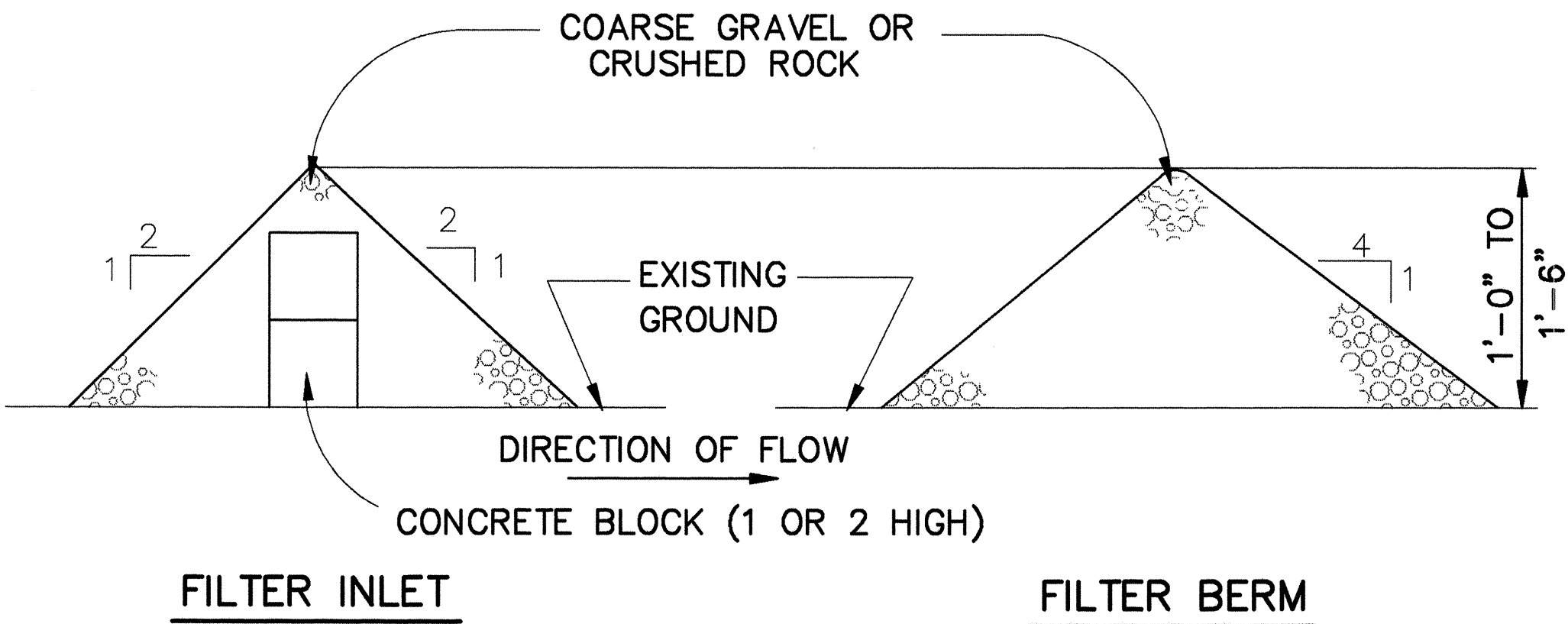


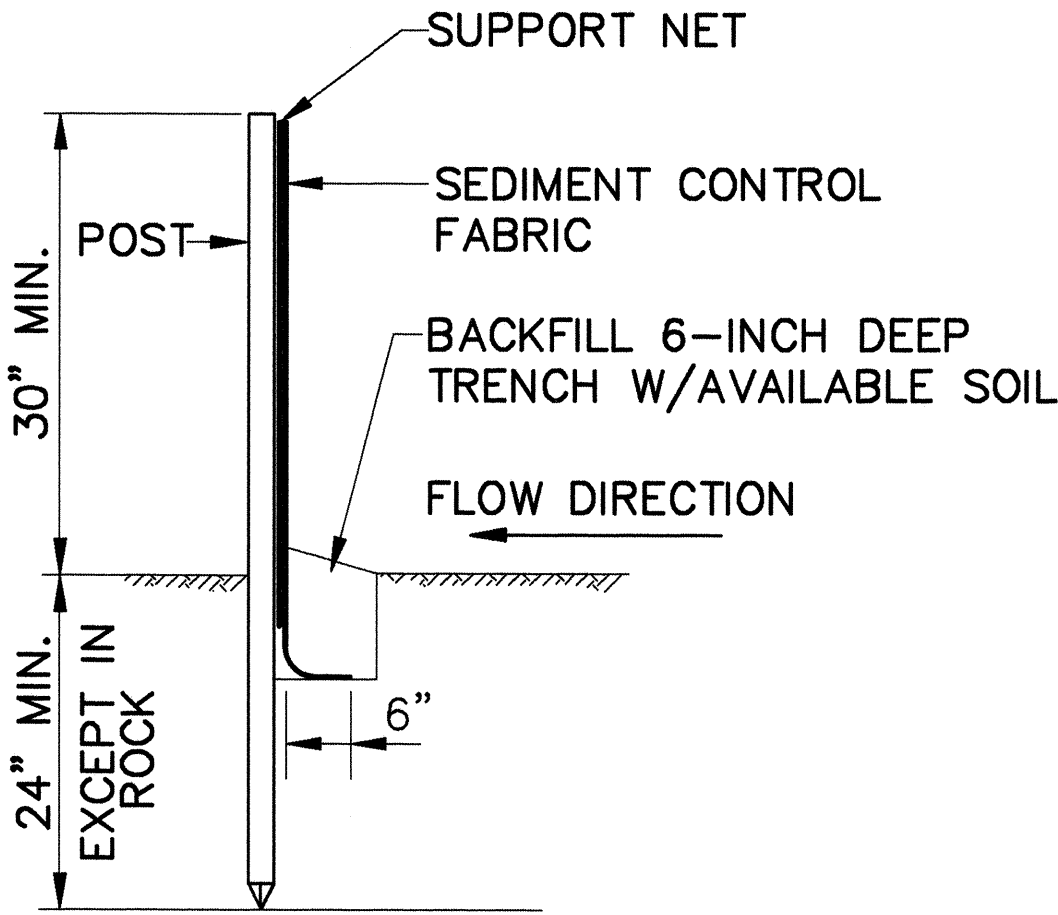
GRADING NOTES

1. ALL GRADING WORK SHALL BE DONE IN ACCORDANCE WITH CHAPTER 23, GRADING, SOIL EROSION AND SEDIMENT CONTROL, OF THE REVISED ORDINANCES OF HONOLULU, 1978, AS AMENDED (ORDINANCE NOS. 81-13 AND 90-71).
2. THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS RESULTING FROM HIS WORK AND DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS. THE COSTS INCURRED FOR ANY NECESSARY REMEDIAL ACTION BY THE CHIEF ENGINEER SHALL BE PAYABLE BY THE CONTRACTOR.
3. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST AND OTHER NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
4. ALL SLOPES AND EXPOSED AREAS SHALL BE HYDRO-MULCH SEEDED AND COVERED WITH EROSION CONTROL MATTING AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED IN ACCORDANCE WITH THE SPECIFICATION AND GRADING PLAN. PLANTING SHALL NOT BE DELAYED UNTIL ALL GRADING WORK HAS BEEN COMPLETED. GRADING TO FINAL GRADE SHALL BE CONTINUOUS, AND ANY AREA WITHIN WHICH WORK HAS BEEN INTERRUPTED OR DELAYED SHALL BE PLANTED.
5. FILLS ON SLOPES STEEPER THAN 5:1 SHALL BE KEYED.
6. NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR WRITTEN NOTICE TO THE CHIEF ENGINEER OR DISTRICT ENGINEER, STATE OF HAWAII.
