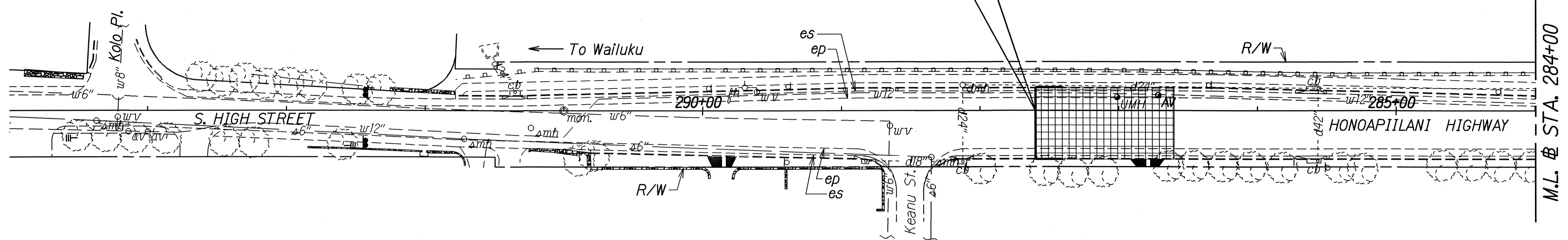


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	30D-01-05M	2005	9	73

END PROJECT
 Project No. 30D-01-05M
 @ Sta. 287+60

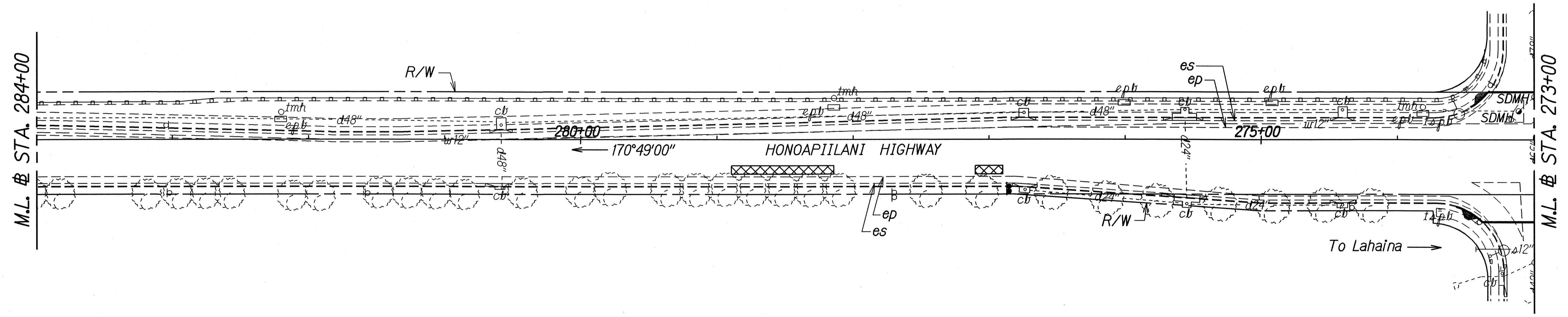
TRUE NORTH
 SCALE: 1" = 40'



STA. 273+20± LT. & RT. - STA. 287+60 ±LT. & RT.
 Cold plane along the face of concrete gutter
 prior to resurfacing. See Plan Sheet No. 8
 for details.

TRUE NORTH
 SCALE: 1" = 40'

STA. 273+20± RT. - STA 291+70± RT (OUTSIDE PROJECT)
 Install RM-5 mounted on rail @ 25' O.C. (76 Each)



ORIGINAL PLAN	DATE
DESIGNED BY	4/05
NOTED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

