

SYMBOLS AND ABBREVIATIONS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-19(001)	2018	22	30

\$	And	Demo.	Demolish, Demolition	GDI	Grated Drain Inlet	oc	On Center	Stl.	Steel
@	At	Def.	Detail	GFRP	Glass Fiber Reinforced Polymer Rebar	Opn'g	Opening	Str.	Straight
Ø	Diameter	Dia.	Diameter			OB	Outbound	Struct.	Structure
≥	Greater Than or Equal to	Diaph.	Diaphragm	Gr.	Grade	OD	Outside Diameter	SE	Super Elevation
≤	Less Than or Equal to	Dim.	Dimension	Grd.	Ground			Symm.	Symmetrical
#	Number	Dist.	Distance	GRP	Grouted Rubble Pavement	Perf.	Perforated		
		DO	Ditto			PL	Plate		
		Dwls.	Dowels	Ht.	Height	PCCP	Portland Cement Concrete Pavement	Tan.	Tangent
Abbr.	Abbreviation	Dn.	Down	(H)	Hinge			TC	Continuity Tendons
Add.	Additional	Dbl.	Double	Horiz., H	Horizontal	PC	Point of Curvature	Temp.	Temporary
Alt.	Alternate	DI	Drain Inlet, Ductile Iron	HDOT	State of Hawaii Department of Transportation	PCF	Pounds per Cubic Foot	TD	Deck Tendon
AB	Anchor Bolt	Dwg., Dwgs.	Drawing, Drawings			P(e)	Effective Prestress Force After All Losses	Thk.	Thick
AC	Asphaltic Concrete	DS	Drilled Shaft	HDPE	High Density Polyethylene			T	Top
Approx.	Approximate			HS	High strength	PSF	Pounds per Square Foot	T#B	Top and Bottom
ASB	Asphalt Stabilized Base	E	East	HECO	Hawaiian Electric Company	PSI, psi	Pounds per Square Inch	TCE	Top of Column (and Bent Cap Soffit) Elevation
AZ.	Azimuth	EA, Ea., ea.	Each	HMA	Hot Mix Asphalt	PLF	Pounds per Linear Foot	TOD	Top of Deck
		EF	Each Face			PI	Point of Intersection of Tangents	TOP	Top of Pier
Bk.	Back	EFH	Each Face Horizontal	IB	Inbound			TFE	Top of Footing Elevation
Bal.	Balance	EFV	Each Face Vertical	In.	Inch	PIVC	Point of Intersection of Vertical Curve	Tot.	Total
⌘	Baseline	EW	Each Way	ID	Inside Diameter			Transv.	Transverse
Bm.	Beam	EPE	Existing Edge of Pavement	IF	Inside Face	PT	Point of Tangency	TS	Structural Tubing
Brg., Brgs.	Bearing, Bearings	EPS	Expanded Polystyrene	Int.	Interior	Pt., Pts.	Point, Points	Typ.	Typical
BVC	Beginning of Vertical Curve	ES	Edge of Shoulder	Inv.	Invert	PRC	Point of Reverse Curvature		
Bet.	Between	Elec.	Electrical			PVC	Polyvinyl Chloride		
BF	Both Faces	EMH	Electrical Manhole	Jt.	Joint	Prestr.	Prestressed	Undergrd.	Underground
BW	Both Ways	El., Elev.	Elevation	JPCP	Jointed Precast Concrete Pavement	P/S	Prestressed Strands	UTPB	Untreated Permeable Base
BFE	Bottom of Footing Elevation	Emb.	Embankment			PB	Pull Box		
Bot., Bott., B	Bottom	EVC	End of Vertical Curve					Var.	Varies
BOF	Bottom of Footing	Eq.	Equal	K	Kips	Rad., R	Radius	Vert., V	Vertical
Blt.	Bolt	Est.	Estimated	KF	Kip Foot	RF	Rear Face	VC	Vertical Curve
		Exc.	Excavation	KSF	Kips Per Square Foot	Rebar	Reinforcing Bar		
Cant.	Cantilever	Excl.	Excluding	KSI	Kips Per Square Inch	Ref.	Reference	W/C	Water/Cement
CIP	Cast Iron Pipe	Exist., Ex.	Existing	KLF	Kips Per Linear Foot	Reinf.	Reinforced, Reinforcing, Reinforcement	w/	With
	Cast-In-Place	Exp., (E)	Expansion					W	West
⊙	Center line	EJ	Expansion Joint	L	Length	Req'd.	Required	WIM	Weigh-In-Motion
cc	Center to Center	Ext.	Exterior	lb., lbs., LBS.	Pound, Pounds	Ret.	Retaining	WWF	Welded Wire Fabric
CG	Center of Gravity			Ltg. Std.	Lighting Standard	ROW	Right of Way	WP	Work Point, Working Point
CFCW	Continuous Flashing Compound	(F)	Fixed	LF, Lin. Ft.	Linear Feet/Foot	Rdwy.	Roadway	WS	Water Surface
	Waterproofing	FA	Force account	LS	Lump Sum				
Cl.	Class	FB	Flat Bar	Longit.	Longitudinal	Sect.	Section	Yr.	Year
Clr.	Clearance	FC	Compression Stresses			Sht.	Sheet		
CO	Clean Out	f'c	Specified Compressive Strength of Concrete at 28 days	M	Modified	Sim.	Similar		
Col.	Column	f'ci	Specified Compressive Strength of Concrete at Time of Initial Prestress	MH	Manhole	Sl.	Slope		
Conc.	Concrete			Max.	Maximum	S	South		
CBW	Concrete Barrier Wall	FF	Far Face, Front Face	Mech.	Mechanical	SB	Southbound		
Conn.	Connection	Fig.	Figure	Min.	Minimum	Spc., Spg.	Spaces, Spacing		
Const.	Construction	Fin. Gr.	Finish Grade	Misc.	Miscellaneous	Sprd.	Spread		
CJ	Construction Joint	fr	Modulus of Rupture	MPH	Miles Per Hour	Spec.	Specification		
Cntl. Jt.	Control Joint	FRP	Fiberglass Reinforced Plastic	NF	Near Face	SF	Square Feet		
CLSM	Controlled Low Strength Material	FT	Tensile Stresses	N	North	SY	Square Yard		
		Ftg.	Footing	NB	Northbound	SS	Stainless Steel		
Cont.	Continuous	Ft.	Feet, Foot	NIC	Not in Contract	Std.	Standard		
CF	Cubic Feet			No.	Number	Sta.	Station		
CY, Cu. Yd.	Cubic Yard	Ga.	Gage, Gauge	NTS	Not to Scale	Stiff.	Stiffener		
		Galv.	Galvanized	NWIM	Nanocrete Weigh-In-Motion	Stirr.	Stirrup		
				O/S	Offset				

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

DRAWING NAME: Z:\00_OGONGON\18-008.5-KUHO HWY STREAM PCC\01 CAD\10-05-20 UHAWHII AS-BUILT\ISP-50004-ABBREV.DWG PLOT TIME: 10-06-20, 3:50 PM

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SYMBOLS & ABBREVIATIONS

KAUAI EMERGENCY FLOOD REPAIRS & CLEANUP
At Various Locations April 2018, Rte. 560
Proj. No. ER-19(001)

Scale: None Date: Mar. 2019

SHEET No. **S04** OF **4** SHEETS