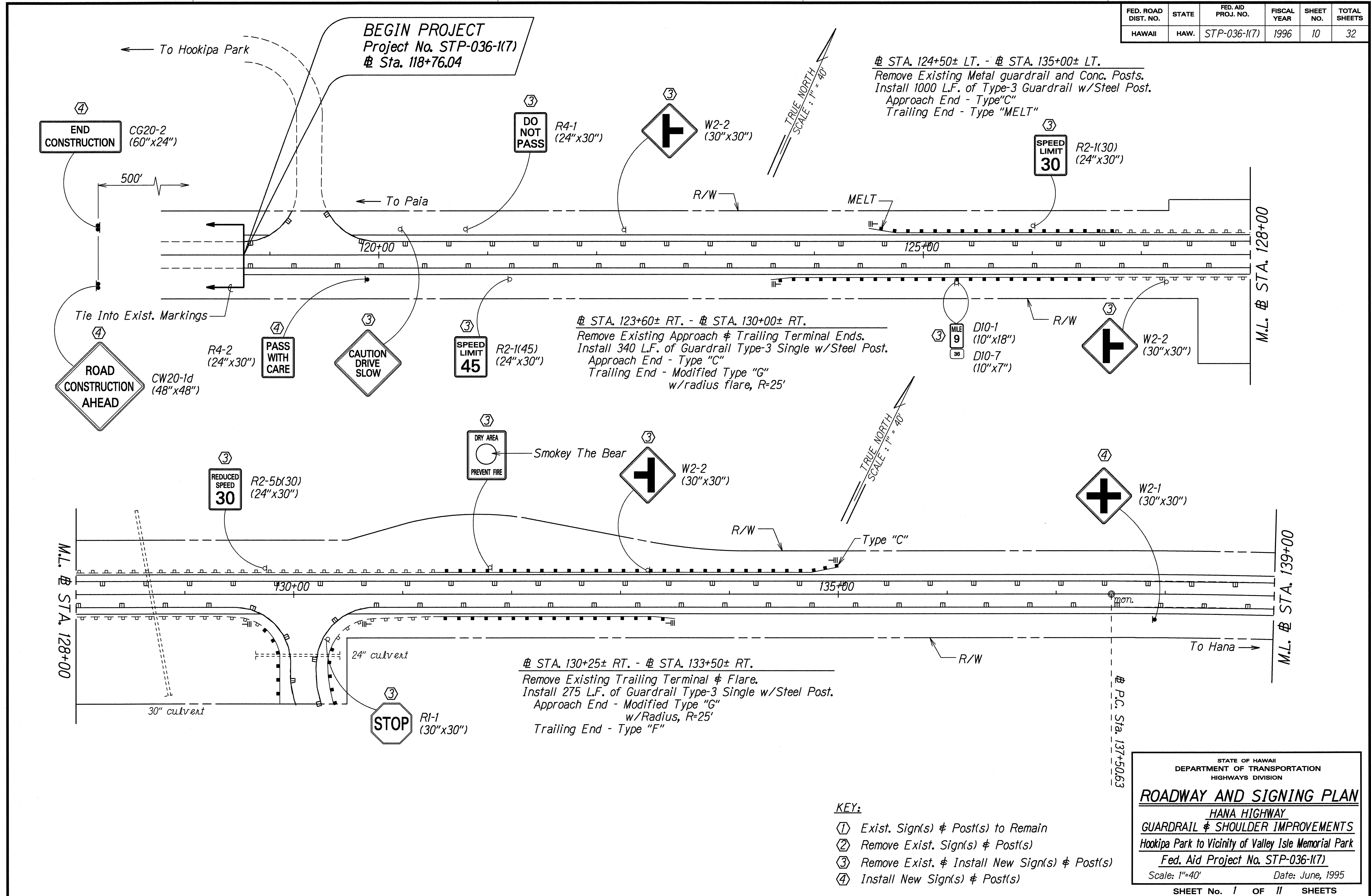


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-036-1(7)	1996	10	32

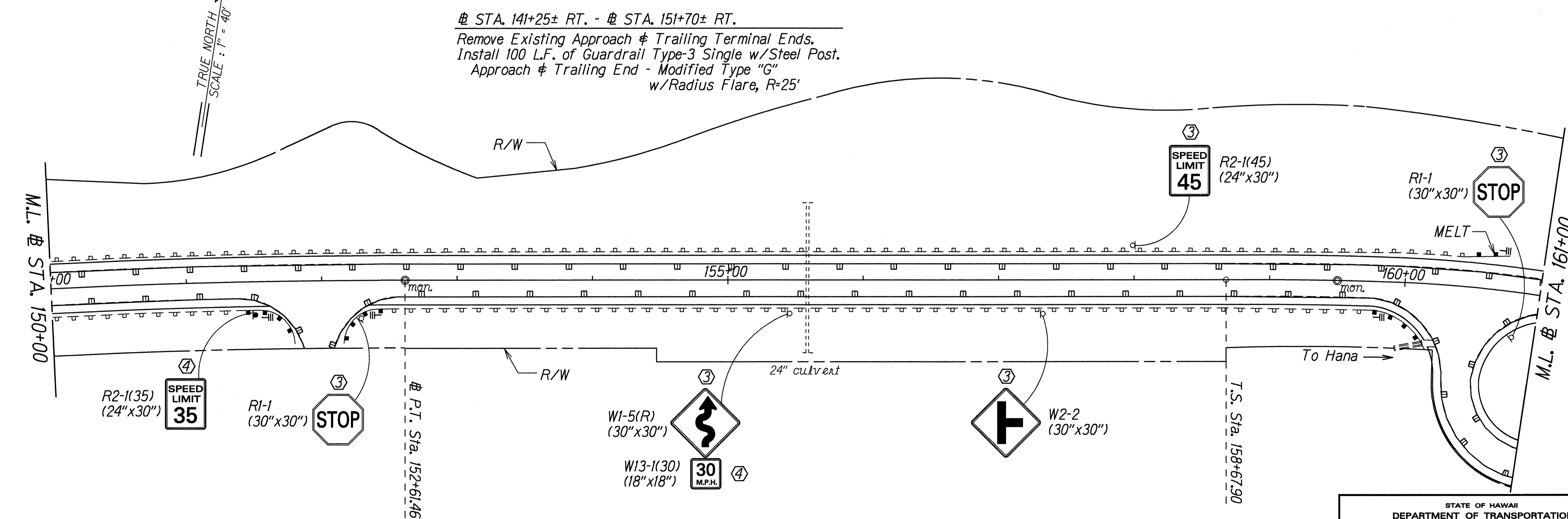
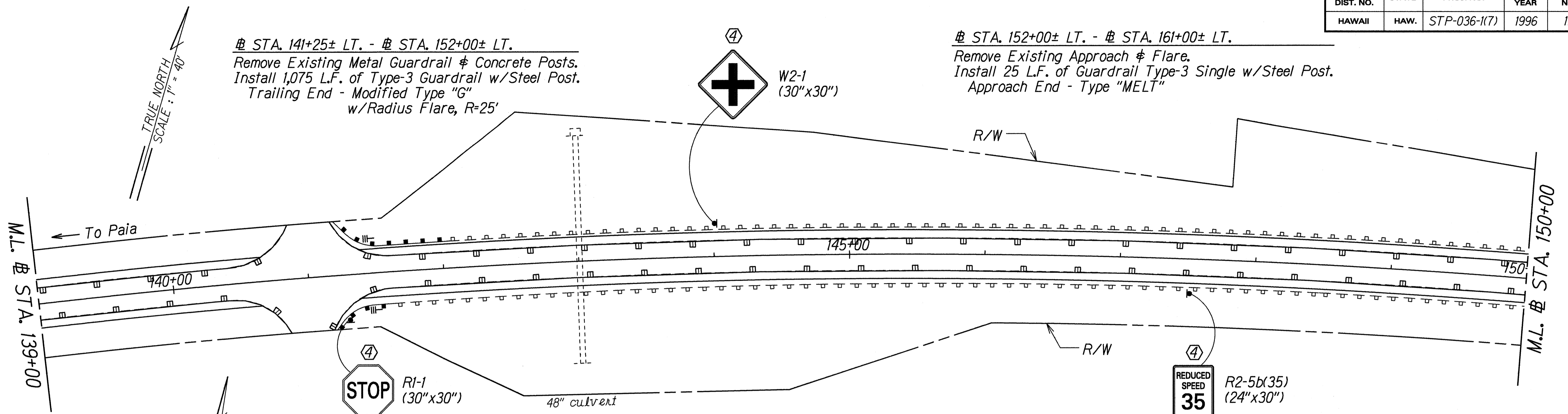