7. THE LIMITS OF THE AREA TO BE GRADED SHALL BE FLAGGED BY THE CONTRACTOR BEFORE THE COMMENCEMENT OF THE GRADING WORK.
8. THE CITY SHALL BE INFORMED OF THE LOCATION OF THE BORROW/DISPOSAL SITE FOR THE PROJECT WHEN THE APPLICATION FOR A GRADING PERMIT IS MADE. THE BORROW/DISPOSAL SITE MUST ALSO FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE.
9. ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF CHAPTER 54, WATER QUALITY STANDARDS, AND CHAPTER 55, WATER POLLUTION CONTROL, OF TITLE 11, ADMINISTRATIVE RULES OF THE STATE DEPARTMENT OF HEALTH.
10. TEMPORARY EROSION CONTROL PLAN AND PROCEDURES SHALL BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL PRIOR TO THE START OF ACTUAL GRADING OPERATIONS.
11. SILT FENCE SHALL BE INSTALLED ALONG THE EDGES OF OPEN CHANNELS & DITCHES IN ORDER TO FILTER SEDIMENT FROM RUNOFF, BEFORE WATERS ENTER THE CHANNEL.
12. TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
13. TEMPORARY EROSION AND POLLUTION CONTROL MEASURES, INCLUDING SILT FENCE, WLL BE PERFORMED ON A FORCE ACCOUNT BASIS AND PAID FOR UNDER ITEM NO. 639.0100, TEMPORARY PROJECT WATER POLLUTION CONTROL.



TEMPORARY EROSION CONTROL MEASURE

N.T.S.

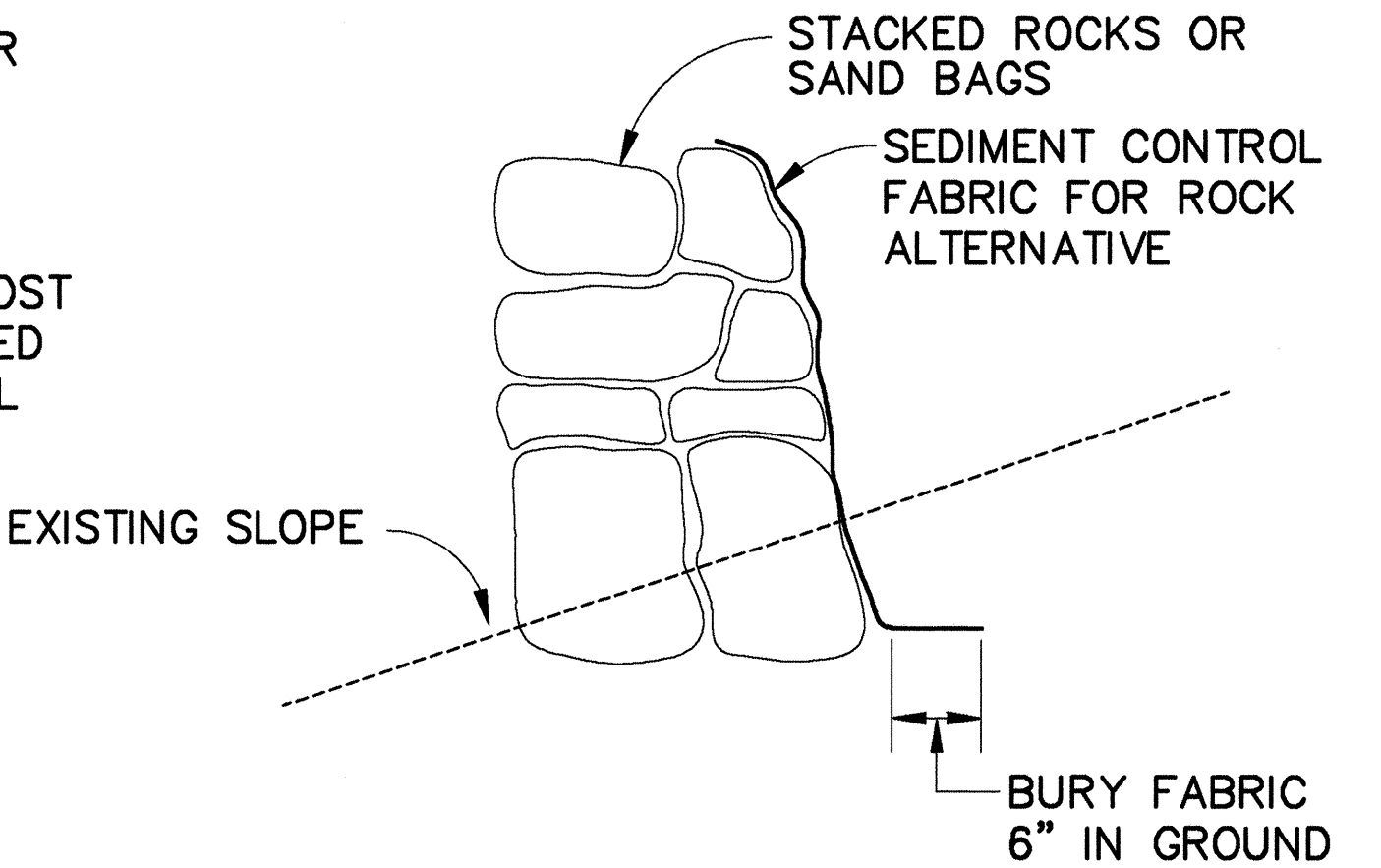
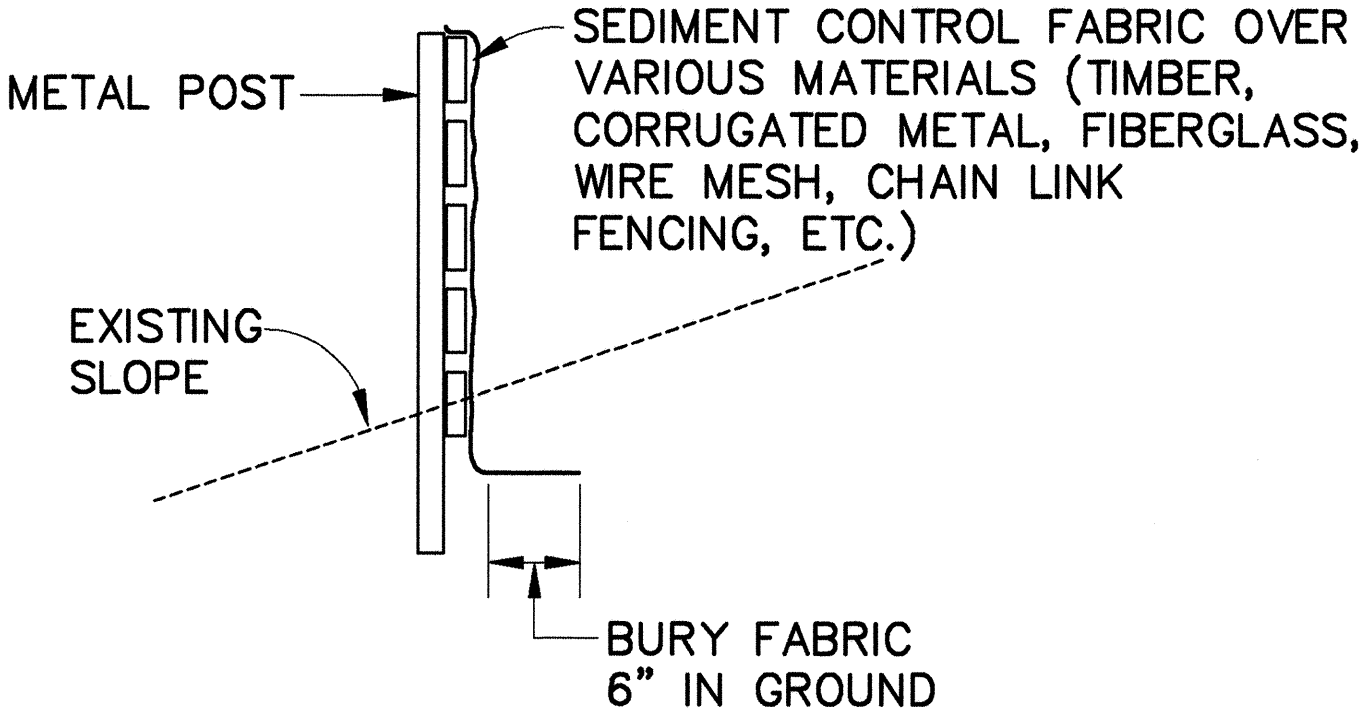


