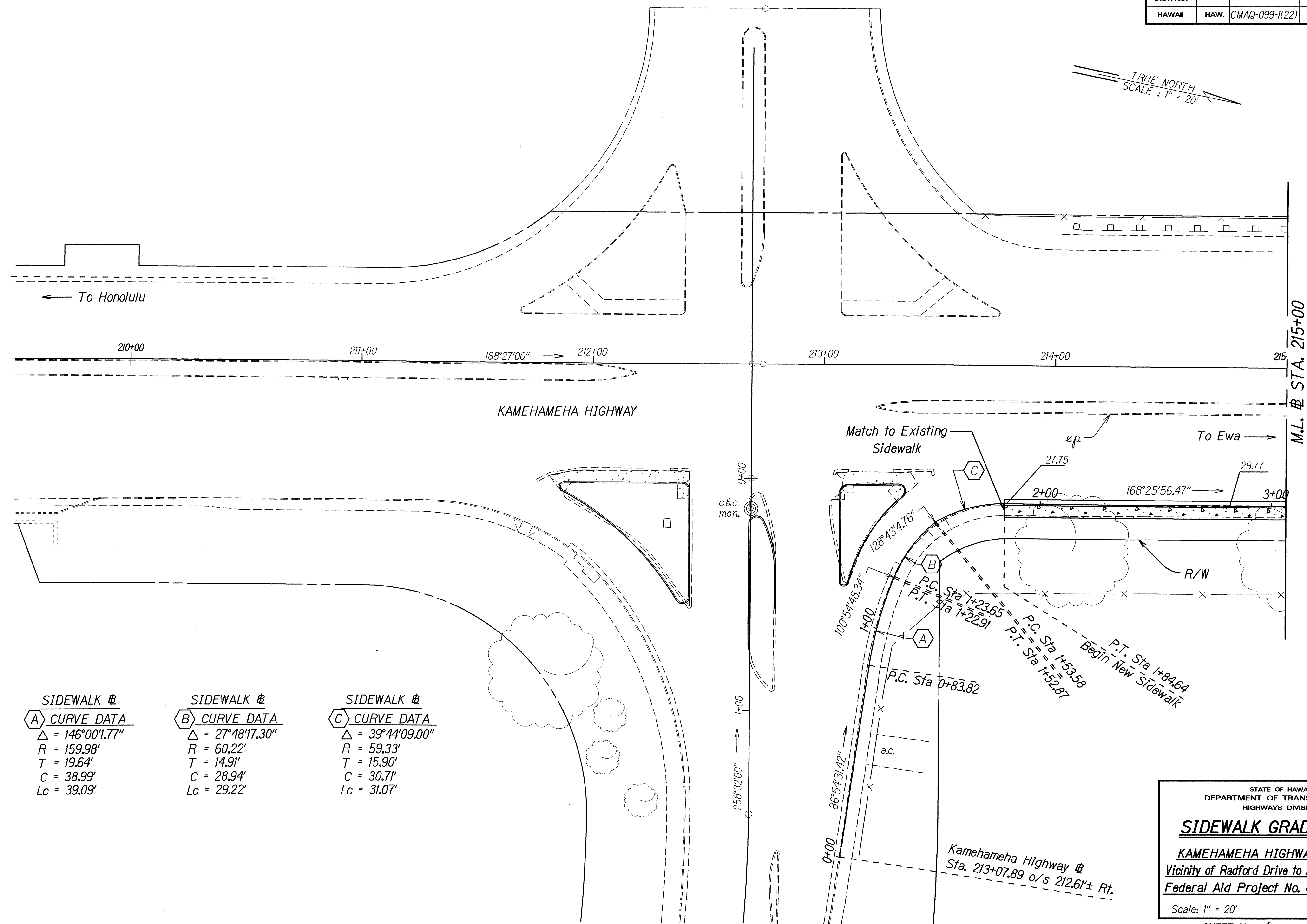


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	14	60



SIDEWALK #	SIDEWALK #	SIDEWALK #
A CURVE DATA	B CURVE DATA	C CURVE DATA
$\Delta = 146^{\circ}00'1.77''$	$\Delta = 27^{\circ}48'17.30''$	$\Delta = 39^{\circ}44'09.00''$
$R = 159.98'$	$R = 60.22'$	$R = 59.33'$
$T = 19.64'$	$T = 14.91'$	$T = 15.90'$
$C = 38.99'$	$C = 28.94'$	$C = 30.71'$
$Lc = 39.09'$	$Lc = 29.22'$	$Lc = 31.07'$

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
CHECKED BY	_____
NOTE BOOK	_____
_____	_____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIDEWALK GRADING PLAN

KAMEHAMEHA HIGHWAY BIKEWAY
Vicinity of Radford Drive to Arizona Memorial
Federal Aid Project No. CMAQ-099-1(22)

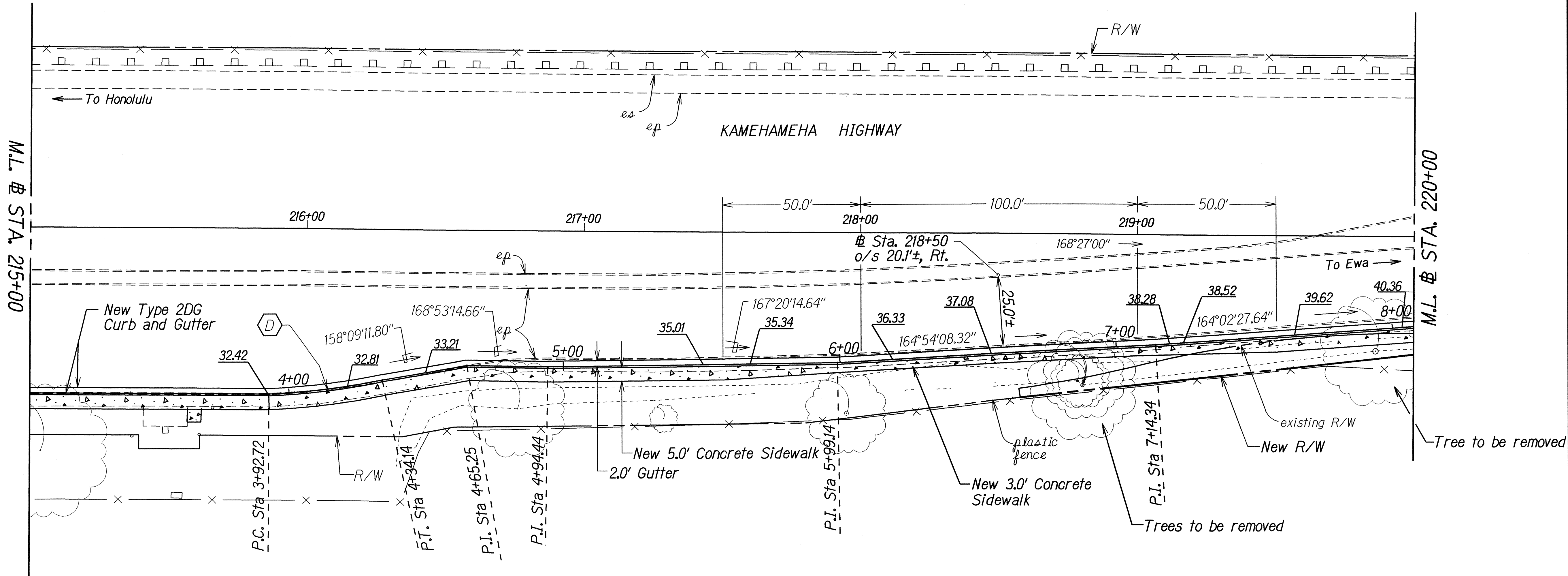
Scale: 1" = 20' Date: April, 2004

SHEET No. 1 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	15	60

TRUE NORTH
SCALE : 1" = 20'