SURVEY BY DATE: EL19-96
 DRAWN BY: J. GUZZALO
 DESIGNED BY: C. BARBER
 QUANTITIES BY: ghanmaldan
 CHECKED BY:

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) & Post(s)
 - ③ Remove Exist. & Install New Sign(s) & Post(s)
 - ④ Install New Sign(s) & Post(s)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY AND SIGNING PLAN
 HANA HIGHWAY
 GUARDRAIL & SHOULDER IMPROVEMENTS
 Hookipa Park to Vicinity of Valley Isle Memorial Park
 Fed. Aid Project No. STP-036-1(7)
 Scale: 1"=40' Date: June, 1995
 SHEET No. 1 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-036-1(7)	1996	11	32



DATE: FEB-96
 DRAWN BY: T. GILBERT
 DESIGNED BY: S. BARBER
 QUANTITIES BY: dhanm2.com
 CHECKED BY:

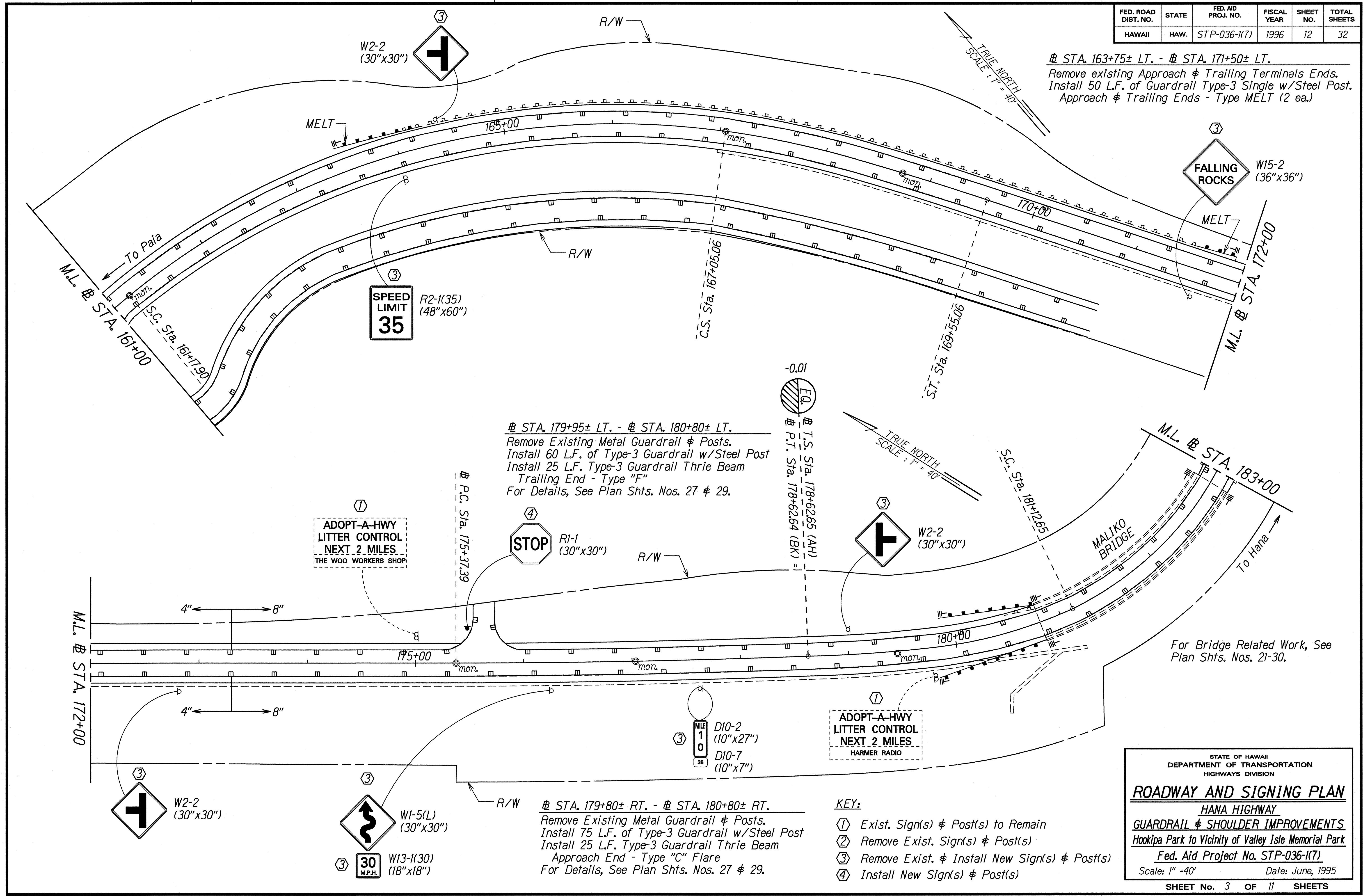
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 - ② Remove Exist. Sign(s) & Post(s)
 - ③ Remove Exist. & Install New Sign(s) & Post(s)
 - ④ Install New Sign(s) & Post(s)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY AND SIGNING PLAN
 HANA HIGHWAY
 GUARDRAIL & SHOULDER IMPROVEMENTS
 Hookipa Park to Vicinity of Valley Isle Memorial Park
 Fed. Aid Project No. STP-036-1(7)
 Scale: 1" = 40' Date: June, 1995

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-036-1(7)	1996	12	32

± STA. 163+75± LT. - ± STA. 171+50± LT.
 Remove existing Approach & Trailing Terminals Ends.
 Install 50 L.F. of Guardrail Type-3 Single w/Steel Post.
 Approach & Trailing Ends - Type MELT (2 ea.)



± STA. 179+95± LT. - ± STA. 180+80± LT.
 Remove Existing Metal Guardrail & Posts.
 Install 60 L.F. of Type-3 Guardrail w/Steel Post
 Install 25 L.F. Type-3 Guardrail Thrie Beam
 Trailing End - Type "F"
 For Details, See Plan Shts. Nos. 27 & 29.

± STA. 179+80± RT. - ± STA. 180+80± RT.
 Remove Existing Metal Guardrail & Posts.
 Install 75 L.F. of Type-3 Guardrail w/Steel Post
 Install 25 L.F. Type-3 Guardrail Thrie Beam
 Approach End - Type "C" Flare
 For Details, See Plan Shts. Nos. 27 & 29.