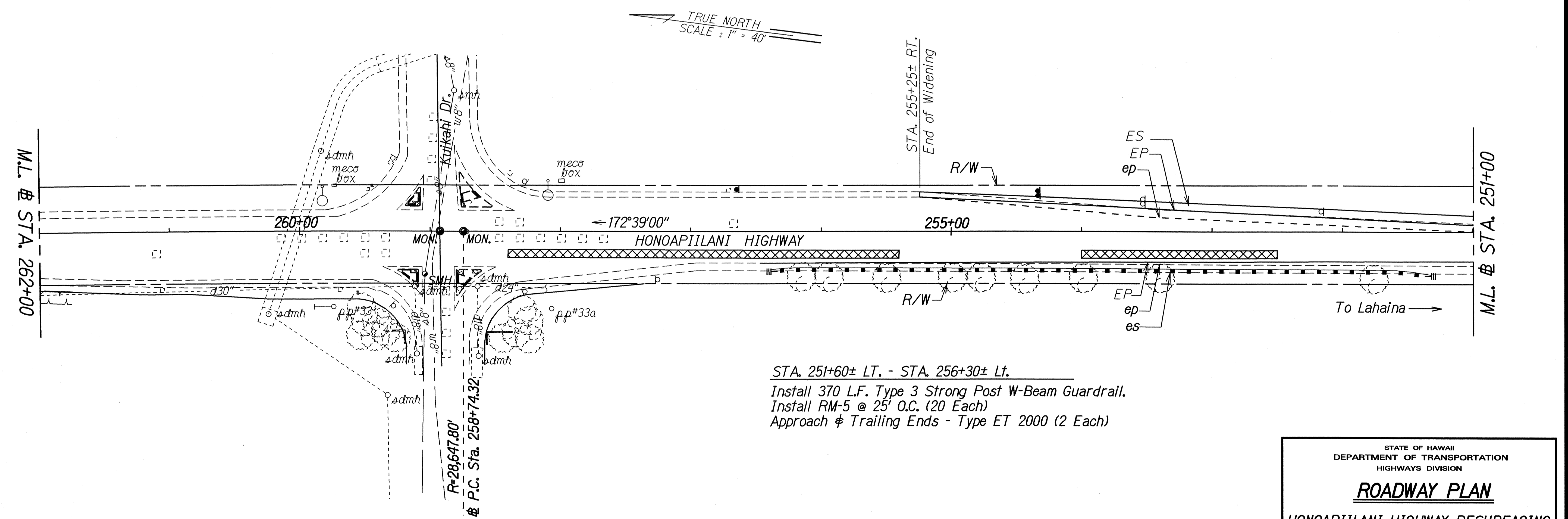
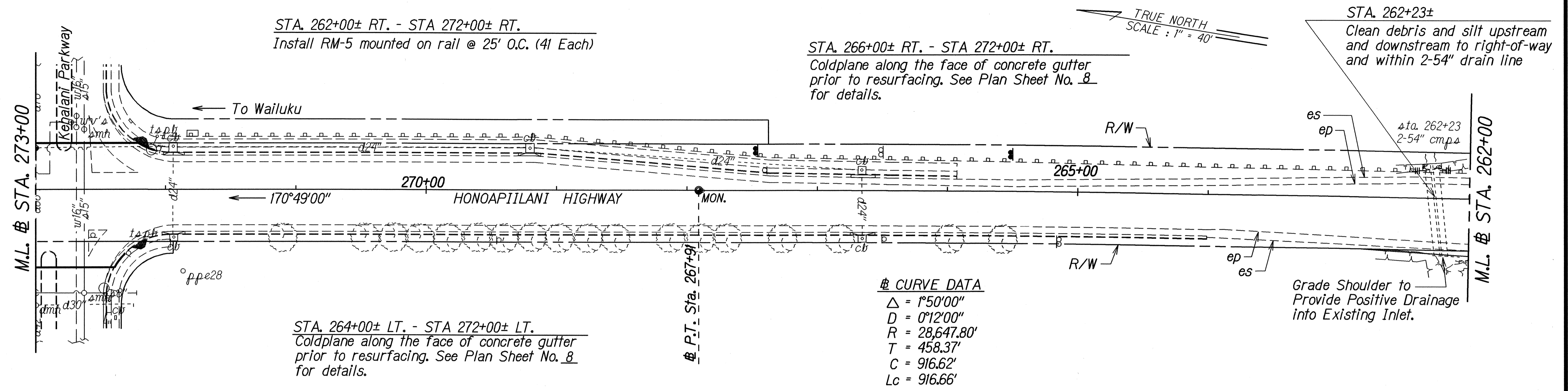
ROADWAY PLAN

HONOAPIILANI HIGHWAY RESURFACING
 Keanu Street to Kuihelani Highway
 Project No. 30D-01-05M

Scale: 1" = 40' Date: April, 2005

SHEET No. 1 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	30D-01-05M	2005	ADD.10	73



DESIGNED BY	DATE
TRACED BY	7/05
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

DATE	REVISION
6/15/05	Deleted note STA. 261+50± Lt. - STA. 263.50± Lt.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

HONOAPIILANI HIGHWAY RESURFACING
Keanu Street to Kuihkehi Highway
Project No. 30D-01-05M

