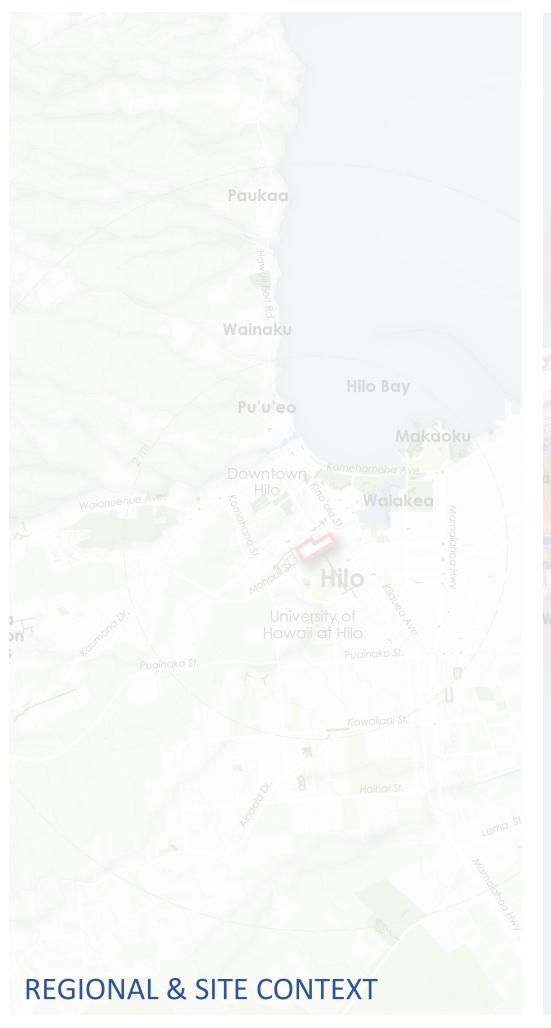
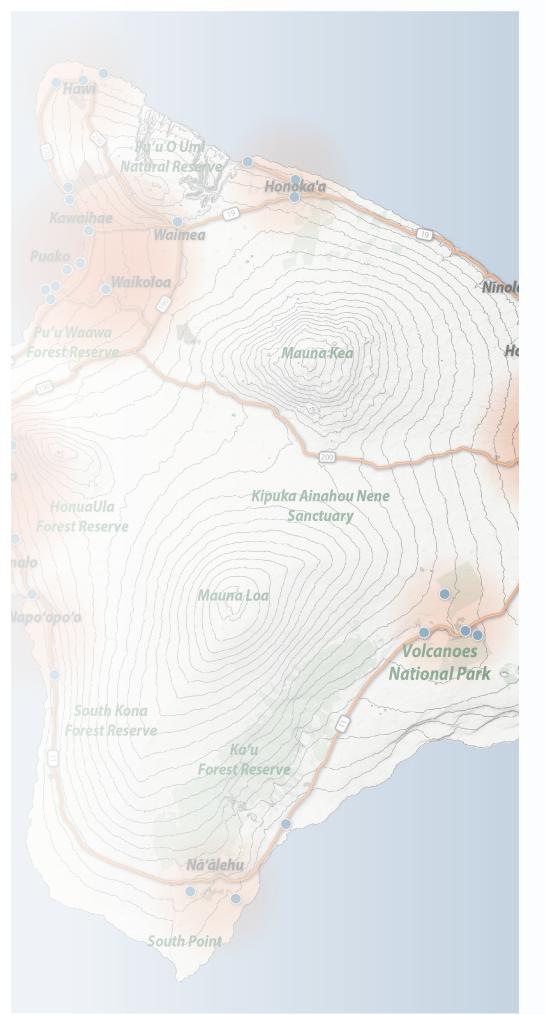




