

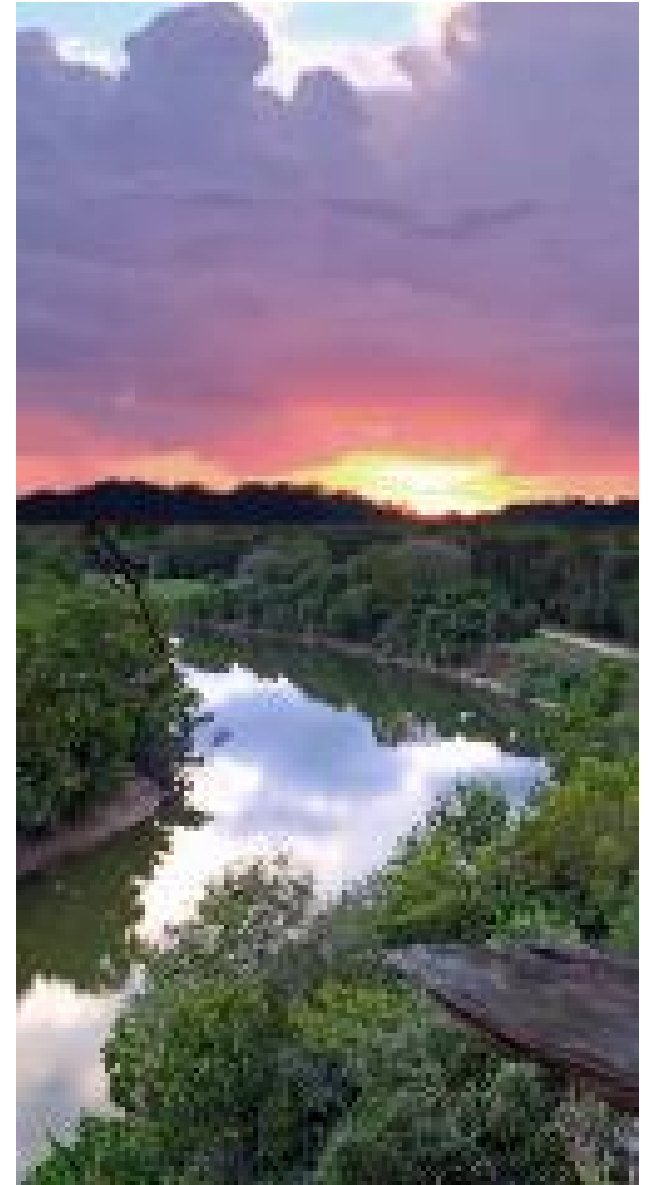


**FY 2018-FY 2023
5 Year Road Plan**

March 24, 2018

Presentation Overview

- Introduction
- Accomplishments/Challenges Since Last Meeting
 - Bond Did not secure 2/3rd majority (62%)
 - Majority want Roads done ASAP
 - But also wanted stable Fees
 - FEMA Repairs & Landslides
 - 57 Homes added - finished roads
 - 158 Homes on Roads Ready For Chip Seal
 - Added 74 Homes in Units 3&5 to original plan
- Building FY 2018-23 Plan
 - FY = Oct 1 – Sep 30



BCWCID Road Committee & Unit Assignments

- Jim Ouellet – BCWCID General Manager - Committee Chair
- Sam Kier – BCWCID #2 Director
- *Victor Gonzalez -- BCWCID #2 Director
- Susan Barrie – Unit 1
- *JoAnne Egitto – Unit 2
- Steve Ross – Unit 3
- *Courtney Kellogg – Unit 4
- *Kathleen Newton – Unit 5
- Alma Rodriguez – Office Administrator
- Tyler Walsh - Operations Manager
- John Creamer – BCWCID Board President

* New Member

First 40+ years

Tahitian Established in the 70's All Platted and Road Designs Approved

- All Arterial Roads Completed
- 43% of All Roads Completed 28M of 65M
- **59%** of Residents on Completed Roads as at January 1, 2018
 - .41M Completed 3.02M in Process (158 homes –11% of residents)
- Approx. 1504 Road District Homes in Total (Increase of 81 from last year)
 - 35 new-builds on an already paved road
- Re-Established use of Contractors to Build Roads Faster; and then County Complete
 - County has limited Resources but saves District Approx. \$50K per Mile on Completion
- Funded Via Road District Statute
 - \$15 per lot per Month ..(**\$21 Max by Current Statute Updated 2017**)
 - **All lots (Vacant & Occupied)**
 - **Recent History: Raised Fees \$2 per year til Old Statutory Max (\$15)**

