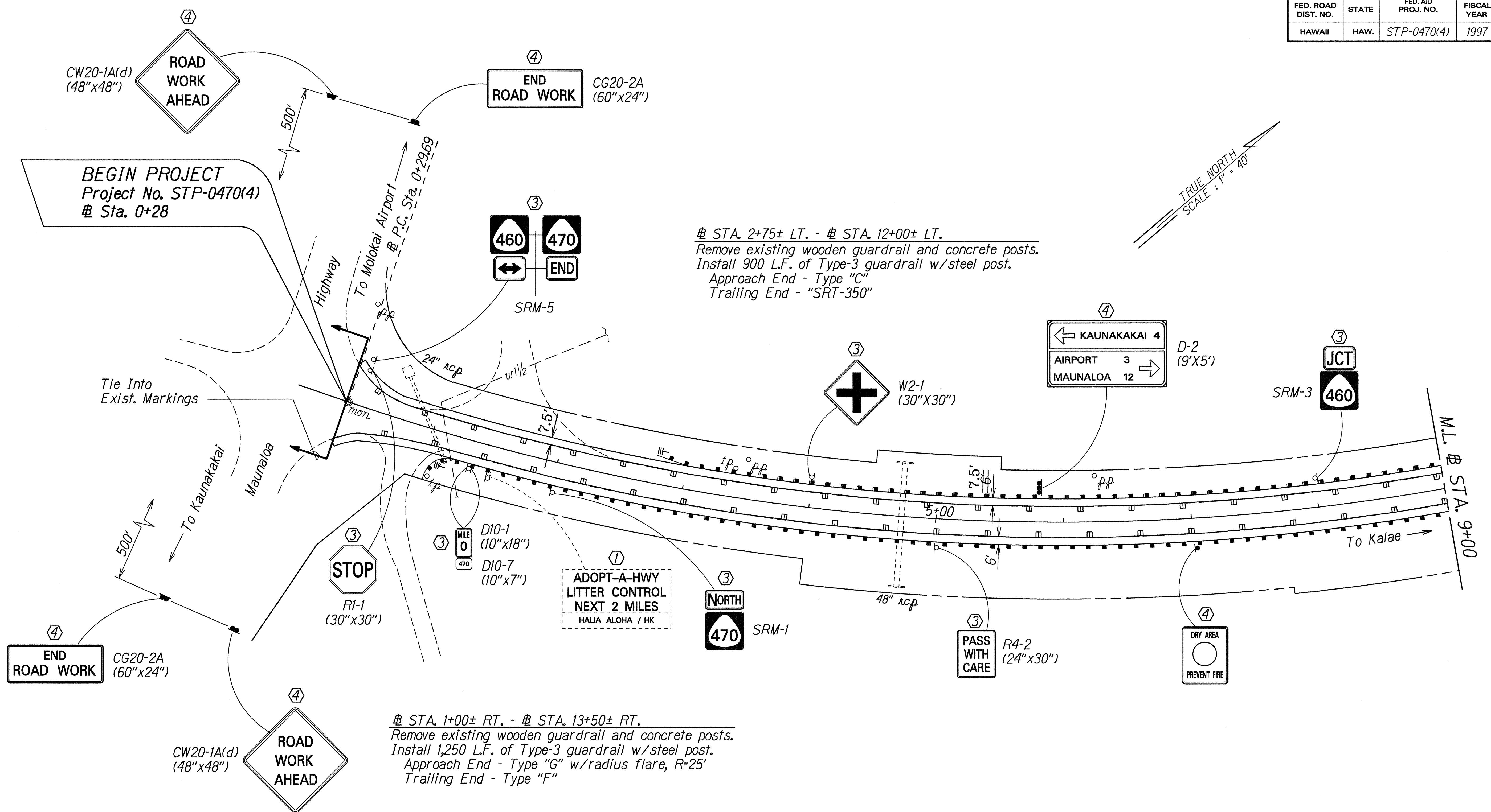


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0470(4)	1997	10	16



STA. 2+75± LT. - # STA. 12+00± LT.
 Remove existing wooden guardrail and concrete posts.
 Install 900 L.F. of Type-3 guardrail w/steel post.
 Approach End - Type "C"
 Trailing End - "SRT-350"

STA. 1+00± RT. - # STA. 13+50± RT.
 Remove existing wooden guardrail and concrete posts.
 Install 1,250 L.F. of Type-3 guardrail w/steel post.
 Approach End - Type "G" w/radius flare, R=25'
 Trailing End - Type "F"