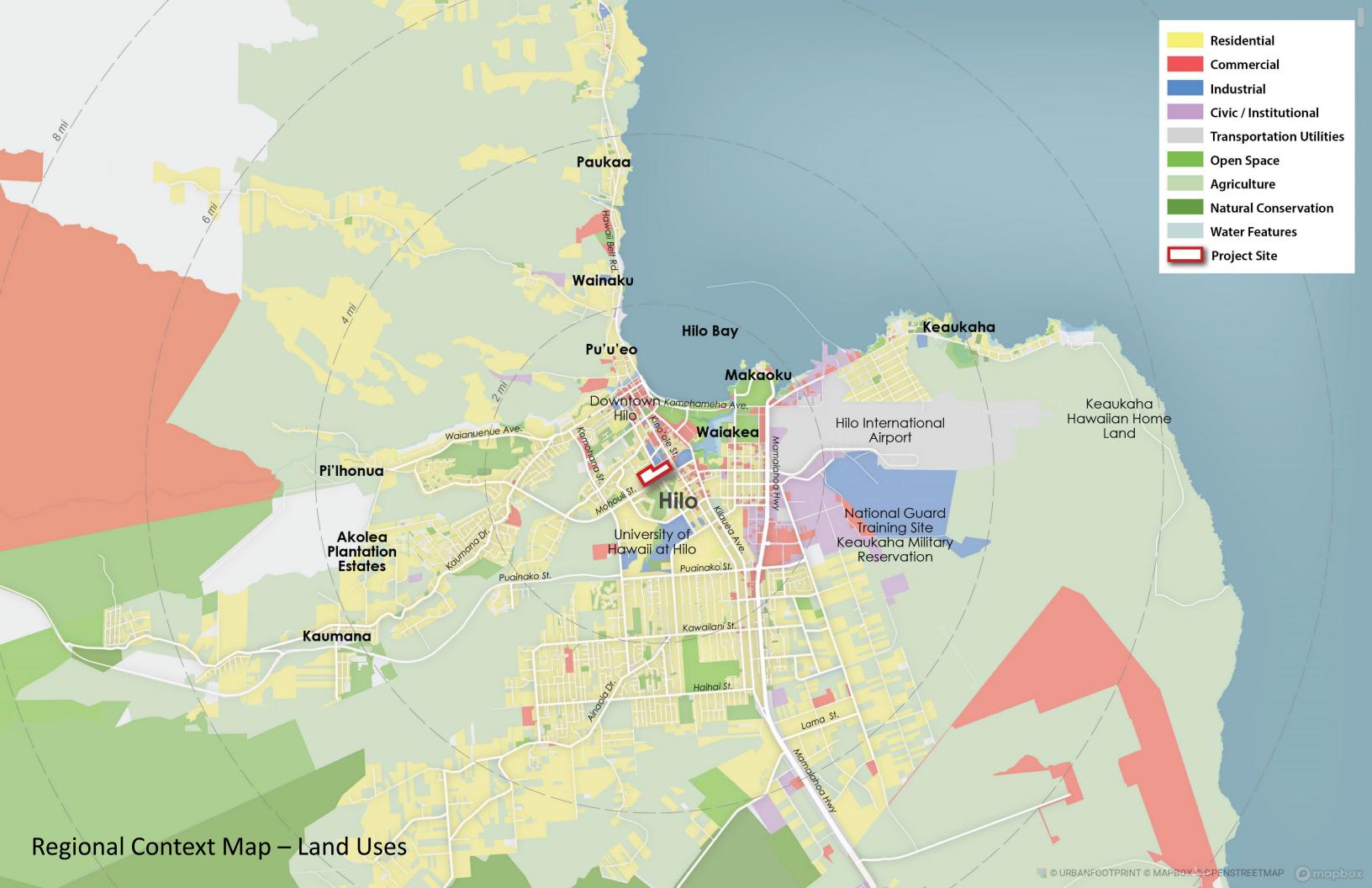
# Project Overview

- Urban Vision & TOD goals
- Ideally a minimum 125 housing, up to 250+ housing units
  - Rezoning Required
- Research: adequate Infrastructure sewer, water, electricity, parking
- Parking 1.5 to 2.0 per unit
- Scope of Services Overview
  - Preliminary Master Plan
  - Mobility Plan
  - Civil Engineering Assessment
  - Planning approach / Process & Engagement
  - Traffic and Complete Street Analysis