Review of Road Construction Process Changes Beginning in 2014

- **Road Selection changed to Prioritization by Highest Home Density**
 - Home Density is defined by the highest # of homes per feet of street where the smallest Home Density factor = the highest density of homes
 - 10 homes/1000 feet of street (or 100 Home Density) is prioritized above 4 homes/1000 feet of street (or 250 Home Density)
- **Other Factors Used for Selection**
 - Roads within Disaster Area where FEMA Money will be used
 - Feeder Streets where multiple highly populated roads feed thru a lesser populated road
 - Emergency Needs /Bus Routes
 - High Risk Roads
 - Logical Groupings for County Efficiency & completeness
 - Roads, Once Completed, Will Be Accepted by County/City after warranty period
- **75% of Road Fees collected to be used for Road Construction ; 25% for Road Maintenance & Administrative**

Estimated Funds for Road Construction/Road Maintenance

2017 Revenue Estimates

- \$1,050K collected from Road Revenue (Increase from \$156 to \$180)
 - 95% Historical Collection Rate (Current & Prior Yr)

12/31/2017 Cash Balance For Roads (Maintenance & Construction) \$504K

Positive Impact towards Maintenance Goal

- **\$15K Donation by TV POA – Thank you**

2017/18 Flood/Road Maintenance Priorities

- Flood - Repairs taking priority (County & District)
- Major issues developed from Floods
 - FEMA funds 75% of costs
 - FEMA Projects Finally Approved – and work is almost complete
 - » 9 large culvert replacements completed in 2017 (Mostly FEMA)
 - Work to be completed in 2018
 - Cash in the Bank to perform work
 - » District is reimbursed after work is completed (75% of approved Amount)
- FEMA & Non-FEMA Landslides
 - Solution agreed upon, Contractors selected, work completed March 12th
 - GM saved the District \$400K from Original Bids
- Contractor hired to grade Approx. 4 Miles miles of roads in 2018.
 - 2064 Tons of Road Base (over 90 truck loads)

