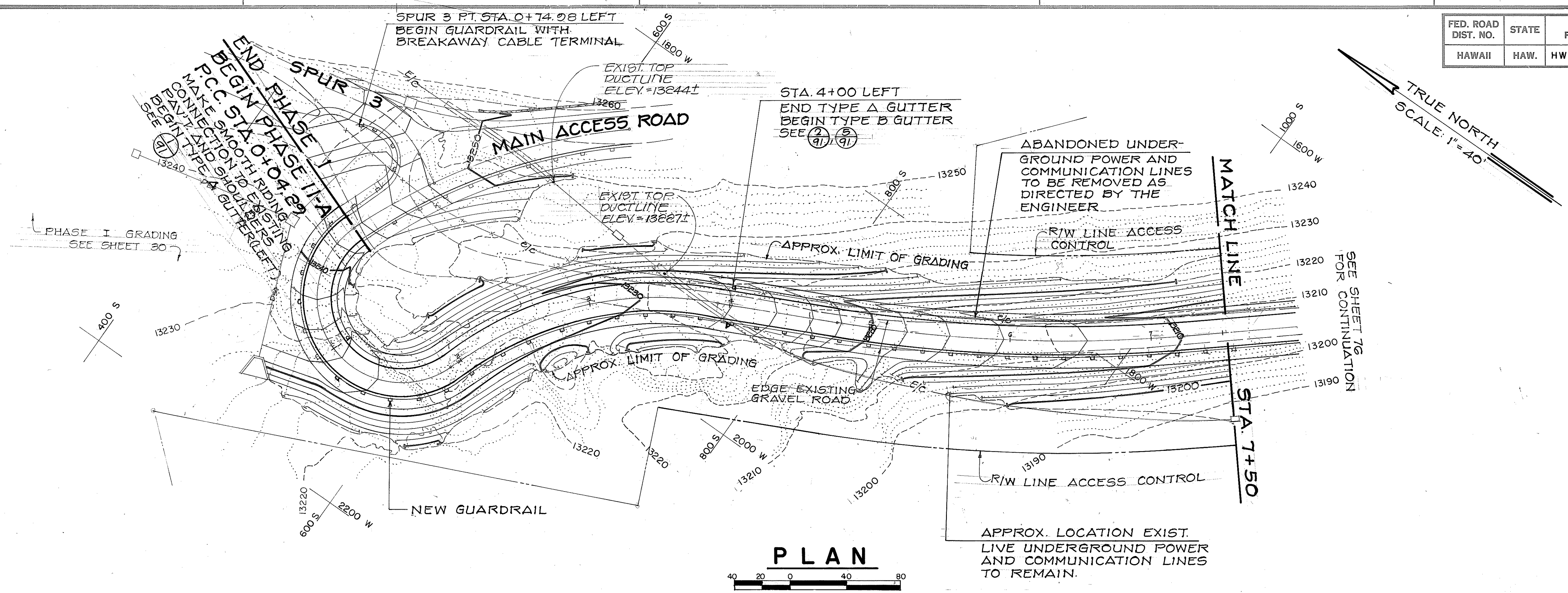
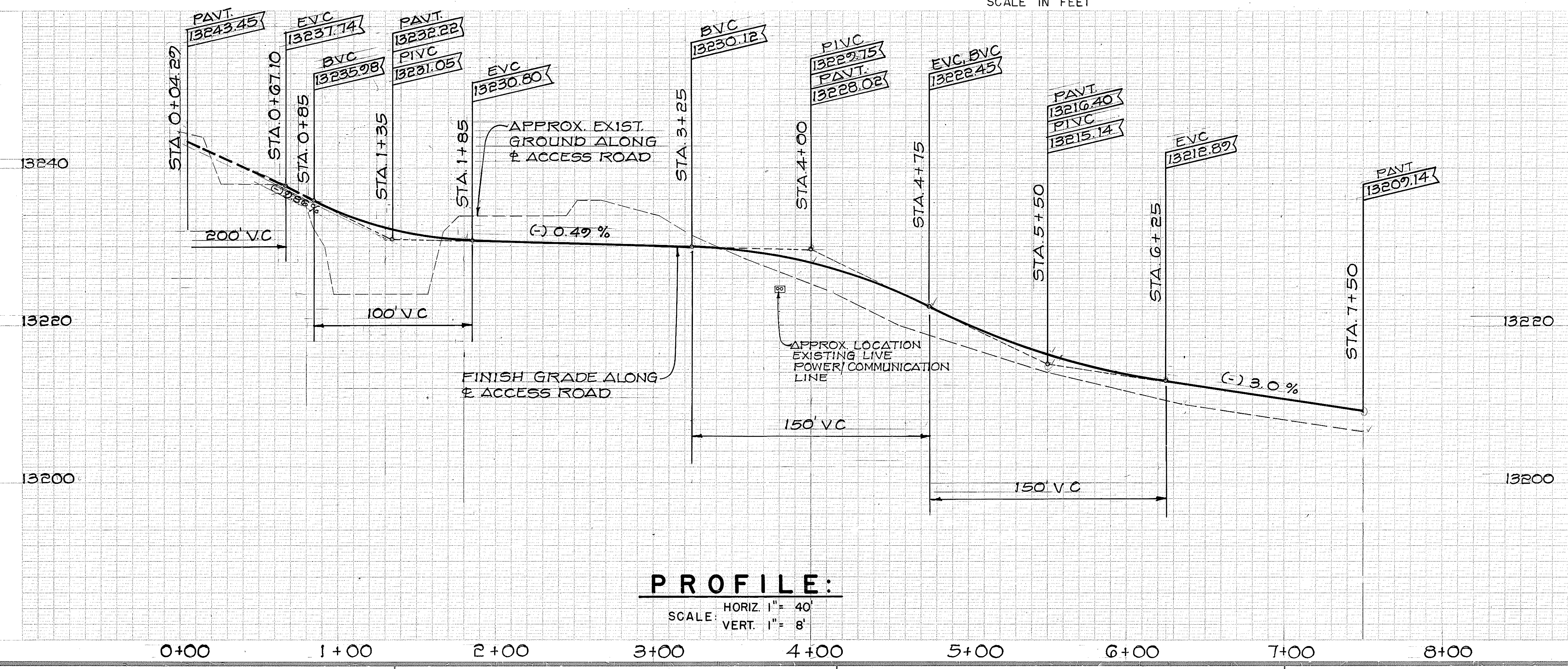


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-86	1987	75	115

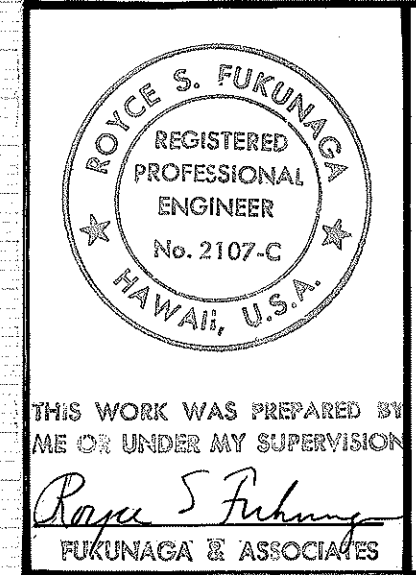


PLAN
SCALE IN FEET
0 20 40 80



PROFILE:
SCALE: HORIZ. 1"= 40'
VERT. 1"= 8'

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NO.	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