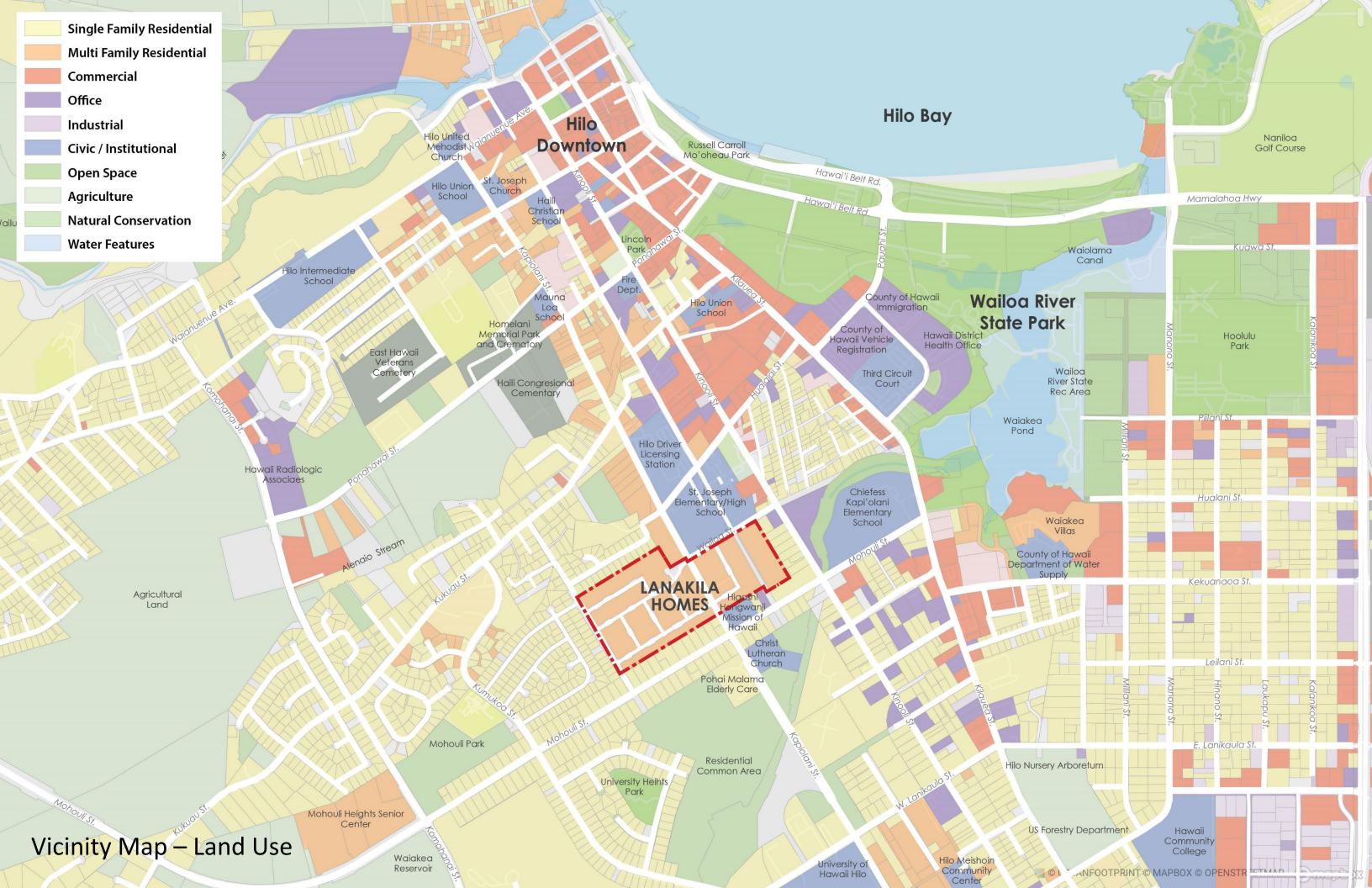






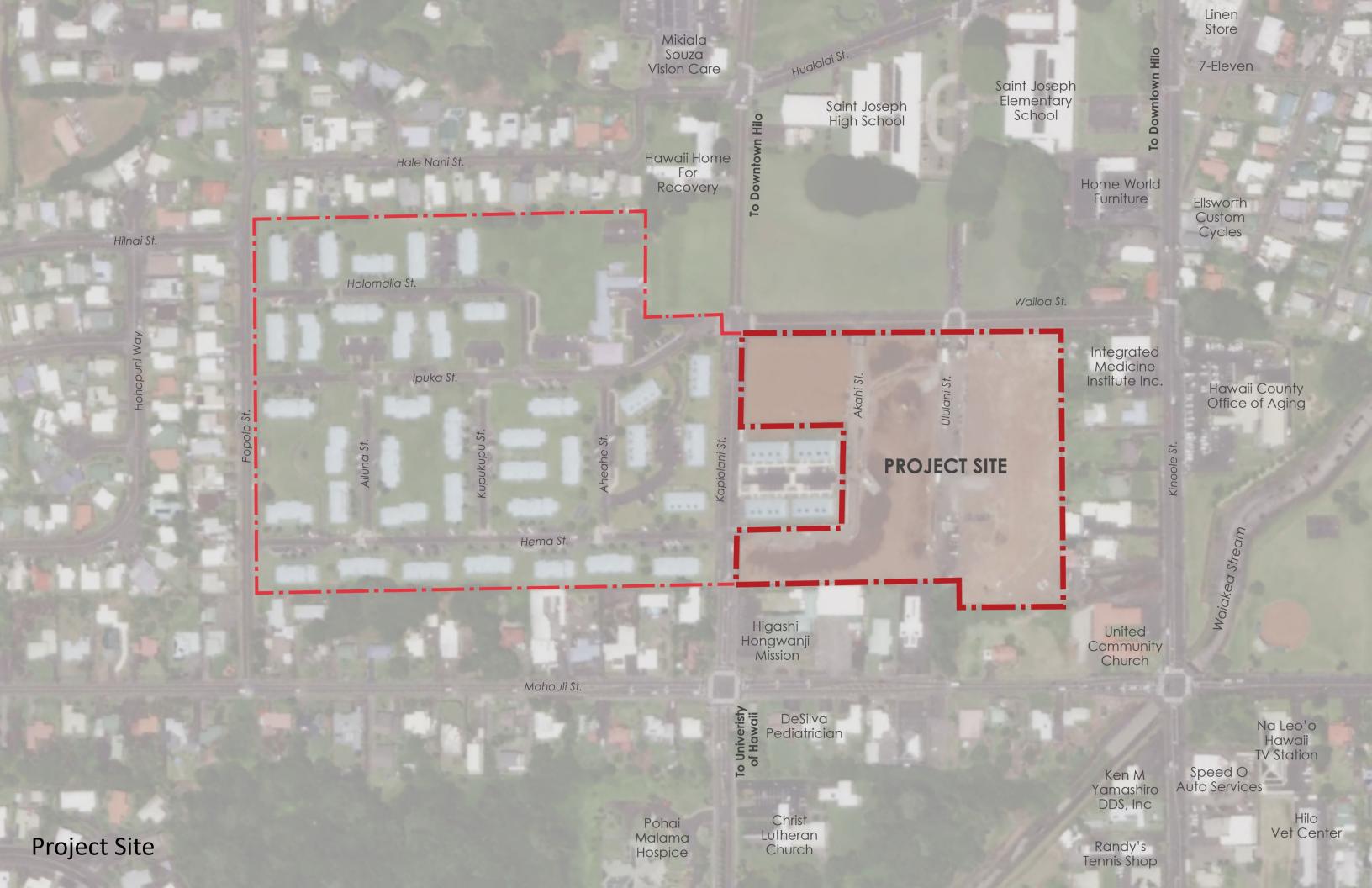


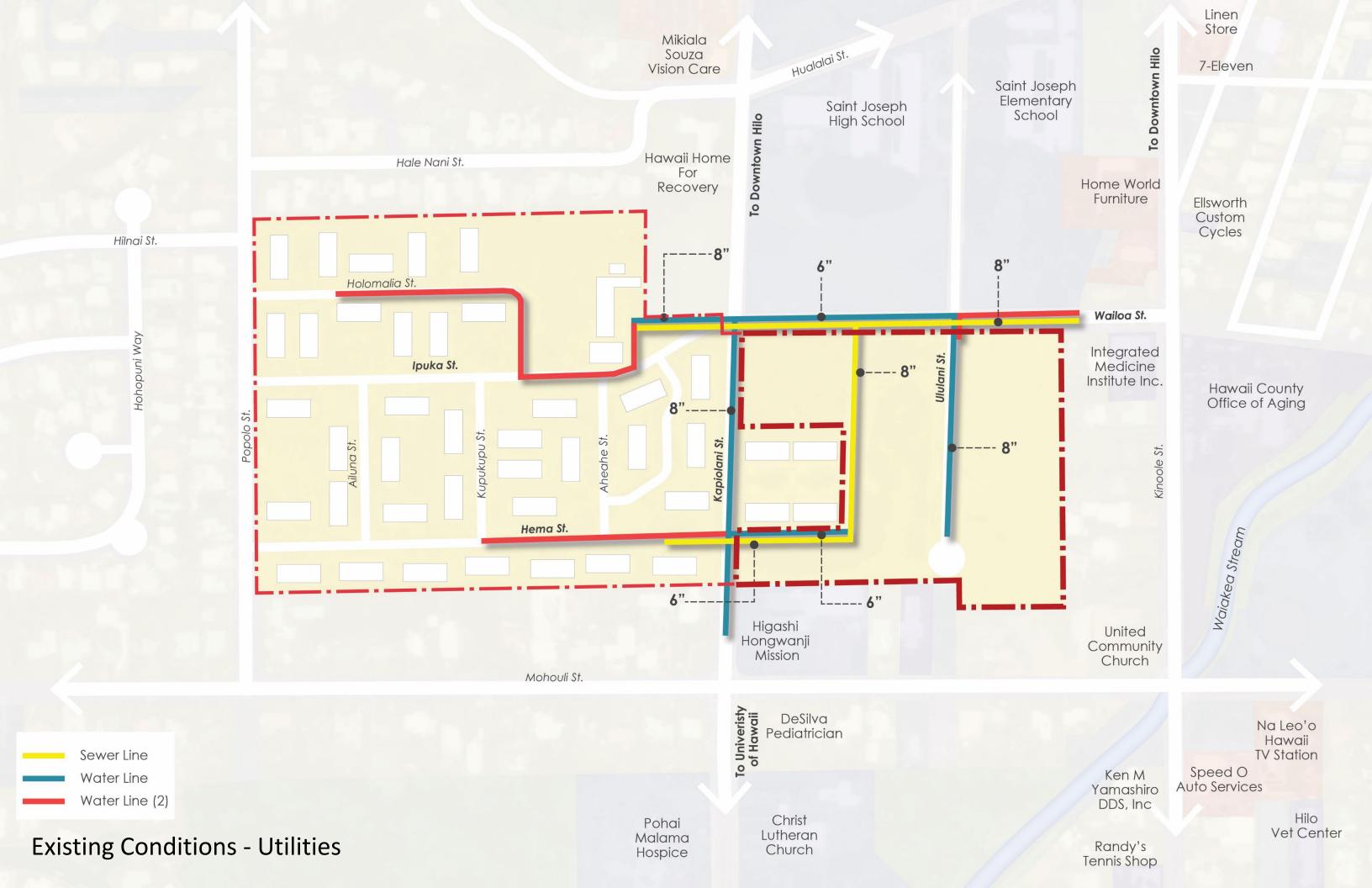


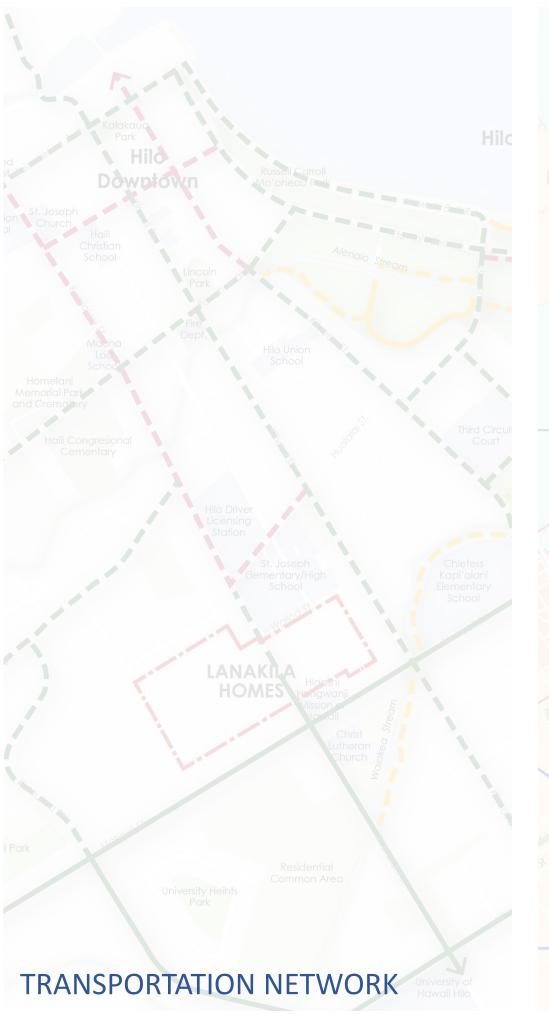


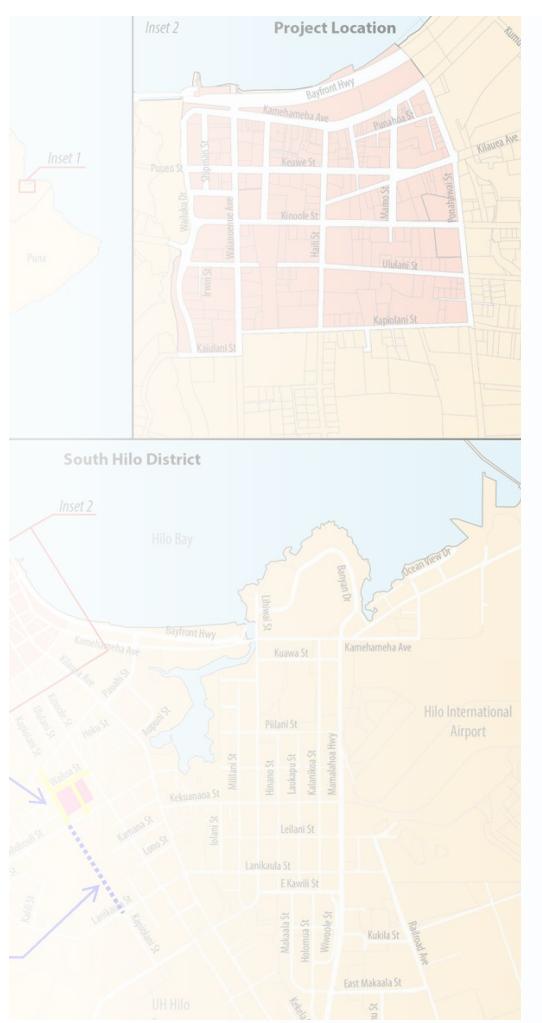