PEARL HARBOR



SIDEWALK #
D CURVE DATA
Δ = 12°21'21.36"
R = 250.00'
T = 20.76'
C = 41.37'
Lc = 41.42'

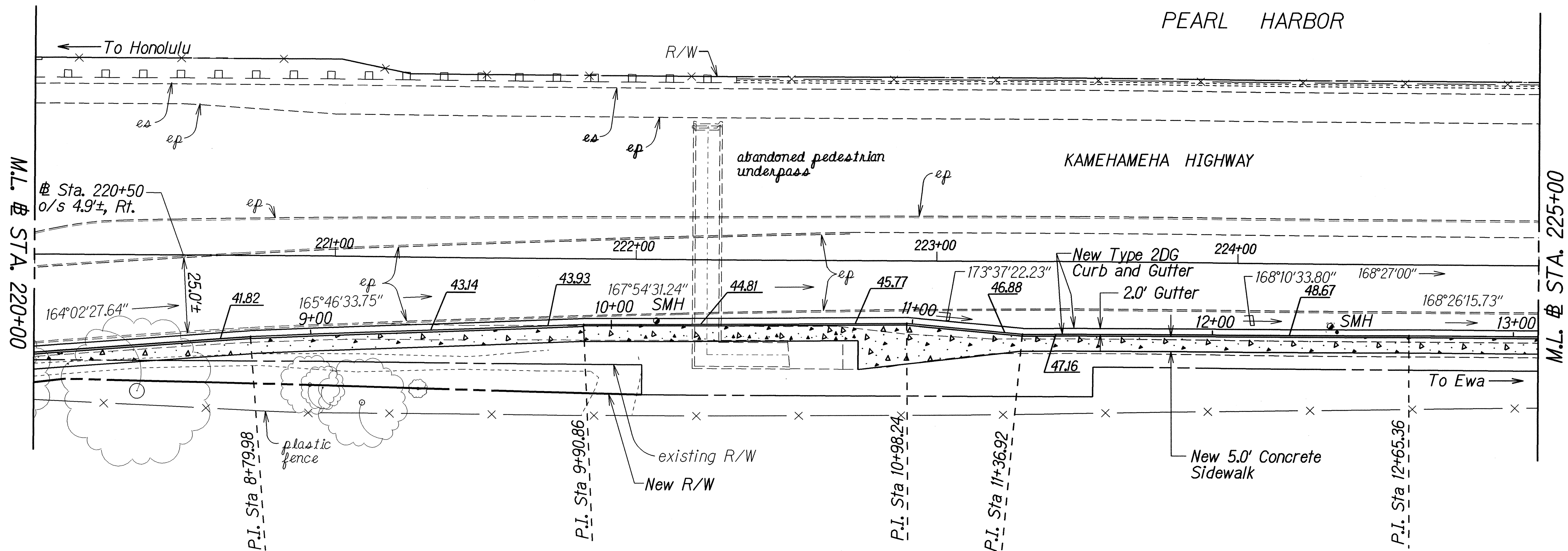
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTE BOOK	
S#	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIDEWALK GRADING PLAN
KAMEHAMEHA HIGHWAY BIKEWAY
Vicinity of Radford Drive to Arizona Memorial
Federal Aid Project No. CMAQ-099-1(22)
Scale: 1" = 20' Date: April, 2004
SHEET No. 2 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	16	60

TRUE NORTH
SCALE : 1" = 20'



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
TRACED BY		
NOTE BOOK		
CHECKED BY		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

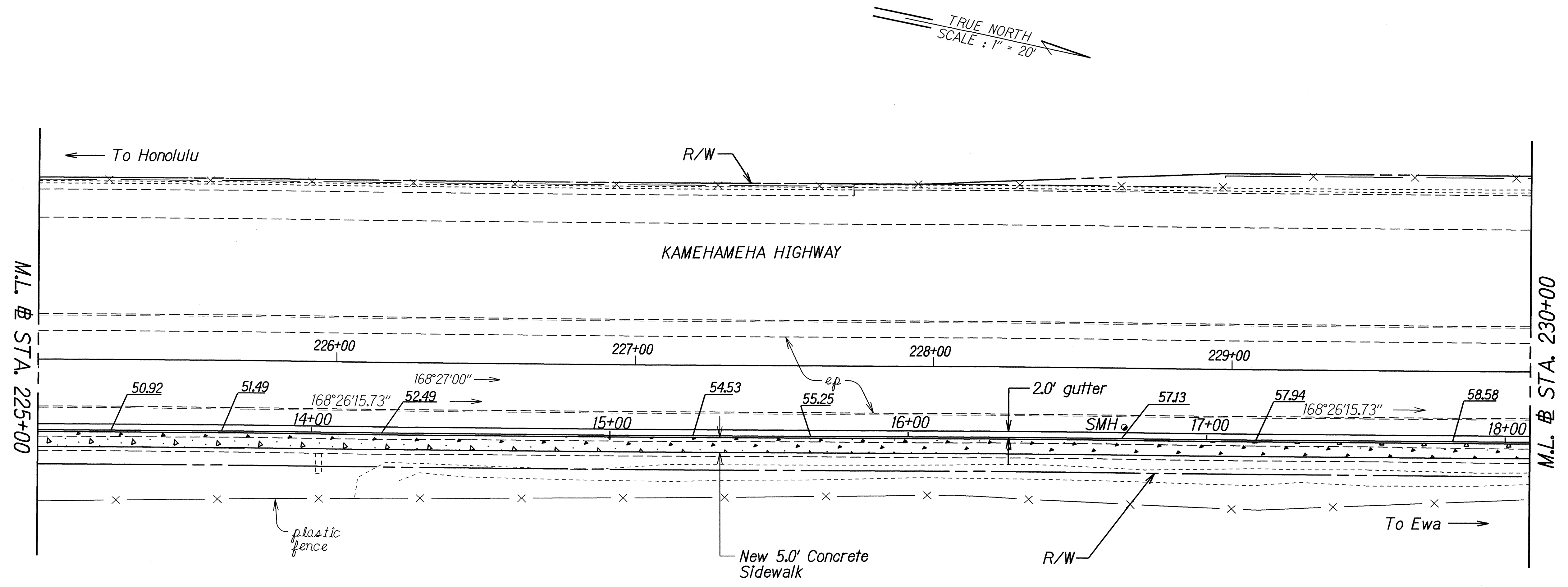
SIDEWALK GRADING PLAN

KAMEHAMEHA HIGHWAY BIKEWAY
Vicinity of Radford Drive to Arizona Memorial
Federal Aid Project No. CMAQ-099-1(22)

Scale: 1" = 20' Date: April, 2004

SHEET No. 3 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	17	60



TRUE NORTH
SCALE : 1" = 20'

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	CHECKED BY	
	QUANTITIES BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIDEWALK GRADING PLAN