SILT FENCE DETAIL

N.T.S.

NOTES:

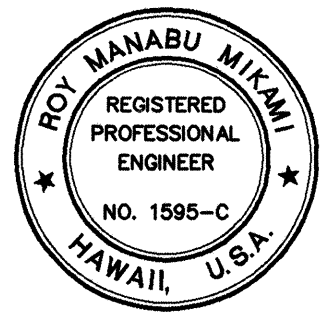
1. SEDIMENT CONTROL FABRIC SHALL BE OF THE TYPE SPECIFIED AND INSTALLED IN COMBINATION WITH A SUPPORT NET OF POLYESTER NETTING OR APPROVED EQUAL. THE FILTER FABRIC SHALL BE A MINIMUM OF 36 INCHES WIDE AND THE SUPPORT NET A MINIMUM OF 30 INCHES.
2. IF SILT FENCE IS OBTAINED FROM MANUFACTURER AS A PACKAGE (I.E. FABRIC ATTACHED TO POSTS) THE MANUFACTURERS INSTALLATION INSTRUCTIONS SHALL BE ADHERED TO.
3. POSTS SHALL BE METAL. CROSS SECTION OF POST WILL BE SUBSTANTIAL ENOUGH TO SUPPORT A LOADED SILT FENCE WITHOUT BENDING. POST SPACING SHALL BE 4' TO 8' DEPENDING ON POST SIZE.



SEDIMENT CONTROL DEVICES AND/OR ENERGY DISSIPATOR

N.T.S.

7/12/94	Deleted embedded Log device. Revised General Notes and posts to be metal only.
DATE	REVISION



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Roy Manabu Mikami
Roy Manabu Mikami
P.E., Inc.
680 PARK ENGINEERING

