SPP No. 12-000138 CONNECTIONS NEW CENTURY PUBLIC CHARTER SCHOOL AND COMMUNITY BASED EDUCATION SUPPORT SERVICES

PUBLIC TESTIMONY

DR HENRY LEE LOY ORAL TESTIMONY

SPP No. 12-000138 Page No. 003197

My name is Dr. Henry Lee Loy and I live on Mele Manu Street. There is further evidence that the proposed location of the Connections Public Charter School is inappropriate. To leverage traffic congestion there is evidence that every public elementary school in Hilo has a separate one-way entrance and a separate one-way exit or two separate drop-off and pick-up points on two different streets surrounding each school. Images and specifics are being submitted as evidence:

- Kaūmana Elementary School (292 students);
 Has a separate one-way entrance on Kaūmana Drive
 Has a separate one-way exit on Kaūmana Drive
 Has Second drop off and pick up point behind cafeteria
- DeSilva Elementary School (429 students);
 Has a separate one-way entrance on 'Ainako Avenue
 Has a separate one-way exit on 'Ainako Avenue
- Hilo Union Elementary School (487 students);
 Has two separate drop off and pick points:
 The first one on Waiānuenue Ave.
 The second one on Kapi'olani Street
- Keaukaha Elementary School (407 students);
 Has a separate one-way entrance on Desha Ave.
 Has a separate one-way exit on Desha Ave.
 Second access from Kawananākoa gym parking lot
- Kapi'olani Elementary School (376 students);
 Has two drop off points:

 The first one on Kīlauea Ave.
 The second one on Mohouli Street

 Has a separate one-way entrance on Kīlauea Ave.

Has a separate one-way entrance on Kīlauea Av Has a separate one-way exit on Mohouli Street

- Waiakea Elementary School (877 students);
 Has a separate one-way entrance on Puainako Ave.
 Has a separate one way-exit on Puainako Ave.
- Waiākeawaena Elementary School (714 students)
 Has three separate drop off and pick up points;
 The first access on Kino'ole street
 The second access on Kīlauea Avenue
 The third access is in the Andrews gymnasium parking lot.

The proposed Connections Public Charter School (350 students) will have only one driveway to accommodate both entrance and exit access on Edita Street

located only a few hundred feet from the potentially dangerous intersection of Edita Street and Kaūmana Drive. Traffic will back up and down Kaumana Drive and Edita Street causing an immediate and adverse impact endangering the lives of residents and students alike.

There is additional evidence that the Traffic Impact Analysis Report, the result of a one day traffic count at the Edita St. and Kaūmana Drive intersection on May 28, 2009 is obsolete, biased, and not an example of a typical school day. Documents are being submitted to provide evidence that three large schools in Hilo were already closed on that date for summer break. Those schools were the University of Hawai'i Hilo, the Hawai'i Community College and the Kamehameha Schools Hawai'i Campus. Over 7000 students were not in school that day thereby creating a variable that could question the accuracy of the study conducted on that date.

The report stated that the future traffic growth along Kaūmana Drive was expected to be minimal and that there would be no traffic growth of traffic along Edita Street. Since the 2009 traffic impact analysis report was completed, documentation is being submitted that evidences several new subdivisions that have been or are being developed which will greatly increase traffic. They include the Department of Hawaiian Homes residential subdivision on Lawai Road, William Brillhante's proposed 45 lot subdivision at the end of Edita Street, the new 39 lot Hokulani Street subdivision and a 23 lot residential subdivision at the intersection of Kaūmana Drive and the Mohouli Street extension. Construction has begun on the new 100-bed Skilled Nursing Facility and the Regency Hilo Nursing & Rehabilitation Center at 563 Kaūmana Drive and the Mohouli Senior Phase I housing project at the Mohouli Street extension in lower Kaūmana is nearing completion.

Documentation requested from the Hawaii County Police Department is submitted showing that traffic accidents increased from 11 to 18 under Post/Beat 147 which covers Kaūmana Drive and areas surrounding Edita Street in the past year.

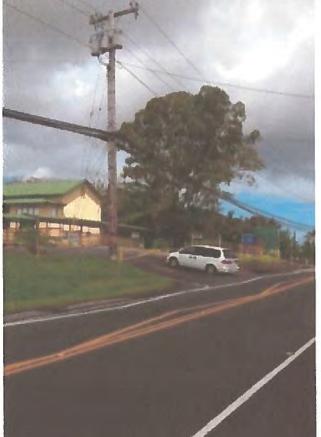
Lastly, there is evidence that "shark teeth striping " has been added to Kaūmana Drive to warn drivers of the dangerous road conditions.

In conclusion Madame hearing officer, the proposed location of the Connections Public School in an established residential neighborhood is inappropriate and I respectfully request that you deny the special use permit. Thank you.

Henry K. Lee Dy MD

Respectfully Submitted, Henry K. Lee Loy 1579 Manu Manu St. Hilo, Hawai'l 96720





Kaūmana Elementary School

K-6= 292 students

- Separate one-way entrance on Kaūmana Drive
- Separate one-way exit on Kaūmana Drive
- 2nd drop off and pick-up point behind cafeteria
- Shark's teeth road stripe installation



SPP No. 12-000138
Page No. 003200
Ernest B. DeSilva Elementary
School

K-6= 429 students

- Separate one-way entrance on `Ainako Ave.
 (1)
- Separate one-way exit on 'Ainako Ave. (2)







Hilo Union Elementary School

K-6= 487 students

- Waiānuenue Ave. Access
- Kapi`olani Street Access



Keaukaha Elementary School

K-6= 407 students

- Separate one-way entrance on Desha Ave.
- Separate one-way exit on Desha Ave.
- Second access from Kawananākoa Gym



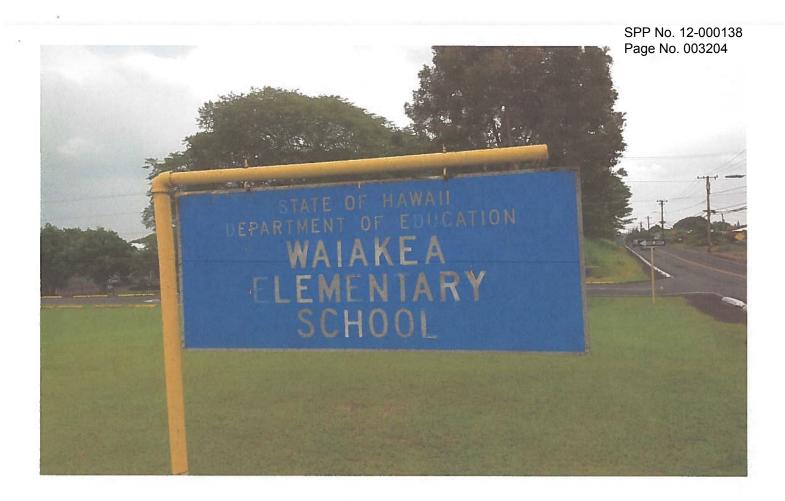


Kapi`olani Elementary School

K-6= 376 students

- Two drop off points
 o Kīlauea Ave.

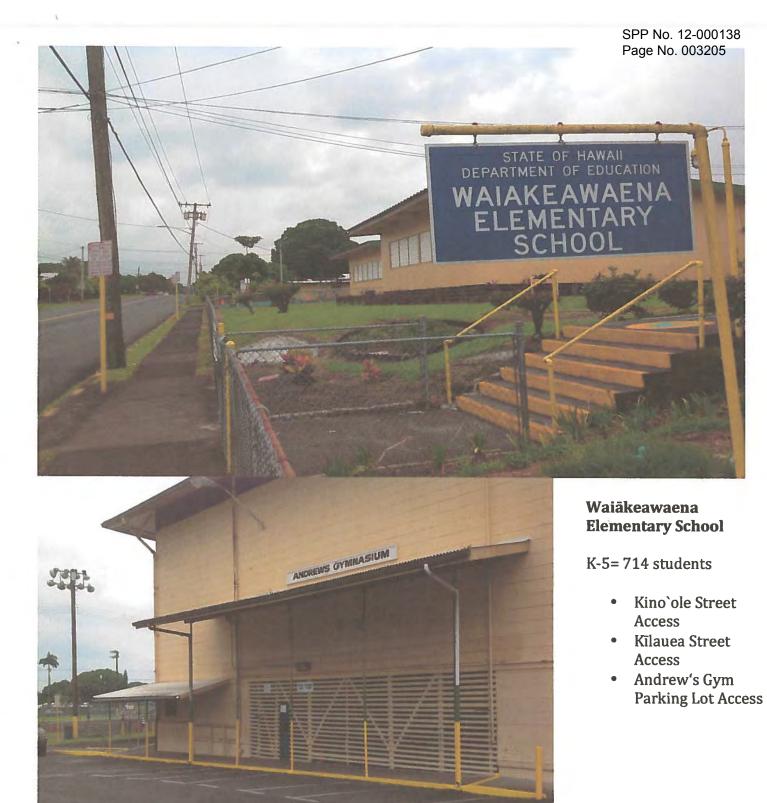
 - o Mohouli Street
- Separate one-way entrance on Kīlauea Ave.
- Separate one –way exit on Mohouli Street



Waiākea Elementary School

K-5= 877 students

- Separate one-way entrance on Puainakō Ave.
- Separate one-way exit on Puainakō Ave.



							Regular Education	ducation							0,	Special Education	ducation		Grand	PREK-K	XX
School	×	-	63	63	4	10	9	7	60	8	10	11	12	Total	K-6	7-8	9-12	Total	Total	Sped	RegEd
Hilo-Laupahoehoe-Walakea																					
351 DE SILVA	73	57	57	69	49	42	47				1			394	35		1	32	429	2	
352 HAAHEO	56	21	25	30	56	92	18							172	11			#	183		
355 HILO HI										316	286	217	231	1050			199	199	1249		
356 HILO INT								189	208					397		69		69	466		
357 HILO UNION	73	71	55	89	51	23	49							420	29			29	487	7	
365 KALANIANAOLE EL & INT	38	29	32	28	23	41	76	27	22					269	21	2		56	295	7	
367 KAPIOLANI	28	53	42	52	38	43	37						_	323	53			23	376	œ	m
369 KAUMANA	43	42	42	40	45	27	25							264	28			28	292	7	
	29	55	47	45	48	43	42							347	8			09	(407)		
	146	135	137	135	138	134								825	52			52		9	
										297	245	271	526	1039			158	158	1197		
385 WAIAKEA INT							276	245	259					780	99	82		112	892		
386 WAIAKEAWAENA	119	106	110	118	8	95								638	9/			9/	0	S	
Hito-Laupahoehoe-Walakea	643	569	547	285	208	504	520	461	492	613	531	488	457	6918	433	156	357	946	100	40	m
Honokaa-Kealakehe-Kohala-Konawaena												-	+								
358 HOLUALOA	107	88	71	71	59	28								480	30		T	30	510		
359 HONAUNAU	23	22	23	15	14	14	T					+		111	18			18	129		31
361 HONOKAA EL	51	53	45	61	9	48	38		T	r		-	-	356	17			17	373	S	П
360 HONOKAA HI & INT								9	48	106	109	122	120	565		12	66	111	9/9		
	28	27	25	12	20	12				_				124	15			15	139	4	9
	161	101	109	83	83	68								979	40			40	999	10	12
378 KE KULA O EHUNUIKAIMALII	23	21	12	15	19	16	18	70	15	12	11	10	÷	193	0	4	00	21	214		
388 KEALAKEHE	210	152	136	170	141	157								996	92			92	1058	11	
							1			360	239	311	336	1246			150	150	1396		
							199	194	199			1		592	17	48		65	657		1
395 KOHALA EL	63	29	200	79	63	*		+	†	1	-	-	-	36/	4			4	411	2	1
373 KOHALA HI							:	į	ţ	9	3	46	26	228	î.	Ç	84	20 L	7/2		
350 KURALA MIU	92	87	86	87	42	80	2	+	2		+		+	578	30	70		3 6	267	2	
		;								185	158	171	137	651			82	82	733		
							181	171	146		-	-		498	22	43	-	65	563		
382 PAAUILO EL & INT	23	31	21	24	24	23	19	21	28	14				228	12	2	1	15	243		
393 WAIKOLOA	129	86	93	77	29	82	55	7.1	49					725	65	17		82	807	3	
387 WAIMEA EL		11	96	88	70	98		0 -0 -000					0000000	524	45			45	569	2	22
Honokaa-Kealakehe-Kohala-Konaw	1017	825	775	160	712	757	563	284	230	743	577	099	059	9153	482	144	388	1014	10167	43	2
Kau-Keaau-Pahoa																					
368 KAU HI/PAHALA EL	23	22	10	22	15	15	16	9	53	57	63	45	41	442	16	15	51	82	524		17
353 KEAAU EL	135	133	117	111	115	121						H		732	9/			92	808	18	
354 KEAAU HI										180	165	175	147	299			165	165	832		
370 KEAAU MID							169	165	212					546	22	45		29	613		
391 KEONEPOKO	84	98	83	83	78	78	9							558	74			74	632	16	6
379 MT VIEW EL	7.5	79	88	89	78	20								458	S			22	208	œ	9
380 NAALEHU	59	61	54	26	48	53	48					H		376	36			36	412	9	8
381 PAHOA EL	61	81	54	72	20	51	41				+	+		392	40			40	432		
383 PAHOA HI & INT								106	88	8	100	71	/3	278		33	98	175	653		i
				000	700	-	700	45.5	C L	1			411	ACOO	21.4	8	202	1	2 4 4 4	OV	74

							_	CITIC	OFFICIAL ENKOLLMENT COUNT ST 13-14	CLIVICIAL	COOK	4T-CT 1	1									
								Regular	Regular Education	×	1		1				Special	Special Education		Grand	PRE	PREK-K
	School	¥	-	2	es	4	10	9	7	60	œ	10	11	12	Total	K-6	7 - 8	9-12	Total	Total	Sped	RegEd
Charte					L																	
396	396 CONNECTIONS-PCS	17	70	21	52	21	29	27	56	31	21	24	17	18	297	13	12	28	53	350		
543	EDUC LAB: A HAWAII NC-PC	10	10	10	00	10	6	26	52	53	99	46	52	52	424	m	7	10	20	444		
546	HAKIPU'U LEARNING CTR-PC						2	m	6	16	10	œ	2	2	49		4	00	12	61		
540	540 HALAU KU MANA-PCS					11	10	14	12	16	12	17	10	4	106	4	2	9	15	121		
542	542 HALAU LOKAHI NC-PCS	r,	14	9	10	12	12	13	18	თ	16	18	21	00	162	m	9	2	14	176		
551	551 HAWAII TECHNOLOGY ACAD	10	27	30	36	64	22	57	65	120	88	85	36	14	682	18	27	24	69	751		
561	HI ACADEMY OF A&S-PCS	25	28	31	28	35	41	53	48	20	62	59	52	45	557	12	12	19	43	909		
548	INNOVATIONS-PCS	22	21	24	23	24	21	22	34	16					207	11	2		16	223		
295	KA 'UMEKE KA'EO-PCS	42	35	35	32	25	22	25	11	13	2	2	4	4	255	80	9	6	23	278		
545	KA WAJHONA O KA NAAUAC	89	20	70	69	65	20	89	29	53					009	56	00		34	634		
275	KAMAILE ACADEMY	94	101	96	88	88	87	82	52	32	20	30	14	œ	787	88	00	16	112	836	9	
466	KANAKA-PCS	4	2	9	S	9	9	4	m	6	2	S	m	rs.	54	2	m	1	6	63		
397	397 KANU O KA'AINA-PCS	32	23	70	25	28	21	16	16	6	16	12	6	10	237	∞	1	6	18	255		
564	564 KANUIKAPONO-PCS	18	16	14	19	18	14	15	7	11	9	2	m	∞	151	7	m	1	9	157		
565	565 KAWAIKINI-PCS	20	13	20	6	11	16	00	'n	4	9	2	m	m	120	2	1	1	4	124		
549	KE ANA LA'AHANA-PCS								80	11	80	9	2	2	43		4	7	11	54		
556	KE KULA NIIHAU KEKAHA-PC	2	7	2	н	m	2	æ	2	4	m	m	2	1	36			2	2	38		
547	KE KULA O KAMAKAU LAB-PI	27	18	16	16	10	∞	3	10	15	7	9	e	4	138					138		18
554	KIHEI PC SCHOOL-PCS	11	6	10	00	11	53	20	29	98	9/	65	99	20	552	7	9	11	24	276		
266		19	39	21	26	22	20	23	70	13					203	9	9		12	215		
557	KUA O KA LA-PCS	16	21	23	21	28	13	21	21	27	15	19	14	10	249	9	00	16	30	279		
411	KUALAPUU	49	43	39	49	44	40	51							315	21			21	336		14
	LANIKAI-PCS	65	45	46	49	43	42	46							336	16			16	352		
377	LAUPAHOEHOE COMMUNIT	53	17	80	50	18	14	6	18	2	15	10	00	9	177	15	9	6	34	211	2	
544	MYRON THOMPSON ACAD-F	70	69	20	22	47	32	25	32	56	32	21	35	34	523	1		1	2	525		
263	NAWAHI IKI LAB-PCS	20	37	42	33	33	16	20	18	19					268	3	2		Ŋ	273		
267	SEEQS						-	33	21						54	2	7		6	63		
260	VOLCANO SCH OF A&S-PCS	16	16	31	17	14	18	14	17	15					158	20	10		30	188		
541	VOYAGER-PCS	38	41	39	38	35	18	20	15	80					252	24	80		32	284		
149	149 WAIALAE-PCS	88	98	82	9/	78	63								473	28			28	501		
394	394 WAIMEA MID-PCCS							92	28	74					250	13	21		34	284		
398	398 WATERS OF LIFE-PCS	21	17	13	10	15	12	14							102	00			œ	110		
399	399 WEST HI EXPLOR ACAD-PCS							23	30	27	8	36	32	23	217	e-1	Ŋ	#	17	234		
Charte		000	040	200	-	000	-		-								1 4					



2008-2009 Catalog

HAWAI'I COMMUNITY COLLEGE

200 West Kāwili Street Hilo, HI 96720-4091

INFORMATION CENTER

Building 387, Manono Campus Phone: (808) 974-7611 Fax: (808) 974-7692 TTY: (808) 933-0702

ADMISSIONS OFFICE

Building 379, Manono Campus Phone: (808) 974-7661 Fax: (808) 974-7692

RECORDS OFFICE

Building 379, Manono Campus Phone: (808) 974-7662 Fax: (808) 974-7692

UNIVERSITY OF HAWAI'I CENTER AT WEST HAWAI'I

81-964 Haleki'i St. Kealakekua, HI 96750 Phone: (808) 322-4850 TTY: (808) 322-4856 Fax: (808) 322-4855

COLLEGE WEB SITE

www.hawaii.hawaii.edu

Disclaimer

This catalog provides general information about Hawai'i Community College, its programs and services, and summarizes those major policies and procedures of relevance to the student. The information contained in this catalog is not necessarily complete. For further information, students should consult with the appropriate unit. This catalog was prepared to provide information and does not constitute a contract. The College reserves the right to, without prior notice, change or delete, supplement or otherwise amend at any time the information, requirements, and policies contained in this catalog or other documents.

Academic Calendar 2008-2009

Spring 2009 Semester Calendar

Aug 15 (F)	Last day for International Students (living abroad) to submit complete Spring 2009 application
Oct 31 (F)	Last day for International Students (in the US with F-1 Visa) to submit complete Spring 2009 application
ГВА	Payment of UH System Tuition/Fees due by 4:00 pm if you early registered
	(You may pay Tuition/Fees online by 7:00 pm through MyUH Portal)
Dec 3 (W)	Last day to submit completed applications for Spring 2009 Semester
an 6-7 (T-W)	Regular Registration (New, Returning, Continuing, and Transfer Students)
an 12 (M)	First day of Instruction
an 12-16 (M-F)	Registration changes (Adds/Drops) (In-person anytime: \$5.00 fee, Online until Jan 16: no charge)
,	NOTE: A \$30.00 Late Registration fee will be charged for new registrations on or after the first day of
	instruction. Full Tuition Payment is due by 4:00pm on the day you register
an 16 (F)	Last day to officially withdraw without owing tuition. (If you register and decide to not attend, you must
· /	officially withdraw by this date. Afterwards, students with unpaid balances will be obligated to pay.)
an 16 (F)	Last day to receive 100% Tuition Refund for withdrawal from semester-length classes
an 16 (F)	Last day to receive Fees Refund for withdrawal from semester-length or partial-semester classes
an 16 (F)	Last day to Add semester-length classes/Last day to Late Register
an 19 (M)	Martin Luther King, Jr. Day (Holiday)
an 30 (F)	Last day to receive 50% Tuition Refund for withdrawal from semester-length classes
(- /	NOTE: You may withdraw online from semester-length classes through Sunday, Feb 1 provided you
	have at least one class remaining this semester
an 30 (F)	Last day to Withdraw from classes without a "W"
	NOTE: You may withdraw online from semester-length classes through Sunday, Feb 1 provided you
	have at least one class remaining this semester
an 30 (F)	Financial Aid census date
eb 16 (M)	Presidents' Day (Holiday)
far 2 (M)	"I" removal deadline: Student to Instructor
Mar 6 (F)	Non-Instructional Day
Mar 13 (F)	Last day to apply for Spring Semester Graduation
Mar 20 (F)	Financial Aid census date
Mar 20 (F)	Last day to submit Credit by Exam results to A&R/WHSS Office
Mar 20 (F)	Last day to Withdraw from classes with a "W" (for semester-length classes)
Mar 20 (F)	"I" removal deadline: Instructor to A&R/WHSS Office
Mar 20 (F)	Last day to submit application to Audit classes
Mar 20 (F)	Last day to exercise CR/NC
Mar 23-27 (M-F)	Spring Recess (No School)
Mar 26 (W)	Kūhiō Day (Holiday)
Apr 3 (F)	Last day to apply for Spring Semester Graduation
Apr 10 (F)	Good Friday (Holiday)
Apr 15 (W)	Last day for International Students (living abroad) to submit complete Fall 2009 application
Apr TBA	Fall 2009 Early Registration for continuing students. NOTE: Information for Tuition and
ipi ibii	Fees Payment will be provided with registration information.
May 6 (W)	Last day to submit Complete Withdrawal form. (Dropping you from ALL your HawCC Spring classes)
viay o (vv)	NOTE: If you are enrolled in part-term class(es), the Complete Withdrawal must be done before any
May 6 (W)	Last day of Instruction
лау б (үү) Лау 7 (R)	Writing Final Exams
•	Final Exams for classes that met on Fridays only throughout the semester
May 8 (F) May 11-14 (M-R)	Final Examinations
	class is completed. Last day of Instruction Writing Final Exams Final Exams for classes that met on Fridays only throughout the semester Final Examinations Hawai'i Community College Commencement - Hilo Hawai'i Community College Commencement - West Hawai'i
May 15 (F) May 16 (S)	Hawai'i Community College Commencement - West Hawai'i
May 18 (M)	Spring semester ends; Instructors must submit grades by 12:00 noon
May 31 (U)	Last day for International Students (in the US with F-1 Visa) to submit complete Fall 2009 application
	() () () () () () () () () ()
	notes Thursday.
	denotes Admissions & Records Office (Hilo)

'WHSS' denotes West Hawai'i Student Services Office (WH)

Academic Calendar subject to change.

Division of Student Affairs
Office of the Registrar



Post-it* Fax Note 7671	Date 10 8 3 # of pages
TODY. Henry Lee Loy	From UH HID
Co./Dept.	co. office of the Registrar
Phone # 969- 2011	Phone #(803) 974-7322
Fax # 949-3480	Fax # (808) 933-0862

October 18, 2013

To Whom It May Concern:

This is to certify that the Spring 2009 term began on January 12, 2009 and ended on May 15, 2009.

Please feel free to contact the Office of the Registrar directly at (808) 974-7322, if you have any questions.

espectfully,

Cathy A. Travis University Registrar



Page No. 003211

Kamehameha Schools Hawai'i 2008-2009 School Year Calendar

To a set	_		of Females and Street,			200
Teachers:	(days)	Elementary & Middle (Tri	mester)	High School (Quar	terly)
Students:	(ES days) MS days) HS days)	1st Trimester: 2nd Trimester: 3rd Trimester:	days days days	1st Quarter: 2nd Quarter: 3rd Quarter: 4th Quarter:	days days days days

Students:				(MS	days days days	;)	2nd Trimester: days 2nd 3rd Trimester: days 3rd	Qua Qua Qua Qua
July	Su 20	M 0 21	T 1 22	W		F	S		
ouly	2						26		
August		3 4	ļ 5	5 6	7	1 8	9		
	10	0 11	12	13	14	15	16	1	
	17 24 31	4 25							
September	7	1 7 8				5 12	6 13		
	14	1 15	16	17	18	19	20		
	21 28				25	26	27		
October				1	2	3	4		
	12				9 16	10 17	11 18	Oct 6-10 Fall Break	
	19	20	21	22	23	24	25		
November	26	5 27	28	29	30	31	1	,	
	9				6 13	7 14	8 15	Nov 11 Veterans' Day - Holiday	
	16 23				20 27	21 28	22 29	•	
_	30		20	20	21	20	29	Nov 27-28 Thanksgiving Holiday	
December	7	1 ' 8		3 10	4 11	5 12	6 13		
	14	15	16	17	18	19	20	Dec. 19 Founder's Day - 1/2 day	
	21 28			24 31	25	26	27	Dec. 22-Jan. 2 Christmas Break	
January					1	2	3		
	4 11		6 13	7 14	8 15	9 16	10 17		
	18		20	21	22	23	24	Jan. 19 Martin Luther King Day - holiday	
February	25 1		27 3	28 4	29 5	30 6	31 7		
	8 15		10 17	11	12	13	14		
7.	22	23	24	18 25	19 26	20 27	21 28		
March	1 8	2 9	3 10	4 11	5 12	6 13	7		
	15	16	17	18	19	20	21		
	22 29	23 30	24 31	25	26	27	28	March 23-April 3 Spring Pro-L	
April				1	2	3	4	March 23-April 3 Spring Break -	
	5 12	6 13	7 14	8 15	9 16	10 17	11 18	April 10 Good Friday - Holiday	
	19	20	21	22	23	24	25		
Vlay :	26	27	28	29	30	1	2		
	3	4	5	6	7	8	9		
	10 17	11 18	12 19	13 20	14 21 (15 22	16 23	May 22 Last Day K-12	
	24	25	26	27	28	29	30	May 23 Baccalaureate-HM tea-Graduation	
une	31	1	2	3	4	5	6	May 26 Last Day for faculty	
	7	8	9	10	11	12	13		
	14 21	15 22	16 23	17 24	18 25	19 26	20		
uly	28	29	30	1	2				
<u>-</u>	5	6	7	8	2 9	3 10	11		
	12 19	13 20	14 21	15 22	16 23	17 24	18 25		
	26	27	28	29	30	31			
August	2	3	4	5	6	7	1		

DATE:

About

SPP No. 12-000138 Page No. 003212

THE UNIVERSITY OF HAWAI'I SYSTEM LIKE NO PLACE ELSE ON EARTH

Directory Calendar

SEARCH

Prospective Students | Current Students | Alumni & Friends | Faculty & Staff | News Media

INSTITUTIONAL **RESEARCH & ANALYSIS OFFICE**

Back to

Academic Planning and Policy

DATA

Data Access Portal

IRO Dynamic Reporting

ODS Data Dictionary

Discoverer Reports

MAPS / INSTITUTION REPORTS

Academic Crossover

Courses

Curriculum

Enrollment

Faculty/Staff

Finance

Graduation and Persistence

Peer and Benchmark Groups

Planning Information

Projections

Students

by Academic Year

MAPS Resources

Latest Reports (last 90)

Discontinued MAPS reports



MAPS RSS Feed

Other Reports

Ad-hoc Studies / Special / Other Student Right-To-Know (SRTK)

REQUEST FORMS

Code Request Form for Academic **Program Codes**

Code Request Guide

ODS Access Request Form

REFERENCE INFORMATION

SWIR @UH Bwiki

Race/Ethnicity Collection and Reporting Changes

INSTITUTIONAL RESEARCH & ANALYSIS OFFICE

UNIVERSITY of HAWAI'I SYSTEM - ACADEMIC PLANNING AND POLICY

Whats New:

- ANNOUNCEMENT:
- Effective immediately, IRO's new email address will be iro-mail@lists.hawaii.edu. The current email address will be inactivated by March 10, 2010. Please update your email addresses to reflect the change.
- Changes to Race/Ethnicity Collection and Reporting View Details...