LEGEND FOR AS-BUILT POSTINGS

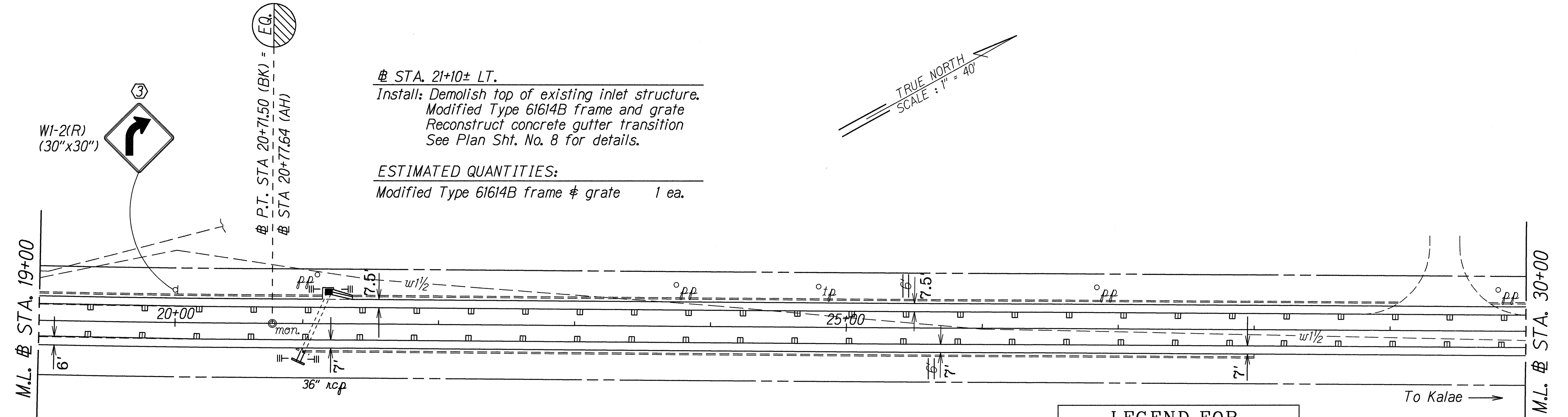
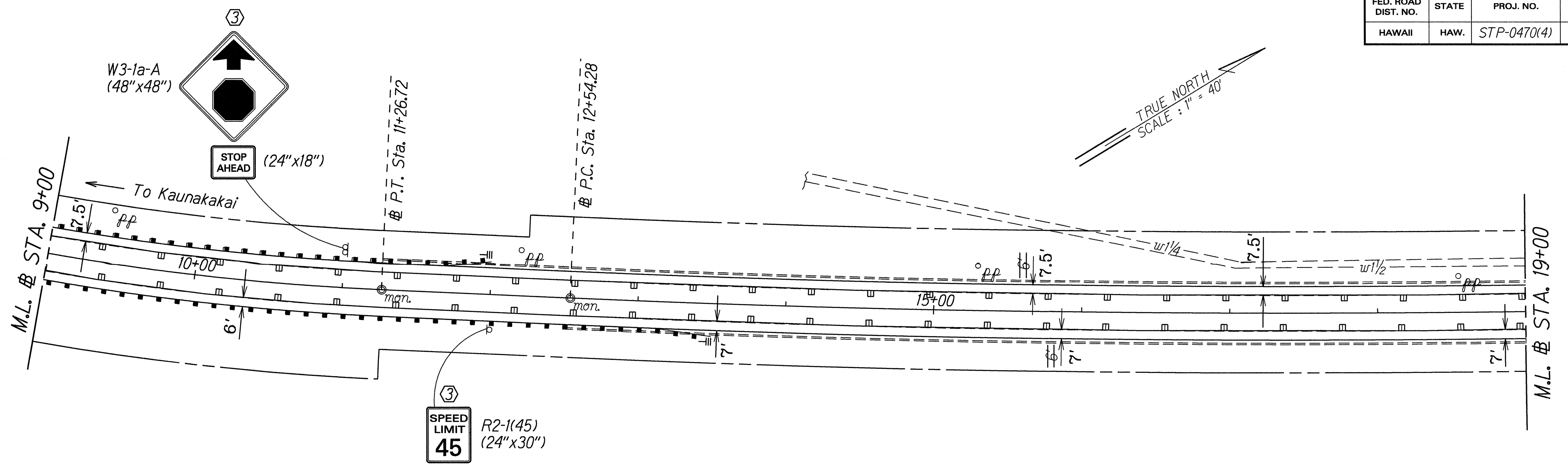
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

