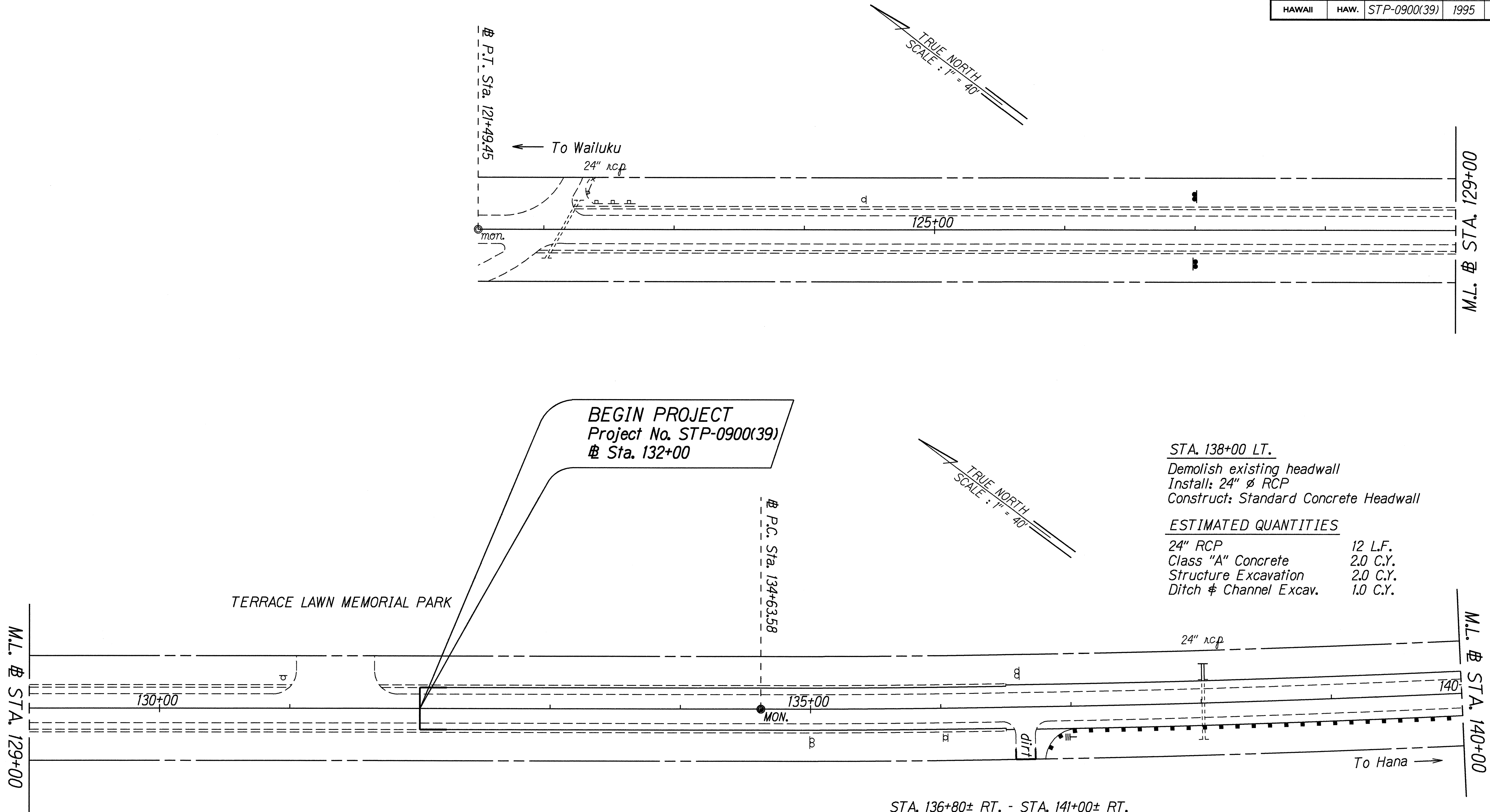


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	11	51



STA. 138+00 LT.
 Demolish existing headwall
 Install: 24" ϕ RCP
 Construct: Standard Concrete Headwall

ESTIMATED QUANTITIES

24" RCP	12 L.F.
Class "A" Concrete	2.0 C.Y.
Structure Excavation	2.0 C.Y.
Ditch & Channel Excav.	1.0 C.Y.

STA. 136+80 $\pm$ RT. - STA. 141+00 $\pm$ RT.
 Install 420 L.F. of Type-3 metal guardrail w/steel post.
 Approach End - Type "G" w/radius flare, R=25'
 Trailing End - Type "MELT"
 (See Plan Shts. 5,6,7 for details)

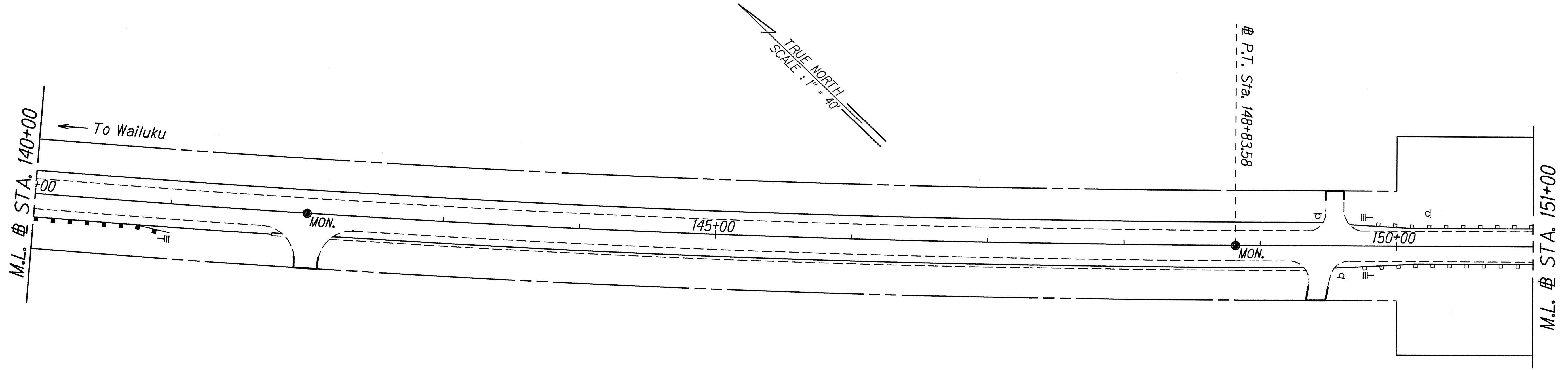
DATE	Mar. 1995
SURVEY PLATTED BY	
DRAWN BY	J. Guzman
DESIGNED BY	C. Bagasa
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NOTE: Jason	
NOTE: Shannan	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

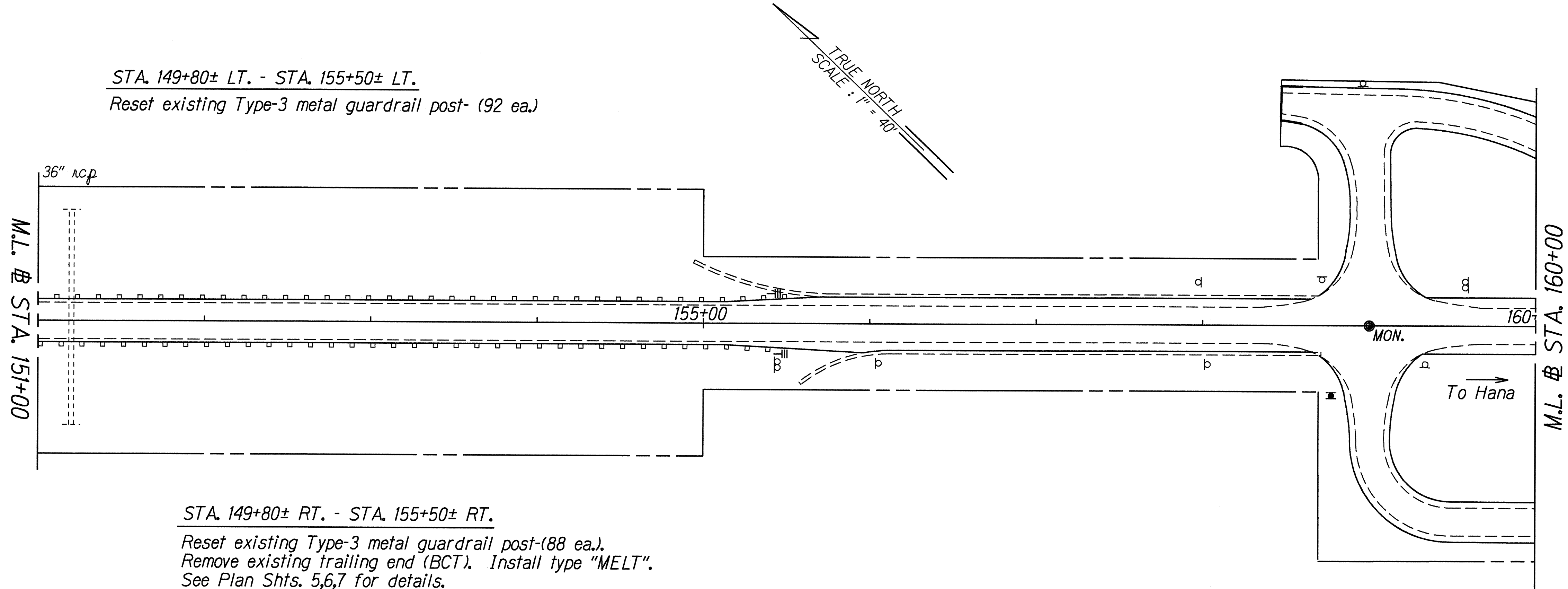
ROADWAY PLAN
 HANA HIGHWAY RESURFACING
 Valley Isle Memorial Cemetery to Huelo
 Fed. Aid Project No. STP-0900(39)
 Scale: 1" = 40' Date: March, 1995

SHEET No. 1 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	12	51



STA. 149+80± LT. - STA. 155+50± LT.
Reset existing Type-3 metal guardrail post- (92 ea.)