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION GRADING NOTES EROSION AND SEDIMENT CONTROL MEASURES INTERSTATE ROUTE H-3 North Halawa Valley Highway, Unit 1, Phase 1B F.A.I. PROJECT NO. 1-H3-(68) SCALE: AS NOTED DATE: MAR. 1994 SHEET No. C20 OF 44 SHEETS
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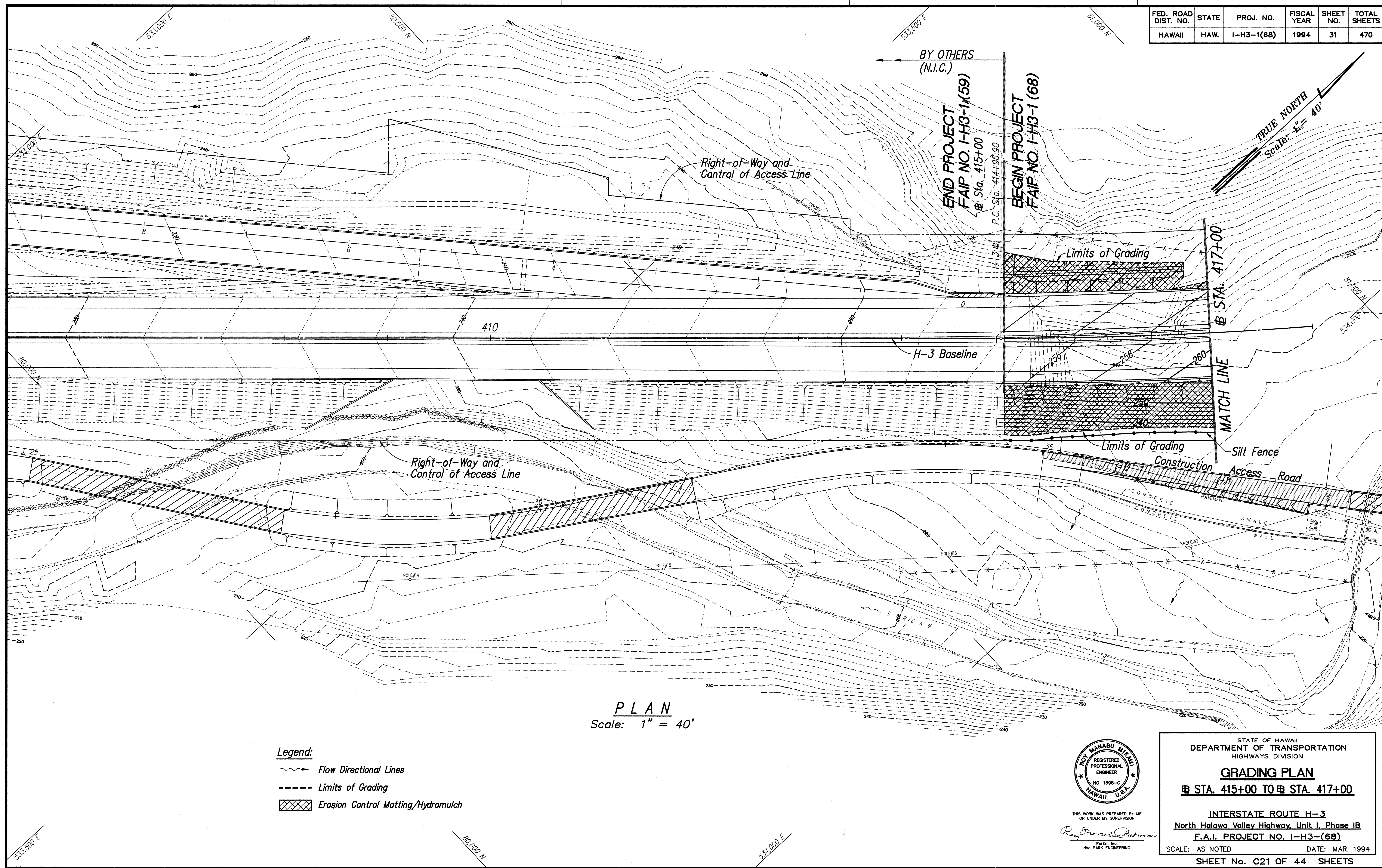
ADD. 30

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

COVERED
BASE P.L. 0.0

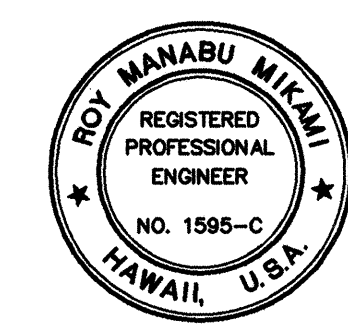
LIB: STATE DOT/H-3VH3030
GRANDIER 7/12/94 RSO

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(68)	1994	31	470



PLAN
Scale: 1" = 40'

- Legend:**
- Flow Directional Lines
 - Limits of Grading
 - Erosion Control Matting/Hydromulch



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OR UNDER MY SUPERVISION
Roy Mamabu Mikami
Parks, Inc.
dba PARK ENGINEERING

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING PLAN
Sta. 415+00 TO Sta. 417+00

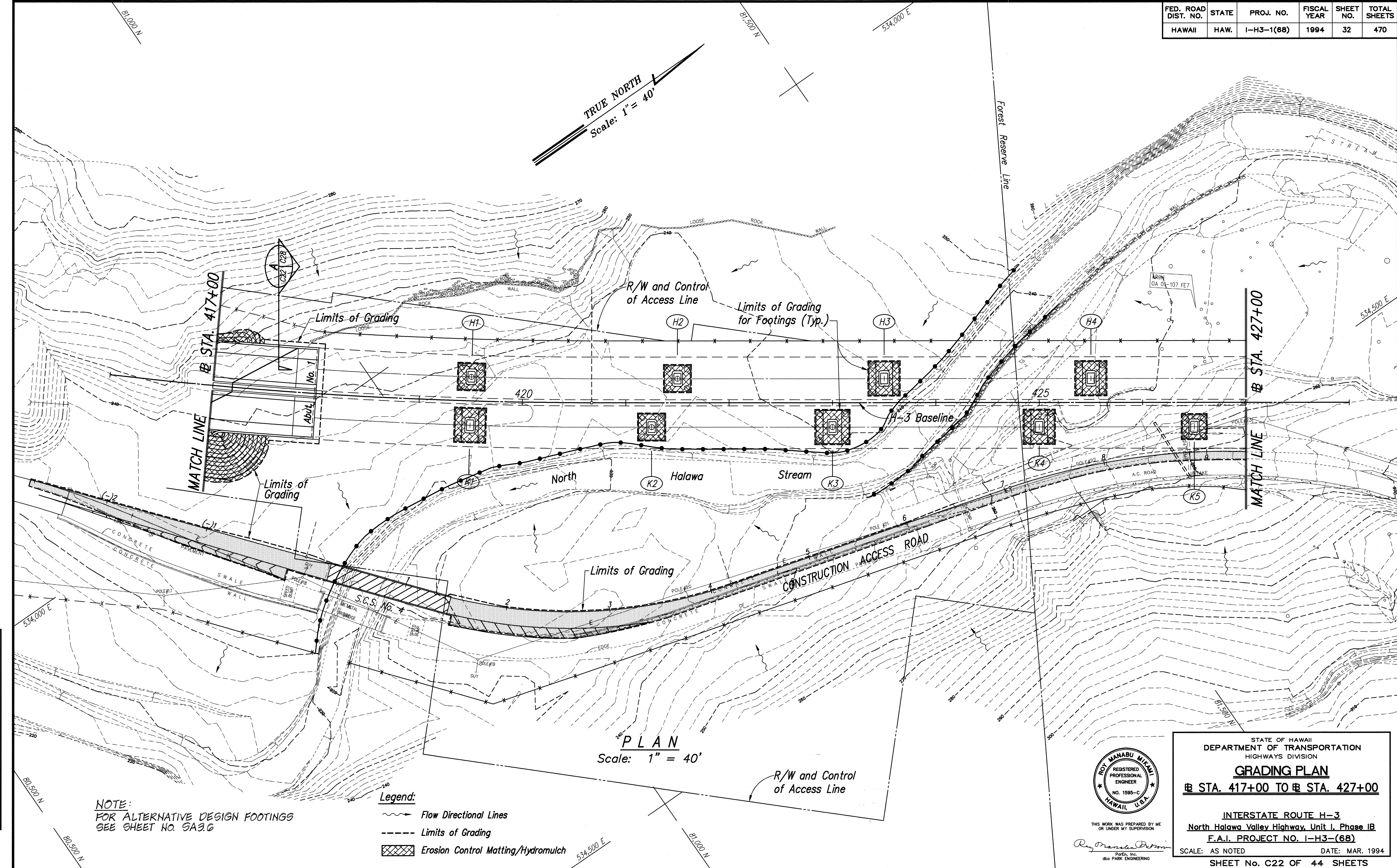
INTERSTATE ROUTE H-3
North Halawa Valley Highway, Unit I, Phase IB
F.A.I. PROJECT NO. I-H3-(68)