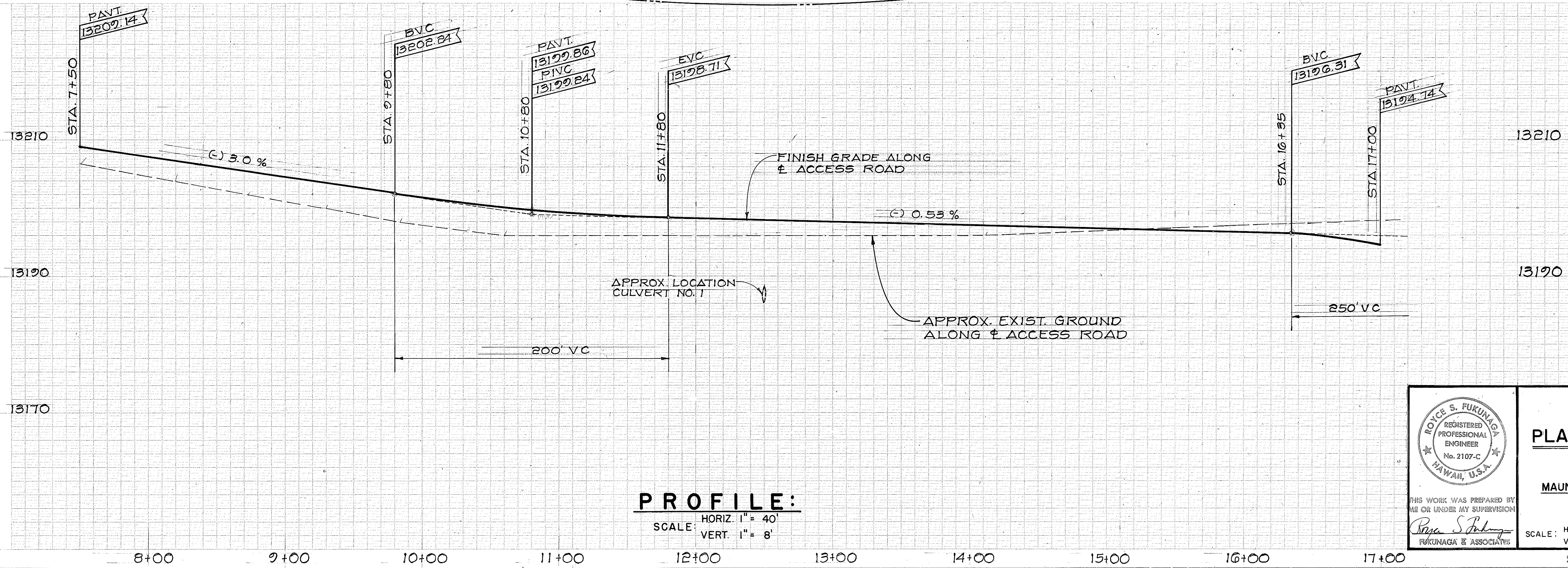
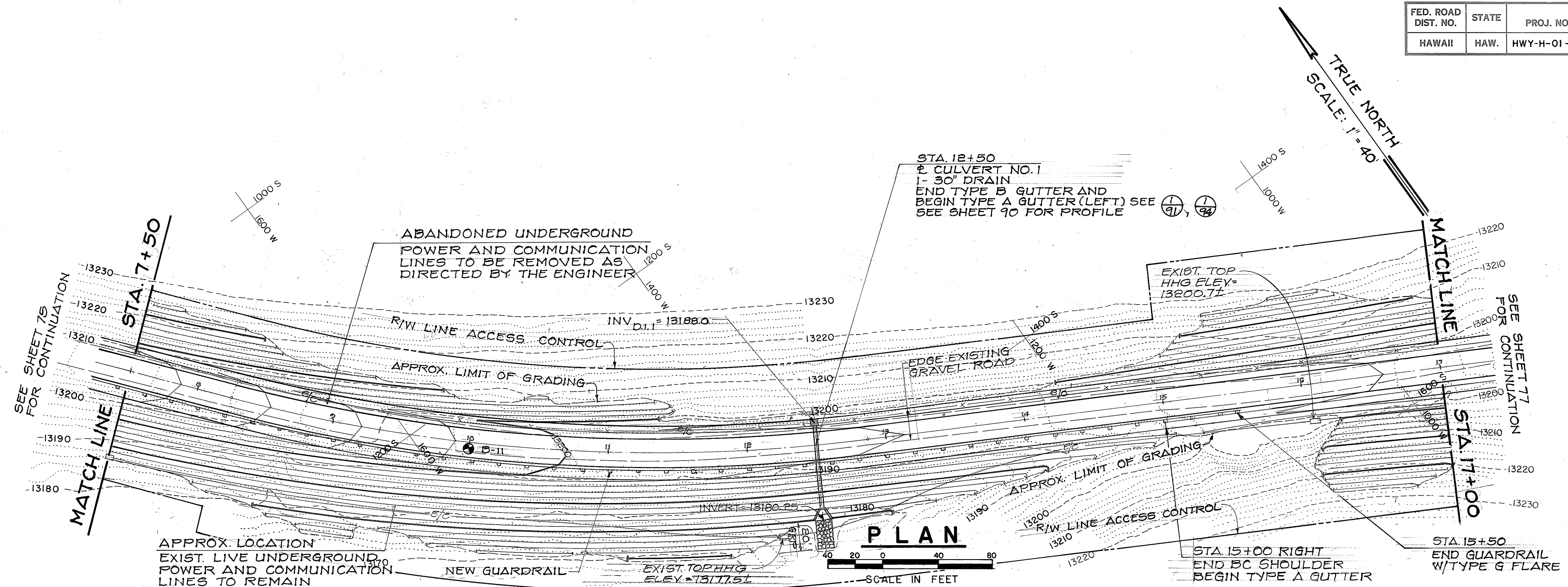
PLAN, PROFILE AND GRADING

MAIN ACCESS ROAD
STA. 0+04.29 TO STA. 7+50
MAUNA KEA OBSERVATORY ACCESS ROAD
PHASE II-A
PROJECT NO. HWY-H-01-86

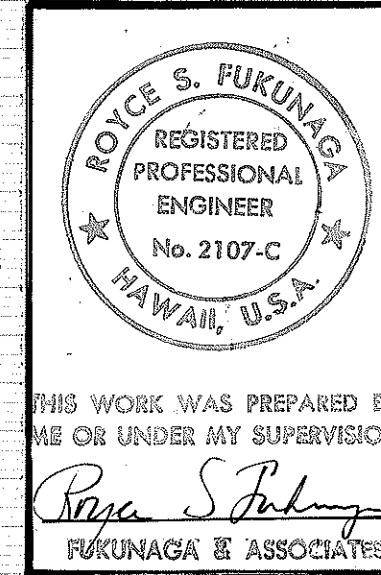
SCALE: HORIZ. 1"= 40'
VERT. 1"= 8'

SHEET No. 1 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-86	1987	76	115



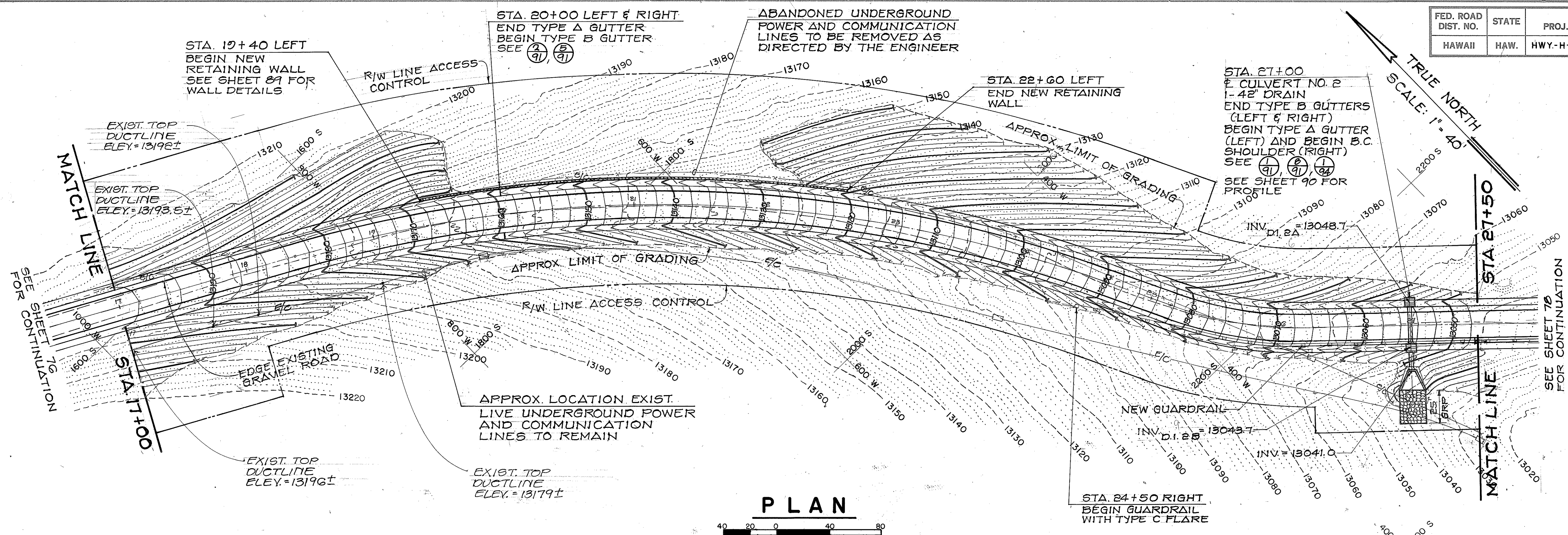
PROFILE:
SCALE: HORIZ. 1" = 40'
VERT. 1" = 8'