2017/18 Challenges toward Planned Construction

Challenges still exist for plans to be achieved

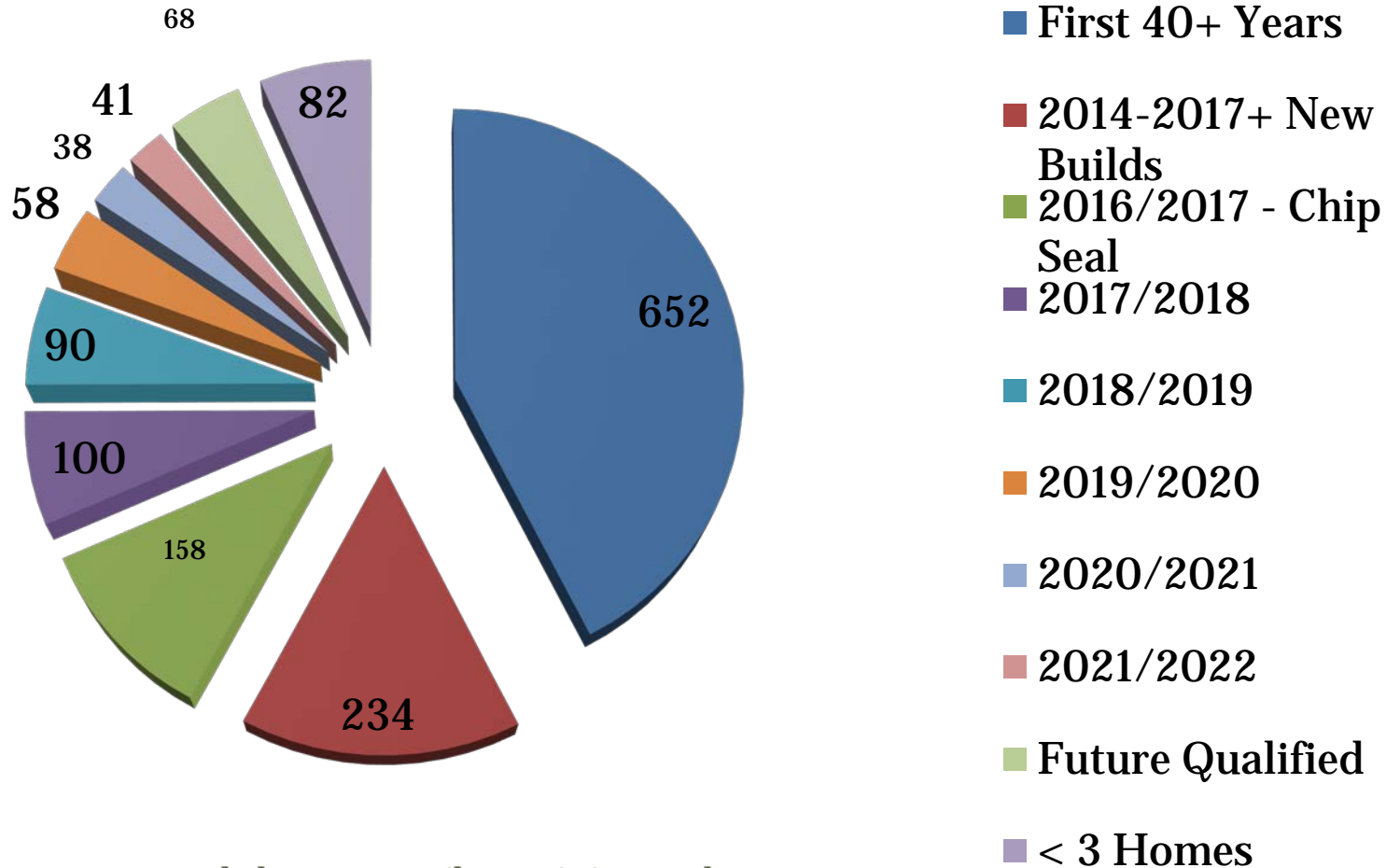
- Road base materials remaining flat thru at least the summer–
 - Current Estimate still at \$200K/mile (at high level)
 - Oil for Chip Seal is still a variable
- County Concerns toward completing 2016/2017 Roads by End of Spring 2018
 - County Precinct #1 Road Crew is not at full strength
 - County FEMA issues were first priority
 - Resources to Complete 2017/18 Roads (Not in new Interlocal)
 - » Likely not completed until Spring 2019 Unless we pay for contractor support (Est. \$125K)
- Costs of Roads in High Density Areas are more expensive per mile
 - Extra cost for each driveway
 - » Therefore 'relative' costs per mile will go down on less populated roads

○ Lessons learned with new process

- Subcontractors need to be well managed for quality and efficiency
 - Fixed Price vs Daily Rate Being Used in 2018
 - Need County oversight as well to ensure standards are met
- Dependency on County to approve base and complete Chip Seal
 - If we subcontract Chip seal ... additional \$50K per mile

Road Construction Progression Since New 2014 Plan Process

Homes Under Approved Roads Now 58% going to 89%



Data Includes Homes Built on Existing Roads

Key Factors in Building Oct 2017/Sept 2023 - 5 Year Plan

- **Re-churned Density Figures**
 - Minimum FY 2018 (2018-2019) & FY 2019 (2019-2020)
 - Surveys already completed for FY 2017 (costs already incurred)
- **When Planning FY2018/23 - take into consideration all new builds and reprioritize again ALL roads for construction based on home density.**
 - 2019 Need to re-survey inventory (boots on ground) to revalidate process.
 - Been 4 years since visual validation

Data Assessed to Build New 5 Year Plan

- **Bastrop WCID Master Plan by BEFCO (Updated)**
 - Streets Paved (by Feet)
 - Streets Not Paved (by Feet)
- **List of Active Water Meters (Updated with New Home Builds in 2017)**
 - Houses on Paved streets
 - # of Houses on Unpaved streets
 - Feet of Unpaved Street divided by # of Houses on that Street
- **Bastrop Bus Routes (Remains the same)**
- **BCWCID Maps (Updated with New Road Paved Data)**
 - Connection to County/City Roads
 - Collector Streets
 - Feeder Streets & the streets that feed into each (where other streets access a feeder street to get out of their area)
- **Roads added when it was logical to add to complete an area**

New 5 Year Plan – Items Needed for Success

Factors Affecting Maximum Allowable Annual Road Construction

1. County ability to complete 2016/2017 Roads this Spring/Summer in order to keep our New 5 Year Plan on Track to begin Oct 1 2017.
2. Timely reimbursement from FEMA Funding for Roads Repaired/Constructed.
3. No New Disasters!! Ie – flooding, fires, etc.
4. Need to maintain Collection Rates
5. 5 Year Plan Assumes NO Change in Road Fees
 1. Increased Road Fees can only speed up the process