View by Headcount | View by SSH

Fall 2013 CENSUS Headcount:

	Fali 2013	%С	Fall 2012	%С	Fail 2011	%С	Fall 2010	%С	Fall 2009
UH	58,941	-2.2	60,295	-0.1	60,330	0.4	60,090	3.7	57,945
Mānoa	20,006	-2.1	20,426	-0.0	20,429	0.5	20,337	-0.5	20,435
Hilo	4,043	-2.7	4,157	0.4	4,139	1.5	4,079	2.6	3,974
West O'ahu	2,361	18.2	1,997	20.2	1,662	13.0	1,471	10.4	1,333
UHCC	32,531	-3.5	33,715	-1.1	34,100	-0.3	34,203	6.2	32,203
Hawai'i Community College	3,406	-7.0	3,663	-6.5	3,917	2.7	3,815	16.5	3,275
Honolulu Community College	4,368	-4.7	4,582	-0.4	4,600	-2.6	4,725	3.5	4,567
Kapi'olani Community College	8,376	-5.8	8,892	-1.5	9,023	-3.0	9,301	2.2	9,102
Kaua'i Community College	1,530	2.3	1,495	4.3	1,433	0.4	1,428	6.2	1,345
Leeward Community College	7,976	0.2	7,960	0.8	7,895	-0.6	7,942	6.1	7,484
Maui College	4,076	-7.0	4,382	-3.2	4,527	3.7	4,367	6.1	4,114
Windward Community College	2,799	2.1	2,741	1.3	2,705	3.0	2,625	13.3	2,316

View Fall 10-year historical headcount headcount and SSH taken (Fall 2003 - 2013) View Spring 10-year historical headcount and SSH taken (Spring 2003 - 2013)

Contact Us:

University of Hawai'i Institutional Research Office Sinclair Annex 2, Room 4 1633 Bachman Place Honolulu, Hawai'i 96822-2301

iro-mail@lists.hawaii.edu 808.956.7532 (Office) 808.956.9870 (Fax)

Mon - Fri (excluding holidays) 7:45 a.m. to 4:30 p.m. HST

Quick Links:

- Report Grid
- Request Forms
- IRO Freeze Information
- IRO Dynamic Reporting ODS Data Dictionary

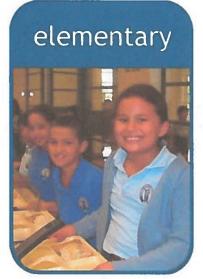
Other IR Offices

- UH Mānoa
- **UH Hilo**
- **UH West O'ahu**
- Hawaii CC
- Honolulu CC
- Kapi'olani CC Kaua'i CC
- Leeward CC
- Maui CC
- Windward CC

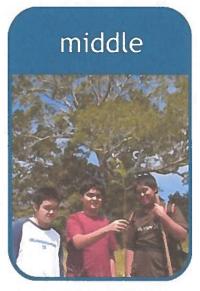
KAMEHAMEHA SCHOOLS

Quick Links to KS System

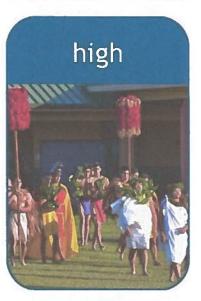




Elementary School Quicklinks



Middle School Quicklinks

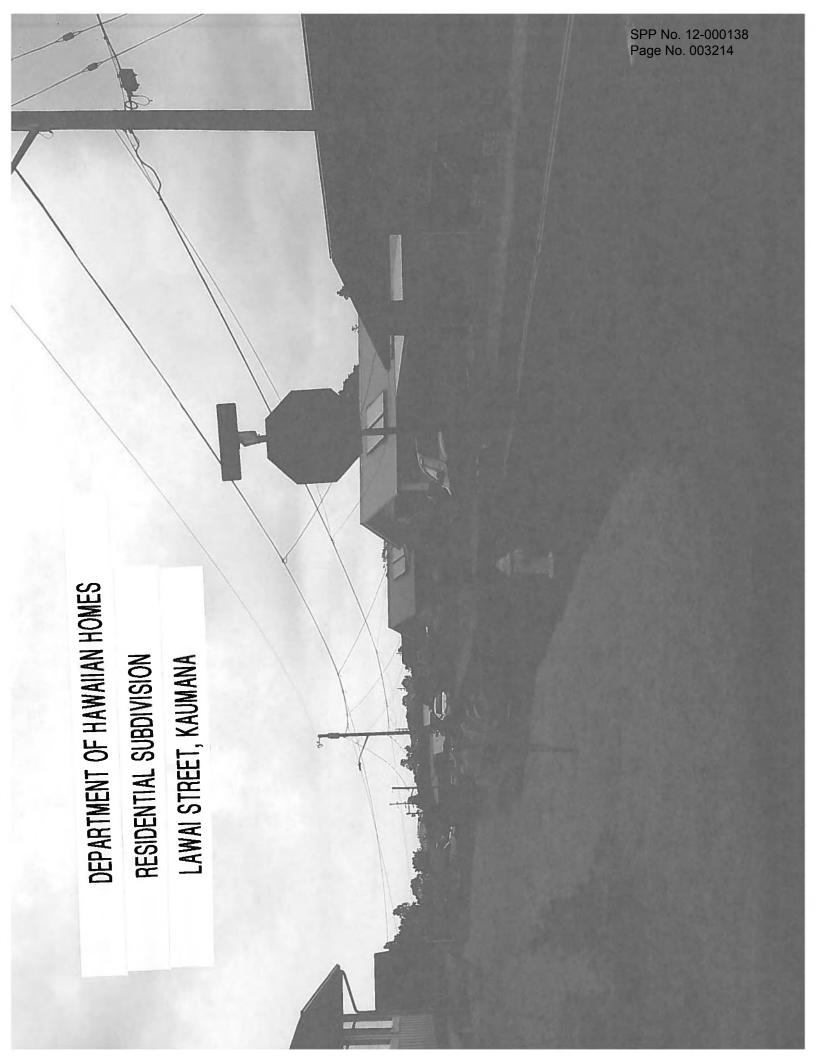


High School Quicklinks

Hawai`i Campus

The 300-acre Kamehameha Schools Hawai`i campus is located in Kea`au, eight miles south of Hilo in a remote, heavily forested and beautiful area. Founded in 1996, the school currently enrolls 1,120 K-12 students. The curriculum is directed towards preparing students for success in post-high school endeavors and a rewarding and productive life.

The overall program is college preparatory with significant enhancements in career and vocational opportunities. Junior and senior students participate in a career academy program which offers skill development and career orientation in the following fields: Arts and Communication; Business and Leadership; Engineering and Design; Health and Wellness; and Science and Natural Resources.





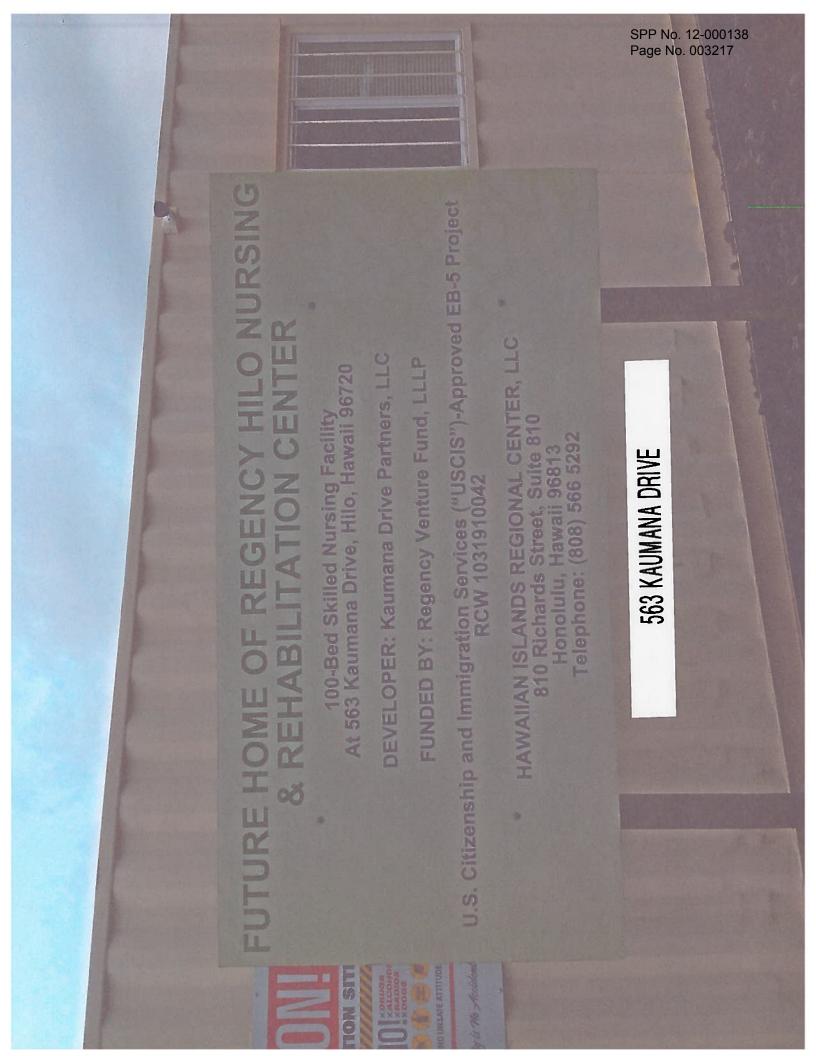
PROPOSED CONSOLIDATION OF LOTS 1, 2, & 3 AND RE-SUBDIVISION INTO LOTS 1 TO 23, INCLUSIVE AND ROADWAY LOTS PROPOSED # OF LOTS: TWENTY-THREE(23) LOTS AND THREE (3) ROADWAY LOTS

SIZE OF PROPERTY: 48.413 ACRES

TAX MAP KEY NO.: (3) 2-3-044:009; PUNAHOA 1st & PONAHAWI, SOUTH HILO, ISLAND AND COUNTY OF HAWAII.

COUNTY OF HAWAII
PLANNING DEPARTMENT
101 PAUAHI STREET, SUITE 3
HILO, HAWAII 96720
PHONE: (808) 961-8288

MOHOULI STREET EXTENSION & KAUMANA DRIVE



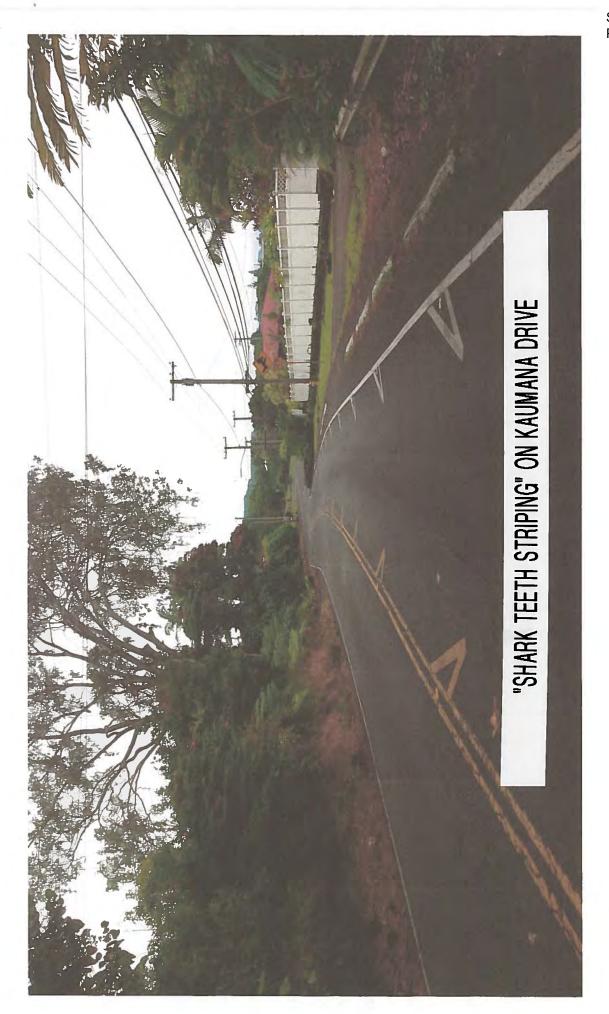
TRAFFIC ACCIDENTS

The below information was obtained from the Hawaii Police Department Records Management System (RMS), the Hawaii Police Department does not keep records of a specific street or address, but does document reports by Post/Beat. The below information relative to traffic accidents was obtained by searching Beat 147 for the periods indicated below. Beat 147 cover Kaumana Drive and areas surrounding Edita Street. The mapping location of beat 147 is as follows:

Beat 147 – From the intersection of Waiānuenue Avenue and Puu Hina Street, thence in a southerly direction along Puu Hina Street to Kaūmana Drive, thence in a southwesterly direction on Kaūmana Drive to Omao Street, thence continuing southeast along Omao Street extended to the center of Alenaio Stream, thence in a westerly direction along Alenaio Stream to a point which intersects with a line drawn from Mohouli Street extended, thence in a straight line in a westerly direction to a point intersecting with a line from Akolea Road extended, thence in a northerly direction along that line to Akolea Road encompassing all properties along both sides of Akolea Road to the intersection with Waiānuenue Avenue and thence in an easterly direction along Waiānuenue Avenue to the point of origin.

In Records Management System, under Post/Beat 147, for the dates of 10/01-2011 to 10/01/2012, reported traffic accidents totaled 11.

In Records Management System, under Post/Beat 147, for the dates of <u>10/01-2012</u> to <u>10/01/2013</u>, reported traffic accidents totaled 18.



Kaumana Drive

striping added to roadway fronting Kaumana Elementary School Since 2009 Traffic Analysis Report completed, shark teeth (displayed earlier) and west of Terrace Drive.

Testimony of Terence Yoshioka

1572 Melemanu Street Hilo, Hawaii 96720

Madame Hearing Officer and members of the Windward Planning Commission, my name is Terence Yoshioka and I am testifying on my own behalf as a resident of the Pacific Plantation Subdivision.

In the course of my research on Special Permits, I came across a Hawaii Supreme Court case which, I believe, will offer you assistance in reaching your decision on their application.

The case is Neighborhood Board v. State Land Use Commission, 64 Haw. 265 (1982). In this action, the Hawaii Supreme Court found that a Special Permit for the development of a 103 acre recreational theme park in an agricultural district "frustrates the objectives and effectiveness of Hawaii's land use scheme." (Supra, p. 272) The Hawaii Supreme Court further stated that "[w]e do not believe the legislature envisioned the special use technique to be used as a method of circumventing district boundary amendment procedures to allow the ad hoc infusion of major urban uses into agricultural districts." (Supra, p. 273)

In discussing the Special Permit process, the Hawaii Supreme Court found that "[i]ts essential purpose, as explained by the Attorney General, is to provide landowners relief in exceptional situations where the use desired would not change the essential character of the district nor be inconsistent therewith." (Supra, p. 271)

In essence, the use of the Special Permit process to effectuate what amounts to be district boundary amendment would frustrate the effectiveness and objectives of HRS. Chapter 205 rather than to promote them.

If this Commission follows the principles enunciated in the <u>Neighborhood Board</u>
decision, I believe you will conclude that the construction of the school will be contrary to Rule

6-3(b)(5)(f) of the Planning Commission Rules of Practice and Procedure as it will substantially alter or change the essential character of the land and the present use thereby requiring a district boundary amendment rather than a Special Permit.

I, therefore, urge you to rule accordingly and I thank you for your time.

TESTIMONY

Hello, my name is Jan Yokoyama. I live at 1300 Kaumana Dr. and have lived there for over 40 years. I am opposed to Connections school being built due to traffic and safety concerns. I recently did an informal traffic survey on Monday, October 14 from 7-8 a.m. I was parked at the mauka corner of Edita and Kaumana Dr. I counted 93 cars coming up pass me, 220 cars going down, and 57 cars either entering or leaving Edita St. This 57-car count is unduplicated, meaning if they passed me on Kaumana Dr., I didn't count them. The cars coming down Kaumana Dr. were whizzing pass me and alarmed me to the point that I called Lt. Darren Horio of Community Policing to schedule the speed trailer to be placed at the corner. Hopefully, this will slow them down. Also, some of the cars coming out of Edita St. were not coming to a complete stop at the stop sign. I witnessed a near rear end collision of a car leaving Edita St. and coming upon a car leaving the driveway on Kaumana Dr. Edita St. and Kaumana Dr. are not built to handle any more traffic that the Connections school will bring.

TESTIMONY

Melvin Yokota 1358 Mele Manu Street Apt A Hilo, Hawaii 96720

Madame Hearing Officer:

I humbly ask that the Connections Charter School application for a special permit be denied. The information presented to date clearly shows that the Environmental Assessment is incomplete and inadequately addresses the plan to achieve full buildout of the campus.

The Community has expressed concerns about traffic, water, and public safety. Yet, no solutions have been provided. Mr Hong has asked a number of community leaders if they would be willing to assist in developing mitigation measures for those concerns. While I acknowledged that I would be willing to provide input, my response was not a tacit approval of this special permit application. If they had good solutions, there would be no need to ask for help in development of mitigation measures.

Mr. Hong has been straightforward in asking the Connections Consultants about how this site was selected. The answer is that the site was preselected, and the Consultants had no input into the site selection process.

Mr. Hong induced his professional witnesses to acknowledge that there has not been a complete planning process done to do a conceptual worst case risk analysis to evaluate the water and traffic concerns that would result from a full buildout of the Campus. They said the campus would be phased. They have not developed answers for the what ifs such as what happens if there is insufficient water? Is a partial campus acceptable? If a well has to be developed, I see no plans for a well site, nor is there documentation as to what the DWS would require of Connections if they decide to construct the well site. Are they prepared to spend millions drilling the well, constructing pipelines, booster pumps, and reservoirs? It appears that this option has not been worked into their project funding scenarios.

Without complete answers as to whether the full buildout can be achieved, the special permit application should be denied. The chances of success for this project is marginal as it now stands.

October 21, 2013

Contested Case Hearing

RE: Special Use Permit Application - Connections Charter School

The State Department of Land and Natural Resources granted a lease to Connections Charter School to build a proposed Pre-K through 12th grade campus. This lease was approved based on the school's ability to obtain all required approvals and permits. This includes permission from the County of Hawaii, via the Windward Planning Commission, to use property designated for agricultural use for non-agricultural purposes. While it would be possible for an educational facility to be built on the proposed site, we must examine all of the boundaries to determine if an educational facility would be an appropriate for the designated parcel.

The County of Hawaii's General Plan outlines the framework for the development of Public Facilities such as schools, emergency services, health and sanitation, and government operations. The development of public facilities should be coordinated to effectively service community needs and maximize the effect of the public dollar.

An educational facility, on the subject property does not follow the guidelines set forth in the County of Hawaii's General Plan.

 The Plan outlines policies, standards and districts for planning and developing educational facilities. Section 10.2.2(d) of the General Plan states that we should "Encourage implementation of the Department of Education's 'Educational Specifications and Standards for Facilities'" (Ed Specs). For new communities, sufficient acreage in accordance with the State's Ed Specs (10.2.3(a)), must be reserved for educational facilities.

Because the upper portion of the subject parcel has been deemed unusable due to the Kaumana Cave system, the lower parcel (approximately 37 acres) does not meet the State's specification for a K-12 campus.

There are two public school complexes in the district of South Hilo. The
Hilo High School complex contains nine (9) schools and serves about
5,576 students. The Waiakea High School complex is comprised of four
(4) schools and serves about 4,763 students. There is a noted
overcrowding of student population at the two Waiakea Elementary

schools, which has resulted in the need to accommodate 6th grade students at the Waiakea Intermediate school campus.

The proposed site for the Connections Charter School is within the Hilo High School complex. When considering the student population, the number of schools in the Hilo Complex, and the projection of resident population by district, an additional school within the Hilo High School complex does not follow the goals and action plan set forth in the County's General Plan.

The Planning Commission, on behalf of the County, has a duty to follow the outline for development set forth in the General Plan. If followed, the development of an educational facility would not be appropriate use for this parcel as an additional school in Kaumana does not fulfill a need for the community, and based on public testimony and petitions submitted, does not have the support of the community.

The State approved a lease with Connections Charter School without first requiring the school to obtain all required approvals – including the approval of a special permit from the County. Because of this, we are in a situation where we are working backwards and trying to fit a square peg into a round hole. The State's approval of the lease should not dictate the appropriateness of constructing a school on the proposed site. The County has the authority to work within its own guidelines for land use matters and should do so independently and in accordance with established rules and guidelines developed in the best interest of the people and the communities of Hawaii County.

Pertinent sections of the County of Hawaii General Plan and Ed Specs are attached for your reference.

Thank you for your time.

Lee Botelho

COUNTY OF HAWAI'I GENERAL PLAN



February 2005
Pursuant Ord. No. 05-025
(Amended December 2006 by Ord. No. 06-153, May 2007 by Ord. No. 07-070,
December 2009 by Ord. No. 09-150 and 09-161, and June 2012 by Ord. No. 12-089)

Supp. 1 (Ord. No. 06-153)



1.1 PURPOSE OF THE GENERAL PLAN

The County of Hawaii's General Plan is the policy document for the long range comprehensive development of the island of Hawaii. The purposes of the General Plan are to:

- Guide the pattern of future development in this County based on long-term goals:
- Identify the visions, values, and priorities important to the people of this County;
- Provide the framework for regulatory decisions, capital improvement priorities, acquisition strategies, and other pertinent government programs within the County organization and coordinated with State and Federal programs.
- Improve the physical environment of the County as a setting for human activities; to make it more functional, beautiful, healthful, interesting, and efficient.
- Promote and safeguard the public interest and the interest of the County as a whole.
- Facilitate the democratic determination of community policies concerning the utilization of its natural, man-made, and human resources.
- Effect political and technical coordination in community improvement and development.
- Inject long-range considerations into the determination of short-range actions and implementation.

1.2 HISTORY OF THE PLAN

General Plan studies in the County of Havaii were initiated in the late 1950's and were limited to particular regions of the island such as the Hilo. Kona, Kohala, Hamakua, and Puna Districts. As such, these initial general plans lacked a comprehensive, coordinated, and integrated overview of the entire County. The first of these studies, "A Plan for Kona", was completed in 1960 and encompassed the districts of North and South Kona. "A Plan for the Metropolitan Area of Hilo" was completed in 1961 for the districts of South Hilo and Puna. "The Kohala-Hamakua Region General Plan" was completed in 1963 and covered part of the district of North Kona and the districts of North and South Kohala, Hamakua and North Hilo. These regional plans were adopted by Ordinance No. 317 in July 1965, as the General Plan for the County. The district of Ka'u was the only area in the County not covered by this plan.

§1.4: The Current General Plan Comprehensive Review Program

The General Plan program is structured to investigate, analyze, and evaluate concurrently all aspects of the County under a common or standard methodology. The preparation of the General Plan involves the process of planning and provides the opportunity to broaden the base of citizen participation, review, and understanding.

The 1971 General Plan required five and ten year comprehensive reviews and updates. The reviews and updates are intended to maintain the dynamism and flexibility of the General Plan and to accommodate major changes and trends that may occur within the County. The County initiated a review of the Land Use Pattern Allocation Guide Map in 1978 that led to several changes to the map. Other changes included the addition of an Energy element and amendments to procedures for the comprehensive reviews and proposals for specific amendments to the General Plan.

The first comprehensive ten-year review of the General Plan was initiated by the Planning Department in the mid-1980's and completed with the adoption of Ordinance No. 89 142 by the Hawaii County Council on November 14, 1989. This comprehensive revision program resulted in various revisions to supporting data as well as to the individual study elements and Land Use Pattern Allocation Guide and Facilities maps.

1.4 THE CURRENT GENERAL PLAN COMPREHENSIVE REVIEW PRO-

The planning process utilized for the current comprehensive review and revision of the General Plan included an assessment of the General Plan elements relative to new data, laws, and methods of analysis. Each study element was then analyzed and evaluated in relation to all other elements, County and district goals, and the land use pattern. Potentially, a change in one element could affect other elements as well as the land use pattern. Similarly, a change in County and district goals could potentially be reflected in all elements and in the land use pattern.

The comprehensive review of the General Plan gathered and assessed the data related to each element to identify present conditions and problems and future possibilities. The study elements utilized in the General Plan included the following:

<u>Economic</u>: Describes the human, capital, and natural resources used to produce goods and services for consumption in local and overseas markets.

<u>Energy</u>: Describes the energy situation for the County and explains the incentive for promoting energy conservation and the development of indigenous energy resources including solar, wind, hydrologic, and geothermal.

Environmental Quality: Identifies the factors affecting the island's environmental quality and describes the precautions and safeguards necessary to maintain and im-

§1.4: The Current General Plan Comprehensive Review Program

prove the quality of the environment for the physical, psychological, and social well-being of residents and visitors.

<u>Flooding and Other Natural Hazards</u>: Pertains to the conservation and protection of life, improvements, and natural resources from excess runoff due to either man-made improvements, natural causes, or inundation from tsunamis and heavy seas.

Historic Sites: Identifies sites and buildings of historical and cultural importance.

<u>Natural Beauty</u>: Identifies areas of unique natural beauty that are a principle asset of the island, and encourages programs for their conservation, preservation, and integration with other elements.

<u>Natural Resources and Shoreline</u>: Describes the valuable and often irreplaceable natural assets of the island and encourages programs for their proper management and protection.

<u>Housing</u>: Addresses the requirements for and the quantity, quality, and distribution of housing units in the County. This element also addresses critical housing problems of the County.

<u>Public Facilities</u>: Pertains to the location and distribution of facilities for education, public safety, social, health services and other government operations.

<u>Public Utilities</u>: Describes the distribution of power, light, and water: the collection and disposal of solid waste and sewage; and the provision of other communication utilities that are essential to the efficient functioning of a community.

<u>Recreation</u>: Examines the requirements of the County for active and passive outdoor activities, cultural events and pastimes, as well as attendant facilities and areas.