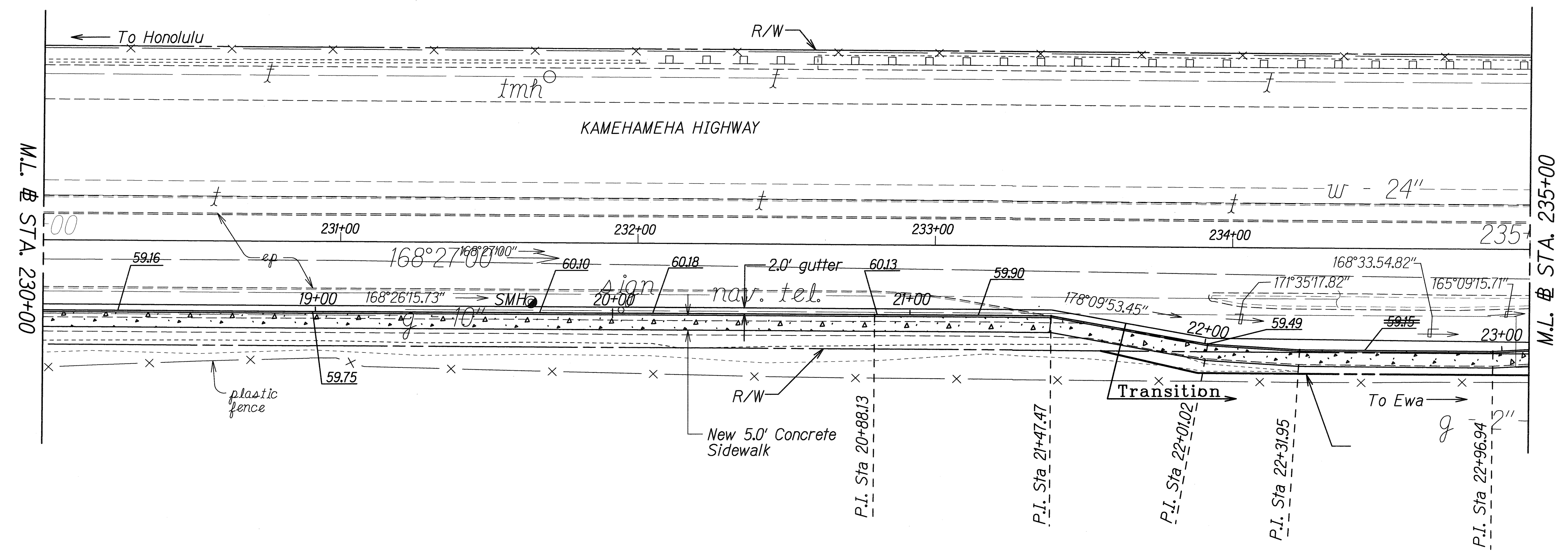
KAMEHAMEHA HIGHWAY BIKEWAY
Vicinity of Radford Drive to Arizona Memorial
Federal Aid Project No. CMAQ-099-1(22)

Scale: 1" = 20' Date: April, 2004

SHEET No. 4 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	18	60

TRUE NORTH
SCALE: 1" = 20'



Sta. 233+63: Transition New Sidewalk, Curb & Gutter to Exist.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	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

SIDEWALK GRADING PLAN

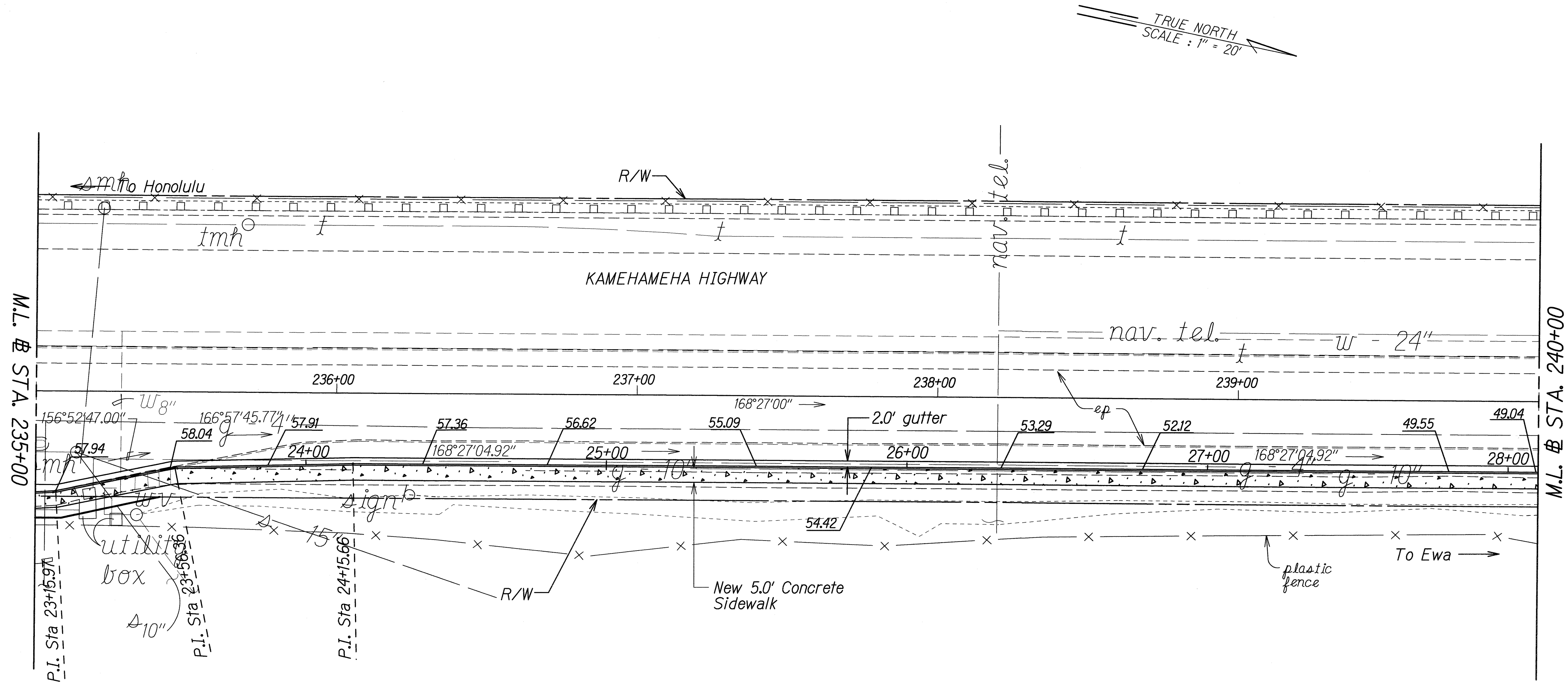
KAMEHAMEHA HIGHWAY BIKEWAY
Vicinity of Radford Drive to Arizona Memorial
Federal Aid Project No. CMAQ-099-1(22)