Road Projects – Oct 2016/Sept 2017

Unit	Collector Road	Total Paved	Street	Length of Unpaved Road Measured by Feet	Homes	Feet Between Homes Being Paved	Avg Home Density of Roads to be paved serviced by feeder	Previous 5 Year Planned Date to Pave	Bus Route Y/N	Comments
1	CI	750	Olaa	950	5	190	108	2016/2017	No	Completed & Transferred to City
1	CI	750	Pahala Ct	750	12	63		2016/2017	No	Completed & Transferred to City
1	CI	650	Homonu Ct	650	5	130		2016/2017	No	Completed & Transferred to City
1	WD/C T	1100	Papaloa Lane	1100	10	110	88	2016/2017	No	Ready For Chip Seal Spring 2018
1	WD/C T	220	Pele Ct	220	5	44		2016/2017	No	Ready For Chip Seal Spring 2018
5	WD/C T	1800	Lamalao	4225	11	164		2016/2017	No	Ready For Chip Seal Spring 2018
2	WD/C T	1440	Kanaio	1440	25	58		2016/2017	No	Ready For Chip Seal Spring 2018
2	WD/C T	2120	Kaupo	2120	20	106		2016/2017	No	Ready For Chip Seal Spring 2018
4	WD/C T	2120	Konahuanui Lane	2120	13	163		2016/2017	No	Ready For Chip Seal Spring 2018
3	WD/C T	1700	Haliimaile	1700	25	68		2018/2019	No	Pulled in to preserve FEMA/Flood Damage
5	WD/C T	1700	Maunalua	1700	11	155		2020/2021	No	Pulled in to preserve FEMA/Flood Damage
5	WD/C T	2400	Puu Waa Waa	2400	12	200		2020/2021	No	Pulled in to preserve FEMA/Flood Damage
3	WD/C T	1360	Kokomo	1360	26	52		Not Planned	No	Pulled in to preserve FEMA/Flood Damage --Paved needs touch up
Total		18110		Homes Paved	180					
WD/CT	3.43 miles									
City	0.41 miles				22	Completed				
Total	3.02 miles				158	Chip Seal				

**City Roads Completed
County Roads Planned for Summer**

Road Projects – Oct 2017/ Sep 2018 (Current Yr)

October 2017-September 2018 (Year 1 New Plan) Locked											
Unit	Collector Road	Total Paved	Street	Length of Unpaved Road Measured by Feet	Homes	Feet Between Homes Being Paved	Avg Home Density of roads to be paved; serviced by feeder	Previous 5 Year Planned Date to Pave	Bus Route Y/N	Comments	
1	WD/CT Feeder	1640	Pahoiki Lane	1640	15	109	108	2017/2018	No	Committed. Off Kaanapali	
1	WD/CT	160	Kou	160	3	53		2017/2018	No	Committed. Ct off Pahoiki	
1	WD/CT	360	Kaliu	360	2	180				Last Street attached to Feeder	
1	WD/CT	850	Kulua Ct	850	8	106		2017/2018	No	Committed. Off Kaanapali.	
1	WD/CT	400	Kimo Ct	400	6	67		2017/2018	No	Committed. Off Kaanapali.	
1	WD/CT	900	Ahumoa	900	7	129		2017/2018	No	Committed. Off Kaanapali.	
2	WD/CT Feeder	1450	Pahihi North	1450	8	181		2017/2018	No	Committed.	
2	WD/CT	800	Kaena Lane	800	7	114		2017/2018	No	Committed. Off N. Pahihi	
2	WD/CT	1320	Awehi Lane	1320	4	330				Finish Rd after spending \$170K on landslide	
2	WD/CT		Koolua Dr	2090	7	299	132	2019/2020			
2	WD/CT		Haleakala Dr	2200	2	1100		Not Planned			
2	WD/CT	800	Kaenapapa	800	5	160				Needs immediate maintenance good density	
2	WD/CT		Laau Ct	650	4	163				Does Not Qualify due to not connected to county Road. Off Haleakala	
2	WD/CT Feeder	2430	S. Papawai Dr	2430	15	162		2017/2018	No	Committed	
2	WD/CT	220	Koae Ct	220	3	73	136	2017/2018	No	Committed. Off Papawai	
2	WD/CT	350	Huelo Ct	350	4	88		2017/2018	No	Committed. Off Papawai	
3	WD/CT	500	Upola Ct	500	2	250				Add for Drainage Improvement From 2019/2020	
3	WD/CT	450	Haou	450	3	150				Finishes that area-- moved from 2019/2020	
3	WD/CT	850	Ohana Ct	850	2	425				Added for Drainage Improvement	
3	WD/CT	450	Paia Ct	450	6	75				2017 Interlocal w/ County For Drainage	
Total		13930		Homes Paved	100						
WD/CT	2.64 miles			Homes with Improved Access	13						
CI	0.00 miles										
Total	2.64										