Scale: 1" = 40' Date: April, 2005

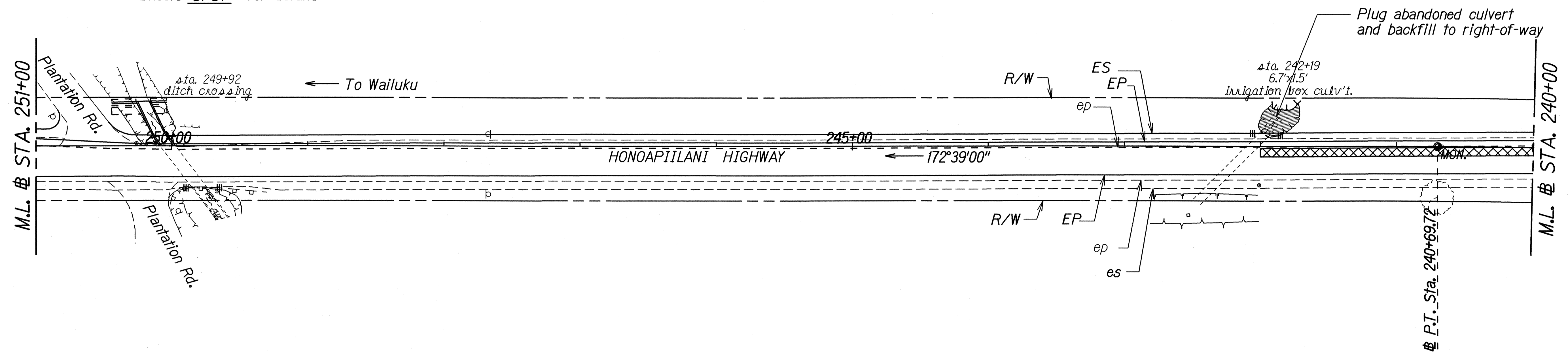
SHEET No. 2 OF 10 SHEETS

ADD.10

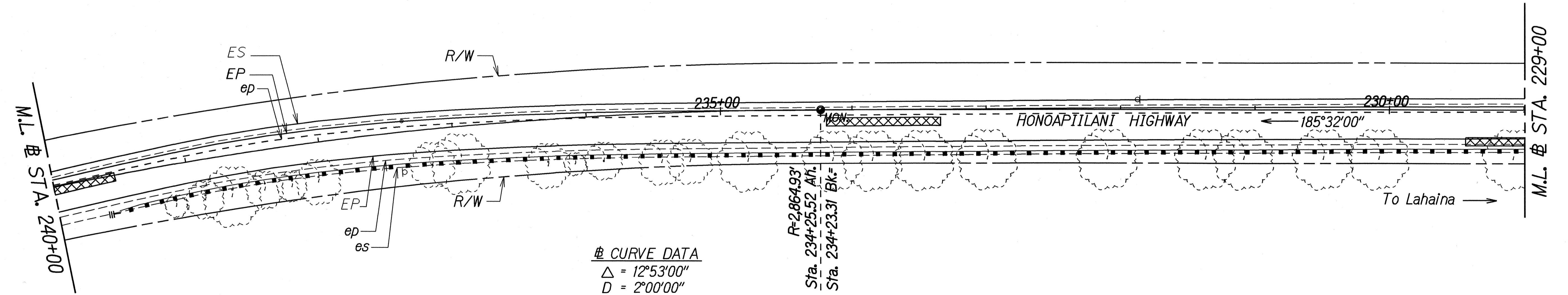
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	30D-01-05M	2005	11	73

STA. 249+92±
 Remove existing guardrail.
 Extend existing Box Culvert. See Plan
 Sheets S1-S7 for details

TRUE NORTH
 SCALE: 1" = 40'



TRUE NORTH
 SCALE: 1" = 40'



☯ CURVE DATA

Δ	= 12°53'00"
D	= 2°00'00"
R	= 2,864.93'
T	= 323.46'
C	= 642.84'
Lc	= 644.20'

R=2,864.93'
 ☯ P.C. Sta. 234+25.52 Aft.
 ☯ P.C. Sta. 234+23.31 Bk=

ORIGINAL PLAN	DATE
NOTED	4/05
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLAN

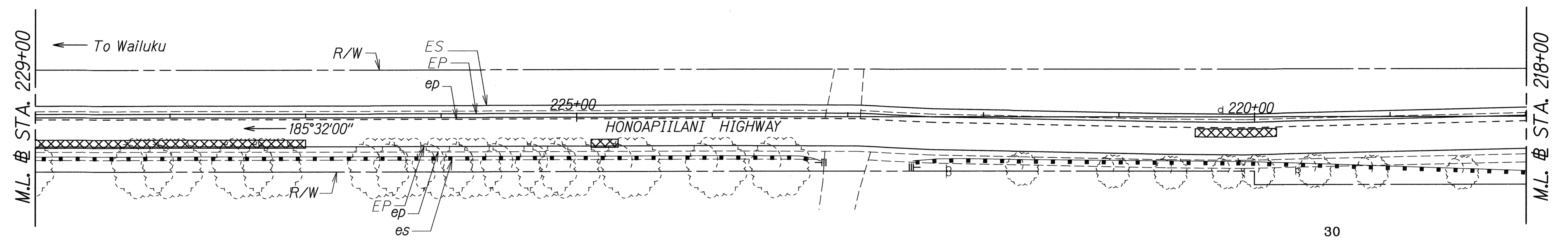
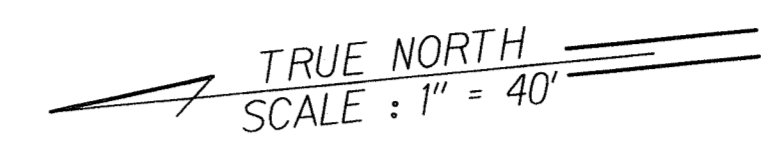
HONOAPIILANI HIGHWAY RESURFACING
 Keanu Street to Kuihelani Highway
 Project No. 30D-01-05M

