

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	63A-11-71 83H-01-71	1972	3	10

CURVE DATA & END BORE

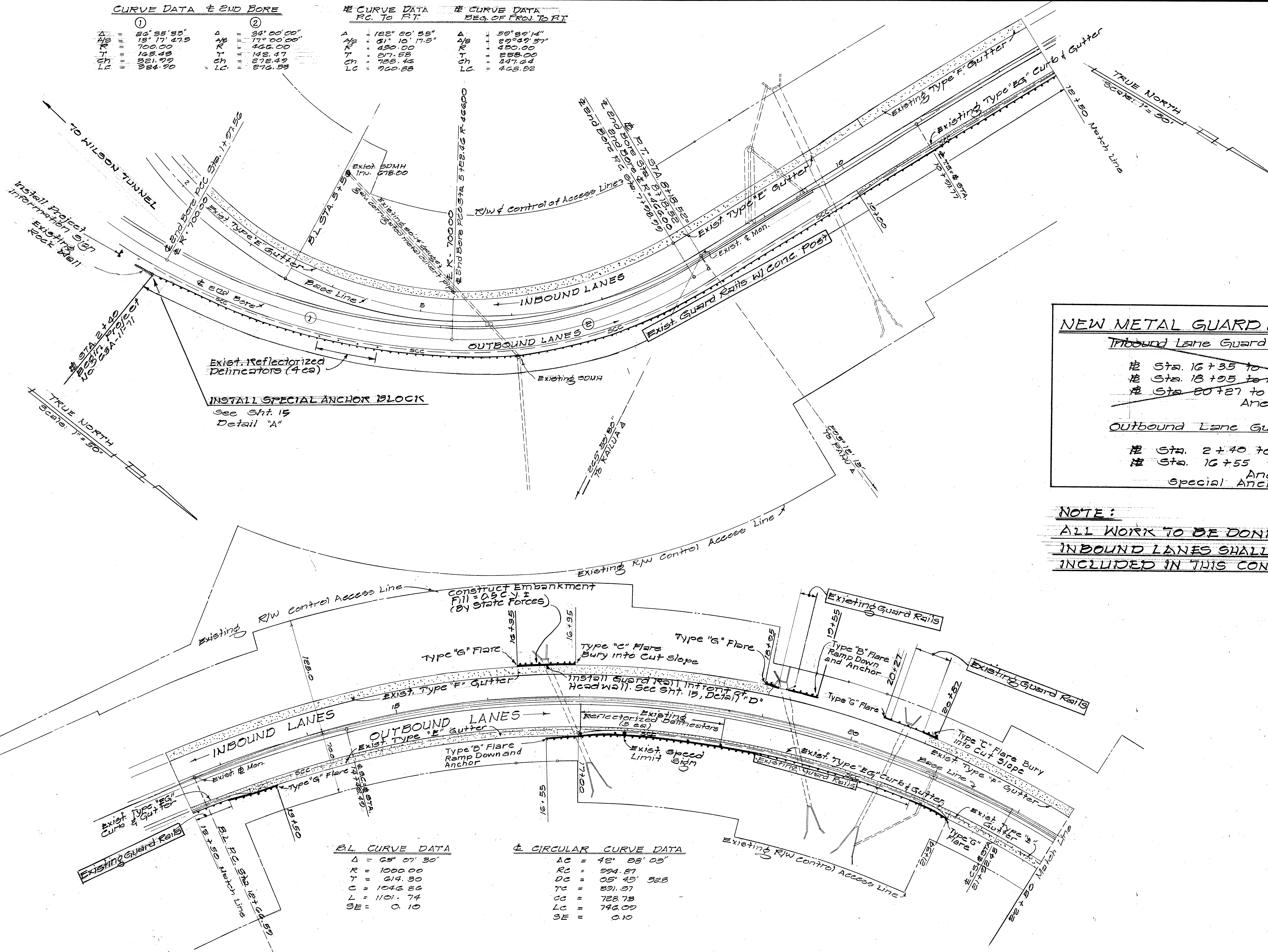
①	②
Δ = 33° 35' 35"	Δ = 34° 00' 00"
PC = 17+47.5	PC = 17+00.00
PT = 100.00	PT = 466.00
CH = 125.49	CH = 142.47
LC = 321.99	LC = 278.42
	LC = 276.53

BE CURVE DATA

PC TO PT	BEQ. OF PROJ. TO PT
Δ = 122° 20' 35"	Δ = 59° 39' 14"
PC = 61+10+17.5	PC = 29+47+37
PT = 480.00	PT = 450.00
CH = 271.53	CH = 228.00
LC = 728.42	LC = 247.64
	LC = 468.52

