FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-01-20	2021	21	767

Legend:

	Existing:	Proposed:
Baseline		℄
Property Line		PL
Delta		Δ
State Right-of-way	r/w	R/W
Property Line or City Right-of-way		
Easement Line		
Power Pole		
Guy Wire		
Overhead Utility Line	o/h	O/H
Traffic Light Pole		
Traffic Signal, Street Light or Electric Box		
Street Light		
Chain Link Fence		
Metal Guardrail		
Hedge/Brush		
Trees		
Benchmark		
Top of Bank	Fill Condition Cut Condition	Fill Condition Cut Condition
Bottom of Bank		
Riprap		
Drain Manhole		
Grated Drain Inlet Box		
Bridge Scupper		
Catch Basin		
Drainline	D24	D24
Drainage Flow Direction		
Sign on Post		
Raised Pavement Markings		
Waterline	EW16	W24
Sewerline	S8	S8

Abbreviations:

AASHTO	American Association of State Highway and Transportation Officials
Ac.	Acre
AC	Asphalt Concrete
ASTM	Association Society for Testing and Materials
BC	Bottom of Curb
Blk.	Block
Bot.	Bottom
BV	Bottom Vertical
BVC	Begin Vertical Curve
BW	Bottom of Wall
BWS	Board of Water Supply
C	Chord
CB	Catch Basin
Cl.	Class
Clr.	Clear
CO	Cleanout
Comm.	Communications
Conc.	Concrete
Conn.	Connect
Cont.	Continuous
Decel.	Deceleration
Det.	Detail
D.I.	Ductile Iron
D.I.P.	Ductile Iron Pipe
DI	Drain Inlet
Dia.	Diameter
D.L.	Drainline
DMH	Drain Manhole
D.P.P.	Department of Planning and Permitting
D.S.	Downspout
E.P.	Edge of Pavement
E.S.	Edge of Shoulder
EVC	End Vertical Curve
Exist.	Existing
FE	Flanged End
GDI	Grated Drop Inlet
GV	Gate Valve
HDOT	Hawaii Department of Transportation
HGL	Hydraulic Grade Line
Hwy.	Highway
I.B.	Inbound
Inv.	Invert
Lc	Length of Chord
Lt.	Left
LP	Light Pole
O.B.	Out Bound
O.C.	On Center
o/s	Offset
Max.	Maximum
Min.	Minimum
Mod.	Modified
MJ	Mechanical Joint
No.	Number
Pav't.	Pavement
PC	Point of Curvature
PCC	Portland Cement Concrete
Ph.	Phase
PI	Point of Intersection
PIVC	Point of Inflection Vertical Curve
PMA	Polymer Modified Asphalt
POC	Point on Curve
PP	Power Pole
Psi	Pounds Per Square Inch
PT	Point of Tangency
Pt.	Point
R	Radius
RC	Reinforced Concrete
Rd.	Road
Rt.	Right
R/W	Right-of-Way
Shldr.	Shoulder
Sht.	Sheet
SLB	Street Light Box
Spec.	Specification
Sp.	Special
STA.	Station
Std.	Standard
Struct.	Structure
St.	Street
Sq.	Square
SWQ	Storm Water Quality
T	Tangent
TC	Top of Curb
TD	Top of Deck
TLP	Traffic Light Pole
TMK	Tax Map Key
TSB	Traffic Signal Box
TV	Top Vertical
TW	Top of Wall
Typ.	Typical
VB	Valve Box
V.E.	Vertical Curve
W.L.	Waterline
WV	Water Valve
WWF	Welded Wire Fabric
Yd.	Yard

APPROVED:

Manager and Chief Engineer, BWS (for work affecting BWS facilities State R/W & BWS easements only) — DATE

CRAIG W. L. LUKE LICENSED PROFESSIONAL ENGINEER No. 6935-C HAWAII, U.S.A.

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

SIGNATURE — April 30, 2022 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

General Legend and Abbreviations

FARRINGTON HIGHWAY WIDENING
Kapolei Golf Course Road to Fort Weaver Road
Project No. 7101A-01-20

