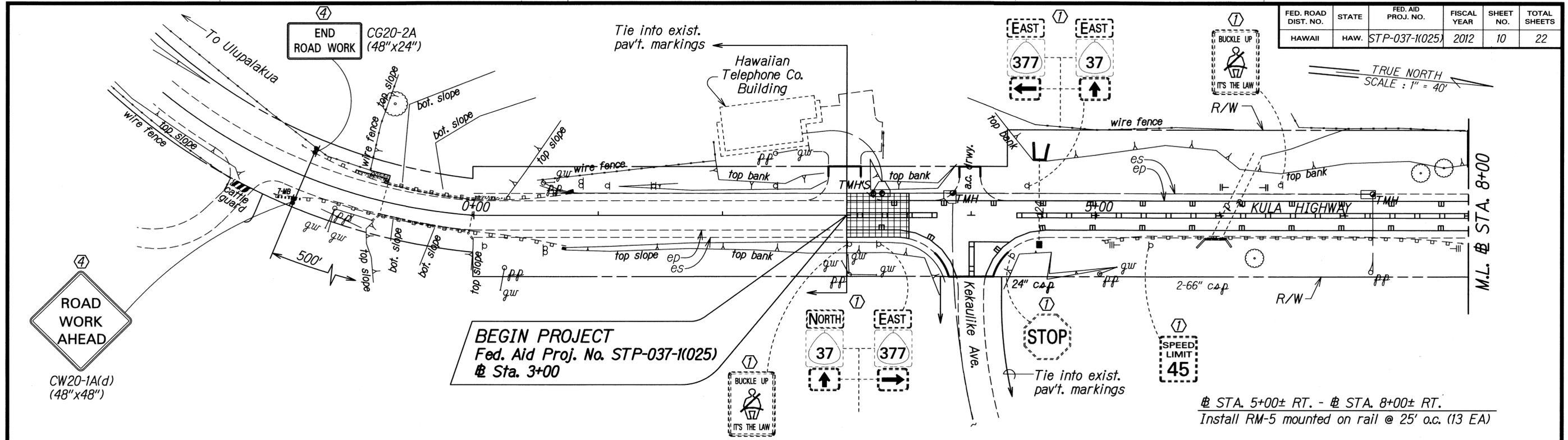


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-1(025)	2012	10	22

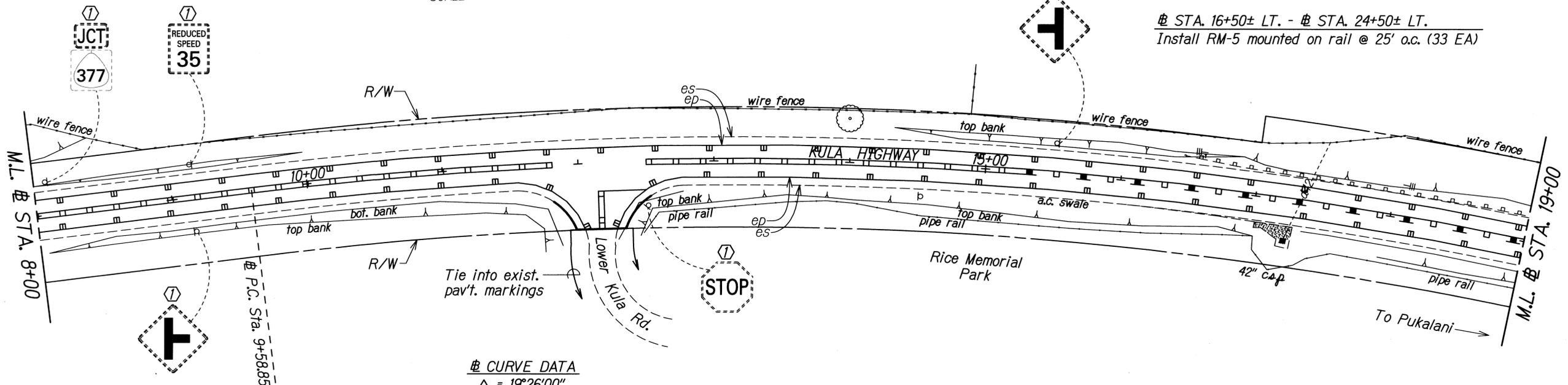


CW20-1A(d)
(48" x 48")

BEGIN PROJECT
Fed. Aid Proj. No. STP-037-1(025)
Sta. 3+00

STA. 5+00± RT. - # STA. 8+00± RT.
Install RM-5 mounted on rail @ 25' o.c. (13 EA)

TRUE NORTH
SCALE : 1" = 40'



STA. 16+50± LT. - # STA. 24+50± LT.
Install RM-5 mounted on rail @ 25' o.c. (33 EA)

CURVE DATA
 $\Delta = 19^\circ 26' 00''$
 $R = 2864.79$
 $T = 490.55$
 $C = 967.02$
 $L_c = 971.67$
 $S. E. = 0.046 \text{ ft/ft}$

- 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)

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

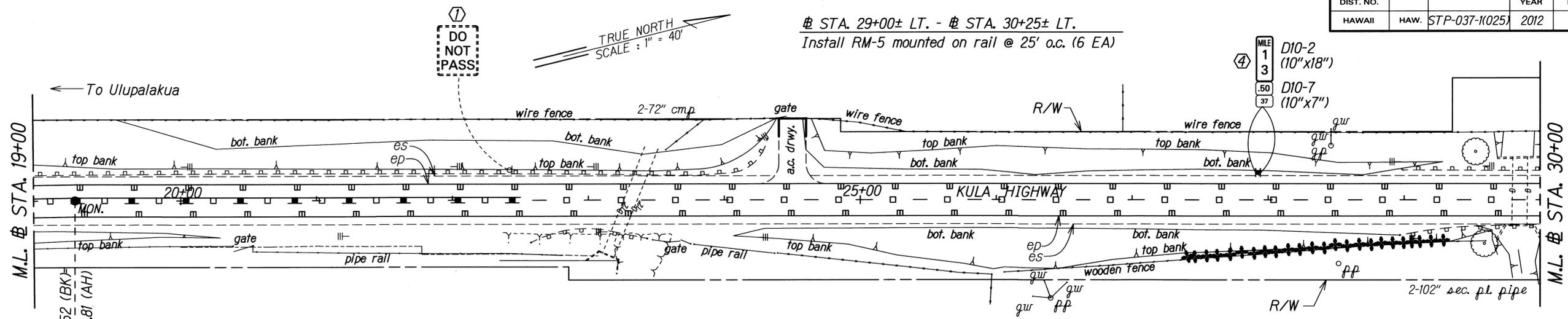
ROADWAY & PAVEMENT MARKING PLAN

KULA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
Kekaulike Avenue to Lower Kula Road
Federal-Aid Project No. STP-037-1(025)

Scale: 1" = 40' Date: December, 2010

SHEET No. 1 OF 13 SHEETS

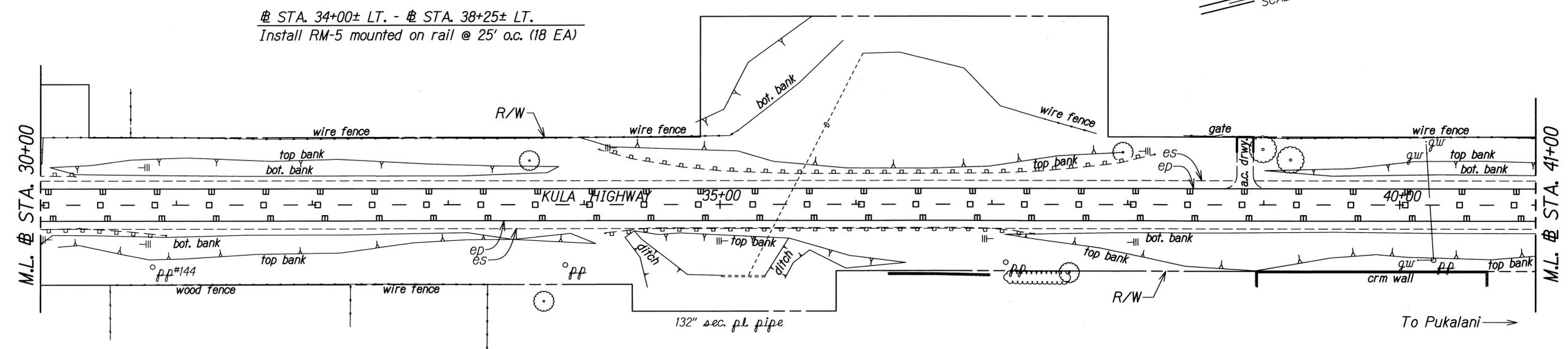
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-(K025)	2012	11	22