- 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 & SIGNING PLAN
 KALAE HIGHWAY
 GUARDRAIL & SHOULDER IMPROVEMENTS
 Maunaloa Highway to Farrington Avenue
 Fed. Aid Project No. STP-0470(4)
 Scale: 1" = 40' Date: June, 1994
 SHEET No. 1 OF 5 SHEETS

SURVEY PLOTTED BY	DATE	JUNE 1994
DRAWN BY		
INCHES BY		
QUANTITIES BY		
CHECKED BY		
ORIGINAL PLAN		
NOTE BOOK		
DATE		
BY		
CHECKED BY		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0470(4)	1997	11	16



STA. 21+10± LT.
 Install: Demolish top of existing inlet structure.
 Modified Type 61614B frame and grate
 Reconstruct concrete gutter transition
 See Plan Sht. No. 8 for details.
 ESTIMATED QUANTITIES:
 Modified Type 61614B frame & grate 1 ea.

STA. 21+10± RT.
 Demolish existing headwall.
 Install: 36" RCP
 Construct: Standard CRM Headwall
 Backfill and compact to match adjacent sections of embankment
 See Plan Sht. No. 9 for details.

ESTIMATED QUANTITIES:
 36" RCP 8 L.F.
 Class "A" Conc. 2.0 C.Y.
 Structure Excavation 2.0 C.Y.
 Ditch & Channel Excav. 1.0 C.Y.
 Note: Structure backfill should be matched to the existing roadway slope.

LEGEND FOR AS-BUILT POSTINGS

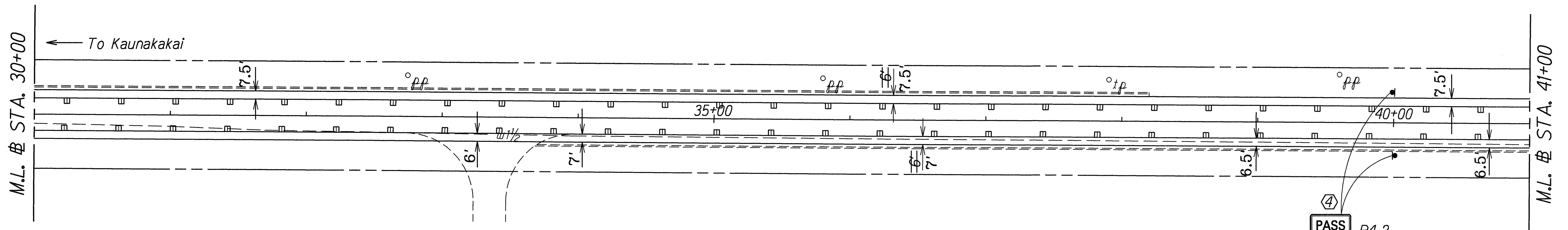
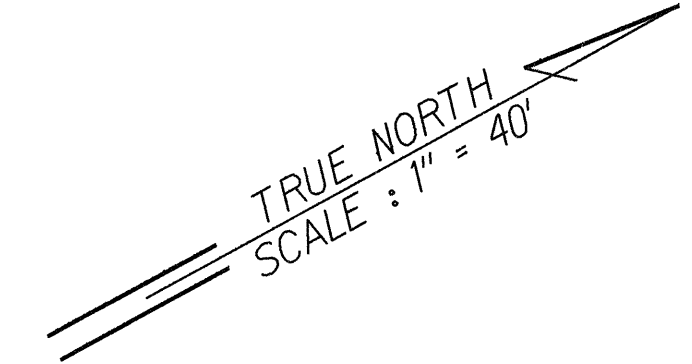
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

- KEY:**
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 - ④ Install New Sign(s) & Post(s)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY & SIGNING PLAN
 KALAE HIGHWAY
 GUARDRAIL & SHOULDER IMPROVEMENTS
 Maunaloa Highway to Farrington Avenue
 Fed. Aid Project No. STP-0470(4)
 Scale: 1" = 40' Date: June, 1994
 SHEET No. 2 OF 5 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	June 1994
DESIGNED BY	
REVISIONS BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
DATE	
BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0470(4)	1997	12	16