BE CURVE DATA

PC TO PT	BEQ. OF PROJ. TO PT
Δ = 122° 20' 35"	Δ = 59° 39' 14"
PC = 61+10+17.5	PC = 29+47+37
PT = 480.00	PT = 450.00
CH = 271.53	CH = 228.00
LC = 728.42	LC = 247.64
	LC = 468.52



NEW METAL GUARD RAILS & METAL POSTS

Inbound Lane Guard Rails to be installed from:

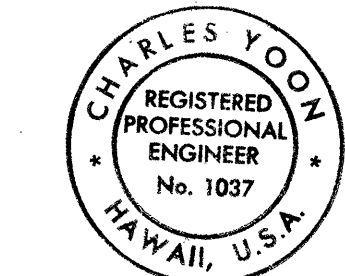
Sta. 16+35 to Sta. 18+55	188 L.F.
Sta. 18+55 to Sta. 19+55	
Sta. 20+27 to Sta. 20+87	
Anchor Blocks	6 Ea.

Outbound Lane Guard Rails to be installed from:

Sta. 2+40 to Sta. 13+50	1638 L.F.
Sta. 16+55 to Sta. 21+34	
Anchor Blocks	
Special Anchor Block	1 Ea.

NOTE:

ALL WORK TO BE DONE ON THE INBOUND LANES SHALL NOT BE INCLUDED IN THIS CONTRACT.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Charles Yoon

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

Sta. 2+40 to Sta. 22+50

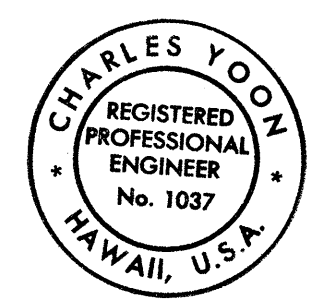
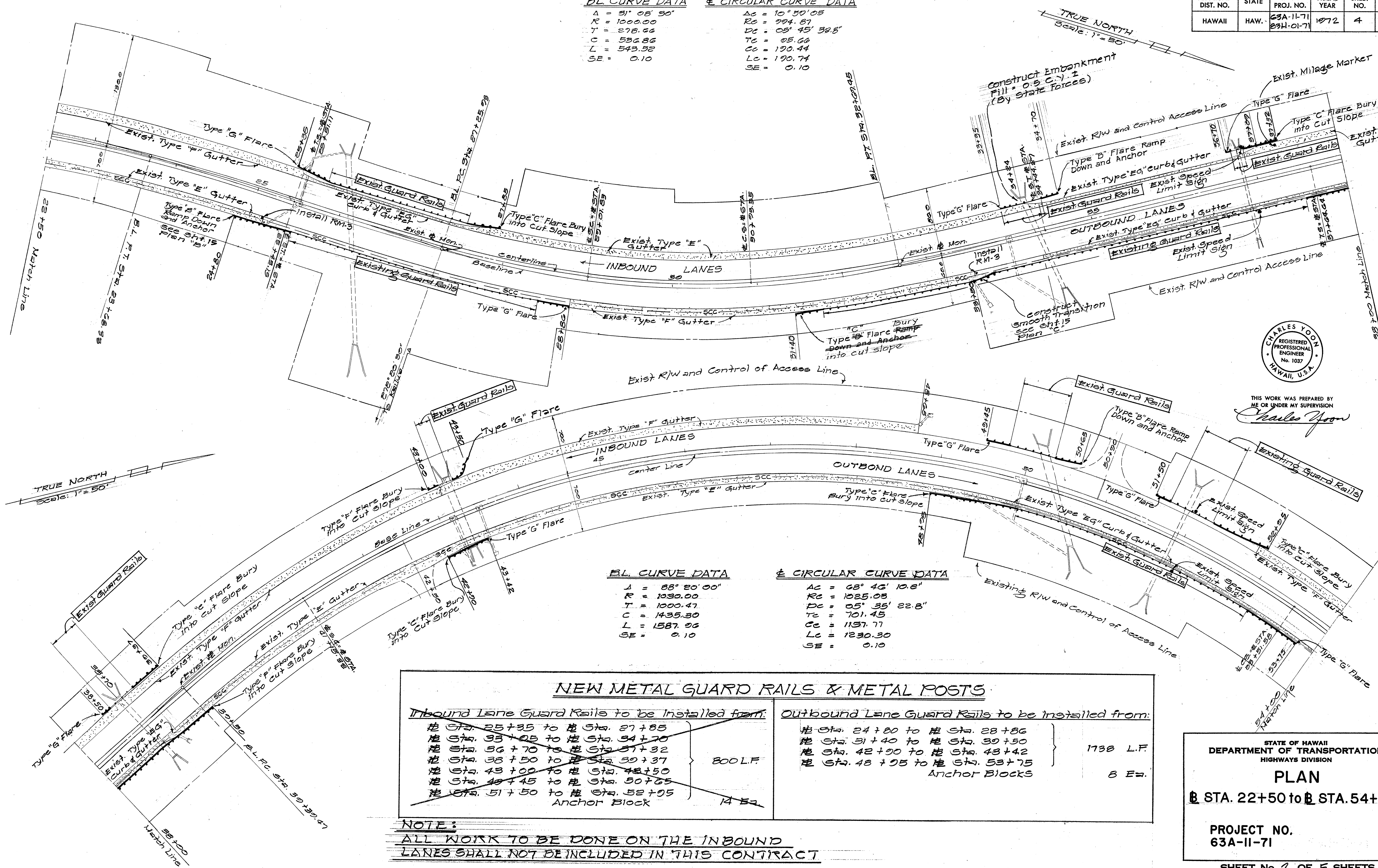
PROJECT NO.
63A-11-71