STA. 149+80± RT. - STA. 155+50± RT.
Reset existing Type-3 metal guardrail post-(88 ea.).
Remove existing trailing end (BCT). Install type "MELT".
See Plan Shts. 5,6,7 for details.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTES BOOK	DRAWN BY J. GIBLIN	MAR. 1995
logits Jason	CHECKED BY C. BOGGS	
giblin@hawaii.gov	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

HANA HIGHWAY RESURFACING
Valley Isle Memorial Cemetery to Huelo
Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40' Date: March, 1995

SHEET No. 2 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	13	51

Remove existing terminal; install 50 L.F. of guardrail, Type-3 single w/steel post
Approach End - Type "G" w/rounded end

Remove existing terminal; install 50 L.F. of guardrail, Type-3 single w/steel post
Trailing End - Type "G" w/rounded end

Reset existing posts (30 ea.)

BEGIN PROJECT NO. F32(2)
Sta. 3+34.19
END PROJECT NO. F32(3)
Sta. 164+34.19

TRUE NORTH
SCALE: 1" = 40'

M.L. # STA. 160+00

To Wailuku

MON.

MON.

5+00

M.L. # STA. 7+00

Reset existing posts (25 ea.±)
Remove existing terminal and replace with Type "C" at approach end and Type "G" w/rounded end at trailing end.

TRUE NORTH
SCALE: 1" = 40'

S.T. Sta. 16+93.80

M.L. # STA. 19+00

To Hana

MON.

STA. 7+00± LT. - STA. 8+10± LT.

Install 78 L.F. of Type-3 guardrail w/steel post.
Install 32 L.F. of Type-3 guardrail Thrie Beam
Approach End - Type "G" w/rounded end
Trailing End - Type "F"

STA. 10+40± LT. - STA. 14+50± LT.

Remove existing metal guardrail and concrete posts.
Install 378 L.F. of Type-3 guardrail w/steel post.
Install 32 L.F. of Type-3 guardrail Thrie Beam
Approach End - Type "C"
Trailing End - Type "G" w/rounded end

M.L. # STA. 7+00

KAUPAKALUA BRIDGE

10+00

S.T. Sta. 14+43.80

15+00

STA. 7+00± RT. - STA. 8+10± RT.

Remove existing metal guardrail and concrete posts.
Install 78 L.F. of Type-3 guardrail w/steel post.
Install 32 L.F. of Type-3 guardrail Thrie Beam
Approach End - Type "C"
Trailing End - Type "G" w/rounded end

STA. 10+40± RT. - STA. 14+25± RT.

Remove existing metal guardrail and concrete posts
Install 353 L.F. of Type-3 guardrail w/steel post.
Install 32 L.F. of Type-3 guardrail Thrie Beam
Approach End - Type "G" w/rounded end
Trailing End - Type "F"

NOTES:

- See Plan Sht. No. 8 for guardrail details at bridge approaches.
- Existing bridge deck shall be paved with slurry seal. See specifications for requirements.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

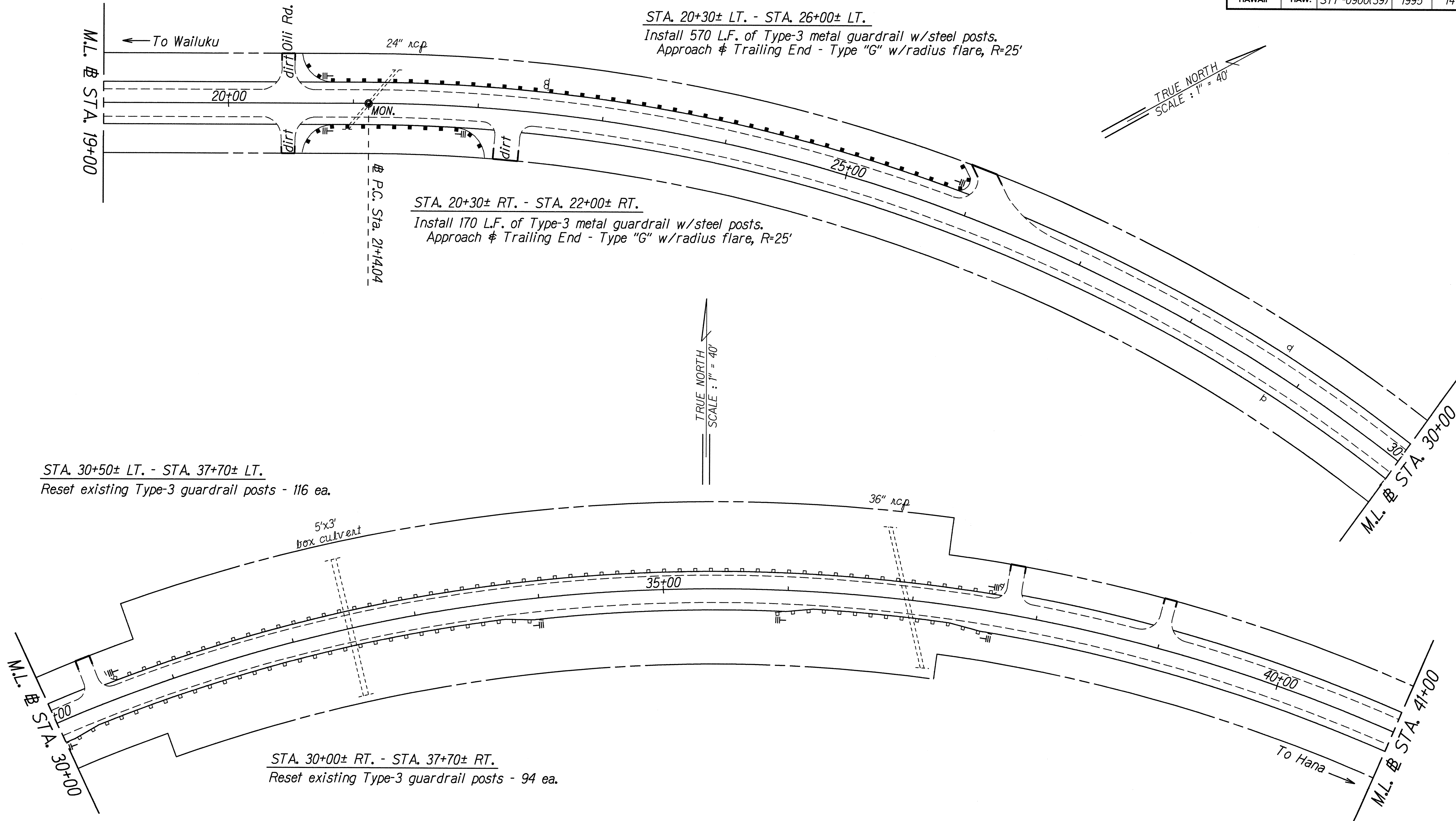
HANA HIGHWAY RESURFACING
Valley Isle Memorial Cemetery to Huelo
Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40' Date: March, 1995

SHEET No. 3 OF 18 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED	DRAWN BY	Mar. 1995
DESIGNED BY	DESIGNED BY	
CHECKED BY	CHECKED BY	
APPROVED BY	APPROVED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	14	51



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	Mar. 1995
Logan, Jason	CHECKED BY	
Shimizu, Hironobu	DESIGNED BY	
	QUANTITY BY	
	CHECKED BY	

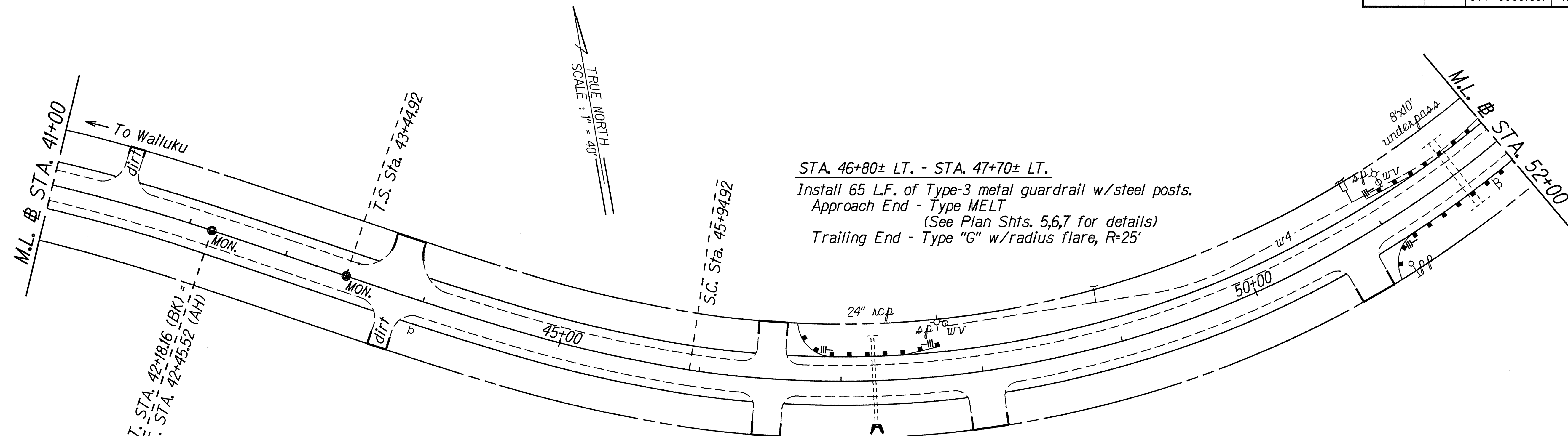
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

HANA HIGHWAY RESURFACING
Valley Isle Memorial Cemetery to Huelo
Fed. Aid Project No. STP-0900(39)
Scale: 1" = 40' Date: March, 1995

SHEET No. 4 OF 18 SHEETS

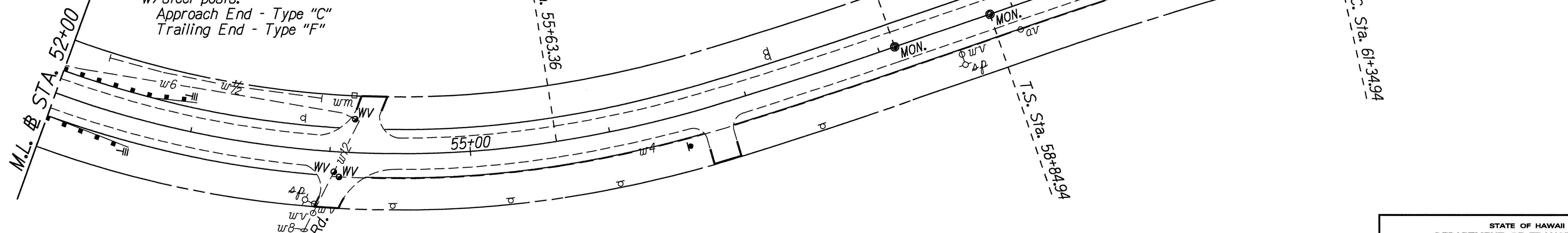
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	15	51



STA. 47+20± RT.
Construct: CRM wingwall
Raise existing CRM headwall, 6 ft.±
Backfill and match existing roadway slope

ESTIMATED QUANTITIES
Structure Excavation 1.0 C.Y.
CRM 5.0 C.Y.
Ditch & Channel Excav. 2.0 C.Y.