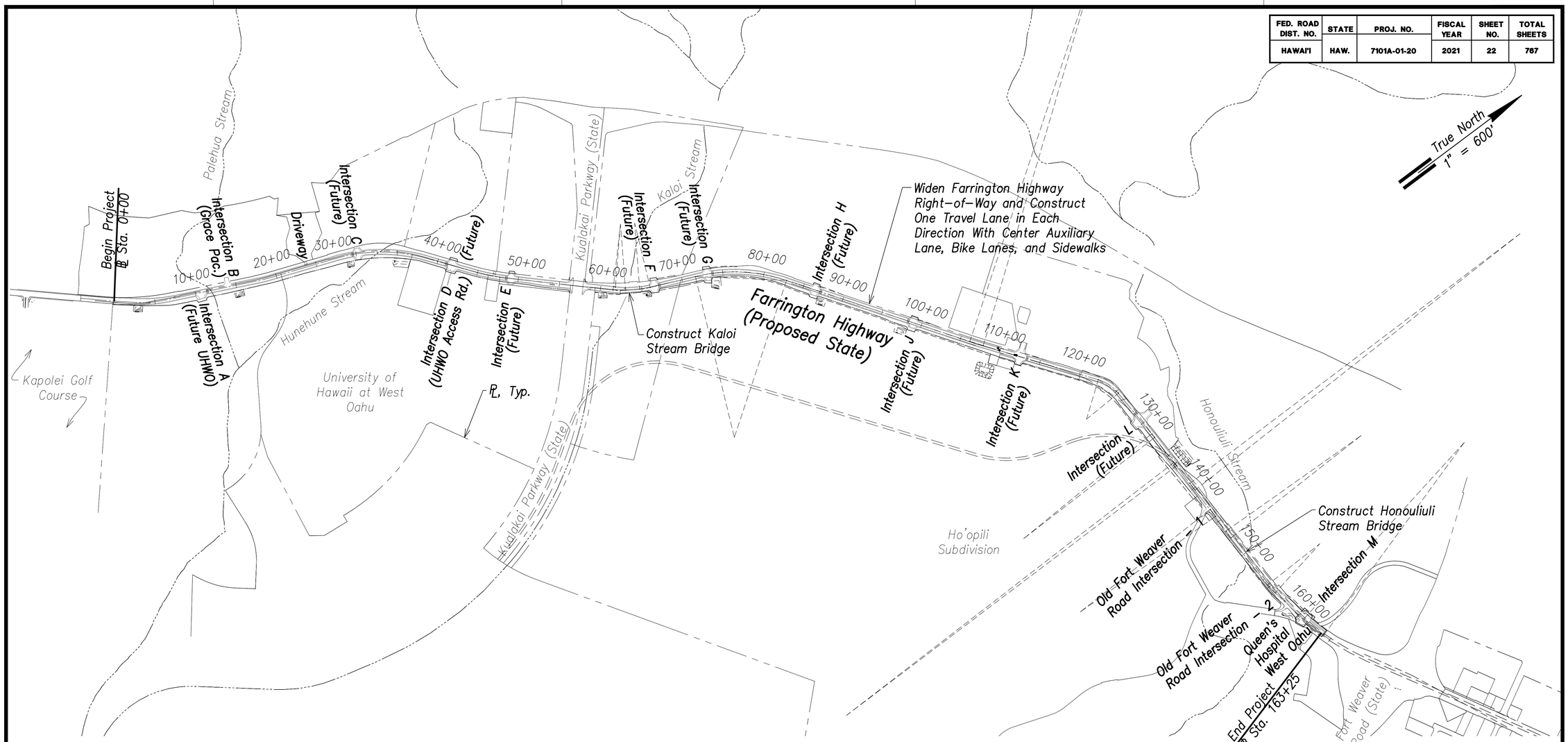
Scale: As Shown — Date: April 2022

SHEET No. C-20 OF 767 SHEETS

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

FILE: K:\civil\23146 Farrington Hwy Widening\Dwg\Construction Dwgs\C-20 Legend and Abbrev.dwg saved April 13, 2022

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAI'I	HAW.	7101A-01-20	2021	22	767



Overall General Plan

Scale: 1" = 600'

APPROVED:

Manager and Chief Engineer, BWS (for work affecting BWS facilities in City/State R/W & BWS easements only) — DATE

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

Graphic Scale:

1" = 600' 600' 0 600' 1200'

Scale in Feet

CRAIG W. L. LUKE LICENSED PROFESSIONAL ENGINEER No. 6935-C HAWAII, U.S.A.

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

SIGNATURE — April 30, 2022 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

Overall General Plan

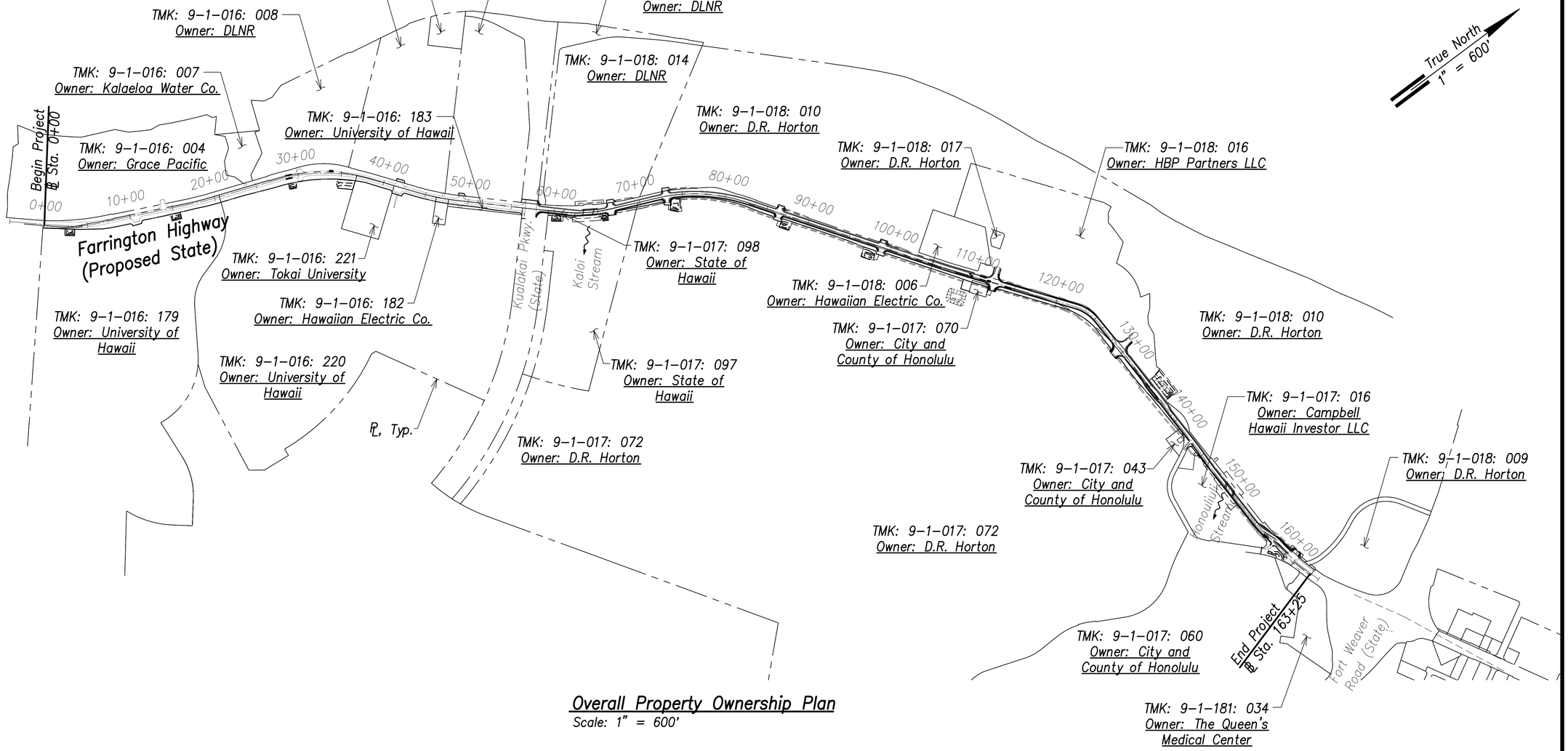
FARRINGTON HIGHWAY WIDENING
Kapolei Golf Course Road to Fort Weaver Road
Project No. 7101A-01-20