M.L. STA. 19+00
 ← To Ulupalakua
 P.T. Sta. 19+30.52 (BK)
 P.T. Sta. 19+35.81 (AH)
 -5.29
 EQ

STA. 22+50± RT. - STA. 23+50± RT.
 Install RM-5 mounted on rail @ 25' o.c. (5 EA)

STA. 29+00± RT. - STA. 31+00± RT.
 Install RM-5 mounted on rail @ 25' o.c. (9 EA)



STA. 34+00± LT. - STA. 38+25± LT.
 Install RM-5 mounted on rail @ 25' o.c. (18 EA)

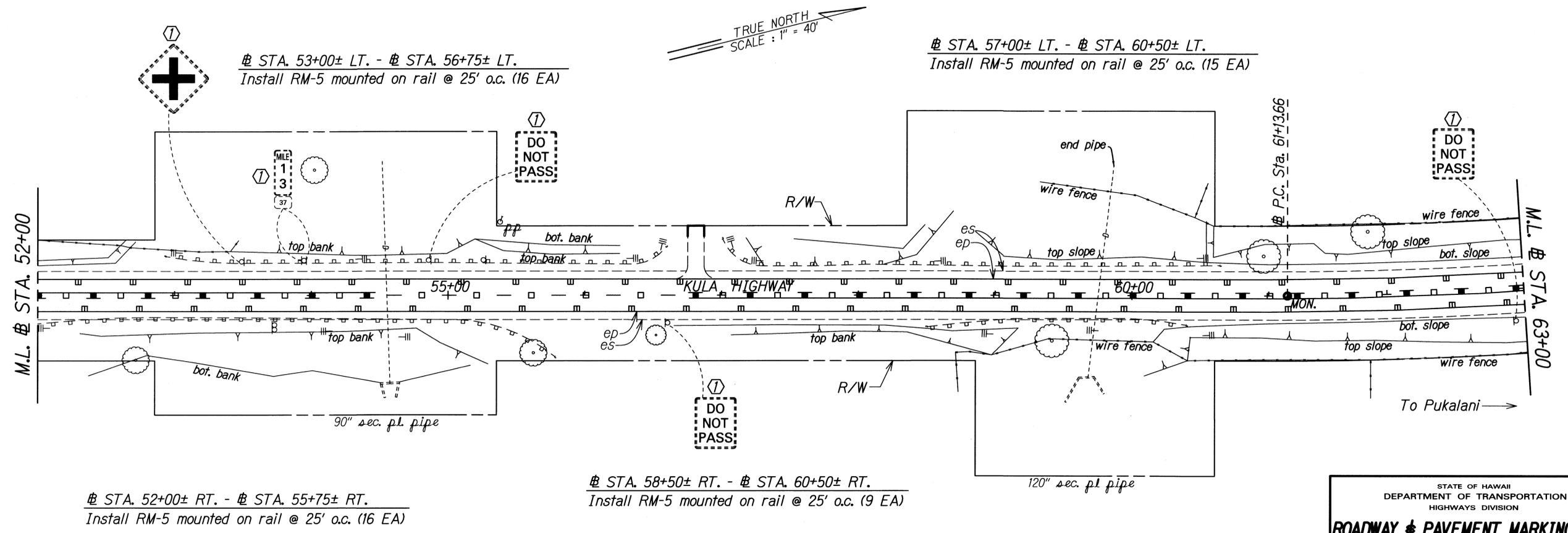
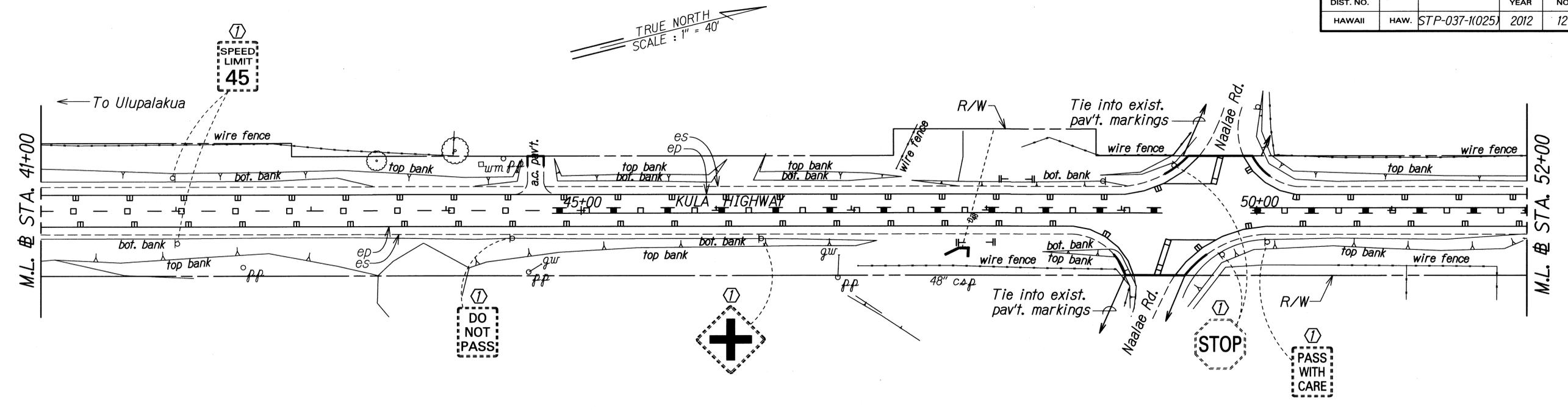
STA. 34+00± RT. - STA. 37+50± RT.
 Install RM-5 mounted on rail @ 25' o.c. (15 EA)

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
TRACED BY	
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)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY & PAVEMENT MARKING PLAN
KULA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
 Kekaulike Avenue to Lower Kula Road
 Federal-Aid Project No. STP-037-(K025)
 Scale: 1" = 40' Date: July, 2011
 SHEET No. 2 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-1(025)	2012	12	22



④ STA. 52+00± RT. - ④ STA. 55+75± RT.
Install RM-5 mounted on rail @ 25' o.c. (16 EA)

④ STA. 58+50± RT. - ④ STA. 60+50± RT.
Install RM-5 mounted on rail @ 25' o.c. (9 EA)

④ STA. 57+00± LT. - ④ STA. 60+50± LT.
Install RM-5 mounted on rail @ 25' o.c. (15 EA)

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
DATE	

- 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 & PAVEMENT MARKING PLAN

KULA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
Kekaulike Avenue to Lower Kula Road
Federal-Aid Project No. STP-037-1(025)

Scale: 1" = 40' Date: July, 2011

SHEET No. 3 OF 13 SHEETS

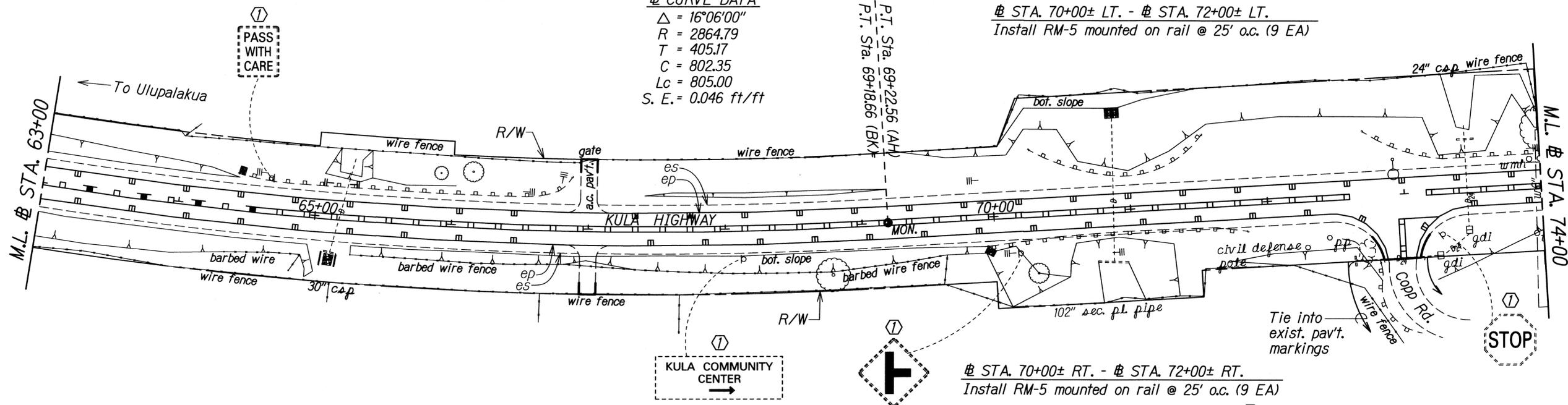
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-1(025)	2012	13	22