SHEET No. 1 OF 5 SHEETS

DATE	.....
DESIGNED BY	.....
TRACED BY	.....
NOTED BY	.....
CHECKED BY	.....
.....	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	63A-11-71 23H-01-71	1972	4	16

BL. CURVE DATA	± CIRCULAR CURVE DATA
Δ = 31° 08' 30"	Δc = 10° 30' 05"
R = 1000.00	Rc = 994.87
T = 278.66	Dc = 05' 45" 32.8"
C = 536.86	Tc = 05.66
L = 543.52	Cc = 190.44
SE = 0.10	Lc = 190.74
	SE = 0.10



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BL. CURVE DATA	± CIRCULAR CURVE DATA
Δ = 88° 20' 00"	Δc = 68° 46' 10.8"
R = 1030.00	Rc = 1025.03
T = 1000.47	Dc = 05' 35" 22.8"
C = 1435.30	Tc = 701.45
L = 1587.96	Cc = 1157.77
SE = 0.10	Lc = 1230.30
	SE = 0.10

<u>NEW METAL GUARD RAILS & METAL POSTS</u>			
<u>Inbound Lane Guard Rails to be Installed from:</u>		<u>Outbound Lane Guard Rails to be Installed from:</u>	
Loc Sta. 25+25 to Loc Sta. 27+85	} 800 L.F.	Loc Sta. 24+80 to Loc Sta. 28+86	} 1738 L.F.
Loc Sta. 33+25 to Loc Sta. 34+70		Loc Sta. 31+40 to Loc Sta. 39+50	
Loc Sta. 36+70 to Loc Sta. 37+32		Loc Sta. 42+90 to Loc Sta. 43+42	
Loc Sta. 38+50 to Loc Sta. 39+37		Loc Sta. 43+25 to Loc Sta. 53+75	
Loc Sta. 43+00 to Loc Sta. 43+50		Anchor Blocks	
Loc Sta. 48+45 to Loc Sta. 50+65			
Loc Sta. 51+50 to Loc Sta. 52+95	} 14 Ea.		
Anchor Block			