STA. 51+00± LT. - STA. 53+00± LT.
Install 200 L.F. of Type-3 metal guardrail w/steel posts.
Approach End - Type "C"
Trailing End - Type "F"



STA. 51+00± RT. - STA. 52+60± RT.
Install 160 L.F. of Type-3 metal guardrail w/steel posts.
Approach End - Type "G" w/radius flare, R=25'
Trailing End - Type "F"

DATE	Mar. 1995
SURVEY PLANNED BY	
DRAWN BY	J. Guerrero
DESIGNED BY	C. Bader
CHECKED BY	Shannon
ORIGINAL PLAN	
NOTED BY	John J. J.
REVISIONS	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

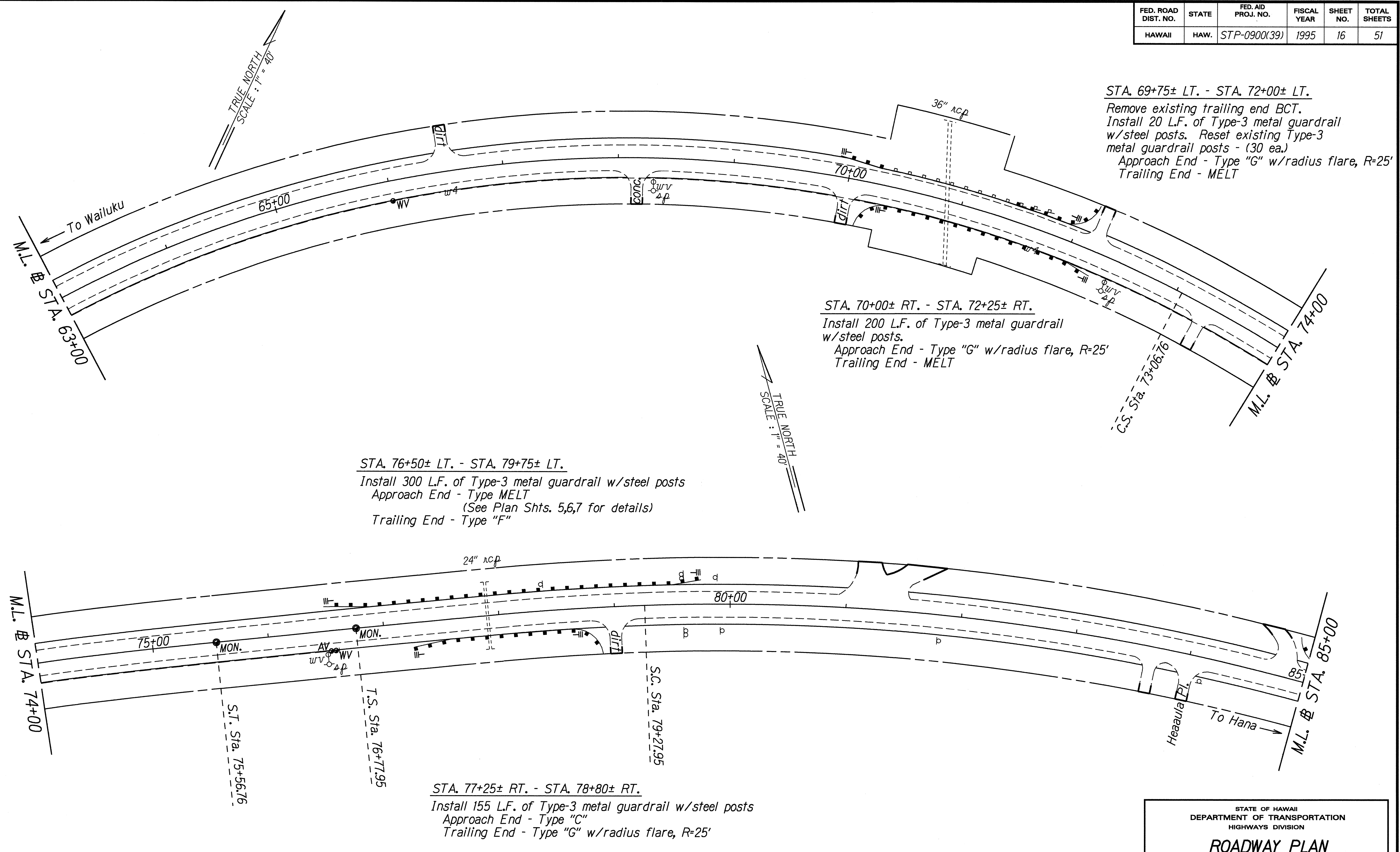
ROADWAY PLAN

HANA HIGHWAY RESURFACING
Valley Isle Memorial Cemetery to Huelo
Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40' Date: March, 1995

SHEET No. 5 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	16	51



DATE	Mar. 1995
SURVEY PLOTTED BY	
DRAWN BY	J. L. Guerrero
DESIGNED BY	G. P. Rogers
CHECKED BY	Shamiruddin
ORIGINAL PLAN	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLAN

HANA HIGHWAY RESURFACING
 Valley Isle Memorial Cemetery to Huelo
 Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40' Date: March, 1995

SHEET No. 6 OF 18 SHEETS

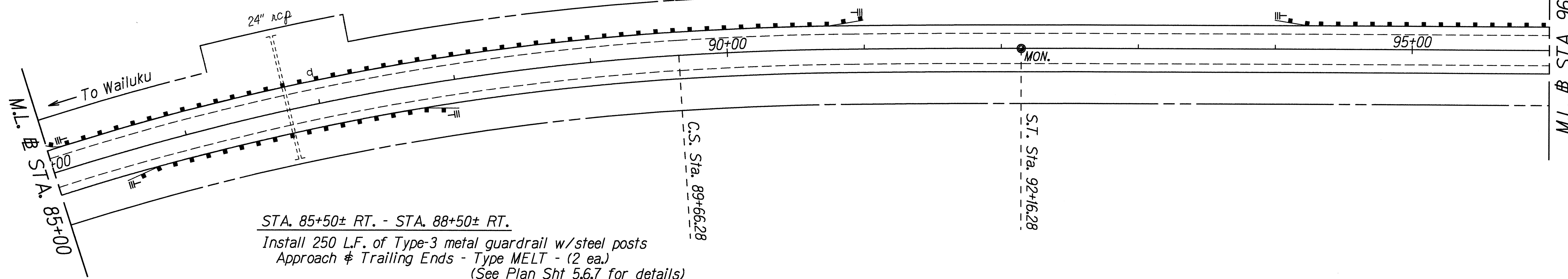
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	17	51

STA. 85+00± LT. - STA. 91+00± LT.

Remove existing concrete posts.
Install 600 L.F. of Type-3 metal guardrail w/steel posts
Approach End - Type MELT
Trailing End - Type "G" w/radius flare, R=25'

STA. 94+00± LT. - STA. 97+70± LT.

Install 370 L.F. of Type-3 metal guardrail w/steel posts
Approach End - Type "G" w/radius flare, R=25'
Trailing End - Type MELT



STA. 85+50± RT. - STA. 88+50± RT.

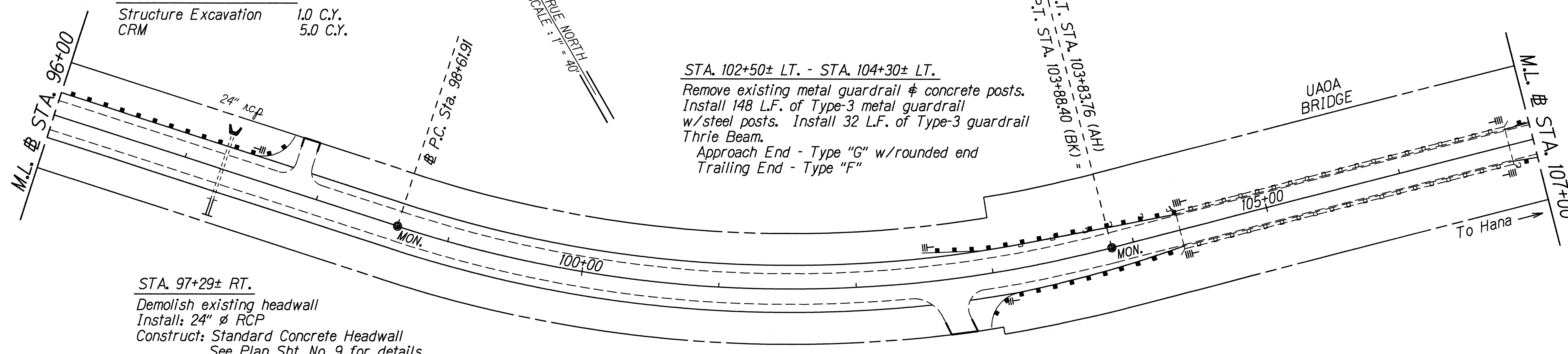
Install 250 L.F. of Type-3 metal guardrail w/steel posts
Approach & Trailing Ends - Type MELT - (2 ea.)
(See Plan Sht 5,6,7 for details)

STA. 97+29± LT.

