

Farrington Highway Corridor Study - Recommended Solutions (Kili Dr to Leihoku St)

• Install speed feedback sign for southbound traffic at start of 25 mph zone

Install bright street lighting ☀ for,
 ■■■ Signalized crosswalks and,
 ■■■ Unsignalized crosswalks.

• Build berm to prevent sand overwash

Army St Solutions:

1 2 3

• Drainage Study and Drainage improvements

• Computerized Traffic Control System, Phase 16 - Waianae to coordinate and optimize 6 traffic signals

• Install speed feedback sign for southbound traffic at start of 25 mph zone





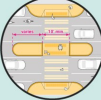

Puhano St Solutions:

1 4 5 6

Resilience Solutions

Congestion Solutions

Safety Solutions:

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|---|---|
| 1  Signing and marking improvements. | 4  Include leading ped interval at signal. |
| 2  Pedestrian hybrid beacon. | 5  left turn lane + green arrow . |
| 3  Pedestrian refuge median island . | 6  Raised median. |

Farrington Highway Corridor Study - Recommended Solutions (Kili Drive to Leihoku Street) - Makaha/Waianae June 2020

SAFETY

Install pedestrian countdown timers at both Puhano crosswalks	\$	10,500
Install pedestrian RRFB with advanced yield or stop markings and signs at Army St	\$	17,400
Install ped refuge raised median island at Army St	\$	26,500
Raised Median at Puhano St.	\$	43,000
Verify traffic signal yellow and red times meet ITE Recommended Practice	HDOT/C&C	
Modify signal phasing (implement a leading pedestrian interval)	\$	400
Implement systemic signing and marking improvements at Army St	\$	7,000
Implement systemic signing and visibility improvements at Puhano St	\$	7,000
Increase retroreflectivity of STOP signs at 7 Stop Controlled intersections	\$	9,200
Increase illuminance from low (<0.2 fc) to Medium >0.2 fc and <1.1 fc) @ 20 crosswalks	\$	713,400
Install dynamic speed feedback sign for 3 lanes (in 2 locations)	\$	33,000

CONGESTION

Computerized Traffic Control System Phase 16 - Waianae	\$	3,800,000	City & County of Honolulu project
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RESILIENCE

Focused Drainage Study to propose solutions for flooding at Leihoku St	\$	112,000	
Focused Drainage Study to propose solutions for flooding at Waianae Valley Road	\$	134,000	
Plan and build rock veneer wall 500 ft x 4 ft high to prevent sand and wave overwash in Makaha	\$	1,390,000	
	\$	6,303,400	STIP plus new improvements
	\$	2,503,400	New improvements only

Farrington Highway Corridor Study - Recommended Solutions (Kili Drive to Leihoku Street) - Makaha/Waianae June 2020

MAKAHA/WAIAANAE PHASING

1 Short Term (6 mo - 2 years), within Right of Way, Low Cost	
Install pedestrian countdown timers at both Puhano crosswalks	\$ 10,500
Install pedestrian RRFB with advanced yield or stop markings and signs at Army St	\$ 17,400
Install ped refuge raised median island at Army St	\$ 26,500
Raised Median at Puhano St.	\$ 43,000
Verify traffic signal yellow and red times meet ITE Recommended Practice	HDOT/C&C
Modify signal phasing (implement a leading pedestrian interval)	\$ 400
Implement systemic signing and marking improvements at Army St	\$ 7,000
Implement systemic signing and visibility improvements at Puhano St	\$ 7,000
Increase retroreflectivity of STOP signs at 7 Stop Controlled intersections	\$ 9,200
Install dynamic speed feedback sign for 3 lanes (in 2 locations)	\$ 33,000
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	\$ 154,000
1 Short Term (6 mo - 2 years), within Right of Way, Medium Cost	
Increase illuminance from low (<0.2 fc) to Medium >0.2 fc and <1.1 fc) @ 20 crosswalks	\$ 713,400
1 Short Term (6 mo - 2 years), within Right of Way, Medium to High Cost	
Computerized Traffic Control System Phase 16 - Waianae	\$ 3,800,000 City & County of Honolulu project
2 Intermediate Term (~2-5 years), Outside Right of Way, Medium to High Cost, Permitting needed	
Plan and build rock veneer wall 500 ft x 4 ft high to prevent sand and wave overwash in Makaha	\$ 1,390,000
2 Intermediate Term (~2-5 years), Within Right of Way, Medium to High Cost, Studies only	
Focused Drainage Study to propose solutions for flooding at Leihoku St	\$ 112,000
Focused Drainage Study to propose solutions for flooding at Waianae Valley Road	\$ 134,000
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	\$ 246,000

NOTE: Estimated costs include 3-5% traffic control, 5-10% engineering/design, 10% mobilization and 30% contingency