± STA. 64+50± LT. - ± STA. 67+00± LT.
Install RM-5 mounted on rail @ 25' o.c. (11 EA)

TRUE NORTH
SCALE : 1" = 40'

± CURVE DATA
 $\Delta = 16^{\circ}06'00''$
 $R = 2864.79$
 $T = 405.17$
 $C = 802.35$
 $Lc = 805.00$
 $S. E. = 0.046 \text{ ft/ft}$

± STA. 70+00± LT. - ± STA. 72+00± LT.
Install RM-5 mounted on rail @ 25' o.c. (9 EA)

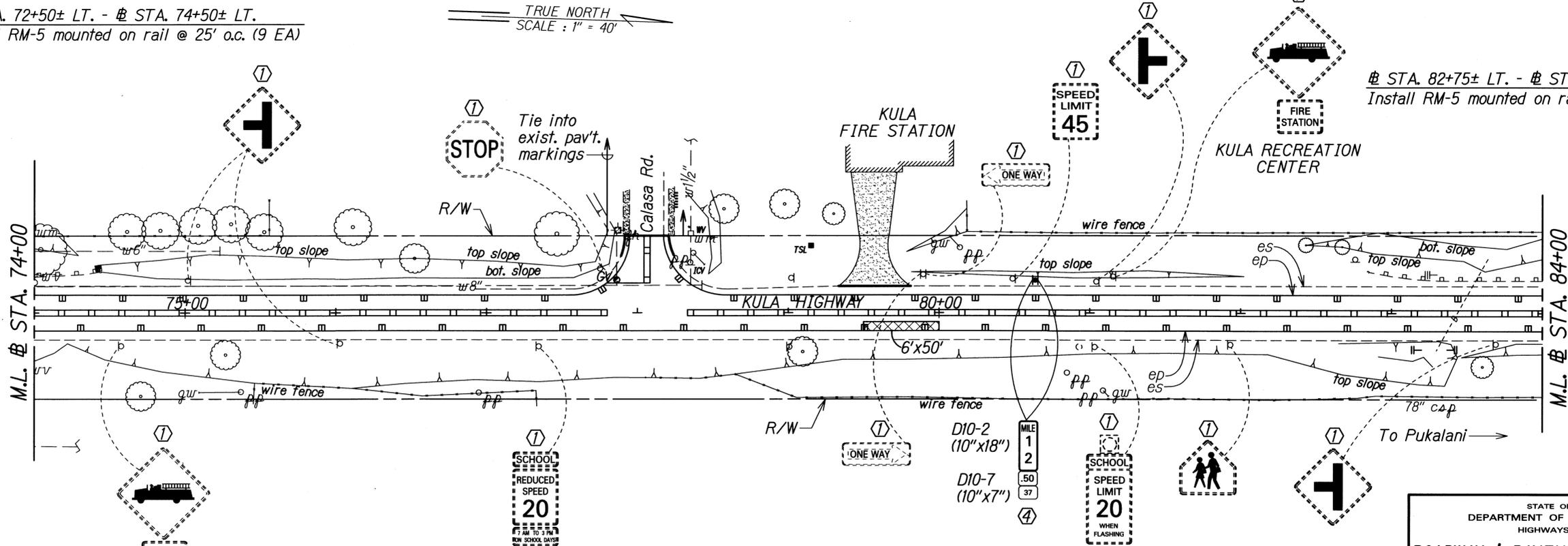


± STA. 72+50± LT. - ± STA. 74+50± LT.
Install RM-5 mounted on rail @ 25' o.c. (9 EA)

TRUE NORTH
SCALE : 1" = 40'

± STA. 70+00± RT. - ± STA. 72+00± RT.
Install RM-5 mounted on rail @ 25' o.c. (9 EA)

± STA. 82+75± LT. - ± STA. 86+50± LT.
Install RM-5 mounted on rail @ 25' o.c. (16 EA)



DATE	_____
DESIGNED BY	_____
TRACED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
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

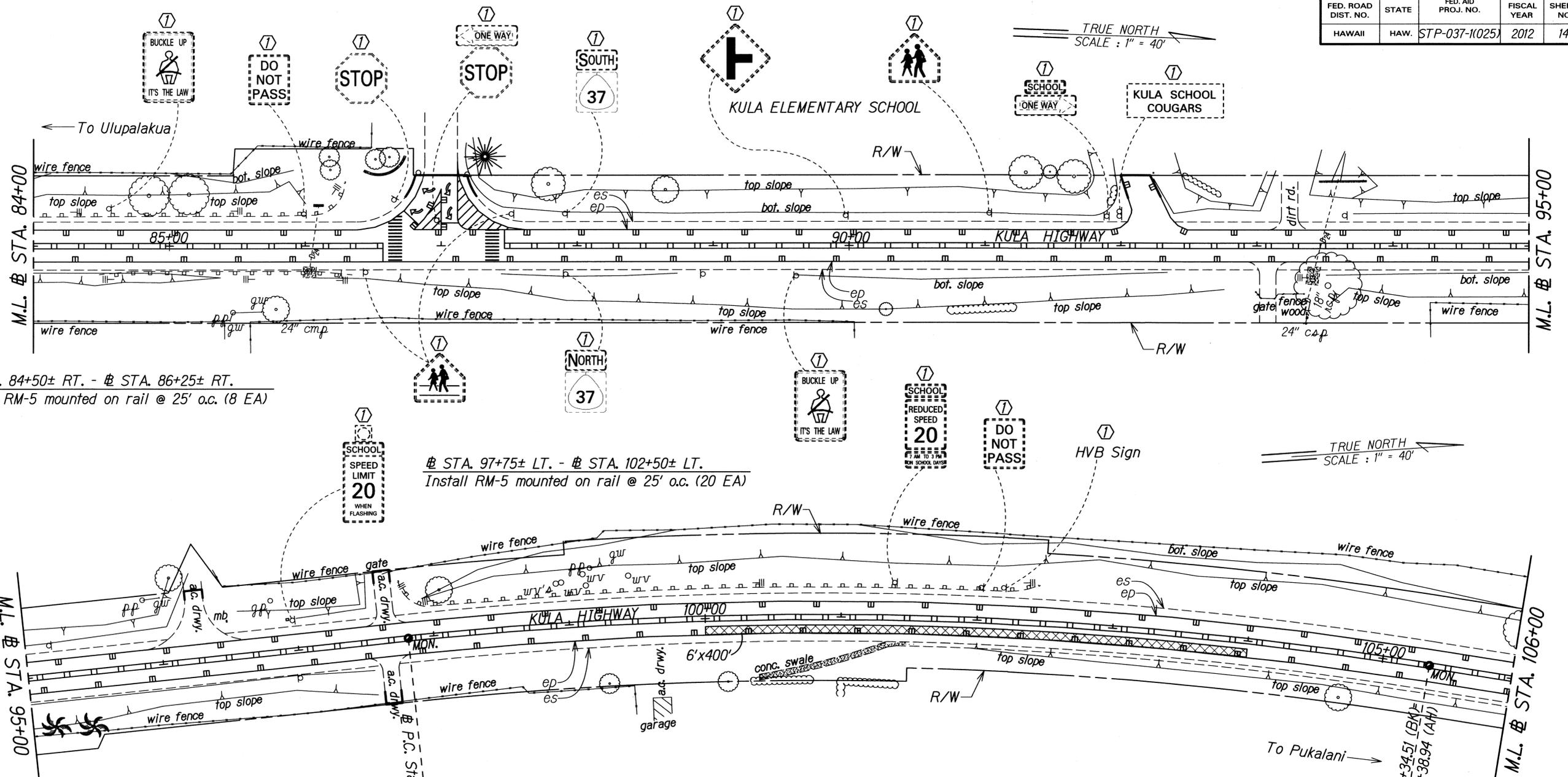
ROADWAY & PAVEMENT MARKING PLAN

KULA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
Kekaulike Avenue to Lower Kula Road
Federal-Aid Project No. STP-037-1(025)

Scale: 1" = 40' Date: July, 2011

SHEET No. 4 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-1(025)	2012	14	22



± STA. 84+50± RT. - ± STA. 86+25± RT.
Install RM-5 mounted on rail @ 25' o.c. (8 EA)

± STA. 97+75± LT. - ± STA. 102+50± LT.
Install RM-5 mounted on rail @ 25' o.c. (20 EA)

± CURVE DATA
 $\Delta = 15^{\circ}04'00''$
 $R = 2864.79$
 $T = 378.85$
 $C = 751.17$
 $Lc = 753.33$
 $S. E. = 0.046 \text{ ft/ft}$