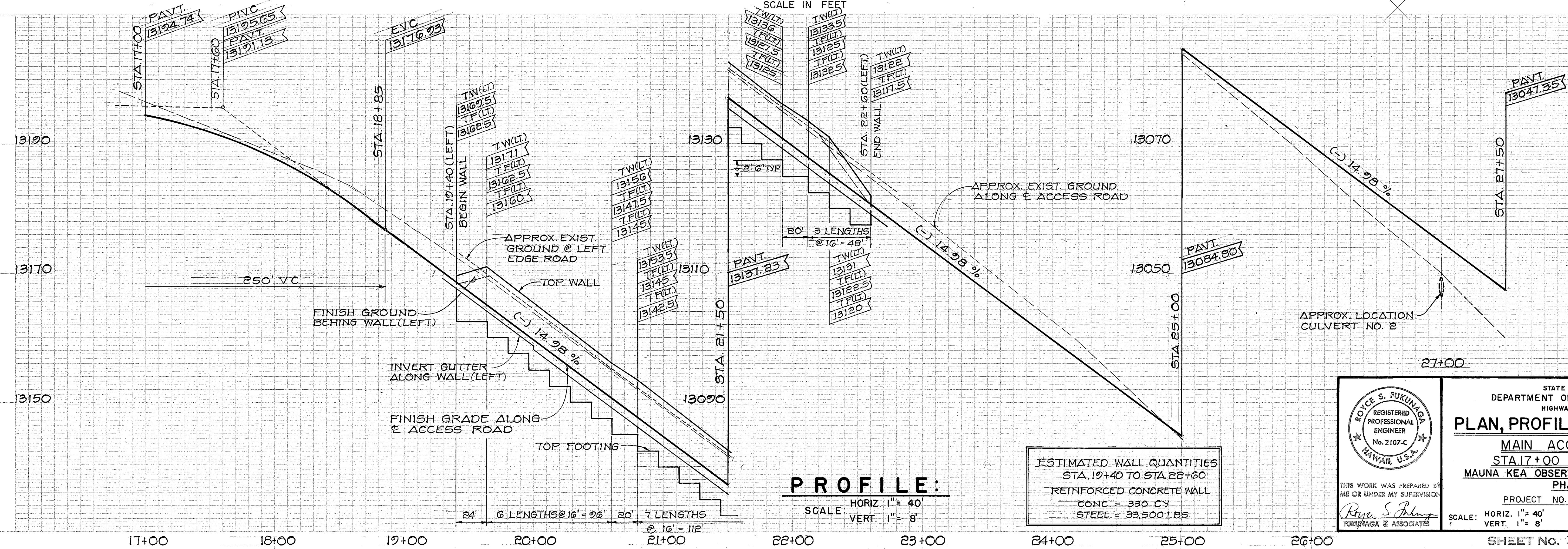
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PLAN, PROFILE AND GRADING
MAIN ACCESS ROAD
STA. 7+50 TO STA. 17+00
MAUNA KEA OBSERVATORY ACCESS ROAD
PHASE II-A
PROJECT NO. HWY-H-01-86
SCALE: HORIZ. 1" = 40'
VERT. 1" = 8'
SHEET NO. 2 OF 11 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
TRACED BY		
DESIGNED BY		
QUANTITIES BY		
CHECKED BY		
NO.		

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY.-H-01-86	1987	77	115



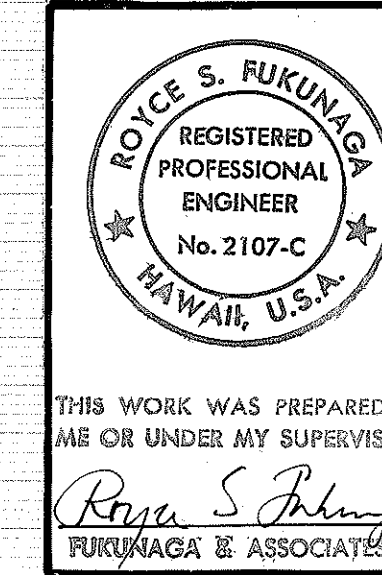
PLAN



PROFILE:

SCALE: HORIZ. 1" = 40'
VERT. 1" = 8'

ESTIMATED WALL QUANTITIES
STA. 17+40 TO STA. 22+60
REINFORCED CONCRETE WALL
CONC. = 330 CY
STEEL = 33,500 LBS.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN, PROFILE AND GRADING

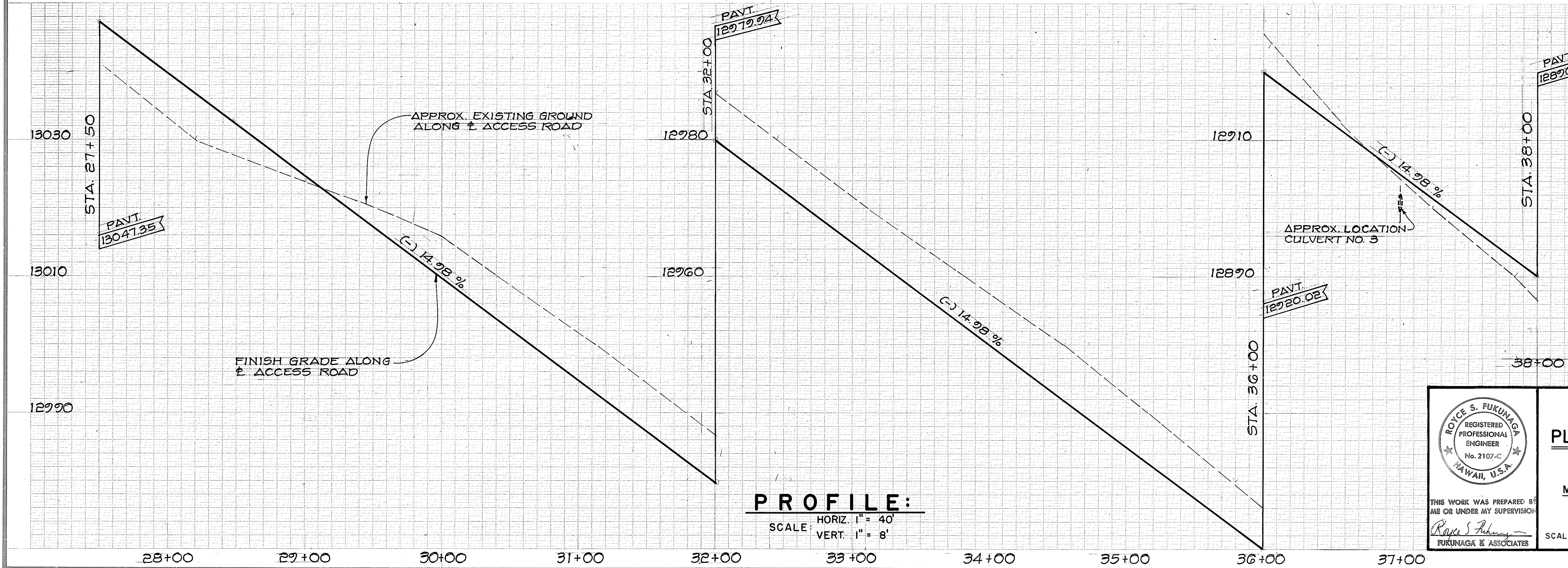
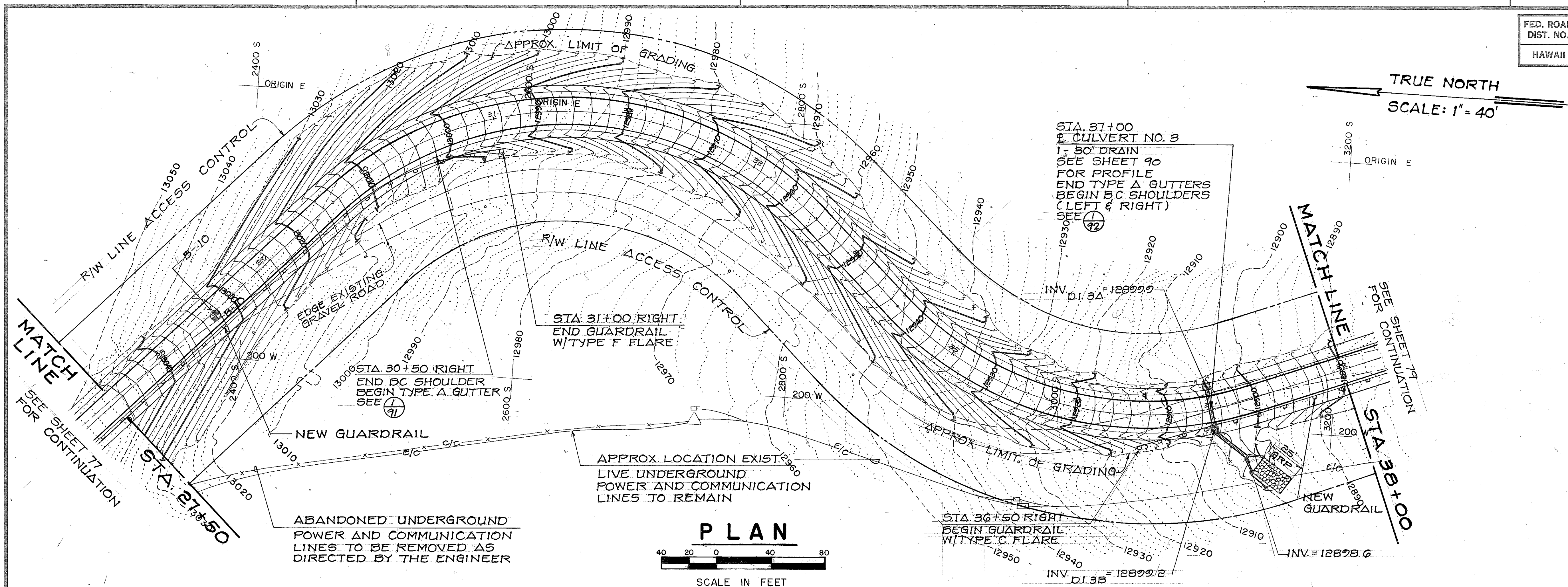
MAIN ACCESS ROAD
STA. 17+00 TO STA. 27+50
MAUNA KEA OBSERVATORY ACCESS ROAD
PHASE II-A

PROJECT NO. HWY.-H-01-86

SCALE: HORIZ. 1" = 40'
VERT. 1" = 8'

