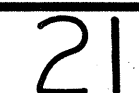
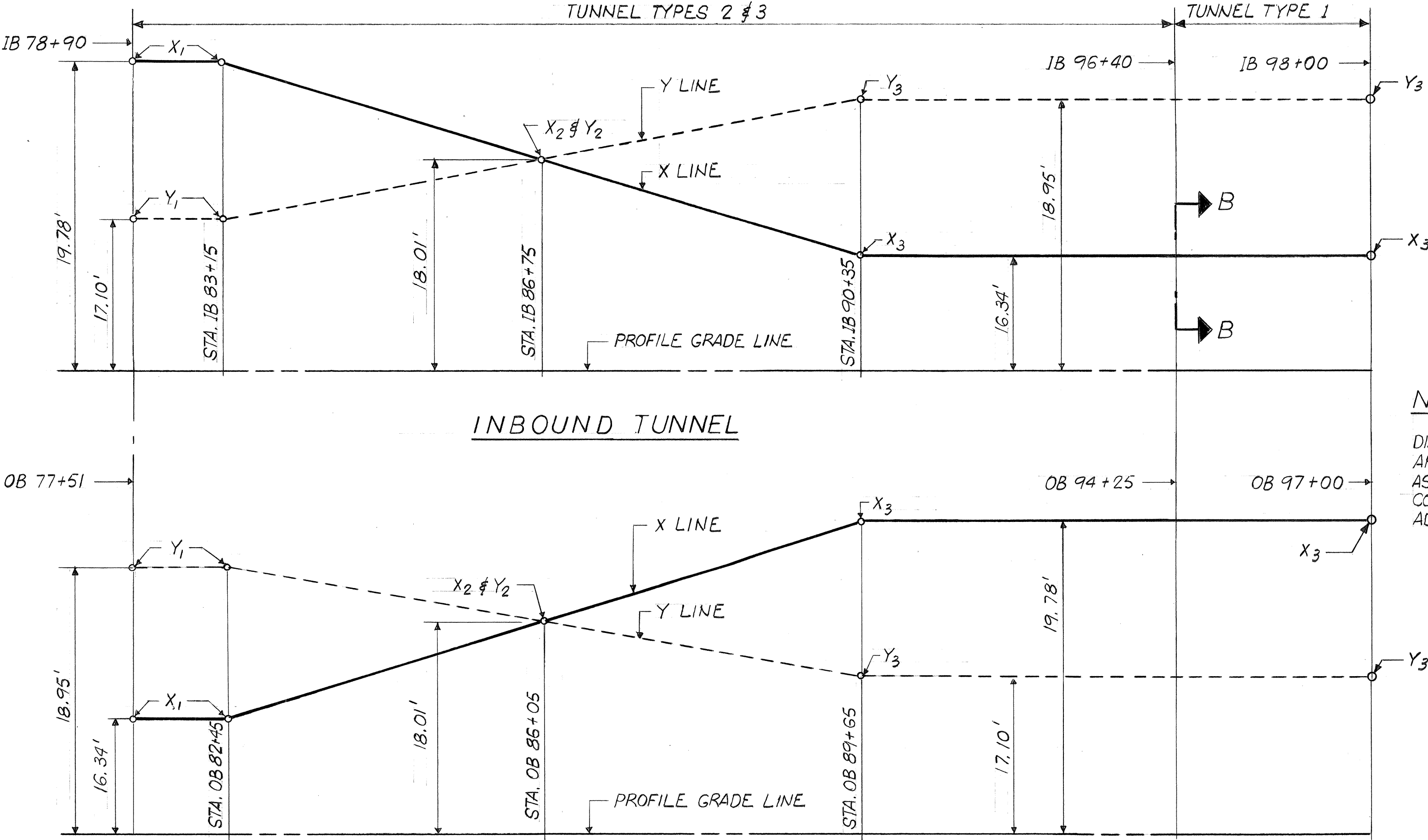


ORIGINAL PLAN	SURVEY PLOTTED BY _____ DRAWN BY <u>R. DIMANUA</u> TRACED BY _____ DESIGNED BY <u>LORE ESKOVICH</u> CHECKED BY _____ QUANTITIES BY _____ NOTED BY <u>JOE BADELLI</u>	DATE 11-11-72 11-17-72 11-17-72
NOTE BOOK		
No. _____		



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(25):3	1975	23	111

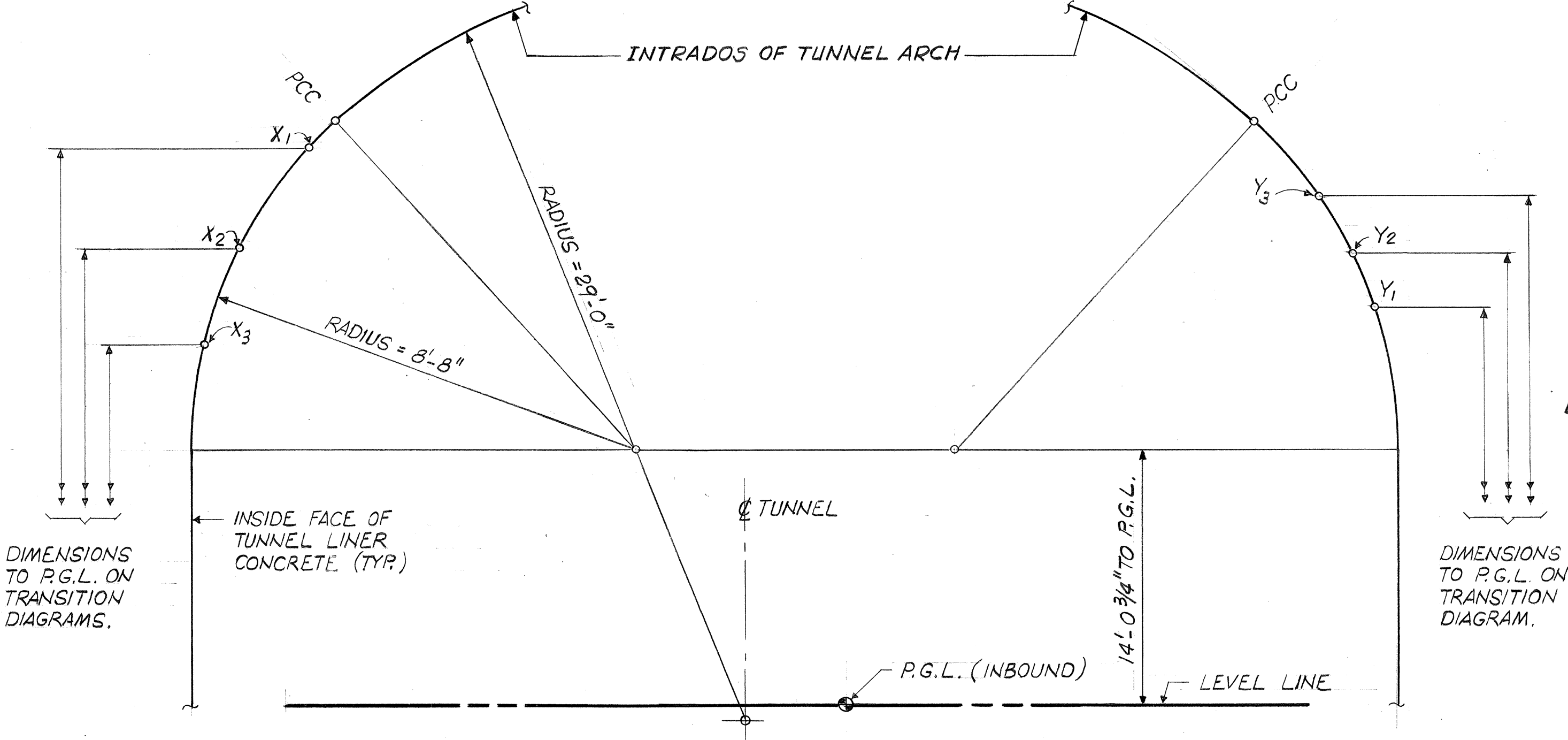


INBOUND TUNNEL

OUTBOUND TUNNEL

TRANSITION DIAGRAMS OF "X" AND "Y" LINES

SCHEMATIC



COMPOSITE CROSS SECTION

(LOOKING UP-STATION)

INBOUND SHOWN; OUTBOUND SIMILAR

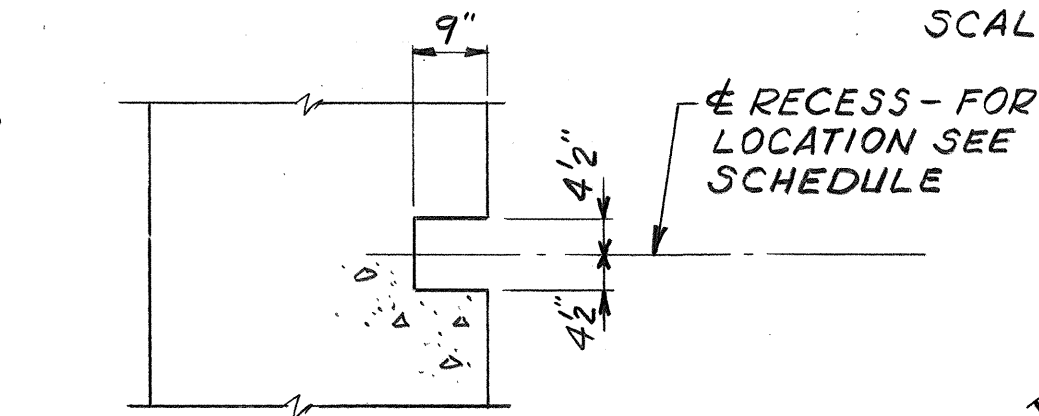
SCHEMATIC

NOTE:

DIMENSIONS TO "X" & "Y" POINTS ARE FOR TUNNEL CONSTRUCTED AS CONTINUOUSLY CURVED. IF CHORD CONSTRUCTION IS USED, CONTRACTOR SHALL ADJUST VERTICAL DIMENSIONS TO SUIT USING SLOPE OF WORK LINE.