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) & Post(s)
 - ③ Remove Exist. & Install New Sign(s) & Post(s)
 - ④ Install New Sign(s) & Post(s)

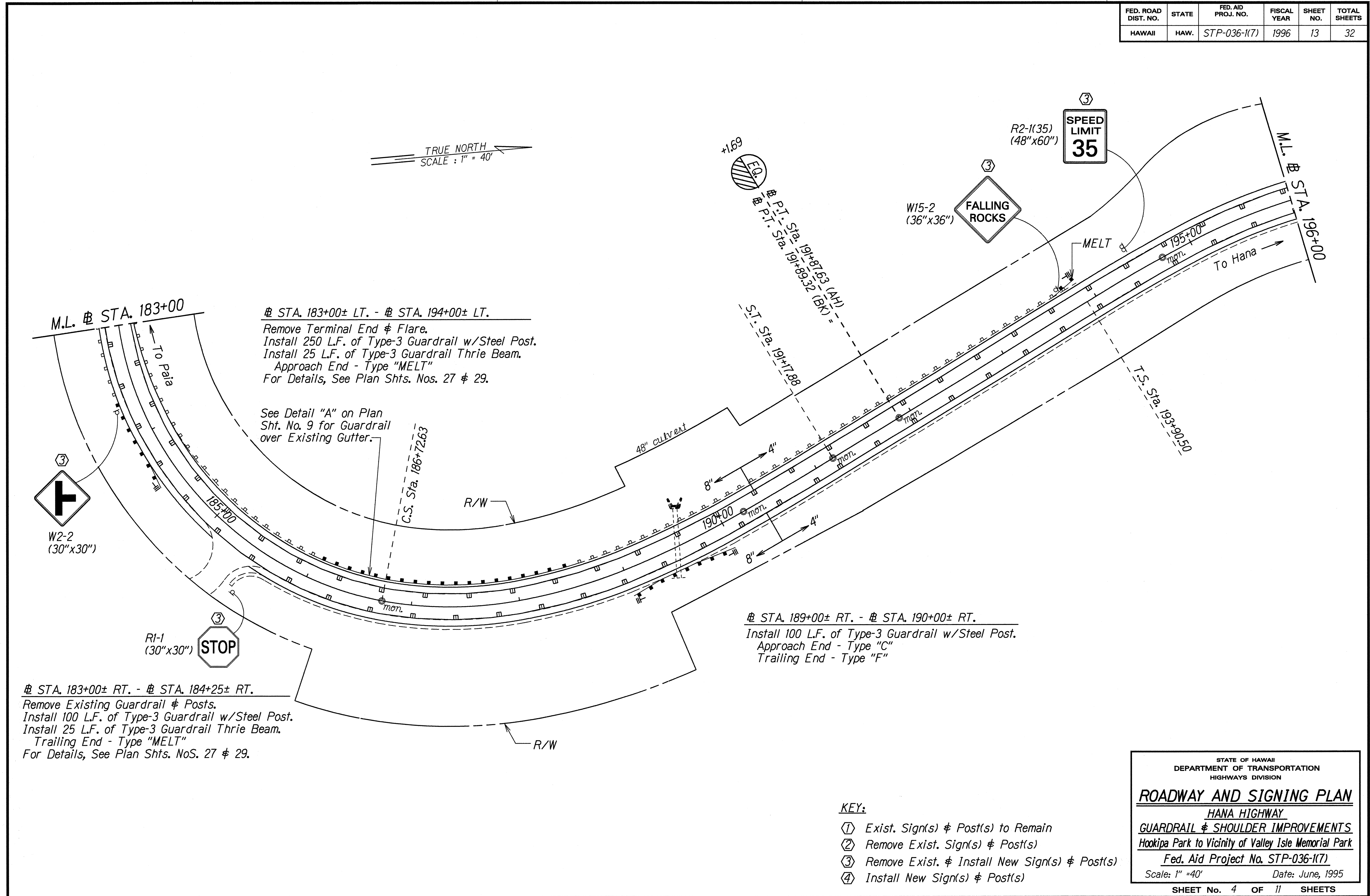
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY AND SIGNING PLAN
 HANA HIGHWAY
 GUARDRAIL & SHOULDER IMPROVEMENTS
 Hookipa Park to Vicinity of Valley Isle Memorial Park
 Fed. Aid Project No. STP-036-1(7)
 Scale: 1" = 40' Date: June, 1995

SHEET No. 3 OF 11 SHEETS

SURVEY PLOTTED BY: DATE: 01-19-96
 DESIGNED BY: C. HANSEN
 CHECKED BY: dhanne@dot.hawaii.gov
 ORIGINAL PLAN:

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-036-1(7)	1996	13	32



STA. 183+00± LT. - STA. 194+00± LT.
 Remove Terminal End & Flare.
 Install 250 L.F. of Type-3 Guardrail w/Steel Post.
 Install 25 L.F. of Type-3 Guardrail Thrie Beam.
 Approach End - Type "MELT"
 For Details, See Plan Shts. Nos. 27 & 29.

See Detail "A" on Plan Sht. No. 9 for Guardrail over Existing Gutter.

STA. 189+00± RT. - STA. 190+00± RT.
 Install 100 L.F. of Type-3 Guardrail w/Steel Post.
 Approach End - Type "C"
 Trailing End - Type "F"

STA. 183+00± RT. - STA. 184+25± RT.
 Remove Existing Guardrail & Posts.
 Install 100 L.F. of Type-3 Guardrail w/Steel Post.
 Install 25 L.F. of Type-3 Guardrail Thrie Beam.
 Trailing End - Type "MELT"
 For Details, See Plan Shts. NoS. 27 & 29.

DATE	7/19/95
SURVEY BY	CHIEF
DESIGNED BY	C. BARBER
CHECKED BY	CHIEF

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) & Post(s)
 - ③ Remove Exist. & Install New Sign(s) & Post(s)
 - ④ Install New Sign(s) & Post(s)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY AND SIGNING PLAN
 HANA HIGHWAY
 GUARDRAIL & SHOULDER IMPROVEMENTS
 Hookipa Park to Vicinity of Valley Isle Memorial Park
 Fed. Aid Project No. STP-036-1(7)
 Scale: 1" = 40' Date: June, 1995
 SHEET No. 4 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-036-1(7)	1996	14	32

± STA. 201+25± LT. - ± STA. 204+00± LT.
 Remove Existing Metal Guardrail & Concrete Posts.
 Install 275 L.F. of Type-3 metal Guardrail w/Steel Post.
 Approach End - Type "C"
 Trailing End - Type "F"

± STA. 196+50± LT. - ± STA. 198+00± LT.
 Remove Existing Approach & Trailing Terminal Ends.
 Install 50 L.F. of Type-3 Guardrail w/Steel Post.
 Approach End - Type "C"
 Trailing End - Type MELT

± STA. 196+75 RT.
 Demolish Existing Structure.
 Install: 61614B Steel Frame & Grate
 Construct: Type 61614B GDI
 Grade Area to Drain.

ESTIMATED QUANTITIES:
 Type 61614B GDI (2.0 Ft. to 3.99 Ft.) 1 EA.
 Structure Excavation 2.0 C.Y.
 Ditch & Channel Excav. 2.0 C.Y.