Scale: 1" = 40' Date: April, 2005

SHEET No. 3 OF 10 SHEETS

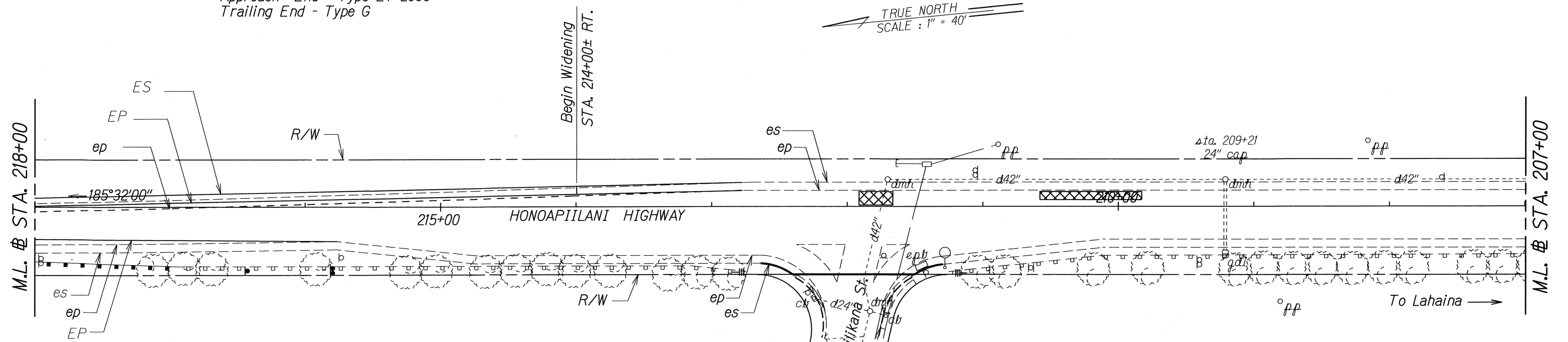
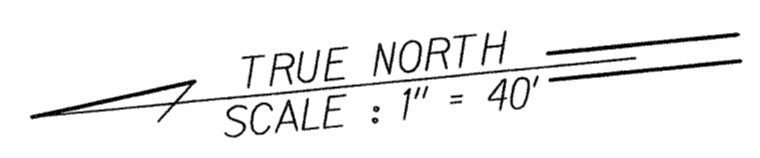
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	30D-01-05M	2005	12	73

STA. 212+90± RT. - STA. 255+10± RT.
Widen roadway. See Plan Sheet 58-72 for details



STA. 223+20± LT. - STA. 239+25± LT.
Install 1,525 L.F. Type 3 Strong Post W-Beam Guardrail.
Install RM-5 mounted on rail @25' O.C. (47 Each)
Approach End - Type ET-2000
Trailing End - Type G

30
STA. 217+00 LT. - STA. 222+00 LT.
Remove existing terminal. Install 500 L.F. Type 3 Strong Post W-Beam Guardrail. Tie into existing guardrail. Install RM-5 mounted on rail @25' O.C. (22 each) Approach End - Type ET-2000



STA. 212+20± LT. - STA. 217+50± LT.
Install RM 5 mounted on rail @ 25' O.C.
Reset existing guardrail posts (59 each)

SURVEY PLOTTED BY	DATE
DESIGNED BY	
NOTE BOOK	
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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