SERVICE MODULE RECESS

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



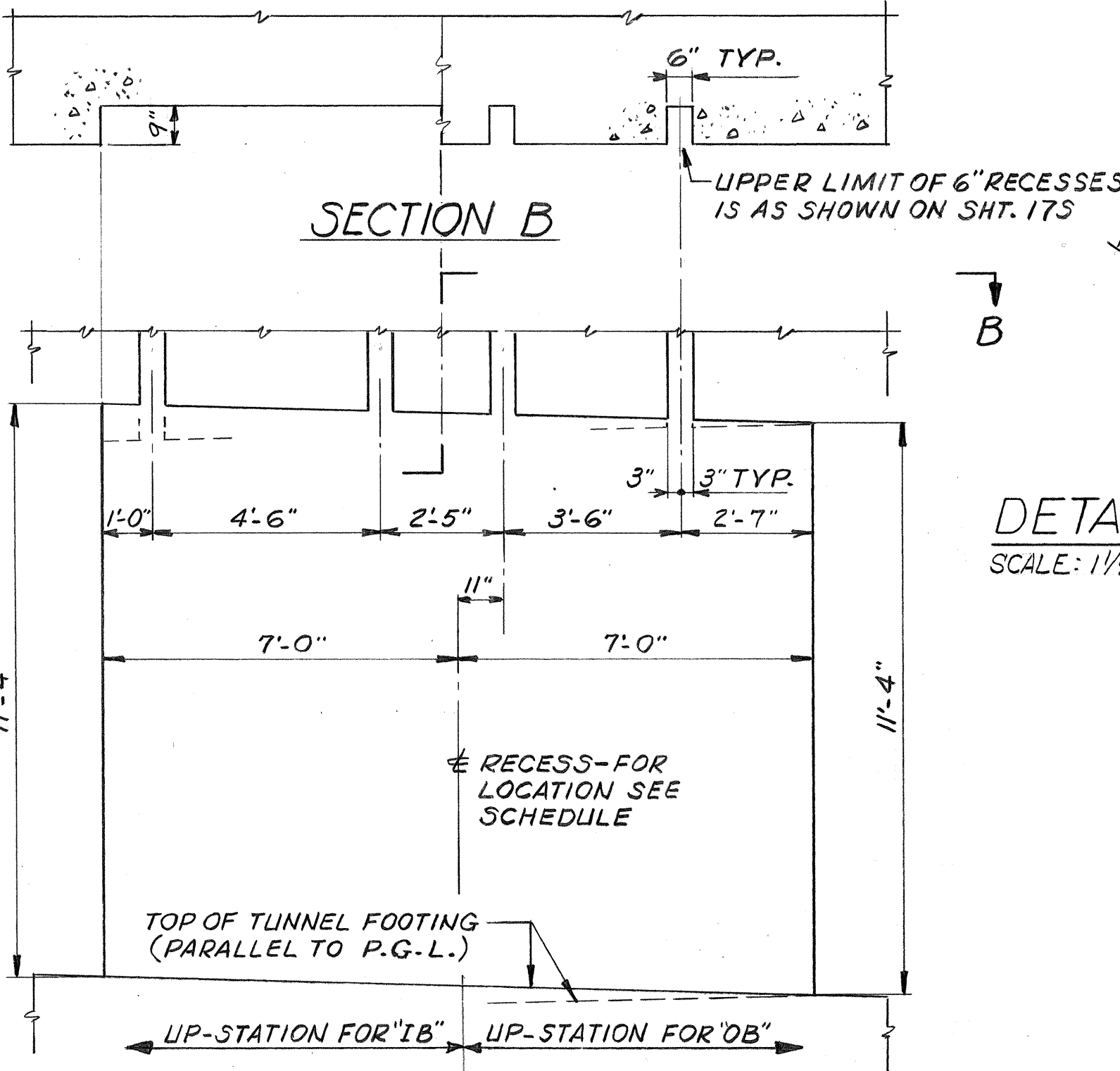
PLENUM DRAIN RECESS

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

DETAILS NOT SHOWN OR NOTED ARE SAME AS "SERVICE MODULE RECESS" ABOVE.

NOTE:

THE "Y" LINE IS ON THE SAME SIDE OF THE TUNNEL AS THE PROFILE GRADE LINE.



TERMINAL BOARD RECESS

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

1. DETAILS NOT SHOWN OR NOTED ARE SAME AS "SERVICE MODULE RECESS" ABOVE.

2. OUTBOUND TUNNEL SHOWN; INBOUND SIMILAR

SCHEDULE OF TUNNEL RECESSES

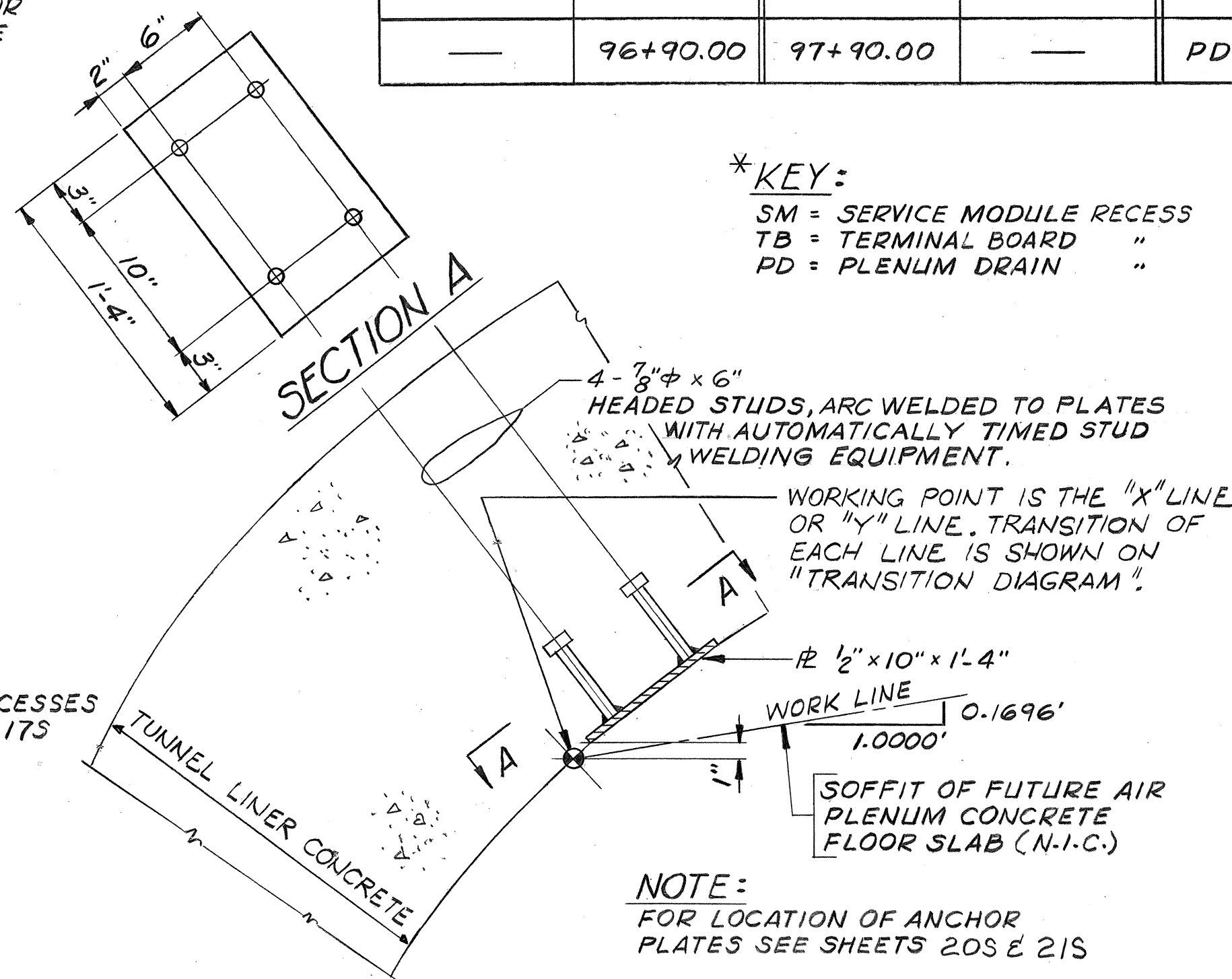
OB TUNNEL NORTH WALL	OB TUNNEL SOUTH WALL	IB TUNNEL NORTH WALL	IB TUNNEL SOUTH WALL	*TYPE
—	77+97.48	79+09.64	—	SM
79+44.43	80+91.38	82+02.26	80+55.95	SM
82+38.33	83+85.17	84+95.07	83+48.57	SM
85+31.80	86+78.42	87+88.32	86+41.69	SM
88+25.05	89+71.46	90+81.89	89+34.94	SM
91+17.77	92+64.08	93+75.79	92+28.84	SM
94+10.40	95+56.71	96+69.69	95+22.74	SM
96+61.67	—	—	97+62.33	TB
96+83.93	—	—	97+84.69	SM
—	96+90.00	97+90.00	—	PD

*KEY:

SM = SERVICE MODULE RECESS

TB = TERMINAL BOARD

PD = PLENUM DRAIN



DETAIL OF PLENUM FLOOR ANCHOR PLATE

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

ORIGINAL PLAN

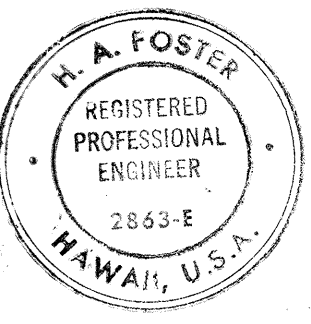
DATE: 11-17-72

DESIGNED BY: R. MITCHELL

TRACED BY: R. MITCHELL

CHECKED BY: R. MITCHELL

NOTED BY: R. MITCHELL



STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

RED HILL TUNNELS

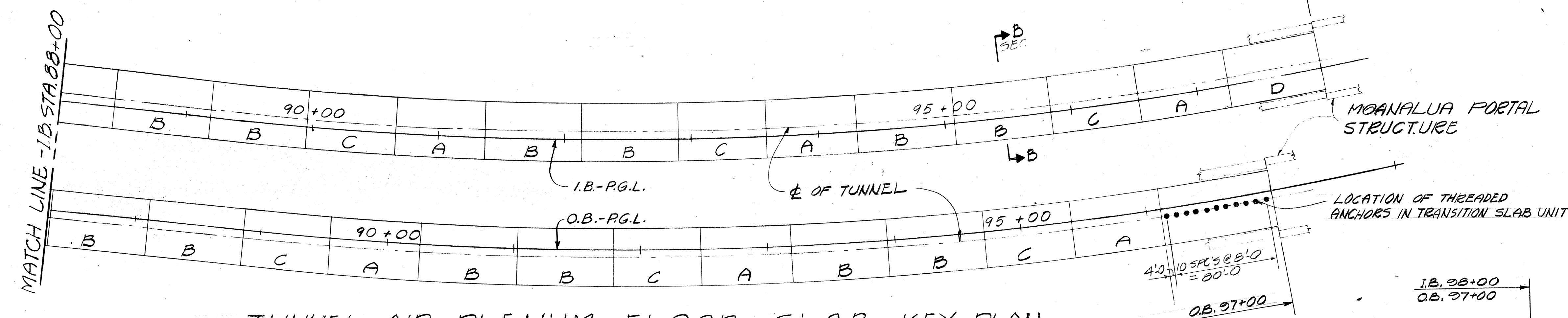
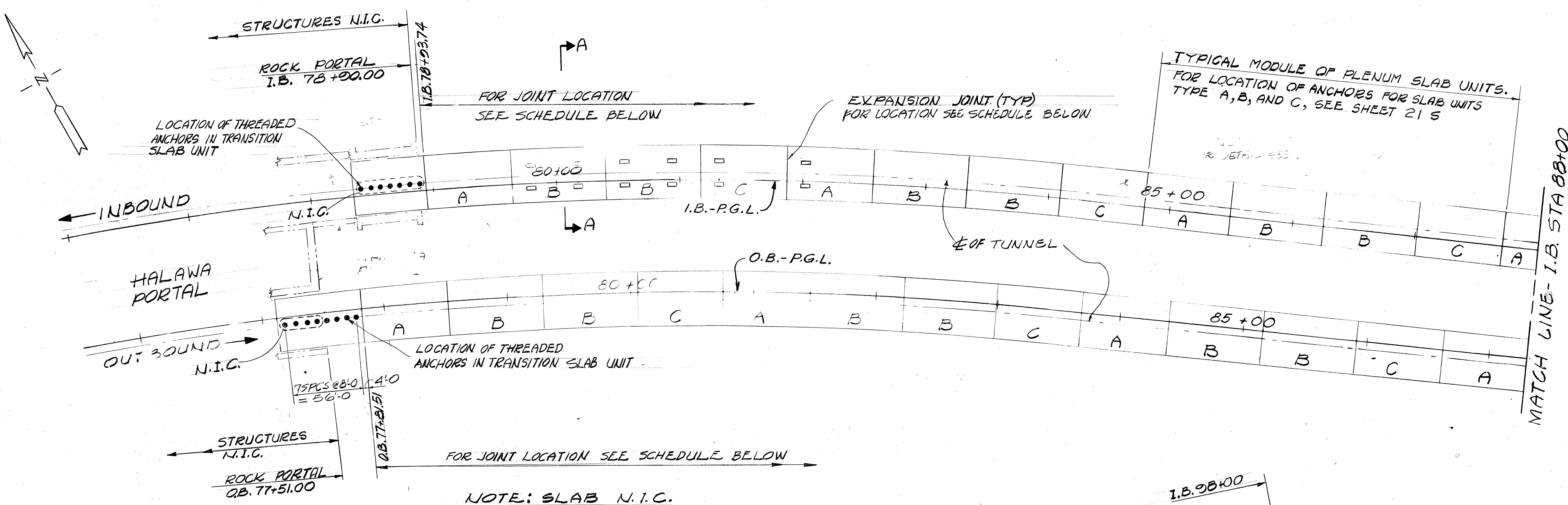
LOCATION & DETAILS OF PLENUM FLOOR ANCHOR PLATES AND TUNNEL RECESSES

P.A. 1. PROJECT NO. I-H3-1(25):3

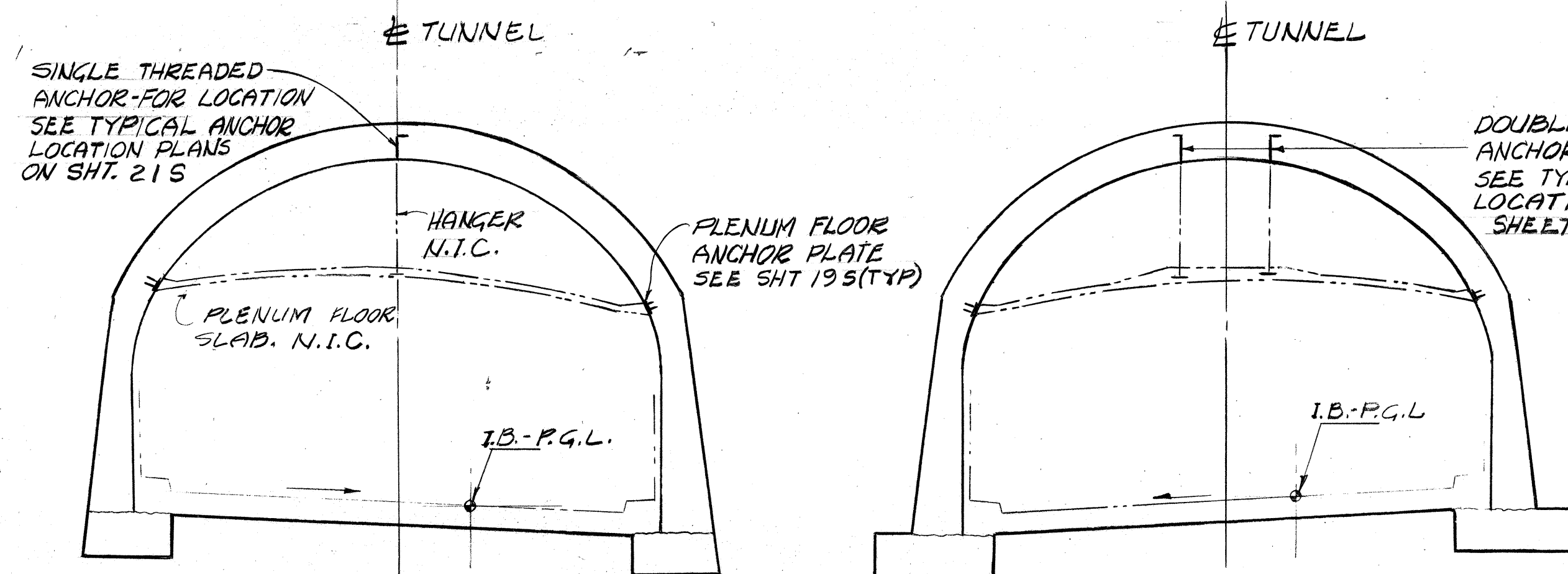
SCALE: AS NOTED DATE: JAN 31, 1975

SHEET No. 19S OF 23S SHEETS

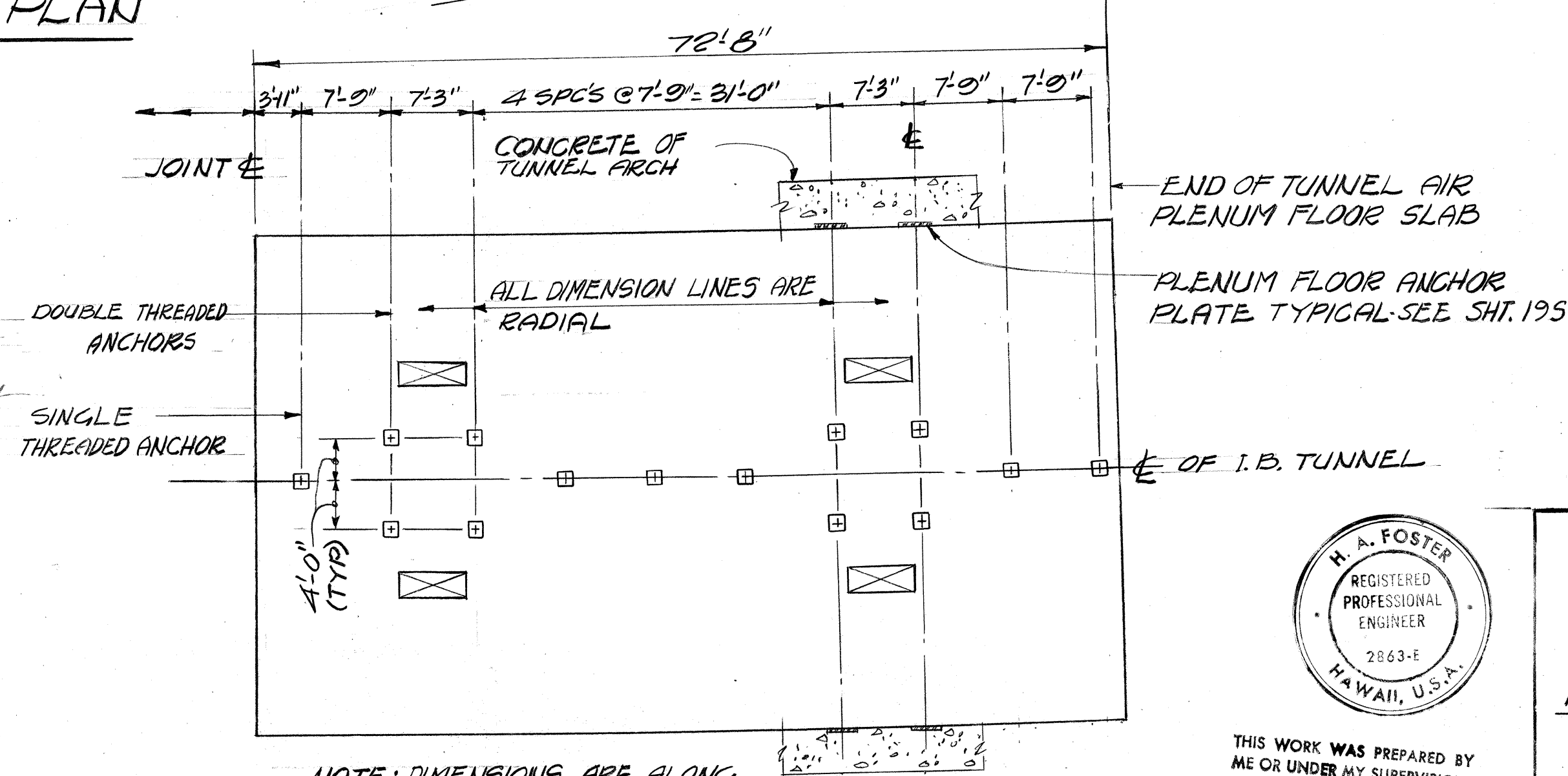
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-43-1(25):3	1975	24	111



