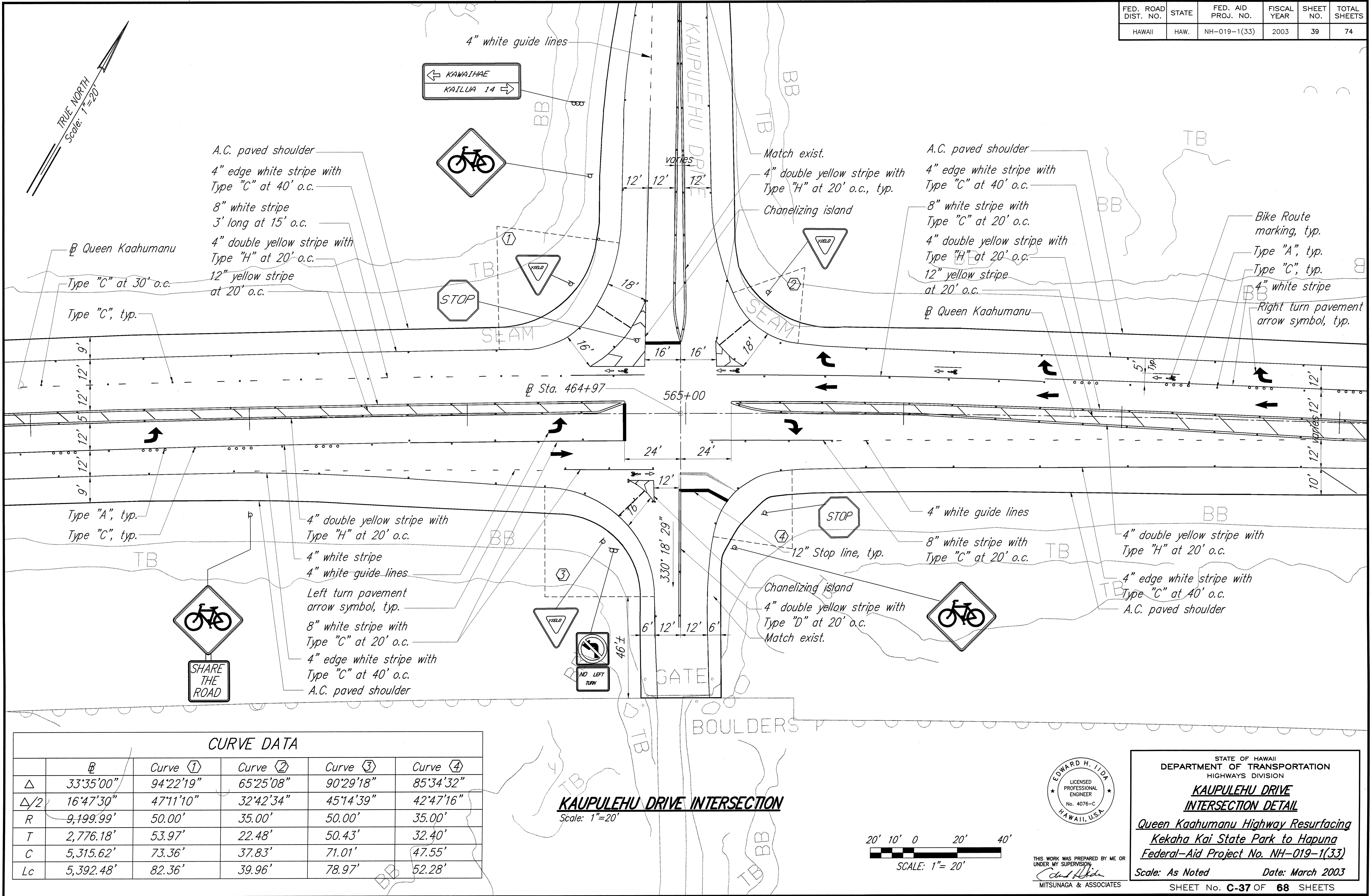


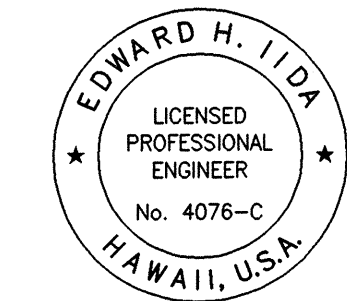
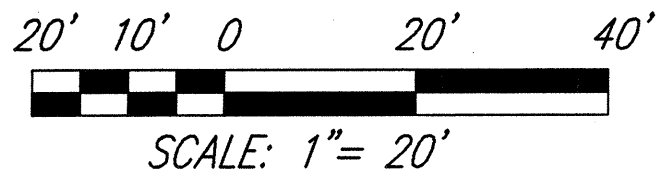
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(33)	2003	39	74