<u>Transportation</u>: Describes the requirements for air and water transport terminal facilities linking the County with the rest of the State and overseas areas, and the island's network of streets, highways, and roads.

<u>Land Use</u>: Studies the relationship of human activities to the uses of land and the location, spatial relationship, and topography. This element is subdivided into the following designations according to uses:

<u>Agricultural</u>: Encompasses all types of agricultural endeavors and specified industrial uses, residential and ancillary community and public and accessory uses.

<u>Commercial</u>: Comprised of industries in the retail trade and service categories and certain non-noxious enterprises from other industrial classifications.

§1.4: The Current General Plan Comprehensive Review Program

<u>Industrial</u>: Includes uses that may not be compatible with commercial areas (such as manufacturing and processing, wholesaling, large storage and transportation facilities, power plants, and government baseyards) as well as other industrial, manufacturing or wholesaling uses.

<u>Multiple Residential</u>: Includes duplexes, apartments, town houses and similar types of residential structures and ancillary community and public uses.

<u>Open Space:</u> Includes conservation lands, forest and water reserves, natural and scientific preserves, and potential natural hazard areas.

Public Lands: Includes Federal. State, County, and University owned lands.

<u>Resort</u>: Consists primarily of areas with basic amenities and attributes that attract developments of visitor accommodations and related facilities.

<u>Single-Family Residential</u>: Consists of single-family detached houses and ancillary community and public uses.

Each study element has been divided into sections described below.

<u>Introduction and Analysis</u>: Describes the element and summarizes findings, County-wide characteristics and features, trends, changes, and problems, as well as the outlook and opportunities for the immediate and distant future. The analysis also addresses the element's interrelationships with other elements.

<u>Goals</u>: Indicates the desired long-range directions and situations enunciated by community groups, officially expressed in the past or implied in governmental programs. Provides a cohesive and comprehensive framework for the coordination of social and economic programs and governmental effort.

<u>Policies</u>: States the methods or strategies that should be undertaken to attain the stated goals. These are action and program oriented and involve the formulation of standard procedures, program evaluation and review, rules and regulations, ordinances and laws, budgeting, specific projects, etc.

<u>Standards</u>: Concerned with qualitative and quantitative criteria by which situations can be evaluated or benchmarks established. Standards are basically "yardsticks" or indicators, minimum conditions or levels of quality necessary for the well-being of the public.

<u>Courses of Action</u>: Many study elements require a more precise and definitive discussion of community concerns and problems. These sections attempt to identify specific alternatives on a community, district or regional basis.

§1.5: County Profile

As an aid to the understanding of the inter-relationship of the components of the General Plan, the separate elements of the General Plan may also be described as follows:

- The Introduction and the Economic element describe the foundations and factors that generate population and economic opportunities and growth on the island of Hawaii.
- The Environmental Quality, Energy, Flooding and Other Natural Hazards, Historic Sites. Natural Beauty, and the Natural Resources and Shoreline elements describe those natural and social conditions that influence and set parameters for development opportunities on the island.
- The Housing, Public Facilities, Public Utilities, Recreation, and Transportation elements describe those services, facilities, and improvements necessary to accommodate the growth of population and support the economy.
- The Land Use element describes the distribution, pattern, and location of the various activities addressed in the other elements of the General Plan.

1.5 COUNTY PROFILE

The County of Hawaii encompasses the island of Hawaii, which is the southeasternmost and largest island of the Hawaiian archipelago. The land area of the County is approximately twice the combined land area of all the other islands of the State.

The island of Hawaii has a diverse climate, topography and scenic beauty. Environments include dense tropical forests; majestic snowcapped mountains; active volcanoes; black, white, and green sand beaches; deeply eroded valleys; and large expanses of grazing land. Each district provides a variety of settings for human activity, land and resource utilization, or wilderness areas of minimal human intrusion.

The County of Hawaii has expanded into new fields of industry such as astronomy. high technology, renewable energy, health and wellness, agricultural and eco-tourism, diversified agriculture and aquaculture. The County's continuing support of research and development in these emerging fields will ensure a promising future for the island's economy and its residents. Specific examples include the establishment of the Agricultural Research Center of the Pacific, conversion of the old sewer treatment plant near Puhi Bay in Hilo to an aquaculture facility, and the construction of an agricultural water system in Ka'u.

The County's overall economic outlook remains mixed due to the County's dependence on the condition of the State's economy. Since 1990, the State's economy has been in a period of decline. While there are opportunities for expansion into new and existing industries, external factors such as the world economy may have an impact on the County's future economy.

§1.7: Employment And Population Projections

There is tremendous potential for expansion in other industries such as aquaculture, astronomy, renewable energy, research and development, and special events such as cultural festivals and athletic events.

1.7 EMPLOYMENT AND POPULATION PROJECTIONS

The County's General Plan is a policy document that sets forth the direction for future activities on the island of Hawaii for the next few decades. In order to plan for the future, it is necessary to understand both historical and future trends related to the number of residents and visitors to be served and the kinds of facilities and resources needed to fulfill their needs.

In traditional public planning efforts, entire plans have been based on the achievement of the projected levels of population. In many of these cases, where population numbers are goals, plans become obsolete when the projected number of residents is not achieved or is surpassed. Thus, the population projections presented within the General Plan are not intended to be used as goals. Rather, this General Plan effort uses the projected levels of population as a guideline in land use planning. The projections represent what could reasonably be expected to occur in the future. The goals, policies, standards, and recommendations of this plan are intended to be flexible enough to accommodate population levels below or above the projections stated in this section.

Employment and population projections for the County of Hawaii were developed through the analysis of relationships between economic activity, employment, and population. The analytical approach used entails the forecasting of employment in basic industries and the relationship that changes in employment have upon population.

Primary Income Generators are those industries that generate income from outside the County. They are assumed to be the foundation of the local economy and the key to the development of the island. Primary Income Generators include agriculture, tourism, the manufacturing of export products, and research and development. These Primary Income Generators, in turn. "drive" the secondary industries, or those enterprises that service the Primary Income Generators or the local population and includes wholesaling, retailing and services. The Primary Income Generators determine the long-run pattern of population and income growth for the County.

Three sets of projections were developed for the comprehensive review program. Series A. B. and C. The major variables in each of these projections were the rate of growth of the visitor industry, the construction of the proposed State prison, the expansion of the University of Hawaii at Hilo, and the utilization of a post-harvest treatment facility for export agricultural products. It should be emphasized that the projections are not statements of goals. The population projections, and the strength of the correlation between primary economic generators and population growth, must be viewed with caution. The 1989 General Plan contained a similar set of economic and popula-

§1.8: Population Distribution

1.8 POPULATION DISTRIBUTION

From the estimates of the islandwide resident population, other estimates have been made to project the distribution of population over the districts of the island. These are not intended to be included as population achievement levels for the districts, nor as firm statements or descriptions of future conditions. They are based on assumptions of potential employment growth rates described in the previous islandwide employment and population estimates, past district growth trends, and trends in the distribution of population on the island.

Table 1-9. District Resident Population Distribution, Year 2020

	Α	В	С
Puna	57,105	58,246	63,491
S. Hilo	48,815	49,791	54,274
N. Hilo	1,842	1,879	2,048
Hamakua	7.184	7,328	7,988
N. Kohala	11,053	11,273	12,289
S. Kohala	23,947	24,426	26,625
N. Kona	41,447	42,275	46,082
S. Kona	13,816	14,092	15,361
Ka'u	8,243	8,408	9,165
Total	213,452	217,718	237,323

Economic Assessment, PKF Hawaii, January 2000

PUBLIC FACILITIES

10.1 OVERVIEW

10.1.1 Introduction And Analysis

Public facilities are those service systems that are provided, staffed, and maintained by government to directly serve the residents of the County. Public facilities include the systems of schools, libraries, fire stations, police stations, detention and correctional facilities, refuse disposal areas, harbors, and airfields. (Harbors and airfields are further described under the Transportation Element)

These facilities are often located in larger towns or centrally situated areas that are in close proximity to the commercial, industrial and cultural activities of established communities.

The majority of public facilities that service the residents of this County are managed by the State and County. For example, the State operates the public school system, libraries, and the public hospitals. The County provides police and fire protection and solid waste disposal. Additionally, both the State and County maintain administrative offices on the island to serve the residents' needs.

It is necessary to carefully coordinate the provision of public facilities in order to use them most effectively and to maximize the effect of the public dollar. It is equally necessary to realize that the type, quality, capacity and location of facilities and services have a significant impact on the community, the people and the total environment.

10.1.2 Goal

(a) Encourage the provision of public facilities that effectively service community and visitor needs and seek ways of improving public service through better and more functional facilities in keeping with the environmental and aesthetic concerns of the community.

10.1.3 Policies

(a) Continue to seek ways of improving public service through the coordination of service and maximizing the use of personnel and facilities.

- **(b)** Coordinate with appropriate State agencies for the provision of public facilities to serve the needs of the community.
- (c) Develop short and long-range capital improvement programs and operating budgets for public facilities and services.
- (d) Develop and adopt an Impact Fees Ordinance.
- (e) Capital Improvement and Operating budgets shall reflect the goals and policies of the County General Plan.
- (f) Require a six-year, long-term, capital improvements budget by County Departments and agencies that shall be reviewed for consistency with the General Plan.

10.1.4 Standards

- (a) Standards have been established in each of the four major groupings of public facilities.
- **(b)** The various public facilities have been categorized into education, protective services, health and sanitation, and government operations.
- (c) The following are set forth for the overall provision and maintenance of public facilities in the County.

10.2 EDUCATION

10.2.1 Introduction and Analysis

There are 39 public schools in the County with a total enrollment of 27,557 students from kindergarten through the 12th grade. The schools range in size from 169 students at Haaheo to 2,180 students at Waiakea High School. There are 17 licensed private regular education schools serving a total of 2,216 students from kindergarten through the 12th grade. The number of students from kindergarten through the 12th grade on the island, public and private school complexes combined, total 30,209 or approximately 20 per cent of the total island population.

In 1999, the Legislature of the State of Hawaii created a new educational initiative with the passage of Act 62, SLH 1999 or "The New Century Charter Schools" law. Charter schools are more autonomous with greater flexibility in decision-making. Charter schools are excluded from many State laws and department rules and regulations. However, charter schools are public schools in that they receive public funds. These schools must still meet all applicable federal. State and County requirements and are not exempt from collective bargaining, discriminatory practice laws, health and safety laws and standards, and the implementation of the Hawaii content and performance standards.

§10.2.1: Introduction and Analysis

Each charter school is responsible for selecting their own sites. If a public school has space available, a charter school may seek to enter into an arrangement with the Department of Education for the use of a portion of the school's facilities. This law allows up to 25 charter schools to be established statewide. Thus far, charter certificates have been issued for five schools.

School complexes with limited enrollment have not always been able to maximize educational opportunities in comparison with the ability of larger facilities to provide a wider scope of educational opportunities. Some older schools lack adequate parking facilities and sufficient area for expansion and some have infrastructure and traffic problems.

The Hawaii Library District is comprised of a regional library in Hilo: six community libraries in Honokaa, Kapaau, Holualoa, Kailua-Kona, Kealakekua. and Naalehu (part-time); and six joint community-school libraries in Keaau. Mountain View, Pahoa, Pahala. Laupahoehoe and Waimea. Size is described by the number of volumes (books, periodicals, etc.) and range from 6,445 volumes at Holualoa to 208,065 volumes in Hilo.

Some library facilities will require improvements as the demand for learning and information increases. More up-to-date facilities are also required in some areas.

The University of Hawaii at Hilo (UHH), located in Hilo provides alternative higher educational opportunities within the University of Hawaii system through its variety of high quality certificate, baccalaureate, and masters degree programs.

The 1973 "University of Hawaii at Hilo Long Range Development Plan" was updated and revised in 1981 and again in 1996. The University of Hawaii at Hilo Long Range Development plan serves as a physical planning guide for the UHH campus. The Plan emphasizes the "spine" concept that organizes all campus structures along a main pedestrian accessway and assures that future development would continue in relation to the various existing structures. As such, new facilities would be developed towards Komohana Street. The University continues to lack adequate student and faculty housing.

Hawaii Community College provides access to higher education, and workforce training for the entire County. The College offers an extensive program of certificate and associate degree programs in technical fields as well as the first two years of a baccalaureate degree. The College also offers an extensive program of short-term training programs throughout the County. The community college serves the entire County with programs on site in the communities and utilizes distance education technologies.

The Long Range Development Plan for Hawaii Community College was approved by the Board of Regents in 1996 and calls for the construction of a new campus in Hilo mauka of Komohana Street. In West Hawaii, in addition to Hawaii Community College programs, the college is responsible for the University of Hawaii Center, through which it delivers baccalaureate and masters degree programs from other institutions in the University Center.

The Long Range Development Plan for the West Hawaii campus of the University of Hawaii was completed in 1998. The State is currently in the process of preparing an environmental impact statement for the initial phase of development of the new campus (University of Hawaii Center at West Hawaii) to be located on a 33-acre portion of a 500-acre State-owned parcel in Kalaoa, North Kona. The proposed campus, which will accommodate approximately 1,500 students upon completion, will be located mauka of the Queen Kaahumanu Highway and the Kona International Airport at Keahole.

10.2.2 Policies

Educational policies relate to the provision of facilities rather than programs, which are the province of the State. It is nevertheless recognized that the facilities and programs are the tools necessary to improve total educational service.

- (a) Encourage continuous joint pre-planning of schools with the Department of Education and the University of Hawaii to ensure coordination with roads, water, and other support facilities and considerations such as traffic and safety, and access for vehicle, bicycle, and pedestrian. Encourage master planning of present and proposed public and private institutions.
- (b) Encourage combining schoolyards with county parks and allow school facilities for afterschool use by the community for recreational, cultural, and other compatible uses.
- (c) Encourage joint community-school library facilities, where a separate community library may not be feasible, in proximity to other community facilities, affording both pedestrian and vehicular access.
- (d) Encourage implementation of the Department of Education's 'Educational Specifications and Standards for Facilities.'
- (e) Encourage the Hawaii State Library System to seek alternate sites for public libraries located on the campuses of public schools.

10.2.3 Standards

(a) In proposed communities, sufficient acreage shall be reserved for school facilities. Sites shall be free from flooding and drainage problems, excessive slope and shall incorporate appropriate street and driveway design and location to minimize traffic interference, pedestrian hazard, and enable safe and easy access for vehicles, bicycles and pedestrians.

§10.2.4: Districts

(b) State Department of Education's education specifications and standards for facilities.

10.2.4 Districts

The following is an examination and analysis of educational facilities by districts. For the purposes of this section, a complex refers to a high school and its associated feeder schools. Feeder schools are the elementary and intermediate (middle) schools that send students to an associated high school. For instance, the Waiakea High School complex has Waiakea High School as its designated high school and Waiakea Intermediate, Waiakeawaena Elementary, and Waiakea Elementary as its feeder schools.

10.2.4.1 PUNA

10.2.4.1.1 Profile

Public school complexes in the Puna District are located in the communities of Keaau, Mt. View and Pahoa.

The Keaau High School complex is comprised of Keaau High School, Keaau Middle School, Keaau Elementary School, and Mt. View Elementary School, and serves a total enrollment of 2.441 students. Existing complex facilities are adequate to serve the current enrollment. The new Keaau High School is being built in phases. As each phase is completed, the incoming class (i.e. freshman, sophomores, etc.) can be accommodated. The Keaau Elementary School is being built in a similar fashion. Thus, in a few years, the need to transport students from the Keaau and Mt. View area will not be necessary. Currently, 11th and 12th graders from Keaau commute to Waiakea High School in South Hilo. At this time, the first phase of Keaau High School has been completed and is in operation.

The Pahoa High School complex is comprised of Pahoa High and Intermediate School, Pahoa Elementary School, Keonepoko Elementary School and serves 2,323 students from kindergarten through the 12th grade level. The natural population growth and in-migration into the subdivisions in the area are contributing to the increased pressure on education facilities at the Pahoa complex. In response to these growth pressures, facilities have been expanded to accommodate the increased enrollment. However, there is still overcrowding at the elementary school.

The Keaau, Mt. View and Pahoa branch libraries are joint community-school facilities. The Keaau facility has 21,332 volumes. The Pahoa and Mt. View facilities house 34,365 volumes and 18,345 volumes, respectively. Both library facilities are inadequate in size to meet the needs of the students and community. Furthermore, the lack of adequate pedestrian access and parking at these facilities is an ongoing problem.

10.2.4.1.2 Courses of Action

- (a) Improve existing school complexes to meet the standards established by the State Department of Education.
- **(b)** School facilities should be made available to the community for recreation and other compatible uses during after school hours.
- (c) Encourage the Department of Education to plan and develop school facilities as the need arises.
- (d) Encourage improvements to pedestrian access between the village of Pahoa and the school and library facilities.

10.2.4.2 SOUTH HILO

10.2.4.2.1 Profile

The public school complexes in the South Hilo district includes two high schools, three intermediate and eight elementary schools. One of the intermediate schools is a combined elementary-intermediate facility serving the kindergarten through the eighth grade level. The school enrollment of South Hilo is about 10,339 students.

The Hilo High School complex is comprised of Hilo High School, Kalanianaole Elementary and Intermediate School, Hilo Intermediate School, DeSilva Elementary School, Haaheo Elementary School, Hilo Union Elementary School, Queen Kapiolani Elementary School, Kaumana Elementary School, and Keaukaha Elementary School and serves about 5,576 students.

The Waiakea High School complex is comprised of Waiakea High School, Waiakea Intermediate School, Waiakeawaena Elementary School, and Waiakea Elementary School and has an enrollment of 4,763 students. The facility serves students from the Waiakea, Keaau and Mt. View intermediate schools. A new high school in Keaau opened in 1999. Upon completion of all phases, the new high school will serve the students from the Keaau complex.

The Waiakea Intermediate School presently accommodates 6th grade students from the Waiakea Elementary and Waiakeawaena Elementary facilities to relieve the overcrowded student population. All three schools have an enrollment of 2,583 students.

Traffic congestion occur in the area of the Waiakea High-Intermediate-Elementary School and the Hilo High-Intermediate-Union School-Haili Christian (private) complexes where students commute to and from school twice daily at nearly the same time. The areas surrounding some school complexes have practically no sidewalks or curb separations for the students' ease of access and safety.

The regional library, with a collection of 208,065 volumes, is located in Hilo and is the administrative center for all the branch libraries in Hawaii County. Although conve-

§10.2.4.2: SOUTH HILO

niently located, it lacks a meeting room or auditorium to conduct cultural or similar programs.

The University of Hawaii at Hilo complex has an enrollment count of 2.800 students. The main or mauka campus encompasses an area of approximately 115 acres. Hawaii Community College has an enrollment of 2.100 degree students and shares the campus, as well as the 21-acre makai campus, located approximately 1/4 mile away. The mauka campus has undergone expansion over the past ten years. The makai campus is being renovated to accommodate some Hawaii Community College programs until a new campus can be constructed.

A recent addition to the mauka campus is the 163-acre University Park, located between Komohana Street and the northern portion of the mauka campus. In addition to University Park, an additional 323 acres directly mauka of the Park on the mauka side of Komohana Street is expected to be transferred to the University and will be developed to include a new campus for Hawaii Community College. The University also owns an additional 33 acres across Kawili Street adjacent and above Waiakea High School. These three properties are designated for University expansion. In addition, the University also uses 110 acres in Panaewa for its agriculture program.

The Edwin H. Mookini Library. located on the main university campus, has a collection of 180,000 bound volumes and other library materials, including periodicals, newspapers, audio/video cassettes and microfilms. It has a capacity of 450,000 volumes and study space for 800 students and faculty members. The library also houses a media production center, providing graphics and duplicating facilities as well as audio and television studios.

10.2.4.2.2 Courses of Action

- (a) Encourage the establishment of additional schools as the need arises.
- **(b)** Participate in the development of student and faculty housing for the university and other joint-use facilities.
- (c) Provide pedestrian walkways to and around all school complexes.
- (d) Support the continued expansion of the University system and the University of Hawaii at Hilo and Hawaii Community College campus and encourage the continuing education programs throughout the community. The transfer of State lands to the University should be actively pursued.
- (e) Encourage continual improvements to existing educational facilities.
- (f) Support and encourage the strengthening of the University of Hawaii at Hilo through the transfer of appropriate colleges and departments from the University of Hawaii at Manoa to the University of Hawaii at Hilo.

§10.2.4.3: NORTH HILO/HAMAKUA

(g) Encourage the implementation of existing State and University of Hawaii plans for the continued development of the "Research and Technology Park" on the campus of the University of Hawaii at Hilo.

10.2.4.3 NORTH HILO/HAMAKUA

10.2.4.3.1 Profile

The Laupahoehoe High and Elementary School complex serves 250 students from kindergarten through the 12th grade level. The existing facility is adequate, as enrollment has been relatively stable due to the aging of the district's population.

The physical disadvantages of the Laupahoehoe School facility include the steep grade and narrow access from the highway, the lack of adequate pedestrian walkways leading to the school, and the abruptness of the road junctions.

The Honokaa High School Complex is comprised of Honokaa High School, Waimea Elementary and Intermediate School, Paauilo Elementary and Intermediate School, Honokaa Elementary School, and Waikoloa Elementary School and serves 3,258 students from kindergarten through the 12th grade level. Honokaa High School accommodates students from South Kohala as well as from the Hamakua district.

A traffic problem exists within the Honokaa School complex due to a through-street bisecting the campus. Vehicular and pedestrian problems also exist in Paauilo.

The Laupahoehoe library is a joint community-school facility housing 20,277 volumes. The community facility in Honokaa has 16.705 volumes.

10.2.4.3.2 Courses of Action (North Hilo)

- (a) Improve pedestrian and vehicular access to the Laupahoehoe and Hamaku School complexes.
- (b) Encourage continual improvements to existing educational facilities.

10.2.4.3.3 Courses of Action (Hamakua)

- (a) Encourage continual improvements to existing educational facilities.
- (b) Encourage traffic re-routing to resolve school traffic problems.
- (c) Implement the Honokaa school campus master plan.
- (d) Encourage expansion of the present library facility and services.

10.2.4.4 NORTH AND SOUTH KOHALA

10.2.4.4.1 Profile

The Kohala High and Elementary School complex is comprised of Kohala High and Intermediate School and Kohala Elementary School. The complex services all of North Kohala's 994 student enrollment. The existing facilities are sufficient for the district's needs.

The South Kohala district public school is located in Waimea and accommodates an enrollment of 1,195 students from kindergarten through the 8th grade level. High school students commute a distance of 16 miles to Honokaa. An additional elementary school has been constructed and is in operation at Waikoloa.

Department of Education is developing a master plan for Waimea School that provides for a new elementary school, an expanded intermediate school, improved access and parking areas.

The Bond Memorial Library has a collection of 16,435 volumes. The Parker Memorial community-school library, located adjacent to Waimea school is the second largest public library on the island. The facility has a collection of 43,309 volumes.

10.2.4.4.2 Courses of Action (North Kohala)

- (a) Encourage the expansion of the public school and library facilities as needs arise.
- **(b)** Encourage the Hawaii State Library System to establish a public library separate from the school facility.
- (c) Encourage continual improvements to existing educational facilities.

10.2.4.4.3 Courses of Action (South Kohala)

- (a) Encourage the expansion of the public school and library facilities as needs arise.
- (b) Encourage continual improvements to existing educational facilities.
- (c) Encourage the installation of walkways to and around schools and street crossing facilities for pedestrian safety.
- (d) Encourage the development of State and private higher educational facilities in West Hawaii.
- (e) Support the development of an intermediate or middle school in Waikoloa.
- (f) Encourage the Hawaii State Library System to establish a public library in Waikoloa.
- (g) Encourage the State Department of Education to explore the feasibility of establishing a high school in the South Kohala district.

10.2.4.5 NORTH AND SOUTH KONA

10.2.4.5.1 Profile

The Kona public school system is comprised of the Konawaena and Kealakehe High School complexes.

The Konawaena High School complex includes Konawaena High School. Konawaena Middle School. Konawaena Elementary School. Hookena Elementary School, and Honaunau Elementary School and serves 2,882 students.

Ho'okena Elementary/Intermediate and Honaunau Elementary/Intermediate kindergarten to 8th grade may be transferred to the Konawaena complex due to extremely limited program offerings as only about 364 students are presently enrolled. The construction of a new Konawaena Elementary School was recently completed.

The Kealakehe High School complex is comprised of Kealakehe High School, Kealakehe Intermediate School, Holualoa Elementary School, Kealakehe Elementary School, and Kahakai Elementary School. The Kealakehe High School complex serves 4,063 students.

Kahakai Elementary School opened in 1982 to relieve the overcrowded enrollment at Kealakehe Elementary School. However, the Kealakehe High School complex continues to experience student population growth problems. It has developed separate facilities for the kindergarten through 6th grade level and 7th through 8th grades. The new Kealakehe High School will serve grades nine through twelve.

The Holualoa Library, located near the school, has a collection of 6.445 volumes; Kealakekua library has 28.467 volumes and the Kailua-Kona branch library has 47.955 volumes. The Kailua-Kona library is inadequate in size to serve the needs of the area.

The State is currently in the planning stages for the University of Hawaii Center at West Hawaii (UHCWH). The new University campus will initially be located on a 33-acre portion of a larger 500-acre site on the mauka side of the Queen Kaahumanu Highway, directly mauka of the Kona International Airport at Keahole. Upon completion, the new campus is anticipated to accommodate 1,500 students. For administrative purposes, the UHCWH will be assigned to the Hawaii Community College at Hilo.

10.2.4.5.2 Courses of Action (North Kona)

- (a) Encourage expansion of the Holualoa school complex to meet school district needs.
- (b) Encourage the State Department of Education to add facilities as the need arises.

§10.2.4.6: KA'U

- (c) Improve basic school facilities to meet current standards.
- (d) Encourage construction of a new library facility to serve the Kailua-Keauhou area.

10.2.4.5.3 Course of Action (South Kona)

(a) Improve basic school facilities to meet current standards.

10.2.4.6 KA'U

10.2.4.6.1 Profile

The Ka'u High School complex is comprised of Ka'u High School, Pahala Elementary School, and Naalehu Elementary and Intermediate School, and serves a total enrollment of 810 students from kindergarten through the 12th grade level. The overall physical facilities at Naalehu and Pahala are adequate to serve the district needs.

Pahala and Naalehu both have adequate library facilities. Pahala is a joint community-school library facility located within the school complex and houses a collection of 19,564 volumes. Naalehu's facility is located behind the local post office and houses a collection of 7,631 volumes.

10.2.4.6.2 Courses of Action

- (a) Encourage continual improvements to existing educational facilities.
- **(b)** Encourage the State Department of Education to plan a K-8 School at Ocean View.

10.3 PROTECTIVE SERVICES

10.3.1 Introduction and Description

Protective services consist of fire, police, detention and correctional facilities, civil defense, the Coast Guard, and National Guard armories.

Fire and Emergency Medical Services

There are presently 20 regular fire stations, 22 volunteer fire stations and 1 federal fire station located throughout the island. The County is proposing a fire station in the Kalaoa-Mauka area. The Pohakuloa fire station is a federally operated facility. The regular fire stations provide 24 hour fire fighting and emergency medical services. The Waiakea and Kailua-Kona stations provide rescue services, the Kaumana station provides hazardous materials response and the South Kohala station provides air medical services.