Scale: As Shown — Date: April 2022

SHEET No. C-21 OF 767 SHEETS

FILE: K:\civil\23146 Farrington Hwy Widening\Dwg\Construction Dwgs\C-21 Overall General Plan.dwg saved April 13, 2022

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAI'I	HAW.	7101A-01-20	2021	23	767



Overall Property Ownership Plan

Scale: 1" = 600'

Graphic Scale:

1" = 600' 600' 0 600' 1200'

Scale in Feet

CRAIG W. L. LUKE
LICENSED PROFESSIONAL ENGINEER
No. 6935-C
HAWAII, U.S.A.

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

SIGNATURE — April 30, 2022 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

Overall Property Ownership Plan

FARRINGTON HIGHWAY WIDENING
Kapolei Golf Course Road to Fort Weaver Road
Project No. 7101A-01-20

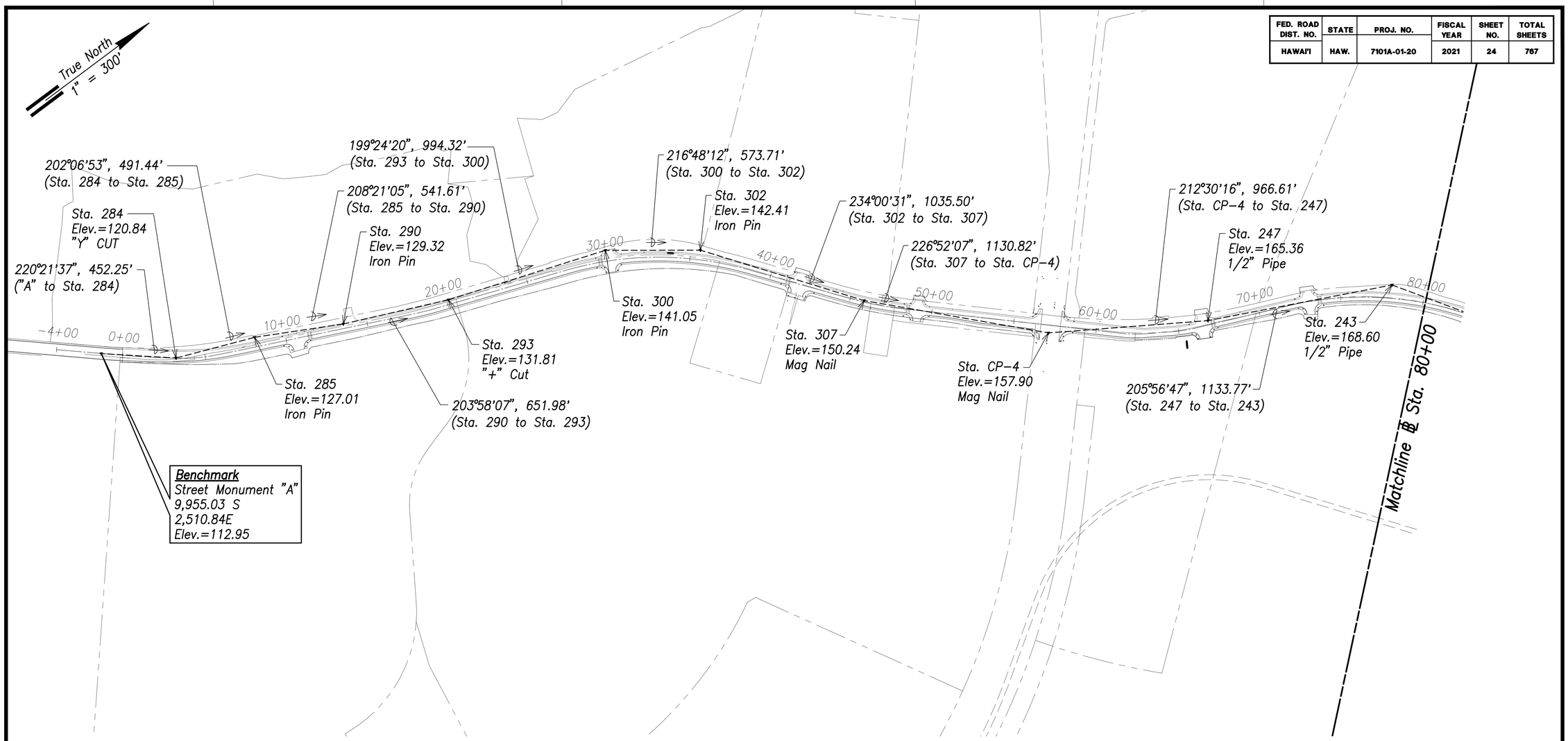
Scale: As Shown Date: April 2022

SHEET No. C-22 OF 767 SHEETS

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

FILE: K:\chk\23146 Farrington Hwy Widening\Dwg\Construction Dwgs\C-22 Overall Property Ownership Plan.dwg saved April 13, 2022