ORIGINAL PLAN NO.	SURVEY PLOTTED BY	DATE
	DRAWN BY	DATE
	DESIGNED BY	DATE
	CHECKED BY	DATE

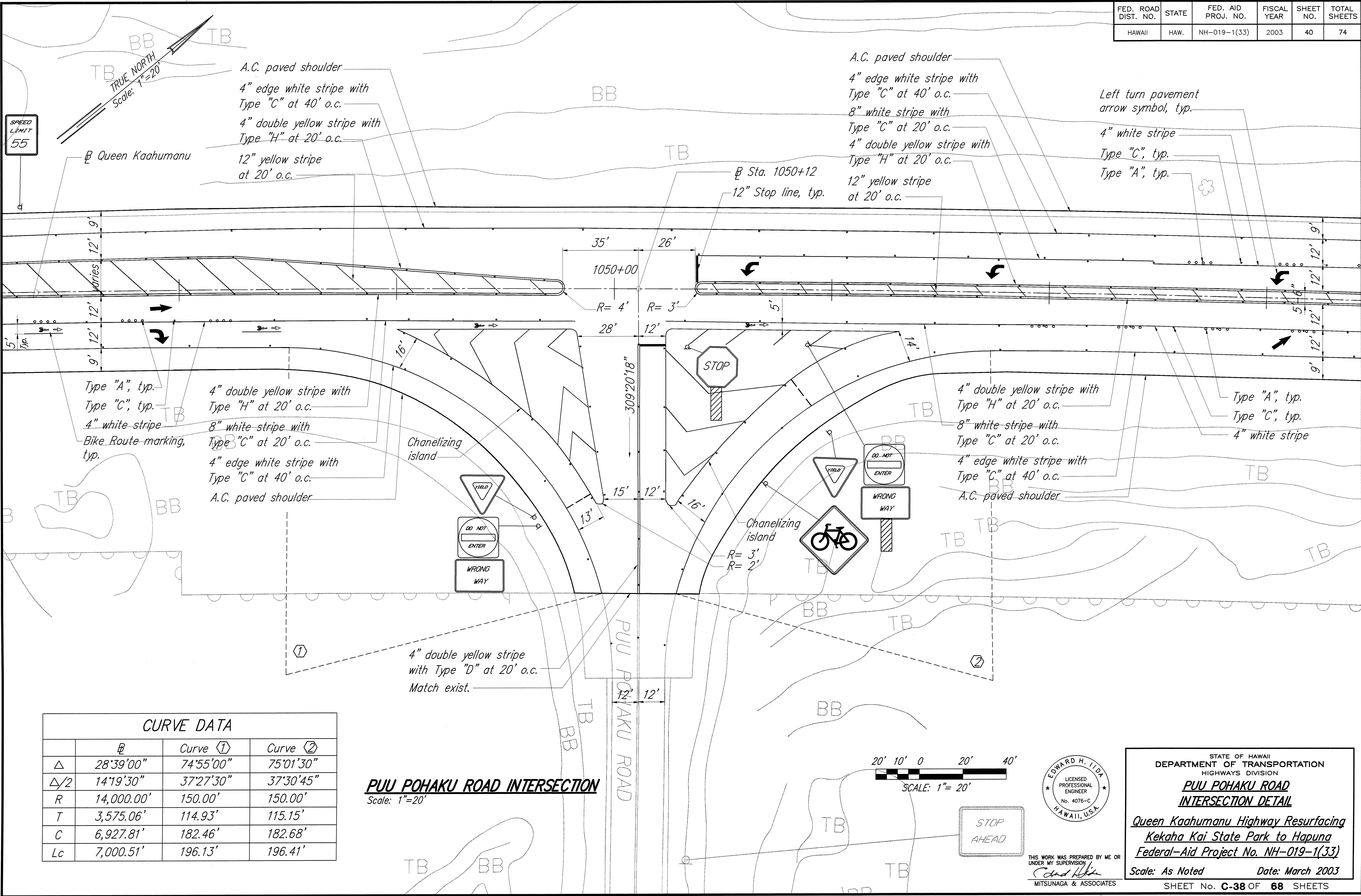
CURVE DATA					
	B	Curve ①	Curve ②	Curve ③	Curve ④
Δ	33°35'00"	94°22'19"	65°25'08"	90°29'18"	85°34'32"
Δ/2	16°47'30"	47°11'10"	32°42'34"	45°14'39"	42°47'16"
R	9,199.99'	50.00'	35.00'	50.00'	35.00'
T	2,776.18'	53.97'	22.48'	50.43'	32.40'
C	5,315.62'	73.36'	37.83'	71.01'	47.55'
Lc	5,392.48'	82.36'	39.96'	78.97'	52.28'

KAUPULEHU DRIVE INTERSECTION
Scale: 1"=20'



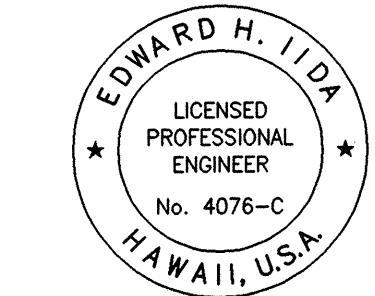
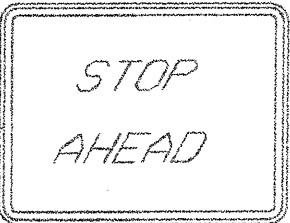
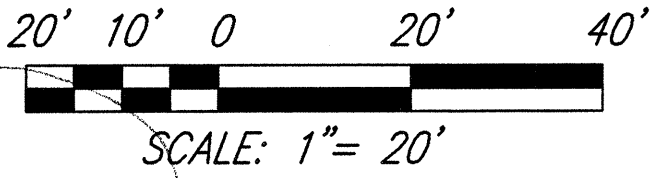
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Edward H. Iida
MITSUNAGA & ASSOCIATES