LAND USE

14.1 OVERVIEW

14.1.1 Introduction And Analysis

The General Plan expresses both the integrated and specific concerns and problems as well as alternative solutions and guidance regarding the use of County resources. Land use is one of the principal focal points of public concern and policy. The other study elements of the General Plan, that depict the various aspects of the County, directly involve land use in varying degrees.

The land use element sets forth goals, policies, and standards to guide the location and density, and building intensities of land uses in particular areas. Regional and/or Community Development Plans are intended to implement the broad goals within the General Plan on a regional basis. They serve to designate and coordinate detailed development patterns and infrastructure needs throughout the County. The Plans detail land use policies and infrastructure priorities, transportation, recreation and other major land use policies within each area, and must be developed with participation by the affected communities and adopted by ordinance by the County Council.

The land use element is intended to be used as a policy guide for the coordinated growth and development of the County. It seeks to accommodate growth without congestion: to designate and preserve the lands needed for residential use, commercial and visitor services, industry, agriculture, and open space; and coordinate these uses with the County's service and circulation systems.

The total area of the island of Hawaii is approximately 2.5 million acres or 4,028 square miles: 4,023 square miles of land and 4.4 square miles of inland water. All of these lands are divided into approximately 125,000 parcels.

Previous General Plans

The first General Plan for the County of Hawaii, adopted in 1965, was a compilation of three separate documents: A Plan for the Metropolitan Area of Hilo, A Plan for Kona, and The Kohala-Hamakua Region General Plan. The first General Plan provided for the general planning for all districts except Ka'u.



Educational Specifications (EDSPECS) For High Schools Department of Education, State of Hawaii

December 2006

Table of Co		Pages
Table of Contents Acknowledgments		1 - 3 ii
Chapter 1:	Introduction	
Section 101 Section 102 Section 103 Section 104	General. Background Description of the Educational Specifications Format of the Educational Specifications	102-1 103-1
Chapter 2:	Planning	
Section 201	Planning Guidelines, Site Considerations, and Site Concepts	
	for High Schools	201-1 - 5
Section 202	Functional Relationships	
Section 203	The Charette Process Guide	203-1 - 4
Section 204	Preparation for the Charette	204-1
Section 205	The Process Before and During the Charette	205-1 - 2
Section 206	Process Diagrams	206-1 - 5
Section 207	Program and Academic Support Elements and Design	
Chapter 3:	Guidelines for Spaces	
Section 301	Explanation of Section Format	301-1 - 2
	Instructional Spaces	
Section 302	Instructional Spaces General Classroom	302-1 - 5
0000000000	(Attachment 1) - Language Arts	1
	(Attachment 2) – Mathematics	
	(Attachment 3) - Social Studies	
	(Attachment 4) - World Languages	
Section 302A	Breakout Room	
Section 303	Special Education Classroom	
Section 304	Natural Resources	
Section 305	Art Education	
Section 306	Business Education	
Section 307	Dance and Theater	
Section 307	Family and Consumer Science	
Section 309	Industrial Arts	
Section 310		
Section 311	Music	
Section 312	Co-Curricular Flex Space (Hold on Implementation of this	311-1-0
Gection 312	component at this time)	312-1 - 3
Section 313	Instructional Commons (Hold on Implementation of this	012-1-0
	component at this time)	313-1 - 2
Section 314	Exterior Commons.	
Section 315 – 340		

Chapter 3:	Guidelines for Spaces (Cont'd)	
	Support Spaces	
Section 341	Administrative Center	
Section 341A	Comprehensive Student Support System (CSSS) Space	341A-1 - 5
Section 341B	Receiving/Storage Room	341B-1 - 2
Section 341C	Safety Office	341C-1 - 3
Section 341D	Student Services Coordinator/Educational Assistant	
	(SSC/EA) Office	341D-1 - 3
Section 341E	Student Activities Space	341E-1 - 3
Section 342	Cafeteria/Food Service Center	342-1 - 18
Section 343	Custodial Service Center	
Section 344	Library/Information Resource Center	
Section 345	Computer Resource Center	
Section 346	Faculty Center	
Section 347	Teacher Planning Center	
Section 348	Storage Space	
Section 349	Toilets	3/10-1 - 3
Section 350	General Utility Closet	
Section 351	Mechanical/Electrical/Media-Communication Rooms	
	Adult Education Center	
Section 352		
Section 353-370	(RESERVED)	
	Physical Education	
Section 371	PE Lockers and Showers	
Section 372	Athletic Lockers and Showers	
Section 373	Gymnasium	
Section 374	Outdoor PE/Athletic Facilities	374-1 - 9
Chapter 4:	Sustainable Design Criteria	
Section 401	Sustainable Design Criteria	401-1 - 2
Obenter Fr	Accustic Design Criteria	
Chapter 5:	Acoustic Design Criteria	504.4.40
Section 501	Acoustic Criteria	501-1 - 16
Chapter 6:	Mechanical Design Criteria	
Section 601	Air Conditioning and Ventilation Systems	601-1 - 5
Section 602	Plumbing	602-1 - 4
Chapter 7:	Electrical Design Criteria	
Section 701	Exterior Electrical Distribution Systems	701-1 - 3
Section 702	Interior Electrical Distribution Systems	
Ohantan O	Mariai Madia Danian Critaria	
Chapter 8:	Multi-Media Design Criteria	004 4 40
Section 801	Multi-Media Systems	
Section 802	Utilities	802-1 - 4
Section 803	Media System Conduit Identification	
Section 804	Telecommunication Infrastructure	
Section 805	Cabling Specifications	
Section 806	Testing and Inspection	806-1 - 2
Chapter 9:	Safety and Security Design Criteria	
Section 901	Safety and Security	901-1 - 2

EDSPECS for High Schools

Traffic, Bus, and Parking Design Criteria	
Traffic	1001-1 - 3
Bus Safety	1002-1 - 2
Landscape Design Criteria	
Planting and Irrigation System	1101-1 - 5
Other Design Criteria	
	1201-1 - 2
Master Key System – Implementation	
High School Facilities Assessment and Development	
	1 – 41
Commissioning for Schools	1 - 2
	Traffic Bus Safety Landscape Design Criteria Planting and Irrigation System Other Design Criteria Graphics and Signage

Acknowledgments

The revised Educational Specifications and Standards for Facilities for the elementary, middle/intermediate and high school was formulated with the assistance and involvement of school, district, and State Department of Education staff members, staffs of the Department of Accounting and General Services, Planning and Economic Development, Budget and Finance, and professionals in the private sector. We thank the following participants for the invaluable knowledge and assistance in this effort along with all others who may have been inadvertently left out of the list below:

Helen Gokan - DOE/DLTSS/Systems Francine Grudzias - DOE/DLTSS Carol J. Ching - DOE/Facilities Branch Nick Nichols - DOE/Facilities Branch Ken Kajihara - DOE/Facilities Branch Brenda Lowrey - DOE/Facilities Branch Clifford Yamanouchi - DOE, Network Support Services Ralph Morita - DAGS Planning Branch Kerry Koide - DOE/ATR/DLTSS Ron Toma - DOE/DLTSS/Oasis Bob Golden - DOE/SSSB K. Kim –DOE/Network Support Services Lester Chuck - DOE/Facilities Branch Carey Isobe - Dags Planning Branch Puanani Wilhelm - DOE/Hawaiian Debra Farmer - DOE/Special Education Mike Fahey - DOE/Special Education Mel Seo - DOE/Safety Rodney Goo - DOE/Safety Annette Nishikawa - Principal, Kapolei Middle School Al Nagasako - Principal, Kapolei High School Sylvia Lee - Vice Principal, Keau High School Jaqueline Heupel - Moanalua High School Bob Eggerston - Moanaloa High School Caroline Wong - DOE/Student Support Services Diana Oshiro - DOE/DLTS Diane Matsuoka - Principal, Waikele Elementary School Dale Castro - Vice Principal, Waikele Elementary School Anita Bruce - DOE/NSSB Neil Tomita - DOE/SRB Mary Sobelski - DOE/SRB Lana Mito - DOE/SRB (Student Activities) Michael Barros - DOE/SRB (Voc Ed) Valerie Kurizaki - Teacher, Kapolei Middle School Kathy Nishimura – DOE/SRB (Math) Athony Calabrese - DOE/SRB (Voc Ed) Andres Libed - DOE/SRB/DLTSS (Music) Stephen Kow - DOE/SRB/DLTSS (Computer Education) Aileen Hokama - DOE Justin Mew - DOE (Science) Anthony Chun - DOE/Leeward SRB Randall Higa - DOE/Safety

Debbie Hatada - Vice Principal, Kapolei High School

Stanley Seki – DOE/Leeward District Paul Kodama – DOE/Teleschool Gillian Hong – DOE/Teleschool Gerald Sake - Teacher, Moanalua High School Malia Melemai - RT - Hawaiian Immersion **Studies** Russell Yamanouchi - ES/DLTSS/CSAP Glenn Tatsuno - ES/DLTSS (Counseling) Betsy Moneymaker - ES/DLTSS Amy Ng - ES/DLTSS Gracie Matsuo - ES/DLTSS Verna Chinn – DOE/DLTSS Dee Helber - DOE/SSSB Dwight Toyama - DOE/DLTSS (Athletics) Gene Kaneshiro - DOE/School Food Services George Okano - DOE/Transportation Dan Yahata - DOE/DLTSS Bert Yamamoto - DOE/OMS Russell Mau - Hawaii Sound Systems Bob Henniger - Hawaii Sound Systems Don Smith - Alert Alarm of Hawaii Doug Schlief - Alert Alarm of Hawaii Henry Lott - Alert Alarm of Hawaii William Baum - The Audio Visual Co. Ainsley Mahikou - The Audio Visual Co. Patrick Lee - the Audio Visual Co. Karl Yoshida - DOE/RM Larry Gaddis - DOE/NSSB Bernie Asakura - DOE/NSSB Les Goto - DOE/NSSB Ron Sodetani - DOE/NSSB Lance Mitsuda – DOE/NSSB Daijo Kaneshiro – DOE/School Library Services Vickie Kajioka - DOE/Systems Mike Miyamura - Principal, Kapolei Elementary School Stanley Kayatani - DOE/Kalihi Kai Kevin Boggs - DOE/Dole Middle School Keith Tomishima - DOE/OMS Daniel Hamada - DOE/Kauai District Superintendent Maggie Cox - Principal, Chiefess Kamakahelei Middle School Lucretia Leong - DOE/TSS/Library Darryl Galera -- Principal, Moanalua High School Ray Minami - DOE/Facilites Branch Jerry Nishida - DAGS/Project Management Branch Allan Yamanoha - DAGS/Project Management Branch

Preface

"We Shape Our Schools and Thereafter, They Shape Us." - Winston Churchill

No building type has undergone greater change, in recent years, than the schoolhouse. These changes in the building are, for the most part, the symptoms of changing trends in student learning.

As a dynamic reflection of the culture in which we live, the specific educational needs of each community must continually change to meet the demands of the present and to support the projections of the future. So too must facilities for education — rather than being merely a shelter in which the elements of education are delivered and received, they now have become a complete educational tool, capable of supporting a wide variety of learning experiences for citizens of all ages, abilities, and needs.

These educational specifications have been developed to permit teachers, staff, students and the community an opportunity to experience a 21st century state of the art educational program within a 21st century facility.



Chapter 1Introduction

Chapter 1: Introduction

Chapter 1: Introduction

Section 101 - General

"The Educational Specifications and Standards for Facilities" shall control and provide the basic guidelines in the acquisition and development of school sites and in the master planning, designing and construction of facilities for all public schools in the State of Hawai'i. This document, referred to as the EDSPECS, was developed to meet the need for a comprehensive guide for consultants, the Department of Education (DOE), the community, other government agencies, and the public in the design and planning of new schools and additions to existing schools.

The EDSPECS are divided into three volumes, for use at each of the three educational levels: elementary, middle/intermediate and high. Although much of the information for school design is the same across levels, the volumes are meant to be used independently. Each volume is categorized into various chapters which provide the appropriate design criteria for a school. To the extent possible, non-technical language is used throughout the guide so that it can be easily understood by all stakeholders: educators, community leaders, parents and students, as well as technical experts in school facilities. A glossary is also included for the many acronyms frequently used within the DOE (see Appendix 2 – Glossary of DOE Acronyms).

END OF SECTION 101

General

¹ Board of Education Policy 6700: Facilities Standards

Chapter 1: Introduction

Section 103 - Description of the Educational Specifications

The EDSPECS is a guide for the planning of school facilities that takes into account a collection of objectives relating to the needs of the community, educational goals, policies, processes, and statements of various support programs.

In order for a school to meet the needs of a community, questions have to be answered during the initial programming phase. The EDSPECS provides a framework with a process and format for planners to collect and analyze pertinent information such as teaching styles and student learning styles, before moving on to technical facility requirements. This participatory process provides the means of involving educators and the community in acquiring greater knowledge of how everyone uses their facilities, in becoming better informed about the successes taking place in their schools, and instilling a sense of pride and ownership in their school.

This document provides the basic data and information essential for a clear understanding of how the physical plant should support instructional objectives. The EDSPECS are intended to be used as a guide when designing and building new schools. When renovating older schools, the EDSPECS shall be used a reference and followed where economically, structurally, and instructionally feasible. In addition to the EDSPECS, all applicable codes and regulations must be followed in the construction of school facilities. These include, but are not limited to: applicable local and State building codes, fire safety requirements, and Americans with Disabilities Act Architectural Guidelines (ADAAG).

In many cases, due to outcomes of the design charette process, there will be variances to the standards set forth within this document. Documentation of the decisions made during the participatory charette process is essential. See Section 203 for the Charette Process Guide.

When considering formal changes to the EDSPECS, refer to the procedures outlined in Appendix 3 – Educational Specifications Development/Revision Process.

END OF SECTION 103

Chapter 2: Planning

Chapter 2: Planning

Section 201 – Planning Guidelines, Site Considerations, and Site Concepts for High Schools

201.1 Planning of New Schools

Scope, Timing, Notification: Plans for a new school will show the geographical area to be served, the proposed grade structure, the projected opening date, and the design enrollment.

201.2 Enrollment Guidelines for Planning New Schools

Minimum Enrollment
550 600 1,000

201.3 Site Selection Criteria

A detailed study is required before a new school site is selected and acquired. The selected site should meet the following general guidelines (additional criteria may apply depending on specific site conditions):

a. Usable Acreage: To be determined in a case by case basis, using the following as a quide:

Elementary School	12 acres
Middle/Intermediate School	18 acres
High School	50 acres

- b. Shape: The length to width ratio of the site should not exceed 2.5 to 1.
- c. Slope: Ideally the campus site should have a maximum slope of 5 percent.
- d. Hazard Areas: The site should not be in a tsunami inundation zone; a major flood plan; or a potential landslide area.
- e. Traffic: The site should not be located in an area hazardous to pedestrian or vehicular traffic safety. The site should have a minimum of two vehicular access points each on a different side of the property. Location of access points subject to DOE approval.
- f. Timing: The school site should be conveyed to the State prior to the start of construction on the school site.
- g. Exclusivity: The use of the school site shall be limited to public school and ancillary school recreational uses.
- Availability of Utilities: Appropriate utility infrastructure needs to be in place prior to the start of school construction.

Testimony of Pauline Ke'ala Lee Loy, 10/22, 2013

My name is Pauline Ke'ala Lee Loy, I am a resident of 1579 Mele Manu Street where we have resided for 17 years. I have worked as a teacher and administrator in both public and private schools for the last thirty-four years.

First and foremost I commend Mr. Thatcher as a school leader and pioneer of non-traditional education. The accolades of both his staff and students are representative of his visionary dedication to education. There is absolutely no question about the quality of education that the school offers the island community.

I am in opposition of the location of Connections Public Charter School to Edita Street because of the imminent traffic disasters. Edita Street off of Kaūmana Drive which leads to Mele Manu Street simply cannot accommodate the volume of traffic that the proposed development will bring.

The opening of the Pū'ainakõ Street pathway from the Saddle Road to Komohana has certainly alleviated some of the heavy traffic patterns on Kaūmana Drive for those heading to West Hawai'i, however, a project or program of this magnitude will restore this traffic.

If such a project, any project would be approved at this Edita site, a third lane turn off and traffic light would need to be installed to prevent deadly accidents.

The proposed project has simply selected the wrong site for its vision. What is alarming is that the school already invested much of its resources in preparing the site for its use even before all legal matters have been settled. It is a poor display of doing the right thing at the right time for the right reasons. Transparency and accountability is of utmost importance for any institution, public institutions particularly.

Thank you.

Pauline Ke'ala Lee Loy 1579 Mele Manu St. Hilo, Hawai'i 96720

${\bf A\ PROJECT\ MANAGER'S\ REVIEW}$

OF THE

FINAL ENVIRONMENTAL ASSESSMENT

FOR THE

CONNECTIONS PUBLIC CHARTER SCHOOL MASTER PLAN

Kaumana, South Hilo, Hawaii

Tax Map Key: (3)2-5-006:141

Melvin H. Yokota, P.E.

Mele Manu Street

Hilo, Hawaii

October 2013

A PROJECT MANAGER'S ASSESSMENT OF THE FINAL ENVIRONMENTAL ASSESSMENT FOR THE CONNECTIONS PUBLIC CHARTER SCHOOL MASTER PLAN

1. PURPOSE

The purpose of this review was to review the contents of the Final Environmental Assessment from an engineering project manager's perspective. This review was initiated due to the author's observations that the testimony before the County of Hawaii Windward Planning Commission by the Connections Public Charter School and its consultants appeared to be contradictory and overly optimistic. The findings herein summarize the shortcomings of the Final Environmental Assessment from the author's viewpoint.

2. BACKGROUND

The author has been a resident of Hilo since 1972 and a resident of Pacific Plantation Subdivision since 1991. The author is currently a Project Manager for POWER Engineers, Inc. Between 1972 and 1979, the author was an electrical engineer for W.A. Hirai and Associates, Inc. Between 1979 and December 2012, the author served as an electrical engineer, senior electrical engineer, principal electrical engineer and vice-president of Harold H. Miura, Inc. (later HHMI Corporation). While with HHMI and with POWER Engineers, author served as project manager where the firm is the prime consultant and as project electrical engineer on projects where the firm is the electrical subconsultant.

3. EXECUTIVE SUMMARY

3.1. Water Requirements

There are two points that are made by the Final Environmental Assessment.

- The Department of Water Supply has stated that the school is entitled to 7 units of 600 gpd of water based on the area of the entire parcel for a total allocation of 4,200 gpd.
- The projected 90,000 square feet of building roof area will provide 30,000 gpd of catchment water.

The author believes that because the leased area is bisected by Edita Street, and there is no way for Connections to serve both the upper and lower parcels with a single water service connection, the water unit allocation should be split between the upper and lower parcels. That means that technically, the allocation for each parcel should be about 3.5 units, or 2,100 gpd for the upper and lower parcel, respectively.

Precipitation records for Kaumana do not support the claim that the building roofs will consistently support 30,000 gpd. Historical data shows that average available catchment water during periods of minimum precipation will average less than 10,000 gpd. Under this condition, the Assessment states that a well site will be developed and dedicated to DWS. Such a well site typically includes a pumphouse, booster pumps, submersible pump, reservoir, and a wall or

fence constructed to DWS standards. Such well sites are large and would likely take up the entire frontage along Edita Street. The DLNR lease application states no sublease will be developed, and such a well site does not meet the land use stated in the application. The assessment should include a discussion of the impact of subdivision on its lease.

3.2. Wastewater Impacts

The Assessment discusses providing leach fields and septic tanks as well as IWS units. Similar to the DWS water capacity, because the parcel is bisected by Edita Street, the allowable IWS (1000 gallons of septic tank capacity per 10,000 square feet) for the facilities on the lower parcel should be based on the area (35 acres) of the lower parcel and not the 72 acres of the entire parcel. This would equate to a total of 157,000 gallons of septic tank capacity. Given the nature of the soils on the property, if the lower parcel is incapable of leaching 26,000 gpd, no amount of septic tank capacity will be sufficient to address the wastewater disposal. The Assessment should provide a viable solution before the special permit application can be considered.

3.3. Traffic Impacts

Mr. Thatcher has testified to the Planning Commission and also told the Kaumana Community that it is not the intent of Connections Public Charter School to serve the Kaumana Community. Instead, the school will continue to serve students from Puna, Ka'u and Hamakua. This Assessment does not address the traffic impacts of a school with 380 K-12 students, 25 preschool students, and 52 staff on greater Hilo, particularly the impacts on congested traffic corridors that serve schools in the Waiakea High School and Hilo High School complexes.

The way the Assessment is written, it is evident that the planning team treated this school as if it is being built to serve the Kaumana Community. The number of vehicular trips projected in the assessment is low, and is consistent with a local school where large numbers of students can bike, walk or ride to school without impacting the traffic infrastructure beyond a two or three mile radius of the campus.

The proposed site is accessible only from Kaumana Drive via Edita Street. The majority of public schools have at least two roadways for vehicular access to the campus. This site has only one. Any accident at the intersection of Kaumana Drive and Edita Street during the morning rush period will prevent students and staff from reaching the campus and prevent the residents of Edita and Mele Manu Streets from exiting the neighborhood. Further, the added traffic will diminish the ability of emergency services to aid the Kaumana Community.

3.4 Environmental Impact

The stated environmental goals in the Assessment preach a minimum impact development to minimize disturbing the environment on the parcel. However, the proposed reforestation of the upper parcel and 20 acre agricultural component of the lower parcel would have a major impact since it will involve import of significant amounts of soil and supplements. This contradicts the stated environmental goals.

These observations lead to the conclusiont that the Assessment is poorly developed and does not address the concerns and needs of the Kaumana Community and Greater Hilo. The special permit should not be granted until all of the discrepancies have been reconsidered and properly addressed.

4. FINDINGS

- 4.1. Page 1 Footnote: The assumptions in the Assessment state that the average daily rainfall on the 90,000 square feet of building roof will be sufficient to supply the needs of the school. However, the study fails to investigate what happens to the rainwater source during periods of low rainfall which can be 0.16" per day, or less based on rainfall records for Kaumana (See Attachments: KAUMANA 88.1, HAWAII, Period of Record General Climate Summary Precipitation From Year=1949 to Year=2006). Under those conditions which indicate droughts can occur in any month, it is clear that a well, reservoir, and booster pumps must be constructed on the site to support the campus. This assessment:
 - Does not site a well facility on the project site
 - Does not consider that a well site that is dedicated to the County DWS will also require a
 county standard reservoir and booster pump station with fence and landscaping.
 Typically the pumping station is adjacent to a county road.
 - Does not address the statement made by Connections School in their application for a lease that the applicant will not create subleases.
 - Does not address what happens to the pump station site if it is dedicated to the County. What happens to the well site? Is it a sublease? Doesn't the land use change if it is used for a pump station for the County?
- 4.2. Page 4, Part 1.6, subparagraph on Soils and Surface Water mentions that an NPDES permit will be procured. However in early July 2012, Connections Charter School engaged a contractor to clear (bulldoze the perimeter of the property) and construct a fence. It appears that this was done without obtaining a NPDES permit from the Clean Water Branch of the State of Hawaii Department of Health. Calls by the author to the Clean Water Branch were never returned. The author understands that the Clean Water Branch suspended issuance of NPDES permits on its General Permit around that time, and is not to begin issuance of general permits until this fall. From Google Earth images, it is apparent that the area cleared is in excess of one acre and the clearing appears to be in violation of NPDES regulations. This kind of action shows that the school is not abiding by its stated environmentally friendly goals.
- 4.3. Page 9, Upper Parcel, second paragraph. A crosswalk between two parcels would be coming off a curve and be a very dangerous location for the crosswalk.
- 4.4. Page 9, Upper Parcel, third paragraph. Proposes reforestation projects stating that koa and hapu'u ferns that are claimed to have historically grown in the area.

However, the author's research (http://nativeplants.hawaii.edu/plant/view/Acacia_koa) into koa shows that koa thrives at elevations above 2000 feet. While koa can grow at lower elevations, some varieties may succumb to diseases after a decade of growth. Koa is known to attract aphids, whiteflies, Chinese rose beetles, seed weevils, koa seed worm, koa moth, mealybugs, and a stem boring grub. A serious pest is the black twig borer. and hapu'u thrives in elevations between 1000 feet and 6000 feet, higher than the elevations present in the upper parcel. Koa is not suited to infertile soils or constant waterlogged soils. Koa prefer loamy, sandy clayforms, clay, clay loams, and sandy clays. Koa is found on light, ash derived soils and weathered clays, none of which are present in the upper parcel. (See attached reference.) Note further that the mature koa forest above Hilo was hit with a massive koa moth infestation this past summer.

The University of Hawaii at Manoa College of Tropical Agriculture and Human Resources Hawaiian Native Plant Propagation Database entry for hapu'u, *Cibotium menziesii* (http://www.ctahr.hawaii.edu/oc/freepubs/pdf/OF-16.pdf) States hapu'u thrives in elevations between 1000 feet and 6000 feet, higher than the elevations present in the upper parcel. It is the author's experience in this environment that hap'uu is difficult to cultivate without creating deep soils. See attached reference.

- 4.5. Page 9, Sustainability. While Connections tries to impress by stating that they will be a school with Silver or better LEED certification. Current trend for DoD facilities is to design for maximum energy efficiency, but not to pursue certification because of the initial cost to certify and the need to audit and monitor performance to maintain the certification, a costly venture.

 It is clear that water pumps will be necessary whether catchment or well water is used. Such pumps require significant amounts of electricity. Renewables such as wind and PV are not conducive to supporting motor driven loads. The wind in the area is generally weak and not suitable for wind turbines. PV systems will not reliably support the reactive loads of induction motors without providing power factor compensation systems such as static var compensators. Further, the predominance of irregular cloud cover makes the use of PV to support motors unreliable and utility power will have to be relied upon for supporting motor loads.
- 4.6. Page 11, Infrastructure, first paragraph. Again the Assessment mentions "the use of photovoltaics and an extensive rainwater catchment system." Rainfall records do not support rainwater catchment systems to provide all of the water needs of the campus. Minimum precipitation records demonstrate that droughts can occur in any month, and projections are for dryer weather due to global warming trends. As the Assessment states, a well will be constructed if needed. Rainfall records prove that a well is the only solution to reliably supporting the water requirements for the campus. This must be included in the Assessment for this application to be considered.

¹ The True Cost of LEED – Certified Green Buildings, Vamosi, Stephen J., PE, Heating/Piping/Air Conditioning Engineering, 2011/01/01.

The second paragraph promotes the use of agricultural irrigation for disposal of excess processed wastewater. The Hilo Coast is a wet climate. Average annual rainfall is 191 inches. In general, due to the rainfall, it is unnecessary to irrigate for agricultural purposes. In addition, soil overlain on nearby Kaumana lava fields are normally moist to saturated. How is the 26,000 gpd of wastewater to be disposed under these normal conditions?