NOTE:
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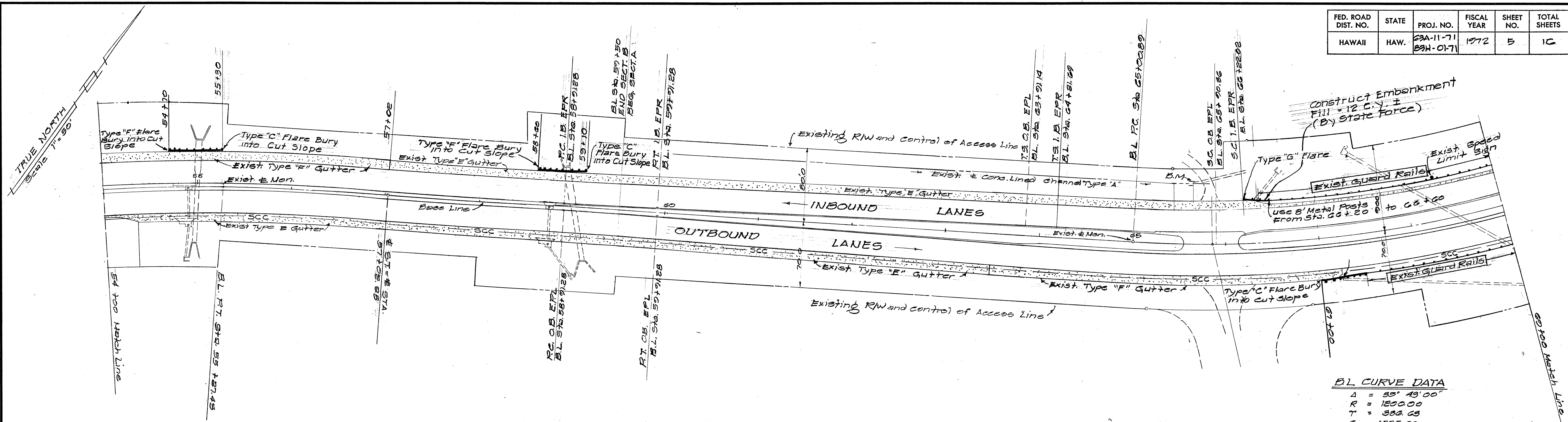
PLAN
B STA. 22+50 to B STA. 54+00

PROJECT NO.
63A-11-71

SHEET No. 2 OF 5 SHEETS

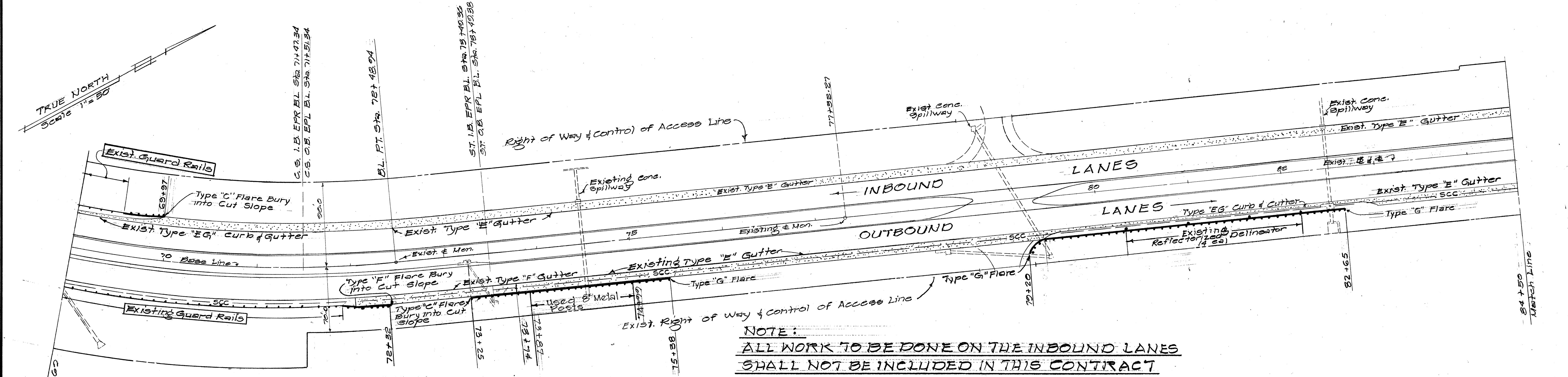
SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	33A-11-71 23H-01-71	1972	5	10



BL CURVE DATA

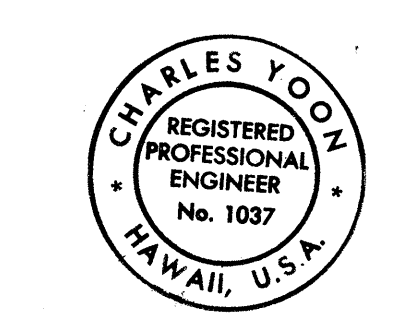
A	= 35° 48' 00"
R	= 1200.00
T	= 386.63
C	= 1735.99
L	= 743.05
S.E.	= 0.08



BL CURVE DATA

A	= 35° 48' 00"
R	= 1200.00
T	= 386.63
C	= 1735.99
L	= 743.05
S.E.	= 0.08

<u>NEW METAL GUARD RAILS AND METAL POSTS</u>			
<u>Inbound Lane Guard Rails to be installed from:</u>		<u>Outbound Lane Guard Rails to be installed from:</u>	
Sta. 54+70 to Sta. 55+30	} 438 L.F.	Sta. 67+00 to Sta. 72+32	} 1113 L.F.
Sta. 58+60 to Sta. 59+70		Sta. 73+25 to Sta. 75+38	
Sta. 66+00 to Sta. 67+07		Sta. 70+20 to Sta. 82+65	
Sta. 66+120 to Sta. 66+60		Anchor Blocks	
(Guard Rails with 8" metal posts)			G Ea.
Anchor Blocks			
G Ea.			