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAI'I	HAW.	7101A-01-20	2021	24	767



General Survey Control Plan – 1

All Survey Traverse Station Control Shown from Control Point Survey, LLC.
Scale: 1" = 300'

Notes:

1. For General Roadway Geometrics, See Sheet C-25.
2. For General Drainage Plan, See Sheet C-26.
3. For General Water and Sewer Plan, See Sheet C-27.
4. For Overall Electrical System, See Sheet EA-3.
5. For Typical Roadway Sections, See Sheets C-28 through C-31. 2

Graphic Scale:
1" = 300' 300' 0 300' 600'
Scale in Feet

DATE	REVISION
06/08/22	2 Revised Note 5

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

General Survey
Control Plan – 1

FARRINGTON HIGHWAY WIDENING
Kapolei Golf Course Road to Fort Weaver Road
Project No. 7101A-01-20

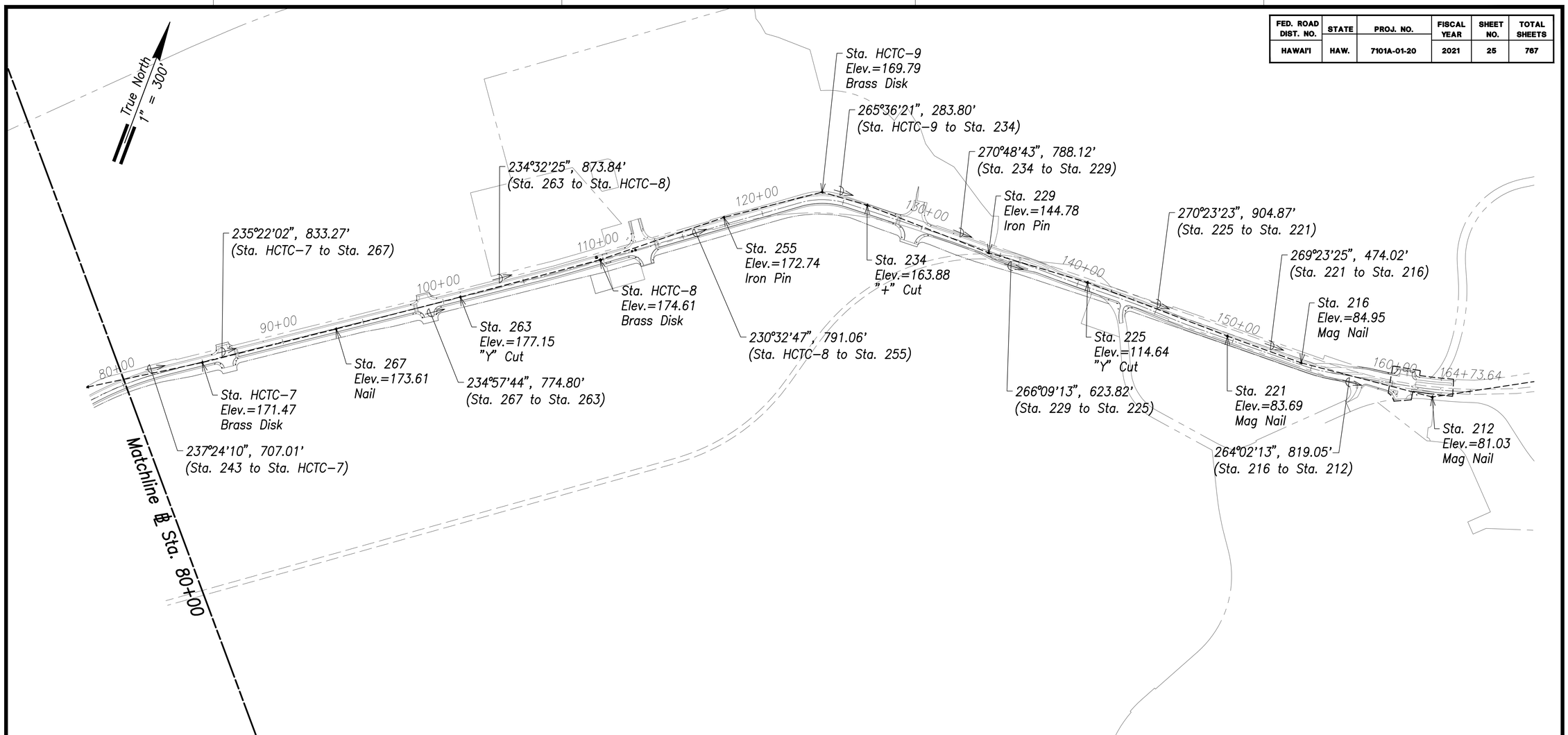
Scale: As Shown Date: April 2022

SHEET No. C-23 OF 767 SHEETS

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

FILE: \\RMTC-FS\projects\civil\23146 Farrington Hwy Widening\Dwg\Construction Dwgs\C-23 General Survey Control Plan - 1.dwg saved May 31, 2022

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAI'I	HAW.	7101A-01-20	2021	25	767



General Survey Control Plan – 2

All Survey Traverse Station Control Shown from Control Point Survey, LLC.
Scale: 1" = 300'

Notes:

1. For General Roadway Geometrics, See Sheet C–25.
2. For General Drainage Plan, See Sheet C–26.
3. For General Water and Sewer Plan, See Sheet C–27.
4. For Overall Electrical System, See Sheet EA–3.
5. For Typical Roadway Sections, See Sheets C–28 through C–31. 2

Graphic Scale:
1" = 300' 300' 0 300' 600'
Scale in Feet

DATE	REVISION
06/08/22	2 Revised Note 5

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

General Survey
Control Plan – 2

FARRINGTON HIGHWAY WIDENING
Kapolei Golf Course Road to Fort Weaver Road
Project No. 7101A–01–20