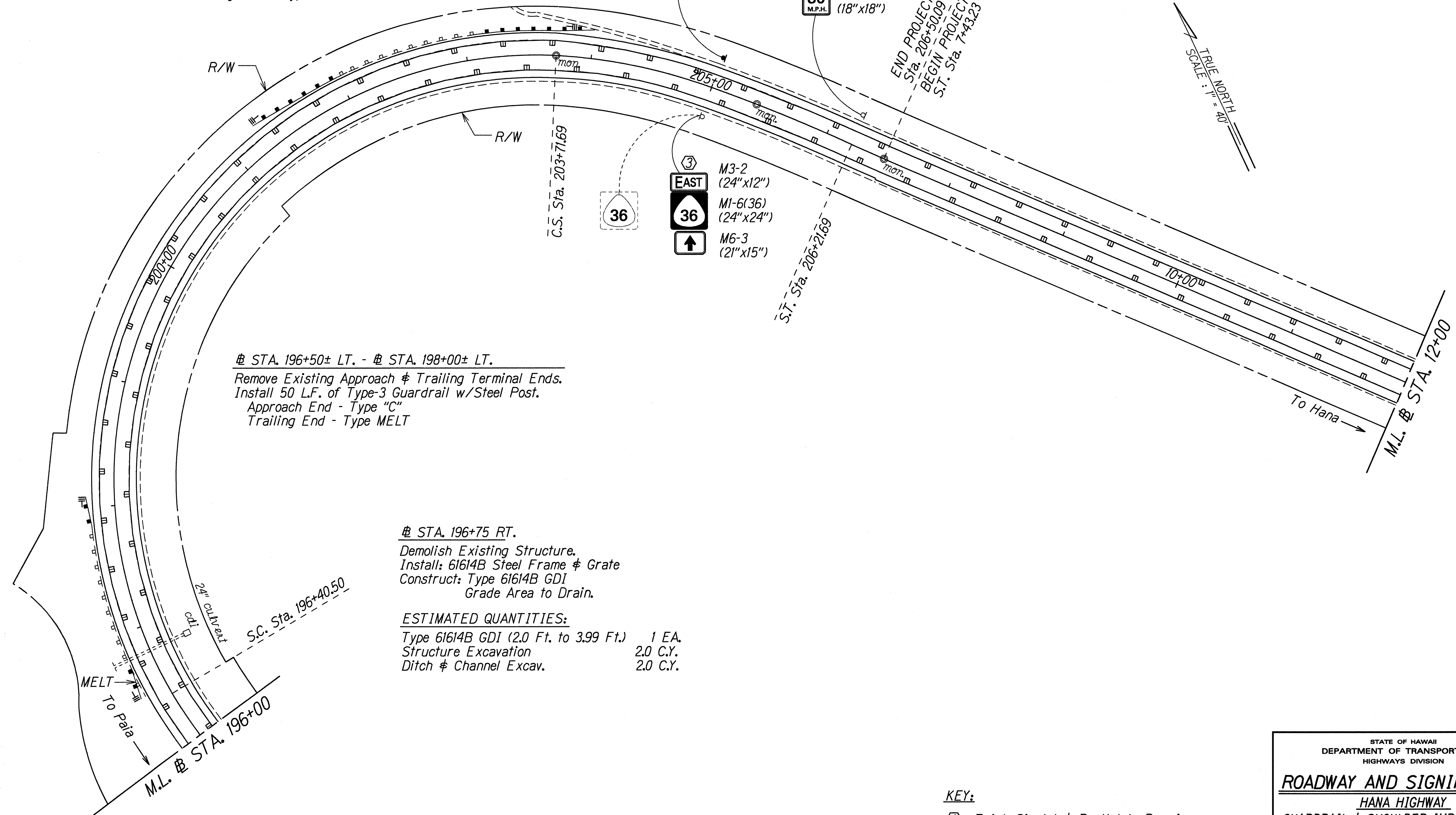
④ WEST
 M3-4 (24"x12")
 M1-6(36) (24"x24")
 M6-3 (21"x15")

③
 W1-5(L) (30"x30")
 W13-1(30) (18"x18")

③ EAST
 M3-2 (24"x12")
 M1-6(36) (24"x24")
 M6-3 (21"x15")

END PROJECT No. F-036-1(1)
 Sta. 206+50.09
 BEGIN PROJECT No. F-32(3)
 S.T. Sta. 7+43.23

TRUE NORTH
 SCALE: 1" = 40'



DATE	11-18-96
SURVEY PLOTTED BY	J. J. J.
DESIGNED BY	C. F.
QUANTITIES BY	C. F.
CHECKED BY	C. F.
ORIGINAL PLAN	
NOTE BOOK	

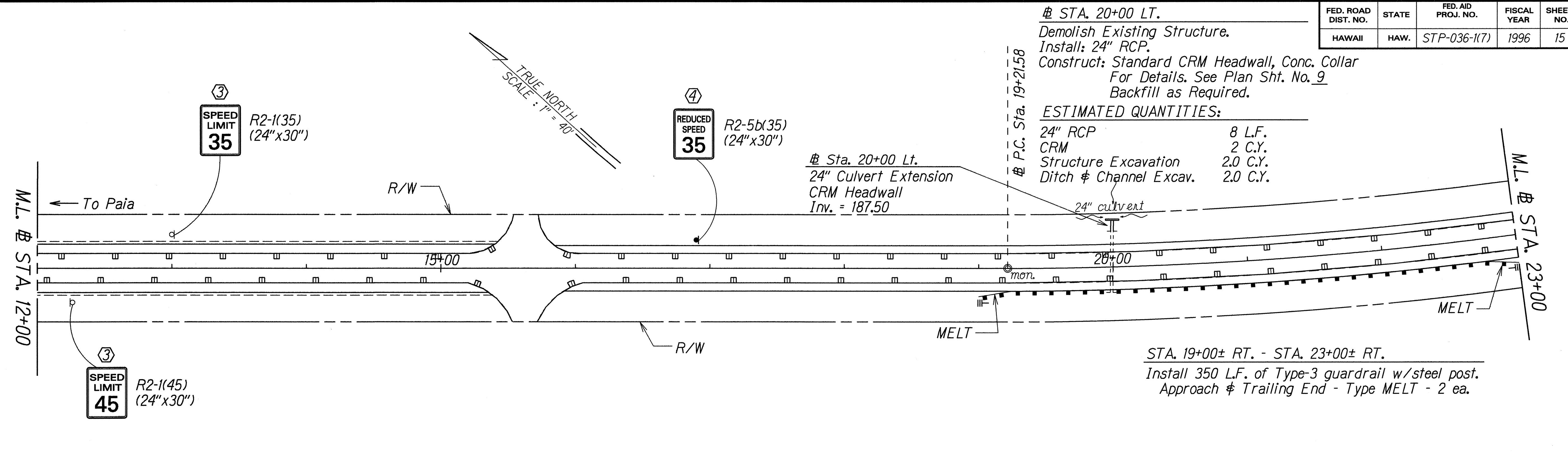
- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) & Post(s)
 - ③ Remove Exist. & Install New Sign(s) & Post(s)
 - ④ Install New Sign(s) & Post(s)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY AND SIGNING PLAN
 HANA HIGHWAY
 GUARDRAIL & SHOULDER IMPROVEMENTS
 Hookipa Park to Vicinity of Valley Isle Memorial Park
 Fed. Aid Project No. STP-036-1(7)
 Scale: 1" = 40' Date: June, 1995

SHEET No. 5 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-036-1(7)	1996	15	32



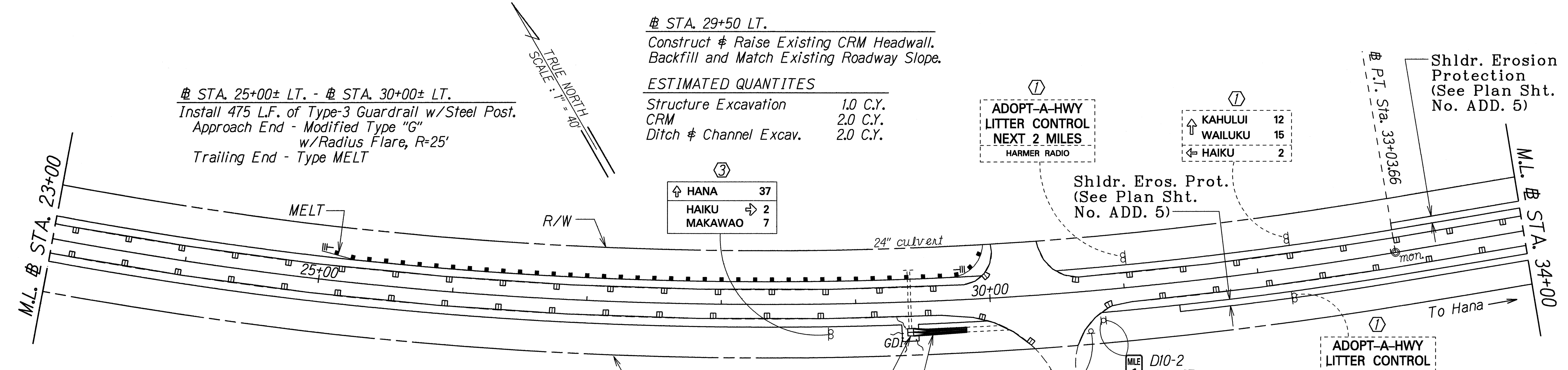
STA. 20+00 LT.
 Demolish Existing Structure.
 Install: 24" RCP.
 Construct: Standard CRM Headwall, Conc. Collar
 For Details. See Plan Sht. No. 9
 Backfill as Required.

