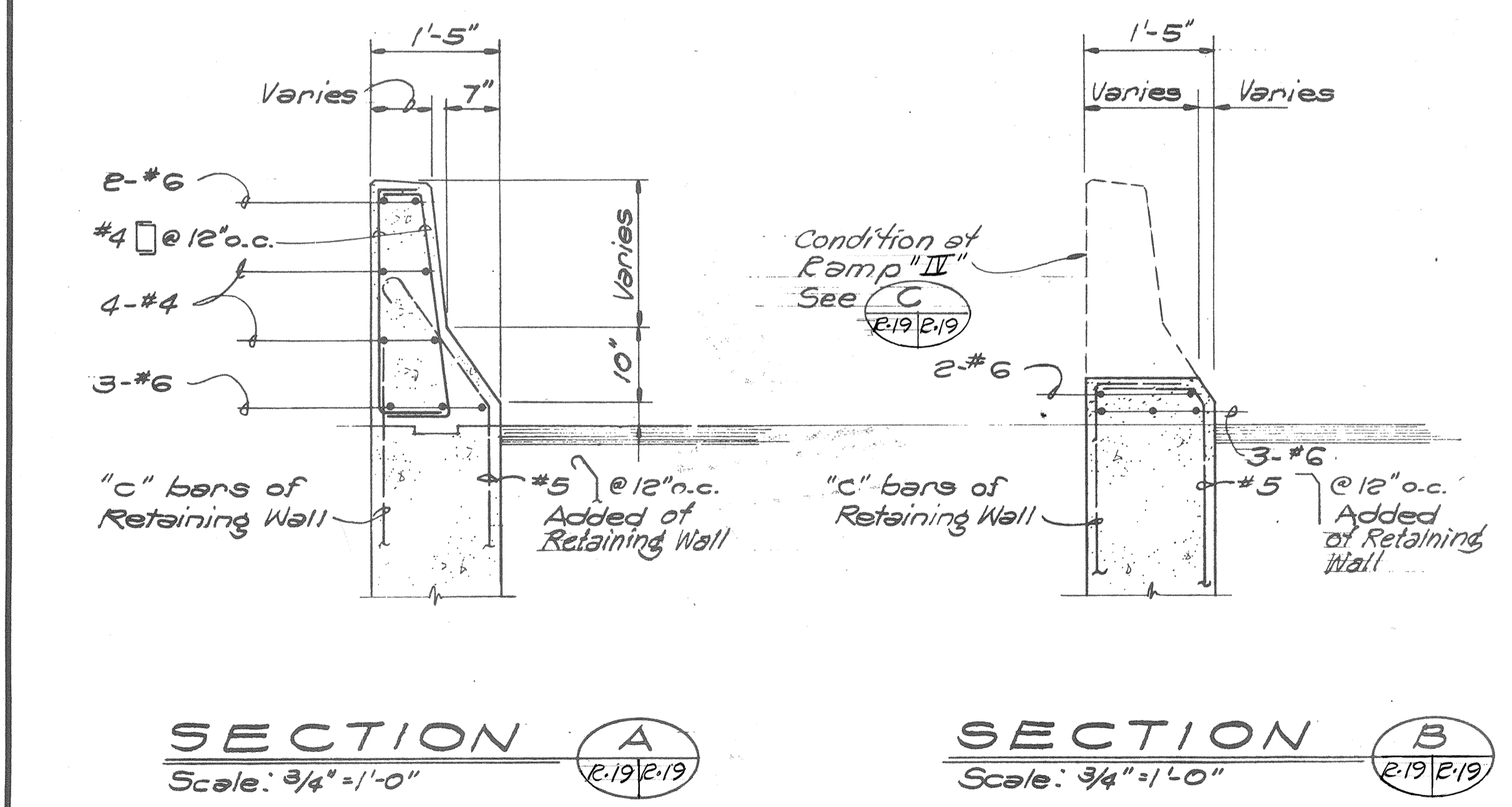
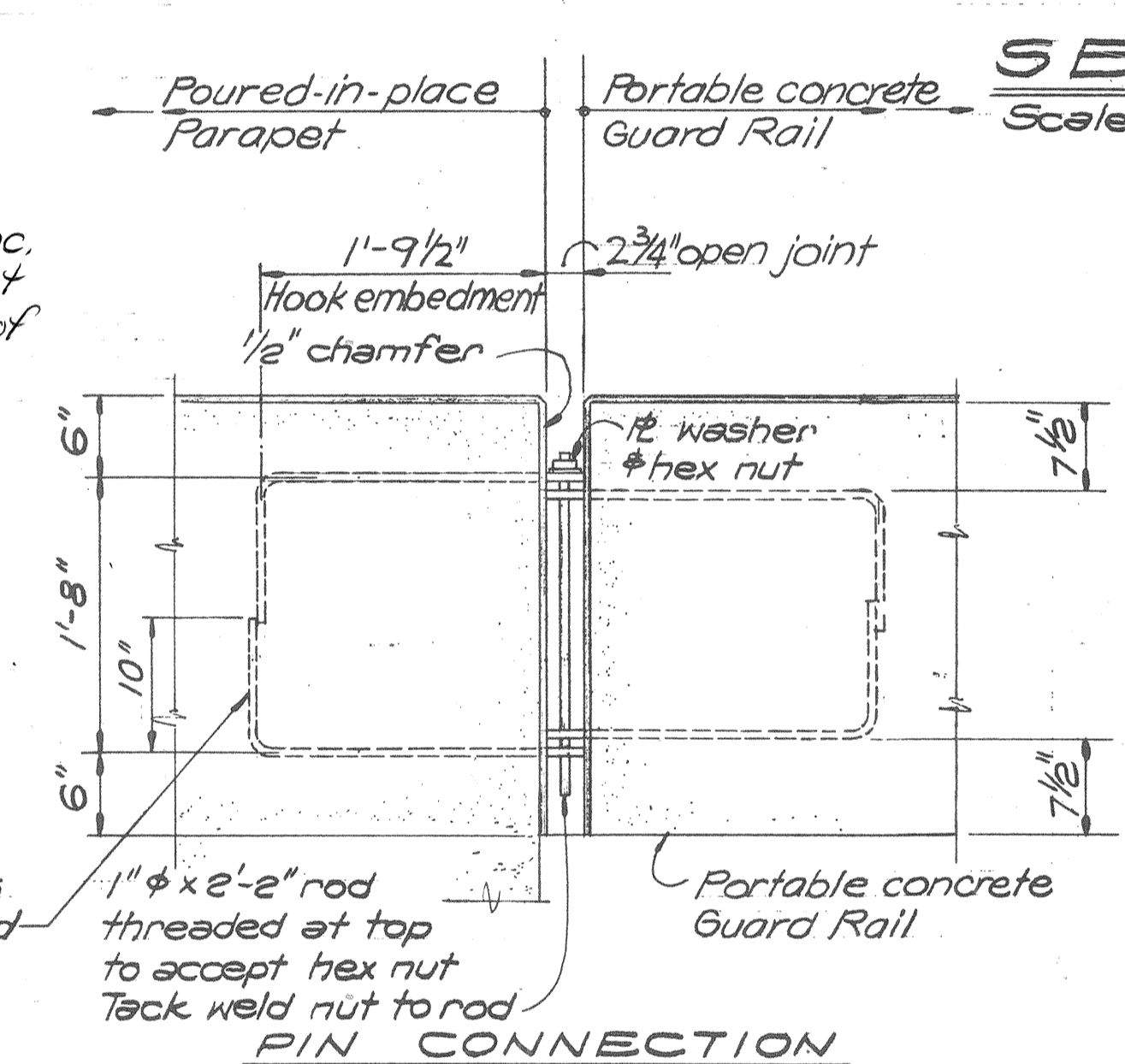
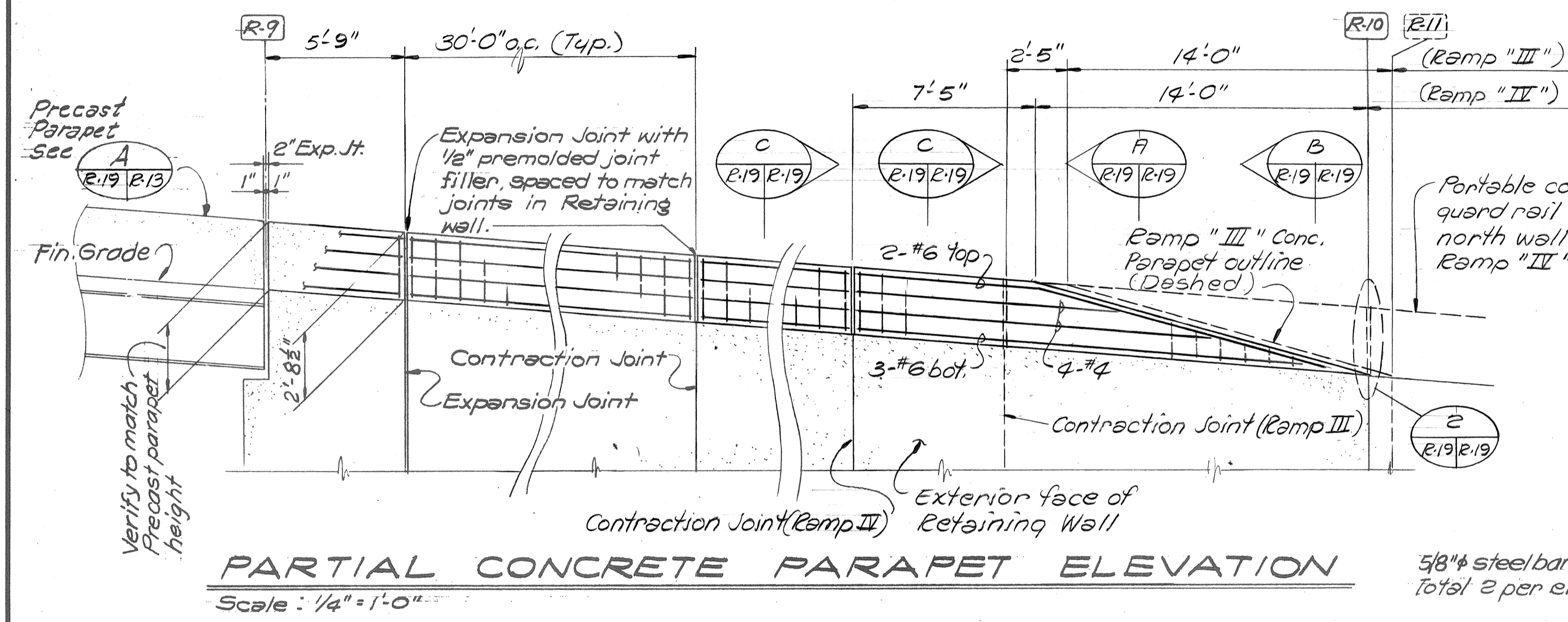
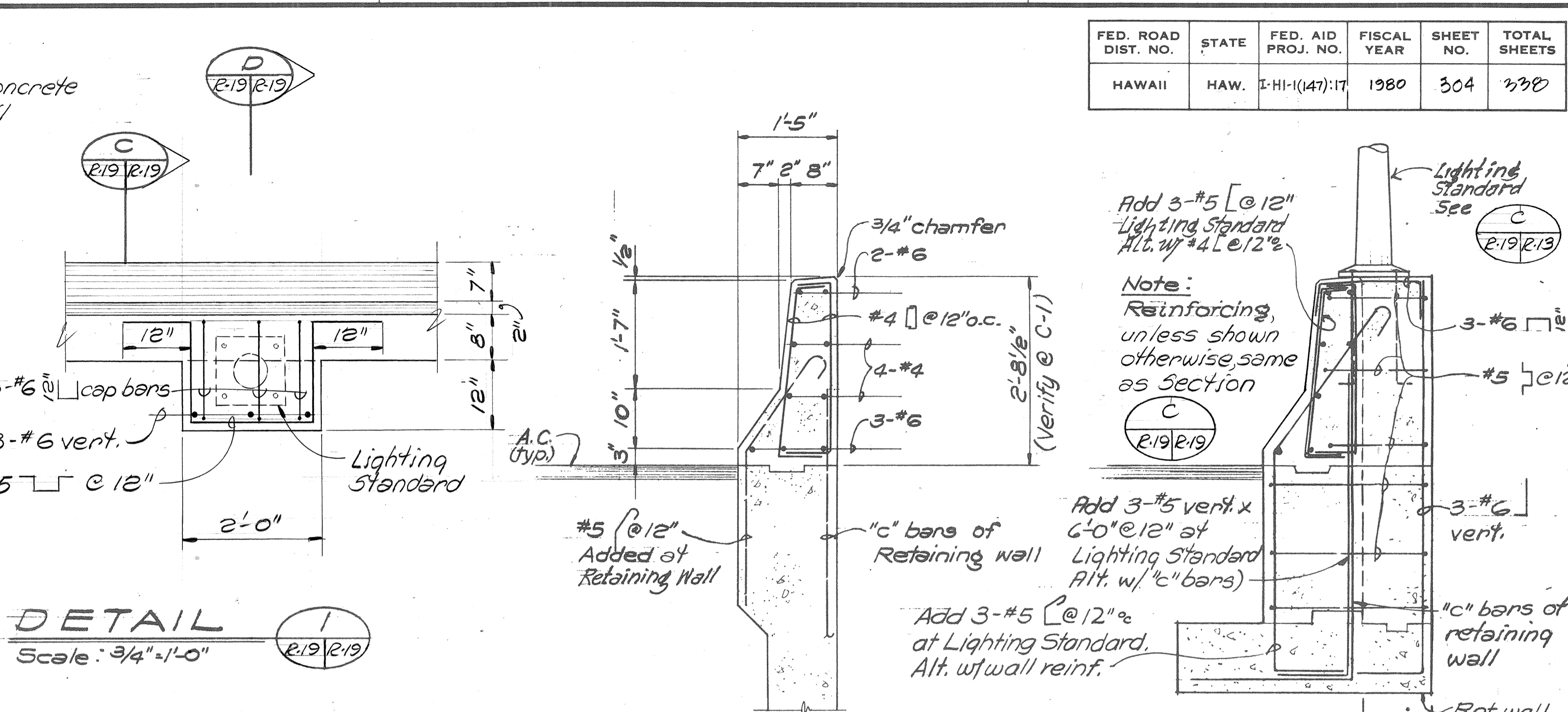
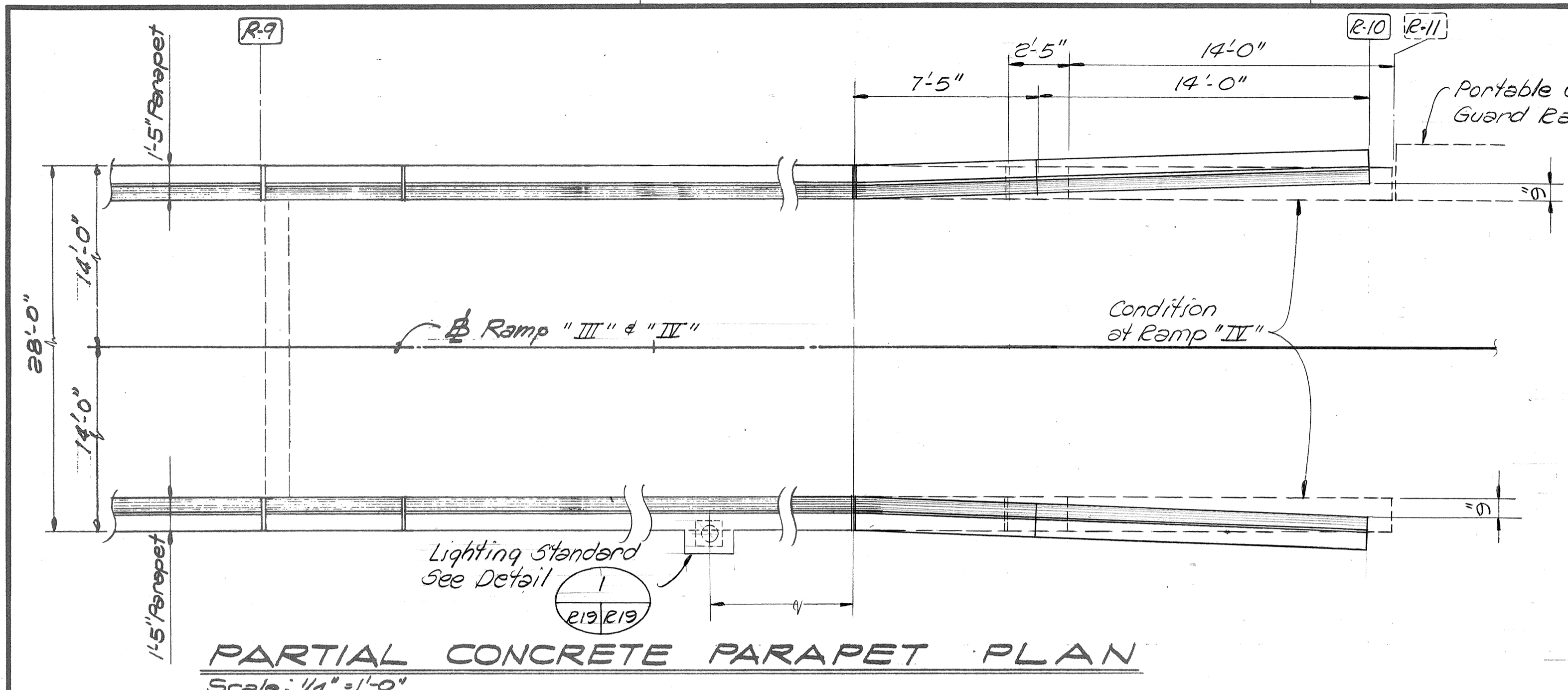
TEMPORARY RAMPS
RETAINING WALL DETAILS

KEEHI INTERCHANGE
F.A.I. PROJ. NO. I-HI-1 (147):17

Scale: As shown Date: April 2, 1979

SHEET NO. R-18 OF 19 SHEETS

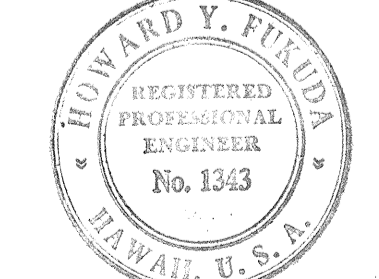
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | I-HI-1(47):17 | 1980 | 304 | 390 |



- NOTES
1. Poured-in-place parapet concrete, and concrete at light standard shall be included in "Concrete in Abutment & Retaining Walls."
 2. For expansion & construction joint details, see State Standard Dwg. DB 207-2

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

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STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
**TEMPORARY RAMPS
 PARAPET DETAILS**

KEEHI INTERCHANGE
 E.A. PROJ. No. I-HI-1 (47):17
 Scale: As Shown Date: April 2, 1979
 SHEET No. 2-19 OF 19 SHEETS

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