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

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-86	1987	78	115



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	
	APPROVED BY	

ROYCE S. FUKUNAGA
REGISTERED PROFESSIONAL ENGINEER
No. 2107-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Royce S. Fukunaga
FUKUNAGA & ASSOCIATES

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN, PROFILE AND GRADING

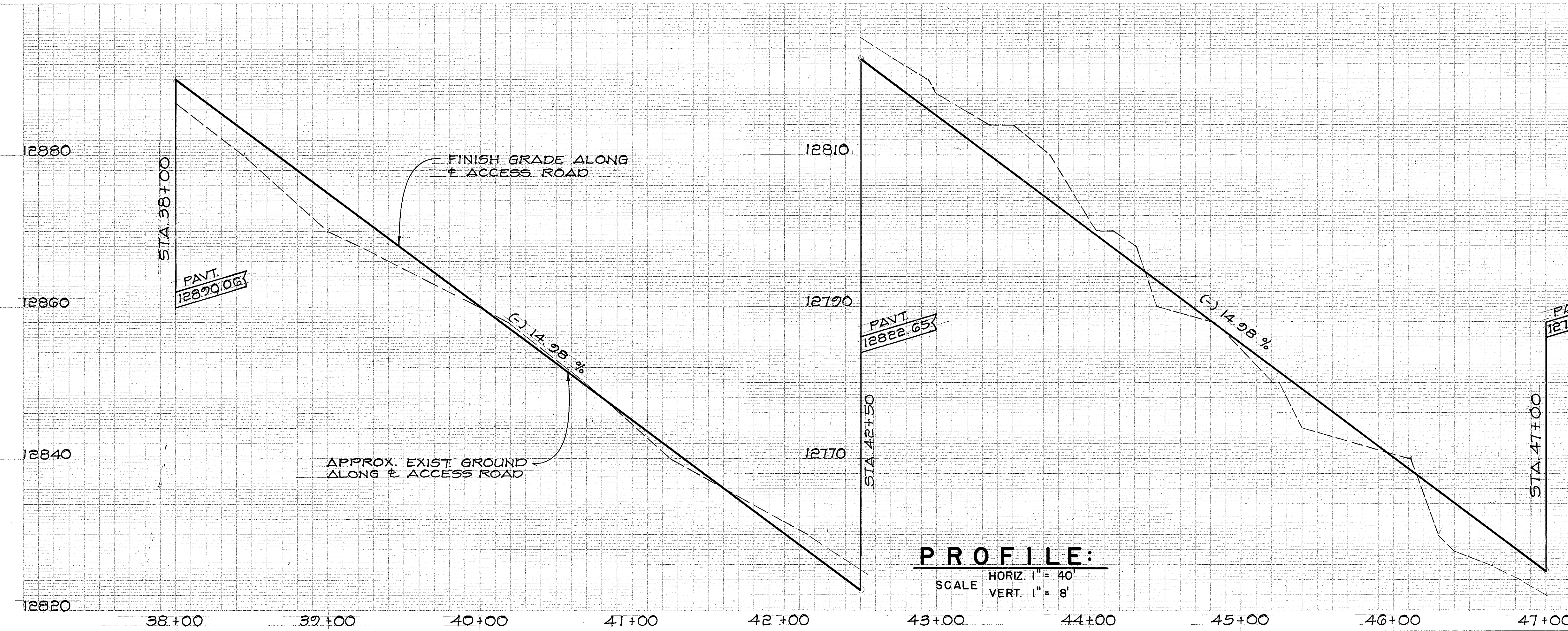
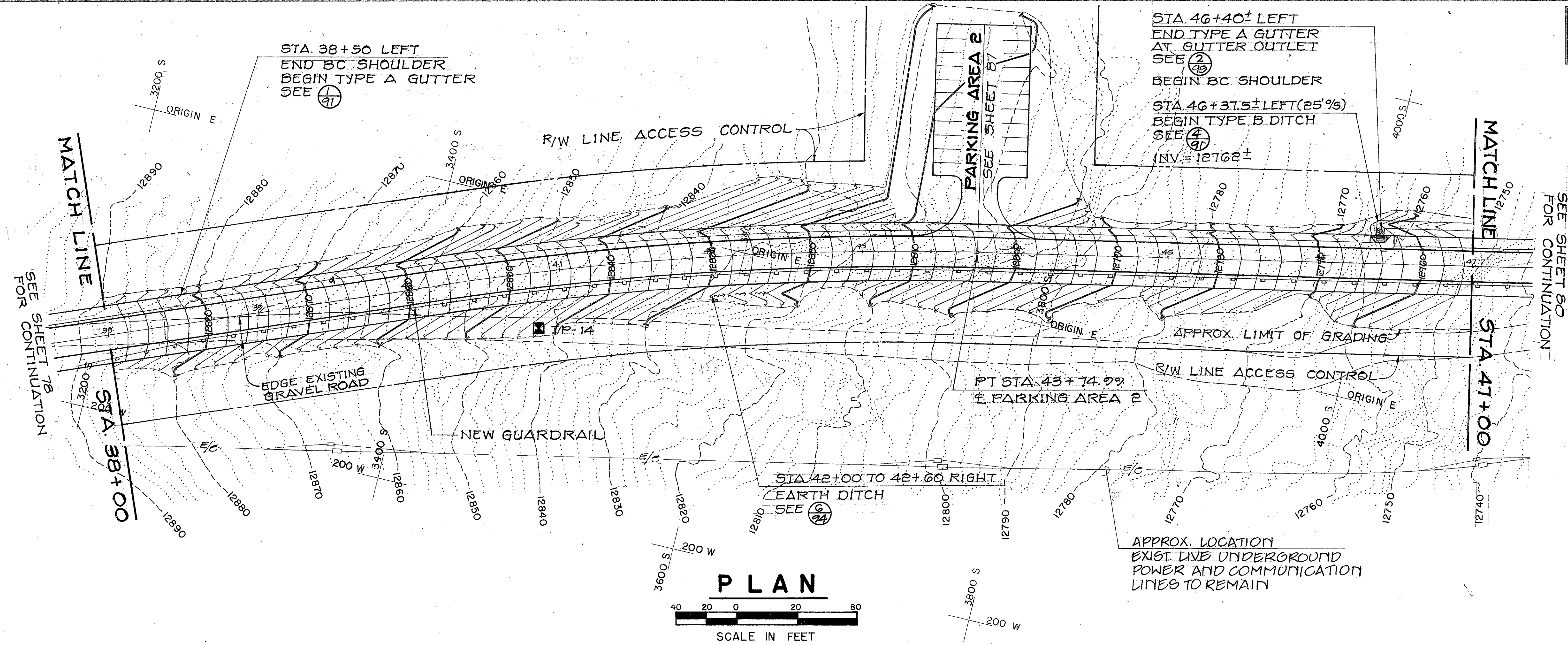
MAIN ACCESS ROAD
STA 27+50 TO STA 38+00
MAUNA KEA OBSERVATORY ACCESS ROAD
PHASE II-A

PROJECT NO. HWY-H-01-86

SCALE: HORIZ. 1" = 40'
VERT. 1" = 8'