SCALE: AS NOTED DATE: MAR. 1994
SHEET No. C21 OF 44 SHEETS

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

LIB: STATE DOT/H-3/43030/
GRAPHIC 3/28/94 GRI

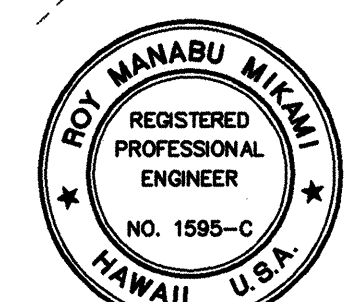
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(68)	1994	32	470



DATE	DATE
DESIGNED BY	DESIGNED BY
TRACED BY	TRACED BY
NOTE BOOK	NOTE BOOK
QUANTITIES BY	QUANTITIES BY
CHECKED BY	CHECKED BY
No.	No.

NOTE:
FOR ALTERNATIVE DESIGN FOOTINGS
SEE SHEET NO. SA3.6

- Legend:
- Flow Directional Lines
 - Limits of Grading
 - Erosion Control Matting/Hydromulch



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Roy Manabu Miki
ParEn, Inc.
dba PARK ENGINEERING

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING PLAN
STA. 417+00 TO # STA. 427+00

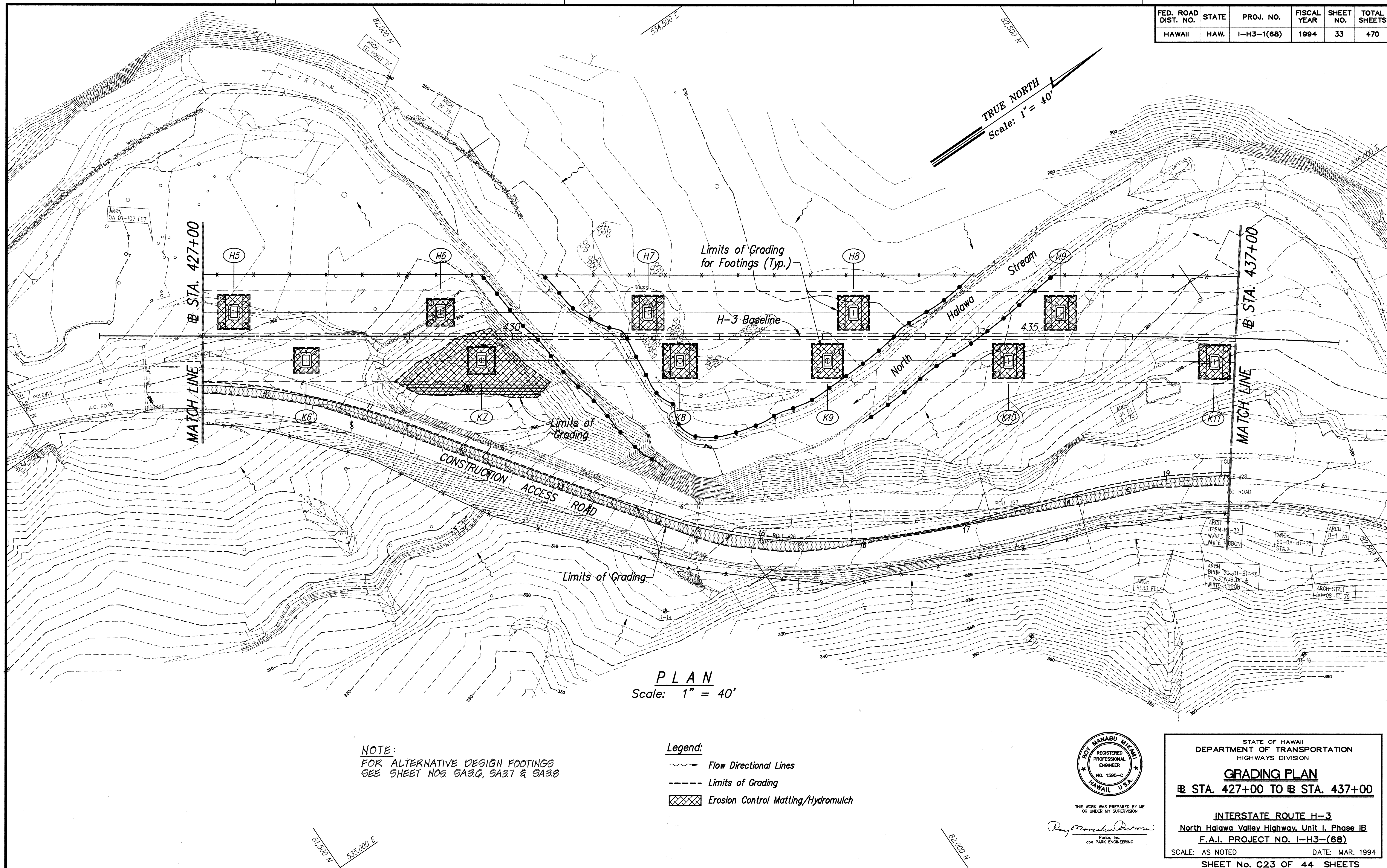
INTERSTATE ROUTE H-3
North Halawa Valley Highway, Unit I, Phase IB
F.A.I. PROJECT NO. I-H3-(68)

SCALE: AS NOTED DATE: MAR. 1994

SHEET No. C22 OF 44 SHEETS

LIB. STATE 0074-H-3430301
GRAPHIC 3/28/94 GRI

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(68)	1994	33	470

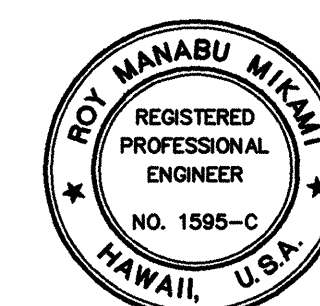


PLAN
Scale: 1" = 40'