ESTIMATED QUANTITIES:

24" RCP	8 L.F.
CRM	2 C.Y.
Structure Excavation	2.0 C.Y.
Ditch & Channel Excav.	2.0 C.Y.

Sta. 20+00 Lt.
 24" Culvert Extension
 CRM Headwall
 Inv. = 187.50

STA. 19+00± RT. - STA. 23+00± RT.
 Install 350 L.F. of Type-3 guardrail w/steel post.
 Approach & Trailing End - Type MELT - 2 ea.



STA. 29+50 LT.
 Construct & Raise Existing CRM Headwall.
 Backfill and Match Existing Roadway Slope.

ESTIMATED QUANTITIES

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

STA. 25+00± LT. - # STA. 30+00± LT.
 Install 475 L.F. of Type-3 Guardrail w/Steel Post.
 Approach End - Modified Type "G"
 w/Radius Flare, R=25'
 Trailing End - Type MELT

ADOPT-A-HWY
 LITTER CONTROL
 NEXT 2 MILES
 HARMER RADIO

KAHULUI 12
 WAILUKU 15
 HAIKU 2

Shldr. Eros. Prot.
 (See Plan Sht. No. ADD. 5)

Shldr. Erosion Protection
 (See Plan Sht. No. ADD. 5)

HANA 37
 HAIKU 2
 MAKAWAO 7

D10-2 (10"x27")
 D10-7 (10"x7")

ADOPT-A-HWY
 LITTER CONTROL
 NEXT 2 MILES
 POLSKY & GOULD ATTORNEY

STA. 29+40± RT. - # STA. 29+80± RT.
 Construct: Lined Trapezoidal Drainage Ditch Backfill Tie into Existing Trapezoidal Drainage Ditch & Match Existing Slope. Drain to Existing Culvert Inlet. (See Plan Sht. No. 5 for Detail.)

ESTIMATED QUANTITIES:

Lined Trapezoidal Drainage Ditch	40 L.F.
----------------------------------	---------

Sta. 29+40 Rt.
 Type 61614B GDI
 Inv. = 212.0

STA. 29+40 RT.
 Construct: Type 61614B
 For Detail See Sheet No. 5
 Grade Surrounding Area to Drain into New Inlet.
 Install: Type 61614B Steel Frame and Grate

ESTIMATED QUANTITIES:

Type 61614B GDI (3.0 Ft. to 4.99 Ft.)	1 EA.
Structure Excavation	2.0 C.Y.
CRM	2.0 C.Y.

Conc. Spillway
 Align. Altered

- KEY:
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) & Post(s)
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 - ④ Install New Sign(s) & Post(s)

LEGEND FOR AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
	Roadway Text for as-built posting

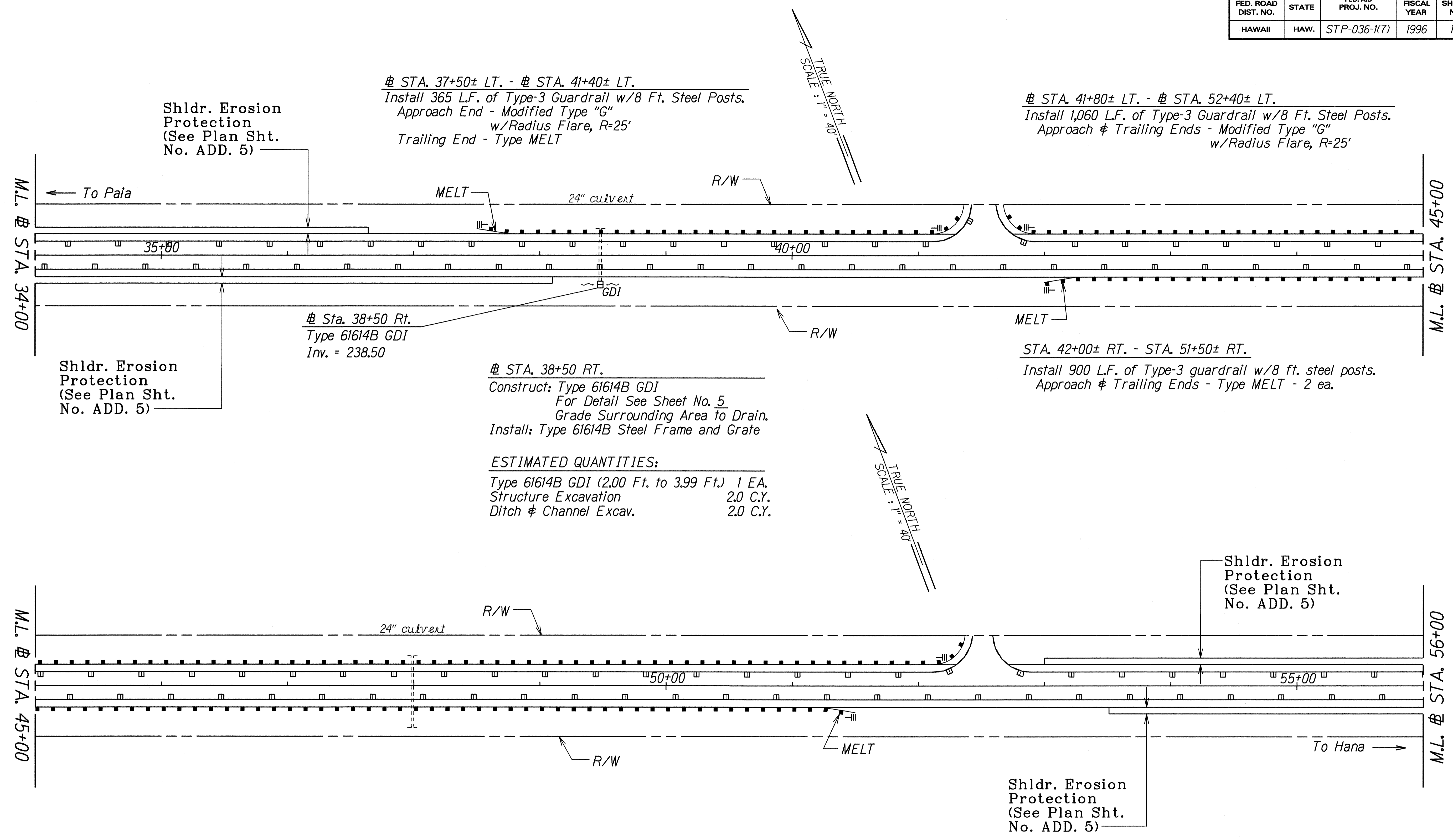
SURVEY PLOTTED BY: DATE: 10-05-95
 DRAWN BY: JH
 DESIGNED BY: C. REBER
 QUANTITIES BY: JH
 CHECKED BY: JH