- 4.7 Page 15, Paragraph 2.3.1 Selection Criteria. The University of Hawaii at Hilo Agricultural Farm Laboratory is located between Hilo and Puna in an area heavily used for agriculture. The proposed site for the 20 acre cultivation area is young lava flows, and substantial soil and supplements would have to be trucked in to provide suitable media for agriculture.
- 4.8 Page 41, Part 3.1 Topography, Geology, and Soils, paragraph covering Topography. The upper parcel proposed for reforestation with koa and hapu'u is lower that normal habitat for those species to thrive.
- 4.9 Page 41, Part 3.1 Topography, Geology, and Soils, paragraph covering Soils. This paragraph states that soils covering the site are thin to nonexistent. This is not conducive to introducing koa and hapu'u on the other parcel. Further, introduction of koa may be detrimental to Kaumana Cave in the future as the root systems of the trees develop. Introduction of sufficiently deep soil to propagate koa and hapu'u would contradict Connection's goal of keeping this parcel pristine. Further, the construction of the elevated walkway would require damaging the vegetation in order to excavate the post holes and manually haul in the timber for the walkways. This assessment does not identify variations in flora and fauna along the length of the upper parcel, and there is no educational value to providing the walkway along the length of the parcel. The vegetation visible at the Edita Street end of the parcel is representative of the vegetation along the entire parcel.
- 4.10 Page 42, Part 3.1.1 Potential Impacts, paragraphs covering Proposed Action, fourth paragraph. This paragraph states that the building design concept would minimize the disruption of soils and topography at the project site. It is clear that reforestation in the upper parcel and the 20 acre agricultural area would involve the importation and placement of massive amounts of soil. This contradicts the building design concept. Over 25 percent of the soils and topography would have to be modified just to address the reforestation and agricultural areas.
- 4.11 Page 55, First paragraph. It is stated that a single Hawaiian Hawk was detected as an incidental observation. The author frequently observes one or two Hawaiian Hawks hunting for prey in the Mele Manu Street area. Further, there is no mention of feral pigs. Residents have encountered problems with feral pigs invading yards from the Puna side of Pacific Plantations. Sizeable cultivated areas will be an attraction to to such pigs, promoting increased populations of animals that are already damaging lawns and gardens of properties adjacent to native ohia forests.

4.12 Page 59, Part 3.8 Land Use, First paragraph. Assessment states that "the soils within the project generally have been too thin to support pasturing of animals or intensive agricultural cultivation." There is no discussion as to how Connections intends to prepare the sites for reforestation or agriculture. As a result there is no discussion as to the impacts upon the site and surrounding properties.

- 4.13 Page 60, Part 3.8.1 Potential Impacts, Paragraph covering Proposed Action. States "Conversely, the Proposed Action would beneficially impact area land use by providing permanent public educational facilities to support the growing residential community of Kaumana." This would be a valid statement only if there were no public schools serving the community. Kaumana has long been served by Kaumana Elementary, De Silva, Hilo Intermediate, and Hilo High Schools. Further, Mr. Thatcher has testified that Connections is not likely to change its demographics to serve the Kaumana population. Therefore, the benefit to the Kaumana community is considered to be minimal.
- 4.14 Page 60, Part 3.9 Utilities, Paragraph covering Water Supply. The Assessment indicates that based on the overall parcel size of approximately 72 acres, and the County of Hawaii, Department of Water Supply has documented that the parcel is entitled to a maximum of seven units of 600 GPD. However, the parcel is bisected by Edita Street with the upper parcel being approximately 37 acres, and the lower parcel being 35 acres. Since it is physically impossible to provide water service to both the upper and lower parcels with one water service point, it appears that the actual allocation should be approximately 3.5 units for each parcel, which further reduces the available water allocation for the lower parcel to 2100 gpd. The rationale is that capacity for water service to the upper parcel must be reserved in the event the parcel is subdivided according to the bisection. This further reduces the water availability for the lower parcel to be developed.
- 4.15 Page 62, First paragraph. As previously demonstrated, precipitation data for Kaumana indicates that catchment alone is inadequate to support the water needs of the campus under historical minimum precipitation conditions. Further, the bisection of the parcel by Edita Street appears to split the available water allocation.
- 4.16 Page 62, Second paragraph. Proposes to retain the kitchen function at the Kress building in downtown Hilo. However, this contradicts Connections stated goals of consolidating its facilities and leaving the Tsunami inundation zone.
- 4.17 Page 62, Third and Fourth paragraphs. As previously stated, historical precipitation data for Kaumana demonstrates that catchment will fall far short of campus needs during minimum precipitation periods, and the Assessment states that the only solution is the provision of a new public water system source. As a result, the campus development plan must include the well, reservoir, booster pump station, fence and piping interconnections per DWS standards. The Final Environmental Assessment must address this issue before consideration can be given to approval of a special permit

4.18 Page 63. Wastewater, First paragraph. Discusses irrigation as a means of disposing of treated wastewater. With an annual average rainfall of 191 inches, very little irrigation is required for Kaumana. If irrigation is not needed, how is water to be disposed of?

- 4.19 Page 63. Wastewater, Third Paragraph discusses the use of a septic system with leach fields, but as other portions of the Assessment have stated, surface soils are very thin. The Assessment does not address this condition, and how leach fields will work, particularly during periods of high precipitation. In addition, when discussing the one IWS per 10,000 square feet of land area, the volume of septic tanks permitted on the lower parcel should be based on the area of the lower parcel and not the total land area of the upper and lower parcels. For 35 acres, the allowable IWS would be 157 units or 157,000 gallons. If this system cannot percolate 26,000 gpd, the septic tanks and leaching system will be inadequate.
- 4.20 Page 70. Part 3.12.1 Potential Impacts, Third paragraph. Mr. Thatcher has stated that the majority of the students will come from Puna, Mountain View, Ka'u, and Hamakua. It is the Author's perception that the traffic related impacts relate better to a school which serves the immediate community. This is borne out by the fact that the Final Environmental Assessment only addresses the roadways between Ainako/Mohouli intersection and the Edita/Kaumana Drive intersections.

The Assessment States that there will be ultimately be 380 K-12 and 25 preschool nonresident students, plus a staff of 52. Two buses will transport up to 96 students to and from school, leaving 331 students that must either drive or be driven to school. Assuming half of the seniors drive to school (13 students), and of the remaining, half will be transported two per vehicle and half will be transported one per vehicle. Including staff, this amounts to a total of 1078 trips.

Because parents from outside of Hilo must cross the Hilo High School and the Waiakea Complex belts twice during the morning rush hour, there is a significant traffic impact on upward and downward traffic between Kanoelehua and Kamehameha up to Edita Street, significantly increasing townbound traffic delays.

A major concern of Kaumana Residents is that Kaumana Drive is the only efficient corridor to get to work. Any accident will block travel to town, and severely impede emergency vehicles. For a development the size of the proposed campus, there should be at least two means of access, one from Kaumana Drive, and one from the Puainako Street Extension. Anything less will potentially diminish the emergency response to Kaumana.

4.21 Page 73. Part 3.12.2 Mitigation Measures, Third bullet point. Carpools are not common where there is so much diversity in the geographic origins of the student population. The assessment suggests the use of alternative modes such as Hele-On buses and bicycles. This further suggests that the authors of the Final Environmental Assessment did not research the origins of the student population. The Connections students can neither walk nor bicycle to

campus. Hele On is a low frequency mode of transportation with low ridership in town and is not a likely means of transport to and from the campus.

- 4.22 Page 91. Part 5.1 Significant (sic) Criteria.
 - 4.22.1 Criteria 1. Based on this concept, no development or reforestation should be permitted on the upper parcel.
 - 4.22.2 Criteria 3. Sentence 3 states that "This project fulfills aspects of these policies by providing the community with modern educational facilities. Based on statements by Mr. Thatcher, it is not the intent of this campus to serve the educational needs of the Kaumana Community.

Based on independent precipitation analysis and water units, rainwater catchment systems will not come close to meeting the water requirements for the campus during periods of low precipitation and the only solution is to develop a County of Hawaii standard well, reservoir, booster pump station, fenced parcel, and interconnecting piping and pump control systems.

- 4.22.3 Criteria 4. Again, based on statements by Mr. Thatcher, it is not the intent of this campus to serve the educational needs of the Kaumana Community.
- 4.22.4 In addition, all planning and consulting engineering services have been contracted with Honolulu based firms, so no design professional job opportunities have been provided for local residents and professional firms.
- 4.22.5 Criteria 5. Kaumana precipitation data does not support the conclusion that catchment will serve all of the water needs of the campus. Further, only half of the water supply units should be dedicated to the lower campus. The balance should be dedicated to the upper campus due to the bisection of the parcel by Edita Street.
- 4.22.6 Criteria 6. Generally not a true statement. Mr Thatcher stated that the school is not intended to serve students in the Kaumana Community. Since the school generally serves students from outside of Kaumana, it is not consistent with the concept of siting a school in proximity to the community it serves or within easy access without adversely impacting other school, neighborhood, and business infrastructure. The action would bring in 400 plus students from outside the area, and the neighborhood derives no significant benefit from the school. This does little to improve educational facilities in the Hilo area dedicated to serving the students within the Hilo High School Complex area.
- 4.22.7 Criteria 7. While LEED certification is a nice-to-have, it is costly to implement, achieve, and maintain. There is nothing to preclude the school from implementing

energy efficiency, but the money for achieving and maintaining LEED is better directed to the education of the students.

- 4.22.8 Criteria 9. Cumulative traffic impacts on Greater Hilo has not been addressed. In addition, the estimated traffic trip projections appear to be for a school which serves students from the immediate neighborhood where a large number of students can walk or bicycle to the campus. According to Mr. Thatcher's statements, this is not the case. The Assessment trip projections are not consistent with the majority of students commuting to campus from outside of Hilo.
- 4.22.9 Criteria 12. The statement is a contradiction. While it states trees and shrubs would be used as a visual buffer so that school facilities would not be glaringly noticeable from public streets. The Assessment states that a catchment reservoir would be placed at the Edita end of the lower parcel, glaringly visible from Edita Street. Further it is evident that a well with reservoir, booster pump station, and fence or wall will be needed instead of the catchment reservoir. The typical DWS reservoir site footprint would take up a large portion of the campus frontage, making it an unsightly entrance to the school.
- 4.22.10 Criteria 13. Serving the water needs of the campus will require electrical energy for pumping water. A DWS standard well site will require significant energy to operate the submersible well as well as for booster pumps. Kaumana is not a typically windy area and wind is not practical. Photovoltaics is a reasonable solution for non-motor loads, especially lighting, but is not practical for significant electric motor loads. Further, the frequent cloud cover makes photovoltaics unreliable with an expensive battery energy storage (BESS) system.

ATTACHMENTS



NOTE:

To print data frame (right side), click on right frame before printing.

1981 - 2010

- Daily Temp. & Precip.
- Daily Tabular data (~23 KB)
- · Monthly Tabular data (~1 KB)
- NCDC 1981-2010 Normals (~3 KB)

1971 - 2000

- · Daily Temp. & Precip.
- Daily Tabular data (~23 KB)
- Monthly Tabular data (~1 KB)
- NCDC 1971-2000 Normals (~3 KB)

1961 - 1990

- · Daily Temp. & Precip.
- Daily Tabular data (~23 KB)
- . Monthly Tabular data (~1 KB)
- NCDC 1961-1990 Normals (-3 KB)

Period of Record

- Station Metadata
- · Station Metadata Graphics

General Climate Summary Tables

- Temperature
- Precipitation
- Heating Degree Days
- Cooling Degree Days
- Growing Degree Days

Temperature

- · Daily Extremes and Averages
- Spring 'Freeze' Probabilities
- Fall 'Freeze' Probabilities
- <u>'Freeze Free' Probabilities</u>
- · Monthly Temperature Listings

Average Maximum
Average Minimum
Extreme Maximum(*)

Extreme Minimum(*)
Precipitation

- Monthly Average
- Daily Extreme and Average
- Daily Average
- Precipitation Probability by Duration.
- Precipitation Probability by Quantity.
- Monthly Precipitation Listings
 <u>Monthly Totals</u>
 <u>Daily Extreme(*) Snowfall</u>
- Daily Extreme and Average
- Daily Average
- Monthly Snowfall Listings
 Monthly Totals Snowdepth
- Daily Extreme and Average
- Daily Average

Heating Degree Days

- Daily Average
- Monthly HDD Listings
 <u>Monthly Totals</u>(*) Cooling
 Degree Days
- Daily Average
- Monthly CDD Listings

Monthly Totals(*) Growing Degree Days

Monthly GDD Listings

Monthly Total Base 40 (*) Monthly Total Base 50 (*)

Period of Record Data

KAUMANA 88.1, HAWAII

SPP No. 12-000138 Page No. 003268

Period of Record General Climate Summary - Precipitation

Station:(513510) KAUMANA 88.1														
From Year=1949 To Year=2006														
	Precipitation											Total Snowfall		
	Mean	High	Year	Low	Year	1 Day Max.		>= 0.01 in.	>= 0.10 in.	>= 0.50 in.	>= 1.00 in.	Mean	High	Year
	in.	in.	-	in.	-	in.	dd/yyyy or yyyymmdd	# Days	# Days	# Days	# Days	in.	in.	-
January	11.81	27.14	2002	0.49	1953	9.93	30/2002	16	11	6	4	0.0	0.0	1950
February	16.82	70.10	1969	0.65	1970	11.53	01/1969	17	13	7	5	0.0	0.0	1950
March	18.94	49.26	1953	3.15	2003	12.38	09/2006	22	17	10	6	0.0	0.6	1953
April	20.53	47.26	1968	4.89	1954	7.80	16/1963	25	20	12	6	0.0	0.0	1950
May	15.72	43.11	1964	3.24	2005	8.89	07/2006	25	19	9	4	0.0	0.0	1950
June	10.98	37.53	1997	4.10	1959	5.50	26/1997	25	19	7	3	0.0	0.0	1950
July	16.05	34.01	1997	5.73	1999	13.18	26/1966	26	21	10	4	0.0	0.0	1950
August	17.53	48.22	1957	5.47	1950	15.17	13/1994	25	20	10	5	0.0	0.0	1950
September	12.06	41.94	1994	3.67	2004	7.10	20/1994	22	17	7	3	0.0	0.0	1950
October	14.10	30.13	1961	3.73	1962	8.68	25/2001	22	17	8	4	0.0	0.6	1949
November	20.18	52.04	1994	2.04	2002	22.85	02/2000	23	18	10	6	0.0	0.0	1949
December	16.65	58.85	1954	2.01	1963	11.44	11/1999	21	16	9	5	0.0	0.6	1955
Annual	191.37	307.38	1994	102.27	1962	22.85	20001102	270	206	105	54	0.1	0.6	1953
Winter	45.28	117.71	1969	10.53	1963	11.53	19690201	54	39	22	13	0.0	0.6	1956
Spring	55.19	95.64	2006	25.00	1966	12.38	20060309	72	56	31	16	0.0	0.6	1953
Summer	44.56	84.98	1994	22.42	1962	15.17	19940813	77	60	27	12	0.0	0.0	1950
Fall	46.34	106.35	1994	23.60	1962	22.85	20001102	67	51	26	13	0.0	0.0	1950

Table updated on Oct 31, 2012

For monthly and annual means, thresholds, and sums: Months with 5 or more missing days are not considered Years with 1 or more missing months are not considered Seasons are climatological not calendar seasons

Winter = Dec., Jan., and Feb. Spring = Mar., Apr., and May Summer = Jun., Jul., and Aug. Fall = Sep., Oct., and Nov.

Western Regional Climate Center, mailto:wrcc@dri.edu

KAUMANA 88 1, HAWAII - Climate Summary

Tables

- Daily Summary Stats (~55 KB)
 Monthly Tabular data (~2 KB)

Daily Data

Graph and Lister (*)
Lister (*) Monthly Data
Custom Monthly Listing (*)

Western Regional Climate Center, wrcc@dri.edu

SPP No. 12-000138 Page No. 003269

home | browse plants | search plants | nursery | contact | login

Native Plants Hawaii







view gallery

Plant Profile Navigation

- Main Plant Information
- Plant Characteristics
- Flower Characteristics
- Leaf Characteristics
- Pests and Diseases
- Growth Requirements
- Environmental Information
- Special Features and Information
- More Links

Search Plants

[Search by Genus, Species, Subspecies, Variety, Forma, Hawaiian and Common Names, or Synonyms]



Acacia koa



Genus

Acacia

Species

koa

Varieties

- kauaiensis
- koa
- latifolia

Hawaiian Names with Diacritics

• Koa

Hawaiian Names

• Koa

Common Names

• Koa

Synonyms

- Acacia hawaiiensis
- · Acacia heterophylla var. latifolia
- · Acacia kauaiensis
- · Racosperma kauaiense

Racosperma koa

Did You Know...?

Koa is the largest native tree in the Hawaiian Islands reaching heights of about 115 feet (33 m)! Commercially, koa is one of the most expensive woods in the world. It is used to make furniture, veneer, and crafts. Most koa is harvested from remnant individuals or stands in pasture lands. [16]

[back to top]



Plant Characteristics

Distribution Status

Endemic

Endangered Species Status

No Status

Plant Form / Growth Habit

• Tree

Mature Size, Height (in feet)

- Tree, Small, 15 to 30
- Tree, Medium, 30 to 50
- Tree, Large, Greater than 50

Mature Size, Width

Koa can have a canopy spread of 40 feet or more. But typically, with a canopy spread of 20-40 feet. [16]

Life Span

Long lived (Greater than 5 years)

Landscape Uses

- Erosion Control
- Provides Shade
- Screening

Additional Landscape Use Information

Koa are fast growing trees at 5 feet per year for the first five years, and can reach impressive heights in several decades in upper elevation landscapes. [16] Though koa can grow at lower elevations, some varieties may succumb to diseases after a decade of growth. Since there is so much variety in koa habit from shrubby, multi-branched forms to tall straight trees, it is good to inquire of the source so as to suit your landscaping needs.

SPP NoPageofoof382 Page No. 003273

While koa can grow to heights of over 100 feet in their natural undisturbed environment, it would take many decades, if ever, to reach such heights in the urban landscape. They are more likely to grow to about 20 to 30 feet in the landscape at low elevations. [Rick Barboza, Hui Kū Maoli Ola]

Growth is in virtue of symbiosis with special bacteria called rhizobia that live associated with the roots. The bacteria convert, or fix, nitrogen from the air into usable nitrogen fertilizer for plants. The leaves, flowers and branches also provide nitrogen for understory and plants in the area. Koa inoculated with rhizobia tend to be more vigorous trees. [1]

Recommended planting is above 2000 feet [610 m]. [16]

Companion Plants:

Koa look nice when planted with other native plants such as naio, lonomea, kolea, kopiko, 'iliahi, olopua, and māmaki, pilo, hāpu'u, and palapalai.* These plants also beneift from the nitrogen-fixation by koa.

Additional Fragrance Information

Koa and koai'a have a distinctive aroma from the root area from a bacterium called rhizobia present in the soil and roots. An ammonia-ilke scent is given off during the nitrogen-fixing process. [1]

The pungent aroma is perhaps best appreciated by those who regularly work with this species. Otherwise, it generally has a non-appealing scent. [David Eickhoff, Native Plants Hawai'i]

Plant Produces Flowers

Yes

[back to top]



Flower Characteristics

Flower Type

Showy

Flower Colors

- Cream
- White
- Yellow

Additional Flower Color Information

Light yellow, cream or white round powder puff flowers. Showy displays when seen en masse.

Blooming Period

Sporadic

^{*} These plants can be found on this website using the "Browse Plants" feature found at the top. Enter names without diacritics.

- Winter
- January
- February
- March

Additional Blooming Period and Fruiting Information

Flowering occurs most heavily from January to March and into May with seeds ripening in August, September and October and persistent year round. [6]

[back to top]



Leaf Characteristics

Plant texture

- Medium
- Coarse

Additional Plant Texture Information

Leaves are 2 to over 10 inches long. Koa have sickle-shaped mature "leaves" called phyllodes, which are the main photosynthetic organs. Juvenile leaves, the true leaves, are feathery compounds.

Leaf Colors

- Light Green
- Medium Green

Additional Leaf Color Information

Koa leaves are green to gray green.

A large-leaved koa form was known as koa lau nui. [21]

[back to top]



Pests and Diseases

Additional Pest & Disease Information

Koa is known to attract aphids, whiteflies, Chinese rose beetles, seed weevils (Aracerus levipennis, Stator spp.), koa seed worm (Cryptophlebia illepida), koa moth (Scotoythra paludicola), mealybugs and a stem boring grub are also known to infest plant. A serious pest is the black twig borer (Xylosandrus compactus, *Xyloborus* spp.). [16]

Since koa forms a symbiotic relationship with bacteria in the roots for the nitrogen-fixing process, it is recommended that pesticides not be used around the root area.

Several fungi (Fusarium oxysporum, F. solani, Calonectria spp.), root rot (Armillaria spp.), and rusts (Endoraecium spp., Atelocauda spp.) on phyllodes are known infect koa. Older trees are also attacked by a

SPP No.P4200001382 Page No. 003275

number of wood-rotting fungi. [16] There are indeed a number of pests and diseases that affect koa, but perhaps Koa wilt is one of the more serious often resulting in the death of the plant. [11]

Native mistletoes or hulumoa (Korthalsella spp.) also parasitize koa. [16]

[back to top]



Growth Requirements

Fertilizer

Lightly fertilize seedlings 2 or 3 weeks after secondary growth. Since koa are nitrogen fixing trees, additional nitrogen is usually not necessary.

Pruning Information

Pruning koa often does more harm than good. Wounds from pruning may not heal, exposing the heartwood to rot and greatly increases their suspeceptability to disease and pests. Additionally, pruning slows the growth of the trees. Therefore, koa should not be pruned if it can be avoided. Lower branches do self prune. If pruning is needed, it should be absolutely minimal, done properly, and without excessive injury to the tree. [1,16]

Koa seedling roots should not be pruned, trimmed, or otherwise "fluffed out."

Water Requirements

- Dry
- Moist

Additional Water Information

Water once a month during dry months, more often for "coastal" trees.

Soil must be well drained

Yes

Light Conditions

- Full sun
- · Partial sun

Additional Lighting Information

Koa does best in full sun.

Spacing Information

Trees should be spaced 30 to 40 ft. apart.

Tolerances

- Drought
- Wind

Soils

- Clay
- Cinder
- Organic

Limitations

Koa are not tolerant of salty soils, infertile soils, constant waterlogged soils, constant high winds, or shade. [1,16] Trees can tolerate drought for 3-5 months, depending on soil, compettion for weeds, relative humility, winds, and other factors. [16]

Koa prefer soils that are loamy, sandy* clay forms, clays, clay loams, and sandy clays. Koa natural occur on both light, ash-derived soils and on highly weathered clays on older islands. Organic soils on lava rock are common in many koa regions. [16]

Surface roots are easily damaged with high human, animal, and machine traffic. [1,16]

[back to top]



Natural Range

- Kaua'i
- Oʻahu
- Moloka'i
- Lāna'i
- Maui
- Hawai'i

Natural Zones (Elevation in feet, Rainfall in inches)

- 150 to 1000, 0 to 50 (Dry)
- 150 to 1000, 50 to 100 (Mesic)
- 1000 to 1999, 0 to 50 (Dry)
- 1000 to 1999, 50 to 100 (Mesic)
- 2000 to 2999, 0 to 50 (Dry)
- 2000 to 2999, 50 to 100 (Mesic)
- 3000 to 3999, 0 to 50 (Dry)
- 3000 to 3999, 50 to 100 (Mesic)
- 4000 to 4999, 0 to 50 (Dry)
- 4000 to 4999, 50 to 100 (Mesic)

Habitat

• Terrestrial

Additional Habitat Information

^{*} Salt-free sands.

SPP No Page 000 138 Page No. 003277

Though not as common as in the past, koa is still easily found in suitable habitat often a dominant component of native and alien mixed forests. Koa grows in dry to moist forests from 300 to 7,000 feet, occasionally as low as 80 feet and rarely as high as 8,000 feet. [1]

There are three varieties of koa. Acacia koa var. kauaiensis on Kaua'i; var. latifolia on Hawai'i Island; and var. koa occurs on all the main islands. [16]

Koa trees with characteristics in between koa (Acacia koa) and koai'a (A. koaia) occur on Kaua'i. [16]

[back to top]



Special Features and Information

General Information

Koa belongs to the third largest plant family, the Pea or Legume family (Fabaceae). There are two endemic species of Acacia in the Hawaiian Islands: Acacia koa and A. koaia.

Koa resemble their smaller cousins koai'a, but there are some significant differences. (See Acacia koaia "Special Notes and Information")

Etymology

The generic name Acacia is derived from the Greek, akakia, the name for Acacia arabica, ultimately from akis or ake, a Greek word meaning a sharp point and referring to the thorns of this particular plant.

The specific epithet *koa* is the Hawaiian name for this species of tree.

Hawaiian Name:

Koa means "brave, bold, fearless" and also "warrior, fighter."

Background Information

Koa are dominant trees in Hawaiian forests and provide suitable habitat for many native species birds. The aptly named Koa-finches, Rhodacanthis palmeri and R. flaviceps, fed almost exclusively on green koa seed pods, sometimes the entire pod in pieces or occasionally only the seeds. Sadly, these brilliantly colored honeycreepers are now extinct. [14]

Koa varies greatly from one location to another. For this reason and others, it is important that koa, or any other native plants from nurseries, are never planted out in the wild. This will ensure genetic variability and alleviate unforeseen problems.

Early Hawaiian Use

Koa was the most valuable tree in Hawaii. [18]

In general, koa wood was also used in constructing houses (hale), spears, tools, paddles (hoe), kahili handles, calabashes ('umeke lā'au), ceremonial poles (hulumanu), religious ceremonies, and short surfboards. [1,3,12,13,17,18]

SPP No. P4250001362 Page No. 003278

While there were many uses for koa, it was never used for eating receptacles because the resin, which could not be removed, would leave a bad taste to foods. [2,18]

Canoe:

The prime importance of koa for early Hawaiians Early Hawaiians was making of canoes (wa'a), not only the single kinds with an outrigger, **kaukahi**, but even double kinds, **kaulua**, which consisted on two canoes lashed together with a yoke in a special way. [18]

Small narrow, long, light canoes, called **kialoa** or **kioloa**, were suitable for a single fisherman or for racing. Other smaller canoes, about 10 to 20 feet long, could accommodate six to eight men. These canoes were scarcely twelve inches at its widest and about two feet deep. [18]

Wa'a peleleu, or simply Peleleu, were long canoes or long voyages were usually 50 feet long, but some were 100 and even 150 feet long had a depth of 6 to 12, and even 15 feet, deep! Such canoes were 1 to 2 feet wide and carved from a single log. Some of these were made from the trunks of gian evergreens that had been carried by ocean currents and winds from the Pacific coasts of America. [18]

Dye:

The bark was used as dye to stain kapa a red color. [1]

Lei:

The leaves (phyllodes) were also used in lei making. [8]

Medicinal:

Koa leaves were placed under a pile of lau hala mats if a person had been in a sick bed for a long time. Leaves were placed on top and spread evenly over the mat to make to person comfortable. The heat that came from the body and the leaves would make the person sweat. [7,9] Someone would wipe the sweat from the person as they fell asleep. This was almost always used for patients with a fever. [7] Young children under a year old who had become weak were given a mixture of koa leaf ash and other plants and applied inside the mouth. [7,9]

The bark was applied to pūhō (abscess, burst sore, ulcer), 'ala'ala (scar, sore perhaps tuberculosis adentis), kaokao (syphilis), leprosy (ma'i lēpela), 'eha māui (sore bruises), and haki (broken bones). [10]

Religion:

Koa branches were made into booths for ritual purposes, in dedication of heiau. [18]

The Choosing & Making of Canoes

The process of selecting the correct tree for making a canoe (wa'a) was more than simply walking into a forest and picking out a tree to be used.