TUNNEL AIR PLENUM FLOOR SLAB KEY PLAN
SCALE 1"=50'



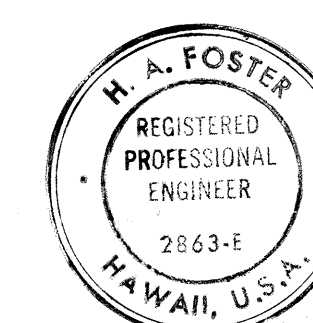
INBOUND SECTIONS SHOWN (OUTBOUND SIMILAR)
SCALE 3/32"=1'-0"



TYPICAL ANCHOR LOCATION PLAN-SLAB UNIT TYPE D
SCALE 3/32"=1'-0"

SCHEDULE OF
SLAB JOINT LOCATION

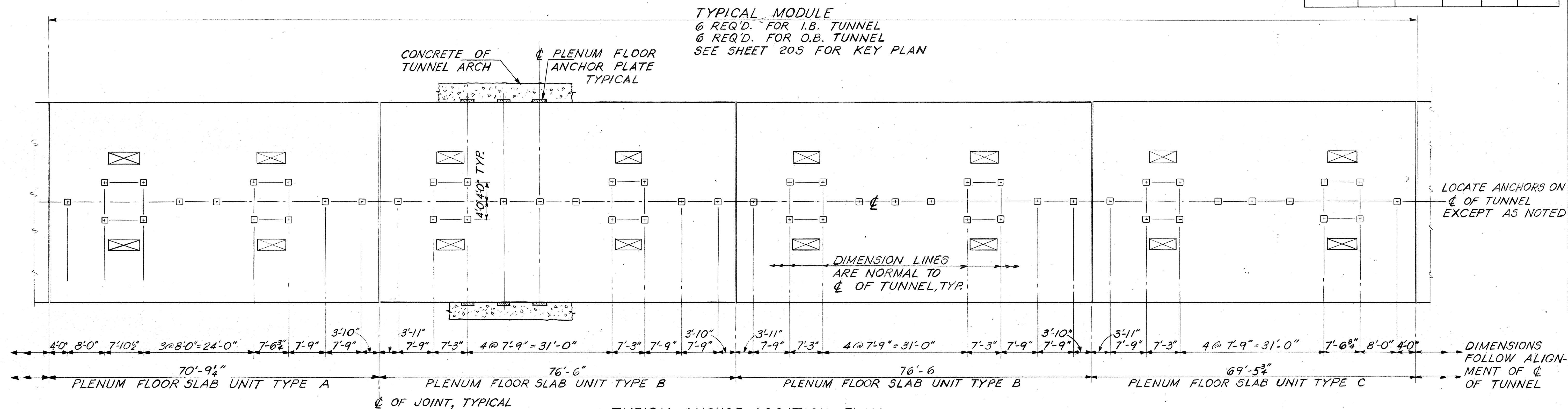
I.B. LINE STATION	O.B. LINE STATION
75+03.74	77+01.45
79+04.35	75+52.44
80+40.00	79+03.11
81+17.02	80+05.77
81+26.35	80+75.40
82+56.97	81+46.34
83+33.31	82+23.01
84+09.65	82+39.60
84+79.13	83+09.23
85+49.90	84+40.01
86+26.40	85+03.00
87+02.90	85+16.51
87+72.36	86+02.48
88+43.15	87+33.26
89+19.65	88+09.70
89+96.20	88+06.22
90+65.91	89+55.55
91+36.85	90+26.17
92+13.52	91+02.51
92+90.18	91+78.84
93+59.81	92+48.17
94+30.75	93+18.80
95+07.42	93+05.14
95+04.08	94+71.47
96+52.71	95+40.80
97+24.64	96+11.42



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
RED HILL TUNNELS
FUTURE AIR PLENUM FLOOR SLAB
ANCHOR LOCATION PLAN
SHEET 1
F.A.I. PROJECT NO I-43-1(25):3
SCALE: AS SHOWN DATE: JAN 31, 1975
SHEET No. 205 OF 235 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	[H3-1(25):3	1975	25	111

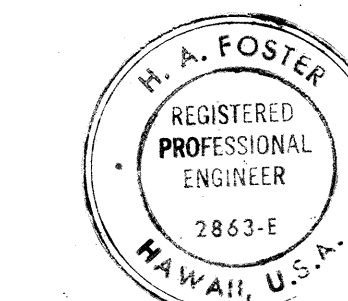
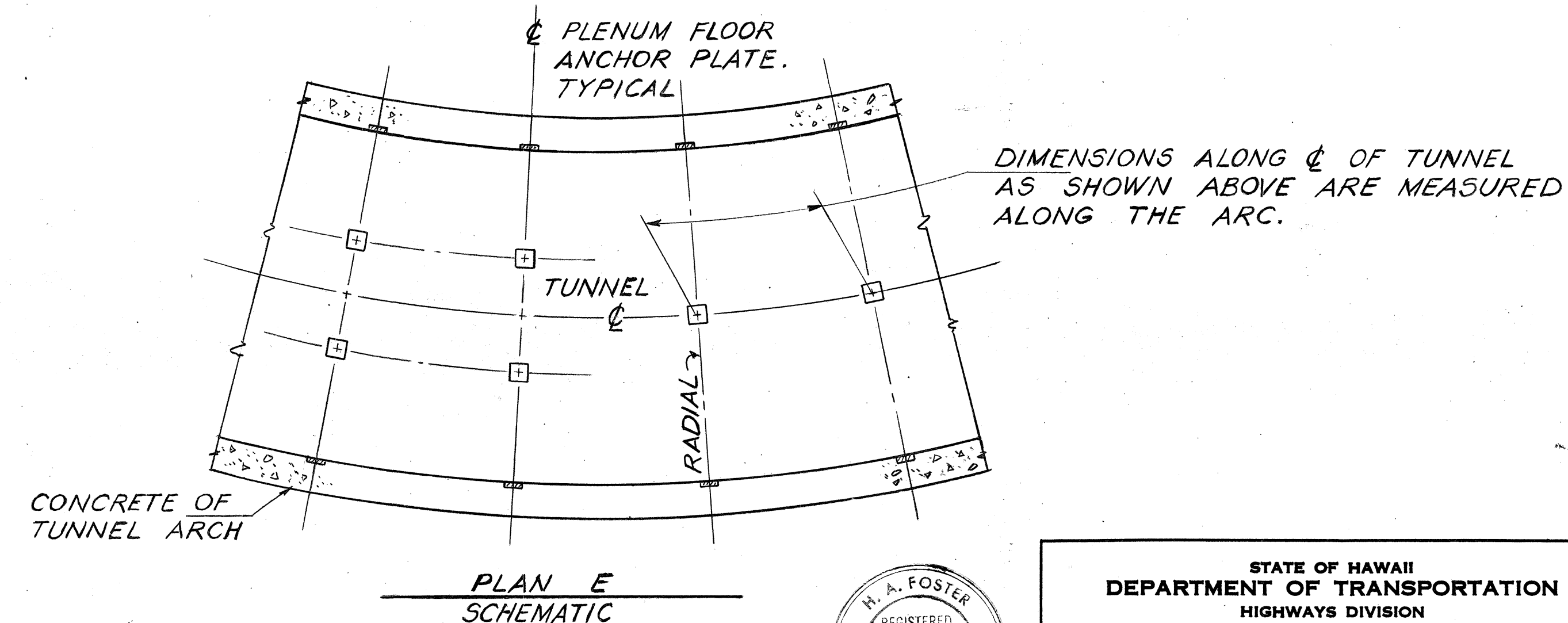


TYPICAL ANCHOR LOCATION PLAN

SCALE : 3/32" = 1'-0"
 TANGENT ALIGNMENT SHOWN
 CURVED ALIGNMENT SIMILAR (SEE PLAN E)

NOTES :

1. □ DENOTES PLAN LOCATION OF HANGER ANCHOR. ALIGN PLENUM FLOOR ANCHOR PLATES AT CORRESPONDING SPACING. SEE SHEET 195.
2. PLENUM FLOOR SLAB N.I.C.
3. FOR LOCATION OF JOINTS SEE SHEET 205.
4. FOR HANGER ANCHOR CAPACITY SEE SHEETS 175 AND 185.
5. DISTANCE OF PLENUM FLOOR ANCHOR PLATES ABOVE PROFILE GRADE LINE VARIES. SEE DIAGRAMS ON SHEET 195.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