Proposed Road Projects – Oct 2018/ Sep 2019 (Year 1) Locked

October 2018 - September 2019 (Year 2 New Plan) -- Locked											
Unit	Collector Road	Total Paved	Street	Length of Unpaved Road Measured by Feet	Homes	Feet Between Homes Being Paved	Avg Home Density of Roads to Be Paved; serviced by feeder	Previous 5 Year Planned Date to Pave	Bus Route Y/N	Comments	
2	WD/CT	Collector	1100	Pahalawe Lane	1100	4	275	214	2018/2019	Yes	Off Tahitian -
2		0	Alele	3150	13	242	2021-2022		Yes	Already Paved	
2		0	Pukoo	1950	7	279					
2	WD/CT	1740	Kaapahu	1740	11	158	2018/2019		No	Committed. Between Alele & Pahalawe	
5	WD/CT	Feeder	900	Mokulua Lane	3230	10	90	118	2018/2019	1 stop	Bus goes down between Pohakuloa and Waikakaaua. Pave only between those 2 streets
5	WD/CT	700	Waimalu	700	5	140	2018/2019		No	Off Mokulua	
5		420	Kipapa	420	2	210			No	Added New -Complete Area	
3	WD/CT	Feeder	1771	Kaewakapu	4300	2	886	130	2018/2019	No	Pave to Waianae Ct
3	WD/CT	500	Kaeleku Ln	500	5	100	2018/2019		Yes	Off Airport Rd	
3	WD/CT	650	Ninole Ct	650	12	54	2020/2023		No	New Homes	
3	WD/CT	850	Waianae Ct	850	9	94	2020/2024		No	New Homes	
5	WD/CT	Feeder	2200	Keanahalululu Ln	2200	11	200	194	2018/2019	No	Eastern end up hill. Pave full remaining portion
5	WD/CT	130	Kapapa	130	3	43	Not Planned		No	Added New -Complete Area	
5	WD/CT	300	Nuupia	300	3	100	Not Planned		No	Added New -Complete Area	
5	WD/CT	520	Kaimuki	520	1	520	Not planned		No	Added New -Complete Area	
5	WD/CT	350	Olomana	350	0	#DIV/0!	Not planned		No	Added New -Complete Area; Homes being planned	
4	WD/CT	450	Kauai Ct	450	3	150	2019/2020	No	ADDED NEW. Off Akaloa		
4	WD/CT	750	Anahulu Lane	900	5	180	2019/2020	No	Off Akaloa -- Only do 750 ft 150 Density		
4	WD/CT	200	Oah Ct	200	3	67	2019/2020	No	ADDED NEW. Off Akaloa		
Total		13531		Homes Paved	90						
WD/CT	2.56			Homes with Improved Access	20						
CI											
Total	2.56										

Committed Roads Under 2018-2023 Road Plan

Proposed Road Projects – Oct 2019/ Sep 2020 (Year 2) Min Locked

October 2019 - September 2020 (Year 3 New Plan) Locked											
Unit		Collector Road	Total Paved	Street	Length of Unpaved Road Measured by Feet	Homes	Feet Between Homes Being Paved	Avg Home Density of Roads To Be Paved; serviced by feeder	Previous 5 Year Planned Date to Pave	Bus Route Y/N	Comments
1	WD/CT	Feeder	700	Kawela	700	3	233	127	2019/2020	No	Off Kamakoa
1			200	Mahina (W. Lai)	200	4	50		2019/2020	No	
1	WD/CT		550	Lihue (E. Lai)	550	3	183		2019/2020	No	Off Kawela
1	WD/CT		830	E & W Kamoi	830	8	104		2019/2020	No	Off Kawela
4	WD/CT		3150	Kaelepulu Dr	5350	19	166		2019/2020	No	Only pave the 3150 ft starting at Akaloa, not the 2200 from MokuManu. Between Akaloa & MokuManu
4	WD/CT		800	Keaau Ct	800	4	200		2021/2022		Off Wahane
4	WD/CT	Feeder	1250	Nanakuli Dr	1250	5	250	178	2021/2022	No	Off Wahane
			400	Kaupa Ct	400	2	200				
Total			7880		Homes Paved	58					
WD/CT	1.49				Homes with Improved Access	0					
CI											
Total	1.49										