Before making a canoe, the Hawaiians employed a Kahuna, or priest, to offer prayers and sacrifices to Kū, the long-bearded god of canoes makers and of war, that the work should be successful. Then, the kahuna aided the men in selecting a suitable tree in the forest. This was a laborious work to fell a tree using a stone adze. The wa'a was then roughly hewn with the same tools.

SPP NB242-000f3b2 Page No. 003279

If the native bird 'elepaio (*Chasiempis* sp.), or the native crow, 'alalā (*Corvus tropicus*),* settled on the log, this was considered an ill omen, and work on it was abandoned. Another tree was selected to take its place. If all went well, there was the chant to move the felled koa:

One would cry: "I kū mau mau!" (Stand together!). Then from all: "I kū wā!" (Shout!)

One: "I kū mau mau! I kū hulu hulu! I kū lanawao!" (Stand together! Haul with all your might! Under the mighty trees!)

All: "I kūwā!" (Shout!)

One: "I kū lanawao!" (Under the mighty trees!)

All: "I kūwā!" (Shout!)

"I kū wa huki!" (Shout! Pull!)

"I kū wa ko!" (Shout! Push!)

"I kū wa a mau!" (Shout! ...Snagged!)

"A mau ka ēulu!" (Snagged in the tree top!)

"*E huki e!*" (PULL!) "*Kūlia!*" (STRIVE!) [20]

Although the wa'a was made from koa, a number of other woods were used to construct and complete the project. Among them were 'ōhi'a (*Metrosideros* spp.), 'ahakea (*Bobea* spp.), wiliwili (*Erythrina sandwicensis*), kamani (*Calophyllum inophyllum*), 'ulu (*Artocarpus altilis*), kukui (*Aleurites moluccana*), and hau (*Hibiscus tiliaceus*), to name a few, with the last three being Polynesian introduced plants. [20]

Modern Use

Today, koa is propagated and planted in forest restoration projects and/or used as shade trees in home gardens. [18]

The wood is still very much prized in wood craft and is high in demand, being one of the most expensive woods in the world. [1,12,15]

Koa is also a tonewood and used in modern musical instruments such as 'ukulele, acoustic guitars such as used country music artist Taylor Swift, some electric guitars, and Weissenborn-style Hawaiian steel or lap guitars. [5,15]

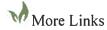
Dyes, or tannins, are still made from koa bark. The dye colors will range from light to very dark (blackish) browns according to the mordant (dye setting metal substance) used on the fabric. [4,18]

Additional References

^{* &#}x27;Elepaio are only known to have existed on Kaua'i, O'ahu and Hawai'i Island; 'Alalā is only known from Hawai'i Island. Both are still found today on these islands. While there is no fossil evidence of 'elepaio found on other islands, there were two other *Corvus* species found on the islands of O'ahu and Moloka'i at the time of early Polynesian settlers.

- [1] "Growing Koa" by Kim M. Wilkinson, pages 5, 7, 11-12, 35-36, 39, 55, 58, 59, 84.
- [2] "Plants in Hawaiian Culture" by Beatrice H. Krauss, pages 22, 52, 65.
- [3] "Arts and Crafts of Hawaii" by Te Rangi Hiroa (Sir Peter H. Buck), page 384.
- [4] "Hawaii Dye Plants and Dye Recipes" by Val Frieling Krohn-Ching, pages 77, 136.
- [5] http://en.wikipedia.org/wiki/Acacia koa [Accessed 10/7/09]
- [6] "Plants of the Canoe People" by W. Arthur Whistler, page 27.
- [7] "Native Plants Used as Medicine in Hawaii" by Beatrice Krauss, page 20.
- [8] "Nā Lei Makamae--The Treasured Lei" by Marie A. McDonald & Paul R. Weissich, page 42.
- [9] "Hawaiian Herbs of Medicinal Value, by D.M. Ka'aiakamanu & J.K. Akina, page 46.
- [10] "Native Hawaiian Medicine--Volume III" by The Rev. Kaluna M. Ka'aiakamanu, pages 62-63.
- [11] "Hawaii Forest Disease and Pests" http://www.ctahr.hawaii.edu/forestry/disease/index.html [Accessed 2/4/11; updated on 4/28/10]
- [12] "In Gardens of Hawaii" by Marie C. Neal, pages 410-411.
- [13] "Lā'au Hawai'i: Traditional Hawaiian Uses of Plants" by Isabella Aiona Abbott, pages 80, 83, 87-88, 110, 115, 129.
- [14] "The Hawaiian Honeycreeper: Drapandidae" by H. Douglas Pratt, pages 129, 209, 210, & Plate 1.
- [15] "Contemporary Woodworkers" by Tiffany DeEtte Shafto & Lynda McDaniel, pages 170, 172.
- [16] "Traditional Trees of the Pacific Islands" by Craig R. Elevitch, pages 1, 4, 5, 6, 7.
- [17] "How to Plant a Native Hawaiian Garden" by Kenneth M. Nagata, page "Koa."
- [18] "Ethnobotany of Hawaii" by Beatrice H. Krauss, pages 127-130.
- [19] "Extinct Birds" by Julian P. Hume & Michael Walters, pages 246-247.
- [20] Ikuna Koa Outrigger Canoe Club http://www.ikunakoaoutriggercanoeclub.com [Accessed on 9/26/13]
- [21] Hawaiian Dictionaries online http://wehewehe.org [Accessed on 9/27/13]

[back to top]



Plant Gallery

View Photo Gallery

Back to Plant List

Plant List

Other Nursery Profiles for Acacia koa

- Aileen's Nursery
- Big Island Plants
- Future Forests
- Ho'olawa Farms
- Hui Kū Maoli Ola: Hawaiian Plant Specialists
- Native Nursery, LLC

[back to top]

Rights Management | About this Site | Contact

Native Plants Hawaii. © 2009 All Rights Reserved. University of Hawaii.



Hawaiian Native Plant Propagation Database

Cibotium menziesii

Alternative Botanical Names

None found

Common Names

Hapu'u Hapu'u 'I'i Hawaiian Tree Fern Male Tree Fern

Family

Dicksoniaceae

Potential or Traditional Uses

Landscape

Cibotum messiesii Art Smith

Description

Cibotium menziesii is Hawai'i's largest tree fern. It can reach 35 feet in height, but often grows only 7 to 25 feet tall. The trunk can be up to 2 1/2 feet in diameter. The fronds arch and can grow as long as 12 feet. The fronds of Cibotium menziesii are smooth and slightly paler underneath with yellowish midribs. They are singly divided, but the divisions are lobed. Soft, brown hairs cover the young fronds, but upper parts of the frond stalks are covered with stiff, black hairs. The spores form in pouches at the ends of the small veins. (Bornhorst 1996; Smith 1999a; Valier 1995)

Habitat and Geographic Range

Cibotium menziesii is an endemic Hawaiian tree fern and is found on all the major Hawaiian islands. This tree fern can grow either terrestrially (on the ground) or epiphytically (on trees or shrubs). It grows in moist and wet forests and is most common at elevations ranging from 1,000 to 6,000 feet. (Smith 1999a; Valier 1995)

Propagation by Spores

Cibotium menziesii can be grown from spores. Spores should be collected from mature fronds of healthy plants. The most mature fronds are generally those lower down on the plant. The spore containers (sori) on these fronds should appear full and plump. The frond branches (pinnae) should be removed from the main frond stem and dried in paper bags, envelopes, or folded newspaper packets. Place each frond piece in its own paper container with the spore side down. To ensure that the spores dry quickly and do not mold, place the containers in a single layer in a warm, dry location for 2 or 3 days. The ripe spores will fall off of the fronds. The spores can be separated from the remaining debris using a very fine screen or seive.



Search the Database

Browse
Database -By Botanical
Name
By Common
Name

Other Native Hawaiian Plant Sites

> Other Plant Propagation Sites

<u>Database</u> <u>Bibliography</u>

Database Home Page

Other CTAHR
Databases

Sanitation is an important part of sowing fern spores to prevent both fungal infections and cross contamination by other fern spores. Smith uses a commercial mix containing sphagnum peat, vermiculite, and perlite (Pro-Mix). He moistens this mix with distilled water and microwaves it in a lidded container for 10 minutes on the high setting of the microwave oven.

After being heated in the microwave, the planting mix is spread in a sterile plastic tray with a clear plastic lid ("humididome") and allowed to cool. The cleaned spores are spread on the surface of the cooled mix and moistened with a fine spray of distilled water. Smith suggests that mixing the spores with water and spraying them onto the planting mix can provide more even distribution. Replace the lid as quickly as possible to prevent contamination.

Clean, dry spores can be stored in paper envelopes or packets. Place the envelopes in an air tight container and place it in the refrigerator. (Smith 1999a)

Propagation by Cuttings

Cibotium menziesii can be grown from the side shoots that form on the main trunks. (Bornhorst 1996)

Propagation by Division

Not applicable.

Propagation by Air Layers

Not applicable.

Propagation by Grafting

Not applicable.

Propagation by Tissue Culture

No information located to date.

References

Bornhorst, Heidi L. 1996. *Growing native Hawaiian plants: a how-to guide for the gardener*. Honolulu: The Bess Press. p. 74-76.

Hensley, David, Rhonda Stibbe, Norman Bezona, and Fred Rauch. 1997. *Hapuu (Hawaiian tree fern), Ornamentals and Flowers, OF-16.* Honolulu: Hawaii Cooperative Extension Service, College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa. (Also available as a PDF file at <u>Free CTAHR Publications.</u>)

Smith, Art. [1999a.] Cibotium Menziesii Tree Ferns in Hawaii [Web site]. [Cited 17 February 2000]. Available from http://www1.interpac.net/~artsmith/treeferns/menziesii.htm.

Smith, Art. [1999b.] *Tree Fern Sport Notes Tree Ferns in Hawaii* [Web site]. [Cited 17 February 2000]. Available from http://www1.interpac.net/~artsmith/treeferns/spores.htm.

Valier, Kathy. 1995. Ferns of Hawai'i. Honolulu: University of Hawai'i Press. p. 52.

SPP No. 12500 1583 Page No. 003284

The image in this record is used with permission from Art Smith's Web site "Tree Ferns in Hawaii" at http://www1.interpac.net/~artsmith/treeferns/index.htm

Last updated: 23 February 2000

Please send comments and suggestions to eherring@hawaii.edu



SPP No. 12-000138 Page No. 003285

The True Cost of LEED-Certified Green Buildings

Stephen J. Vamosi, PE; Intertech Design Services; Cincinnati, Ohio Sat 2011-01-01 12 00

Columnist examines what contributes to the higher price tags of green designs

Editor's note: The following is Part 3 of a three-part series.

Many industry professionals believe that seeking Leadership in Energy and Environmental Design (LEED) certification will put an additional financial burden on new and existing/remodeled buildings. Let's take a closer look at what goes into the cost of a LEED design:

- · Possibly higher energy use (See Part 1 of this series, "Green Buildings and Energy Efficiency," November 2010).
- · LEED certification fees.
- Construction-related expenses for architects, engineers, LEED advisors, etc.
- · Site clearing and debris separation/ disposal.
- · Green materials and equipment.
- · Post-construction monitoring/environmental-control systems.
- · Higher operating expenses.

LEED Certification Fees

According to recently filed court documents, the minimum cost of LEED certification is \$2,900 for a new building under 50,000 sq ft.1 LEED certification fees for a newly constructed building over 500,000 sq ft amount to \$20,000 (plus a \$900 initial registration fee). In California, certification of a new hospital exceeded \$1 million. A 1.2-million-sq-ft mixed-use office building with a \$400 million budget estimated the cost of LEED certification is "only 0.27 percent of the total cost," which represents an additional \$1.08 million.

Construction-Related Expenses

Construction-related expenses for LEED-certified buildings can increase a project's cost by about 10 to 30 percent. LEED certification alone can account for 5 to 15 percent of the total construction costs, not including funds required for other mandated expenses.

Architects and engineers usually demand higher fees for green designs. Green designers add value to the end product and provide extra services. A green-design professional typically charges 1 to 2 percent more for a LEED-certified building design.

These figures do not include the rates of a LEED Accredited Professional (which can increase design fees by 10 to 15 percent), LEED-certification application fees, or the costs associated with monitoring and reporting building performance.

Site Clearing and Debris Separation

In the early phases of the "green revolution," contractors voiced their concerns about spending excessive amounts of money and wasting time on carefully picking and separating various materials that result from the demolition of older buildings. Having separate containers for brick, drywall, steel, wood, etc. was a job killer. The disposal of some recovered material, such as steel and copper, might have been financially advantageous, but most separated materials were dumped into the same landfill.

Green Materials and Equipment

The cost of green-certified materials can become an issue when LEED design guidelines favor one material source over another. Building Design+Construction discussed wood certification in its March 2010 issue.2 According to the magazine, the U.S. Green Building Council (USGBC) only accepts wood when it comes from forests certified by the Forest Stewardship Council (FSC). The problem is 82 percent of FSC forests are outside of the United States and Canada. The USGBC apparently did not consider the cost of delivering certified wood thousands of miles from outside of the United States. Similar issues would arise if, for example, one drywall manufacturer or one steel supplier became a "designated green supplier."

USGBC green-design guidelines delineate systems and equipment considered to be green, such as tankless (instantaneous) water heaters. A gas heater's overall energy efficiency ranges from 25 to 30 percent, as opposed to the 92- to 95-percent thermal efficiencies of storage-tank-type water heaters. Electric water heaters theoretically are 100-percent efficient at the point of use. However, electric energy typically is delivered to the point of use at an overall efficiency of approximately 30 percent. (A 3-gpm instantaneous water heater with a 70°F rise requires a 32-kw heating element.) The costs of larger electric feeders, switchgear, and internal wiring must be considered. However, USGBC guidelines do not even mention overall system efficiency as a criterion for awarding extra points. The result is that final designs frequently receive points for non-economical designs.

Post-Construction Monitoring

To comply with the monitoring and reporting post-construction performance data required for LEED certification, a building's mechanical, electrical, and plumbing systems must have a sophisticated data-collection/evaluation system installed. Small- to medium-size buildings traditionally do not specify, install, and maintain that kind of equipment. This one item could add up to several thousands of dollars worth of computer hardware, software, and sensors. Larger buildings normally are prepared to include complex data-recording/reporting systems, somewhat reducing the additional-cost impact. Also, larger buildings normally have skilled operators on staff, while small- and medium-size buildings might not.

Post-construction monitoring costs typically are recurring. Data collection and complex submittal calculations need to be repeated annually for every building.

Conclusion

Parts 1, 2, and 3 of this series are full of pro and con arguments about green designs. It is almost impossible to keep up to date on new developments on a daily—or even weekly—basis. Other issues about the effects and impacts of going green not mentioned in these columns are equally important and will play a significant part in the overall operating costs and energy efficiency of buildings.

References

- 1) Henry Gifford, Gifford Fuel Savings Inc. vs. U.S. Green Building Council, David Gottfield, Richard Fedrizzi, Rob Watson, Jane Doe, John Doe, et al., 10 Civ 7747 (2010).
- 2) Cassidy, R. (2010, March). End the battle of FSC vs. SFI wood in LEED. Building Design+Construction. Retrieved from http://www.bdcnetwork.com/article/end-battle-fsc-vs-sfi-wood-leed

Stephen J. Vamosi, PE, is principal and chief executive officer of Intertech Design Services (www.intertechdesign.net), an architecture and engineering firm specializing in the design of commercial, medical, educational, and retail buildings. He also is a professor emeritus for the University of Cincinnati and a member of the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

Source URL: http://hpac.com/columns/engineering-green/true-cost-leed-buildings-0111

SPP No. 12-000138 Page No. 003286

SPP No. 12-000138 Page No. 003287

WRITTEN FINAL TESTIMONY OF TERENCE YOSHIOKA

Critical to the evaluation and understanding of this Petition is the Hawaii Supreme Court decision in Neighborhood Board vs. State Land Use Commission, 64 Haw. 265 (1982) wherein a special permit granted by the Land Use Commission which would have allowed 103 acres of land in an agricultural district to be used for a recreational theme park was overturned.

The Appellant in Neighborhood Board contested the issuance of the special permit on several grounds including, inter alia, that: (1) Chapter 205 required the applicant to pursue a district boundary amendment rather than a special permit; and (2) the applicant failed to meet the substantive special permit requirements of HRS §205-6 and the Land Use District Regulations.

In overturning the special permit, the Hawaii Supreme Court held at pages 269 and 270 that "HRS §205 allows the county planning commission and the LUC to issue special permits for 'certain unusual and reasonable uses within agricultural and rural districts other than those for which the district is classified' but only when the use would promote the effectiveness and objectives of [HRS Ch. 205]." Whether a particular use is 'unusual and reasonable' is determined by applying the five guidelines set forth in the Land Use District Regulations §5-2 to the proposed project. Section 5-2 requires the following:

- (1) Such use shall not be contrary to the objectives sought to be accomplished by the Land Use Law and Regulations.
- (2) That the desired use would not adversely affect surrounding property.
- (3) Such use would not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage and school improvements, and police and fire protection.

SPP No. 12-000138 Page No. 003288

- (4) Unusual conditions, trends and needs have arisen since the district boundaries and regulations were established.
- (5) That the land upon which the proposed use is sought is unsuited for the uses permitted within the District.

The Hawaii Supreme Court deemed it "unnecessary" to review all five guidelines as it found that the applicant "failed to comply with the first and critical requirement that the proposed use not run contrary to the objectives sought to be accomplished by the Land Use Laws and Regulations, the counterpart of the statutory mandate that the proposed use promote the effectiveness and objectives of HRS Ch. 205." [Supra, p. 270]

After lengthy discussion of the procedural and substantive differences between the special permit and district boundary amendment processes, the Hawaii Supreme Court concluded at page 273 as follows:

The interim statewide land use guidance policies enumerated in HRS 205-16.1 (1976 and Supp. 1981) and the Hawaii State Plan HRS Ch. 226, themselves articulate as planning objectives the avoidance of scattered urban development and the accommodation of urban growth in existing urban areas. [Citations omitted]. We do not believe that the legislature envisioned the special use technique to be used as a method of circumventing district boundary amendment procedures to allow the ad hoc infusion of major urban uses into agricultural districts. [Citation omitted.]. We therefore conclude that Oahu's Kahe Point proposal is not an 'unusual and reasonable use' which would qualify for a special permit under HRS §205-6 and that planning commission and LUC abused their discretion in approving Oahu's application. The proposed recreational theme park is more properly the subject of a district boundary amendment petition which would be considered in accordance with the requirements of procedure and proof as set forth in HRS §205-4.

As noted by the Hawaii Supreme Court, the "essential purpose" of the special permit is to "provide landowners relief in exceptional situations where the use desired would not change the essential character of the district nor be inconsistent therewith." [Supra, p. 271]. It seems, therefore, that the test to be applied to determine if a district

boundary amendment is called for should be: Is the proposed use a "major urban use" that "changes the essential character of the district" or "is inconsistent therewith"?

To answer this question as to this project, we need only refer to the County of Hawaii Planning Department Revised Recommendations wherein it is stated at section (F) on page 782 that "[t]he proposed school will alter or change the essential character of the land and its present use from its current undeveloped character." Despite its acknowledgment, the Planning Department apparently overlooks or accepts the change because of Petitioner's proposal to construct single story structures similar to the surrounding residential community. [Supra]. Even if Petitioner was able to construct a gymnasium that was only one-story high, the Planning Department limited view of what constitutes a "change" to "the essential character" of the property is unrealistic and shortsighted. No matter whether one story or not, the construction of elementary, intermediate and high school classrooms, an administrative center, a 140-space parking lot, a library/resource center, a kitchen/dining facility, a gymnasium/multi-purpose building, green/shade houses, a 6-horse barn, a maintenance building, a 30-person dormitory, a caretaker's residence, and a facility to house the inter-generational program would, by any standard, change the essential character of the land from an agricultural district to an urban district.

Furthermore, the Planning Department's narrow view of what constitutes "change" ignores the nearly 500 students, teachers and staff that will occupy the property at least five days per week, and the hundreds of buses and cars going to and from the property each day. It also ignores the noise and dust that must be endured for 16 to 25 years while the improvements are constructed on the property. All of these consequences

SPP No. 12-000138 Page No. 003290

must and should be taken into consideration to determine if the "essential character" of this property will be "changed." And, obviously, the scrutiny should not be restricted to the height (i.e. one story) of the buildings to be constructed.

In reliance upon the foregoing, I urge the Hearing Officer to rule that the school does constitute a "major urban use" of the property which will "change the essential character of the district" or "be inconsistent therewith" so as to require that the proposed use be effected by a district boundary amendment and not a special permit.

If this application does not require a district boundary amendment, it must yet be denied for failure to satisfy the seven criteria set forth in Rule 6-3(b)(5) of the Planning Commission Rules of Practice and Procedure.

As pointed out in the <u>Neighborhood Board</u> decision, "[w]hether a particular use is 'unusual and reasonable' is determined by applying the five guidelines set forth in the Land Use District Regulations §5-2 to the proposed project." [Neighborhood Board at page 270]. Those five guidelines are now set forth in §15-15-95 of the Land Use Commission Rules. Its counterpart for the County of Hawaii Planning Commission is contained in Rule 6-3(b)(5) and has been expanded to seven criteria. The two additional criteria are:

(F) the proposed use will not substantially alter or change the essential character of the land and the present use and (G) The request will not be contrary to the General Plan and official Community Development Plan and other documents such as Design Plans.

The additional requirement that the "proposed use will not substantially alter or change the essential character of the land and the present use" is consistent with the Neighborhood Board decision to require a district boundary amendment if this requirement is not satisfied. In short, Rule 6-3(b)(5)(F) merely codifies the ruling in

Neighborhood Board and forewarns any applicant for a special permit that the special permit cannot be granted if the "essential character" of the land and its present use will be "substantially altered."

Clearly, then, only a district boundary amendment can authorize the proposed use if the "essential character" of the agricultural district will be changed and it matters not if the remaining six criteria of Rule 6-3(b)(5) can be satisfied.

Assuming, without conceding, that Petitioner's failure to satisfy Rule 6-3(b)(5)(F) is, by itself, not sufficient to deny the special permit, the next issue must then be: How many of the other six criteria must be satisfied before this special permit can be approved? Rule 6-3(b)(5), itself, gives no indication that anything less than all seven criteria is required. Had the authors of Rule 6-3(b)(5) intended to accept 5 or 6, or even a simple majority of the seven criteria to grant a special permit, then why not state so? What line of reasoning can support a belief that less than all seven criteria must be met to grant a special permit? Without additional words of qualification in Rule 6-3(b)(5), it would be pure arbitrary guesswork to select a number less than seven.

If we assume, nonetheless, that not all seven criteria must be satisfied, and we review the Petitioner's and Planning Department's position on the criteria, there is a clear acknowledgment that at least three of the seven criteria have not been met. For example, with respect to Rule 6-3(b)(5)(B) which requires that "the desired use would not adversely affect surrounding properties", the Planning Department concedes that "the proposed use is anticipated to have an adverse affect on the surrounding properties, but these adverse impacts can be mitigated to minimize these impacts through conditions of approval." [Planning Department's Revised Recommendations, p. 7].

The use of the term "minimize" is erroneous and totally without support. The Random House Webster's College Dictionary defines "minimize" as "to reduce to the smallest possible amount or degree." As increased traffic and noise are expected to negatively impact surrounding properties, "minimizing" these adverse consequences would mean reducing the extra traffic to one car and reducing the noise to one decibel. It is obvious that these results are unattainable.

Without questioning the accuracy or reliability of Applicant's Traffic Impact
Analysis Report (TIAR), we know that the school will generate much more traffic going
to and from the school. Based upon the TIAR, we can expect at least 621 more buses and
cars (p. 536). Except for construction of a left turn lane from Edita Street turning into the
school (p. 887), no other action is being recommended by the Planning Department to
mitigate traffic delays caused by the school traffic.

Neither the Planning Department nor Applicant can state that traffic delays will not be experienced by the surrounding property owners. Whether these delays are classified as "better than acceptable levels of service" [Revised Recommendations, p. 886], for those Kaumana residents who are used to no traffic delays currently, having to wait 8 to 11 seconds (p. 536) before entering to and from Kaumana Drive because of the school traffic will be irritating and upsetting and adversely affect the daily routine and quality of life.

Equally, if not more upsetting to the surrounding properties, will be the noise generated by the increased traffic, school activities and 16 to 25 years of construction of the school improvements. Petitioner seeks to avoid this adverse consequence by saying that it will plant landscaping. But we all know, and it is common knowledge, that heavy

growth of trees and other vegetation near a construction site does not negate the noise emanating therefrom. And even traffic on Kaumana Drive can be heard despite the barrier of trees between Kaumana Drive and Pacific Plantation Subdivision.

Even if the noise from this project could possibly be lessened or abated by landscaping, the issue is this: by how much? No evidence has been submitted by Petitioner to show how much traffic, school and construction noise would be generated by this project, nor by how much such noise would be reduced through landscaping. As it is Petitioner's burden of proof to show that it has met the criteria for the special permit, failure to present such evidence means that Petitioner has failed to prove that the surrounding properties will not be adversely affected.

Another criterion that the Planning Department has admitted has not been met is that "[t]he use will not substantially alter or change the essential character of the land and present use." [Rule 6-3(b)(5)(F)]. This requirement as already been extensively discussed hereinabove and need not be repeated.

Subsection (E) of Rule 6-3(b)(5) requires that "[t]he land upon which the proposed use is sought is unsuited for the uses permitted within the district." Because of the "poor" quality of the soil, the Planning Department concluded that "the land upon which the proposed use is sought is unsuited for agricultural uses permitted within the Agricultural District" [Revised Recommendations, p. 889]. In contrast, the Petitioner stated at pages 48 and 49 of its Petition that "[d]espite the poor agricultural qualities of the property, the school does intend to include an agricultural program, the purpose of which would be educational rather than commodity driven, and would focus on teaching sustainable practices" including hydroponics and the cultivation of fruits, vegetables,

nature trees, plants and ornamental plants. Petitioner also intended to use the property for raising of livestock and the development of a forestry/conservation program. [Supra].

The Planning Department, in order to find the land unsuitable for agricultural use, has overlooked many of the agricultural uses cited in Chapter 205-4.5, HRS, that are not dependent on good quality soil, such as game and fish propagation and public recreational areas such as camps, picnic grounds, parks, etc.

Petitioner, on the other hand, has had to concede that the land is suitable for agricultural uses because of its selection of the site for its agricultural program. It was caught between the proverbial rock and hard place. It if admitted that the property was not suitable for agricultural uses to satisfy Rule 6-3(b)(5)(E), then there would be no justification for placement of the school in an agricultural district. But if it admitted that the property was suitable for agricultural uses, then it would not be able to satisfy Rule 6-3(b)(5)(E). Unfortunately for Petitioner, it cannot have it both ways. So the land, by its own admission, is *not* unsuitable for the uses permitted within the agricultural district.