H. A. Foster

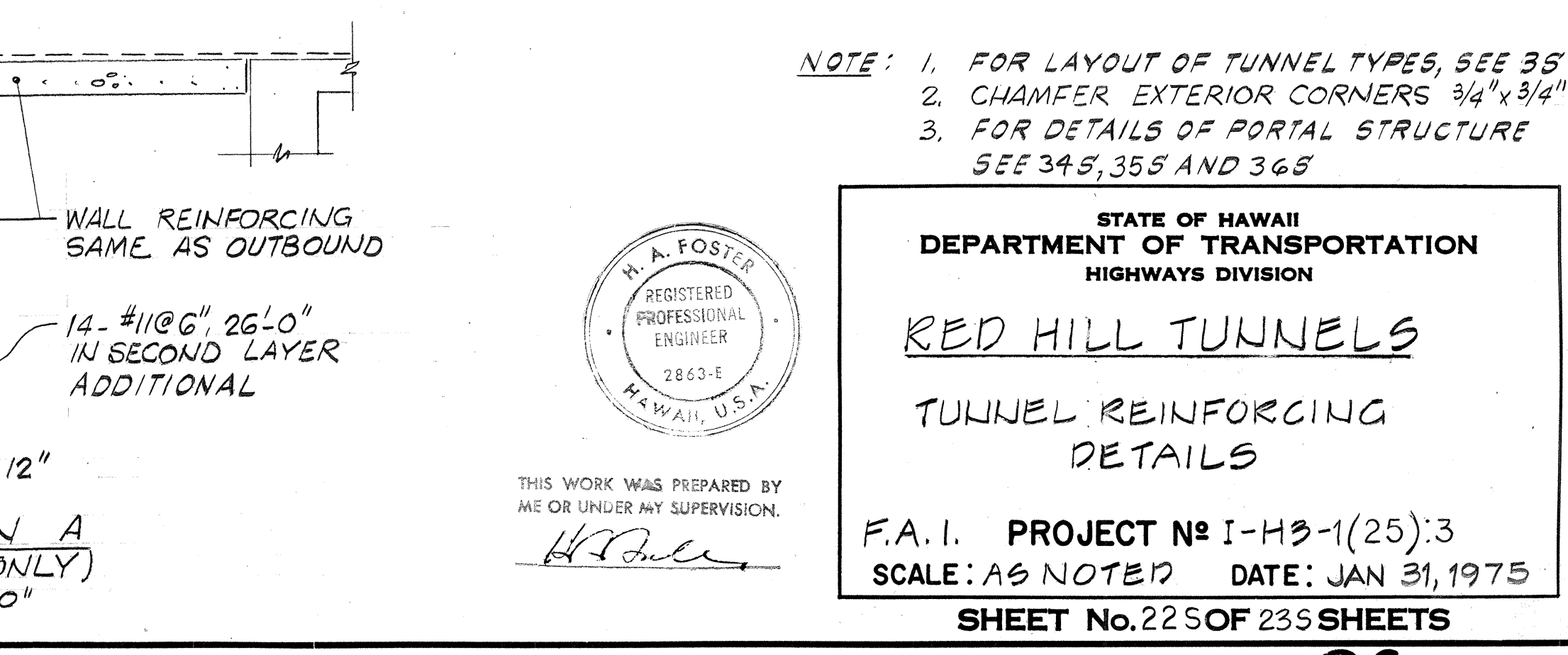
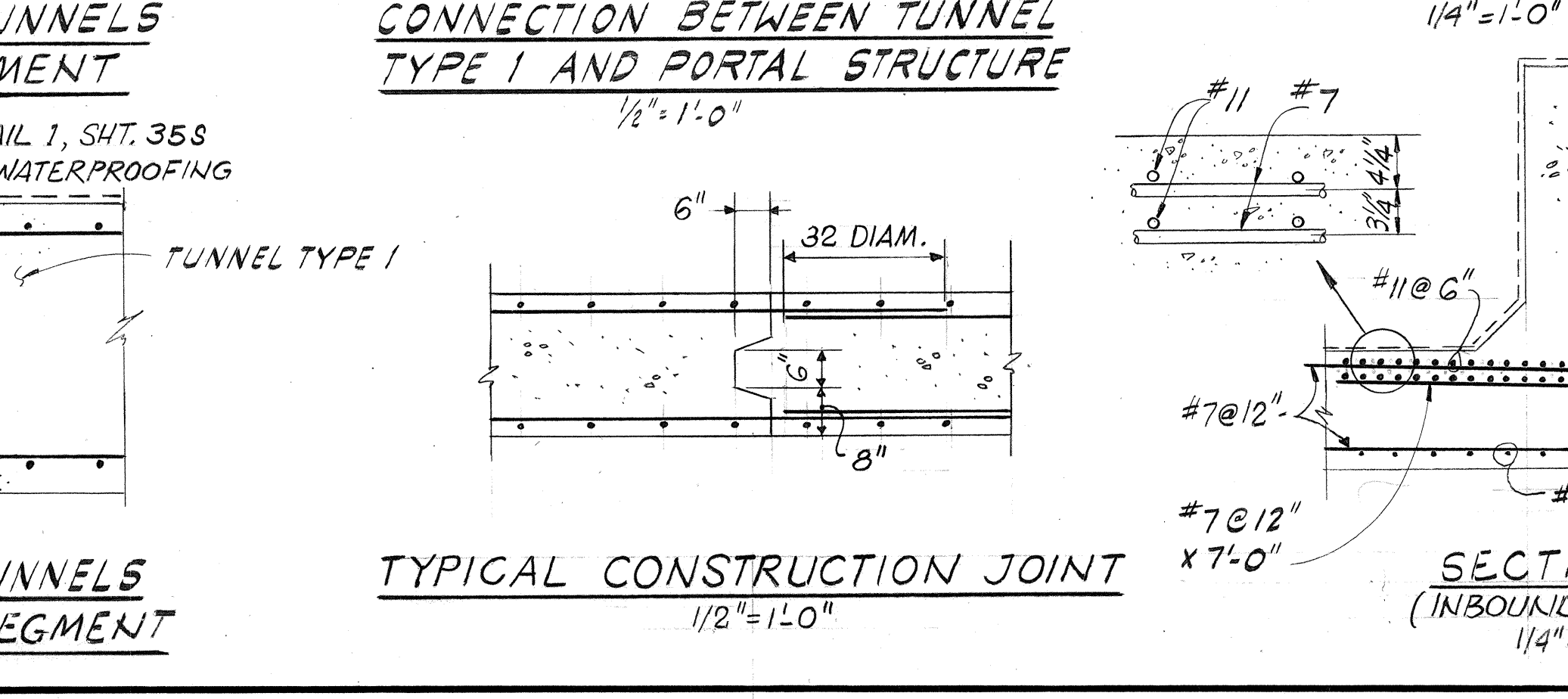
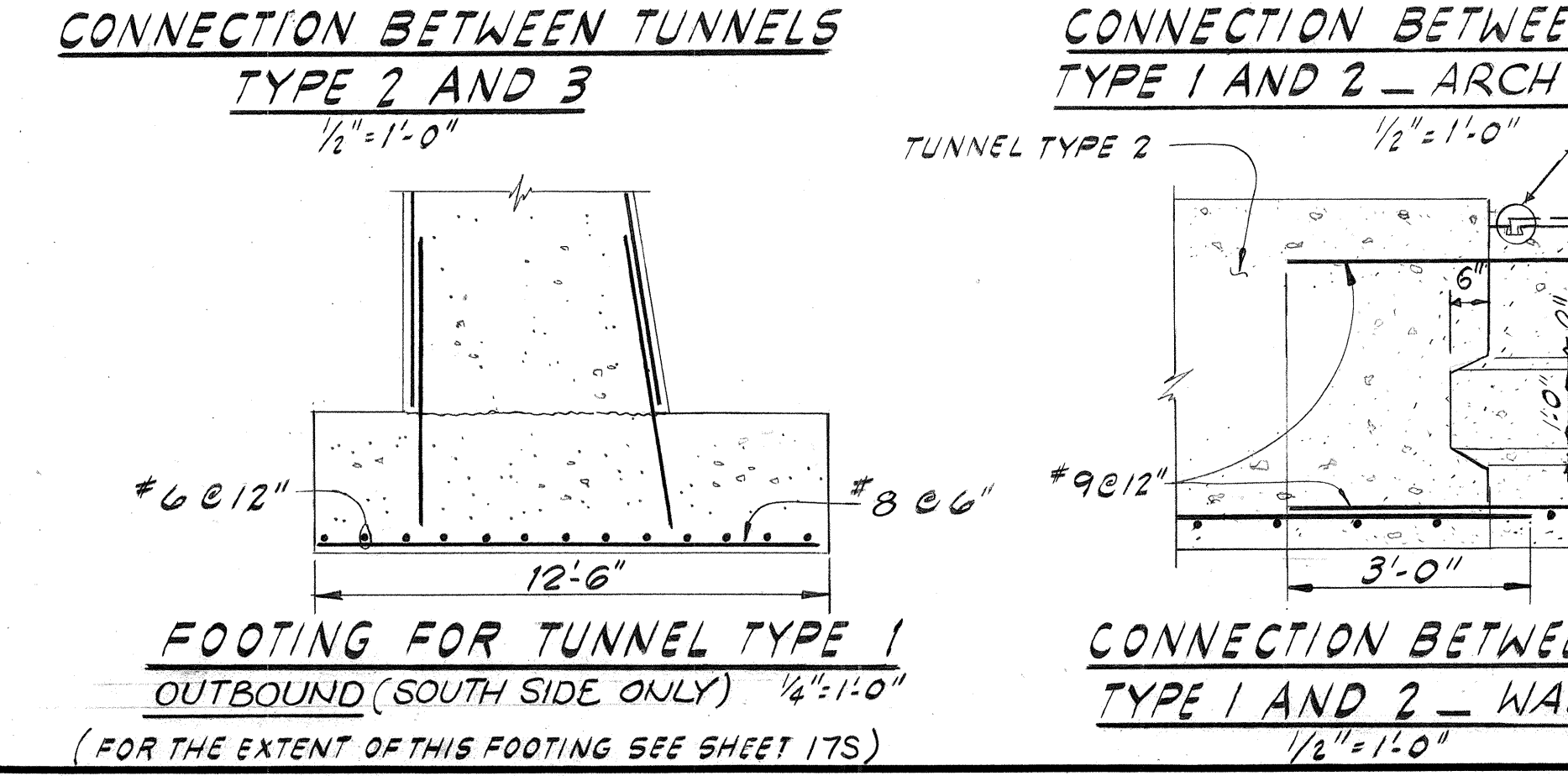
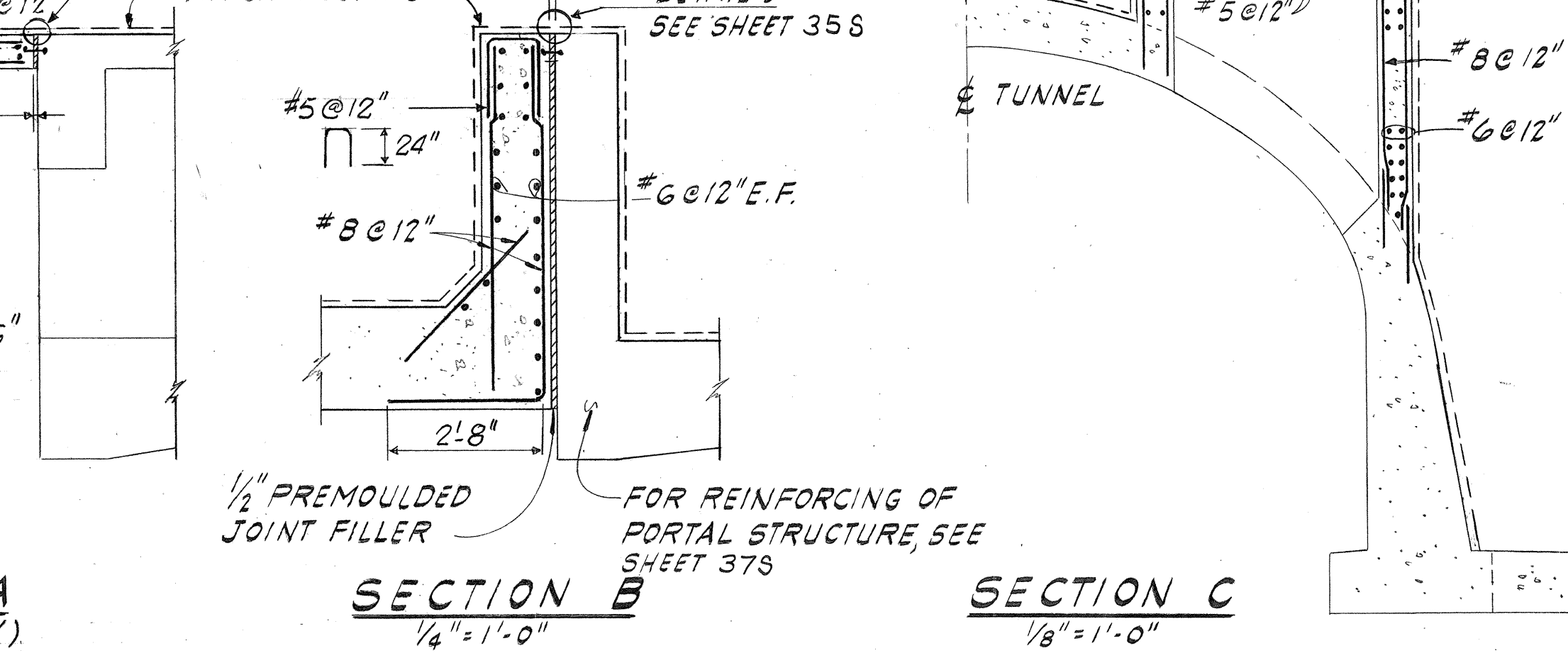