Construct: CRM wingwall
Raise existing CRM headwall, 6 ft.±
Backfill and match existing roadway slope

ESTIMATED QUANTITIES

Structure Excavation	1.0 C.Y.
CRM	5.0 C.Y.



STA. 102+50± LT. - STA. 104+30± LT.

Remove existing metal guardrail & concrete posts.
Install 148 L.F. of Type-3 metal guardrail w/steel posts. Install 32 L.F. of Type-3 guardrail Thrie Beam.
Approach End - Type "G" w/rounded end
Trailing End - Type "F"

STA. 97+29± RT.

Demolish existing headwall
Install: 24" Ø RCP
Construct: Standard Concrete Headwall
See Plan Sht. No. 9 for details

ESTIMATED QUANTITIES

24" RCP	12 L.F.
Class "A" Concrete	2.0 C.Y.
Structure Excavation	2.0 C.Y.
Ditch & Channel Excav.	1.0 C.Y.

NOTES:

- See Plan Sht. No. 8 for guardrail details at bridge approaches.
- Existing bridge deck shall be paved with slurry seal. See specifications for requirements.

STA. 102+85± RT. - STA. 104+30± RT.

Remove existing metal guardrail & concrete posts.
Install 113 L.F. of Type-3 metal guardrail w/steel posts.
Install 32 L.F. of Type-3 guardrail Thrie Beam.
Approach End - Type "G" w/radius flare, R=50'
Trailing End - Type "G" w/rounded end

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED	DRAWN BY	1995
DESIGNED BY	CHECKED BY	
APPROVED BY		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

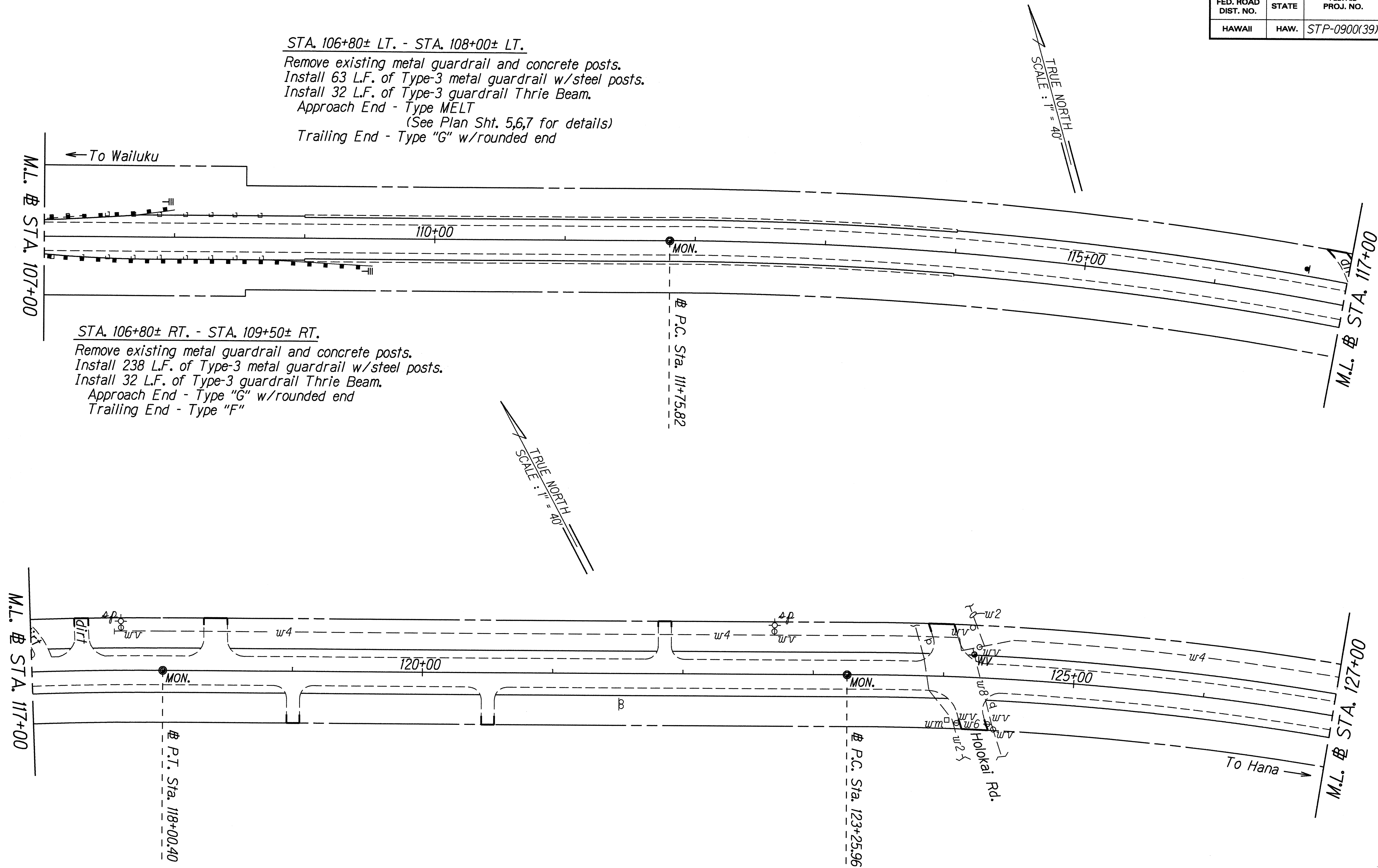
ROADWAY PLAN

HANA HIGHWAY RESURFACING
Valley Isle Memorial Cemetery to Huelo
Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40' Date: March, 1995

SHEET No. 7 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	18	51



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY J. GARCIA	Mar. 1995
LOGS	TRACED BY J. C. BRADSHAW	
QUANTITIES BY	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

HANA HIGHWAY RESURFACING
 Valley Isle Memorial Cemetery to Huelo
 Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40' Date: March, 1995

SHEET No. 8 OF 18 SHEETS

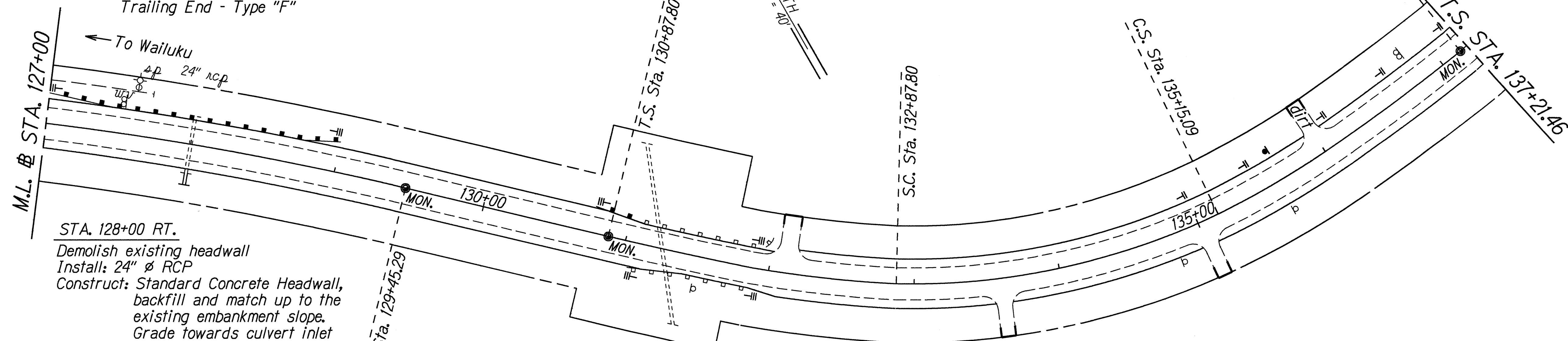
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	19	51

STA. 127+00± LT. - STA. 129+00± LT.

Install 175 L.F. of Type-3 metal guardrail w/steel posts
Approach End - Type MELT
(See Plan Sht. 5,6,7 for details)
Trailing End - Type "F"

STA. 130+40± LT. - STA. 132+00± LT.

Remove existing trailing end (BCT). Install Type MELT
Reset existing Type-3 guardrail posts (23 ea.)



STA. 128+00 RT.

Demolish existing headwall
Install: 24" ø RCP
Construct: Standard Concrete Headwall,
backfill and match up to the
existing embankment slope.
Grade towards culvert inlet

ESTIMATED QUANTITIES

24" RCP	12 L.F.
Class "A" Concrete	2.0 C.Y.
Structure Excavation	5.0 C.Y.
Ditch & Channel Excav.	10.0 C.Y.

STA. 131+00± RT. - STA. 132+00± RT.

Reset existing Type-3 guardrail posts (17 ea.)

STA. 2+50± LT. - STA. 6+80± LT.

Remove existing metal guardrail & concrete posts.
Install 430 L.F. of Type-3 metal guardrail w/steel posts
Approach & Trailing Ends - Type "G" w/radius flare, R=25'

STA. 0+40 LT.

Demolish existing headwall
Install: 24" ø RCP
Construct: Standard Concrete Headwall

ESTIMATED QUANTITIES

24" RCP	12.0 L.F.
Class "A" Concrete	2.0 C.Y.
Structure Excavation	2.0 C.Y.
Ditch & Channel Excav.	1.0 C.Y.

STA. 0+40 RT.