Scale: 1" = 20' Date: April, 2004

SHEET No. 5 OF 9 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	19	60



Sta. 233+63 - Sta. 254+50±: New Sidewalk, Curb & Gutter Not Constructed

ORIGINAL PLAN	DATE
DESIGNED BY	
CHECKED BY	
DATE	

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

SIDEWALK GRADING PLAN

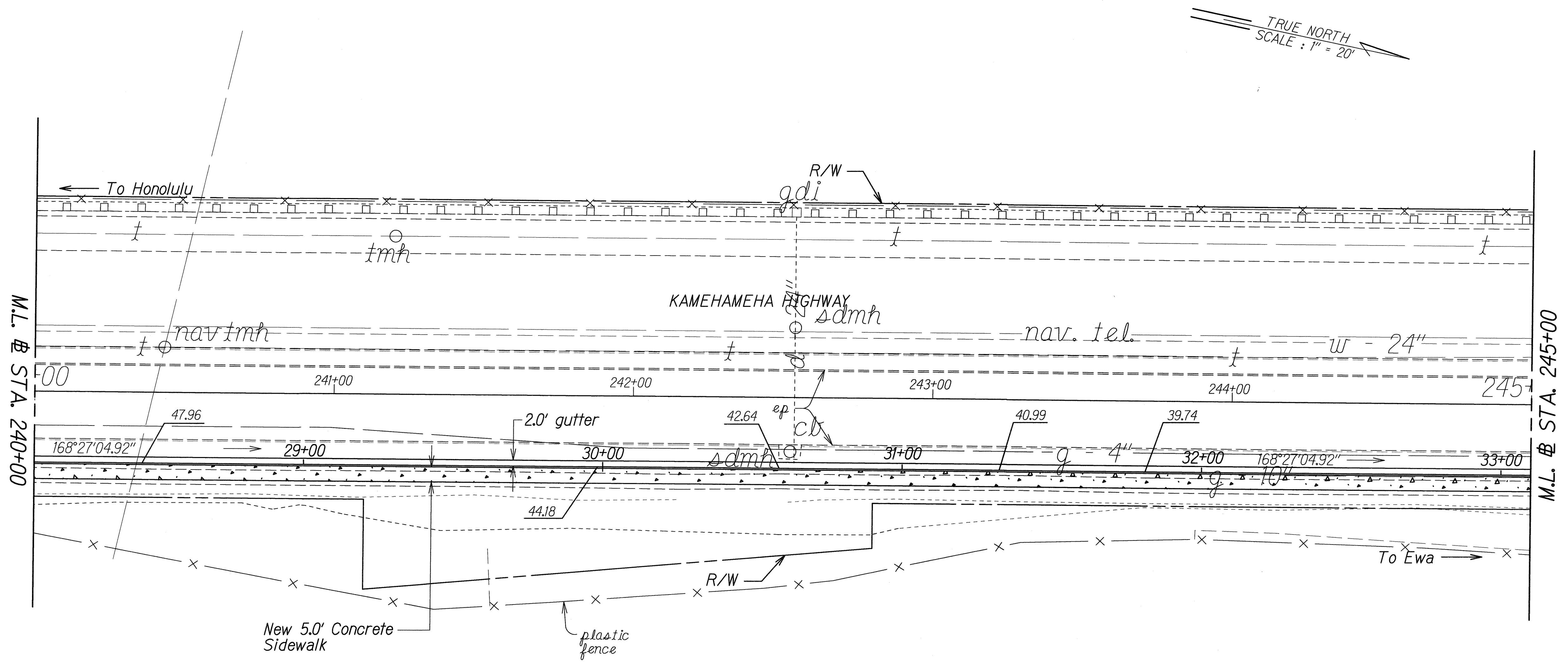
KAMEHAMEHA HIGHWAY BIKEWAY
Vicinity of Radford Drive to Arizona Memorial
Federal Aid Project No. CMAQ-099-1(22)

Scale: 1" = 20'
Date: April, 2004

SHEET No. 6 OF 9 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	20	60



Sta. 233+63 - Sta. 254+50±: New Sidewalk, Curb & Gutter Not Constructed

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

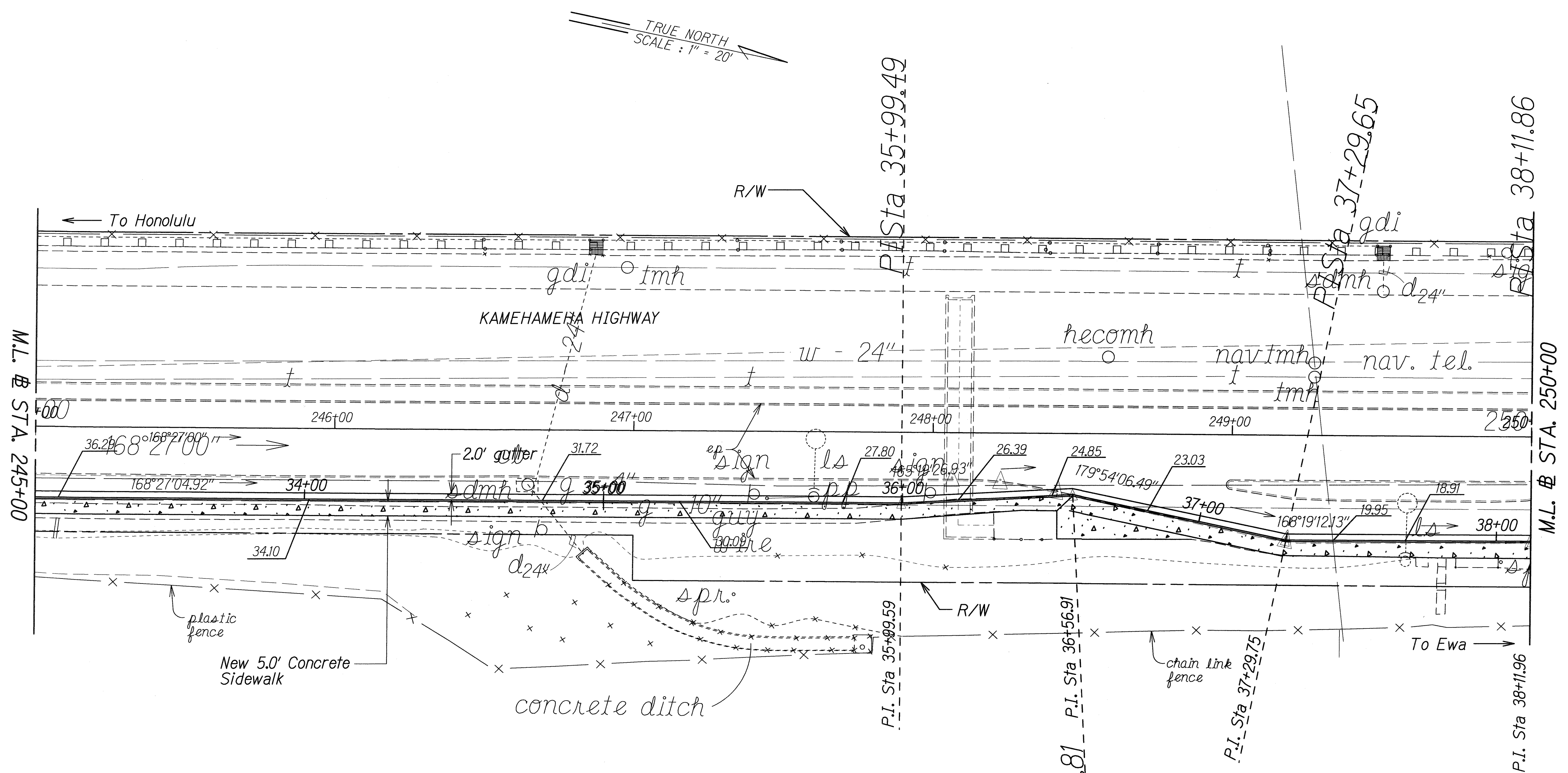
SIDEWALK GRADING PLAN

KAMEHAMEHA HIGHWAY BIKEWAY
Vicinity of Radford Drive to Arizona Memorial
Federal Aid Project No. CMAQ-099-1(22)