Newly Committed Roads Under 2018-2023 Road Plan

Proposed Road Projects –Oct 2020/ Sep 2021 (Year 3)

October 2020 - September 2021 (Year 4 New Plan)											
Unit	Collector Road	Total Paved	Street	Length of Unpaved Road Measured by Feet	Homes	Feet Between Homes Being Paved	Avg Home Density of Roads To Be Paved; serviced by feeder	Previous 5 Year Planned Date to Pave	Bus Route Y/N	Comments	
2	WD/CT Feeder	1000	Onini	1000	4	250	270	2021/2025	No	Off Kaanapali	
2		350	Kolo Ct	350	1	350					
2	WD/CT	2300	Kipahulu	3700	10	230		2020/2021		Pave between Kainalu & Nakalele	
2	WD/CT	2430	Kahalulu	3150	10	243		2021/2022		Pave between Kainalu & Nakalele	
3	CT	3100	Waipahoehoe Dr	3100	13	238				Off Lamaloa	
Total		9180									
WD/CT CI	1.74			Homes Paved	38						
Total	1.74										

Proposed Road Projects –Oct 2021/Sep 2022 (Year 4)

October 2021 - September 2022 (Year 5 New Plan)											
Unit	Collector Road	Total Paved	Street	Length of Unpaved Road Measured by Feet	Homes	Feet Between Homes Being Paved	Avg Home Density of Roads to be Paved; serviced by feeder	Previous 5 Year Planned Date to Pave	Bus Route Y/N	Comments	
2	WD/CT	1950	Pukoo	1950	7	279		2021/2022		Between Pahalawe and Alele	
2	WD/CT	1200	Koali	1200	4	300		2021/2023	No	Between Kaanapali & Alele	
2	WD/CT	2090	Koolua	2090	7	299		2019/2020	No	Off Awehi Lane	
2	CT	2200	Haleakala Dr	2200	2	1100				Finish Off Area	
2	CT	650	Laa Ct	650	4	163				Finish off area	
5	CT	1300	Kikipua	1300	5	260				Newly Qualified	
4	CT	2550	Mokuleia Cr	2550	9	283		2018/19	No	Off Akaloa. Pave full Circle	
4	CT	950	Mokolea Lane	950	3	317				Connects Akaloa & Nanakuli	
Total		12890		12890							
WD/CT	2.44				Homes Paved	41					
CI					Homes with improved Access	0					
Total	2.44										

Qualified Roads Pending Future Inclusion in Plan

Unit	Collector Road	Total Paved	Street	Length Ft	Homes	Feet Between Homes	Average using all roads serviced by feeder	Initial Year Planned	Bus Route Y/N	Comments
4		2700	Nene	2700	9	300				Was W. Kokekole
4	CT	989	Kaaawa Lane East	989	3	330			No	Off Wahane
5	CT	2175	Kahana	2175	6	363			No	Off Awehi Lane
5	CT	1820	Nuuanu	1820	5	364				
5	CT	2650	Kawainui	2650	7	379			No	Off N. Wahane
2	CT	2700	Wainee	2700	7	386			No	Off Awehi Lane
5	WD/CT	2350	Kamaiki	2350	4	588			No	
2	CT	2500	Molokini	2500	6	417			No	Off Awehi Lane
2	CT	3450	Hekili	3450	8	431			No	Off N. Wahane
4	CT	2550	Wailupe	2550	4	638			No	Off N. Wahane
5	CT	2100	Pauwela	2100	3	700				
4	CT	2200	Kaelepulu Dr (South)	2200	3	733			No	Off Awehi Lane
5	CT	2330	Mokulua Ln (East)	2330	3	777				
Total		30514		Qualified Homes on Unpaved Roads	68					
County	5.78 miles									
City	0.00 miles									
Total	5.78									