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY AND SIGNING PLAN
 HANA HIGHWAY
 GUARDRAIL & SHOULDER IMPROVEMENTS
 Hookipa Park to Vicinity of Valley Isle Memorial Park
 Fed. Aid Project No. STP-036-1(7)
 Scale: 1" = 40' Date: June, 1995
 SHEET No. 6 OF 11 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-036-1(7)	1996	16	32



Shldr. Erosion Protection (See Plan Sht. No. ADD. 5)

Install 365 L.F. of Type-3 Guardrail w/8 Ft. Steel Posts.
Approach End - Modified Type "G"
w/Radius Flare, R=25'
Trailing End - Type MELT

Install 1,060 L.F. of Type-3 Guardrail w/8 Ft. Steel Posts.
Approach & Trailing Ends - Modified Type "G"
w/Radius Flare, R=25'

Shldr. Erosion Protection (See Plan Sht. No. ADD. 5)

Sta. 38+50 Rt.
Type 61614B GDI
Inv. = 238.50

Construct: Type 61614B GDI
For Detail See Sheet No. 5
Grade Surrounding Area to Drain.
Install: Type 61614B Steel Frame and Grate

ESTIMATED QUANTITIES:
Type 61614B GDI (2.00 Ft. to 3.99 Ft.) 1 EA.
Structure Excavation 2.0 C.Y.
Ditch & Channel Excav. 2.0 C.Y.

Install 900 L.F. of Type-3 guardrail w/8 ft. steel posts.
Approach & Trailing Ends - Type MELT - 2 ea.

Shldr. Erosion Protection (See Plan Sht. No. ADD. 5)

Shldr. Erosion Protection (See Plan Sht. No. ADD. 5)

DATE	7-19-95
SURVEY PLOTTED BY	J. J. ...
DRAWN BY	J. J. ...
DESIGNED BY	C. ...
QUANTITIES BY	...
CHECKED BY	...

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

- KEY:
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) & Post(s)
 - ③ Remove Exist. & Install New Sign(s) & Post(s)
 - ④ Install New Sign(s) & Post(s)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

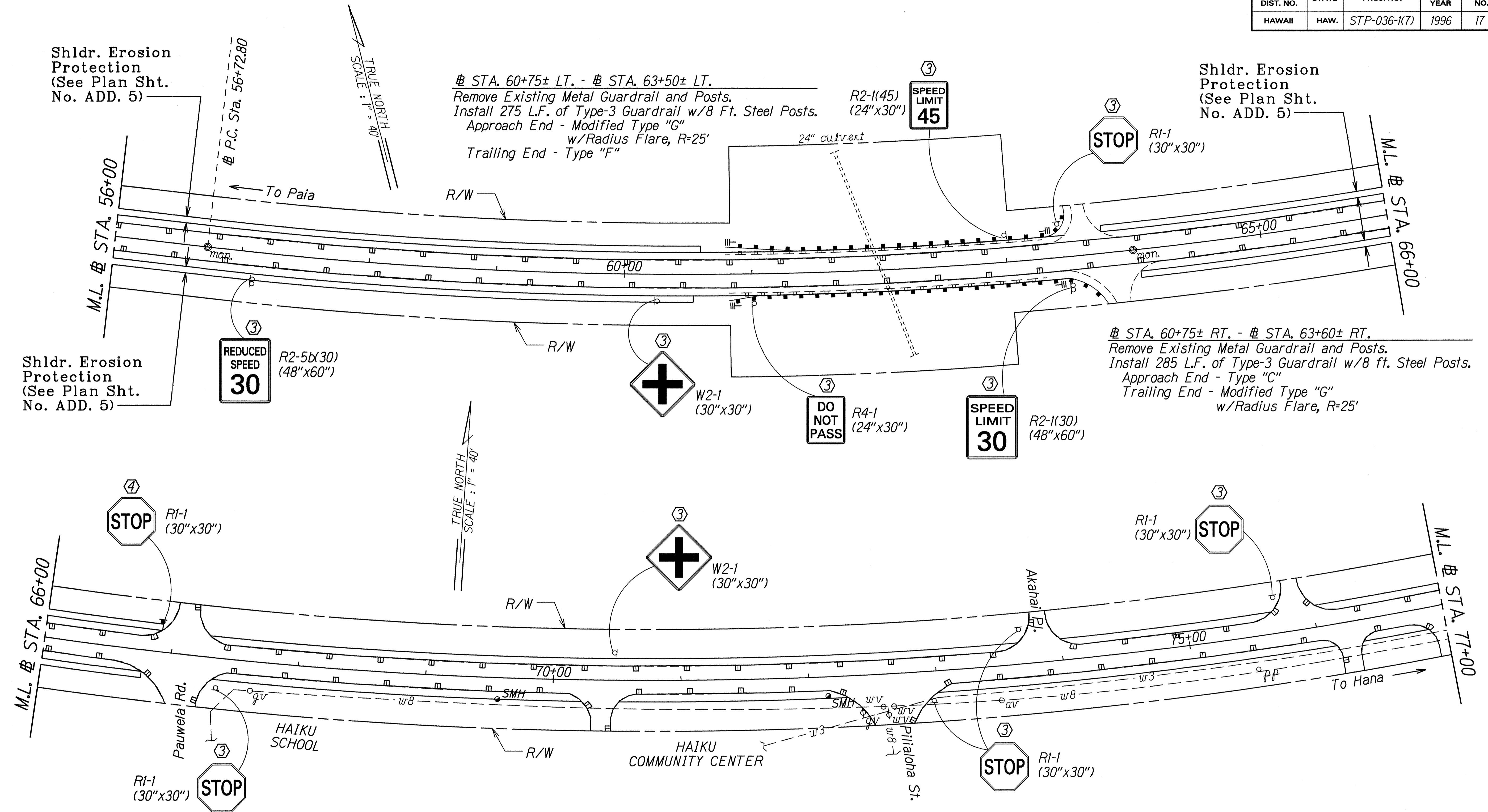
ROADWAY AND SIGNING PLAN

HANA HIGHWAY
GUARDRAIL & SHOULDER IMPROVEMENTS
Hookipa Park to Vicinity of Valley Isle Memorial Park
Fed. Aid Project No. STP-036-1(7)
Scale: 1" = 40' Date: June, 1995

SHEET No. 7 OF 11 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-036-1(7)	1996	17	32



Shldr. Erosion Protection
(See Plan Sht. No. ADD. 5)

STA. 60+75± LT. - # STA. 63+50± LT.
Remove Existing Metal Guardrail and Posts.
Install 275 L.F. of Type-3 Guardrail w/8 Ft. Steel Posts.
Approach End - Modified Type "G"
w/Radius Flare, R=25'
Trailing End - Type "F"

Shldr. Erosion Protection
(See Plan Sht. No. ADD. 5)

Shldr. Erosion Protection
(See Plan Sht. No. ADD. 5)

STA. 60+75± RT. - # STA. 63+60± RT.
Remove Existing Metal Guardrail and Posts.
Install 285 L.F. of Type-3 Guardrail w/8 ft. Steel Posts.
Approach End - Type "C"
Trailing End - Modified Type "G"
w/Radius Flare, R=25'