Scale: 1" = 20'
Date: April, 2004

SHEET No. 7 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	21	60



Sta. 233+63 - Sta. 254+50± New Sidewalk, Curb & Gutter Not Constructed

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOT FOR CONSTRUCTION	TRACED BY	
	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

SIDEWALK GRADING PLAN

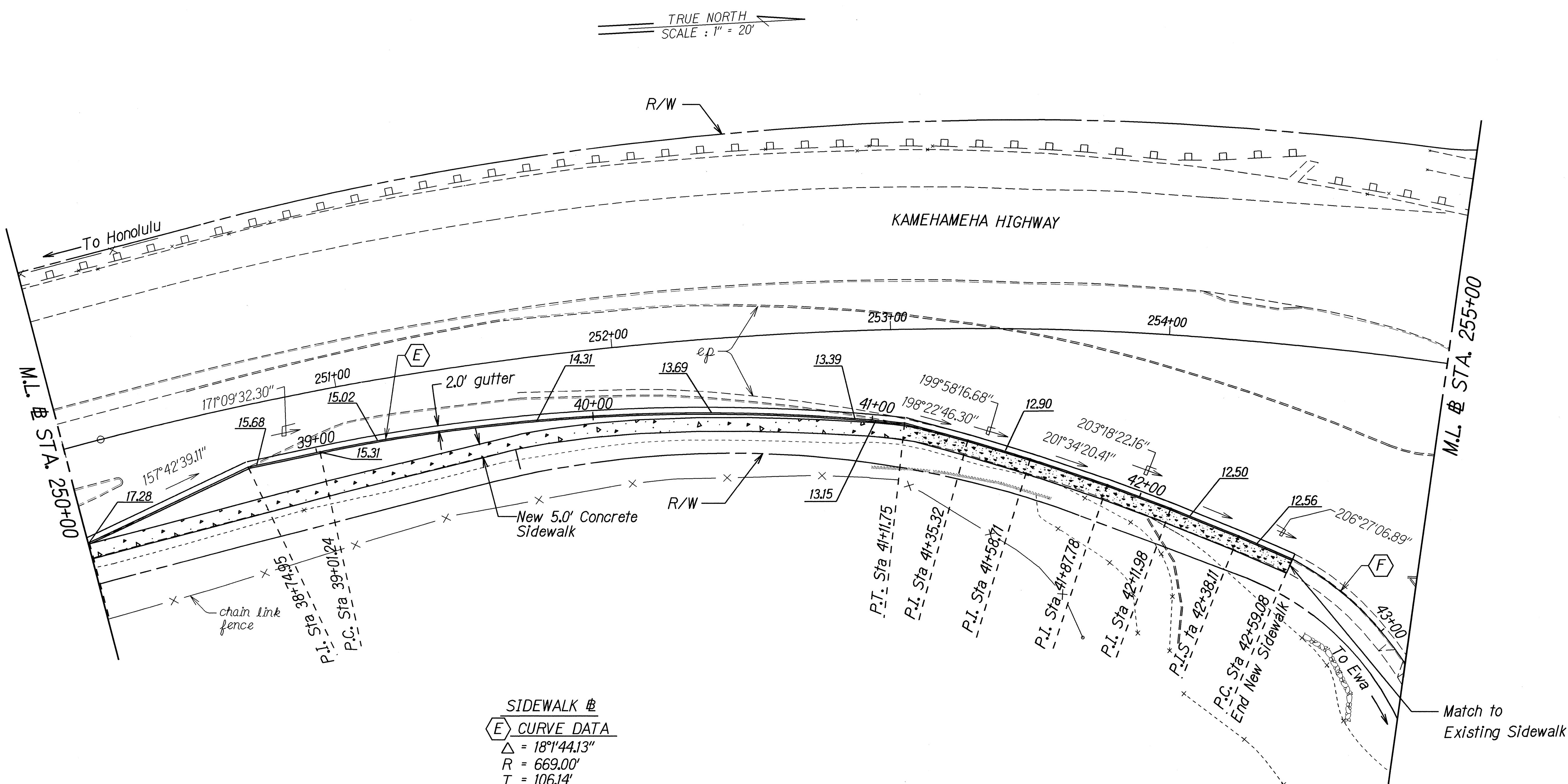
KAMEHAMEHA HIGHWAY BIKEWAY
Vicinity of Radford Drive to Arizona Memorial
Federal Aid Project No. CMAQ-099-1(22)

Scale: 1" = 20' Date: April, 2004

SHEET No. 8 OF 9 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	22	60



SIDEWALK #
 E CURVE DATA
 $\Delta = 18^{\circ}1'44.13''$
 $R = 669.00'$
 $T = 106.14'$
 $C = 209.65'$
 $L_c = 210.52'$

SIDEWALK #
 F CURVE DATA
 $\Delta = 86^{\circ}40'19.95''$
 $R = 113.16'$
 $T = 106.77'$
 $C = 155.32'$
 $L_c = 171.18'$

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
CHECKED BY	_____
NOTE BOOK	_____
_____	_____

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

SIDEWALK GRADING PLAN

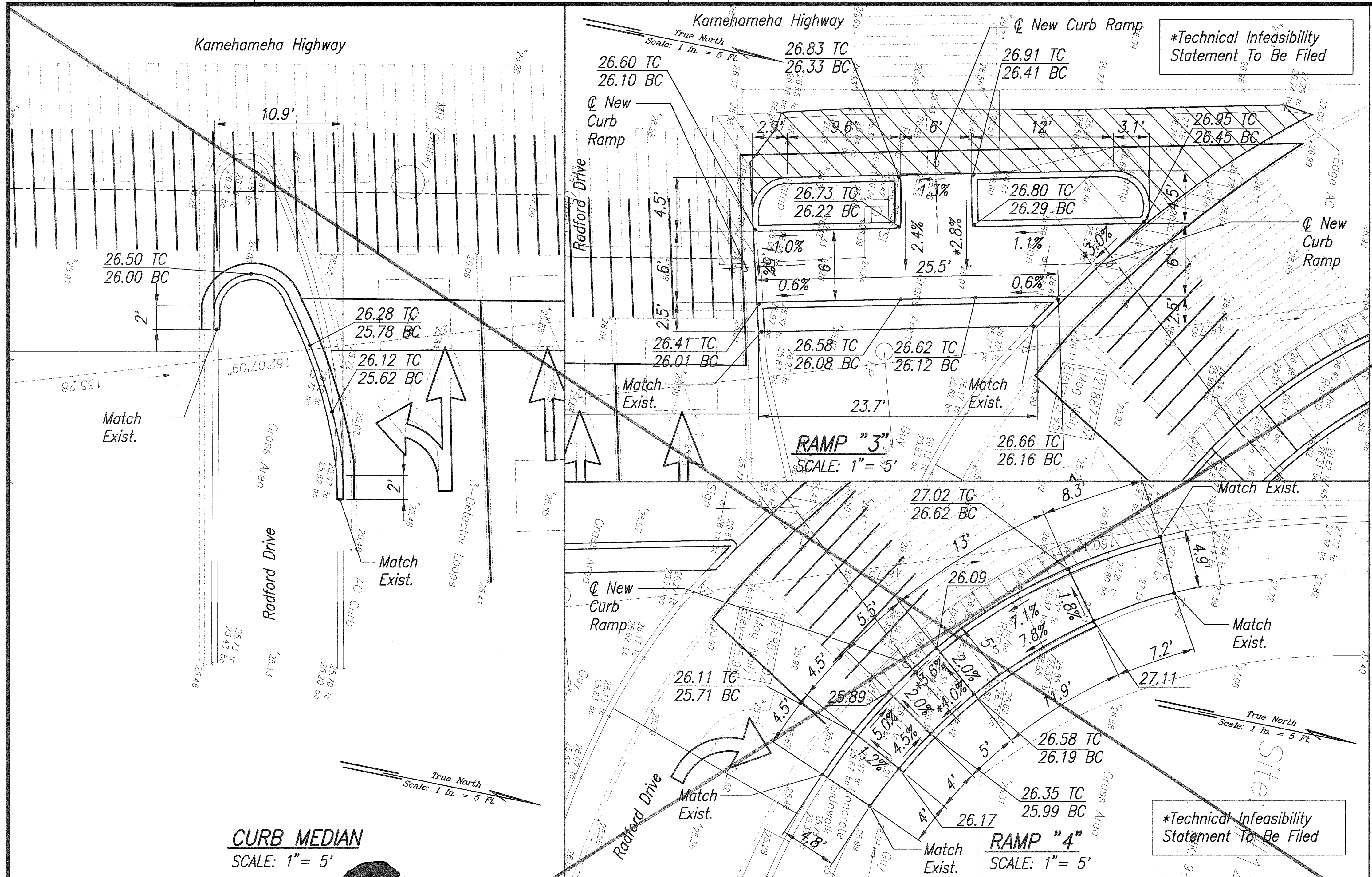
KAMEHAMEHA HIGHWAY BIKEWAY
 Vicinity of Radford Drive to Arizona Memorial
 Federal Aid Project No. CMAQ-099-1(22)