SHEET No. 4 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-86	1987	79	115



ROYCE S. FUKUNAGA
REGISTERED
PROFESSIONAL
ENGINEER
No. 2107-C
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

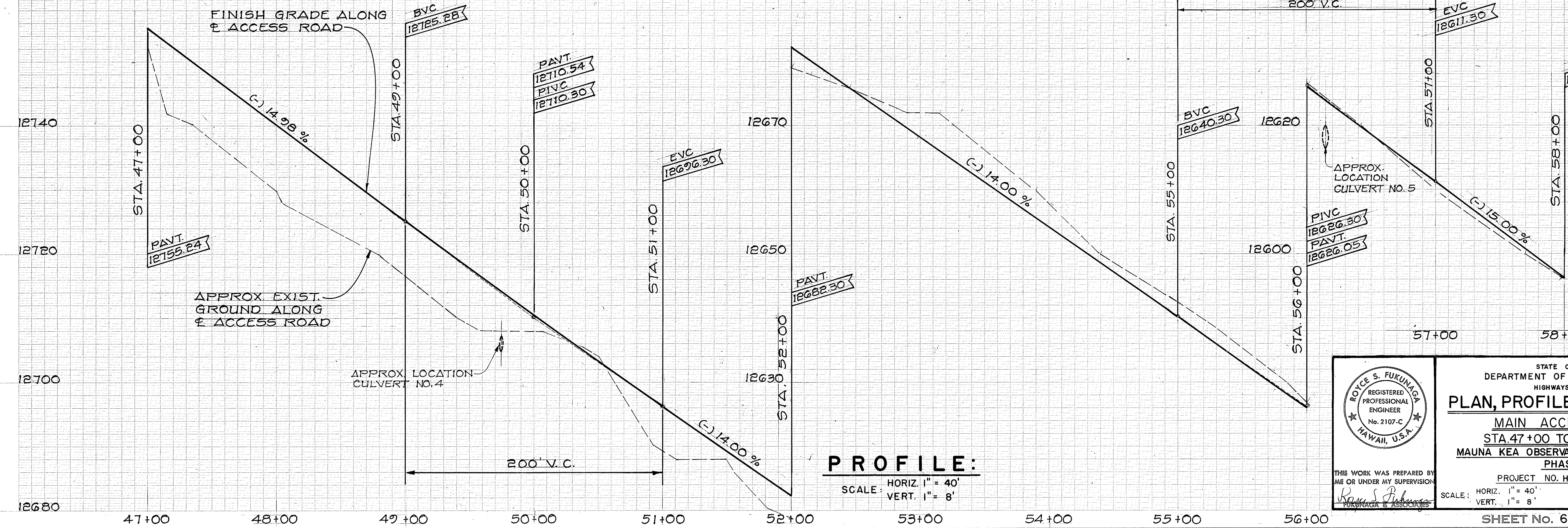
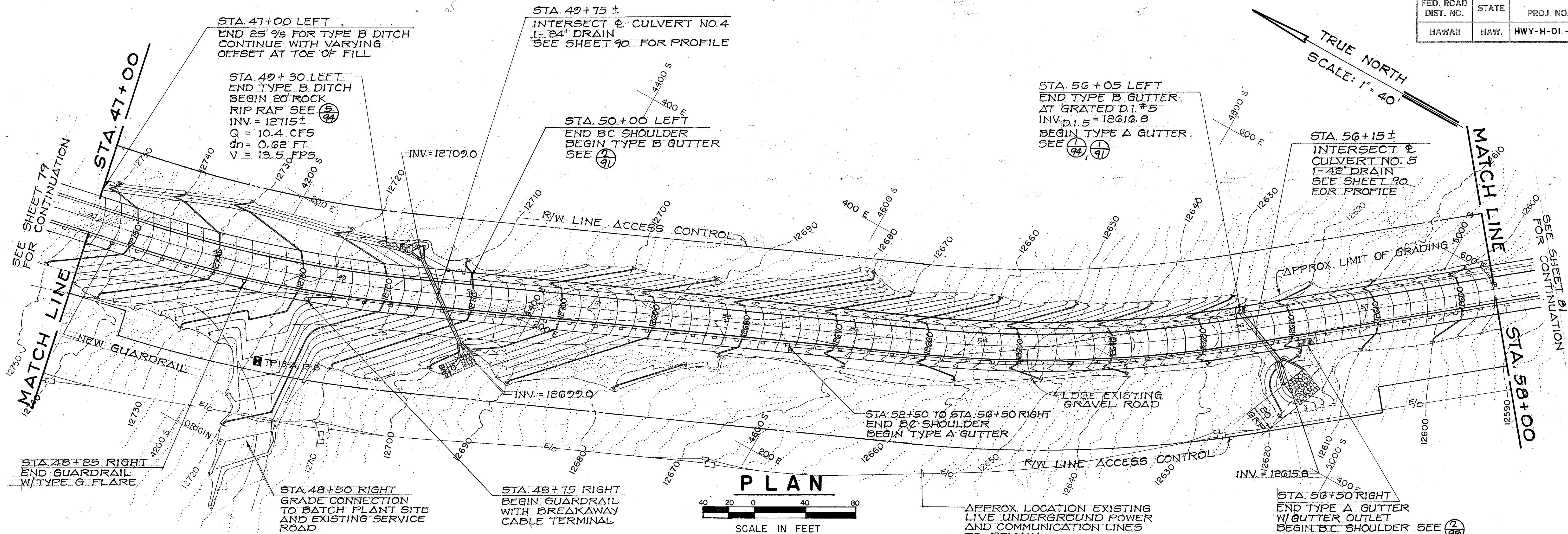
PLAN, PROFILE AND GRADING

MAIN ACCESS ROAD
STA 38+00 TO STA 47+00
MAUNA KEA OBSERVATORY ACCESS ROAD
PHASE II-A
PROJECT NO. HWY-H-01-86

SCALE: HORIZ. 1" = 40'
VERT. 1" = 8'

SHEET NO. 5 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-86	1987	80	115



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

ROYCE S. FUKUNAGA
REGISTERED
PROFESSIONAL
ENGINEER
No. 2107-C
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN, PROFILE AND GRADING

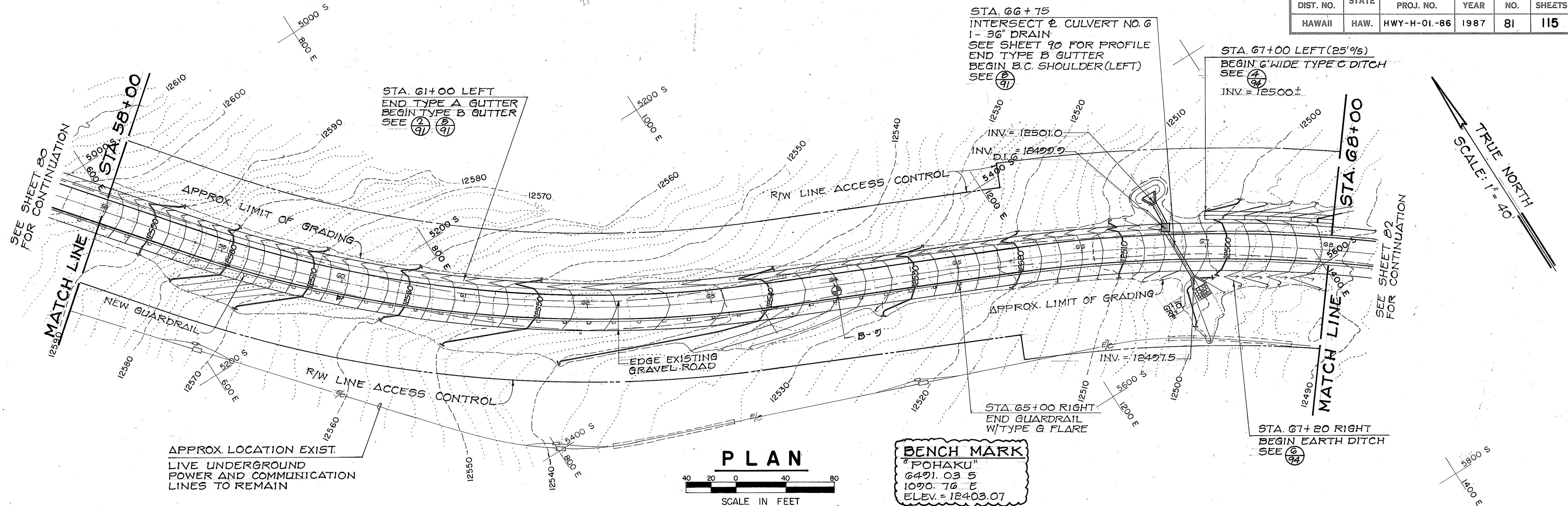
MAIN ACCESS ROAD
STA. 47+00 TO STA. 58+00
MAUNA KEA OBSERVATORY ACCESS ROAD
PHASE II-A

PROJECT NO. HWY-H-01-86

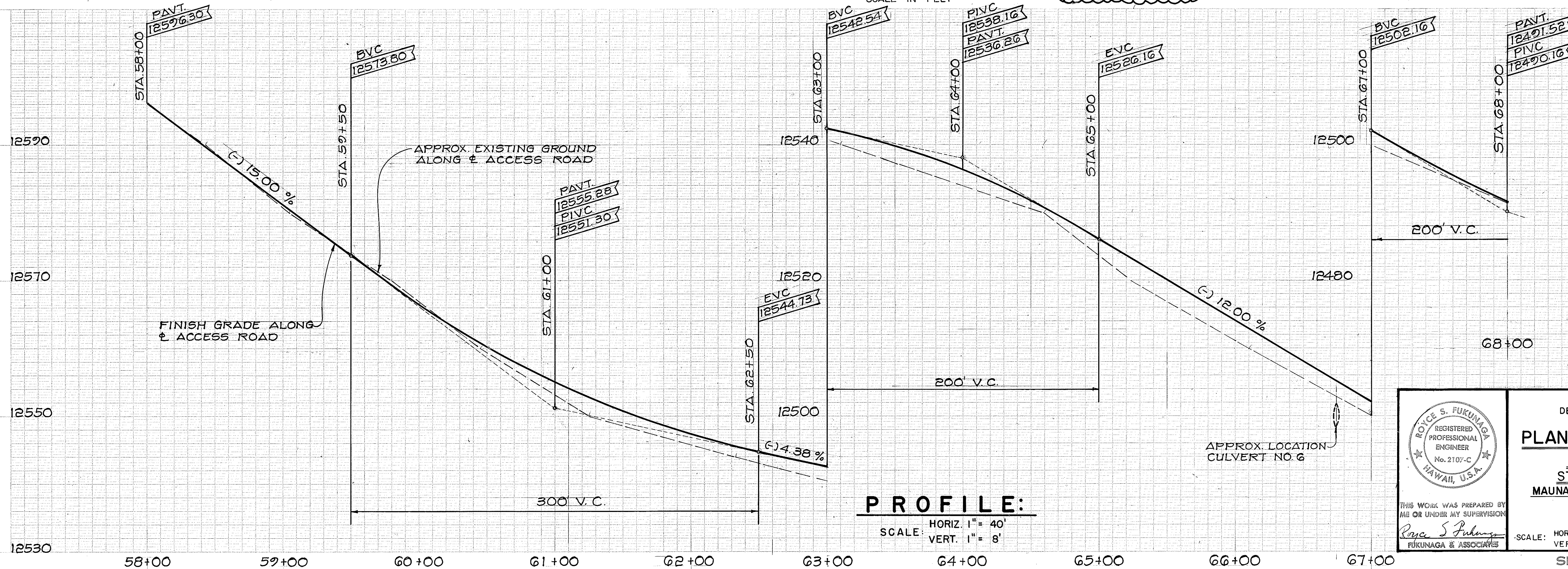
SCALE: HORIZ. 1" = 40'
VERT. 1" = 8'

THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION
Royce S. Fukunaga
FUKUNAGA & ASSOCIATES

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-86	1987	81	115



BENCH MARK
 "POHAKU"
 6491.03 S
 1090.76 E
 ELEV. = 12403.07



PROFILE:
 SCALE: HORIZ. 1" = 40'
 VERT. 1" = 8'

ROYCE S. FUKUNAGA
 REGISTERED PROFESSIONAL ENGINEER
 No. 2107-C
 HAWAII, U.S.A.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

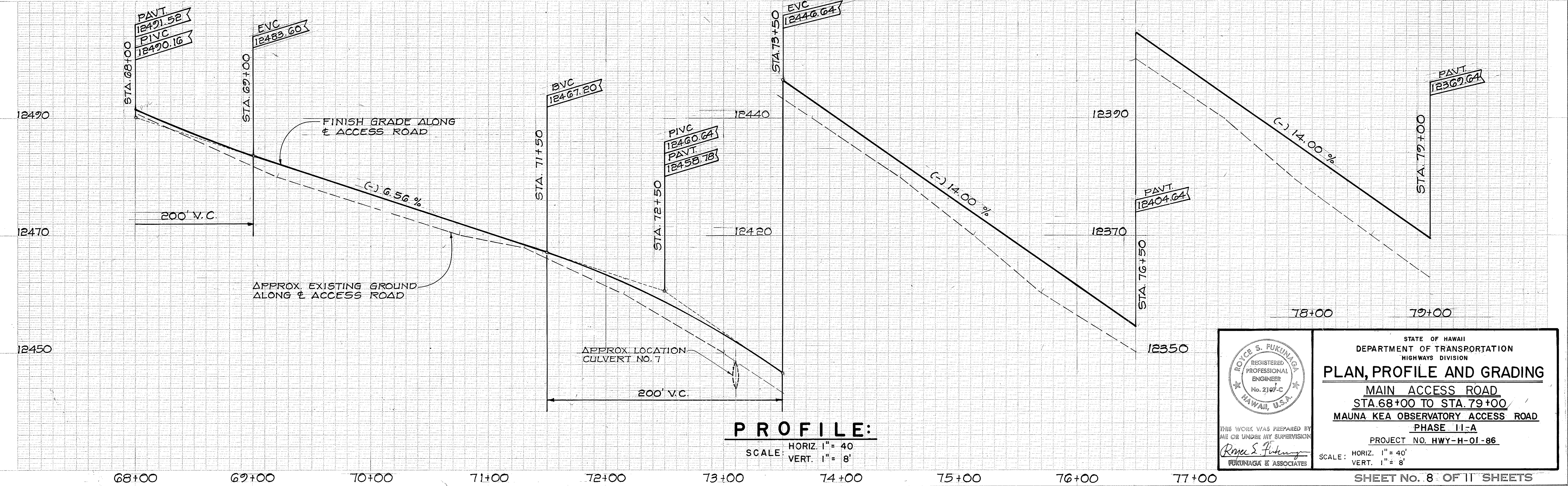
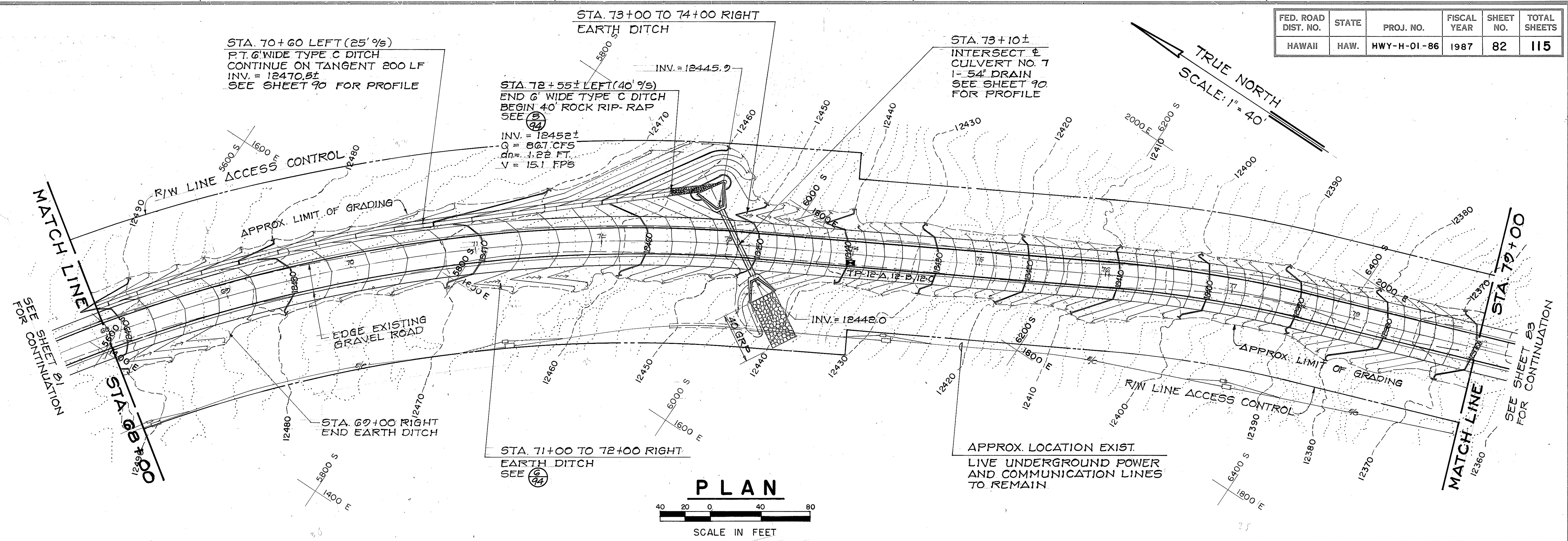
PLAN, PROFILE AND GRADING

MAIN ACCESS ROAD
 STA 58+00 TO STA 68+00
 MAUNA KEA OBSERVATORY ACCESS ROAD
 PHASE II-A

PROJECT: NO. HWY-H-01-86

SCALE: HORIZ. 1" = 40'
 VERT. 1" = 8'

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-86	1987	82	115



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	CHECKED BY	
	QUANTITIES BY	

ROYCE S. FUKUNAGA
REGISTERED PROFESSIONAL ENGINEER
No. 2197-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Royce S. Fukunaga
FUKUNAGA & ASSOCIATES