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**KAUPULEHU DRIVE
INTERSECTION DETAIL**
Queen Kaahumanu Highway Resurfacing
Kekaha Kai State Park to Hapuna
Federal-Aid Project No. NH-019-1(33)
Scale: As Noted Date: March 2003
SHEET No. **C-37** OF **68** SHEETS



CURVE DATA			
	B	Curve ①	Curve ②
Δ	28°39'00"	74°55'00"	75°01'30"
Δ/2	14°19'30"	37°27'30"	37°30'45"
R	14,000.00'	150.00'	150.00'
T	3,575.06'	114.93'	115.15'
C	6,927.81'	182.46'	182.68'
Lc	7,000.51'	196.13'	196.41'

PUU POHAKU ROAD INTERSECTION
Scale: 1"=20'

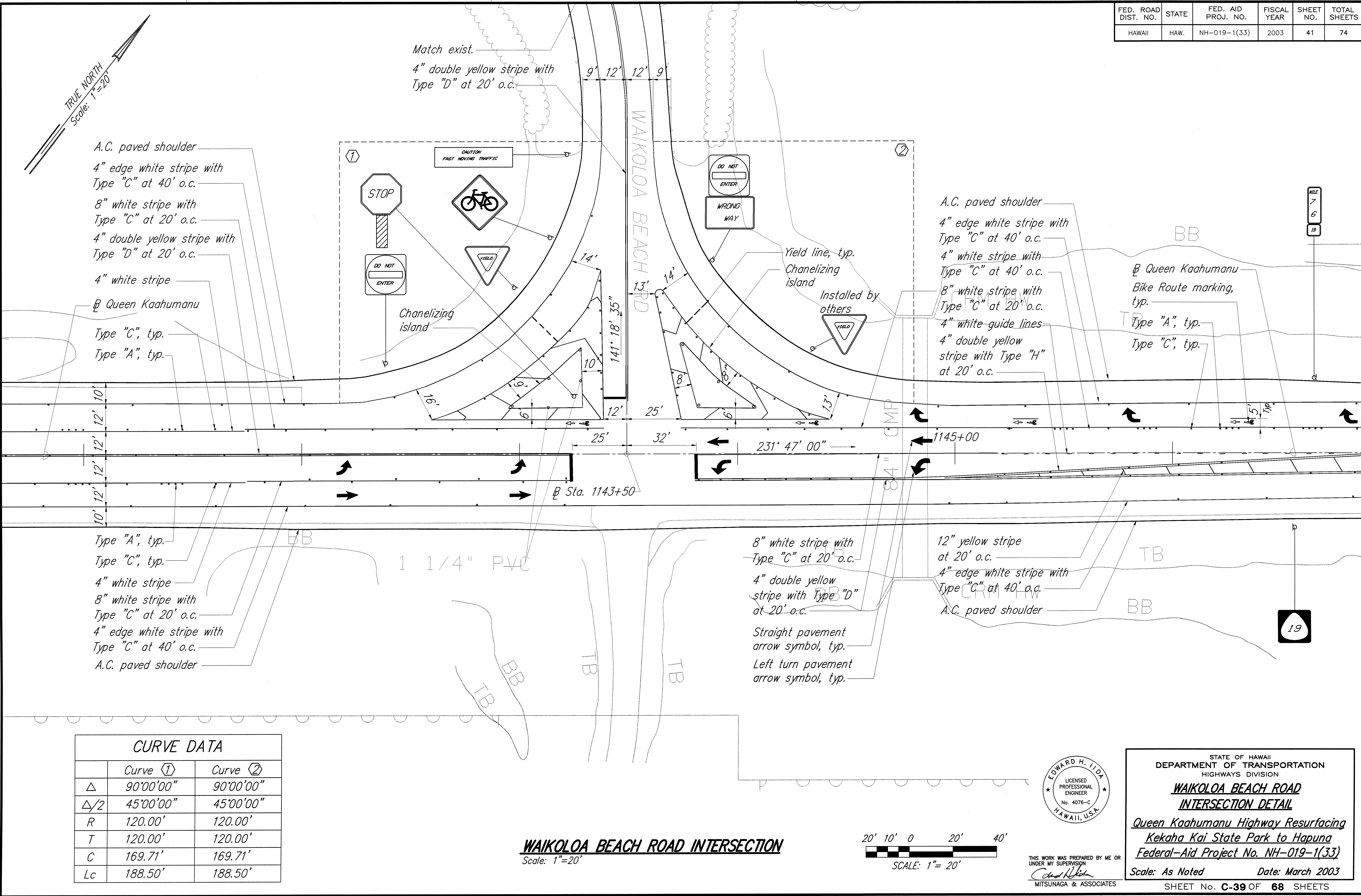


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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**PUU POHAKU ROAD
INTERSECTION DETAIL**
*Queen Kaahumanu Highway Resurfacing
Kekaha Kai State Park to Hapuna
Federal-Aid Project No. NH-019-1(33)*
Scale: As Noted Date: March 2003
SHEET No. **C-38** OF **68** SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	3/03
CHECKED BY	3/03
DESIGNED BY	3/03
QUANTITIES BY	3/03
CHECKED BY	3/03
ORIGINAL PLAN	
NOTE BOOK	
No.	