Scale: 1" = 20' Date: April, 2004

SHEET No. 9 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	C.O. 22 S-3	60

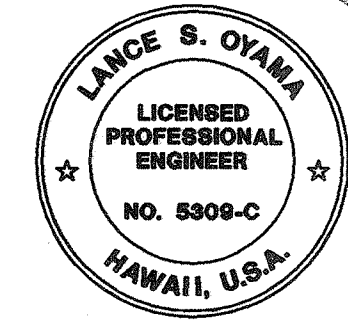
LEGEND	
X 49.52	exist. spot elevation
52.58	Finished Spot Elevation
51.50 TC	Finished Top Of Curb
51.00 BC	Finished Bottom Of Curb



SURVEY PLOTTED BY	DATE
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NOTE BOOK	
No.	

N.I.C.

GRADING PLAN - KAMEHAMEHA HWY. & RADFORD DR.
INTERS. ID NO. 121887
SCALE: 1" = 5'



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

Lance S. Oyama
SIGNATURE DATE

"OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS".

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GRADING PLAN
KAMEHAMEHA HWY. & RADFORD DR.

KAMEHAMEHA HIGHWAY BIKEWAY
Vicinity of Radford Drive to Arizona Memorial
Federal Aid Project No. CMAQ-099-1(22)

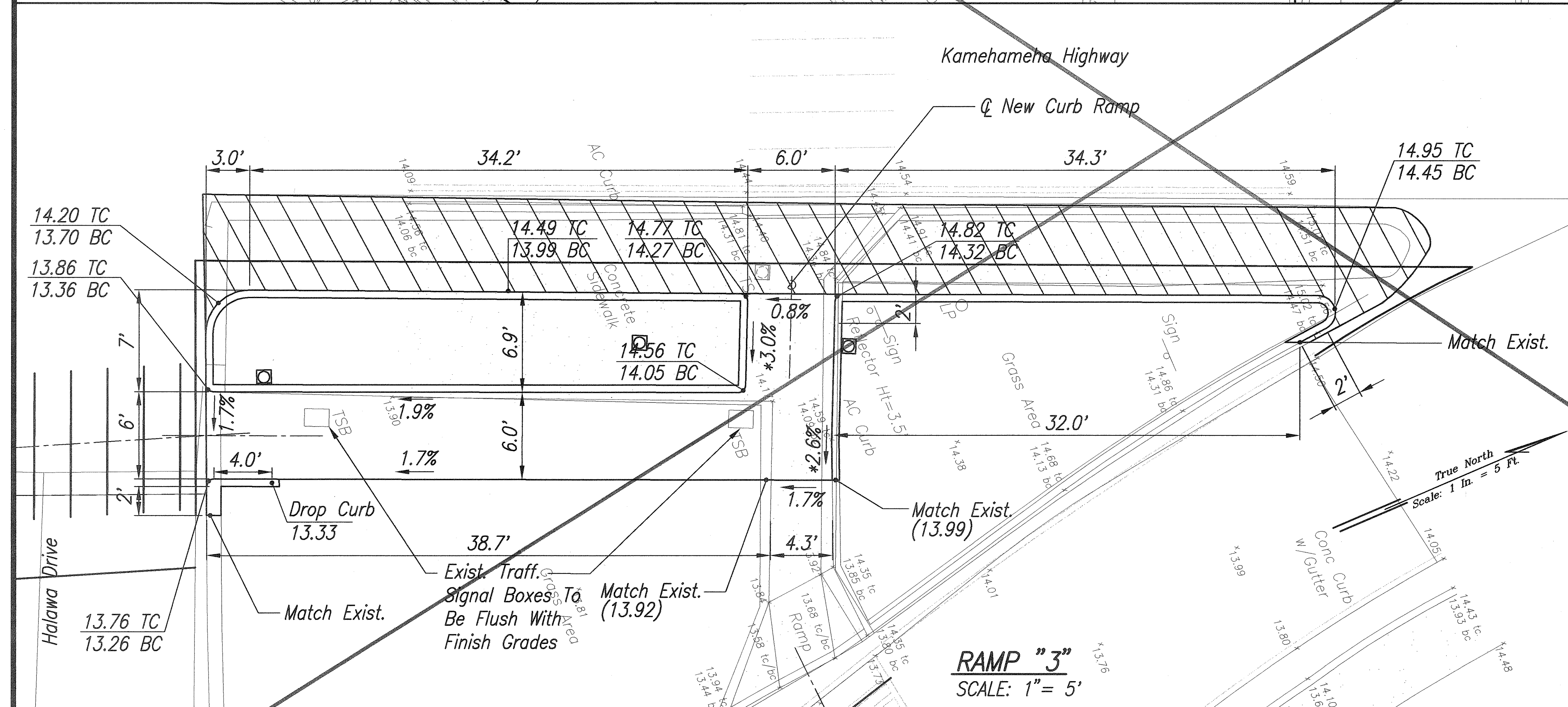
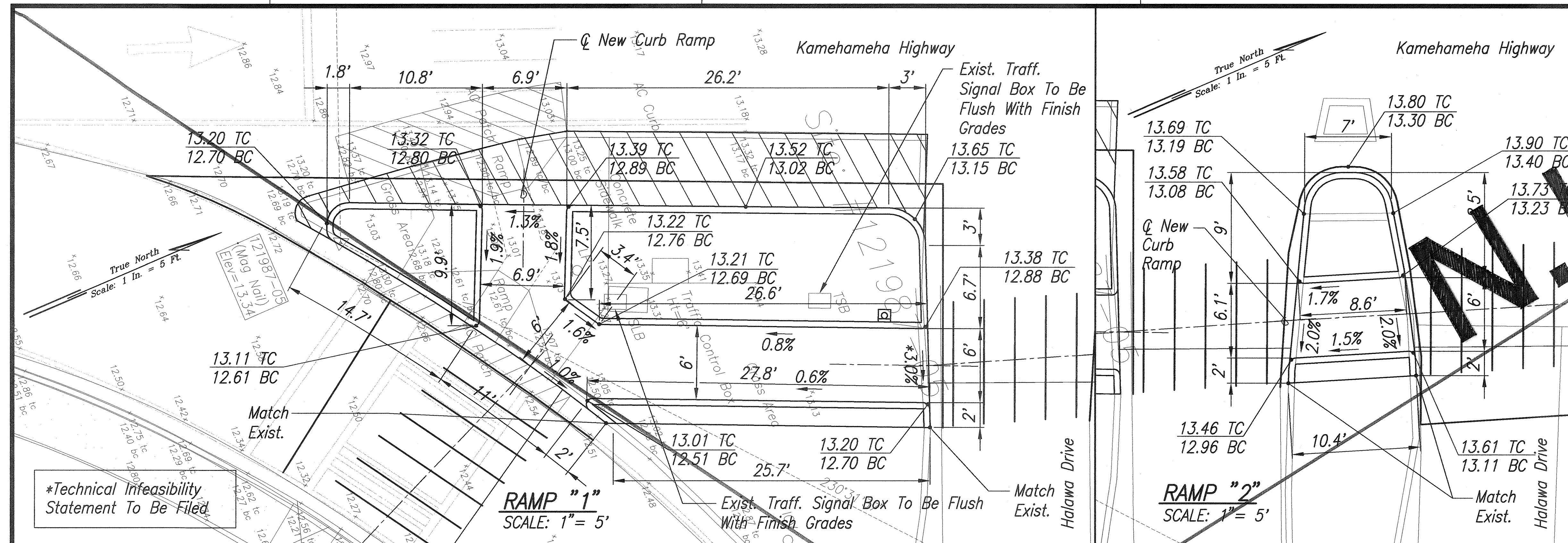
Scale: Date: August 2005