To conclude what has already been a lengthy closing argument, but without conceding that the other unmentioned criteria have been met, let me point out that because the subject property is more than fifteen acres, Rule 6-9 of the Planning Commission Rules requires approval of the Special Permit by the State Land Use Commission. Both the Planning Commission and Land Use Commission are required by their respective Rules [.e. Chapter 15-15-95 and Rule 6-3(b)(5)] to find that the proposed use is "unusual and reasonable" and would promote, or not be contrary to, the objectives of Chapter 205 and our State Land Use Laws.

The Planning Department has determined that the proposed use is "unusual and reasonable" independent of the seven criteria set forth in Rule 6-3(b)(5). In the instant case, the Planning Department found Petitioner's proposed use to be "unusual" because a school is "not normally considered agricultural in nature." [Revised Recommendations page 885]. If this approach to determine what is "unusual" is upheld, then all proposed Special Permits would automatically qualify as "unusual" since each Special Permit is sought to allow a non-agricultural use in an agricultural district.

The Planning Department also concluded that Petitioner's proposed use was "reasonable" because the school is "required to support the agricultural community in which they are located" [Supra]. There is nothing on record to support this conclusion nor is there any rational discussion as to how this conclusion was reached.

And even if a school can be considered a "reasonable" use in an agricultural district, how do we determine if this school is a "required" service in the subject agricultural district? There has been no showing that another school is desired or needed, much less "required", in the subject agricultural district or any other nearby agricultural district. Why then is it "reasonable" to allow this school to be injected into this agricultural district without such proof?

To conclude that the proposed use is "reasonable" by utilizing the Planning Department's definition would be pure conjecture and unsustainable by any burden of proof. Accordingly, I urge the Hearing Officer to find that the Planning Department's determination that the proposed use is "unusual" and "reasonable" to be in error and without any basis in fact or in law.

Conclusion

Authoritative case law requires that the district boundary amendment process be utilized if the proposed use changes the essential character of the district. Without question, the construction of a kindergarten through twelfth grade school will change the essential character of the subject property from agricultural to urban. As such, the special permit process utilized by Petitioner is inappropriate to authorize the construction of the school.

Even if the special permit process is deemed appropriate, Petitioner must, yet, fail as it has not satisfied all of the seven criteria prescribed by Rule 6-3(b)(5) to qualify the school as an "unusual and reasonable" use. For example, the noise and traffic generated by the project is an admitted adverse impact upon the surrounding property owners which will persist for no less than 16 to 25 years (as to the noise) and forever (as to the traffic).

In addition, Petitioner has failed to show that the property is unsuited for agricultural uses. In fact, Petitioner has admitted that it is suitable for the growing of crops and for forestry/conservation purposes.

Without words of qualification or limitation, there is no logical or justifiable basis for allowing a special permit to be issued if all seven criteria of Rule 6-3(b)(5) have not been satisfied. As the foregoing arguments point out, criteria (A), (B), (E), and (F) have not been satisfied and for that reason, the Petition should be denied.

Testimony of Henry K Lee Loy on day three of the contested case hearing

Good morning Madame hearing officer.

My name is Dr. Henry Lee Loy and I live at 1579 Mele Manu St. The TRAFFIC IMPACT ANALYSIS REPORT by Mr. Philip Rowell states that the PURPOSE and OBJECTIVE of the study was to identify potential deficiencies adjacent to the study project that would impact traffic operation in the vicinity of the proposed project. I will present you evidence that his study failed to meet its purpose and objective. The report states future traffic growth consists of two components. The first being ambient background growth and the second component is the estimated traffic that will be generated by other development projects in the vicinity of the proposed project. Related projects are defined as those projects that are to be constructed adjacent to the study project and would significantly impact traffic in the study area. His report states, "no related projects were identified". The report also presumed "that there would be no traffic growth of traffic along Edita Street".

Contrary to Mr. Rowell's report I am submitting evidence that Mr. William Brilhante's 45 lot subdivision adjacent to the proposed school was tentatively approved by the planning department in 1998 and resubmitted as recently as August 12, 2012. Traffic from his subdivision is to unload onto Kaumana Drive via Edita Street. I am also submitting evidence that another 83 lot subdivision called Kumulani Gardens has received tentative approval as of July 24, 2012. The entrance to this 83 lot subdivision will be approximately half a mile from the intersection of Kaumana Drive and Edita Street. Mr. Rowell failed to identify this project in his report. His report also fails to identify other projects in the vicinity including the Department of Hawaiian Homes residential subdivision, the 39 lot Hokulani St. subdivision, the 23 lot residential subdivision at the intersection of Kaumana Drive and Mohouli Street extension, the 100 bed Skilled Nursing Facility on Kaumana Drive and the Mohouli Senior Phase 1 Housing Project at Mohouli Street extension.

SPP No. 12-000138 Page No. 003298

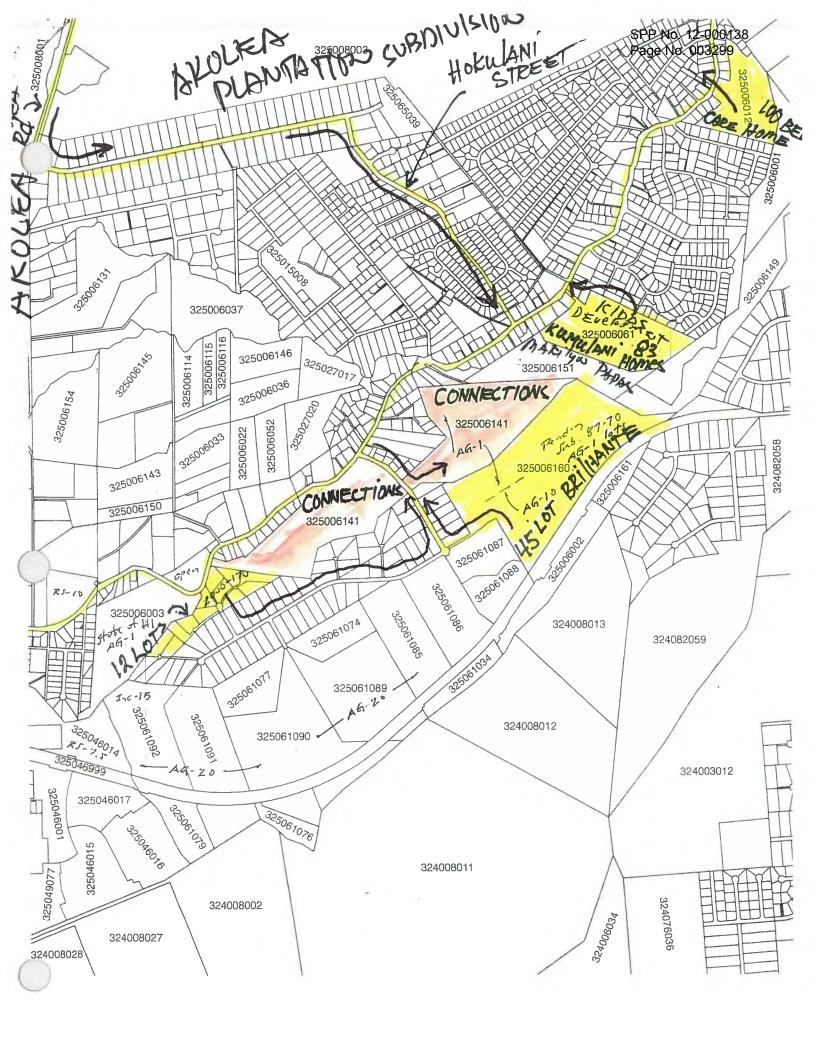
Madame hearing officer, today as you approach Kaumana Drive for a site visit please drive carefully as you will see the road is narrow and winding. On your left you will note construction of the 100 bed skilled-nursing facility, the shark teeth striping on the sharp curve just above Terrace Drive, the numerous side-streets and driveways that feed onto Kaumana drive, the location of the 83 lot subdivision on your left near Alahelenui Street, to your right is Hokulani Street which will soon be open to traffic from the Akolea plantation subdivision and a new 39 lot subdivision. (Please refer to the colored map I provided for you). Imagine the roadway slick with rain and think of the safety of the Kaūmana community. Thank you for your time.

Respectfully submitted,

Henry K Lee Loy

1579 Mele Manu Street

Hilo. Hawaii 96720





William P. Kenoi

West Hawai'i Office

Phone (808) 323-4770

Fax (808) 327-3563

74-5044 Ane Keohokalole Hwy

Kailua-Kona, Hawai'i 96740



County of Hawai'i
PLANNING DEPARTMENT

SPP No. 12-000138 BPage No. 003301

Margaret K. Masunaga Deputy

> East Hawai'i Office 101 Pauahi Street, Suite 3 Hilo, Hawai'i 96720 Phone (808) 961-8288 Fax (808) 961-8742

July 24, 2012

Jason K. Inaba, PE Inaba Engineering, Inc. 273 Waiānuenue Avenue Hilo, HI 96720

Dear Mr. Inaba:

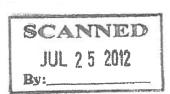
SUBDIVIDER: KIDDS DEVELOPMENT CORPORATION
"Kumulani Gardens"

Proposed Subdivision of Parcel A-1-A,
Into Lots 1 to 83_Inclusive, Lots R-1, R-2 & R-3
Road Lots "A" & "B" and Mokihana Street Extension,
Being a Portion of Grant 5484,
Ponahawai, South Hilo, Island of Hawai'i, Hawai'i
TMK: 2-5-006:061 (SUB-00-000019)

Please be informed that Tentative Approval of the revised preliminary plat map dated October 15, 2008, is hereby granted with modifications and conditions.

The subdivider is now authorized to prepare detailed drawings of the subdivision plan in accordance with Chapter 23, Subdivision Control Code, County of Hawaii, as modified. Before final approval can be granted, the following conditions must be met:

- 1) Water System
 - a) Provide a water system meeting with the approval of the Department of Water Supply.
 - b) Submit water system construction plans for approval by affected agencies.
 - c) Pay installation and facilities charges as required by the Department of Water Supply.
- 2) Drainage
 - a) Identify all watercourses and drainage ways and encumber with drainage easements.



SPP No. 12-000138 Page No. 003302

Jason K. Inaba, PE Inaba Engineering, Inc. Page 2 July 24, 2012

Access and Roadway Improvements

The location of the connection of Mokihana Street Extension with Kaumana Drive shall meet with the approval of the Department of Public Works (DPW), including sight distance.

Provide a Traffic Impact Analysis Report (TIAR) to DPW-Engineering Division.

For Road Lots A, B and Mokihana Street Extension, construct minimum 32-ft. wide dedicable pavement with concrete curbs, gutters and sidewalks within a minimum 50-ft. wide right-of-way conforming to Standard Detail R-32 and R-34. Stipulate the specific intent of Lots R-1, R-2 and R-3, including access destination.

Roadway design, including allowable street grades and minimum sight distance requirements, shall conform to the standards of the code.

Provide minimum 20-ft. corner radius at the intersection of Road Lot "A" and Road Lot "B" with Mokihana Street Extension and Mokihana Street Extension with Kaūmana Drive.

For cul-de-sac, construct dedicable turnaround conforming to Standard Detail R-32.

Utility poles shall be located in the road right-of-way as shown on DPW Standard Detail R-35 (Revised). The subdivider shall contact the utility companies to determine the width and location of any required easements and shall show the easements on the final plat map.

The proposed Mokihana Street Extension shall connect to the adjacent existing Mokihana Street. Submit proposed street names conforming to the adopted street naming policy of the County of

Hawaii.

Submit construction plans and drainage report for review and comment.

Additional storm runoff due to development shall be disposed within the subdivision and shall not be discharged onto adjacent properties or roadways.

Install streetlights/signs/pavement markings as required by the Traffic Division, Department of Public Works.

All easements affecting proposed lots shall be identified for its purpose and to which proposed lot(s) and/or grantee(s) the easement is in favor of. This shall be shown on the final plat map.

Wastewater Improvements. All wastewater plans shall conform to applicable provisions of the State

Department of Health's Administrative Rules, Chapter 11-62, Wastewater Systems.

Comply with all conditions of approved Change of Zone Ordinance No. 716 (REZ 396). In summary, the conditions are generally as follows but not limited to: time extension request; zoning of the property in two (2) increments; and compliance with the County's current affordable housing requirements (Chapter 11, Hawai'i County Code).

Property Tax Certification. Submit written proof that all taxes and assessments on the property are

Surveyor's Certification. Place property markers in accordance with the final plat map. Surveyor shall submit certification upon completion.

Jason K. Inaba, PE Inaba Engineering, Inc. Page 3 July 24, 2012

Final Plat Map. Submit ten (10) copies of the final plat map prepared in conformity with Chapter 23, Subdivisions, within one year from the date of tentative approval, on or before July 24, 2013. If not, tentative approval to the revised preliminary plat map shall be deemed null and void. Only upon written request from the subdivider and for good cause, the director may grant to the subdivider an extension of time within which the subdivider may file the final plat. As part of final plat map submittal, provide an additional copy of the final plat map as a ".dwg" or ".dxf" diskette file prepared by CAD software. In the alternate, a digital copy of the final plat map may be emailed to the Tax Maps and Records Supervisor at planning@co.hawaii.hi.us.

Time Limit. Subdivider shall complete all requirements specified as conditions for tentative approval of the revised preliminary plat map within three (3) years of said tentative approval, on or before July 24, 2015. An extension of not more than two (2) years may be granted by the director upon timely request

of the subdivider.

Please be aware that if at any time during the fulfillment of the foregoing conditions, should concerns emerge such as environmental problems or other problems which were earlier overlooked or not anticipated/accounted for in data/reports available to date, this could be sufficient cause to immediately cease and desist from further activities on the proposed subdivision, pending resolution of the problems. The Planning Director shall confer with the listed officers to resolve the problems and notify you accordingly.

No final approval for recordation shall be granted until all the above conditions have been met.

Land shall not be offered for sale, lease or rent until final approval for recordation of the subdivision is granted by the Planning Director or the proposed subdivision has been issued a preliminary order of registration by the Department of Commerce and Consumer Affairs (DCCA) in accordance with the requirements of Chapter 484, Hawaii Revised Statutes.

Should you have any questions, please feel free to contact Ed Cheplic of this department.

Sincerely,

BJ LEITHEAD TODD

Planning Director

ETC:Inm

\\Coh33\planning\public\Admin Permits Division\Subdivision\2012\SUBc2012-3\SUB-00-000019KiddsDevCorpKumulaniGardensTA.doc

Enc.: Revised PPM (10-15-08)

Aral, Daryn

From: Aral, Daryn

Tuesday, December 20, 2005 5:31 PM

'island.survey@verizon.net'

Ishii, Ben; Yuen, Chris

Subject: SUB 87-000070 (Brilhante) adjacent to Pacific Plantation at Mele Manu Street and Edita

Robert,

I have spaken to the Director and he is comfortable with going with the extension of Mele Manu Street through the proposed subdivision as a 50-foot wide right-of-way. Take a careful look at how this Mele Manu Street extension will approach Puainako Street and widen the right-of-way as necessary to accommodate any necessary fill areas along the shoulders of the roadway so it matches grade with Puginako.

The following will detail some of the items that we discussed at today's (12/20/05) meeting between you, Bill Brilhante, Karlyn Hamamoto representing the applicant and Ben Ishii of DPW-Engineering and Sal of State DOT.

- A pending 44 lot subdivision (SUB87-000070) remains pending with this office. Tentative approval issued on December 30, 1988. However, since this initial approval, the alignment of Puainako Street has changed so that the proposed lots will need to be reconfigured. Secondly, you expressed concern regarding the preservation of this application in light of the zone district boundaries between the A-10a and A-1a zone as it bisects this property. I need to do a lot more research into this before I can give you a definitive answer, but will respect your desire to keep this application active given certain commitments granted upon the issuance of tentative approval. I will continue with my background research into the location of the zone district boundaries and our position regarding the preservation of this old subdivision application may change given my findings.
- You request the ability to process a relatively simple lot adjustment subdivision concurrent with the pending 44-lot subdivision. Given that this lot adjustment is part of your on-going negotiations with 2. the Department of Public Works to allow for drainage improvements/studies within your property and the Puainako Street extension, we will permit you submit this simple lot line adjustment subdivision that will be processed under Section 23-7 of the Subdivision Gode. We normally do not allow for the processing of concurrent subdivision applications affecting the same property, but since the pending 44-lot subdivision requires additional research as well as a major revision of the preliminary plat map to reflect the current alignment of the Puainako Street extension, I don't see the simple lot line adjustment subdivision as being procedurally disruptive.
- The proposed lot line adjustment subdivision shall include provisions for cross-access easements at the eastern corner of the project site along the common parcel boundaries and consistent with the 3 anticipated location of the Mele Manu Street extension-Puainako Street intersection. This will ensure that both properties will access Puainako at a single access point. Provide no-access planting screen easements along the remainder of the lots' frontage with Puainako, exclusive of this access point. Show the entire alignment of the Mele Manu Street extension as a future road reserve easement. Certificate of staking can be limited to that area where the lot lines were modified

We understand that you will be assessing your ability to proceed with a revised version of your proposed 44-lot subdivision at some point in the future. Our discussion up to this point have been supportive of a revised layout to accommodate the current location of the Puainako Street extension and your cooperation in accommodating the extension of Mele Manu Street. We did discuss the extension of Mele Manu just short of its connection with Puainako, leaving a short remaining section as a road reserve. Should you proceed with this subdivision, all lots will load onto Kaumana Drive until such time the County or State feels that this connection to Puainako is desired. Not knowing when you will proceed with this subdivision has made me reconsider that full connection to Puainako Street, along with all required intersection improvements, may be a requirement depending upon the status of the Edita Street extension. Sal of DOT made it clear that you cannot have two full intersections along this stretch of Puainako Street.

hope this clarifies some of the issues and questions that were raised at today's meeting.

Daryn S. Arai County of Hawaii Planning Department Aupuni Center 101 Paudhi Street, Suite No. 3 Hile, Hawaii 96720

Phone: (808) 961-8288 Ext 204

Feec (808) 961-8742

email: darai@co.hawaii.hi,us

Hawaii County is an equal opportunity provider and employer

74-5044 Ane Keohokalole Hwy Kailua-Kona, Hawai'i 96740 Phone (808) 323-4770 Fax (808) 327-3563

County of Hawai'i PLANNING DEPARTMENT

Milo, mawai i 🗸 SPP No. 12-000138 Page No. 003306

August 23, 2012

Bruce K. Meyers, P.E. Okahara & Associates, Inc. 200 Kohola Street Hilo, HI 96720

Dear Mr. Meyers:

RETURN SUBDIVISION APPLICATION AND PRELIMINARY PLAT MAP SUBDIVIDER: BRILHANTE-HAWAII, LLC

Proposed Consolidation of Remnant A-2 and Lot 36-B-1, And Resubdivision into Lots 1 through 45, 3 Roadway Lots and 2 Drainage Lots, Kūkūau 2nd, South Hilo, Island of Hawai'i, Hawai'i TMK: 2-5-006:160 & 2-5-061:087

This is to acknowledge receipt of ten (10) copies of the preliminary plat map dated August 6, 2012, and filing fee of \$1,375.00 for the referenced application for 45 lots, 2 road lots and 2 drainage lots. However, regret that we are unable to process the application and are returning it to you. The filing fee will be returned to the subdivider under separate cover.

This application proposes to consolidate and resubdivide properties that are zoned A-1a and A-10a into one (1) acre lots. The only way to accomplish the subdivider's intent of 45 one (1) acre lots is to have a change of zone approved for the A-10a portion of the proposal.

We also find that the preliminary plat map is quite deficient in required information such as:

- There is no description of the proposed action (i.e. Proposed consolidation of ... and resubdivision into ...":
- Name and address of the owner/subdivider; 2.
- Adjacent property ownership information; 3.
- The approximate lot layout and the approximate dimensions and area of each lot; 4.



August 23, ZU1Z

SPP No. 12-000138 Page No. 003307

Acreage of proposed subdivision and number of lots;

Widths of all existing streets within or adjacent to the tract and control of access lines adjacent to State highways;

Zoning upon subject and adjacent parcels, show zoned district boundaries; Sites, if any, allocated for purposes other than single-family dwellings;

Proposed deed restrictions in outline form if any;

10. The approximate location within the subdivision and in the adjoining streets and property of existing sewers and water mains, culverts and drain pipes, electric conduits or lines proposed to be used on the property to be subdivided and invert elevations of sewers at points of proposed connections;

11. Statement regarding water system to be installed, including source, quality and quantity of water;

12. Provisions for sewage disposal, drainage and flood control which are proposed. The drainage map shall include the approximate location of areas subject to inundation or storm water overflow and all areas covered by waterways, including ditches, gullies, streams and drainage courses within or abutting the subdivision;

13. Parcels of land proposed to be dedicated to public use, and the conditions of such dedication; and

14. Improvements to be made by the developer and the approximate time such improvements are to be completed. Sufficient detail regarding proposed improvements shall be submitted so that they may be checked for compliance with objectives of these regulations, State laws and other applicable County ordinances.

The abovementioned items are some of the deficiencies we observed, but the subdivider is ultimately responsible to provide all information on the preliminary plat map as required by the Subdivision Code.

build you have any questions, please feel free to contact Jonathan Holmes of this department.

Sincerely,

Sound Stagning J LEITHEAD TODD Planning Director

P:\Admin Permits Division\Subdivision\2012\SUBc2012-3\2-5-6-16082-5-61-878rilhanter\tauvallinc\SUB-12-001197\RETPP\M.doc

Encs: 10 PPM (08-06-12)

Copies of Letter of Transmittal (08-07-12)

Original & Copies Subdivision Application (08-07-12)

Brilhante-Hawai'i, LLC w/Receipt #669825 XC:

C. Torrison, Senior Account Clerk w/copy of Receipt #669825

THE SEP 26 M27.

Ms. Bobby Jean Leithead-Todd Planning Director 101 Pauahi Street, Suite 3 Hilo, Hawai'I 96720

Dear Bobby,

Thank you so very much for taking the time off your busy schedule to fit us in on Monday,

I truly need some help and understanding as I am at a loss as to how to proceed. The original construction plan approval was signed off by Planning in 1998. This was after two revisions.

That lay-out clearly showed the 44 lots as we continued to use Mele Manu Street as our zoning guideline.

I subsequently did not proceed immediately, as you know the three possible alignments were being considered for the Puainako Extension.

I fully cooperated with the County in their new roadway and am still at the present time assisting them in sorting their construction, slope and drainage easements as being required by the State.

I have enclosed receipts for holding our water commitments for the 44 meters until the present day. I have thus far paid \$145,050.00 in this regard to Board of Water Supply; my understanding is that this could be lost as it is non-refundable.

I paid the original engineer for his work on the previous completed plans.

In the past year, I have contracted Okahara and Associates to complete the revised plans as Puainako is now in. They are the engineers who did the Puainako Street Extension.

It is my sincerest hope that this matter may be resolved as I have been very open to the County on the whole Puainako Extension matter. You may check with Daryl Inaba of the County Land Section and with Warren Lee of Public Works.

Bobby, once again I humbly request to please try to help me with this matter.

Sincerely,

SCANNE

Testimony by Pauline Ke'ala Lee Loy, 11/12/2013

I offer this testimony for my own clarity as well as clarity for those who have newly joined the opposition of the development of Connections Public Charter School (CPCS) on Edita Street in Kaūmana.

Today's hearing will ultimately determine the recommendation or denial of a special use permit request for the development of CPCS on DLNR property on Edita Street. CPCS has already been granted the lease for the property and is currently awaiting the green light to proceed with development. They plan to build a school to accommodate more than 400 students along with faculty and staff over a 16-25 year period.

In opposition of this development is a Kaūmana community unaware of the proposed project until long after the release of the environmental assessment. A full environmental impact study was not done.

Connections Public Charter School implies that the community was included in the planning process, it was NOT, however, clearly established as to WHICH community was included but it was certainly NOT the neighboring community of the desired location of the school.

Mr. Hong has also implied offense to the No Connections signage and alleged website. It simply represents the fact that NO CONNECTIONS were made between CPCS and the neighboring community of the proposed location.

You will notice that CPCS posted keep out signs on the hogwire fence fronting the well-manicured parcel at our site visit today. As a community member I interpreted the signs as an act of intimidation and bullying and a counter reaction to the community who had erected NO CONNECTIONS signs to publicly declare the lack of inclusivity.

A year ago former planning director Ms. Bobby Jean Leithead implored Connections Public Charter School to meet with the community. Since then the school held only one meeting back in Dec 2012 in the middle of a work day at their Kress Store building led by the Vice Principal of CPCS and paralegal Susan Lee Loy. The questions posed by the community members present were not adequately addressed in the absence of both Mr. Thatcher and Mr. Hong and there was no follow-up attempt to communicate with meeting attendees thereafter.

Project Manager Celia Shen indicated in the last hearing that this project is an ongoing process and plans change, yet she has never approached anyone from the neighboring community to provide input as the company she represents (Will Chee and Associates) proudly advertises. In previous hearings we have been

consistently reminded that CPCS is NOT required to implement, follow or adhere to the same state guidelines enforced on schools that receive state and federal funds. It is certainly our hope that ANY school would voluntarily abide by all requirements and guidelines involving the health and safety of its constituents. There is no compromise.

The moment that bulldozer crushed the first of many kumu 'ōhi'a lehua and displaced the 'io (the hawk), 'aumakua of the area, they violated the land, the law and the lives of the community.

Implicit vs Explicit
Transparent vs Hidden
Inclusive vs Exclusive
Land stewards vs Land abusers

They have broken our trust.

Mahalo.

Respectfully submitted,

Pauline Ke'ala Lee Loy 1579 Mele Manu St. Hilo, Hawai'i. 96720

onnections



June Sakamoto Resident of Mele Manu St. November 12, 2013

A laid-back pace, not too much traffic, knowing your neighbors, and enjoying a sense of community—this is what is so special about Hilo. This is the quality-of-life factor that endears people to this place. This is what we wish to have preserved in our Kaumana neighborhood. This is why I am against having the Connections school located on Edita Street.

Traffic Impact

My concerns about traffic and safety as stated in my previous testimonies remain. The traffic assessment report for this project states that it was based on the assumptions that there would be:

- 1) no future traffic growth on Edita St. and
- 2) very little growth on Kaumana Drive, being that "the surrounding area is relatively built out and the pertinent section of Kaumana Drive is expected to be used by local traffic only."

The report goes on to say "The second component in estimating future background traffic volumes is traffic resulting from other proposed projects in the vicinity.....No related projects were identified." Contrary to these assumptions, homes have been built and additional lots opened up for sale in Pacific Plantations Subdivision since the issuance of the report. This would lead to future traffic growth on Edita St. A new subdivision (Punahoa Mauka Estates off Hokulani St.) with access to Kaumana Drive has been developed with more yet to come such as Kumulani S/D with access via Kaumana Drive near Hokulani Street. These additions to traffic, plus more people taking Kaumana Drive to enjoy the much-improved Saddle Road, are important considerations in determining Connections School's impact on traffic. The traffic assessment report acknowledges "heavy traffic volumes" on Puainako Street Extension and Kaumana Drive but concludes that the traffic impact of Connections School will be minimal. Minimal to who? Certainly not to the people who will actually experience the increased traffic on Kaumana and Edita. Mr. Thatcher states in his school newsletter (Nov 19, 2012) that a particular skilled nursing facility being built on Kaumana Drive "WILL negatively impact the traffic on Kaumana Drive"... yet he says his school, with all its students, teachers, workers, special guests, and parents, will have little impact. How is that?