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

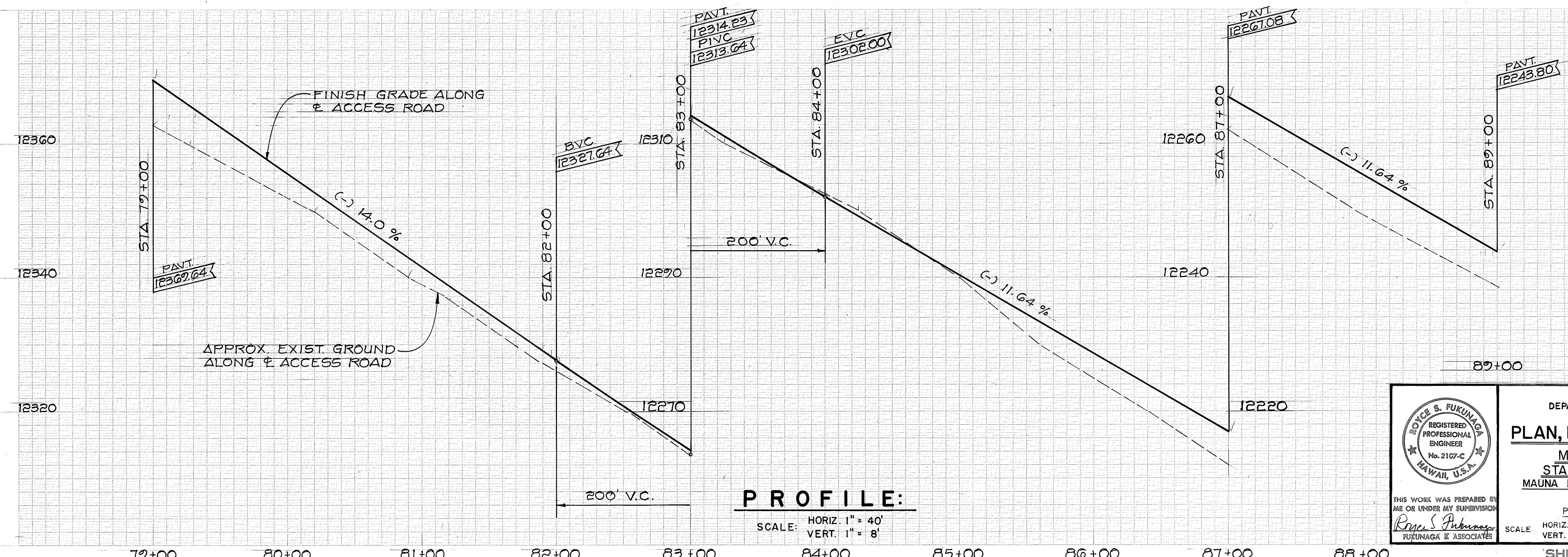
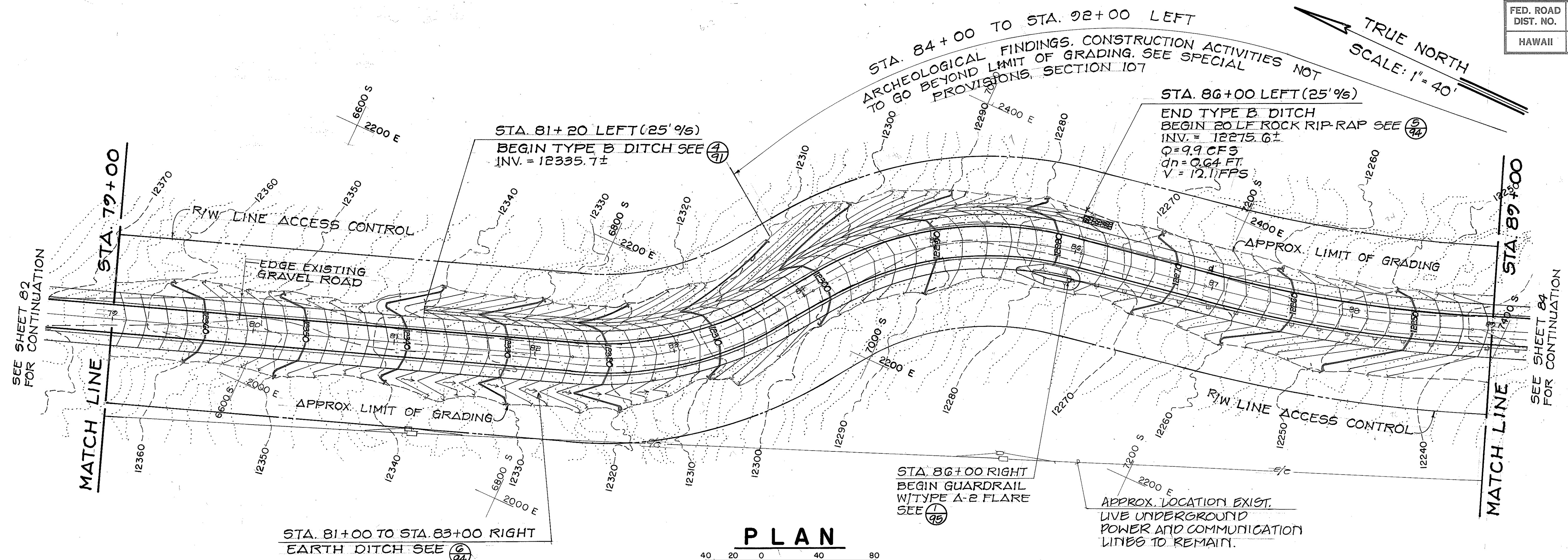
PLAN, PROFILE AND GRADING

MAIN ACCESS ROAD
STA. 68+00 TO STA. 79+00
MAUNA KEA OBSERVATORY ACCESS ROAD
PHASE II-A

PROJECT NO. HWY-H-01-86

SCALE: HORIZ. 1" = 40'
VERT. 1" = 8'

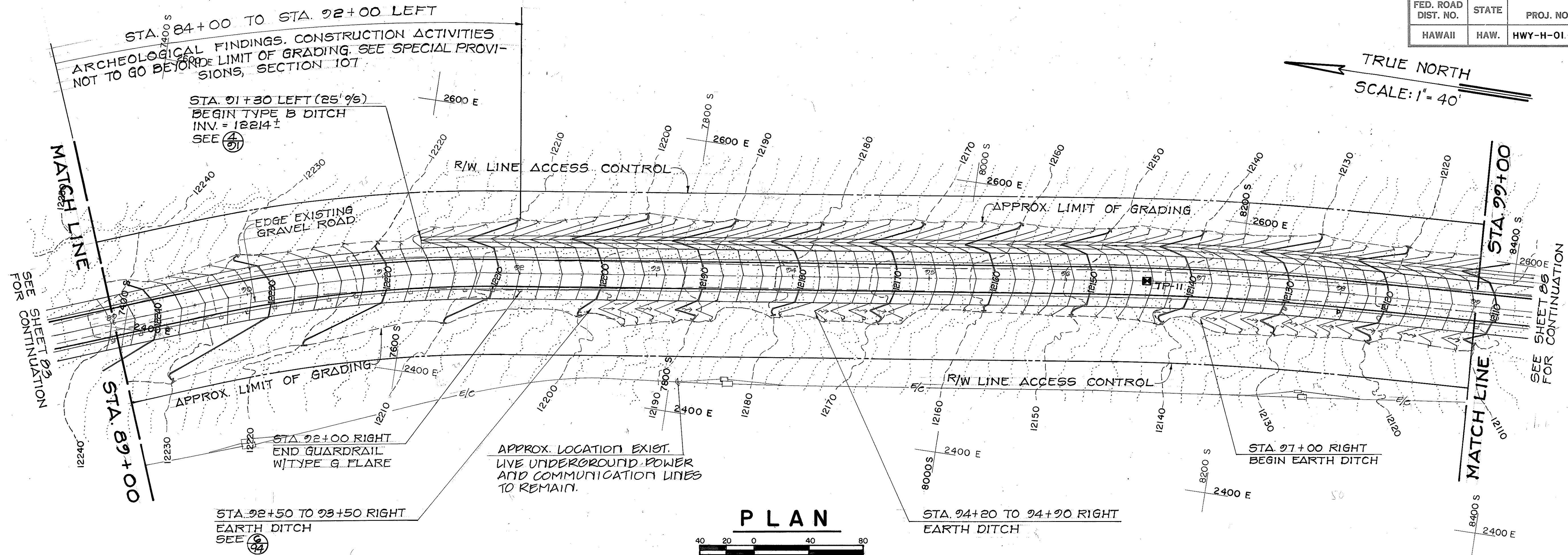
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-86	1987	83	115



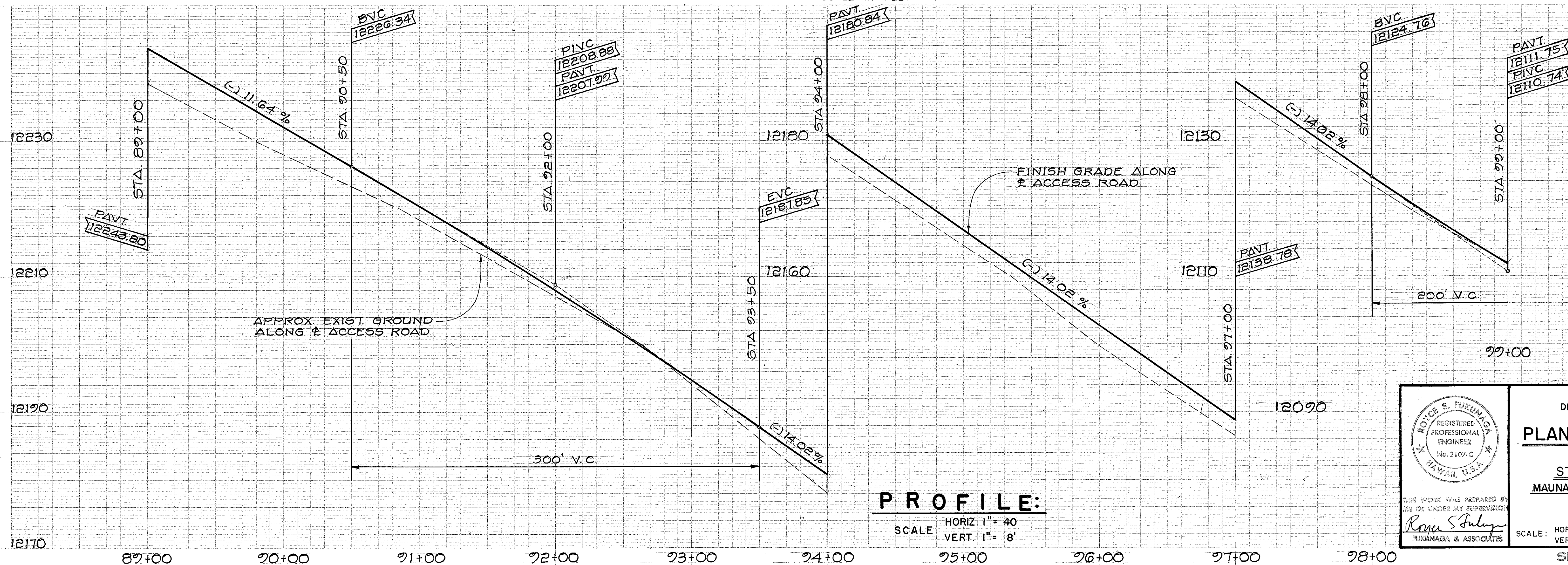
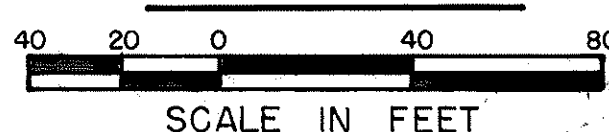
ORIGINAL PLAN	DATE
DESIGNED BY	
CHECKED BY	
NO.	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
PLAN, PROFILE AND GRADING
 MAIN ACCESS ROAD
 STA. 79+00 TO STA. 89+00
 MAUNA KEA OBSERVATORY ACCESS ROAD
 PHASE II-A
 PROJECT NO. HWY-H-01-86
 SCALE: HORIZ. 1" = 40'
 VERT. 1" = 8'
 SHEET NO. 9 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-86	1987	84	115