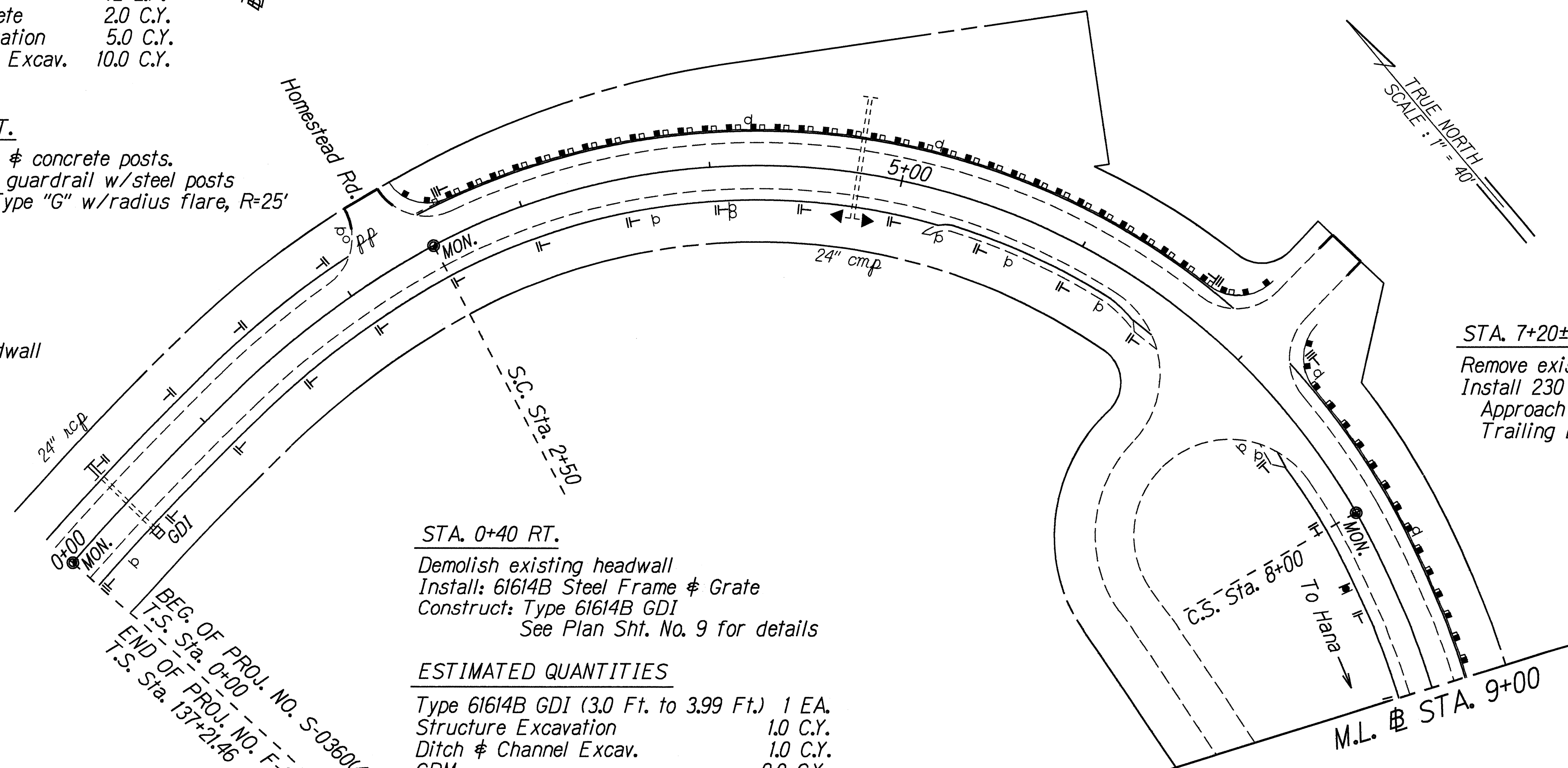
Demolish existing headwall
Install: 61614B Steel Frame & Grate
Construct: Type 61614B GDI
See Plan Sht. No. 9 for details

ESTIMATED QUANTITIES

Type 61614B GDI (3.0 Ft. to 3.99 Ft.)	1 EA.
Structure Excavation	1.0 C.Y.
Ditch & Channel Excav.	1.0 C.Y.
CRM	2.0 C.Y.

STA. 7+20± LT. - STA. 9+50± LT.

Remove existing metal guardrail & concrete posts.
Install 230 L.F. of Type-3 metal guardrail w/steel posts
Approach End - Type "C"
Trailing End - Type "G" w/radius flare, R=25'



ORIGINAL PLAN	DATE: Mar. 1995
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
APPROVED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

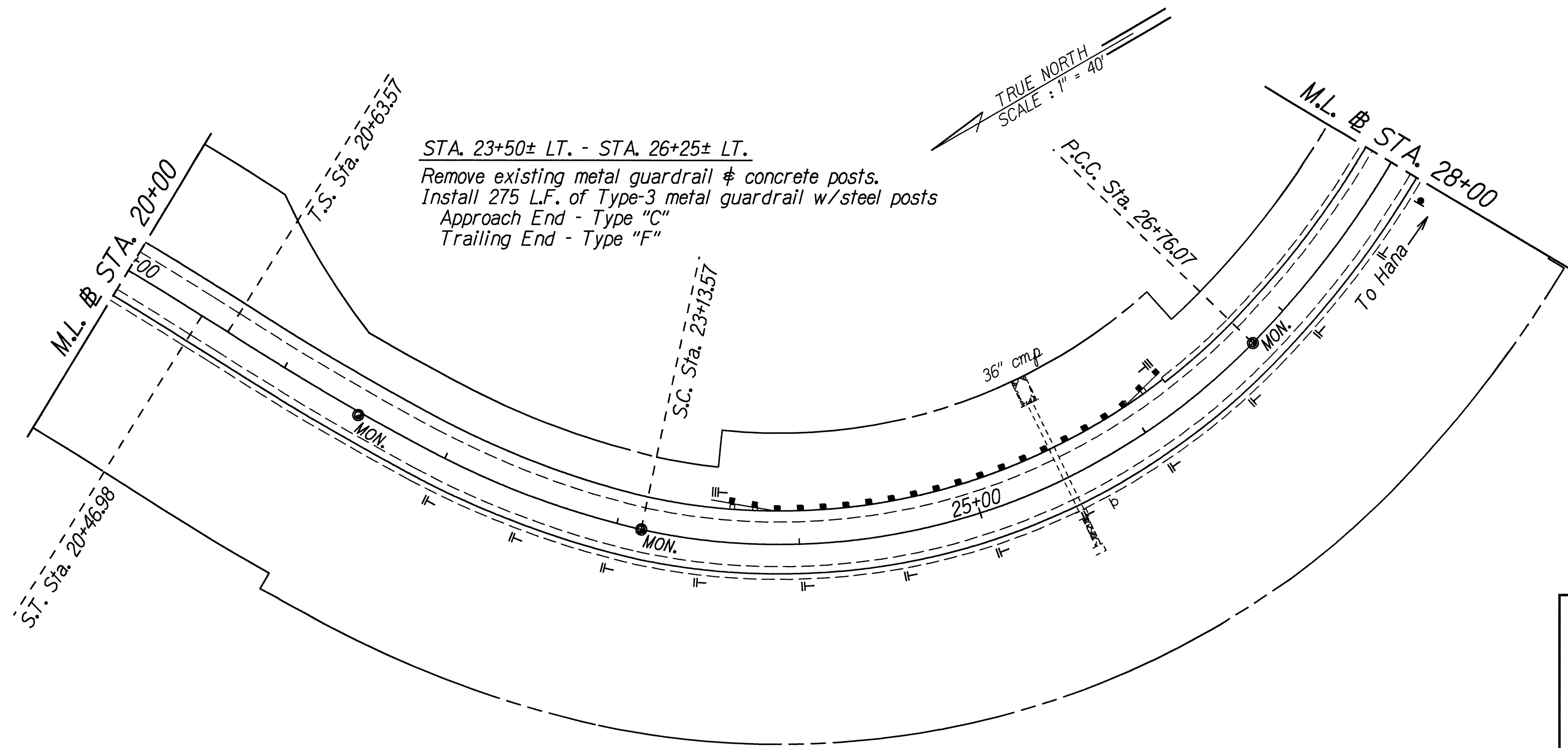
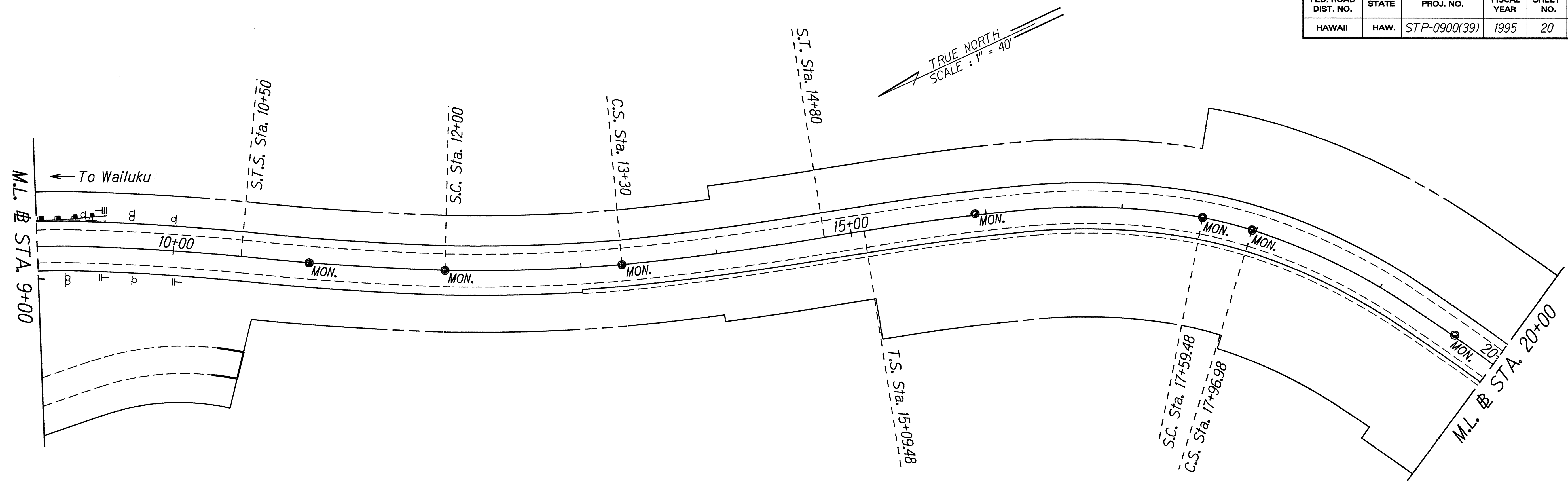
ROADWAY PLAN