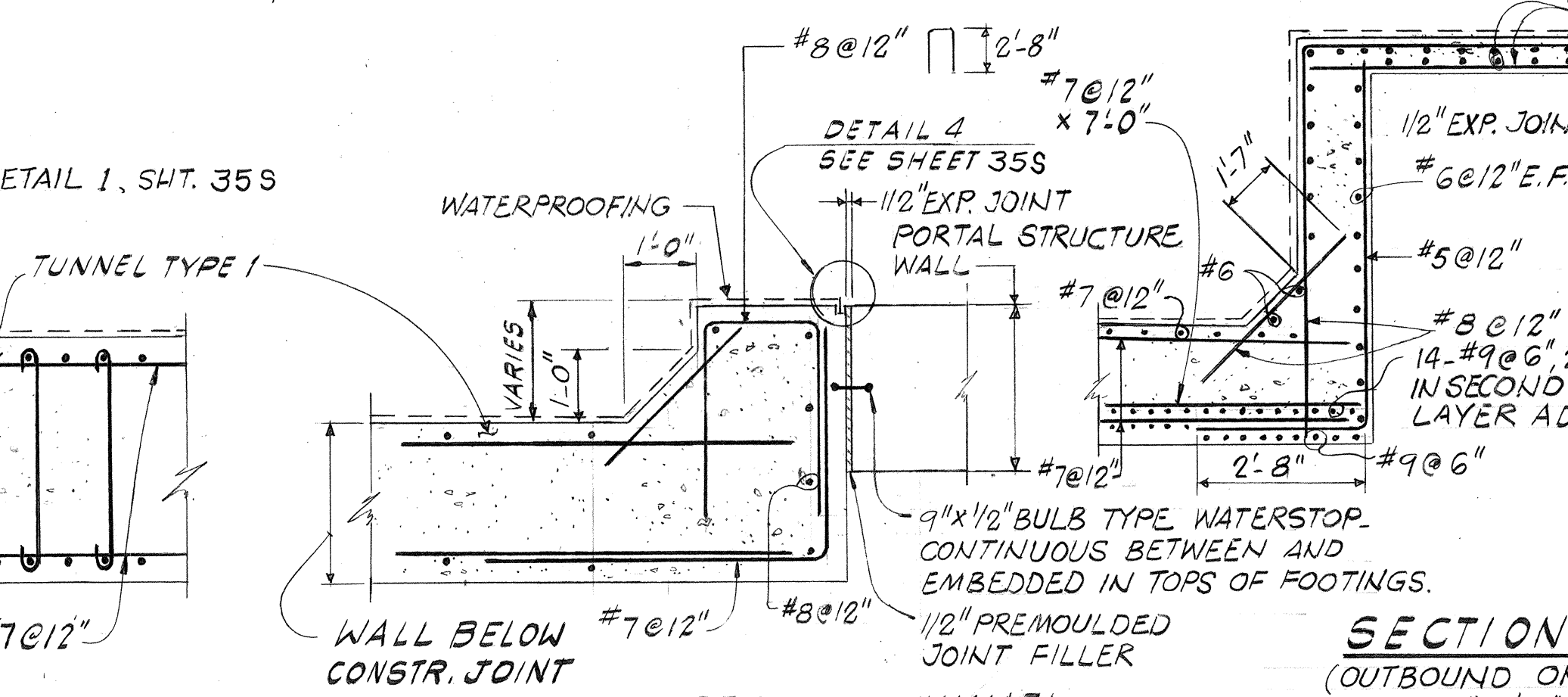
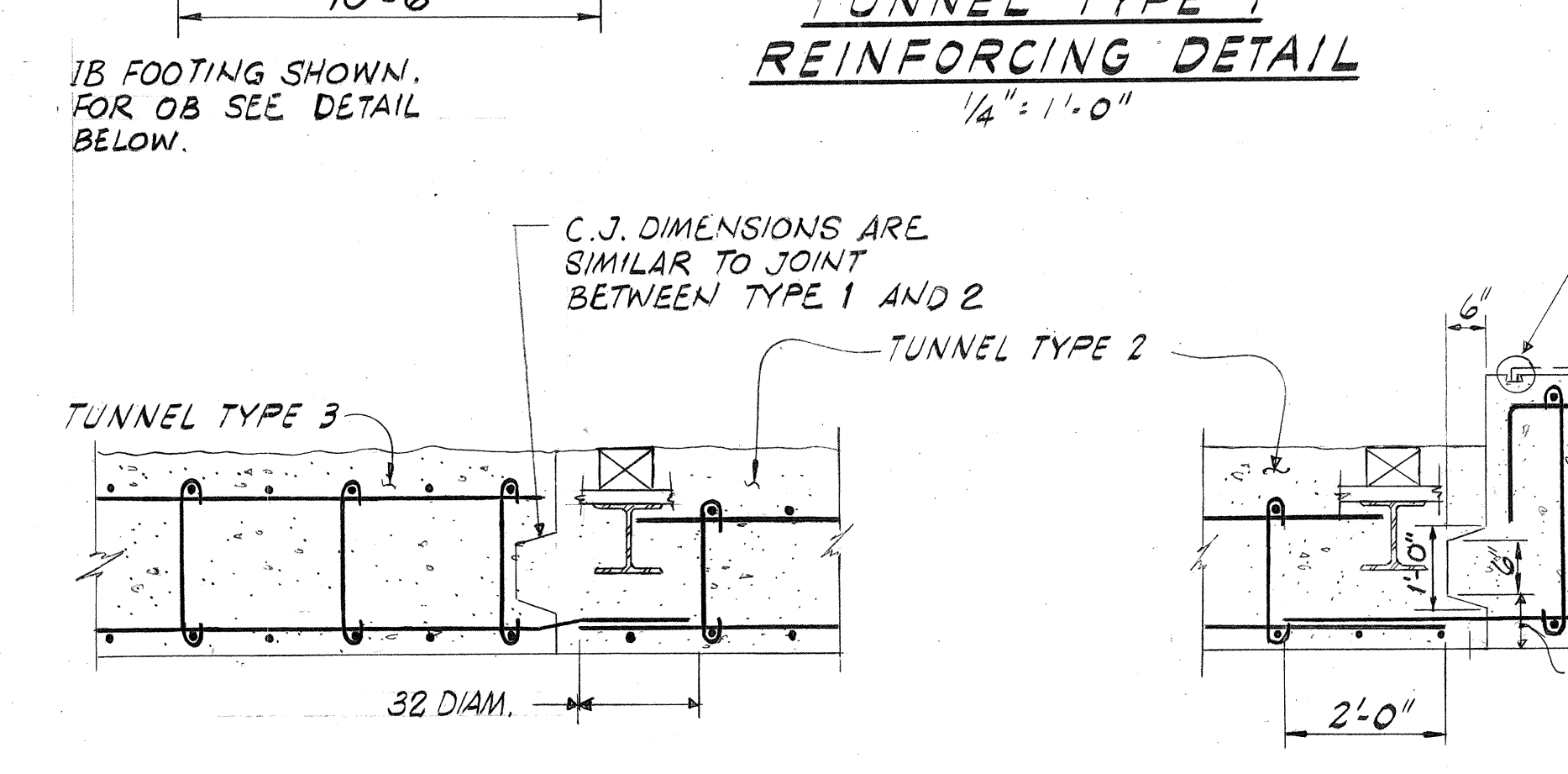
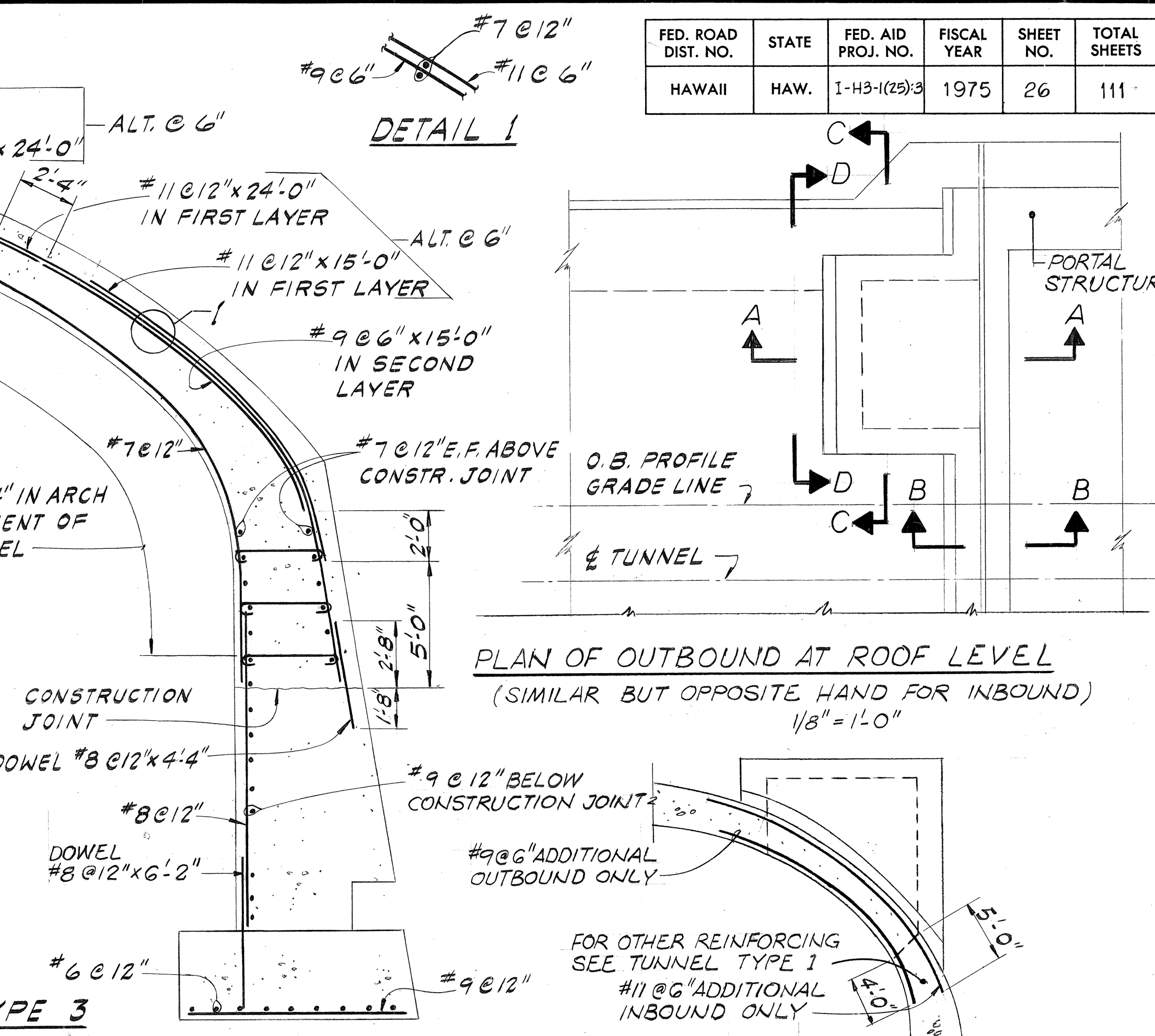
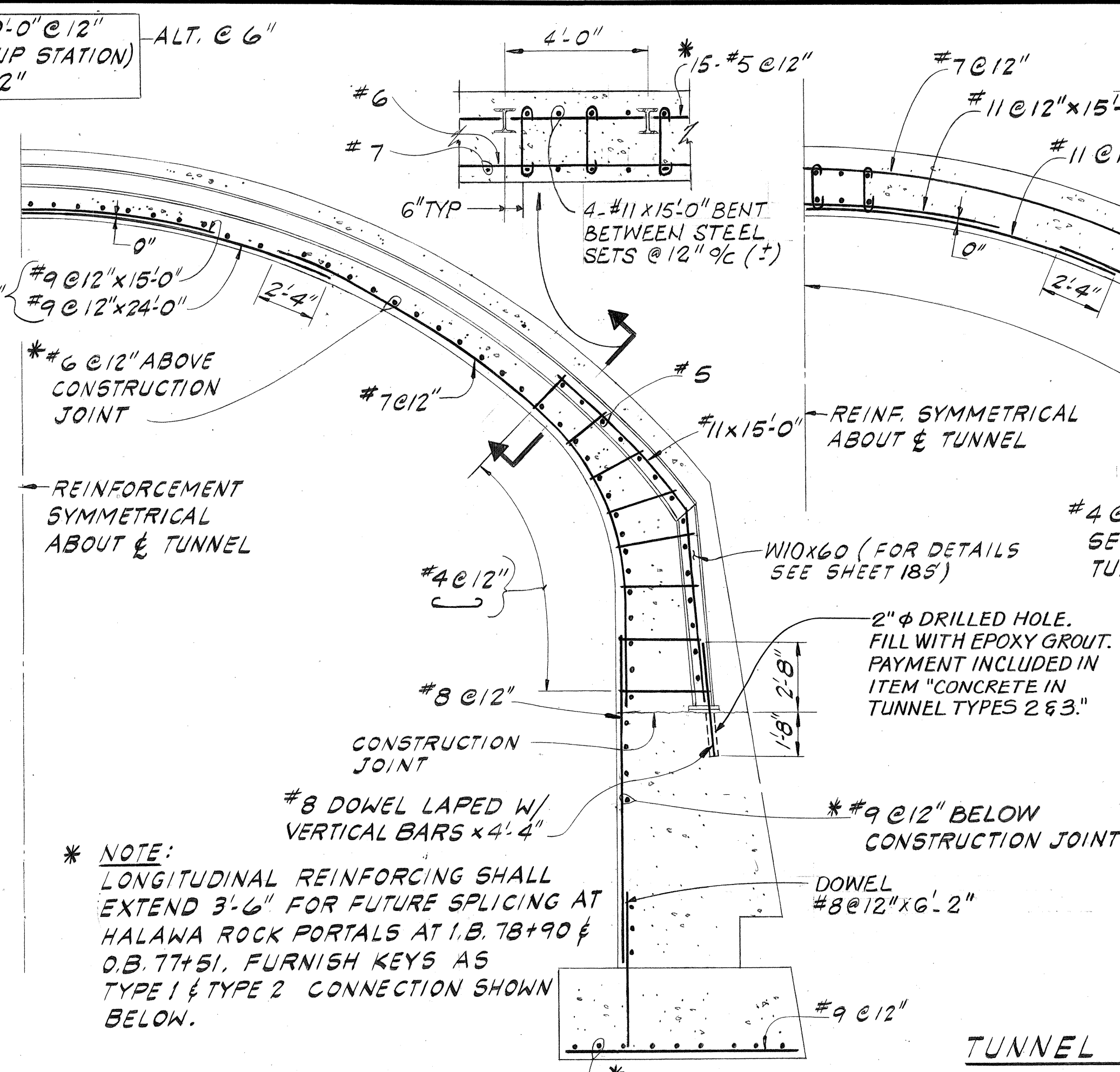