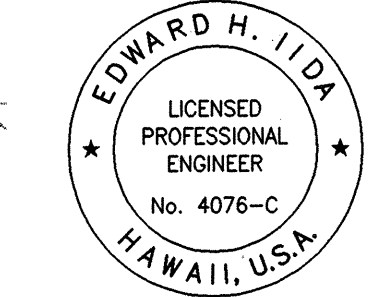
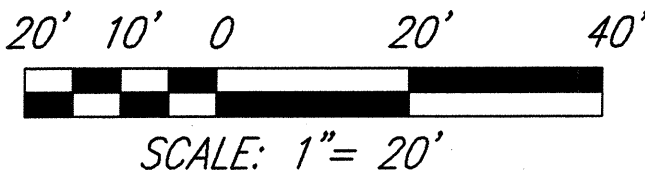
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(33)	2003	41	74



CURVE DATA		
	Curve ①	Curve ②
Δ	90°00'00"	90°00'00"
$\Delta/2$	45°00'00"	45°00'00"
R	120.00'	120.00'
T	120.00'	120.00'
C	169.71'	169.71'
Lc	188.50'	188.50'

SURVEY PLOTTED BY	DATE
DRAWN BY	3/03
DESIGNED BY	3/03
QUANTITIES BY	3/03
CHECKED BY	3/03
ORIGINAL PLAN	
NOTE BOOK	
No.	

WAIKOLOA BEACH ROAD INTERSECTION
 Scale: 1"=20'



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STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

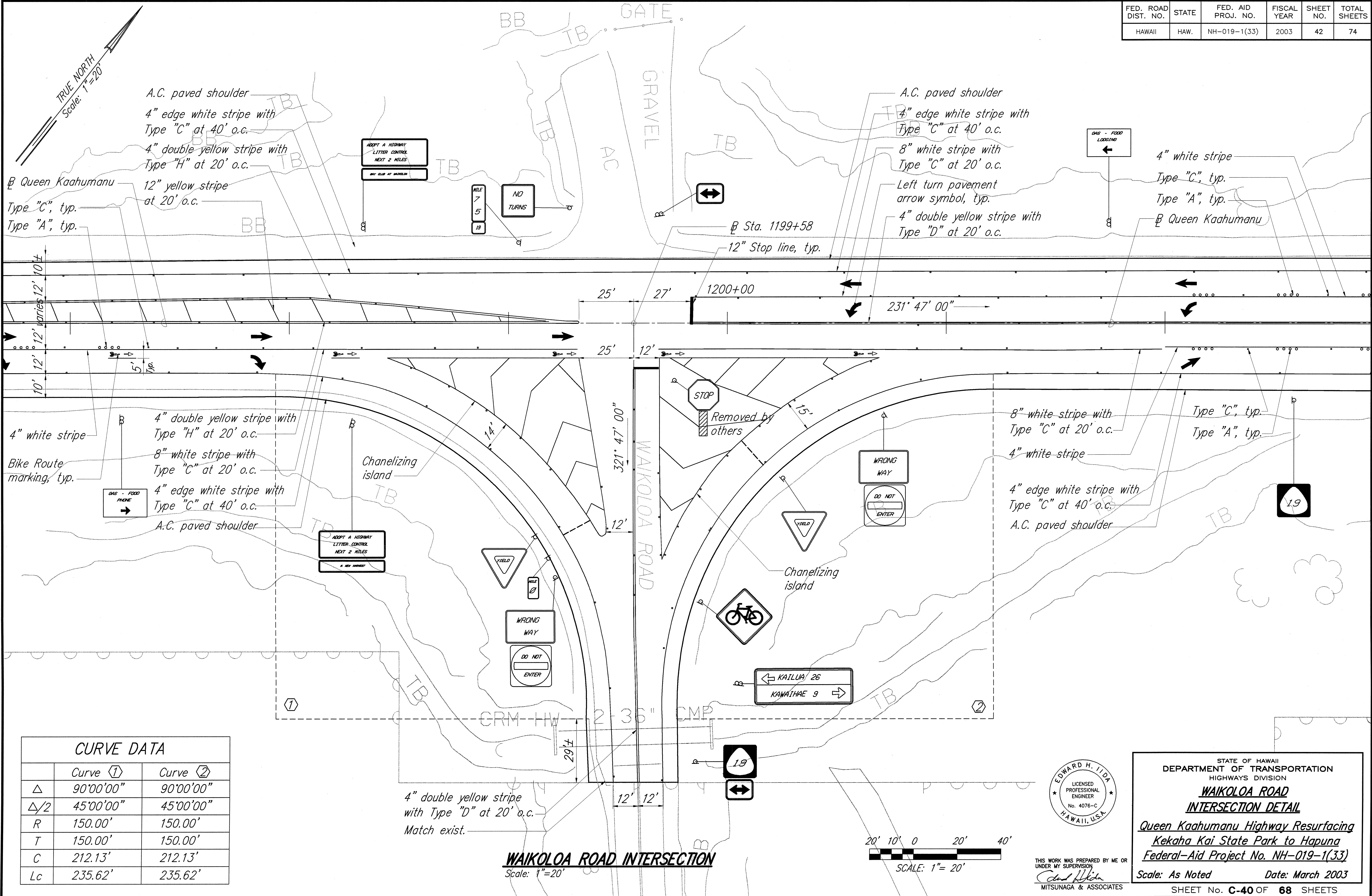
WAIKOLOA BEACH ROAD
INTERSECTION DETAIL

*Queen Kaahumanu Highway Resurfacing
 Kekaha Kai State Park to Hapuna
 Federal-Aid Project No. NH-019-1(33)*