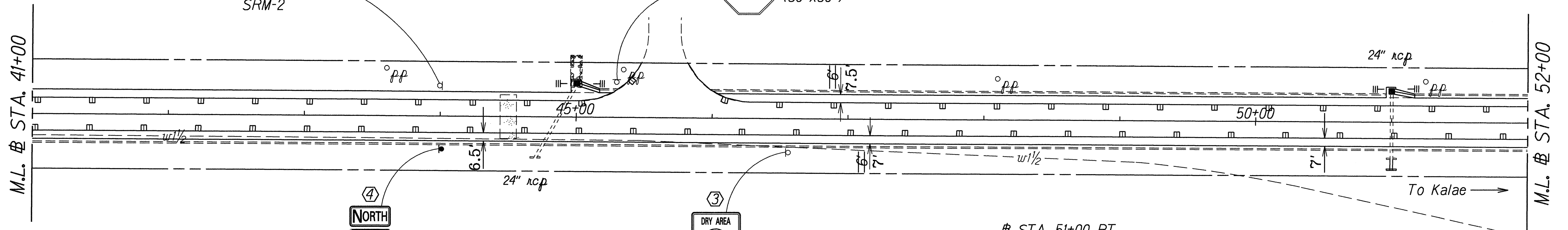


STA. 44+90± LT.
 Demolish top of existing inlet structure.
 Install: Modified Type 61614B frame and grate
 Reconstruct concrete gutter transition
 See Plan Sht. No. 8 for details.

ESTIMATED QUANTITIES:
 Modified Type 61614B frame & grate 1 ea.

STA. 51+00 LT.
 Demolish top of existing inlet structure.
 Install: Modified Type 61614B frame and grate
 Reconstruct concrete gutter transition
 See Plan Sht. No. 8 for details.

ESTIMATED QUANTITIES:
 Modified Type 61614B frame & grate 1 ea.



STA. 51+00 RT.
 Demolish existing headwall.
 Install: 24" RCP
 Construct: Standard CRM Headwall
 Backfill and compact to match adjacent sections of embankment
 See Plan Sht. No. 9 for details.

ESTIMATED QUANTITIES:
 24" RCP 8 L.F.
 Class "A" Conc. 2.0 C.Y.
 Structure Excavation 1.0 C.Y.
 Ditch & Channel Excav. 1.0 C.Y.

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)

SURVEY PLOTTED BY	DATE
DRAWN BY	JUNE 1994
CHECKED BY	
NOTE BOOK	
LOG IN FILE	
QUANTITIES BY	
CHECKED BY	

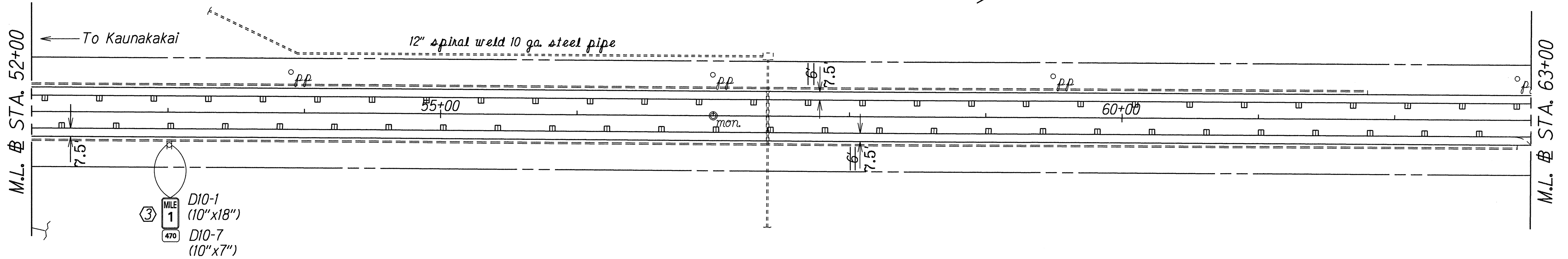
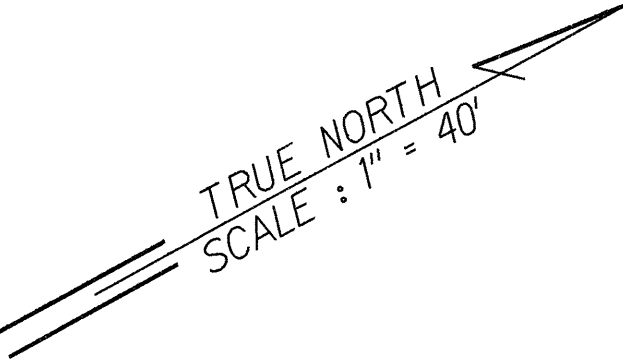
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY & SIGNING PLAN