HANA HIGHWAY RESURFACING
Valley Isle Memorial Cemetery to Huelo
Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40'
Date: March, 1995

SHEET No. 9 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	20	51



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED	DRAWN BY	Mar. 1995
DESIGNED BY	CHECKED BY	
APPROVED BY		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

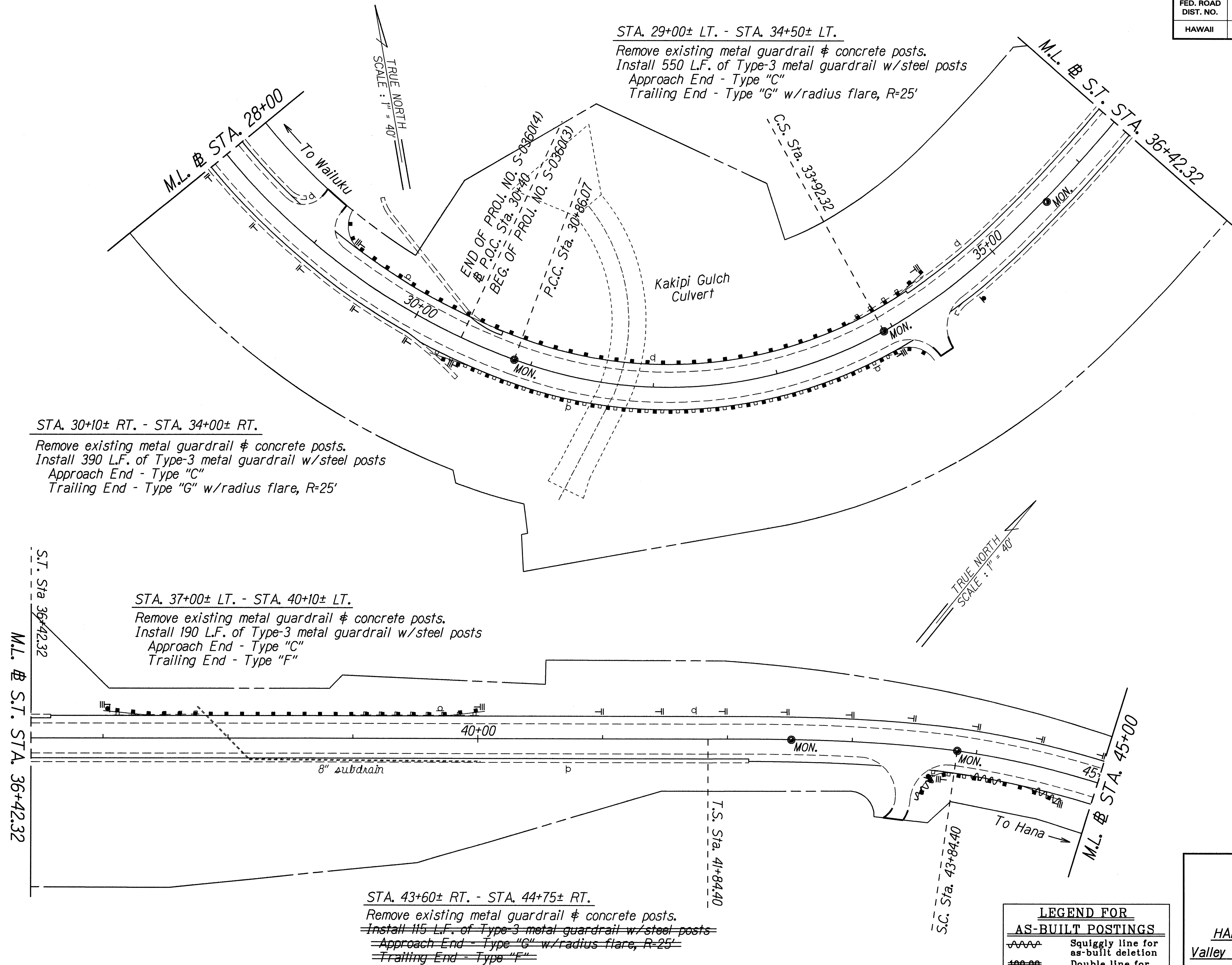
ROADWAY PLAN

HANA HIGHWAY RESURFACING
Valley Isle Memorial Cemetery to Huelo
Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40' Date: March, 1995

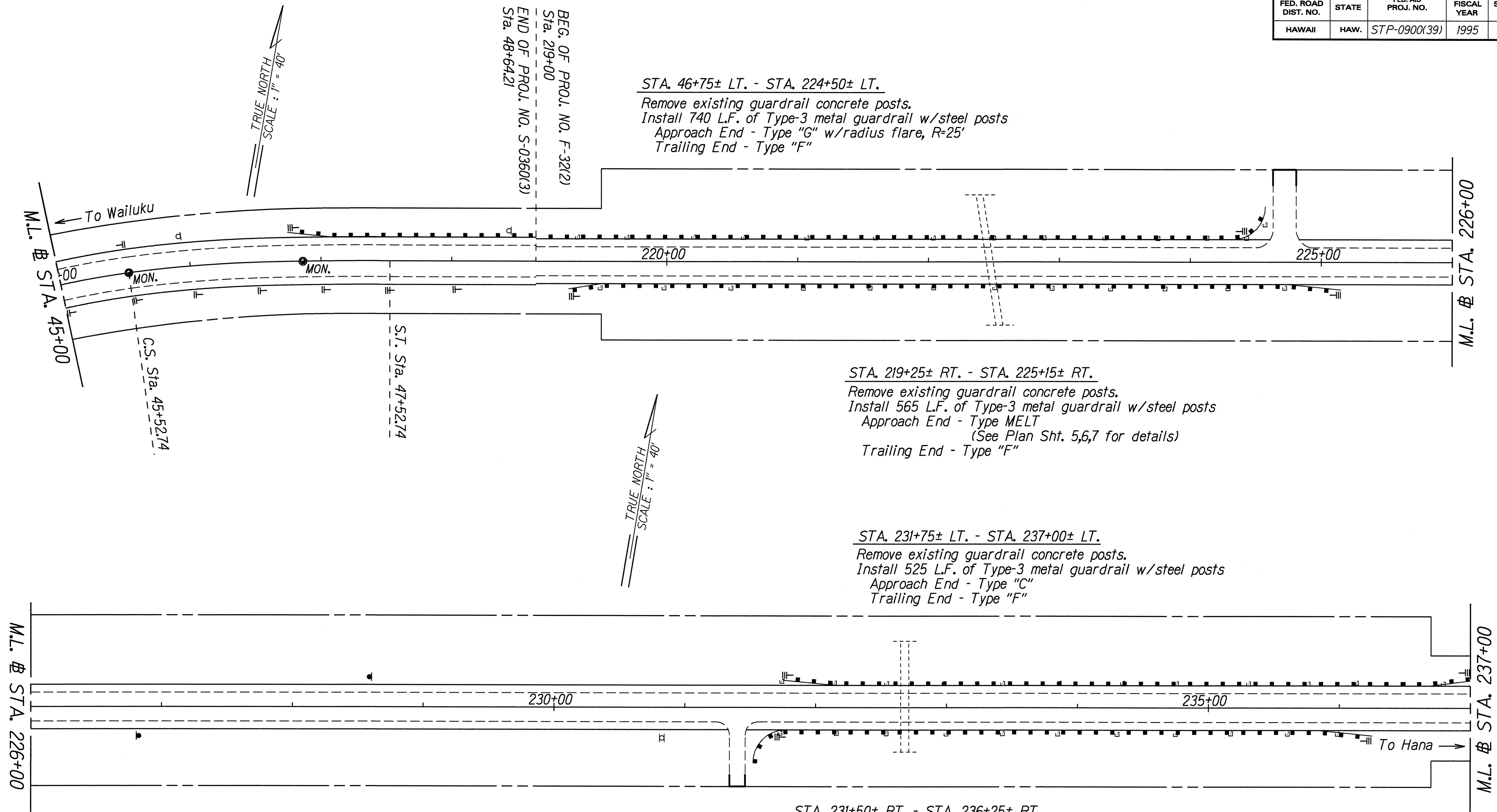
SHEET No. 10 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	21	51



DATE	Mar. 1995
DESIGNED BY	C. P. P. P.
DRAWN BY	C. P. P. P.
CHECKED BY	C. P. P. P.
APPROVED BY	C. P. P. P.
ORIGINAL PLAN	11
NOTE	11
REVISION	11
QUANTITY BY	11
QUANTITY BY	11

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	22	51



DATE	Mar. 1995
SURVEY PLOTTED BY	Y. T. T. T.
DESIGNED BY	C. B. B.
QUANTITIES BY	C. B. B.
CHECKED BY	C. B. B.
ORIGINAL PLAN	Y. T. T. T.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