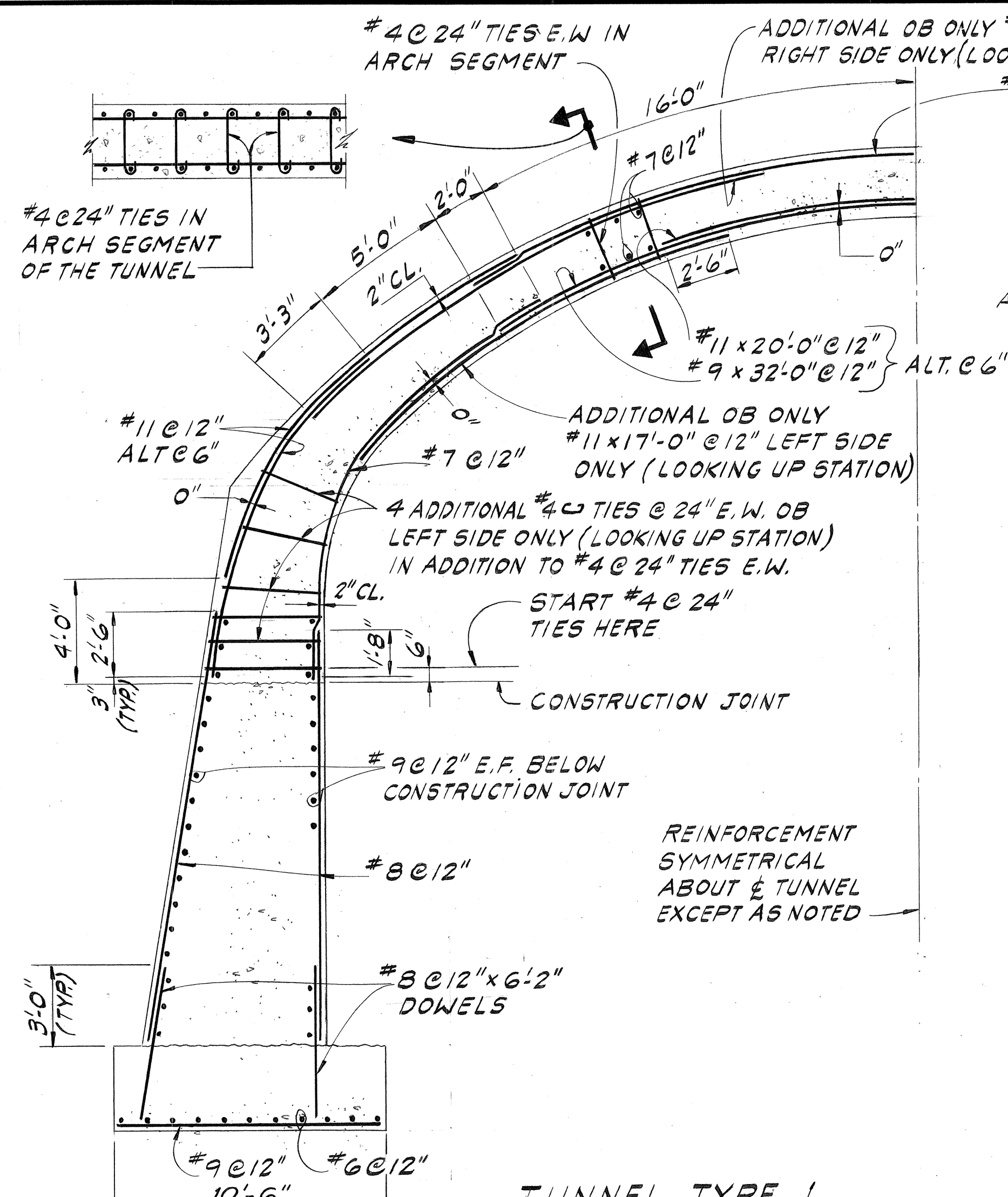
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
RED HILL TUNNELS
 FUTURE AIR PLENUM FLOOR SLAB
 ANCHOR LOCATION PLAN
 SHEET 2