Scale: As Noted Date: March 2003

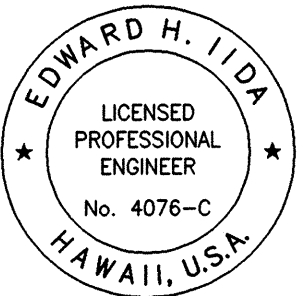
SHEET No. **C-39** OF **68** SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(33)	2003	42	74



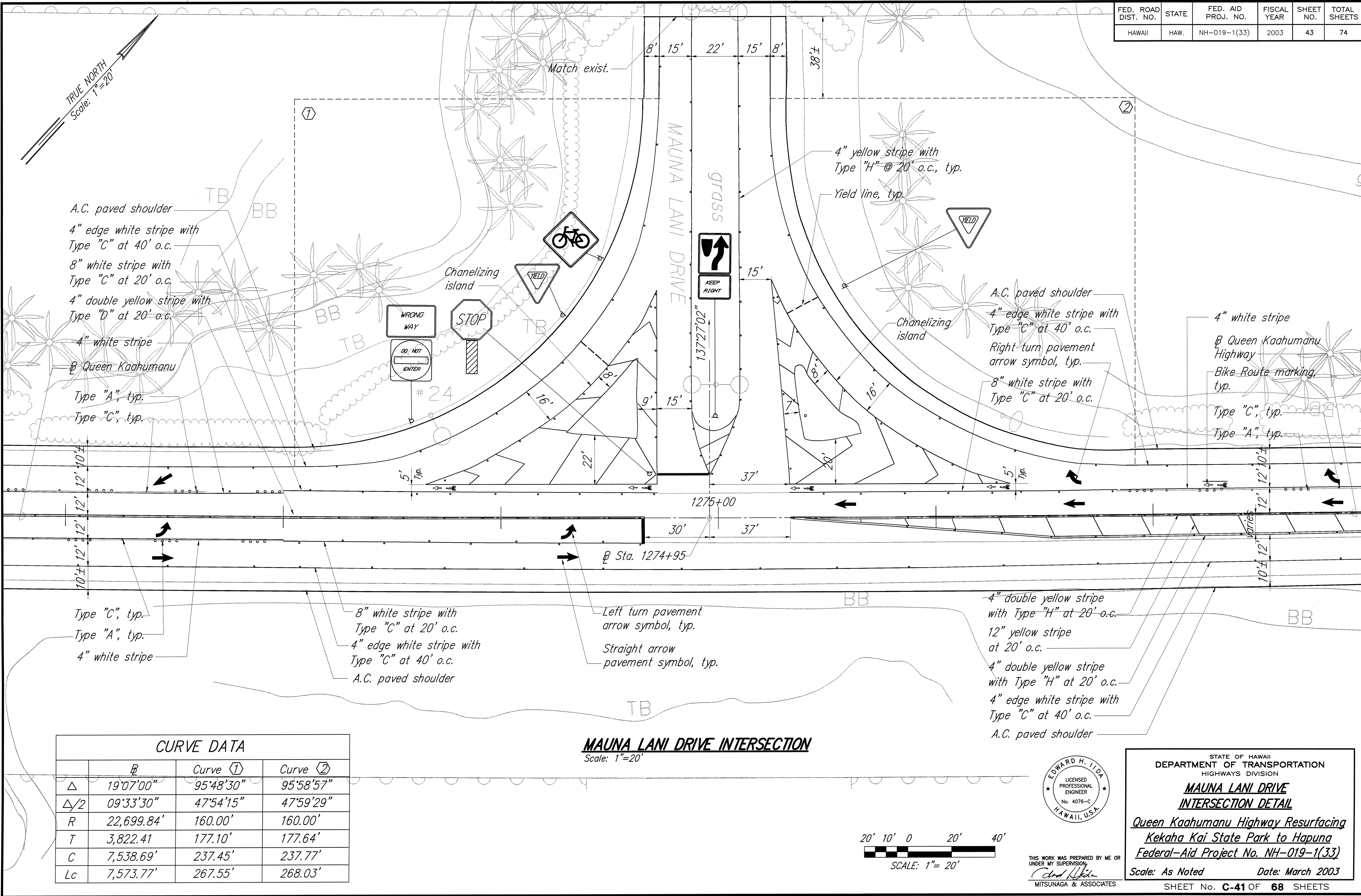
CURVE DATA		
	Curve ①	Curve ②
Δ	90°00'00"	90°00'00"
$\Delta/2$	45°00'00"	45°00'00"
R	150.00'	150.00'
T	150.00'	150.00'
C	212.13'	212.13'
Lc	235.62'	235.62'

SURVEY PLOTTED BY	DATE
DESIGNED BY	3/03
TRACED BY	3/03
QUANTITIES BY	3/03
CHECKED BY	3/03
ORIGINAL PLAN	
NOTE BOOK	
No.	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
WAIKOLOA ROAD
INTERSECTION DETAIL
Queen Kaahumanu Highway Resurfacing
Kekaha Kai State Park to Hapuna
Federal-Aid Project No. NH-019-1(33)
Scale: As Noted Date: March 2003
SHEET No. C-40 OF 68 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(33)	2003	43	74



A.C. paved shoulder
 4" edge white stripe with Type "C" at 40' o.c.
 8" white stripe with Type "C" at 20' o.c.
 4" double yellow stripe with Type "D" at 20' o.c.
 4" white stripe
 B Queen Kaahumanu
 Type "A", typ.
 Type "C", typ.