SURVEY PLOTTED BY	DATE
DRAWN BY	DESIGNED BY
NOTED BOOK	QUANTITIES BY
DESIGNED BY	CHECKED BY

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

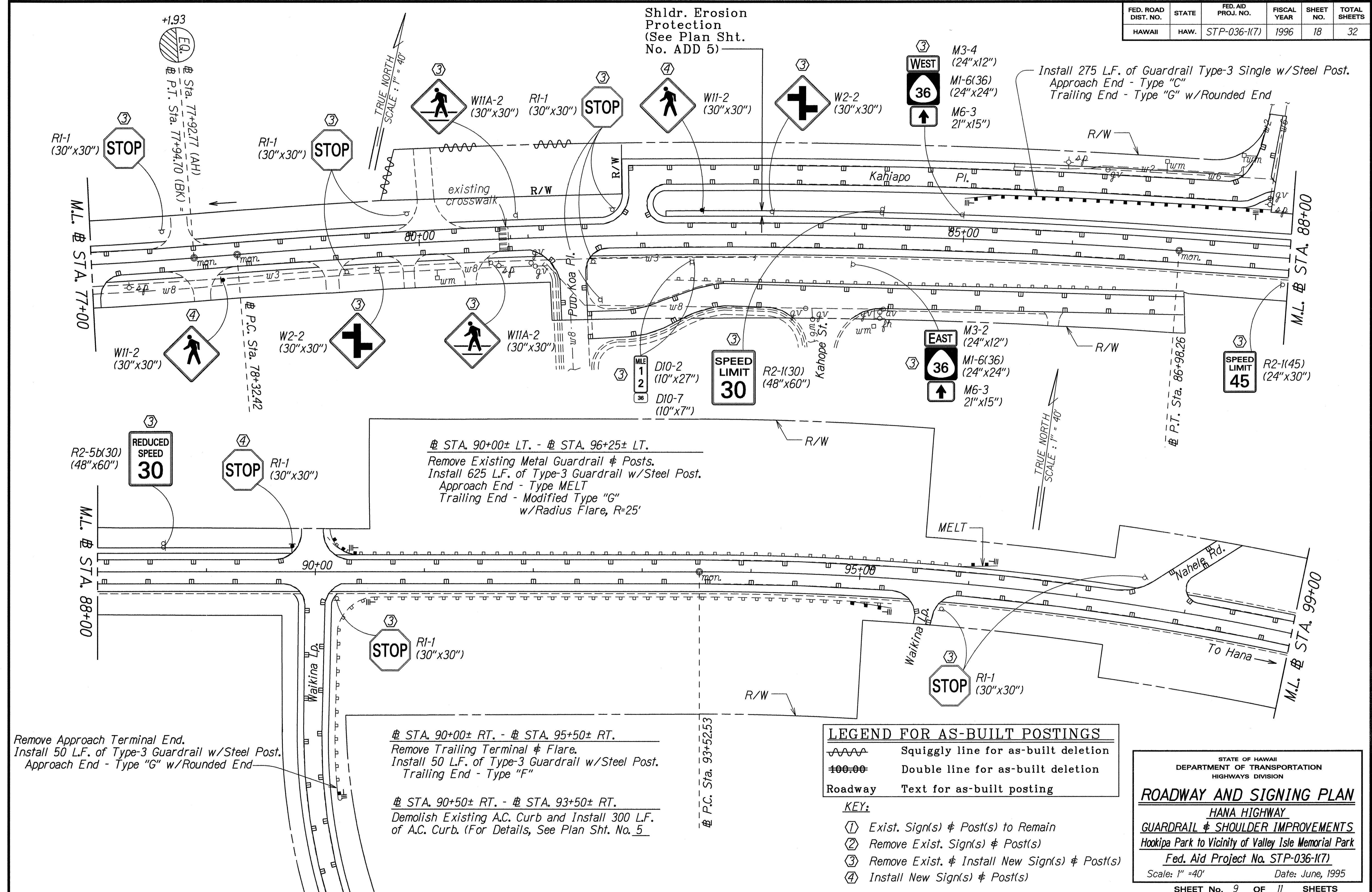
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 - ③ Remove Exist. & Install New Sign(s) & Post(s)
 - ④ Install New Sign(s) & Post(s)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY AND SIGNING PLAN
HANA HIGHWAY
GUARDRAIL & SHOULDER IMPROVEMENTS
Hookipa Park to Vicinity of Valley Isle Memorial Park
Fed. Aid Project No. STP-036-1(7)
Scale: 1" = 40' Date: June, 1995
SHEET No. 8 OF 11 SHEETS

"AS-BUILT"

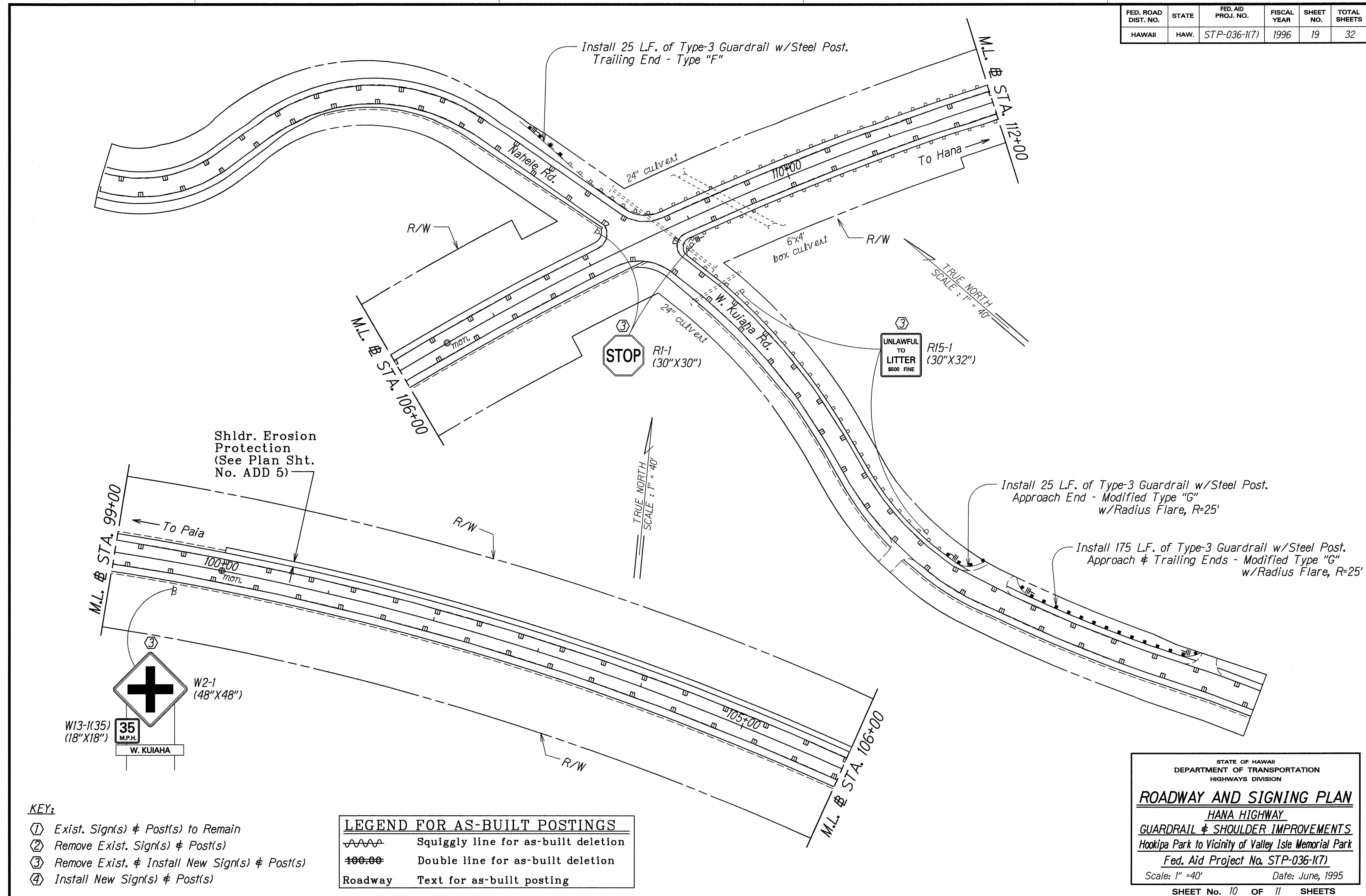
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-036-1(7)	1996	18	32



