

VPUU - Makena State Rec. Area  
"Big Beach"

Date 1st used	Makena State Rec Beach VPUU		Survey Dates Used									
			1/2/1995	9/3/1995	2/17/1996	8/10/1996	1/7/1997	7/8/1997	1/15/1998	7/7/1998	1/11/1999	6/29/1999
1/2/1995	RP#1	PK nail on flag on rock, ONLINE	RP1	RP1	BLDR	BRP	BRP	-	BRP	BRP	BRP	BRP
1/15/1998	RP#2	PK nail on flag on cutoff limb of tree, ON	RP	RP2	BRP	BRP.STUMP	-	BRP	-	-	-	-
1/2/1995	RP#3**	pK nail on flag on stump of SWD kiawe, ON	RP3	RP3	FRP	FRP	FRP	FRP	FRP	FRP	FRP	FRP
1/2/1995	RP#4	PK nail on flag on low limb of kiawe to S	RP4	RP4	SRP	SRP	SRP	SRP	SRP	-	SRP	-
1/2/1995	RP#5	chip on S/LNDWD top of pillbox to N	RP5	-	-	-	-	-	-	-	-	-
1/2/1995	RP#6*	PK nail on wite line at beach access	-	-	-	-	-	GPS1	-	GPS	-	-
1/2/1995	RP#7	"X" on S/LNDWD corner of pillbox top	-	-	-	-	-	GPS2	GPS	GPS	-	-
7/8/1997	RP#8		-	-	-	-	-	-	-	-	-	-
	<b>Start of Line</b>		on.RP1	base rock	base.rock	base.rock	base.rock	base.rock	base.rock	on BRP	swd.sd.BRP	RP.rock.base
	<b>Line Number</b>		-	-	-	-	-	-	-	-	-	-
	<b>bearing</b>		210	-	207	212	212	212	220	223	220	221
* = new PK nail or other marker												
<b>location:</b>	Head S on Makena Alanui St, go past Maui Prince Hotel, go past Puu OLai, turn SWD into 2nd entrance into Makena State Rec. Area. Park, then go to L on beach											
<b>LINE-UP</b>	Sawed-off limb of Kiawe tree at vegetation line (FRP) and BRP on rock											
<b>Hor.Ref:</b>	Top S/SWD corner of pillbox, 200m NW of line											
<b>RP#1</b>	PK nail on orange flag 2.5 ft above ground on SWD side of large (5' diam., 4.5' high) rock.											
<b>RP#2</b>	PK nail on orange flag 2" below cutoff limb of kiawe tree on S/SWD side of rock											
<b>RP#3</b>	PK nail on orange flag 4 ft above ground on flat surface of cutoff stump of lone kiawe tree at vegetation line											
<b>RP#4</b>	PK nail on orange flag on low-lying branch of kiawe tree with wide "V" limbs, 9' from trunk along limb. Tree is 50m SSE of line											
<b>RP#5</b>	Chip in S/LNDWD corner of concrete pillbox top, 10" from landward edge and 4" from S edge. Pillbox is 170m N of line											
<b>RP#6</b>	Pk nail on wite line at beach access											
<b>RP#7</b>	"X" on S/LNDWD corner of pillbox top											
<b>RP#8</b>												
<b>GPSa</b>	VPUU: Temporary point on beach GPS1 (1/2/95)											
<b>GPSb</b>	VPU2: Temporary point on beach GPS2 (1/2/95)											
<b>GPSc</b>	VPUU: RP5? or 7?, Chiseled x on top of bunker, offline (1/12/95). Possibly same point as PUU2 (7/6/97)											
<b>GPS1</b>	PP5B: RP6, GCP point. PK nail in mauka north corder of handicap parking lines near gate (7/8/97)											
<b>GPS2</b>	PUU2: RP7, Middle of chiseled x on mauka, south quadrant on top of pillbox (7/6/97). Possibly same point as VPUU (1/12/95)											
<b>NOTES:</b>												
1/2/95	GPS Survey, VPUU, VPU2											
1/12/95	GPS Survey, VPUU											
7/97	GCP GPS Survey, PP5B											
7/8/97	GPS Survey, PUU2											
	GPS Positions	Longitude	Latitude	Elevation (meters above local tidal datum)								
	PP5B	-156.445175	20.631332	6.204								
	PUU2	-156.446777	20.631710	5.038								
	*Primary GPS for elevation control; GPS1, PP5B (GCP) RP6 (7/97) = 6.204											
	**Primary reference point; RP3/FRP = 3.588											