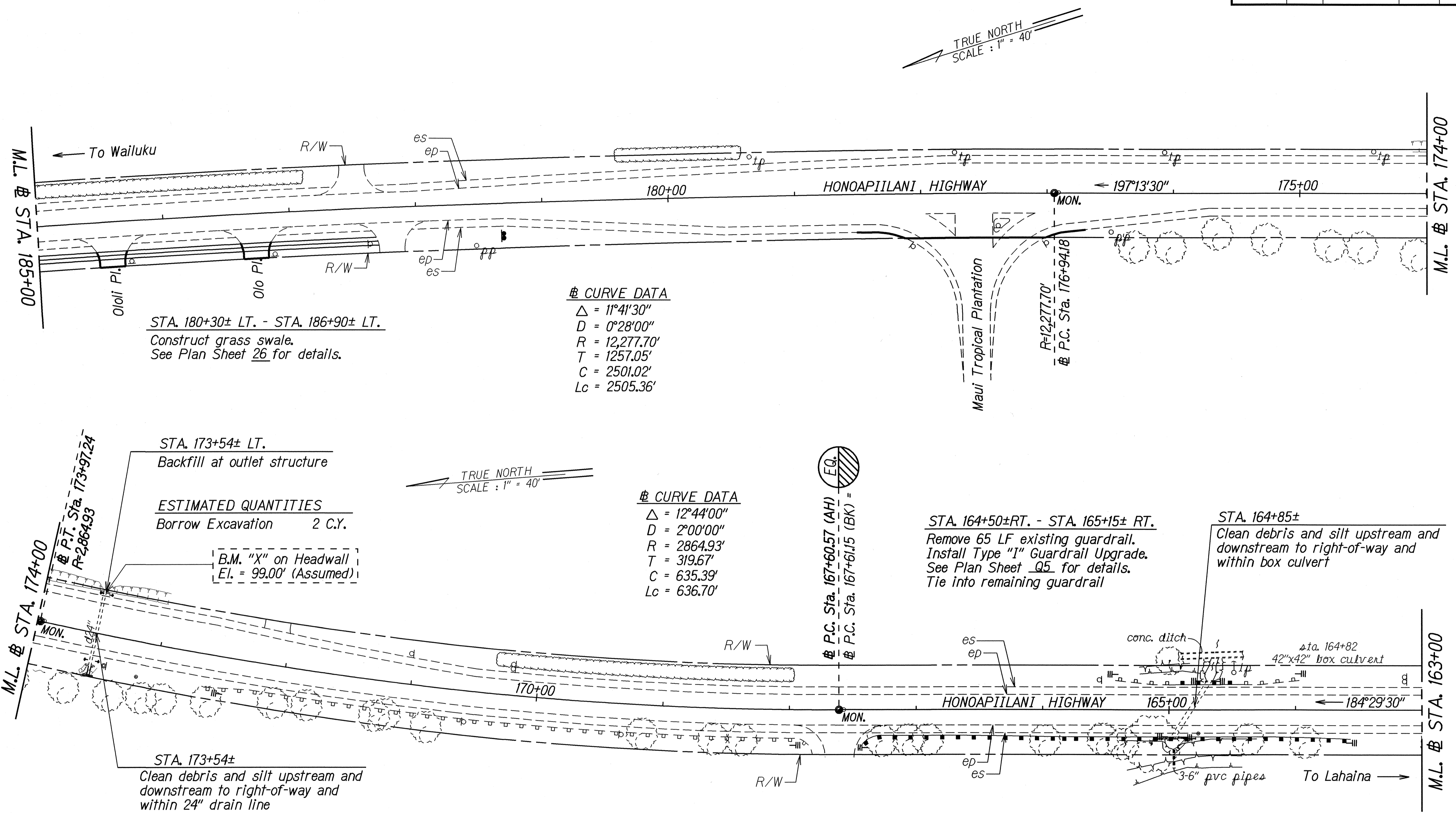
ROADWAY PLAN

HONOAPIILANI HIGHWAY RESURFACING
Keanu Street to Kuihelani Highway
Project No. 30D-01-05M

Scale: 1" = 40' Date: April, 2005

SHEET No. 4 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	30D-01-05M	2005	14	73



STA. 180+30± LT. - STA. 186+90± LT.
 Construct grass swale.
 See Plan Sheet 26 for details.

☯ CURVE DATA
 $\Delta = 11^\circ 41' 30''$
 $D = 0^\circ 28' 00''$
 $R = 12,277.70'$
 $T = 1257.05'$
 $C = 2501.02'$
 $L_c = 2505.36'$

STA. 173+54± LT.
 Backfill at outlet structure

ESTIMATED QUANTITIES
 Borrow Excavation 2 C.Y.

B.M. "X" on Headwall
 El. = 99.00' (Assumed)

☯ CURVE DATA
 $\Delta = 12^\circ 44' 00''$
 $D = 2^\circ 00' 00''$
 $R = 2864.93'$
 $T = 319.67'$
 $C = 635.39'$
 $L_c = 636.70'$

STA. 164+50± RT. - STA. 165+15± RT.
 Remove 65 LF existing guardrail.
 Install Type "I" Guardrail Upgrade.
 See Plan Sheet Q5 for details.
 Tie into remaining guardrail

STA. 164+85±
 Clean debris and silt upstream and downstream to right-of-way and within box culvert

STA. 173+54±
 Clean debris and silt upstream and downstream to right-of-way and within 24" drain line
 Demolish Existing Headwall
 Install 24" RCP
 Construct Std. Concrete Headwall
 See Plan Sheet 27 for Details

STA. 164+00± RT. - STA. 165+50± RT.
 Reset existing guardrail posts (25 Each)
 Install RM-5 mounted on rail 25' O.C. (7 each)

STA. 163+60± LT. - STA. 167+30± LT.
 Install 208 LF Strong Post W Beam Guardrail.
 Install Type "H" Guardrail Upgrade.
 See Plan Sheet Q4 for details.
 Approach End - Type Modified G (R=15' min.)
 Trailing End - Type A

SURVEY PLOTTED BY	DATE
DESIGNED BY	4/05
TRACED BY	
NOTE BOOK	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

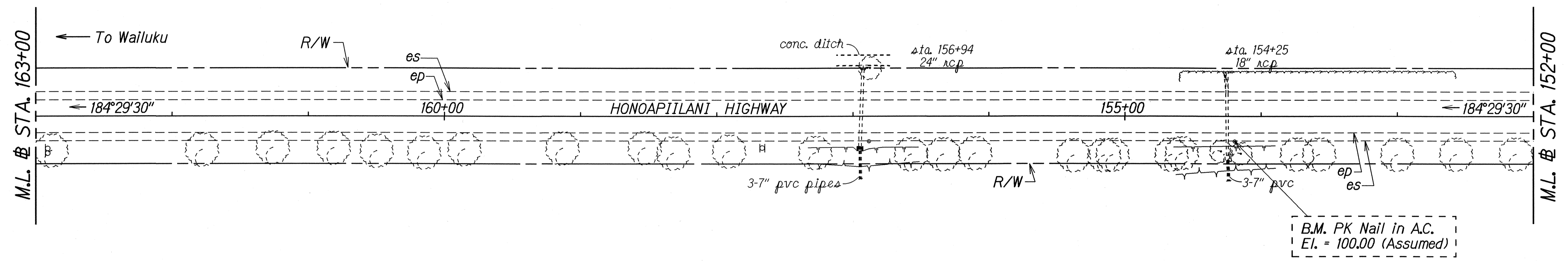
ROADWAY PLAN

HONOAPIILANI HIGHWAY RESURFACING
 Keanu Street to Kuihelani Highway
 Project No. 30D-01-05M