DATE	10/19/95
DESIGNED BY	W.H.
CHECKED BY	C. Regasa
QUANTITIES BY	dlm/mb/gdn
CHECKED BY	

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-036-1(7)	1996	19	32



SURVEY PLOTTED BY	DATE
DESIGNED BY	11/10/95
DESIGNED BY	AB/28/95
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) & Post(s)
 - ③ Remove Exist. & Install New Sign(s) & Post(s)
 - ④ Install New Sign(s) & Post(s)

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

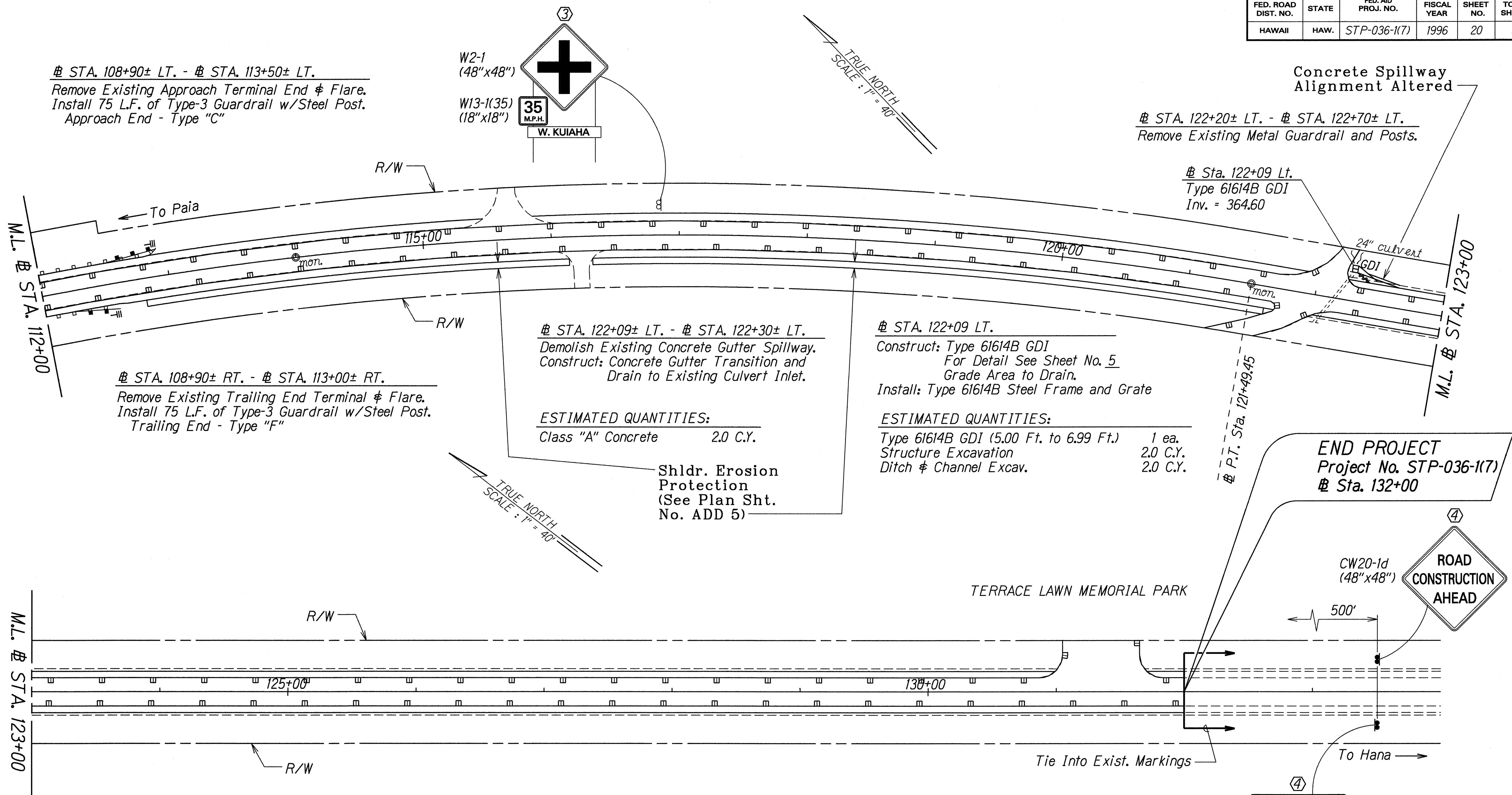
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY AND SIGNING PLAN
HANA HIGHWAY
GUARDRAIL & SHOULDER IMPROVEMENTS
Hookipa Park to Vicinity of Valley Isle Memorial Park
Fed. Aid Project No. STP-036-1(7)
Scale: 1" = 40' Date: June, 1995

SHEET No. 10 OF 11 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-036-1(7)	1996	20	32



① STA. 108+90± LT. - ① STA. 113+50± LT.
 Remove Existing Approach Terminal End & Flare.
 Install 75 L.F. of Type-3 Guardrail w/Steel Post.
 Approach End - Type "C"

W2-1
 (48"x48")
 W13-1(35)
 (18"x18")
 35 M.P.H.
 W. KUIAHA

① STA. 122+20± LT. - ① STA. 122+70± LT.
 Remove Existing Metal Guardrail and Posts.

① Sta. 122+09 Lt.
 Type 61614B GDI
 Inv. = 364.60

① STA. 108+90± RT. - ① STA. 113+00± RT.
 Remove Existing Trailing End Terminal & Flare.
 Install 75 L.F. of Type-3 Guardrail w/Steel Post.
 Trailing End - Type "F"

① STA. 122+09± LT. - ① STA. 122+30± LT.
 Demolish Existing Concrete Gutter Spillway.
 Construct: Concrete Gutter Transition and
 Drain to Existing Culvert Inlet.

ESTIMATED QUANTITIES:
 Class "A" Concrete 2.0 C.Y.

Shldr. Erosion
 Protection
 (See Plan Sht.
 No. ADD 5)

① STA. 122+09 LT.
 Construct: Type 61614B GDI
 For Detail See Sheet No. 5
 Grade Area to Drain.
 Install: Type 61614B Steel Frame and Grate

ESTIMATED QUANTITIES:
 Type 61614B GDI (5.00 Ft. to 6.99 Ft.) 1 ea.
 Structure Excavation 2.0 C.Y.
 Ditch & Channel Excav. 2.0 C.Y.

END PROJECT
 Project No. STP-036-1(7)
 ① Sta. 132+00

CW20-1d
 (48"x48")
 ROAD
 CONSTRUCTION
 AHEAD

END
 CONSTRUCTION
 CG20-2
 (60"x24")

LEGEND FOR AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

- KEY:**
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 - ② Remove Exist. Sign(s) & Post(s)
 - ③ Remove Exist. & Install New Sign(s) & Post(s)
 - ④ Install New Sign(s) & Post(s)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY AND SIGNING PLAN
 HANA HIGHWAY
 GUARDRAIL & SHOULDER IMPROVEMENTS
 Hookipa Park to Vicinity of Valley Isle Memorial Park
 Fed. Aid Project No. STP-036-1(7)
 Scale: 1" = 40' Date: June, 1995
 SHEET No. 11 OF 11 SHEETS

SURVEY PLOTTED BY	DATE
DESIGNED BY	11/19/95
CHECKED BY	ABF/23/95
QUANTITIES BY	
ORIGINAL PLAN	
NOTES BOOK	
DESIGNED BY	
CHECKED BY	
QUANTITIES BY	
ORIGINAL PLAN	

"AS-BUILT"