NOTE:
FOR ALTERNATIVE DESIGN FOOTINGS
SEE SHEET NOS. SA3.6, SA3.7 & SA3.8

Legend:

-  Flow Directional Lines
-  Limits of Grading
-  Erosion Control Matting/Hydromulch



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING PLAN

電 STA. 427+00 TO 電 STA. 437+00

INTERSTATE ROUTE H-3
North Halawa Valley Highway, Unit I, Phase IB
F.A.I. PROJECT NO. I-H3-(68)

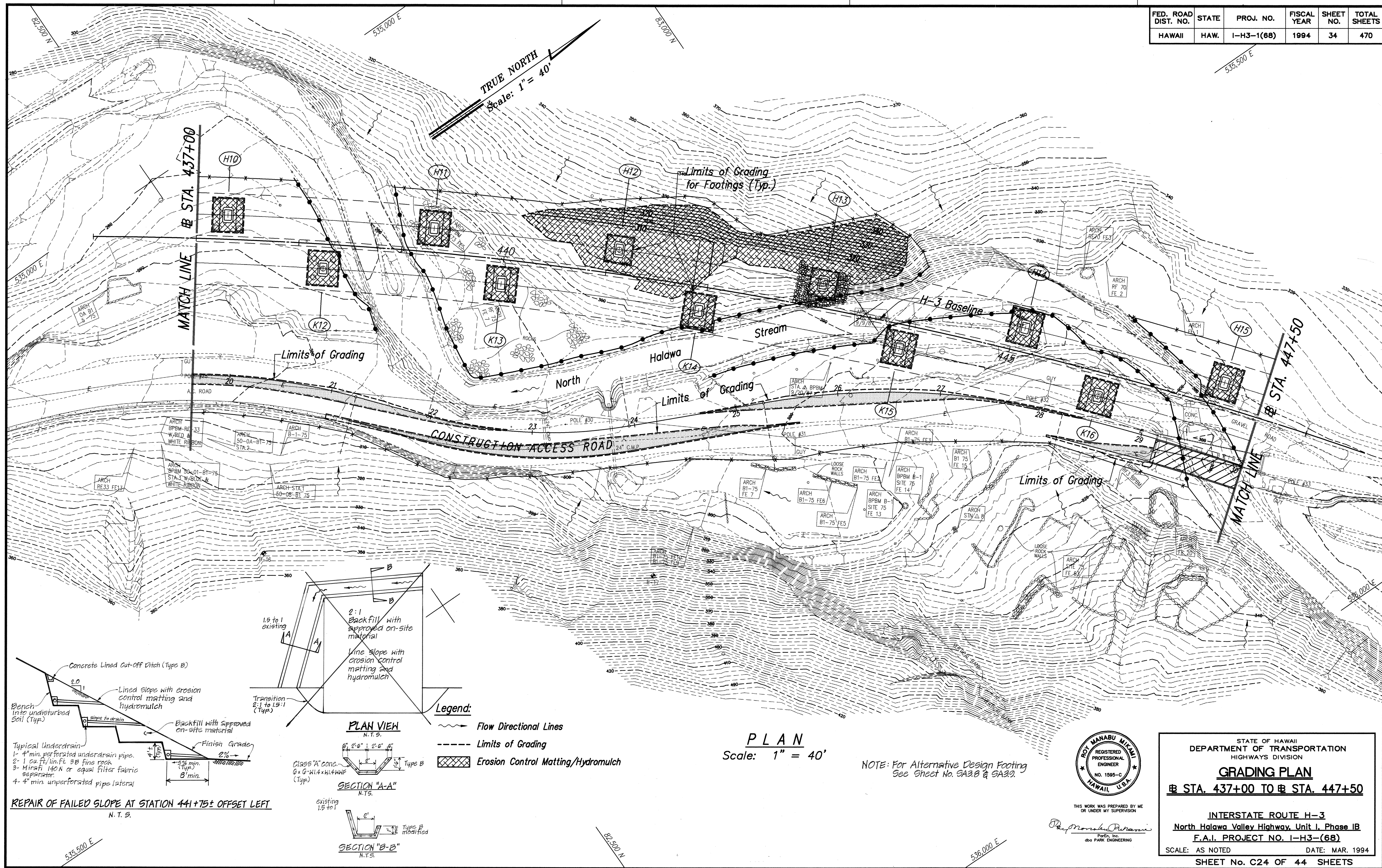
SCALE: AS NOTED DATE: MAR. 1994

SHEET No. C23 OF 44 SHEETS

33

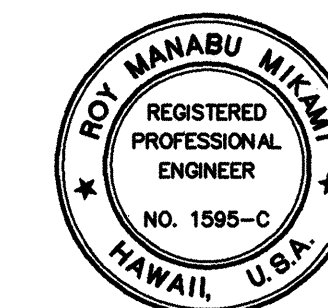
LIB: STATE\DOT\H-3\H3030\

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(68)	1994	34	470



PLAN
Scale: 1" = 40'

NOTE: For Alternative Design Footing
See Sheet No. SA30 & SA32.



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Roy Mahabu
Roy Mahabu
dbs PARK ENGINEERING

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING PLAN
ST. STA. 437+00 TO ST. STA. 447+50