Scale: As Shown Date: April 2022

SHEET No. C-24 OF 767 SHEETS

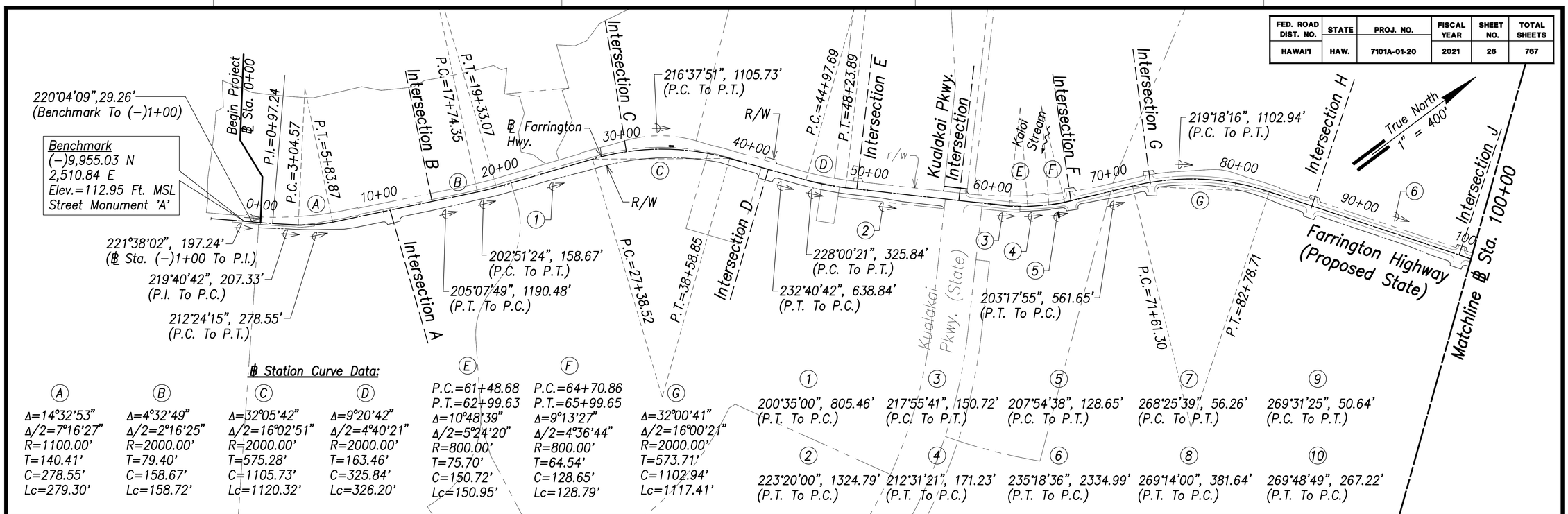
ADD. 25

ORIGINAL PLAN	
NOTE BOOK	
No.	

SURVEY PLOTTED BY
TRACING BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

FILE: \\RMTC-FS\Iproject\civil\23146 Farrington Hwy Widening\Dwg\Construction Dwgs\C-24 General Survey Control Plan - 2.dwg saved May 31, 2022

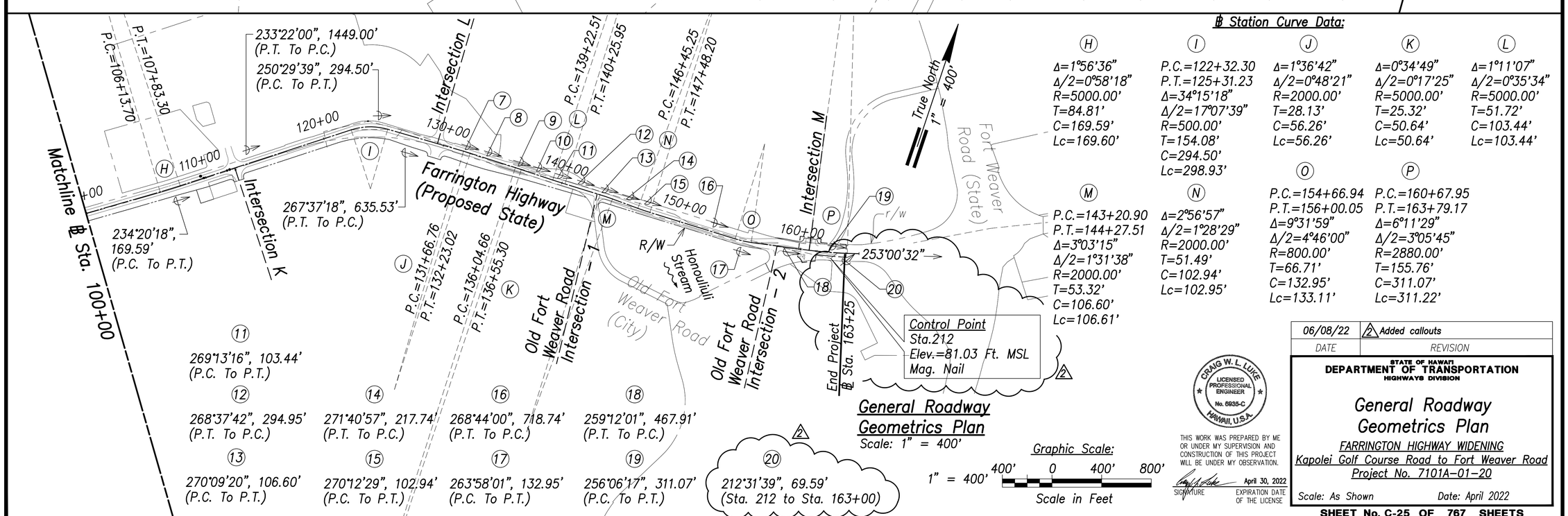
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-01-20	2021	26	767