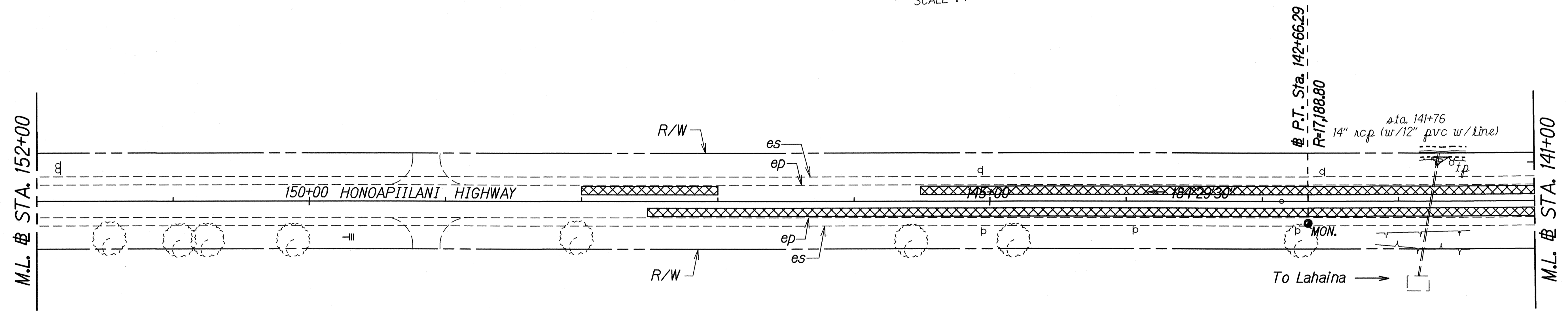
Scale: 1" = 40' Date: April, 2005
 SHEET No. 6 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	30D-01-05M	2005	15	73

TRUE NORTH
SCALE : 1" = 40'



TRUE NORTH
SCALE : 1" = 40'



ORIGINAL PLAN	DATE
NOTED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

HONOAPIILANI HIGHWAY RESURFACING
Keanu Street to Kihelani Highway
Project No. 30D-01-05M

Scale: 1" = 40' Date: April, 2005

SHEET No. 7 OF 10 SHEETS

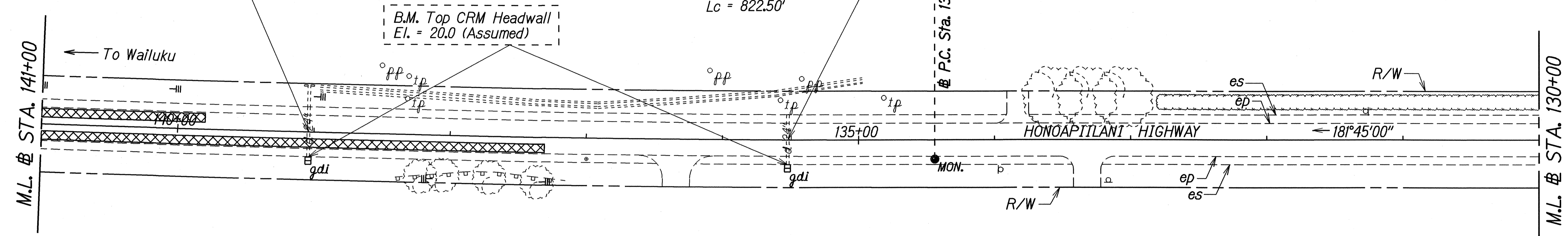
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	30D-01-05M	2005	16	73

STA. 139+00±
Clean debris and silt upstream and downstream to right-of-way and within 24" drain line

⊕ CURVE DATA
 $\Delta = 2^{\circ}44'30''$
 $D = 0^{\circ}20'00''$
 $R = 17,188.80'$
 $T = 411.33'$
 $C = 822.42'$
 $L_c = 822.50'$

STA. 135+50±
Clean debris and silt upstream and downstream to right-of-way and within 24" drain line

TRUE NORTH
SCALE : 1" = 40'



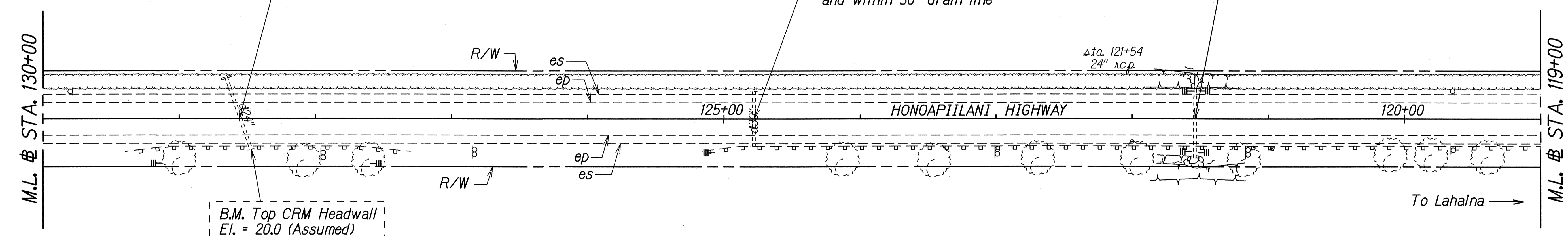
STA. 137+20± LT. - STA. 138+40± LT.
Reset existing guardrail posts (20 each)
Install RM-5 mounted on rail @ 25' O.C. (6 each)