A.C. paved shoulder
 4" edge white stripe with Type "C" at 40' o.c.
 Right turn pavement arrow symbol, typ.
 8" white stripe with Type "C" at 20' o.c.

4" white stripe
 B Queen Kaahumanu Highway
 Bike Route marking, typ.
 Type "C", typ.
 Type "A", typ.

Type "C", typ.
 Type "A", typ.
 4" white stripe

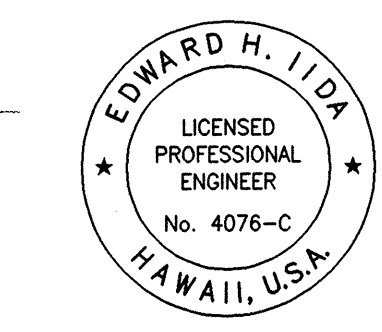
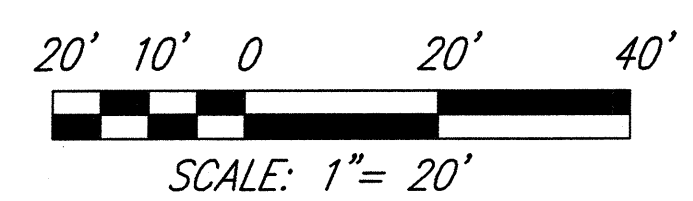
8" white stripe with Type "C" at 20' o.c.
 4" edge white stripe with Type "C" at 40' o.c.
 A.C. paved shoulder

Left turn pavement arrow symbol, typ.
 Straight arrow pavement symbol, typ.

4" double yellow stripe with Type "H" at 20' o.c.
 12" yellow stripe at 20' o.c.
 4" double yellow stripe with Type "H" at 20' o.c.
 4" edge white stripe with Type "C" at 40' o.c.
 A.C. paved shoulder

CURVE DATA				
	B	Curve ①	Curve ②	
Δ	19°07'00"	95°48'30"	95°58'57"	
Δ/2	09°33'30"	47°54'15"	47°59'29"	
R	22,699.84'	160.00'	160.00'	
T	3,822.41	177.10'	177.64'	
C	7,538.69'	237.45'	237.77'	
Lc	7,573.77'	267.55'	268.03'	

MAUNA LANI DRIVE INTERSECTION
 Scale: 1"=20'