EQ
 P.T. Sta. 105+34.51 (B.N.F.)
 P.T. Sta. 105+38.94 (A.H.P.)
 -4.48

DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
TRACED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____
N.	_____

- 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 & PAVEMENT MARKING PLAN

KULA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
 Kekaulike Avenue to Lower Kula Road
 Federal-Aid Project No. STP-037-1(025)

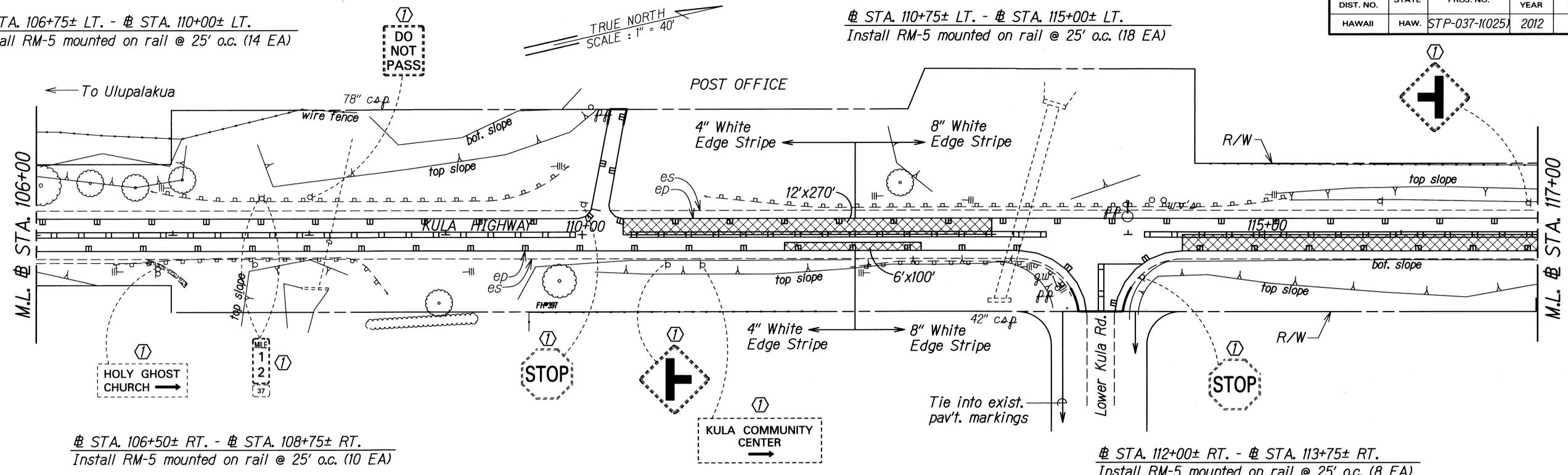
Scale: 1" = 40' Date: July, 2011

SHEET No. 5 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-(K025)	2012	15	22

± STA. 106+75± LT. - ± STA. 110+00± LT.
Install RM-5 mounted on rail @ 25' o.c. (14 EA)

± STA. 110+75± LT. - ± STA. 115+00± LT.
Install RM-5 mounted on rail @ 25' o.c. (18 EA)

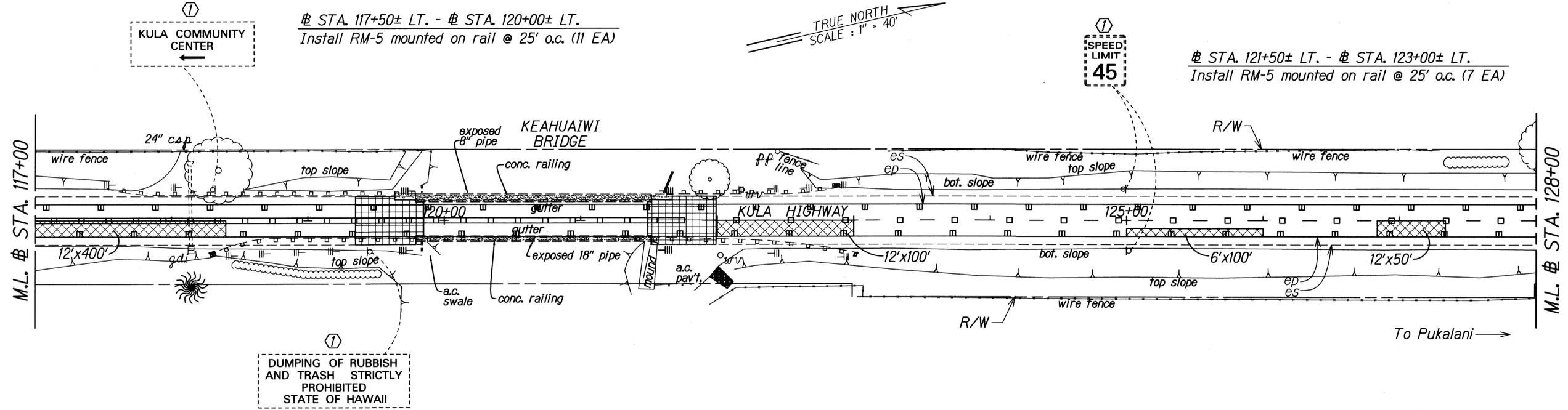


± STA. 106+50± RT. - ± STA. 108+75± RT.
Install RM-5 mounted on rail @ 25' o.c. (10 EA)

± STA. 112+00± RT. - ± STA. 113+75± RT.
Install RM-5 mounted on rail @ 25' o.c. (8 EA)

± STA. 117+50± LT. - ± STA. 120+00± LT.
Install RM-5 mounted on rail @ 25' o.c. (11 EA)

± STA. 121+50± LT. - ± STA. 123+00± LT.
Install RM-5 mounted on rail @ 25' o.c. (7 EA)



± STA. 118+25± RT. - ± STA. 123+00± RT.
Install RM-5 mounted on rail @ 25' o.c. (20 EA)

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
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 & PAVEMENT MARKING PLAN

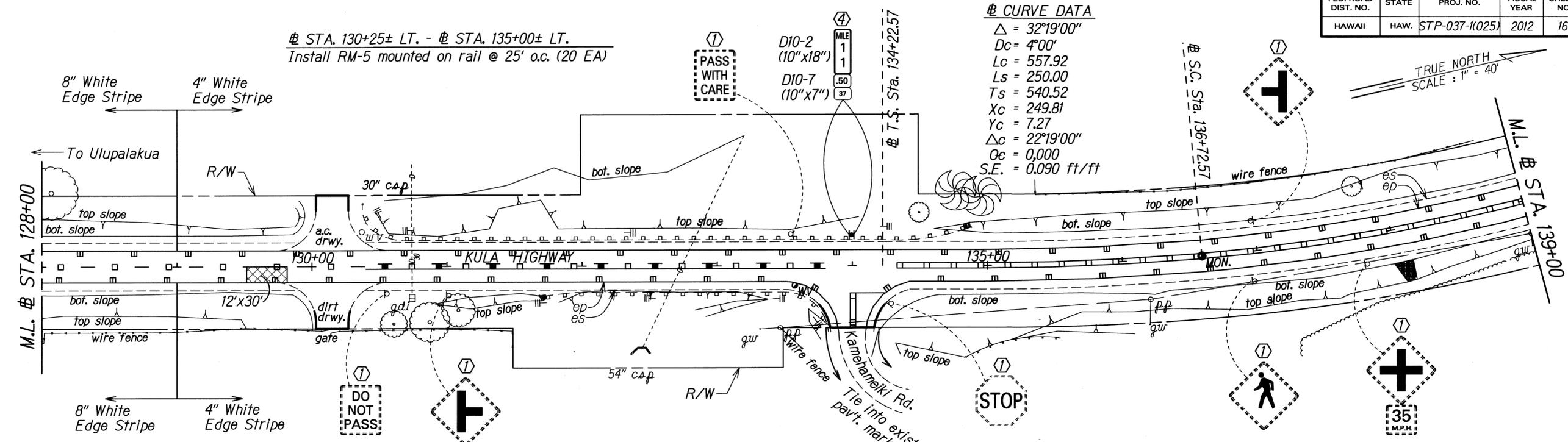
KULA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
Kekaulike Avenue to Lower Kula Road
Federal-Aid Project No. STP-037-(K025)

Scale: 1" = 40' Date: July, 2011

SHEET No. 6 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-(K025)	2012	16	22