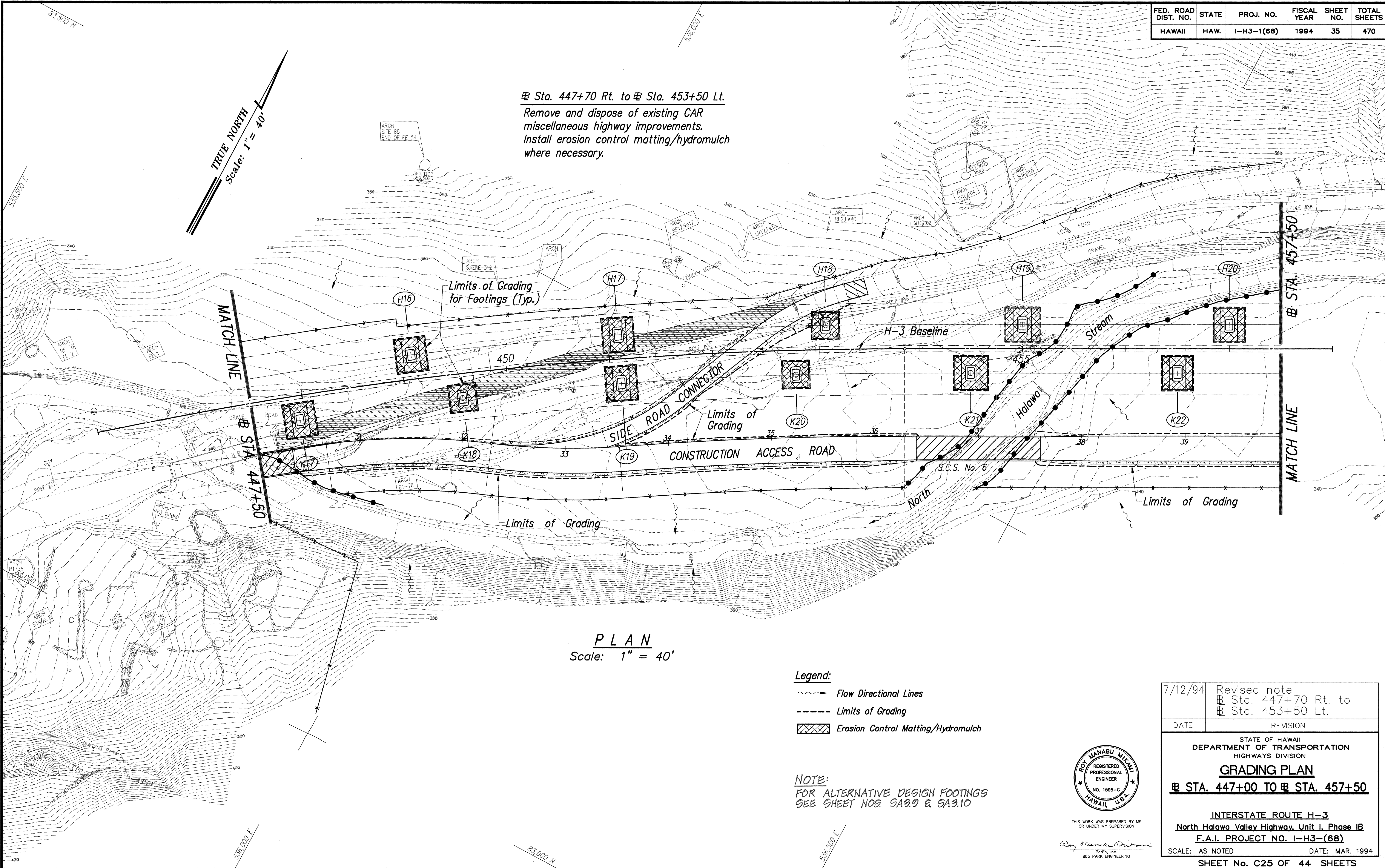
INTERSTATE ROUTE H-3
North Halawa Valley Highway, Unit I, Phase IB
F.A.I. PROJECT NO. I-H3-(68)

SCALE: AS NOTED DATE: MAR. 1994
SHEET No. C24 OF 44 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(68)	1994	35	470

Sta. 447+70 Rt. to Sta. 453+50 Lt.
 Remove and dispose of existing CAR
 miscellaneous highway improvements.
 Install erosion control matting/hydromulch
 where necessary.

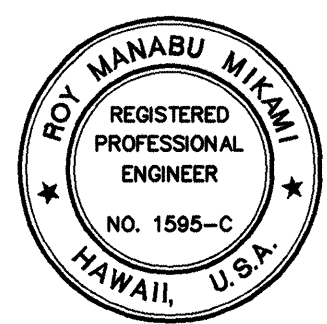
TRUE NORTH
 Scale: 1" = 40'



PLAN
 Scale: 1" = 40'

- Legend:
- Flow Directional Lines
 - Limits of Grading
 - Erosion Control Matting/Hydromulch

NOTE:
 FOR ALTERNATIVE DESIGN FOOTINGS
 SEE SHEET NOS. SA9.0 & SA9.10

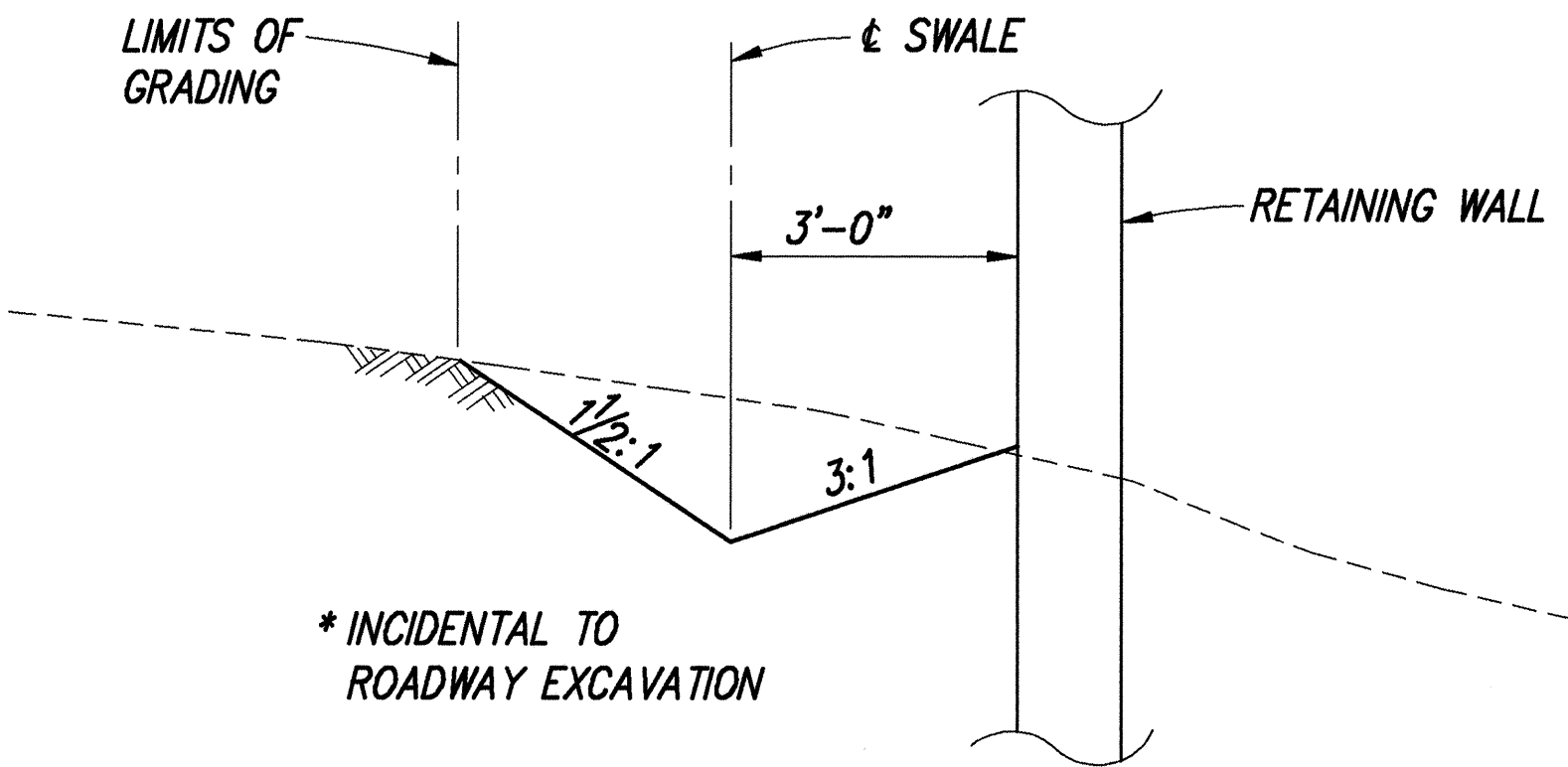


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 Roy Manabu Driscoll
 dba PARK ENGINEERING