A Lack of Good Communications with the Community

At the urging of the Windward Planning Commission, Connections Charter School--represented by Eric Boyd--held a meeting on December 17, 2012, with members of the Kaumana community. Mr. Boyd presented a visual aid (attachment 1) to show that Connections has made sincere efforts to reach out to the community. Listed were meetings held between April 2009 and Dec 2012. The notation at the bottom states: "Each mtg: 149 notices were mailed to residents and owners within 500' perimeter surrounding property." This is untrue. The school has acknowledged their failure to adequately notify people and yet they continue to put out this kind of information.

Here is my assessment of those meetings:

April 16, 2009 Mtg, 5:30-7:30p, Kress Building (THIS WAS THE THURSDAY OF MERRIE MONARCH WEEK. Poor choice of date!)

- --The Final Environmental Assessment (Attachment 2) states "The school also held a public information meeting on April 16, 2009. This meeting was publicized by sending home informational flyers with the Connections' students, posting of informational flyers around the Kress Building and downtown Hilo, and by placing an information bulletin in the Hawai'l Tribune Herald." NOTE: There is no mention of notification sent to residents and owners within 500' perimeter of the property.
- --A small notice (Attachment 3) appeared in the calendar section of the 4/11/09 Tribune Herald: "Connections Talks Kaumana Campus," 5:30-7:30 p.m., Kress Bldg, Connections Charter School invites all to get involved in a discussion about the new Kaumana campus. NOTE: there is no mention of Edita St. or Kaumana Drive. Most people seeing this would not feel a need to attend, especially if they do not have school-aged children.
- --The flyer (Attachment 4) indicates: "Informational Dinner Night"...."Why: New Facility Development"....."Kaumana Property." Sounds esoteric to me. Again, there is no mention of Edita St. or Kaumana Drive—nothing to make people in our subdivision feel that this was something they should attend.
- --If only 19 people showed up, that's a pretty sad sign of interest on the part of the school childrens' parents.
- --Is there a sign-up sheet to show how many Kaumana residents attended?

June 3, 2011 Mtg, 5:00-5:30 refreshments; 5:30-7:00 Community Input (THIS WAS A FRIDAY. Poor choice of time. No consideration given to people who work, have kids to pick up after work, have families to feed, etc.)

--14 residents attended. Many people in the community--including those who would be most directly impacted--did not even receive an invitation. Mr. Boyd (at the 12/17/12 mtg) addressed the issue of their failure to notify people by saying they sent meeting notices to the names of people they got from the State. He doesn't know why some names were missing. This is an unbelievably poor excuse.

September 2, 2011 Mtg, 5:00, Kaumana Elementary School Cafeteria (THIS WAS THE FRIDAY BEFORE THE LONG LABOR DAY WEEKEND. Poor choice of date/time—people work, have kids to pick up, families to feed. Some were probably too busy with holiday plans to attend)

April 27, 2012 Mtg, 5:00-6:00, Kaumana Elementary School Cafeteria (THIS WAS A FRIDAY. Again, poor choice of time — people work, have kids to pick up, have families to feed, etc.)

- --Connections was told by concerned attendees that they have to inform the WHOLE subdivision of the project as everybody will be impacted.
- --As a result, Connections says they went door to door on April 28 and left Comment/Information cards at peoples' homes. I found one at my front door. Interesting that the card has a diagram of the proposed campus but no distinct reference to Edita or Kaumana Drive (meaning that someone looking at the card would have no idea of the location of the proposed school). I think it was intentional.

December 17, 2012 Mtg, Noon – 2:00, Kress Building

(THIS WAS A MONDAY, Start of school break -- possibility of families being on vacation. The time of the meeting reflects the school's appalling lack of consideration for the people who were working and says a lot about the school's sincerity (or lack of it) in wanting to meet with as many members of the community as possible.

In regards to the requests for public input and concerns, as I see it, Ted Hong and the school administration were just going through the motions.

- --Please note that the glossy printed cardstock materials (postcard meeting invitations, comment cards, and the capital campaign brochure) all have a diagram of the proposed campus but no distinct reference to Edita St. or Kaumana Drive. I believe it to be intentional.
- --At the April 27, 2012 meeting, a community member brought up the issue of the Puainako St. access. The attached meeting minutes from Connections School (Attachment 5) has Mr. Hong's reply to this person ("If we commit to an

alternate access, then will you support the project? We will do that if we have to."), but there is no way for you the reader to know the sharp tone in which those words were said. The community member was so taken aback at the way Mr. Hong snapped back at him that he no longer cared to give his input that evening despite a later apology from Mr. Hong. Shortly thereafter, Mr. Fuke said "The planning commission can make occupancy conditional on an alternate access. Will that issue be resolved by the time of the Public Hearing?" Mr. Hong's response was "Don't keep presenting hurdles as we jump over them." They said they wanted to know our comments and concerns, but did they really? What, then, was the real purpose of these "community outreach" meetings?

In summary, poor meeting dates and times, failure to invite people, cutting people down during Q&A sessions, an offensive attitude on the part of Mr. Hong, deceptive information, "missteps" along the way, etc. No wonder there is no trust and support from the local community!

Someone in favor of Connections School wrote regarding the subject of Trust and Open Communications "Our school is called "Connections" for a very intentional and distinct reason, as linking with and communication with our community is what we are all about!" I think this is something Mr. Hong and the school administration should think about because as far as I can tell, they have done a lackluster job of communicating in earnest with the community from day one through the final community meeting held on Dec 17, 2012.

The school may be a great idea but the location is inappropriate. I ask that the special permit be denied.

Attachment SPP No. 12-000138 Page No. 003317



Attachment 2 SPP No. 12-000138 Page No. 003318

FINAL ENVIRONMENTAL ASSESSMENT Connections Public Charter School, Kaumana, South Hilo, Hawaii
Further efforts were made to ascertain whether any cultural practices occurred within the project site. Requests for information were sent to the Hawaiian Civic Club of Hilo, the Edith Kanakaole Foundation and Mr. Kepa Maly in an attempt to identify any cultural resources and practices that may be conducted within or around the project site. responses were received. These request letters are attached as Appendix G. The school also held a public information meeting on April 16, 2009. This meeting was publicized by sending home informational flyers with the Connections' students, posting of informational flyers around the Kress Building and downtown Hilo, and by placing an information bulletin in the Hawai'i Tribune Herald. No persons at the public information meeting spoke in regards to any cultural resources or practices occurring within the project site. Findings of the archaeological investigation, as well as the lack of response for information and public input seem to suggest that the conclusion reached by the Puainako Street Extension and Widening project EIS that there are no traditional cultural practices occurring within the project site are still valid.

approaching their centernial year. Former NPS chief historian Dwight Pitcaithley discusses the history, current status and future options of the park service.

Contact: Ruth Levin, 985-011, ruth_levin@nps.gov

30

ited

09:

0.

"AS I RECALL" with "STEAMY" CHOW

Where: Basically Books, 160 Kamehameha Ave., Hilo When: I.I a.m.-noon Tuesday. : April 14

Details: Join Bob "Steamy" ... Chow and talk story with him about his recollections of the old days in Hilo. His book. "As I Recall" is a collaboration with Connections Charter' School students and is helping to fund a student China:

Contact: Christine Reed, 961-0144. bbinfo@hawaiiantel.net. basicallybooks.com:

CHANTED HAWAIIAN MELE - A WORLD VIEW

Where: Imiloa Astronomy Center

Vhen: 10 a.m. Tuesday, April

Details: UH-Hilo professor Kalena Silva will discuss Hawaiian views of the world as reflected in chanted Hawaiian mele, how traditional knowledge is passed on through mele, and different vocal styles. Free.

Contact: Justina Mattos, 969-9743, imattos@imiloahawaii. org, www.imiloahawaii org

WEDNESDAY, April 15

TREES & PLANTS used in HULA INSTRUMENTS

Where: 'Imiloa Astronomy Center

When: 10-11:30 a.m. Wednes-

day, April 15 Details: UH-Hilo ethno-

botany instructor Kana'e 'awe discuss plants used the creation of traditional nula instruments Keawe is an island artisan, cultural prac- where: Basically Books, 160

a custoff the later man and reference

their personal experiences. Free.

Contact: Justina Mattos, 969-9743, www.imiloahawaii.org

KEALOPIKO DESIGNS: FASHION SHOW

Where: Imiloa Astronomy Center .

When: Lp.m. Thursday, April 16

Details: Fashion show and a presentation by young Hawaiian clothing designer Jamie Makasobe, who'll discuss the inspirations and research she uses to create her contemporary Hawaiian clothing designs. Free; admissions for exhibits and planetarium shows apply.

Contact: Justina Mattos, 969-9743, imattos@imiloahawaii. org, www.imiloahawaii.org

CONNECTIONS TALKS KAUMANA CAMPUS

Where: Kress Building, 174 Kamehameha Ave.

When: 5:30-7:30 p.m. Thursday April 16

Details: Connections Charter School invites all to get involved in a discussion about the new Kaumana campus. Guest speaker from Wil Chee Development. Dinner served at 5:30 p.m.

Contact: Eric Boyd, 961-3664, eric.boyd@connectionscharterschool.org

LEI & HAWAIIAN CRAFT DEMOS

Where: Hilo Shopping Center When: 9 a.m. - 5 p.m. Thursday and Friday, April 16-1% Details: Learn to make easy varn lei and other Hawaiian crafts with live demonstrations during the center's Mer-~rie Monarch Craft Fair, Free admission.

Contact: Marcia Prose, 959-7797, grafady@hawaiiantel.net

CLIFF KAPONO BOOK SIGNING

titioner and plant researcher. : Kamehameha Ave. Hill

for the coveted title and share... Hawaii Island." This collection of essays covers diverse topics, and includes maps and numerous historical photos. Contact: Christine Reed, 961-0144. bbinfo@hawaiiantelinet. basicallybooks.com

COMING

KING KALAKAUA **GATHERING**

Where: Kalakaua Park. When: 9 a.m.-3 p.m. Saturday. April 18

Details: Hawaiian historian and musician Palani Vaughn hosts this event of hula. singing, ukulele playing, storytelling, food, artists and craftspeople. Free admission. Coincides with the Merrie-Monarch Parade.

Contact: Alice Moon, 933-9772, amooninfo@bigisland... com, www.poshfestivals.com

CPR SATURDAY

Where: Castle Gym, Upper Campus, Hawaii Preparatory Academy

When: 7:30 a.m.-12:30 p.m. Saturday, April 18

Details: The Red Cross Youth Group at HPA, in conjunction with the American Red Cross, West Hawaii branch, will offer free CPR training: Sessions begin on the half hour and will take 21/2 hours. Registration recommended.

Contact: Dana Petteys, 881-4082, dpetteys@hpa.edu -

OPEN SCHOOL at MALAMALAMA WALDORF

Where: Malamalama Waldorf School, Hawaiian Paradise Park, Makuu and 26th When: 9 a.m.-noon Saturday. April 18

Details: Malamalama Waldorf: School offers Waldorf education for preschool through seventh grade. Visit classrooms, see a Waldorf pup-

pet show and a presentation!! about Waldorf Education. Celebrate Earth Day & the kickoff to Turn Your TV Off Week.

a free lecture People Ethica Cruelty-free 1 Contact: Gwe 937-5272, pea com

PREVENT SIC N

Where: Kar or in front of When: 4-5 April 22 Details: Prom parenting, ic relationships vices. Public c participate by express the th the Child.", Sp. Hawaii Coalit Child Abuse a Contact: Mary 5550, mhyslor

RELAY TEAM CAP Where: Institu

my, University When: 5 p.m. April 22 Details: Key in be given. Contact: Cath 935-0025, cath cancer.org org/hilohi

VOLCANO PO Where: Volcari 19-3834 Old V Volgano

When: 7-9 p ni 24

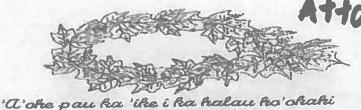
Details: A night words. Bring yo or those of and Free, light refre lic welcome.

Contact: Ira Or volcanogarden. rr.com, www. o arts.com .

BOY SCO

Where: Editi Mülti-pürnos When: 9 a.m. day, April 25 Details Public

SHP Na. 02-000138 Page No. 003320



Connections Public Charter School

A Community, Business & Education Learning 'Ohana

Informational Dinner Night

Presented By: Connections Future Visionary Association (CFVA)

When: Thursday April 16th, 2009

Where: Connections Public Charter School (Kress Building) Entrance on Kamehameha Ave.

5:30pm-7:30pm

5:30pm Complimentary Dinner

6:00pm-7:30pm Meeting

Why: New Facility Development

"Kaumana Property"

Guest Speakers:

Wil Chee Planning and Development

174 Kamehameha Ave., Hilo, Hawai'i - Phone 1-866-961-3664 FAX 1-808-961-2665 Email: cpcs@aloha.net Celia: Water tanks will be about 50'-60' from boundaries; buildings about 500'.

Ted: Will buffers be included in the design?

John: We will be including landscape buffer options.

CMQ: What about alternative access options? Are you still looking at coming in from the Puainako Extension?

Ted: That is a property privately owned by Brilhante-Hawaii LLC. We spoke to Mr. Brilhante again this past Monday. He is willing to continue to discuss the possibility of an easement through that property.

CMQ: I'm concerned because both Edita and Kaumana are so narrow.

Celia: The traffic assessment showed no significant impact. Although not required, we will continue to look at dedicated turn lanes.

Ted: Were there any recommendations from the traffic assessment engineer?

Celia: No, they found no significant impact.

CMQ: We first talked about the alternative access question in June 2011 and again at the next meeting here in Kaumana, and you're only now talking to Mr. Brilhante? At both those meetings you said it was a priority!

Eric: That was the most recent opportunity we have had to talk to him. Mr. Thatcher did talk to him after those meetings.

CMQ: How much of the fund-raising project is earmarked for alternative access?

Ted: If we commit to an alternate access, then will you support the project? We will do that if we have to.

CMQ: I'm concerned because there is only one way in and out.

Mr. Fuke: The planning commission can make occupancy conditional on an alternate access. Will that issue be resolved by the time of the Public Hearing?

Ted: Don't keep presenting hurdles as we jump over them.

CMQ: With the possibility of Puainako access, will you consider moving the project closer to that side of the property?

Celia: This is all a project concept, and changes can happen as necessary.

Aloha,

My name is Clayton Kua. I currently reside at 632 Kaumana drive, about a half-mile mauka of the Union 76 gas station. As a 24 year resident and property owner I have witnessed an ebb and flow to the traffic patterns on Kaumana drive. For many years Kaumana drive served as the primary thoroughfare for residents wishing to access Hilo town and beyond. Turning left out of my driveway onto this little two lane street was at times an anxiety provoking experience. Some days it was "I think I can make it" and other days it was "I don't know if I can, but here goes." In short, it was a very dangerous and at times unpredictable situation.

The development of the Puainako extension, relieved some of the congestion and traffic became much more manageable. However, I have noticed an increase in traffic as of late, and can only attribute that to more cars using Saddle Road for their cross-island trek and young adults, such as my child acquiring their driver's license. While still manageable, I don't think the road is equipped to handle the onslaught of traffic that would be created by transporting students, goods and services, on a daily basis, to and from the proposed Connections Charter School in Kaumana.

With other residential and private developments slated for our area it won't be long before residents once again encounter intolerable traffic conditions. I don't believe there are any plans to convert Kaumana drive to a four-lane highway, so the impending congestive nature is something we will have to learn to live with or to avert before it begins. For this reason if an alternative route to and from the Connections campus cannot be established, then I stand in opposition to its proposed construction. Access from Puainako street (as has been previously discussed) stands as a viable solution. I don't know what's involved in making that happen, but I do know leaving Kaumana drive as the only means of reaching the campus would in the long run, only make things worse for all involved.

Mahalo,

Clayton Kua 632 Kaumana Drive Hilo, Hawai'i 96720

Madame Hearing Officer
Regarding: Connections Charter School Application
From: Larry Kimura, Resident of Ka'ūmana

Dear Hearing Officer,

This is my second letter of testimony to the County voicing my objections to the Connections Charter School's application to use parcels at the entry of Edita Street, Ka'ūmana.

I cannot understand why the County of Hawai'i would "import" school families outside of the Ka'ūmana residential area. My understanding is that at least half of this charter school's families are from the Puna-Pāhoa area, and the remainder from other outlying places of Hilo. The County should encourage these school families to be a part of their own communities and make contributions there to further the healthy development of their places. Surely the district of Puna has space for the grand plans of the Connections Charter School. It is strange as to why Connections would <u>not</u> want to be located in a place where most of their families come from.

Lower Ka'ūmana Drive already has its share of neighborhood developments. There is the 100 bed care facility that is now being constructed less than 1/2 mile ma kai of Edita, and the County approved plans for the low-income housing for Kumulani Gardens subdivision, not to mention connecting the 'Akōlea Plantations subdivision through Hōkūlani Street. These 3 major developments within less than a 1 mile stretch of Ka'ūmana Drive means a definite heavier traffic pattern that our existent twisty road has never encountered before.

Again, I submit my testimony in opposition of the Connections Charter School in this Ka'ūmana neighborhood.

Mahalo.

Larry Kimura 243 Mikala Street Hilo, Hawai'i 96720

November 10, 2013

Dana G. Kenny P. O. Box 1335 Hilo, Hi. 967201

Additional testimony regarding Connections Charter School

I am providing this addition testimony to clarify earlier testimony to insure that my points have been conveyed correctly. Let me apologize in advance for the grammar and spelling. I am writing this in haste with very limited time and skill.

To clarify my main point. Any property can be developed for any desired use. The site selected could in fact be modified and all challenges over come. The question is it the best choice and is it good planning.

Strictly from a developers point of view, when selecting a property you first establish the desired outcome, who will it serve, and how best to allocate the resources you have to best meet those goals with a positive outcome. In this case the goal is to educate K through 12th grade students, who primarily reside in the population centers of east Hawaii or primarily south Hilo and the Puna districts as they contain the vast majority of the population in East Hawaii. The school is being funded by grant money and other sources of yet to be secured private funding and those funds it would appear are logically conditioned on the ability to get approvals and permits to build what is planned. A great deal of effort has been put into identifying the obstacles that exist and on paper solutions have been proposed to overcome them in order to seek approvals to proceed.

What doesn't make sense is this. If you have say \$30 mil dollars and your goal is to build a school, the wise move would be to seek a site with the least land development cost so the monies available can be used for facilities development. If the site cost \$10 mil to develop then you have \$20 mil for facilities, verses purchasing a \$1 mil sight with no challenges and having \$29 mil for facilities. The exception could be that the sight is likely to make the school more accessible to the group it will service or has some other special features that would offset the additional sight cost. There are no such features to this property so why choose the more difficult location?

During the hearing the schools council kept referring to Kamehameha Schools Puna campus as an example and I think its a perfect one to illustrate my point.

The sight of the KSBE School is;

- 1. located at the center of the area it was designed to service and the area most likely to accommodate the future population growth.
- 2. There is no residential development in the area likely to be impacted by the development.
- 3. The land is relatively flat and easy to develop.
- 4. Ingress and egress are located on a main traffic corridore designed to accommodate

the traffic the school will generate not only today but for many years to come.

- 5. Water is readily available.
- 6. Waste water is not an issue. and can be addresed in conventional ways.
- 7. There is no significant community opposition to the school
- 8. The land lends itself well to agricultural actives and has the soil needed.

Not a single one of those features is true about the Kaumana site selected. Though there are proposed solutions to over come these shortcomings there is no assurance that any of the proposed solutions will in fact ever come to be. There is not a firm source of financing to develop these solutions, no government approvals are in place that would indicate they will be allowed, no permits have been issued, no designs submitted to the building department or board of health, and a number of the solutions would require special use permits that are un assured going forward. In fact many of the proposed solutions have never been allowed in the past and raise questions of good community development.

Water; There is no available source for the water needed to accommodate the use. The development of a catchment water system has never been approved for a school, its unreliable, has health issues associated with it, requires the building of huge and expensive storage and filtration systems, would be an eye sore, and is sub standard for this use. They could be developed but why would someone choose to? A well has issues of its own. The existence of the caves under the property, Fed regulations governing distance from waste water affluence which last I checked was a min of 1000' radius from any waste water source, and no evidence that the well would hit sufficient resources to solve the problem. There are additional concerns about federal standards of water quality, private wells for public use are a problem now and will not get better in the future. Liability insurance for a private water system serving a school is sure to be an issue also. If any of these issues come up how will we go back from there? Think about it. We approved a school with no water system that will meet future standards. This isn't a 10 year choice we are making its a 50 year choice we will have to live with long after the advocates or opposition will be around.

Topography; The land is not flat, it would be a huge expense to develop roadways into the property and to mitigate the water flow and runoff these roadways will generate at that degree of slope. Again it can be resolved but why choose that expense.

Traffic; Not only is the access to the property limited to a single entrance with no alternate exits for safety, but the side street comes off of a roadway that is already taxed and has extremely limited options for improvement. Even if the road could be improved, a new bridge built at the Chong street access, it places a burden on the community and county to make these improvement to accommodate a private school. In the future this road will require sewer and water line improvement further complicating the issue.

Need; The area is already serviced by three elementary schools, one middle school, and a high school, all public, as well as one private school. The community is being asked to endure the impact of this new school with no existing need of it, and in fact

according to the school figures will require the busing of students from as many as 40 miles away from lower Puna to fill its roles. Again it can be done but is it good planning to have students travel more then an hour to school one way in the morning and what evidence is there that parents would make that choice. Would it not be more logical to have half the students each drive 20 miles each. I mean simply from a good planning point of view.

Impact; Council for the school seems to paint the community opposition to the school as being greedy, hostile, unreasonable, and in some cases bigoted. I don' think this is fair but to me is not the issue but a way of diverting the attention from what the issues are. What ever the reason for the opposition it clearly exist. The idea that a victory in the planning commission hearing will be the end of the legal challenges the school will face is extremely optimistic. The situation is so divisive at this point I predict that there will be challenges at every step of the process going forward. Every permit, or approval process will result in a re hashing of all of these issues and the legal cost themselves will be high enough to allow for the purchase of a very fine piece of property more suited to the schools needs. For what ever reason the school has failed in its most important step, which is to win community support for the project. I keep hearing concerns about property values as one of the big issues. Schools themselves do not affect property values. Uncertainty can, and bad planning surly will. The fact that the key elements of this project remain unresolved and in my opinion will not ever be, causes great concern and places a very unfair burden on the immediate community. If any of the planned resolutions fail we will be left with an unfinished school at best. If this hearing results in approval for them to proceed the die will be cast and we will be forced to live with the results. I think that should be a major concern for the hearings officer in that once this approval is given there is no process that will be able to undo the damage done, no exit strategy of any kind, and as a result the county would be forced to lower its standards and the situation will dictate policy rather then good planning dictating the situation.

Another key impact to the community is the proposed housing of students. The community is not being asked to accommodate the school and students from 8 to 5, but students 24 hours a day. My company manages dorms and student housing. There are real, legitimate, and serious concerns of what activity will come with that use. Its not a matter of this school, or those students, but the natural behavior of children and the impact that will bring. Again, if the community needed the services of this school the argument could be made that the impact would in some way balance. The case here is that we are being asked to accept the impact with no benefits of any kind. Seems to be contrary to the purpose of the planning commission which is to insure wise planning choices are made and the community is not adversely impacted by private development. It should also be pointed out that the school is a school of choice in that students and parents have to choose to attend this school. There is no evidence that the public will make this choice over other schools that exist or may be planned. History cannot be used as a guide because there is not history of this school, this vision, in this new location. What ever the opinion of the current student body may be its not applicable. These are not the students of tomorrow and no one has any picture of what the final outcome will be or if financing will be available to complete the plan. Allowing this to proceed without bonded assurance of completion is highly irresponsible. No

private developer would be allowed to proceed in this situation.

It is my understanding that one of the main advocates of the school lives very close to this sight and has a love of horses. I am reminded of a study I read done in the early 1900's looking at the use of railroad facilities along the Hamakua coast designed to make the harvesting of cane more efficient. The different sugar companies had each designed their own routs and connected them. The report concludes that the design of the system was very conducive to the owners of the plantations visiting each other but very poor for the harvesting of cane. The plan of the school is to first build a barn and a caretakers house. I would think the first thing a school should focus on would be a classroom, several in fact, and I do not think the community is being difficult or unreasonably concerned when the last thing in a plan for a school are the classrooms. But hay, if it doesn't work out we have....what a barn, caretakers home, on State land, for what public need?

When its all said and done, all emotion is taken out of the situation, this location does not benefit the students, it doesn't benefit the community, the county, the DOE, the State, the investors, the teachers, the legal process, it doesn't enhance anyones life in a way that makes the location ideal by any measure, and will result in a long, very expensive experiment the community will have to live with for ever. So my point is very simple, you can choose the best site to build the most cost effective school that fills the needs of the community it will serve, or you can spend a fortune more to have one that doesn't make anyone happy. In my business I see this all the time, someone gets fixated on a piece of property and spends time and effort justifying the choice in the face of huge obstacles, making the argument of why it will work. Family fortunes are lost every day this way. The perfect location does not require an argument. It speaks for itself as in the case of the KSBE campus.

Thank you all for your time in hearing me out and I hope this has helped to define at least my view which I think is shared by many in the community. This is truly an ill conceved plan that goes against all logic and acceptable measures of good planning. From a business point of view its a fast track to bankruptcy.

Dana G. Kanay

SPP No. 12-000138 Page No. 003328 Thouk You for this hearing Topologize for being late - 2 meetings I am in favor of the school and the location. Those who oppose the school and location offer only the tired worn-out reasons already stated numerous times by those who oppose Drogress. Those in opposition have already, what they need for the remaining years in their lives. They forget the benefits provided for their education by people who could have "looked the other way".... More traffic, more noise, etc. comes with living in a modern society. and noise then they should move way out into the jungle where they won't be bothered by "progress".

Respect-fully

0

Lary Sering Larry Cenng d Ktry (to hotmail com

November 5, 2013

Aloha,

My name is Paul "Scotty" Paiva and I have lived at 1169 Kaumana Drive for the past 30 plus years. I have seen this area grow from a family oriented community to numerous subdivisions ranging from high-end homes to affordable housing and rental units.

I was recently informed that many more subdivisions are planned for this area. Developments to include the Hokulani Project, Kumulani Homes, and several by Brilhante. Being a public safety administrator I feel it is my duty to voice my alarm of the traffic impact these projects will bring to Kaumana Drive and the various feeder roads.

Kaumana Drive was built a very long time ago. It's a windy country road that has seen only cosmetic improvements over the years. This increase in traffic will cause much delays and frustration which will lead to people behaving badly. These bad behaviors will lead to auto and pedestrian accidents causing unnecessary injuries and possible fatalities.

Traffic is just one the many concerns I have and why I don't support the Connections Charter School being built on Edita Street. This is just a bad location for a very worthwhile project that I am sure will have a positive impact in another location. Please support our community's concerns and help keep us safe and healthy and not allow the school to be built on Edita Street.

Mahalo,

1169 Kaumana Drive

Hild HI 96720