℄ Station Curve Data:

	A	B	C	D	E	F	G
	Δ=14°32'53"	Δ=4°32'49"	Δ=32°05'42"	Δ=9°20'42"	P.C.=61+48.68	P.C.=64+70.86	Δ=32°00'41"
	Δ/2=7°16'27"	Δ/2=2°16'25"	Δ/2=16°02'51"	Δ/2=4°40'21"	P.T.=62+99.63	P.T.=65+99.65	Δ/2=16°00'21"
	R=1100.00'	R=2000.00'	R=2000.00'	R=2000.00'	Δ=10°48'39"	Δ=9°13'27"	R=2000.00'
	T=140.41'	T=79.40'	T=575.28'	T=163.46'	Δ/2=5°24'20"	Δ/2=4°36'44"	T=573.71'
	C=278.55'	C=158.67'	C=1105.73'	C=325.84'	R=800.00'	R=800.00'	C=1102.94'
	Lc=279.30'	Lc=158.72'	Lc=1120.32'	Lc=326.20'	T=75.70'	T=64.54'	Lc=1117.41'
					C=150.72'	C=128.65'	
					Lc=150.95'	Lc=128.79'	

	1	3	5	7	9
	200°35'00", 805.46' (P.T. To P.C.)	217°55'41", 150.72' (P.C. To P.T.)	207°54'38", 128.65' (P.C. To P.T.)	268°25'39", 56.26' (P.C. To P.T.)	269°31'25", 50.64' (P.C. To P.T.)
	2	4	6	8	10
	223°20'00", 1324.79' (P.T. To P.C.)	212°31'21", 171.23' (P.T. To P.C.)	235°18'36", 2334.99' (P.T. To P.C.)	269°14'00", 381.64' (P.T. To P.C.)	269°48'49", 267.22' (P.T. To P.C.)



℄ Station Curve Data:

	H	I	J	K	L
	Δ=1°56'36"	P.C.=122+32.30	Δ=1°36'42"	Δ=0°34'49"	Δ=1°11'07"
	Δ/2=0°58'18"	P.T.=125+31.23	Δ/2=0°48'21"	Δ/2=0°17'25"	Δ/2=0°35'34"
	R=5000.00'	Δ=34°15'18"	R=2000.00'	R=5000.00'	R=5000.00'
	T=84.81'	Δ/2=17°07'39"	T=28.13'	T=25.32'	T=51.72'
	C=169.59'	R=500.00'	C=56.26'	C=50.64'	C=103.44'
	Lc=169.60'	T=154.08'	Lc=56.26'	Lc=50.64'	Lc=103.44'
		C=294.50'			
		Lc=298.93'			

	M	N	O	P
	P.C.=143+20.90	Δ=2°56'57"	P.C.=154+66.94	P.C.=160+67.95
	P.T.=144+27.51	Δ/2=1°28'29"	P.T.=156+00.05	P.T.=163+79.17
	Δ=3°03'15"	R=2000.00'	Δ=9°31'59"	Δ=6°11'29"
	Δ/2=1°31'38"	T=51.49'	Δ/2=4°46'00"	Δ/2=3°05'45"
	R=2000.00'	C=102.94'	R=800.00'	R=2880.00'
	T=53.32'	Lc=102.95'	T=66.71'	T=155.76'
	C=106.60'		C=132.95'	C=311.07'
	Lc=106.61'		Lc=133.11'	Lc=311.22'

	11	12	14	16	18
	269°13'16", 103.44' (P.C. To P.T.)	268°37'42", 294.95' (P.T. To P.C.)	271°40'57", 217.74' (P.T. To P.C.)	268°44'00", 718.74' (P.T. To P.C.)	259°12'01", 467.91' (P.T. To P.C.)
	13	15	17	19	20
	270°09'20", 106.60' (P.C. To P.T.)	270°12'29", 102.94' (P.C. To P.T.)	263°58'01", 132.95' (P.C. To P.T.)	256°06'17", 311.07' (P.C. To P.T.)	212°31'39", 69.59' (Sta. 212 to Sta. 163+00)

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

DATE	REVISION
06/08/22	2 Added callouts

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

General Roadway Geometrics Plan

FARRINGTON HIGHWAY WIDENING
Kapolei Golf Course Road to Fort Weaver Road
Project No. 7101A-01-20

Scale: As Shown Date: April 2022

General Roadway Geometrics Plan

Scale: 1" = 400'

Graphic Scale:
1" = 400' 400' 0 400' 800'
Scale in Feet

CRAIG W. L. LUKE
LICENSED PROFESSIONAL ENGINEER
No. 6935-C
HAWAII, U.S.A.