Year 5 and Other Qualified



THANK YOU

Tammy & Jon Eden

Commissioner Hamner from Bastrop County Precinct 1

Trey Job from City of Bastrop

Tyler Walsh with BCWCID#2

BEFCO & County Engineering

& ALL Your Crews

For Your Tremendous Cooperation & Teamwork

TVPOA For Donations Towards Materials

This Year and Next Year's Roads -- Summary

2018 road construction

<u>Road</u>	<u>feet</u>
Pahoiki Lane	1640
Kou Ct	160
Kulua ct	850
Kimo Ct	400
Ahumoa Drive	900
North Pahihi Drive	1450
Kaena Lane	800
Papawai Drive	2430
Koae Ct	220
Huelo Ct	350
Kaliu Ct	360
Kaenapapa Lane	800
Awehi Lane	1320
Upola Ct	500
Ohana Ct	850
Haou Ct	450
<u>Paia ct</u>	<u>450</u>
Total Feet	13930
Miles	2.64

2019 road construction

<u>Road</u>	<u>feet</u>
Pahalawe Lane	1100
Kaapahu	1740
Molulua Lane	900
Waimalu	700
Kipapa	420
Kaeleku	500
Ninole	650
Waiane	850
Keanahalululu	2200
Kaewakapu	1771
Kapapa	130
Nuupia	300
Kaimuki	520
Olomana	350
Kauai Ct	450
Anahulu	750
Oah Ct	<u>200</u>
Total Feet	13531
Miles	2.56

Road Construction -- Open Bidding – By Street

- Bids Opened March 9, 2018
- 5 Bids Submitted
- Proposal to Board; Assign Efforts to 2 Successful Bidders
 - WJC Company
 - Jimmy Evans Construction
- Contract Discussion and Action to be made at Next Board Meeting

WJC Company

WJC COMPANY

2018

PROPOSED START IN APRIL

<u>ROAD</u>	<u>LENGTH</u>	<u>LABOR COSTS</u>	<u>MATERIAL COSTS***</u>	<u>PAVING COSTS**</u>	<u>TOTAL COSTS</u>
North Pahihi Drive	1450	\$27,600	\$23,008	\$8,239	\$58,846
Kaena Lane	800	\$14,400	\$12,039	\$4,545	\$30,984
Papawai Drive	2430	\$47,240	\$36,530	\$13,807	\$97,577
Koae Ct	220	\$5,960	\$4,036	\$1,250	\$11,246
Huelo Ct	350	\$9,300	\$5,829	\$1,989	\$17,118
Kaenapapa Lane	800	\$14,400	\$14,039	\$4,545	\$32,984
Awehi Lane	<u>1320</u>	<u>\$27,240</u>	<u>\$21,214</u>	<u>\$7,500</u>	<u>\$55,954</u>
TOTAL	7370	\$146,140	\$116,694	\$41,875	\$304,709
MILES	1.40				

** COUNTY ESTIMATE

*** ROAD BASE PLUS CULVERTS

Jimmy Evans

<u>JIMMY EVANS</u>		2018 PROPOSED START IN JULY			
<u>COMPANY</u>					
<u>Road</u>	<u>feet</u>	<u>LABOR COSTS</u>	<u>MATERIAL COSTS***</u>	<u>PAVING COSTS**</u>	<u>TOTAL COSTS</u>
Pahoiki Lane	1640	\$24,760	\$25,629	\$9,318	\$59,708
Kou Ct	160	\$6,960	\$5,208	\$909	\$13,077
Kulua ct	850	\$23,250	\$14,729	\$4,830	\$42,808
Kimo Ct	400	\$9,400	\$8,519	\$2,273	\$20,192
Ahumoa Drive	900	\$19,000	\$15,419	\$5,114	\$39,532
Kaliu Ct	360	\$11,160	\$5,967	\$2,045	\$19,173
Upola Ct	500	\$15,000	\$9,899	\$2,841	\$27,740
Ohana Ct	850	\$16,000	\$14,729	\$4,830	\$35,558
Haou Ct	450	\$12,300	\$7,209	\$2,557	\$22,066
<u>Paia ct</u>	<u>450</u>	<u>\$9,360</u>	<u>\$7,209</u>	<u>\$2,557</u>	<u>\$19,126</u>
total	6560	\$147,190	\$114,518	\$37,273	\$298,980
miles	1.24				

** COUNTY ESTIMATE

*** ROAD BASE PLUS CULVERTS