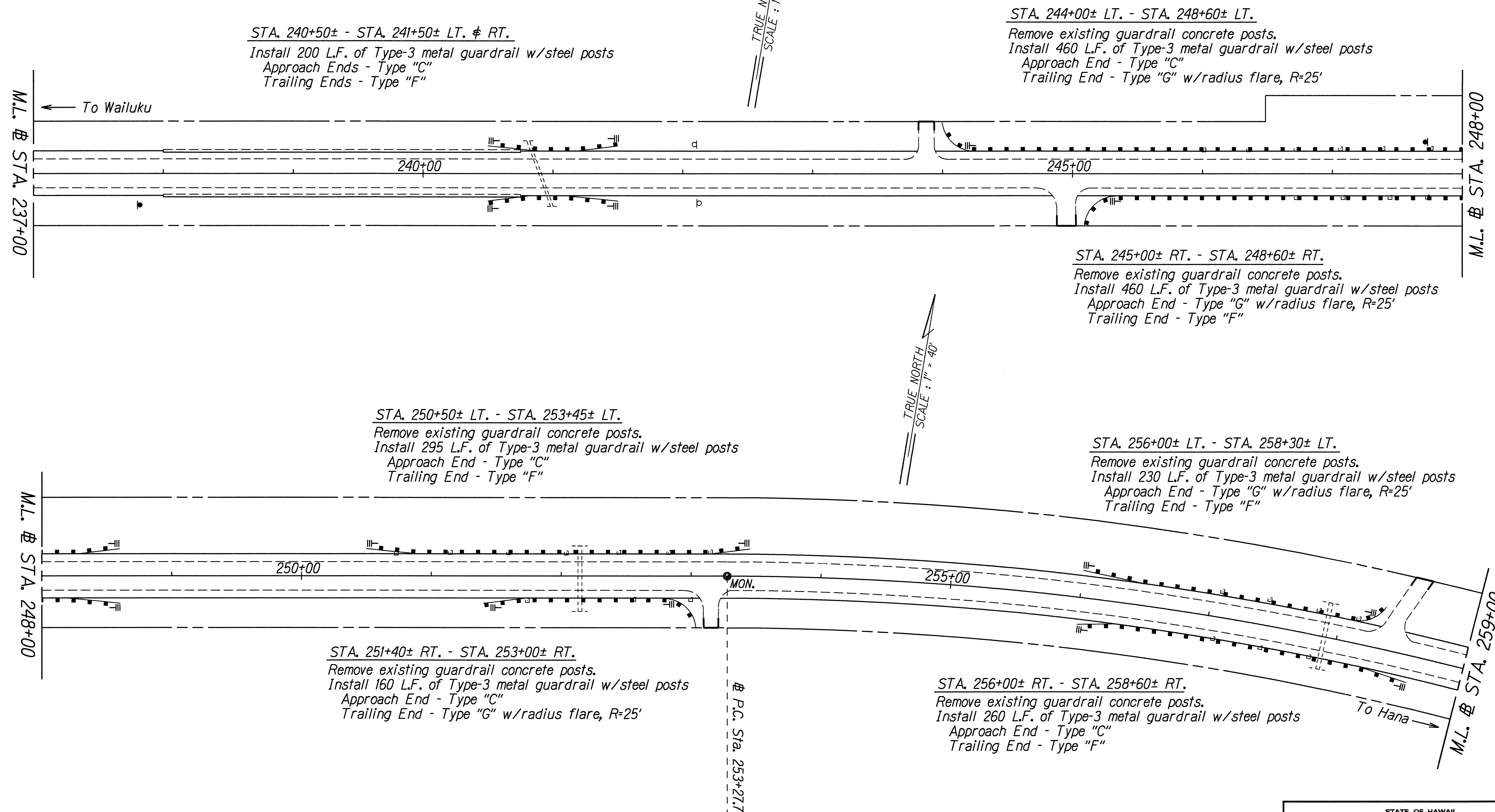
ROADWAY PLAN

HANA HIGHWAY RESURFACING
 Valley Isle Memorial Cemetery to Huelo
 Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40' Date: March, 1995

SHEET No. 12 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	23	51



DATE	Mar. 1995
DESIGNED BY	C. R. R. 1995
DRAWN BY	J. J. 1995
CHECKED BY	J. J. 1995
APPROVED BY	J. J. 1995

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

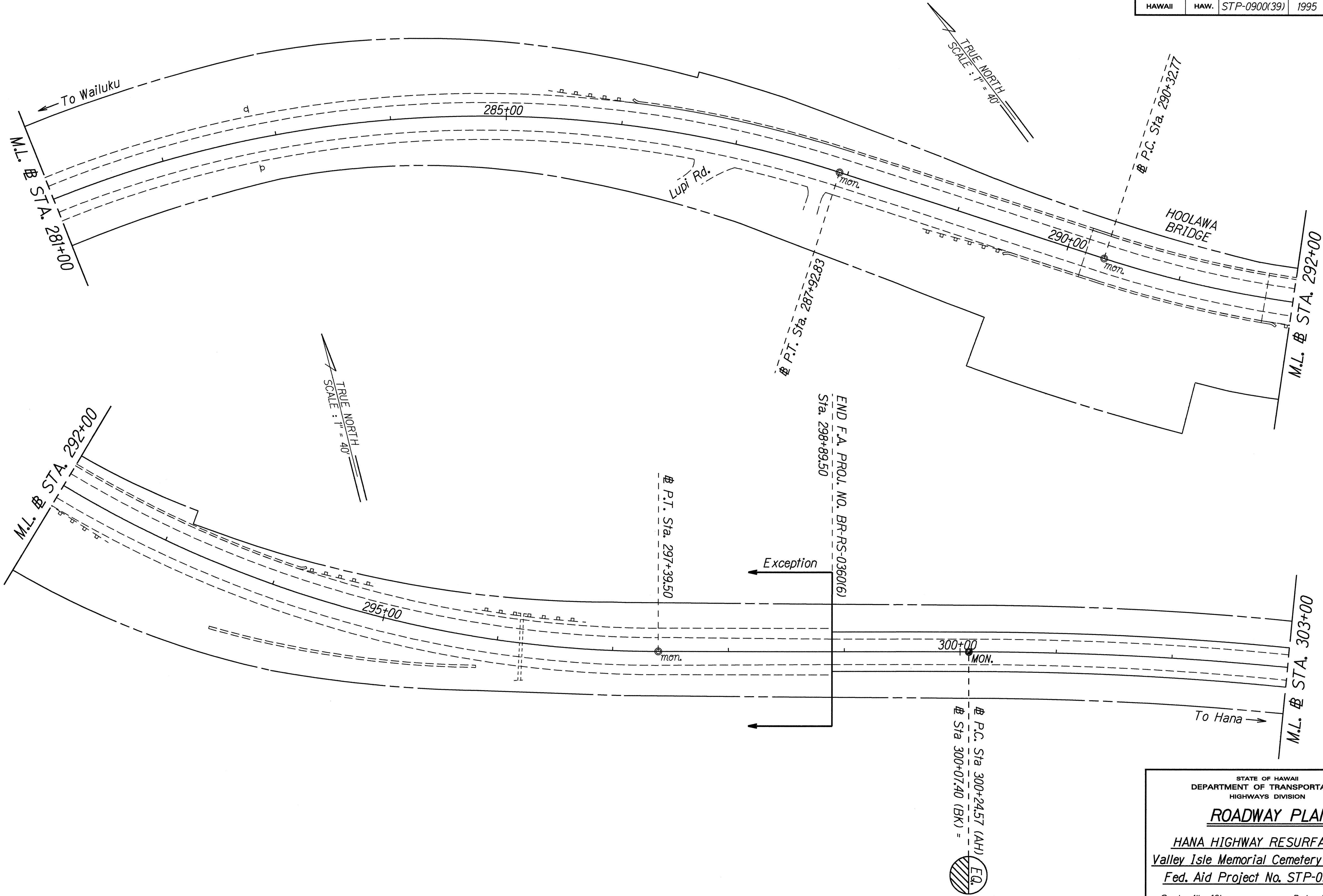
ROADWAY PLAN

HANA HIGHWAY RESURFACING
 Valley Isle Memorial Cemetery to Huelo
 Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40' Date: March, 1995

SHEET No. 13 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	25	51



DATE	Mar. 1995
DESIGNED BY	J. C. Rader
DRAWN BY	T. T. Quinlan
CHECKED BY	Shannon S. S. S.
APPROVED BY	
NOTED BY	John J. J.
PLAN	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

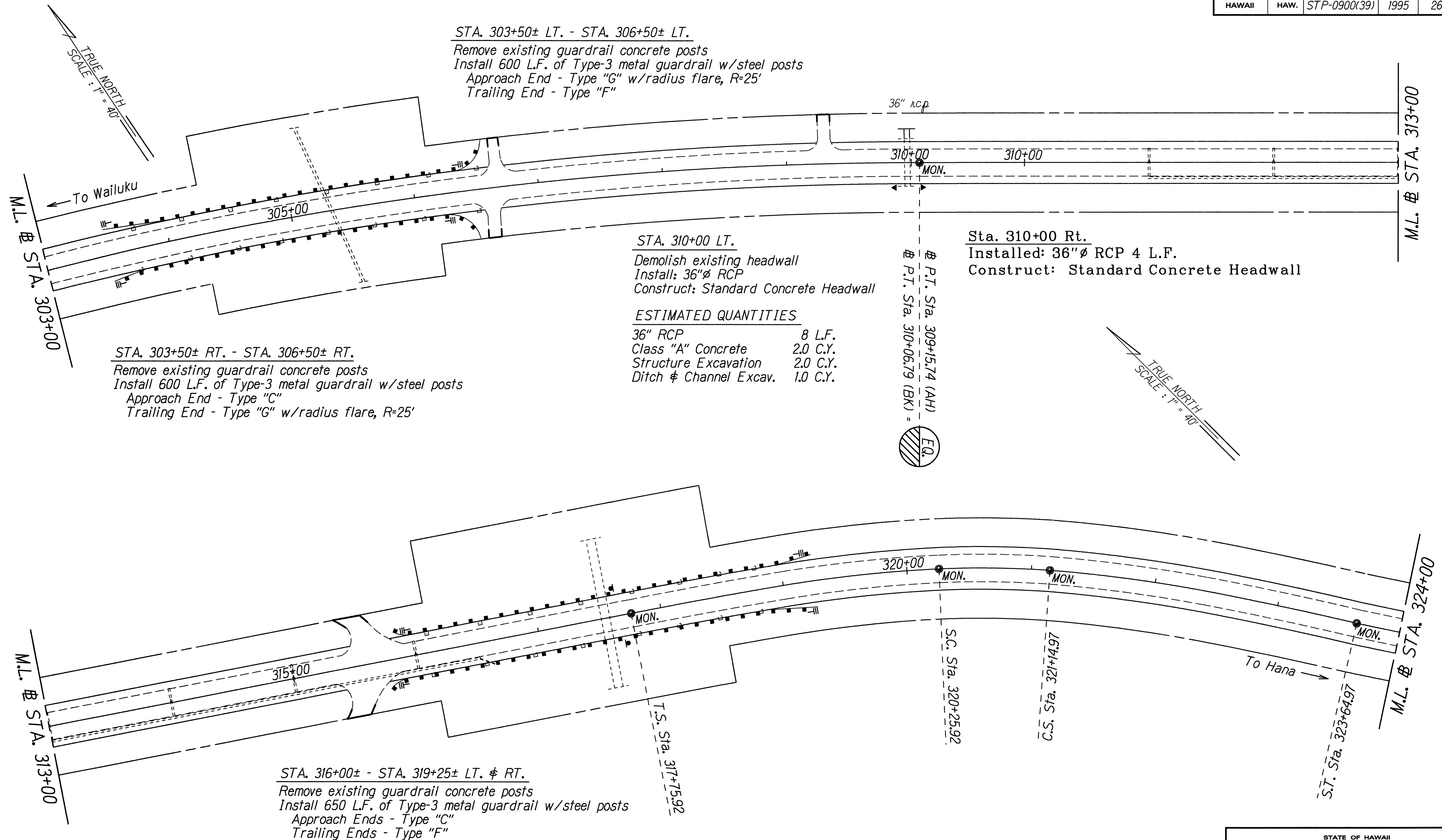
ROADWAY PLAN

HANA HIGHWAY RESURFACING
Valley Isle Memorial Cemetery to Huelo
Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40'
Date: March, 1995