SHEET No. 3 OF 7 SHEETS

"AS-BUILT"

C.O. 22 S-3

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	C.O. 22 S-5	60



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

Signature: *Lance S. Oyama* Date: 4/30/06

"OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS".

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GRADING PLAN
KAMEHAMEHA HWY. & HALAWA DR.

KAMEHAMEHA HIGHWAY BIKEWAY
Vicinity of Radford Drive to Arizona Memorial
Federal Aid Project No. CMAQ-099-1(22)

Scale: _____ Date: August 2005

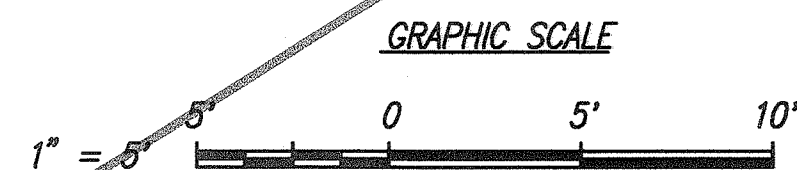
SHEET No. 5 OF 7 SHEETS

C.O. 22 S-5

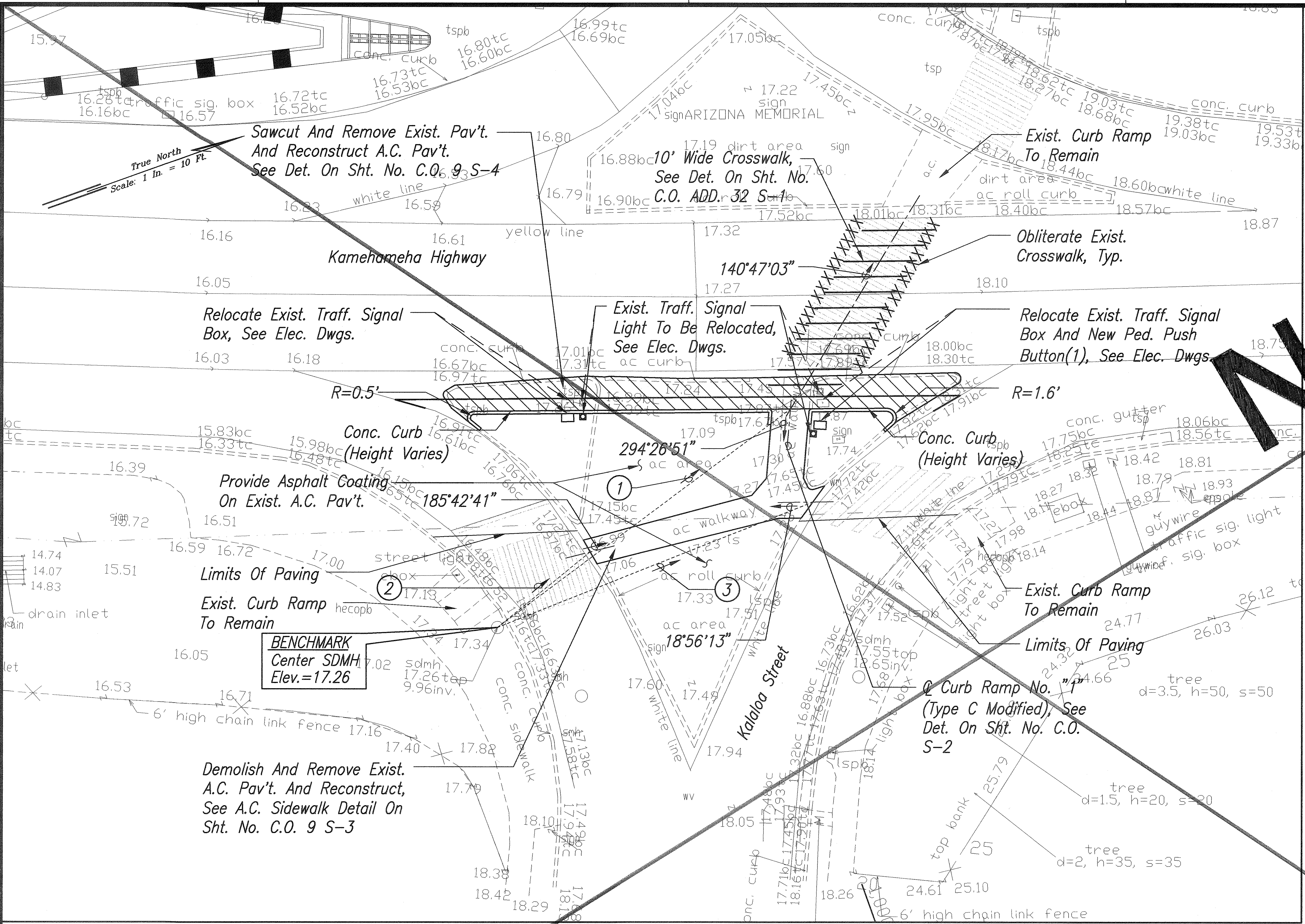
GRADING PLAN - KAMEHAMEHA HWY. & HALAWA DR.
INTERS. ID NO. 121987
SCALE: 1" = 5'

"AS-BUILT"