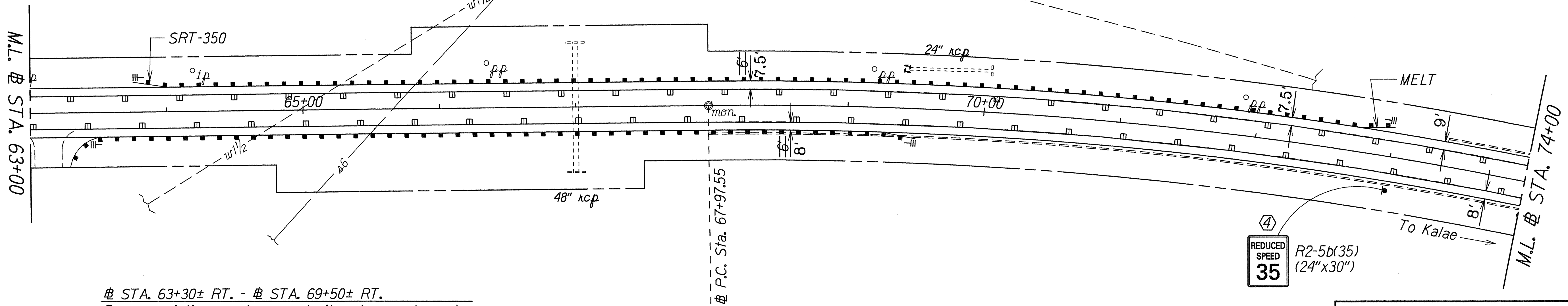
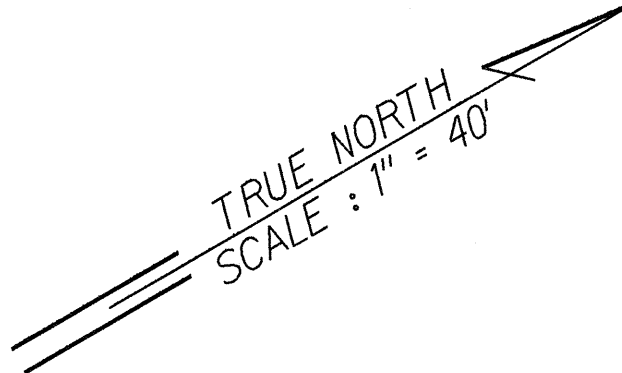
KALAE HIGHWAY
 GUARDRAIL & SHOULDER IMPROVEMENTS
 Maunaloa Highway to Farrington Avenue
 Fed. Aid Project No. STP-0470(4)
 Scale: 1" = 40' Date: June, 1994

SHEET No. 3 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0470(4)	1997	13	16



STA. 63+80± LT. - # STA. 73+00± LT.
 Remove existing wooden guardrail and concrete posts.
 Install 870 L.F. of Type-3 guardrail w/steel post.
 Approach # Trailing End - Type "SRT-350" (2 ea.)



STA. 63+30± RT. - # STA. 69+50± RT.
 Remove existing wooden guardrail and concrete posts.
 Install 595 L.F. of Type-3 guardrail w/steel post.
 Approach End - Type "G" w/radius flare, R=25'
 Trailing End - Type "SRT-350"

SURVEY PLOTTED BY	DATE
DRAWN BY	7/2/95
TRACED BY	
NOTES MOOK	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE MOOK	
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)