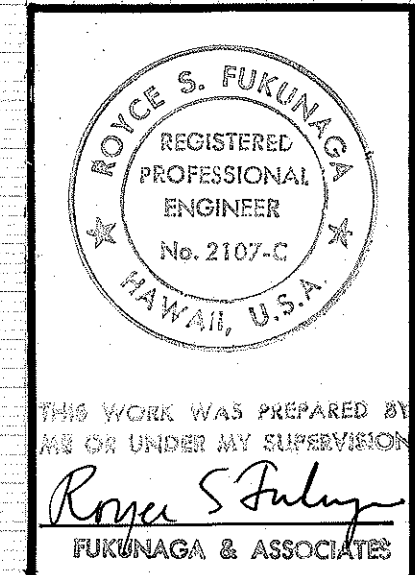
PLAN



PROFILE:

SCALE HORIZ. 1" = 40'
VERT. 1" = 8'

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	DESIGNED BY	
	QUANIFIED BY	
	CHECKED BY	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN, PROFILE AND GRADING

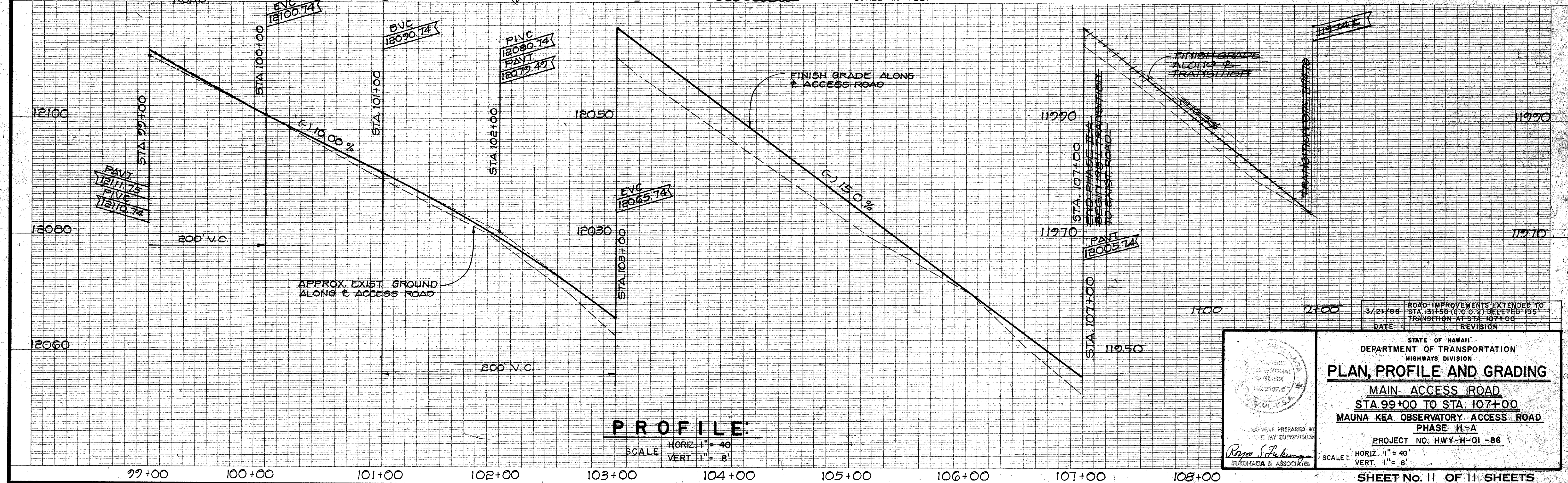
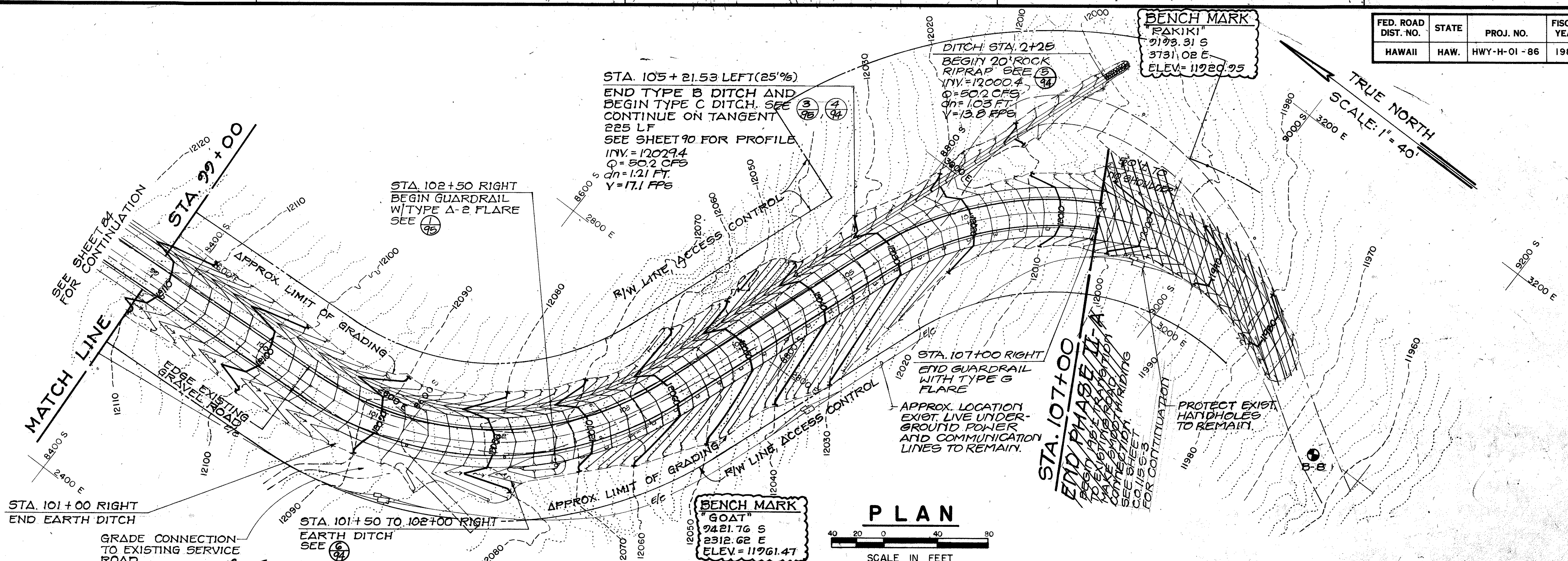
MAIN ACCESS ROAD
STA. 89+00 TO STA. 99+00
MAUNA KEA OBSERVATORY ACCESS ROAD
PHASE 11-A

PROJECT NO. HWY-H-01-86

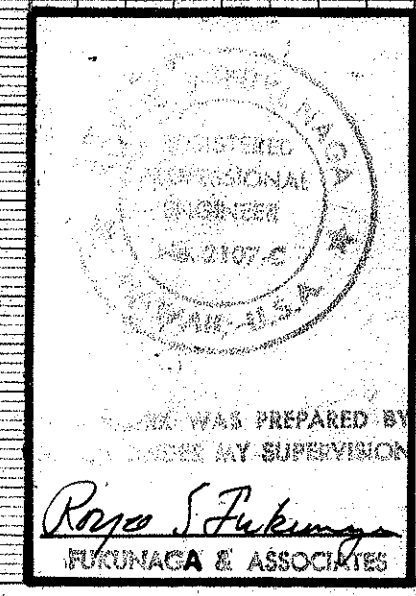
SCALE: HORIZ. 1" = 40'
VERT. 1" = 8'

SHEET No. 10 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-86	1987	C.O. 85	115



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



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN, PROFILE AND GRADING

MAIN ACCESS ROAD
STA. 99+00 TO STA. 107+00
MAUNA KEA OBSERVATORY ACCESS ROAD
PHASE II-A

PROJECT NO. HWY-H-01-86

DATE: 3/21/88
REVISION: ROAD IMPROVEMENTS EXTENDED TO STA. 131+50 (C.C.O. 2) DELETED 195' TRANSITION AT STA. 107+00

SCALE: HORIZ. 1" = 40'
VERT. 1" = 8'

SHEET NO. 11 OF 11 SHEETS

C.O. 85