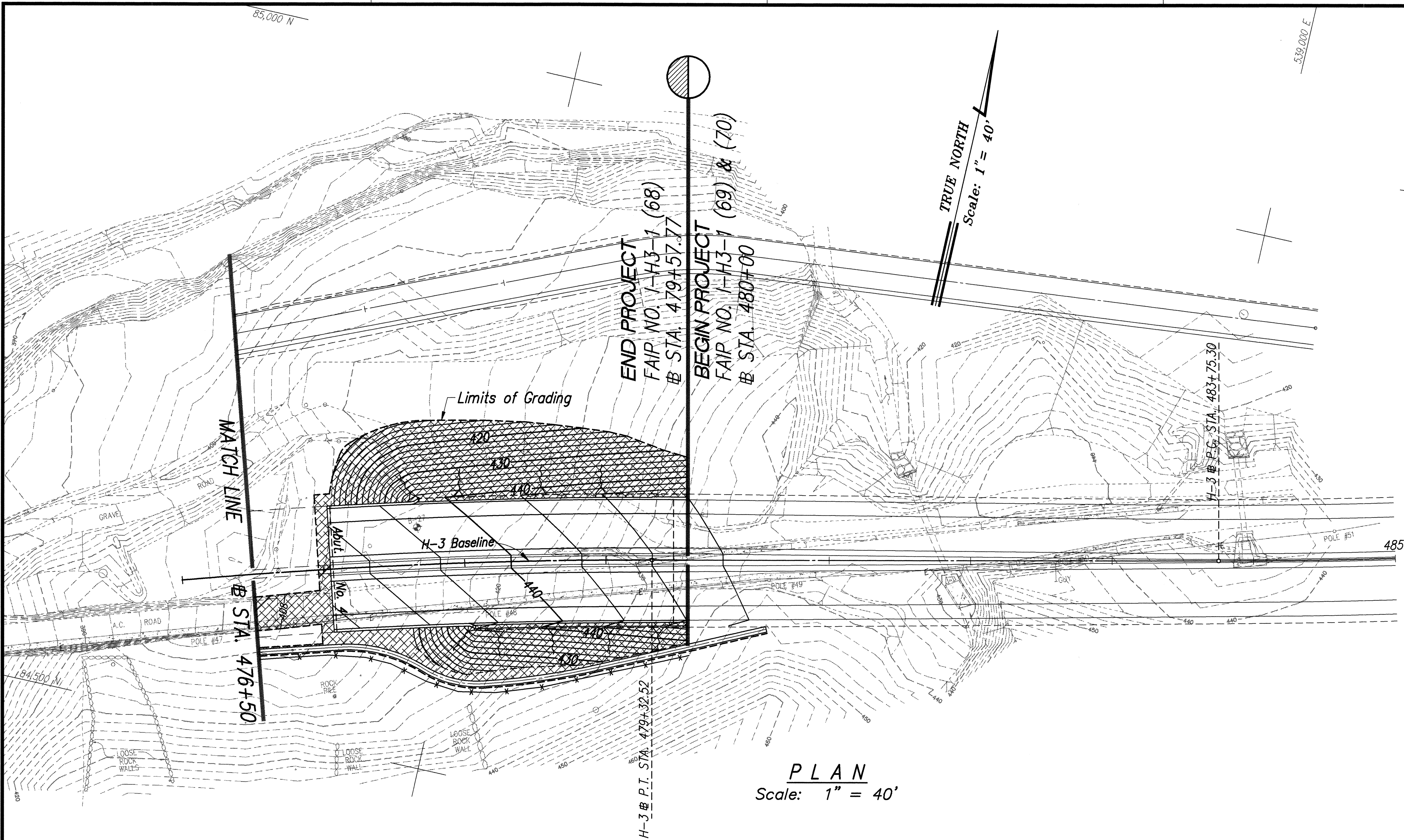
7/12/94	Revised note Sta. 447+70 Rt. to Sta. 453+50 Lt.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION GRADING PLAN Sta. 447+00 TO Sta. 457+50 INTERSTATE ROUTE H-3 North Halawa Valley Highway, Unit I, Phase IB F.A.I. PROJECT NO. I-H3-(68) SCALE: AS NOTED DATE: MAR. 1994 SHEET No. C25 OF 44 SHEETS	

\\STATE\DOT\H-3\H3030\

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(68)	1994	38	470



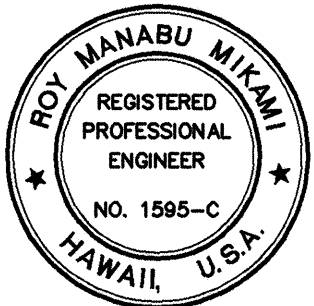
SWALE SECTION
Scale: 1/2" = 1'-0" A
C28
C28



PLAN
Scale: 1" = 40'

Sta. 476+50 to Sta. 479+57.77
Remove and dispose of existing CAR miscellaneous highway improvements. Where embankment or backfill is to be placed, the asphalt concrete pavement shall be obliterated. Install erosion control matting/hydromulch where necessary.

- Legend:
- Flow Directional Lines
 - Limits of Grading
 - Erosion Control Matting/Hydromulch



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Roy Manabu Mikami
Pore, Inc.
dba PARK ENGINEERING

7/12/94	Revised Note: Sta. 476+50 to Sta. 479+57.77
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GRADING PLAN	
Sta. 476+50 TO END	
INTERSTATE ROUTE H-3	
North Halawa Valley Highway, Unit I, Phase IB	
F.A.I. PROJECT NO. I-H3-(68)	
SCALE: AS NOTED	DATE: MAR. 1994
SHEET No. C28 OF 44 SHEETS	

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