STA. 128+55±
Clean debris and silt upstream and downstream to right-of-way and within 24" drain line

STA. 124+80±
Clean debris and silt upstream and downstream to right-of-way and within 30" drain line

STA. 121+54±
Clean debris and silt upstream and downstream to right-of-way and within 24" drain line

TRUE NORTH
SCALE : 1" = 40'



STA. 127+40± LT. - STA. 129+40± LT.
Reset existing guardrail posts (33 each)
Install RM-5 mounted on rail @ 25' O.C. (9 each)

ORIGINAL PLAN	DATE
DESIGNED BY	4/05
NOTED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

HONOAPIILANI HIGHWAY RESURFACING
Keanu Street to Kuihelani Highway
Project No. 30D-01-05M

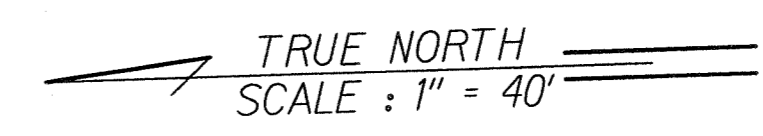
Scale: 1" = 40' Date: April, 2005

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	30D-01-05M	2005	17	73

STA. 112+70± LT. - STA. 125+20± LT.
 Reset existing guardrail posts (201 each)
 Install RM-5 mounted on rail @ 25' O.C. (51 each)

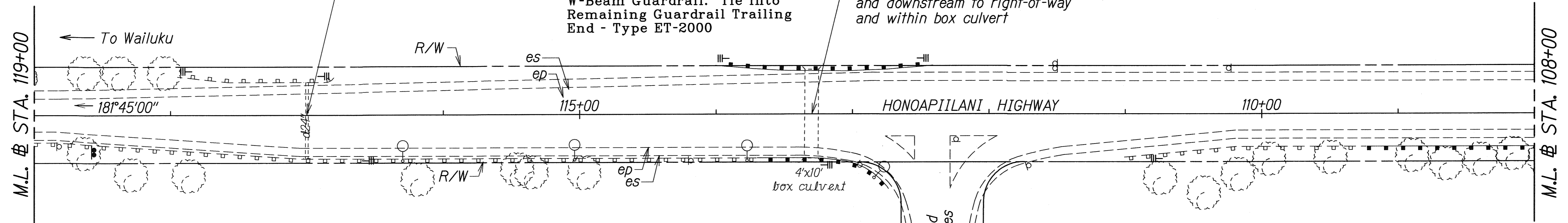
STA. 117+00±
 Clean debris and silt upstream
 and downstream to right-of-way
 and within 24" drain line

STA. 112+50± RT. - STA. 114+00± RT.
 Remove existing guardrail and terminals.
 Install Type "I" Guardrail Upgrade.
 See plan sheet Q5 for details.
 Approach and Trailing Ends - Type ET-2000



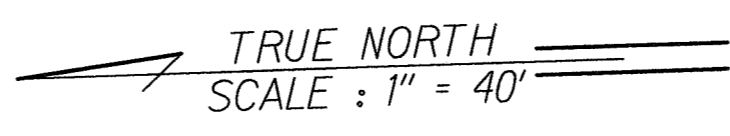
STA. 112+50Rt. - Sta. 117+00 Rt.
 Installed 400± L.F. Strong Post
 W-Beam Guardrail. Tie into
 Remaining Guardrail Trailing
 End - Type ET-2000

STA. 113+30±
 Clean debris and silt upstream
 and downstream to right-of-way
 and within box culvert

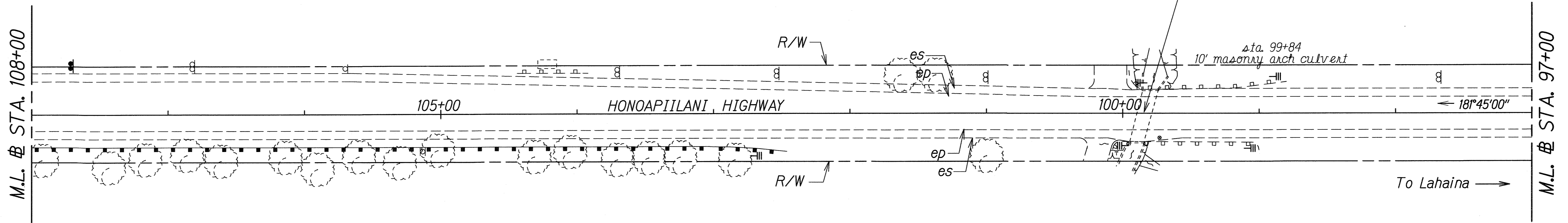


STA. 116+80± RT. - STA. 118+00± RT.
 Reset existing guardrail posts (20 each)
 Install RM-5 mounted on rail @ 25' O.C. (6 each)

STA. 112+50± LT. - STA. 114+00± LT.
 Remove 65 L.F. existing guardrail and trailing terminal.
 Install Type "I" Guardrail Upgrade and trailing terminal.
 Tie into remaining guardrail.
 See plan sheet Q5 for details.
 Trailing End - Type Modified "G" (R=25')