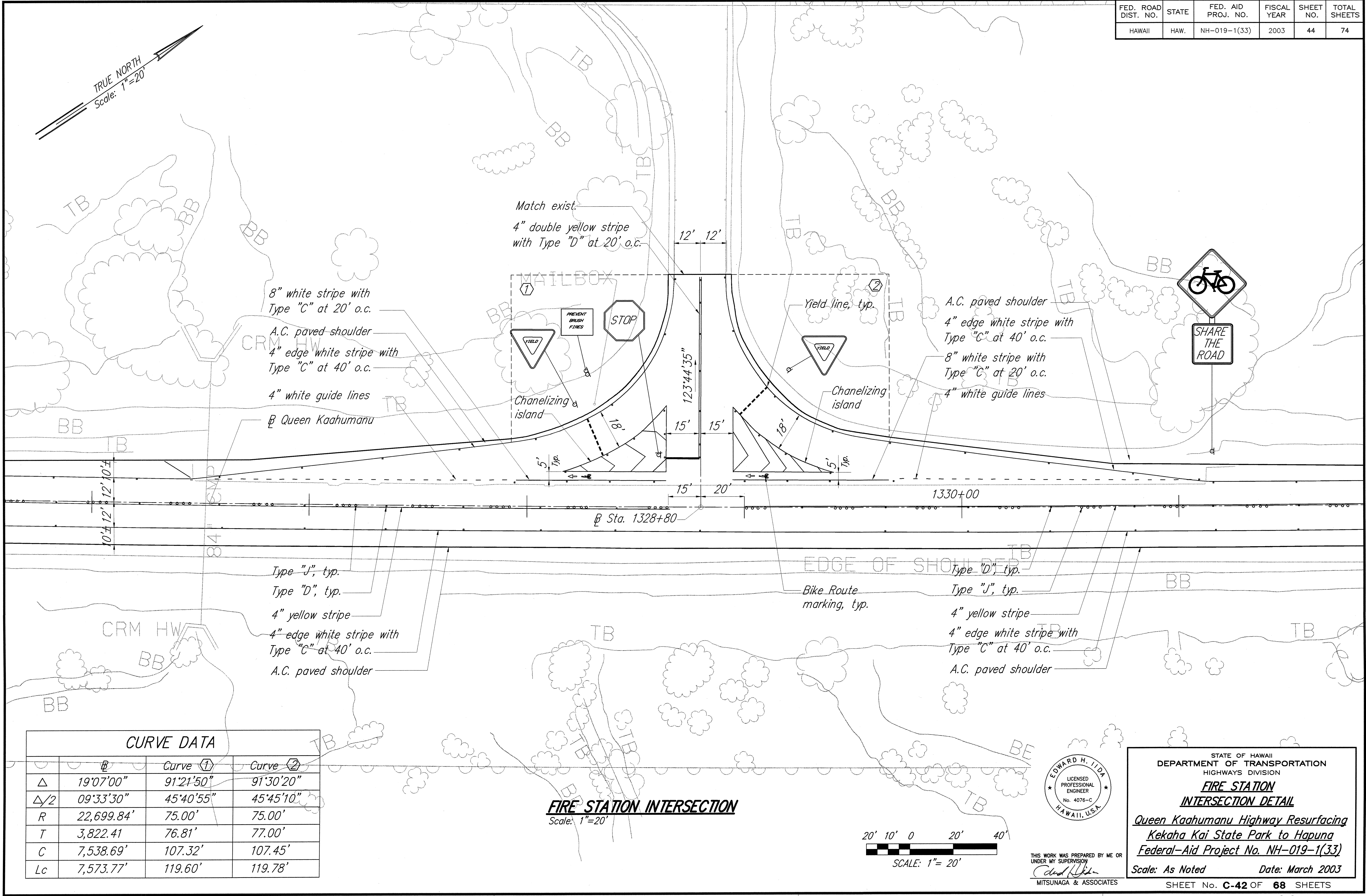


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STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
**MAUNA LANI DRIVE
 INTERSECTION DETAIL**
 Queen Kaahumanu Highway Resurfacing
 Kekaha Kai State Park to Hapuna
 Federal-Aid Project No. NH-019-1(33)
 Scale: As Noted Date: March 2003
 SHEET No. **C-41** OF **68** SHEETS

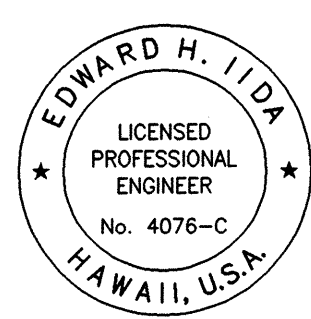
ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	3/03
DRAWN BY	G. IWA
CHECKED BY	3/03
DESIGNED BY	C. MCCOMBS
QUANTITIES BY	C. MCCOMBS
CHECKED BY	E. IIDA
NO.	3/03

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(33)	2003	44	74



SURVEY PLOTTED BY	DATE
DRAWN BY	3/03
DESIGNED BY	3/03
CHECKED BY	3/03
ORIGINAL PLAN	
NOTE BOOK	
No.	

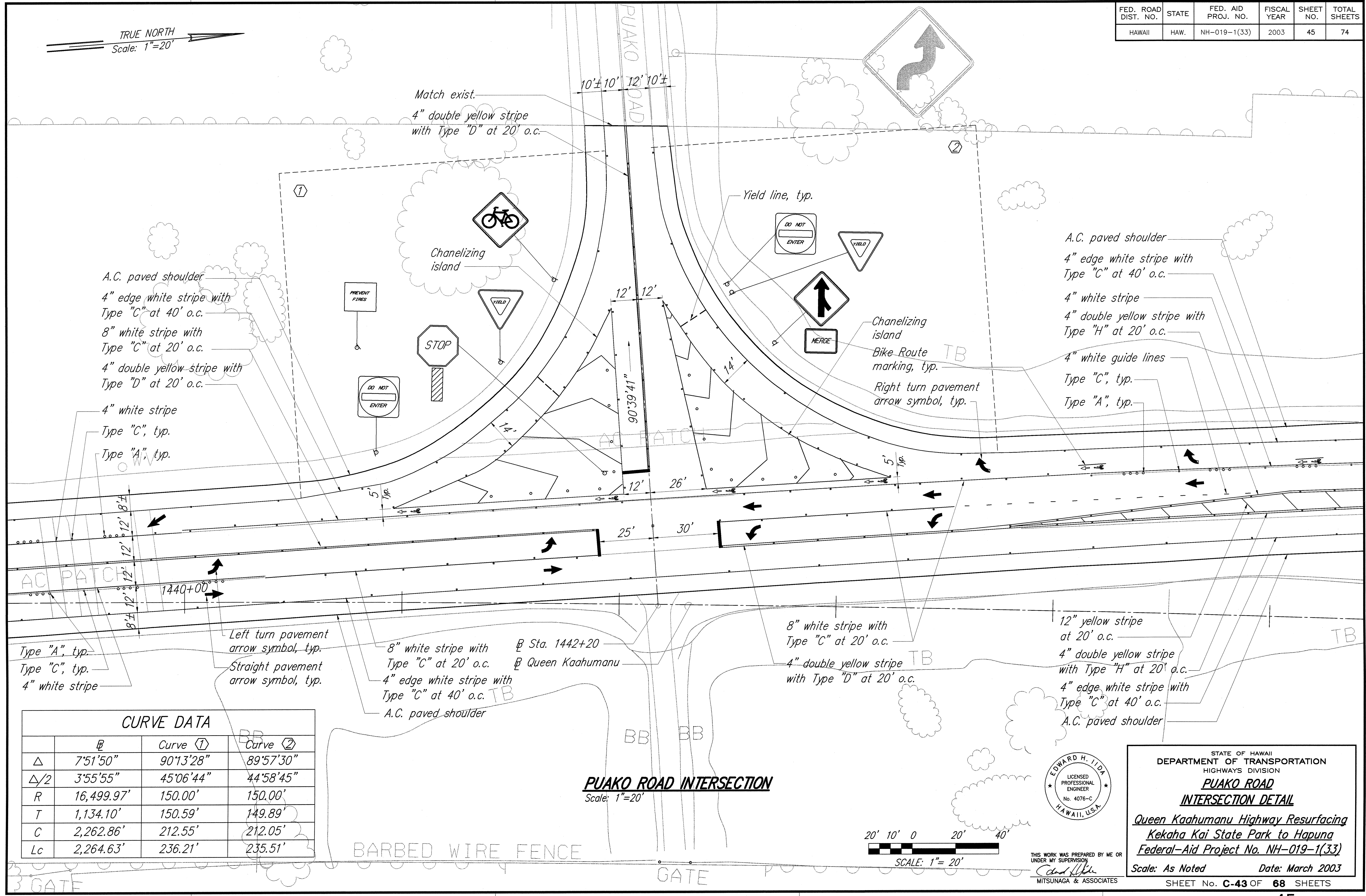
CURVE DATA				
	B	Curve ①	Curve ②	
Δ	19°07'00"	91°21'50"	91°30'20"	
Δ/2	09°33'30"	45°40'55"	45°45'10"	
R	22,699.84'	75.00'	75.00'	
T	3,822.41	76.81'	77.00'	
C	7,538.69'	107.32'	107.45'	
Lc	7,573.77'	119.60'	119.78'	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**FIRE STATION
INTERSECTION DETAIL**
Queen Kaahumanu Highway Resurfacing
Kekaha Kai State Park to Hapuna
Federal-Aid Project No. NH-019-1(33)
Scale: As Noted Date: March 2003
SHEET No. C-42 OF 68 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(33)	2003	45	74