F.A.I. PROJECT N° I-H3-1(25):3
 SCALE: AS SHOWN DATE: JAN 31, 1975

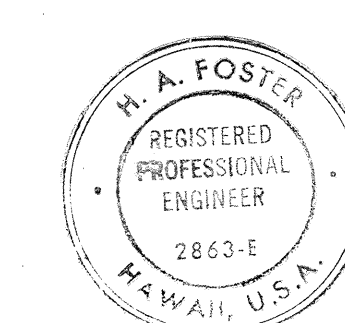
SHEET No. 215 OF 235 SHEETS

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	11-72
DRAWN BY	F. A. ZEPEDA
DESIGNED BY	11-72
CHECKED BY	F. E. MITCHELL
NOTE BOOK	
No.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(25)3	1975	26	111



NOTE: 1. FOR LAYOUT OF TUNNEL TYPES, SEE 35
2. CHAMFER EXTERIOR CORNERS 3/4" x 3/4"
3. FOR DETAILS OF PORTAL STRUCTURE SEE 345, 355 AND 365



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
RED HILL TUNNELS
TUNNEL REINFORCING DETAILS
F.A.I. PROJECT NO. I-H3-1(25)3
SCALE: AS NOTED DATE: JAN 31, 1975
SHEET No. 22 OF 235 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(25):3	1975	27	111

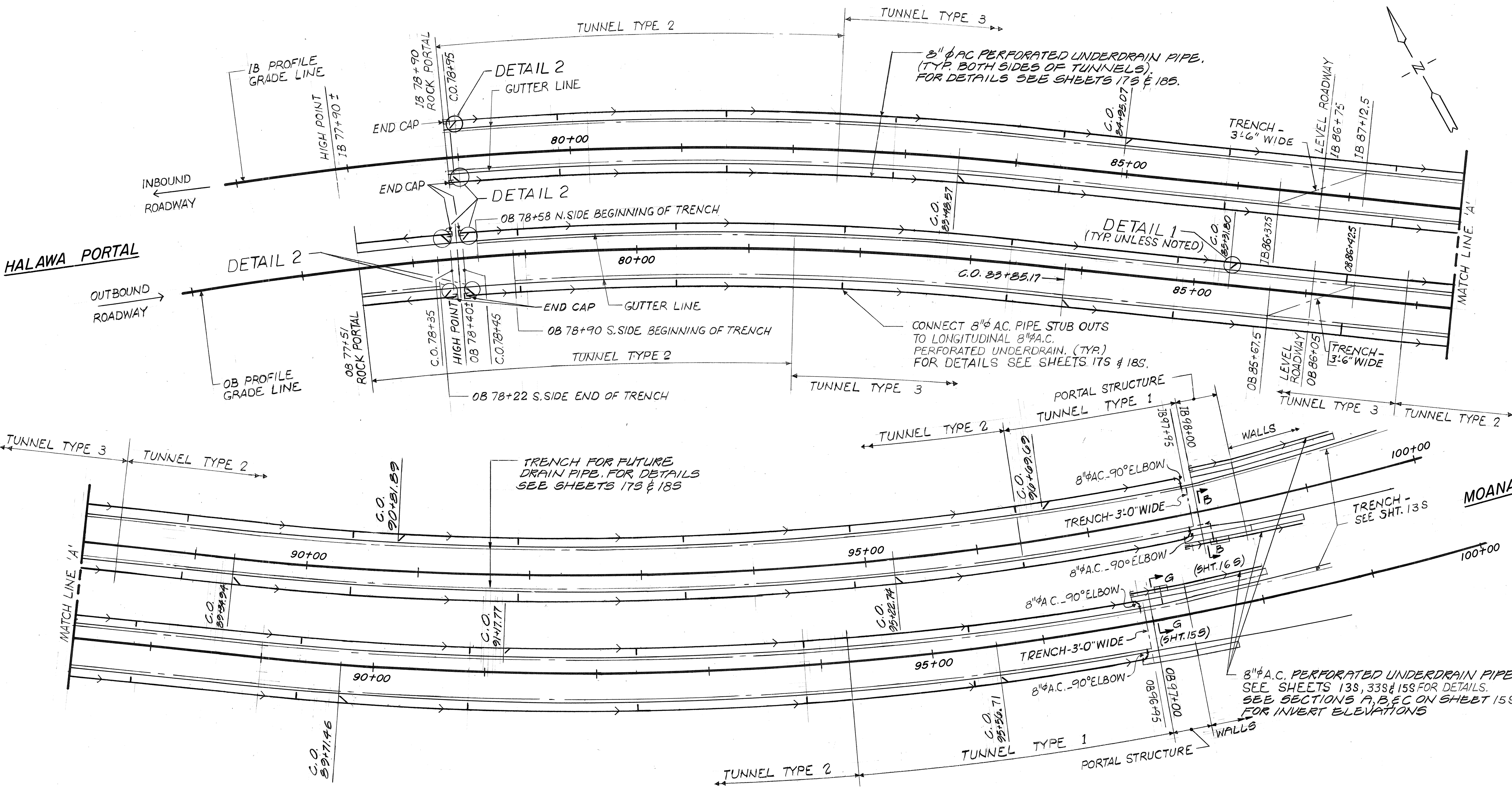
SCHEDULE FOR 8" A.C. PIPE

STUB-OUTS

INBOUND ROADWAY OUTBOUND ROADWAY

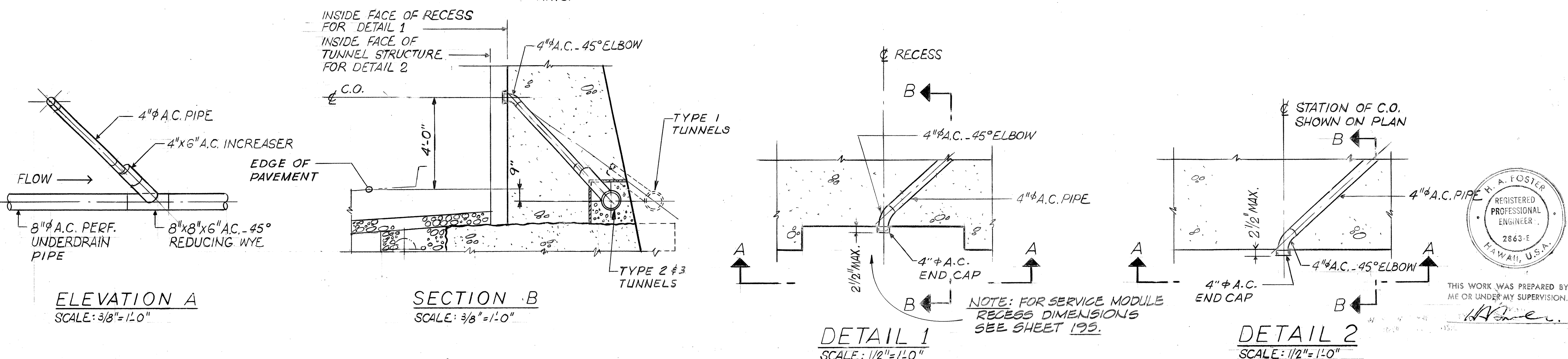
STATION	STATION
79+90.0	78+95.0
81+40.0	80+35.0
82+90.0	81+85.0
84+40.0	83+35.0
85+90.0	84+85.0
87+40.0	86+35.0
88+90.0	87+85.0
90+40.0	89+35.0
91+90.0	90+85.0
93+40.0	92+35.0
94+90.0	93+85.0
96+40.0	95+35.0
97+95.0	96+95.0

NOTE:
STATIONS OF STUB-OUTS SHOWN
APPLY TO EACH SIDE OF ROADWAY.



TUNNEL DRAINAGE PLAN
N.T.S.

- LEGEND:
- FLOW DIRECTION
 - CLEAN OUT
 - 8" A.C. PERFORATED UNDERDRAIN PIPE
 - STUB OUT FOR FUTURE CONN.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

RED HILL TUNNELS

TUNNEL DRAINAGE
PLAN & DETAILS
F.A.I. PROJECT NO I-H3-1(25):3
SCALE: AS NOTED DATE: JAN 31, 1975
SHEET No.235 OF 235 SHEETS

SURVEY PLOTTED BY: [Signature]
 DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 DATE: 1/27/75
 ORIGINAL PLAN: 1/27/75
 NOTE BOOK: 1/27/75
 NO. 1/27/75