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PLAN

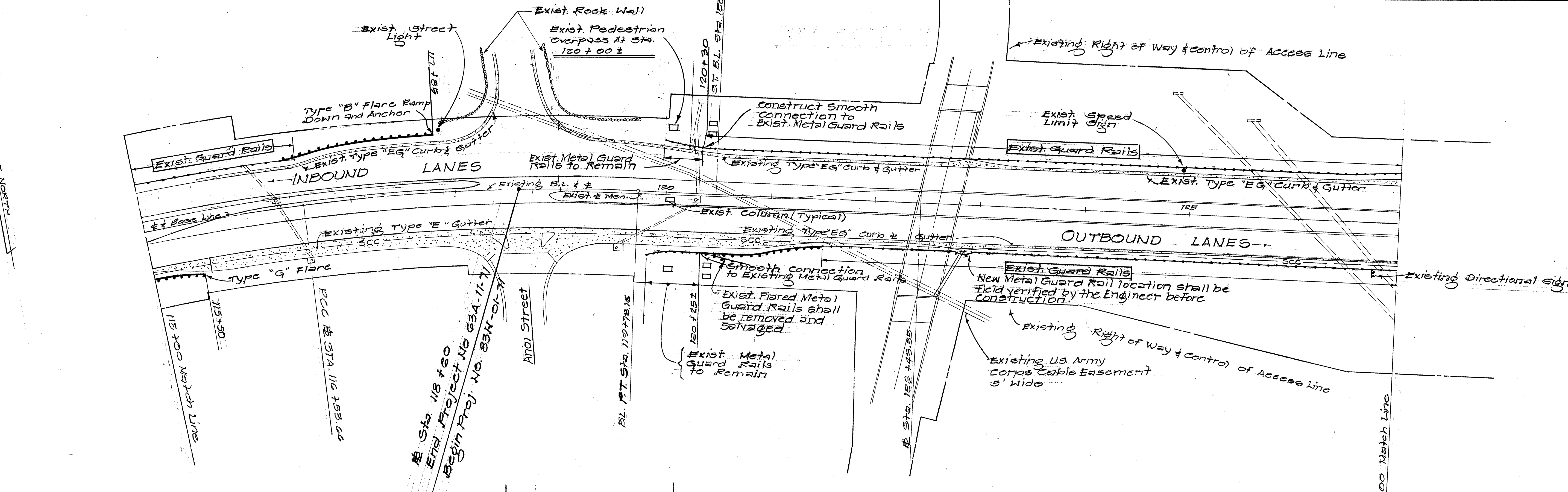
STA. 54+00 to STA. 84+50

PROJECT NO.
63A-11-71

SHEET NO. 3 OF 3 SHEETS

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

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	63A-11-71 83H-01-71	1972	7	16



NEW METAL GUARD RAILS AND METAL POSTS			
PROJECT NO. 63A-11-71			
<u>Inbound Lane Guard Rails to be installed from:</u>			
Sta. 115+00 to Sta. 117+85	285 L.F.		
Anchor Block	1 Ea.		
<u>Outbound Lane Guard Rails to be installed from:</u>			
Sta. 115+00 to Sta. 115+50	50 L.F.		
Anchor Block	1 Ea.		
PROJECT NO. 83H-01-71			
<u>Inbound Lane Guard Rails to be installed from:</u>			
Sta. 120+30 to Sta. 127+60	730 L.F.		
Anchor Block	1 Ea.		
<u>Outbound Lane Guard Rails to be installed from:</u>			
Sta. 120+25 to Sta. 128+00	775 L.F.		
Anchor Block	1 Ea.		

NOTE:
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HIGHWAYS DIVISION

PLAN

Sta. 115+00 to Sta. 118+60
PROJECT NO. 63A-11-71

Sta. 118+60 to Sta. 128+00
PROJECT NO. 83H-01-71

SHEET NO. 5 OF 5 SHEETS

DATE	.....
SURVEY PLOTTED BY	.....
DRAWN BY	.....
NOTED BY	.....
CHECKED BY	.....
ORIGINAL PLAN	.....
NOTE BOOK	.....
No.	.....