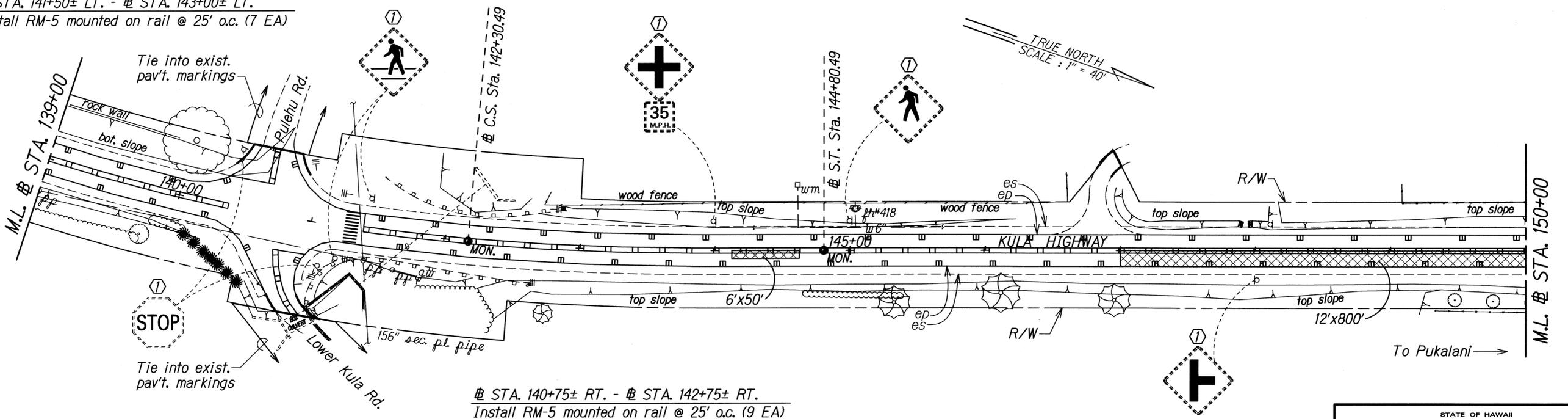
④ CURVE DATA
 $\Delta = 32^{\circ}19'00''$
 $Dc = 4^{\circ}00'$
 $Lc = 557.92$
 $Ts = 540.52$
 $Xc = 249.81$
 $Yc = 7.27$
 $\Delta c = 22^{\circ}19'00''$
 $Oc = 0.000$
 $S.E. = 0.090 \text{ ft/ft}$



④ STA. 130+25± LT. - ④ STA. 135+00± LT.
 Install RM-5 mounted on rail @ 25' o.c. (20 EA)

④ STA. 131+75± RT. - ④ STA. 134+00± RT.
 Install RM-5 mounted on rail @ 25' o.c. (10 EA)

④ STA. 141+50± LT. - ④ STA. 143+00± LT.
 Install RM-5 mounted on rail @ 25' o.c. (7 EA)



④ STA. 140+75± RT. - ④ STA. 142+75± RT.
 Install RM-5 mounted on rail @ 25' o.c. (9 EA)

DATE	DATE
DESIGNED BY	CHECKED BY
TRACED BY	QUANTITIES BY
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 & PAVEMENT MARKING PLAN

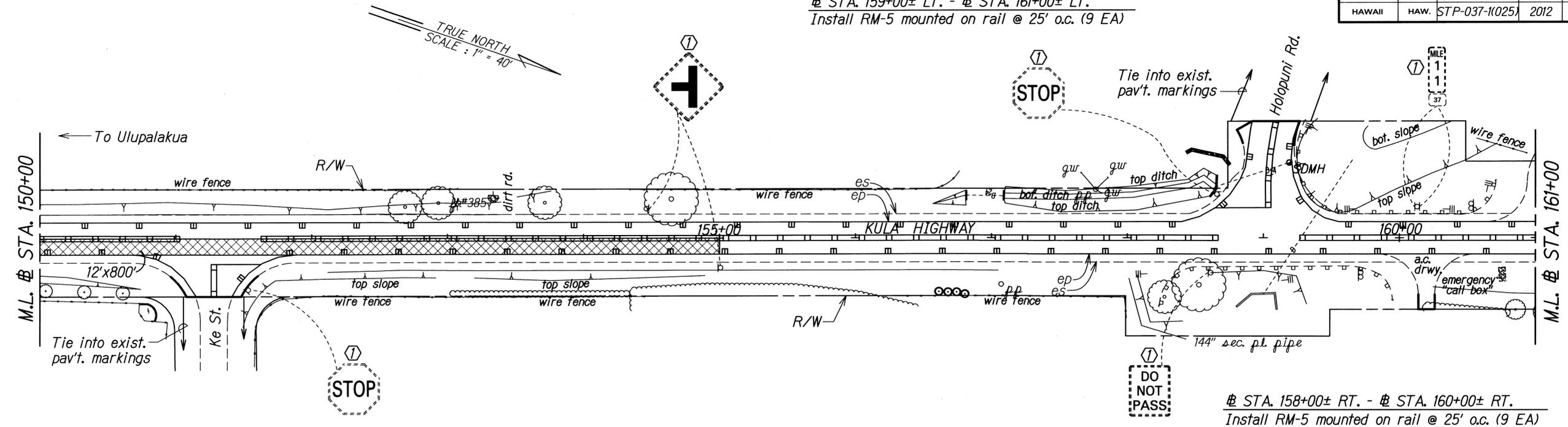
KULA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
 Kekaulike Avenue to Lower Kula Road
 Federal-Aid Project No. STP-037-(K025)

Scale: 1" = 40' Date: July, 2011

SHEET No. 7 OF 13 SHEETS

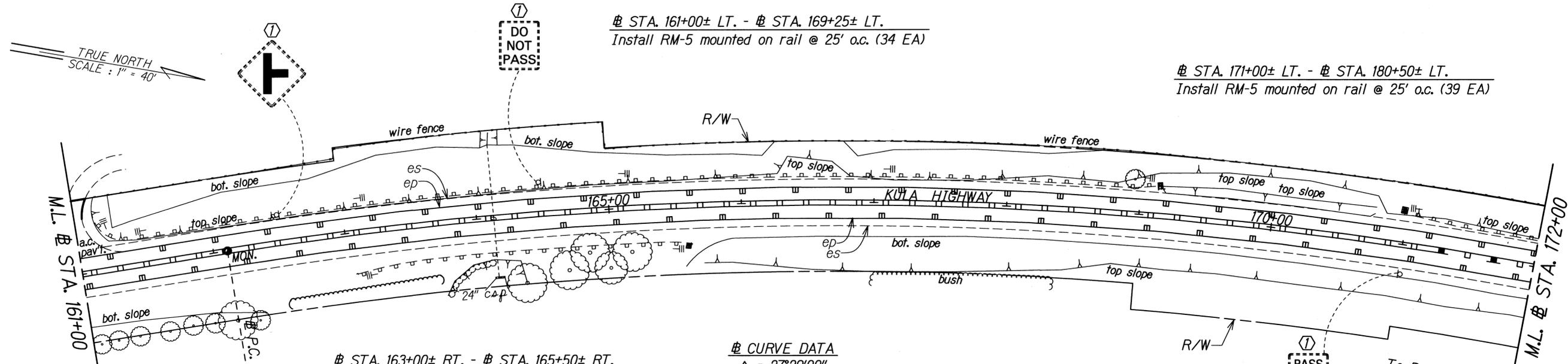
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-1(K025)	2012	17	22

± STA. 159+00± LT. - ± STA. 161+00± LT.
Install RM-5 mounted on rail @ 25' o.c. (9 EA)



± STA. 158+00± RT. - ± STA. 160+00± RT.
Install RM-5 mounted on rail @ 25' o.c. (9 EA)

± STA. 161+00± LT. - ± STA. 169+25± LT.
Install RM-5 mounted on rail @ 25' o.c. (34 EA)



± STA. 171+00± LT. - ± STA. 180+50± LT.
Install RM-5 mounted on rail @ 25' o.c. (39 EA)

± STA. 163+00± RT. - ± STA. 165+50± RT.
Install RM-5 mounted on rail @ 25' o.c. (11 EA)

± CURVE DATA
 $\Delta = 27^{\circ}29'00''$
 $R = 2864.79$
 $T = 700.57$
 $C = 1361.05$
 $Lc = 1374.17$
 $S.E. = 0.046 \text{ ft/ft}$

DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
TRACED BY	_____
NOTE BOOK	_____
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)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