SHEET No. 15 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	26	51



ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	Mar. 1995
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

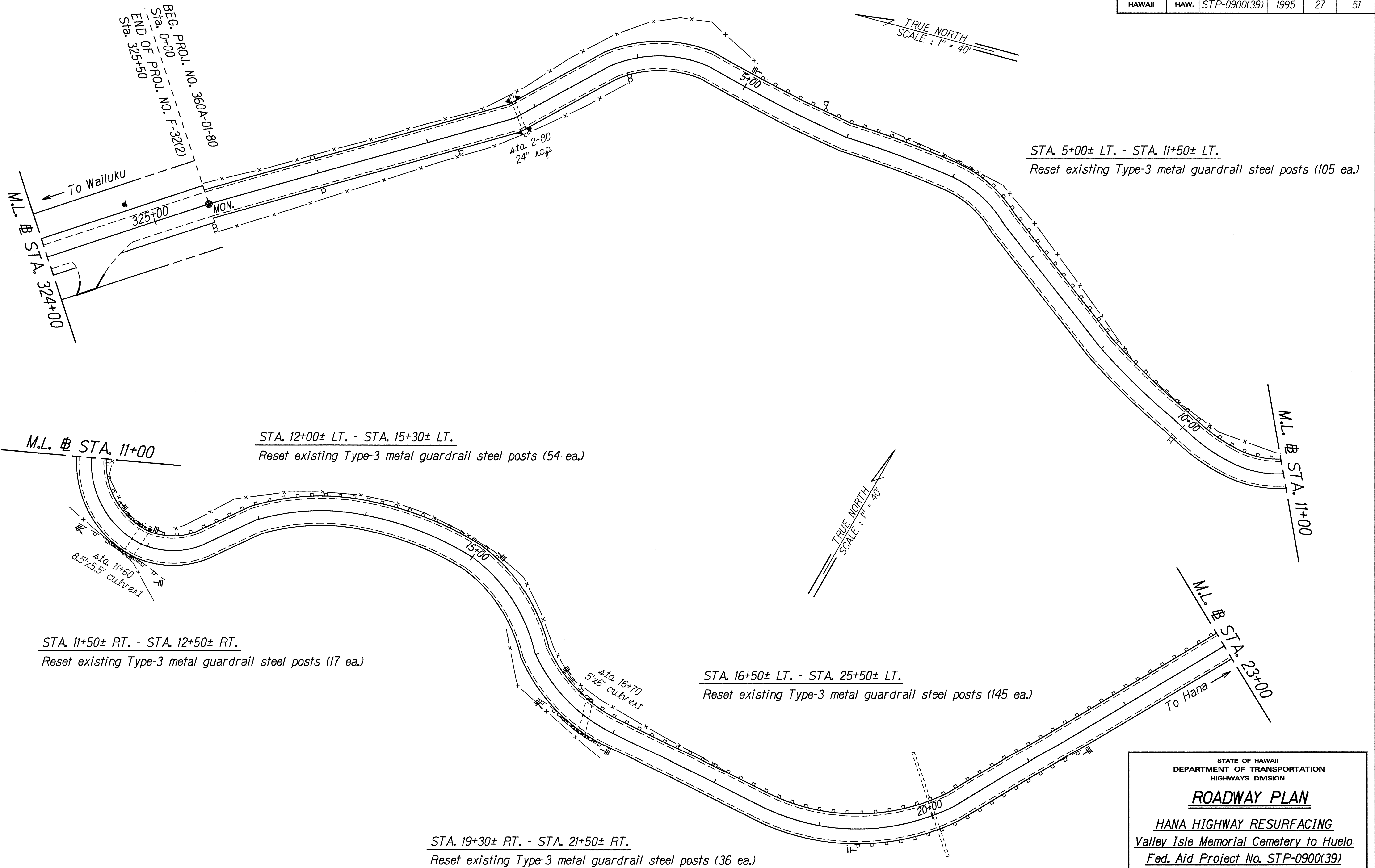
ROADWAY PLAN

HANA HIGHWAY RESURFACING
 Valley Isle Memorial Cemetery to Huelo
 Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40' Date: March, 1995

SHEET No. 16 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	27	51



ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	Mar. 1995
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

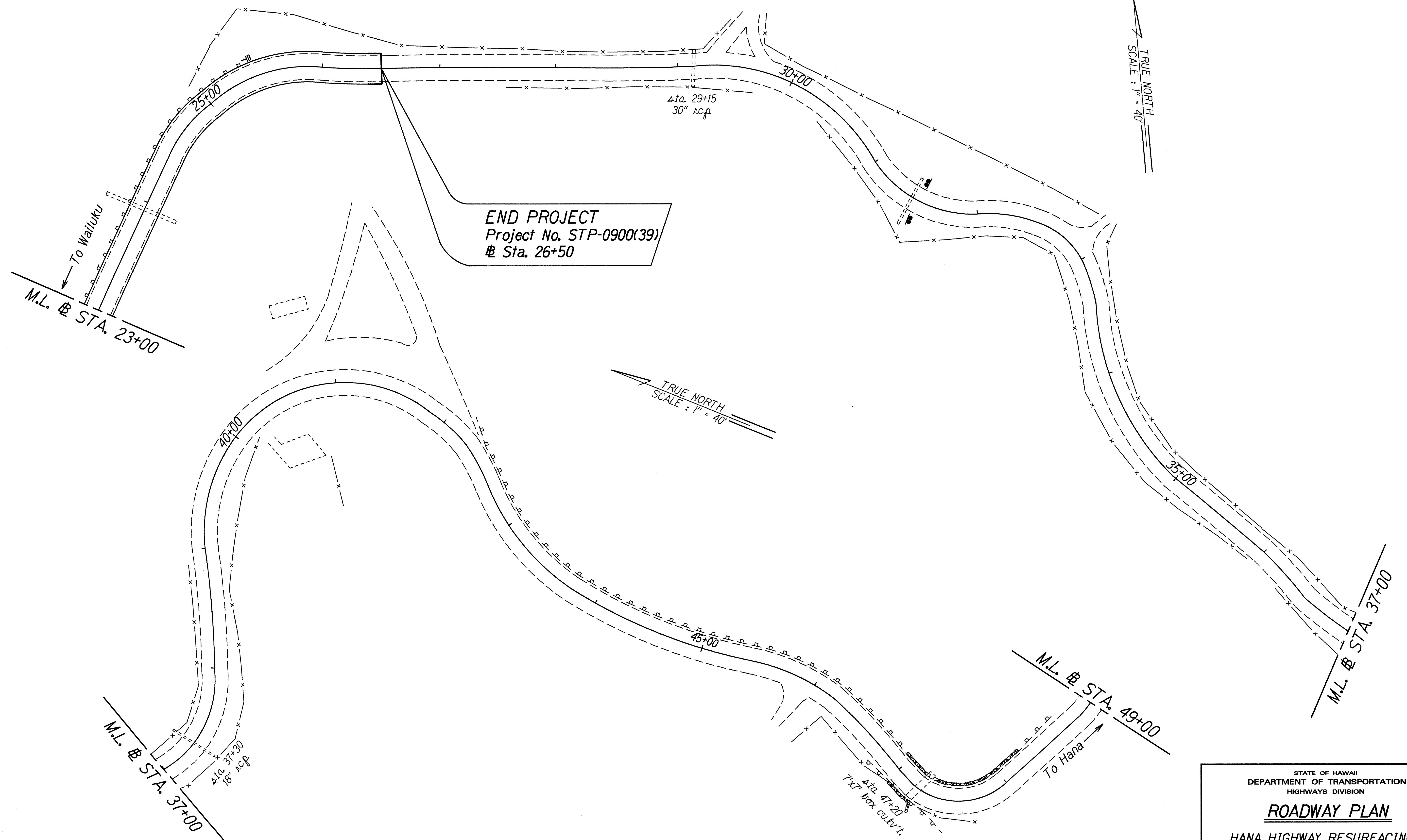
ROADWAY PLAN

HANA HIGHWAY RESURFACING
 Valley Isle Memorial Cemetery to Huelo
 Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40' Date: March, 1995

SHEET No. 17 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0900(39)	1995	28	51



ORIGINAL PLAN	DATE
SURVEY DATED BY	Mar. 1993
DRAWN BY	L. G. G. G.
DESIGNED BY	L. G. G. G.
CHECKED BY	L. G. G. G.
NOTED BY	L. G. G. G.
QUANTITIES BY	L. G. G. G.
CHECKED BY	L. G. G. G.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

HANA HIGHWAY RESURFACING
Valley Isle Memorial Cemetery to Huelo
Fed. Aid Project No. STP-0900(39)

Scale: 1" = 40' Date: March, 1995

SHEET No. 18 OF 18 SHEETS