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

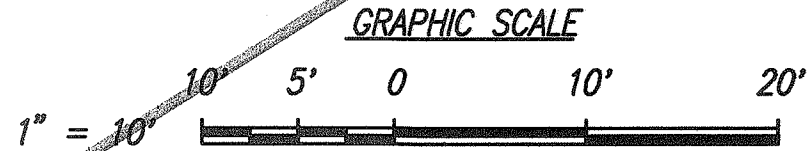


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	C.O. 22 S-6	60

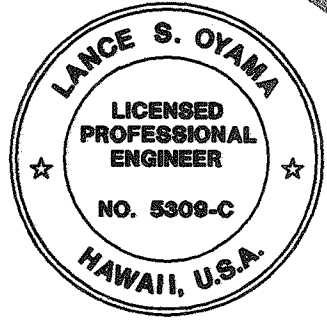


- ① 163°00'48" 59.53'
TIE: BM To Intersection Of $\odot$ Ramp And Curb Face And $\odot$ Crosswalk
- ② 160°34'03" 19.46'
TIE: BM To Intersection Of $\odot$ Exist. Ramp And Curb Face
- ③ 178°02'08" 55.30'
TIE: BM To Intersection Of $\odot$ Exist. Ramp And Curb Face

NOTE:
Contractor To Verify Elevations Of New Pav't. And New Curb Ramps.
Any Discrepancies Shall Be Verified With The Engineer.



SITE PLAN - KAMEHAMEHA HWY. & KALALOA ST.
INTERS. ID NO. 122087
SCALE: 1" = 10'



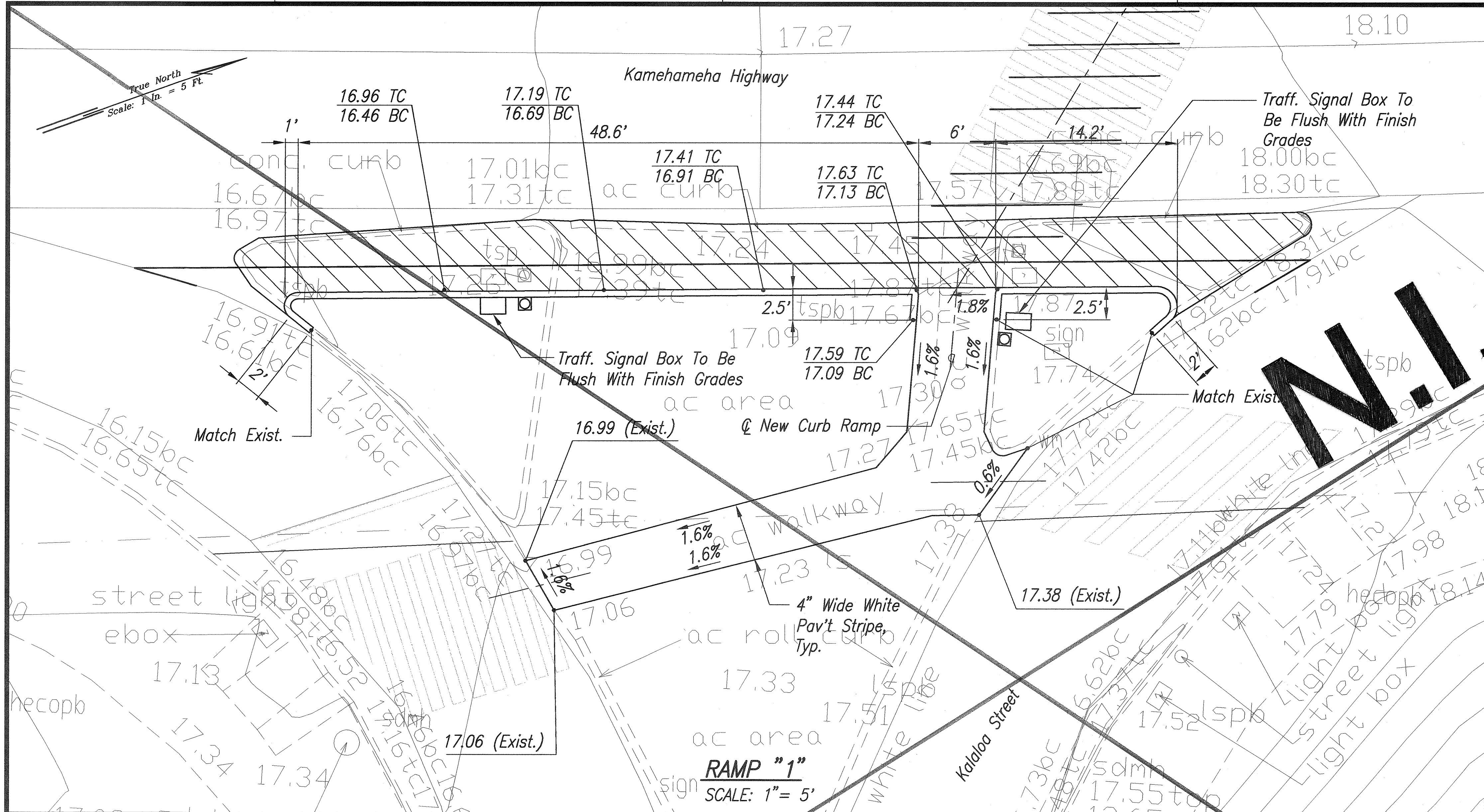
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
Lance S. Oyama 9/30/05
SIGNATURE DATE
"OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS".

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
SITE PLAN
KAMEHAMEHA HWY. & KALALOA ST.
KAMEHAMEHA HIGHWAY BIKEWAY
Vicinity of Radford Drive to Arizona Memorial
Federal Aid Project No. CMAQ-099-1(22)
Scale: Date: August 2005
SHEET No. 6 OF 7 SHEETS

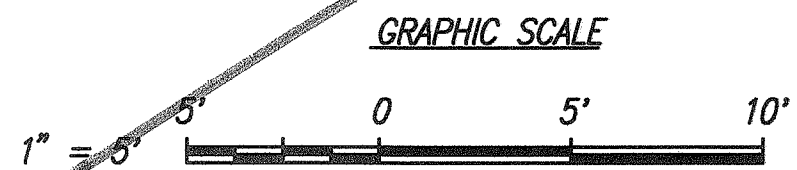
C.O. 22 S-6

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-099-1(22)	2005	C.O. 22 S-7	60

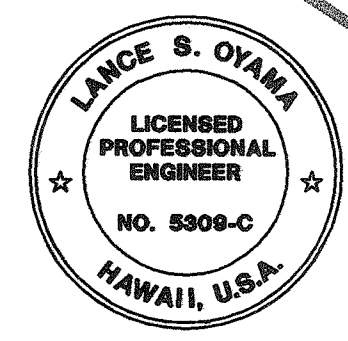
LEGEND	
X 49.52	exist. spot elevation
52.58	Finished Spot Elevation
51.50 TC	Finished Top Of Curb
51.00 BC	Finished Bottom Of Curb



ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	



GRADING PLAN - KAMEHAMEHA HWY. & KALALOA ST.
INTERS. ID NO. 122087
SCALE: 1" = 5'



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
Signature: Lance S. Oyama
DATE: 8/20/06
"OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS".

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GRADING PLAN
KAMEHAMEHA HWY. & KALALOA ST.
KAMEHAMEHA HIGHWAY BIKEWAY
Vicinity of Radford Drive to Arizona Memorial
Federal Aid Project No. CMAQ-099-1(22)
Scale: Date: August 2005
SHEET No. 7 OF 7 SHEETS

"AS-BUILT"

C.O. 22 S-7