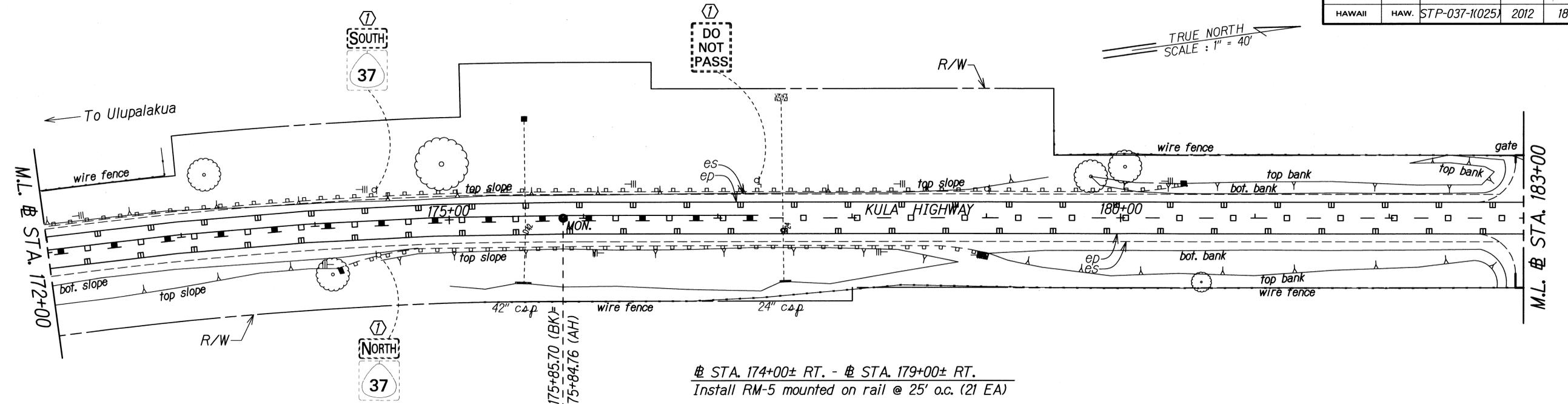
ROADWAY & PAVEMENT MARKING PLAN

**KULA HIGHWAY PAVEMENT
PREVENTIVE MAINTENANCE**
Kekaulike Avenue to Lower Kula Road
Federal-Aid Project No. STP-037-1(K025)

Scale: 1" = 40' Date: July, 2011

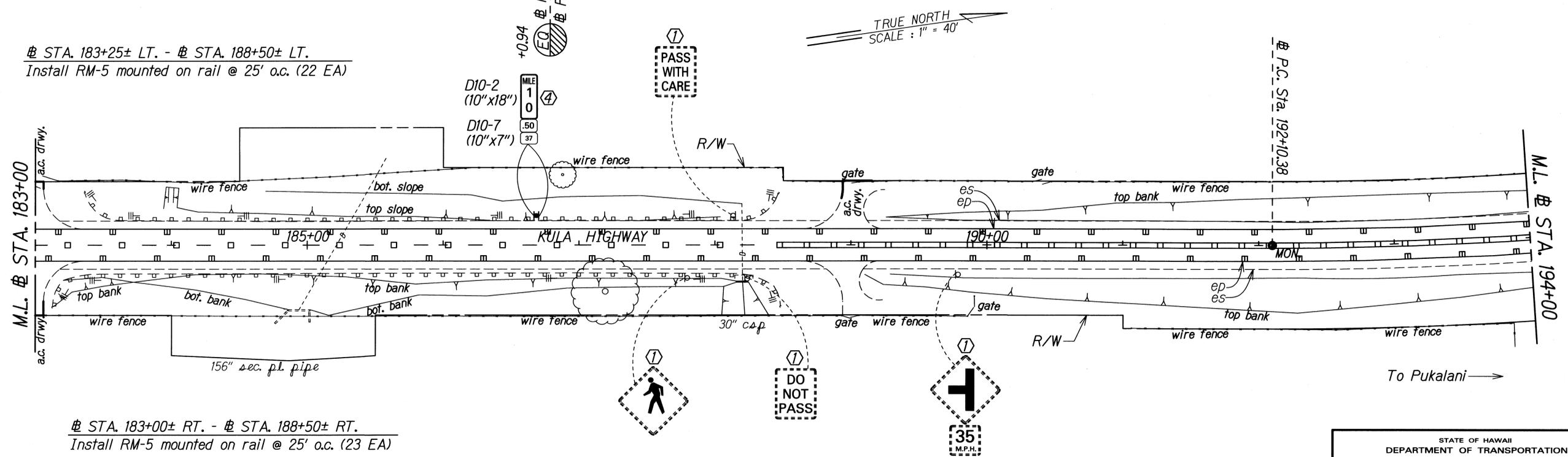
SHEET No. 8 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-1(025)	2012	18	22



± STA. 174+00± RT. - ± STA. 179+00± RT.
Install RM-5 mounted on rail @ 25' o.c. (21 EA)

± STA. 183+25± LT. - ± STA. 188+50± LT.
Install RM-5 mounted on rail @ 25' o.c. (22 EA)



± STA. 183+00± RT. - ± STA. 188+50± RT.
Install RM-5 mounted on rail @ 25' o.c. (23 EA)

DATE	PLOTTED BY
DATE	DESIGNED BY
DATE	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

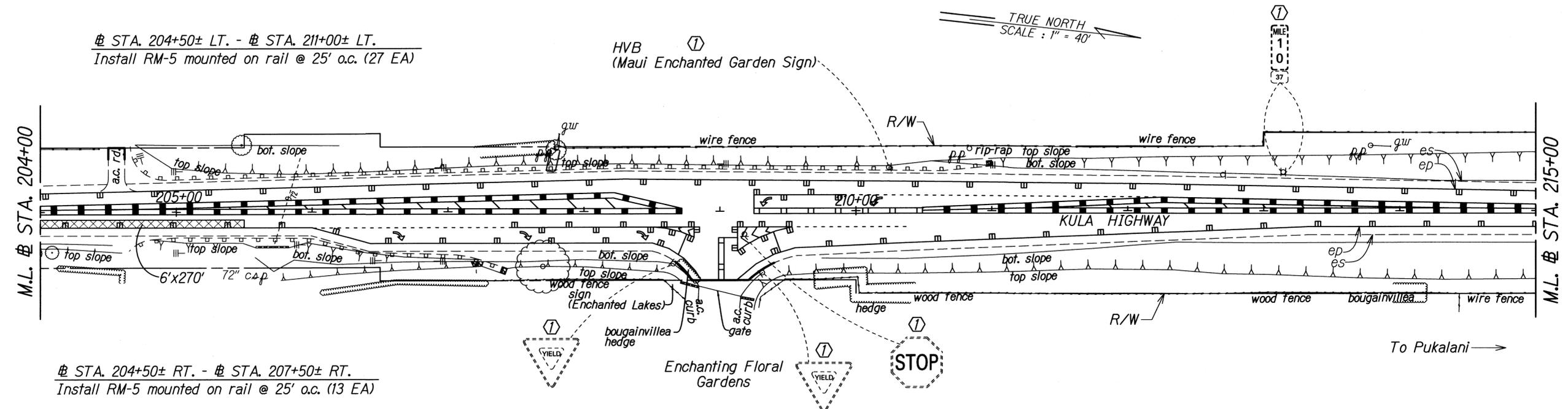
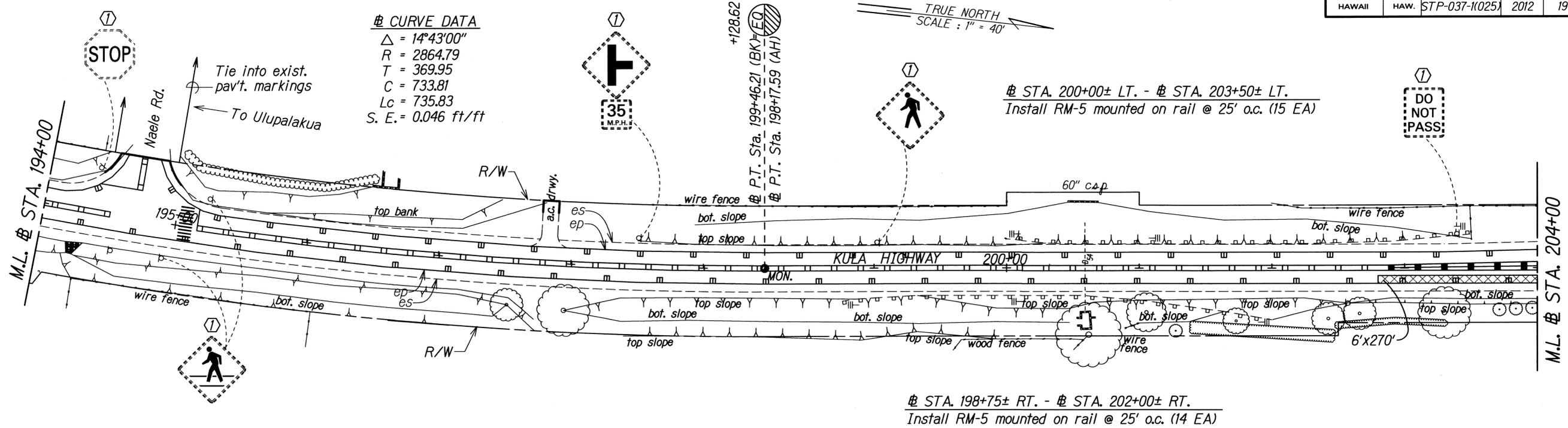
ROADWAY & PAVEMENT MARKING PLAN