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

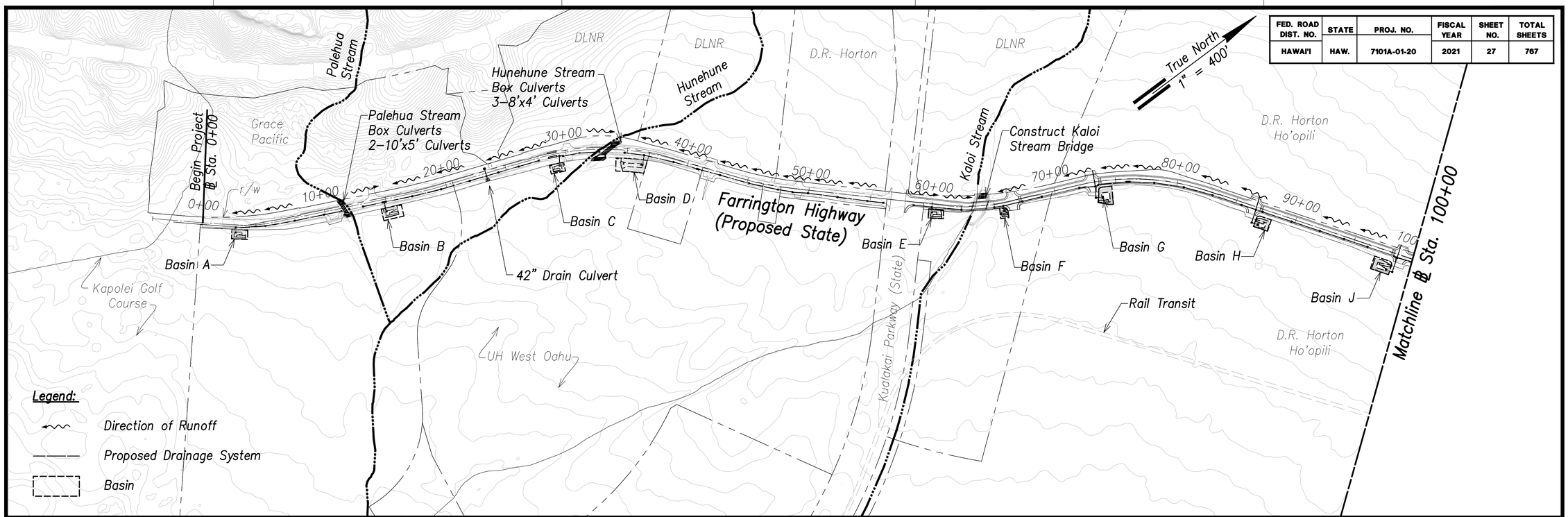
SIGNATURE April 30, 2022
EXPIRATION DATE OF THE LICENSE

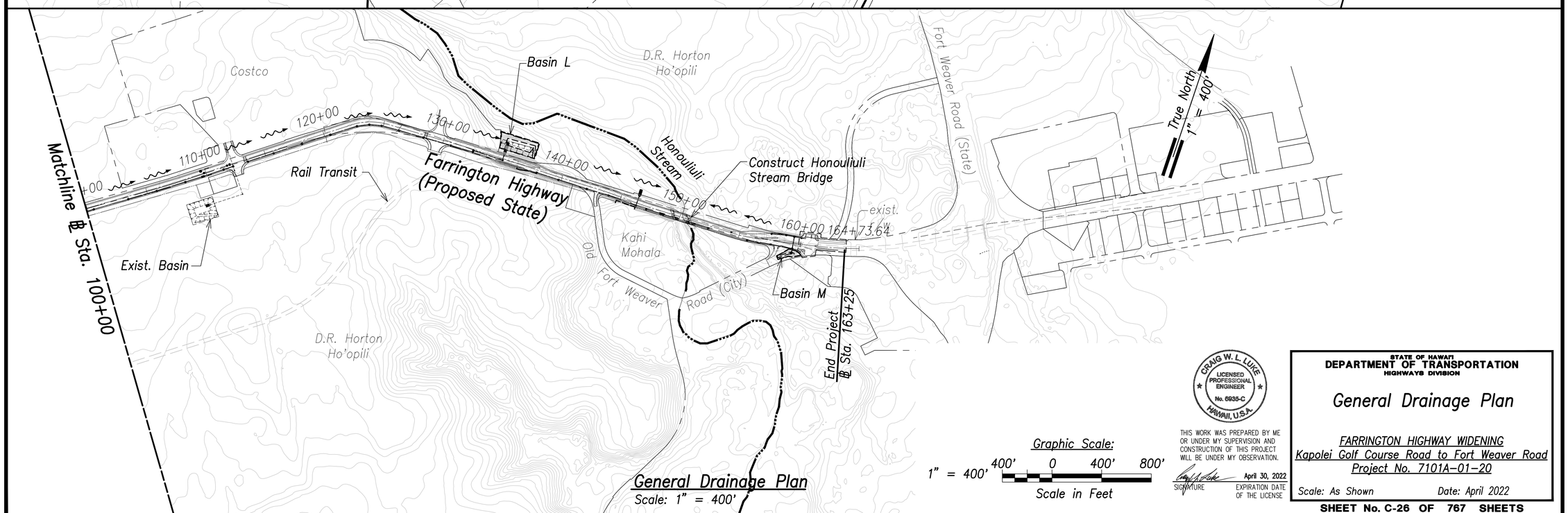
SHEET No. C-25 OF 767 SHEETS

ADD. 26

FILE: \\RMC-FS\1project\civil\23146 Farrington Hwy Widening\Dwg\Construction Dwgs\C-25 General Roadway Geometrics Plan.dwg saved May 31, 2022

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-01-20	2021	27	767





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

Graphic Scale:

1" = 400' 400' 0 400' 800'

Scale in Feet

CRAIG W. L. LUKE LICENSED PROFESSIONAL ENGINEER No. 6935-C HAWAII, U.S.A.