TRUE NORTH
Scale: 1"=20'



A.C. paved shoulder
4" edge white stripe with Type "C" at 40' o.c.
8" white stripe with Type "C" at 20' o.c.
4" double yellow stripe with Type "D" at 20' o.c.
4" white stripe
Type "C", typ.
Type "A", typ.

Yield line, typ.

A.C. paved shoulder
4" edge white stripe with Type "C" at 40' o.c.
4" white stripe
4" double yellow stripe with Type "H" at 20' o.c.
4" white guide lines
Type "C", typ.
Type "A", typ.

Type "A", typ.
Type "C", typ.
4" white stripe

Left turn pavement arrow symbol, typ.
Straight pavement arrow symbol, typ.

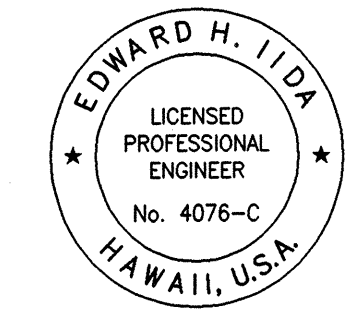
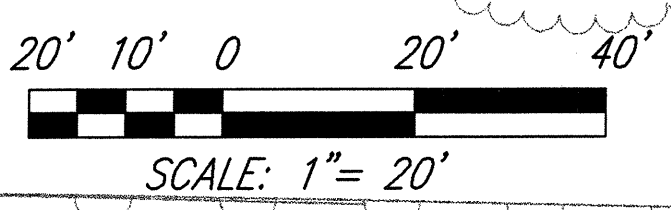
8" white stripe with Type "C" at 20' o.c.
4" edge white stripe with Type "C" at 40' o.c.
A.C. paved shoulder

8" white stripe with Type "C" at 20' o.c.
4" double yellow stripe with Type "D" at 20' o.c.

12" yellow stripe at 20' o.c.
4" double yellow stripe with Type "H" at 20' o.c.
4" edge white stripe with Type "C" at 40' o.c.
A.C. paved shoulder

CURVE DATA				
	B	Curve ①	Curve ②	
Δ	7°51'50"	90°13'28"	89°57'30"	
Δ/2	3°55'55"	45°06'44"	44°58'45"	
R	16,499.97'	150.00'	150.00'	
T	1,134.10'	150.59'	149.89'	
C	2,262.86'	212.55'	212.05'	
Lc	2,264.63'	236.21'	235.51'	

PUAKO ROAD INTERSECTION
Scale: 1"=20'



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**PUAKO ROAD
INTERSECTION DETAIL**
*Queen Kaahumanu Highway Resurfacing
Kekaha Kai State Park to Hapuna
Federal-Aid Project No. NH-019-1(33)*
Scale: As Noted Date: March 2003
SHEET No. **C-43** OF **68** SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	3/03
DESIGNED BY	3/03
QUANTITIES BY	3/03
CHECKED BY	3/03
ORIGINAL PLAN	
NOTE BOOK	
No.	