KULA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
Kekaulike Avenue to Lower Kula Road
Federal-Aid Project No. STP-037-1(025)

Scale: 1" = 40' Date: July, 2011

SHEET No. 9 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-1(025)	2012	19	22



Δ CURVE DATA
 $\Delta = 14^{\circ}43'00''$
 $R = 2864.79$
 $T = 369.95$
 $C = 733.81$
 $L_c = 735.83$
 $S. E. = 0.046 \text{ ft/ft}$

- 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
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY & PAVEMENT MARKING PLAN

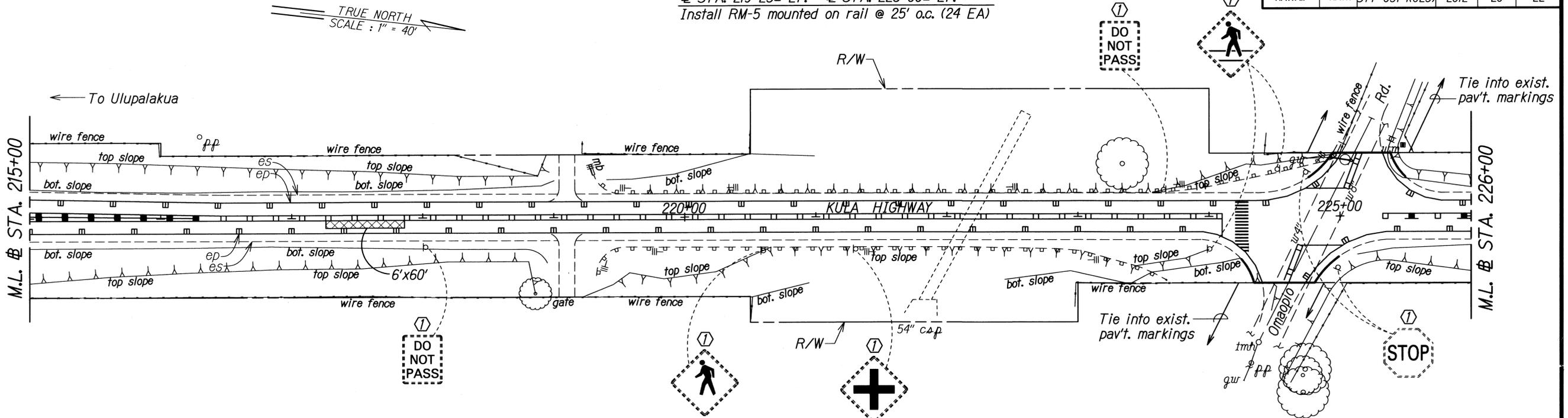
KULA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
Kekaulike Avenue to Lower Kula Road
Federal-Aid Project No. STP-037-1(025)

Scale: 1" = 40' Date: July, 2011

SHEET No. 19 OF 13 SHEETS

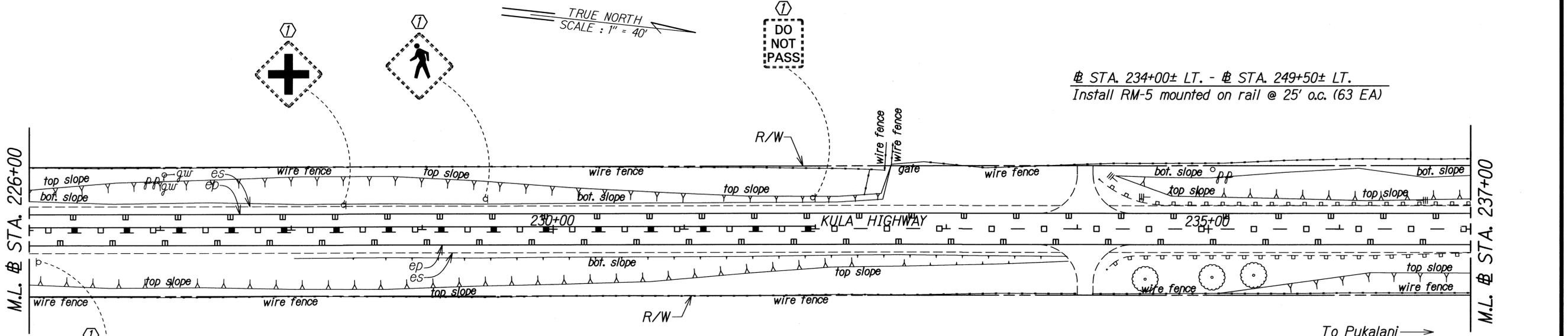
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-1(K025)	2012	20	22

± STA. 219+25± LT. - ± STA. 225+00± LT.
Install RM-5 mounted on rail @ 25' o.c. (24 EA)



± STA. 219+25± RT. - ± STA. 223+75± RT.
Install RM-5 mounted on rail @ 25' o.c. (19 EA)

± STA. 234+00± LT. - ± STA. 249+50± LT.
Install RM-5 mounted on rail @ 25' o.c. (63 EA)



± STA. 234+25± RT. - ± STA. 249+50± RT.
Install RM-5 mounted on rail @ 25' o.c. (62 EA)

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

- 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

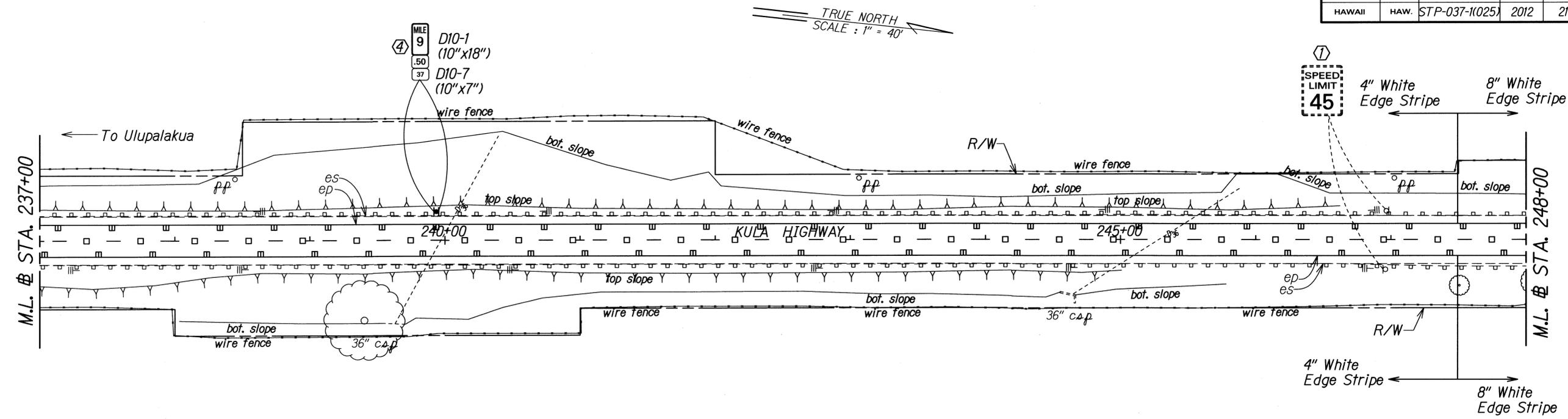
ROADWAY & PAVEMENT MARKING PLAN

KULA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
Kekaulike Avenue to Lower Kula Road
Federal-Aid Project No. STP-037-1(K025)