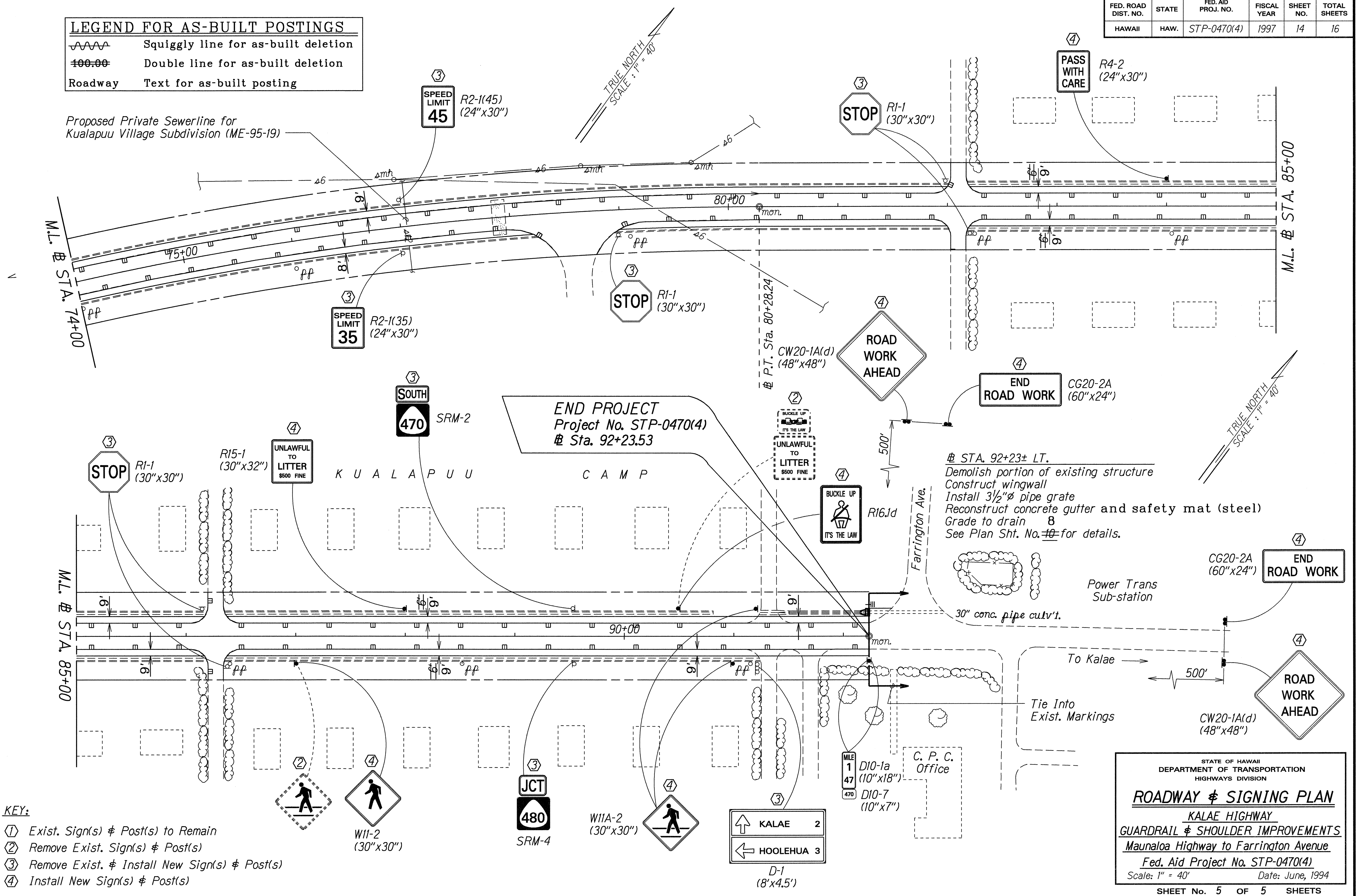
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY # SIGNING PLAN
 KALAE HIGHWAY
 GUARDRAIL # SHOULDER IMPROVEMENTS
 Maunaloa Highway to Farrington Avenue
 Fed. Aid Project No. STP-0470(4)
 Scale: 1" = 40' Date: June, 1994
 SHEET No. 4 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0470(4)	1997	14	16

LEGEND FOR AS-BUILT POSTINGS

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

Proposed Private Sewerline for Kualapuu Village Subdivision (ME-95-19)



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

SURVEY PLOTTED BY	DATE
DRAWN BY	JUNE 1994
CHECKED BY	
NOTE BOOK	
DESIGNED BY	C. RAGASA
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY & SIGNING PLAN

KALAE HIGHWAY
GUARDRAIL & SHOULDER IMPROVEMENTS
Maunaloa Highway to Farrington Avenue
Fed. Aid Project No. STP-0470(4)
Scale: 1" = 40' Date: June, 1994

SHEET No. 5 OF 5 SHEETS