STA. 99+84±
 Clean debris and silt upstream
 and downstream to right-of-way
 and within box culvert



STA. 102+20± LT. - STA. 111+00± LT.
 Remove trailing end terminal. Install 680 L.F. Strong Post
 W-Beam Guardrail. Tie into remaining guardrail
 Trailing End - Type ET 2000

STA. 98+80± LT. & RT. - 100+00± LT. & RT.
 Reset existing guardrail posts (40 each)
 Install RM-5 mounted on rail @ 25' O.C. (11 each)

SURVEY PLOTTED BY	DATE
TRACED BY	4/2/05
DESIGNED BY	
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

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLAN

HONOAPIILANI HIGHWAY RESURFACING
 Keanu Street to Kuihelani Highway
 Project No. 30D-01-05M

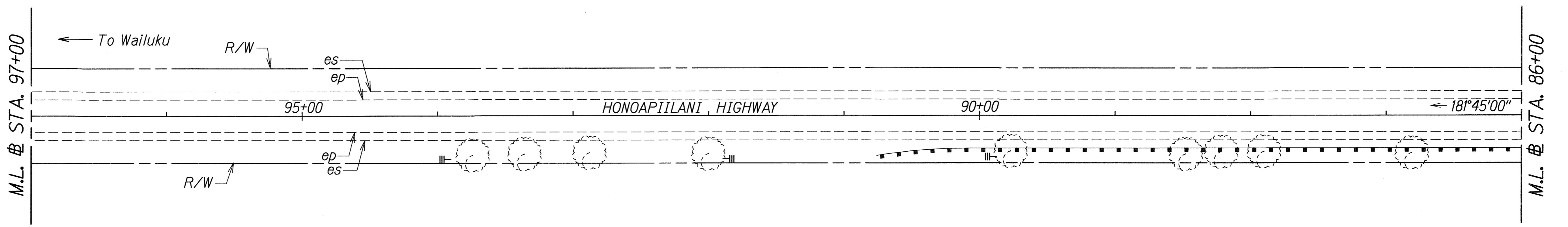
Scale: 1" = 40' Date: April, 2005

SHEET No. 9 OF 10 SHEETS

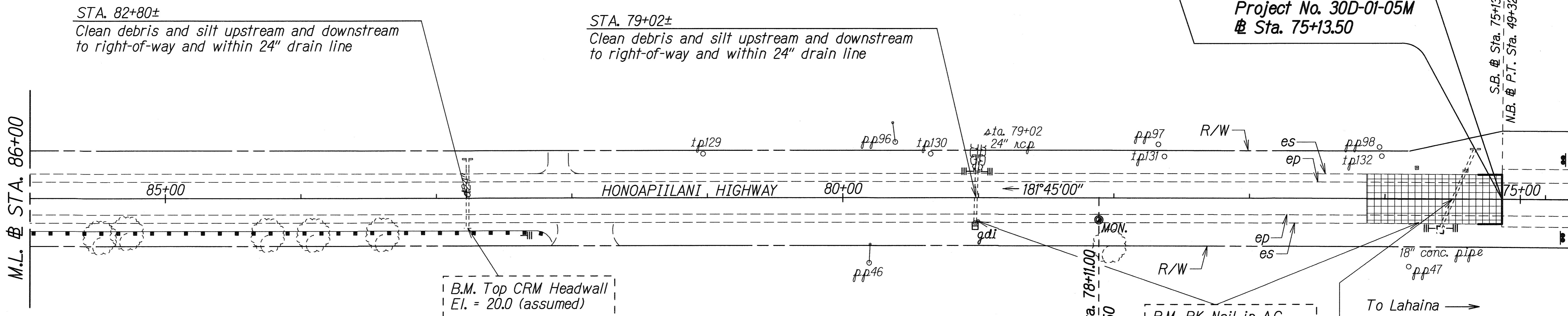
AS-BUILT

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	30D-01-05M	2005	18	73

TRUE NORTH
SCALE : 1" = 40'



TRUE NORTH
SCALE : 1" = 40'



BEGIN PROJECT
Project No. 30D-01-05M
Sta. 75+13.50

S.B. # Sta. 75+13.50
N.B. # P.T. Sta. 49+32.05

88+75± 90+63±
STA. 82+20± LT. - STA. 90+50± LT.
Install 885 L.F. Type 3 Strong Post W-Beam Guardrail
Approach End - Type A
Trailing End - Modified Type G
w/ Radius Flare (R=10' min.)

B.M. PK Nail in A.C.
El. = 100.00 (assumed)

STA. 75+50±
Clean debris and silt upstream and downstream to right-of-way and within 24" drain line

CURVE DATA
Δ = 6°29'45"
D = 0°10'00"
R = 34,377.50'
T = 1,950.84'
C = 3,895.42'
Lc = 3,897.50'

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 PLAN

HONOAPIILANI HIGHWAY RESURFACING
Keanu Street to Kuihelani Highway
Project No. 30D-01-05M

Scale: 1" = 40' Date: April, 2005

DESIGNED BY	DATE
DRAWN BY	4/05
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

AS-BUILT