Scale: 1" = 40' Date: July, 2011

SHEET No. 11 OF 13 SHEETS

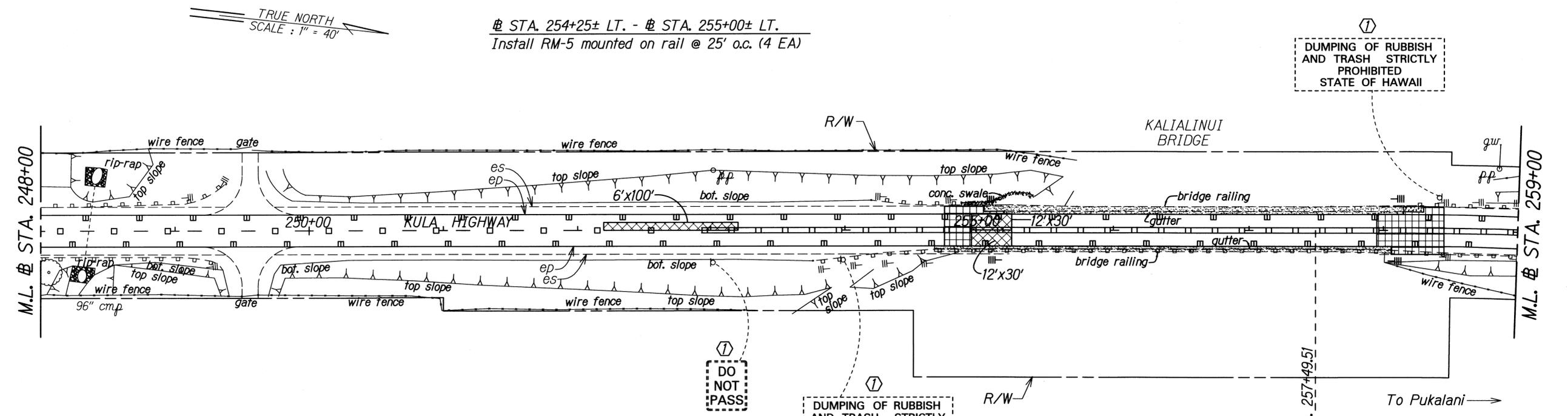
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-1(025)	2012	21	22



⊕ STA. 258+25± LT. - ⊕ STA. 265+00± LT.
Install RM-5 mounted on rail @ 25' o.c. (28 EA)

⊕ STA. 254+25± LT. - ⊕ STA. 255+00± LT.
Install RM-5 mounted on rail @ 25' o.c. (4 EA)

Ⓛ DUMPING OF RUBBISH AND TRASH STRICTLY PROHIBITED STATE OF HAWAII



⊕ STA. 253+75± RT. - ⊕ STA. 262+00± RT.
Install RM-5 mounted on rail @ 25' o.c. (34 EA)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY & PAVEMENT MARKING PLAN

KULA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
Kekaulike Avenue to Lower Kula Road
Federal-Aid Project No. STP-037-1(025)

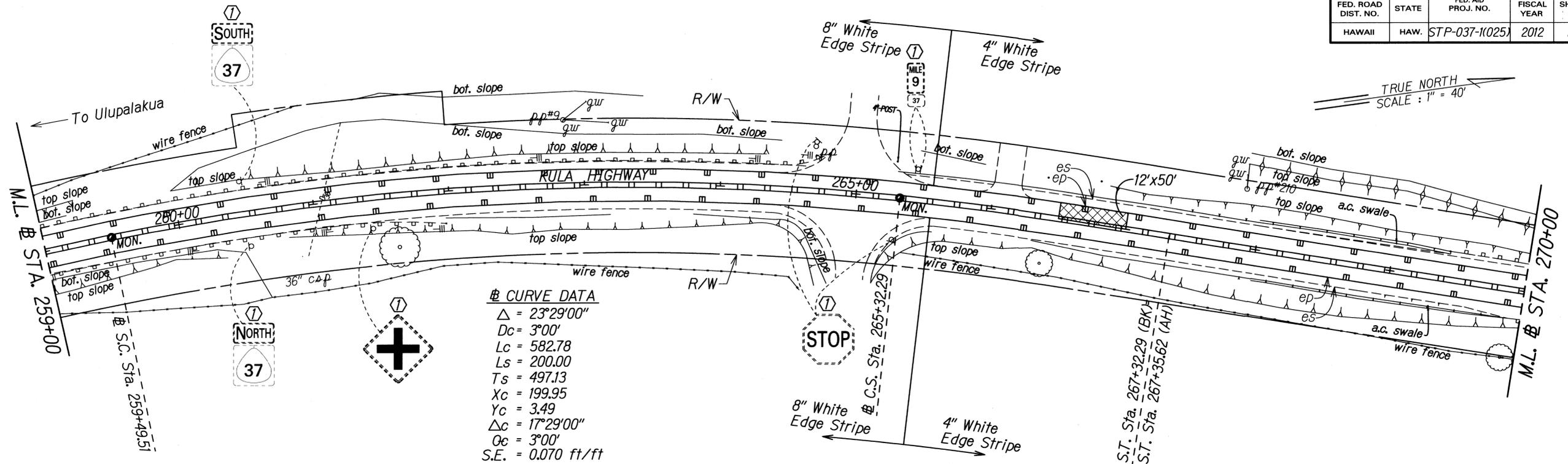
Scale: 1" = 40' Date: July, 2011

SHEET No. 12 OF 13 SHEETS

- KEY:**
- Ⓛ Exist. Sign(s) & Post(s) to Remain
 - Ⓜ Remove Exist. Sign(s) & Post(s)
 - Ⓝ Remove Exist. & Install New Sign(s) & Post(s)
 - Ⓞ Install New Sign(s) & Post(s)

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

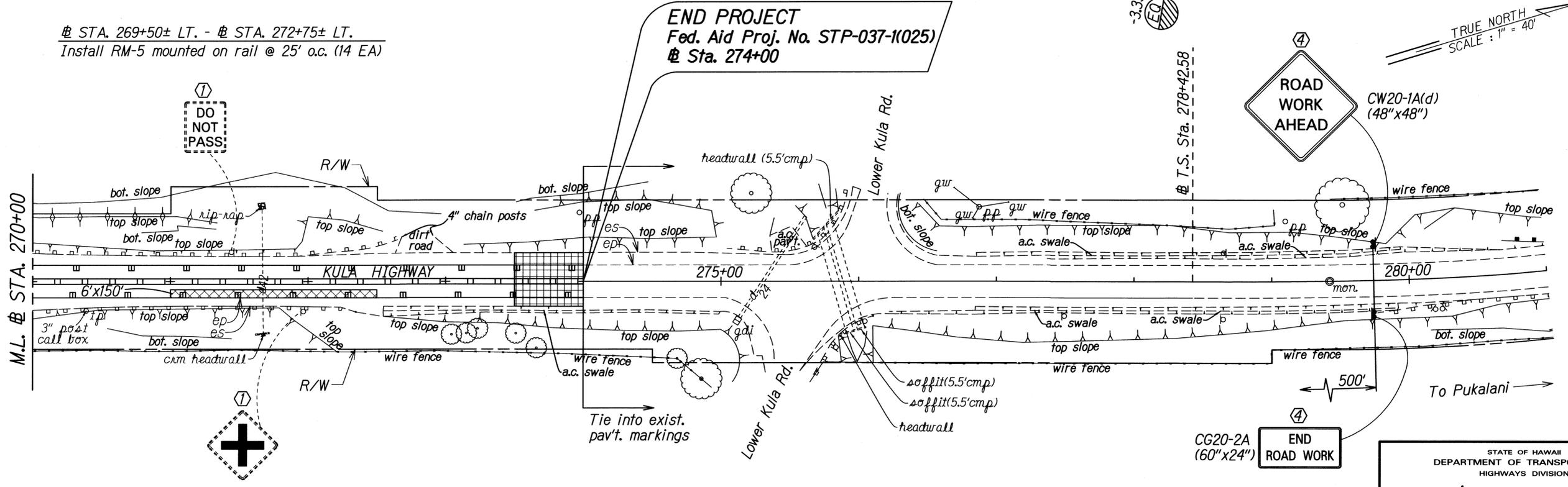
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-1(025)	2012	22	22



⊕ CURVE DATA
 $\Delta = 23^{\circ}29'00''$
 $Dc = 3^{\circ}00'$
 $Lc = 582.78$
 $Ls = 200.00$
 $Ts = 497.13$
 $Xc = 199.95$
 $Yc = 3.49$
 $\Delta c = 17^{\circ}29'00''$
 $Oc = 3^{\circ}00'$
 $S.E. = 0.070 \text{ ft/ft}$

⊕ STA. 269+50± LT. - ⊕ STA. 272+75± LT.
 Install RM-5 mounted on rail @ 25' o.c. (14 EA)

END PROJECT
 Fed. Aid Proj. No. STP-037-1(025)
 ⊕ Sta. 274+00



⊕ STA. 270+00± RT. - ⊕ STA. 272+25± RT.
 Install RM-5 mounted on rail @ 25' o.c. (10 EA)

- 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 & PAVEMENT MARKING PLAN

KULA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
 Kekaulike Avenue to Lower Kula Road
 Federal-Aid Project No. STP-037-1(025)

Scale: 1" = 40' Date: July, 2011

SHEET No. 13 OF 13 SHEETS

DATE	DATE
DESIGNED BY	CHECKED BY
TRACED BY	QUANTITIES BY
NOTE BOOK	