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

SIGNATURE — April 30, 2022 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

General Drainage Plan

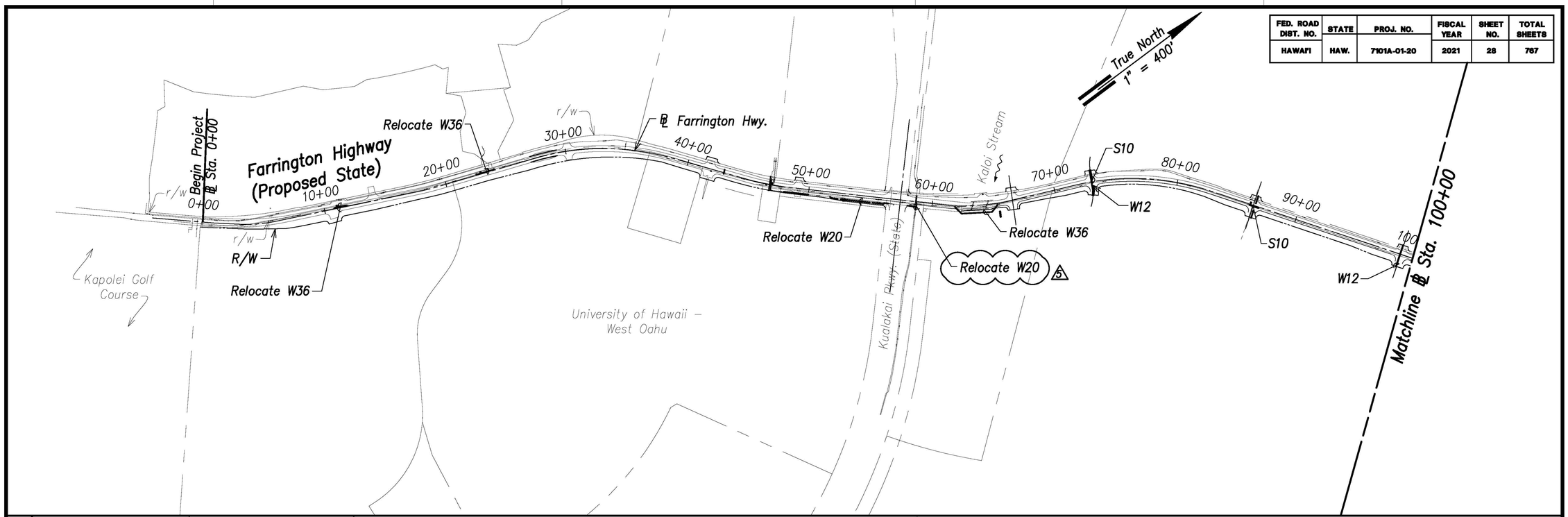
FARRINGTON HIGHWAY WIDENING
Kapolei Golf Course Road to Fort Weaver Road
Project No. 7101A-01-20

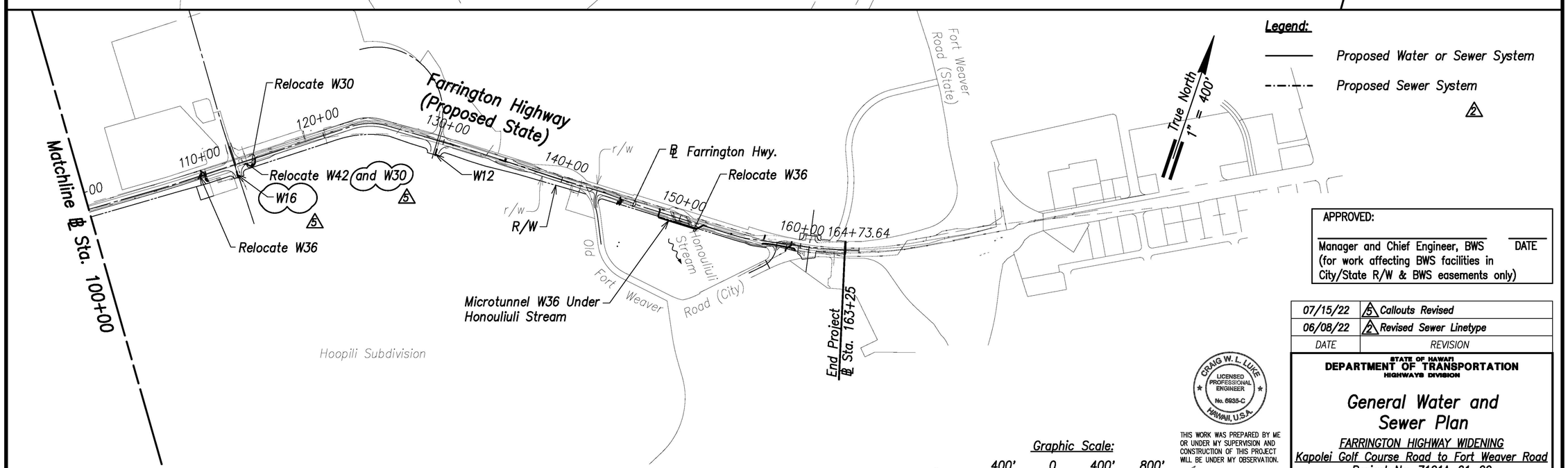
Scale: As Shown Date: April 2022

SHEET No. C-26 OF 767 SHEETS

FILE: K:\civil\23146 Farrington Hwy Widening\Dwg\Construction Dwgs\C-26 General Drainage Plan.dwg saved April 13, 2022

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-01-20	2021	28	767





Legend:

Proposed Water or Sewer System

Proposed Sewer System 2

APPROVED:

Manager and Chief Engineer, BWS (for work affecting BWS facilities in City/State R/W & BWS easements only) — DATE

DATE	REVISION
07/15/22	5 Callouts Revised
06/08/22	2 Revised Sewer Linetype

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

General Water and Sewer Plan

FARRINGTON HIGHWAY WIDENING
Kapolei Golf Course Road to Fort Weaver Road
Project No. 7101A-01-20

Scale: As Shown — Date: April 2022

CRAIG W. L. LUKE — LICENSED PROFESSIONAL ENGINEER — No. 6935-C — HAWAII, U.S.A.

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

SIGNATURE — April 30, 2024 EXPIRATION DATE OF THE LICENSE

Graphic Scale: 1" = 400' — 400' 0 400' 800' — Scale in Feet

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

General Water and Sewer Plan

Scale: 1" = 400'

FILE: K:\cdh\23146 Farrington Hwy Widening\Dwg\Construction Dwgs\C-27 General Water Plan.dwg saved June 30, 2022