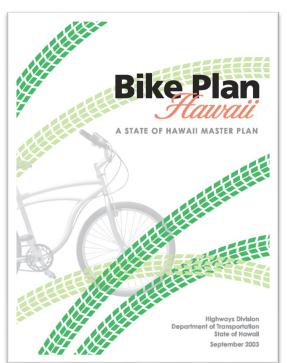








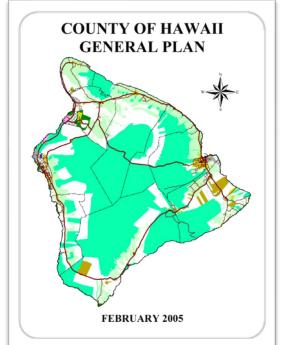




### State of Hawaii Bike Plan

Priority 2 Project: Signed Shared Road on Kapiolani Street from Waianuenue Avenue to Hualalai Street.

(within project area)



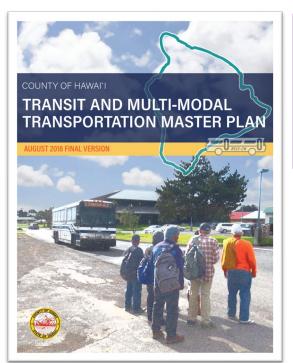


### Kapiolani St Extension

Constructed new 60-foot-wide roadway connection with landscaped median, bike lanes, and sidewalks. (south of project area)

2003 2016 2018 2020

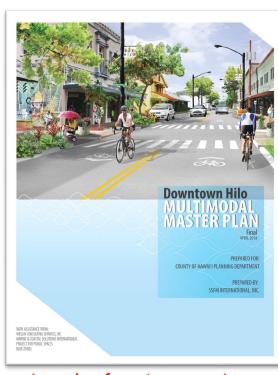
### Bike Plan Hawaii COH General Plan



County of Hawaii Transit and Multi-Modal Transportation Master Plan

Proposes future bus route realignments that pass along the project site.

(within project area)



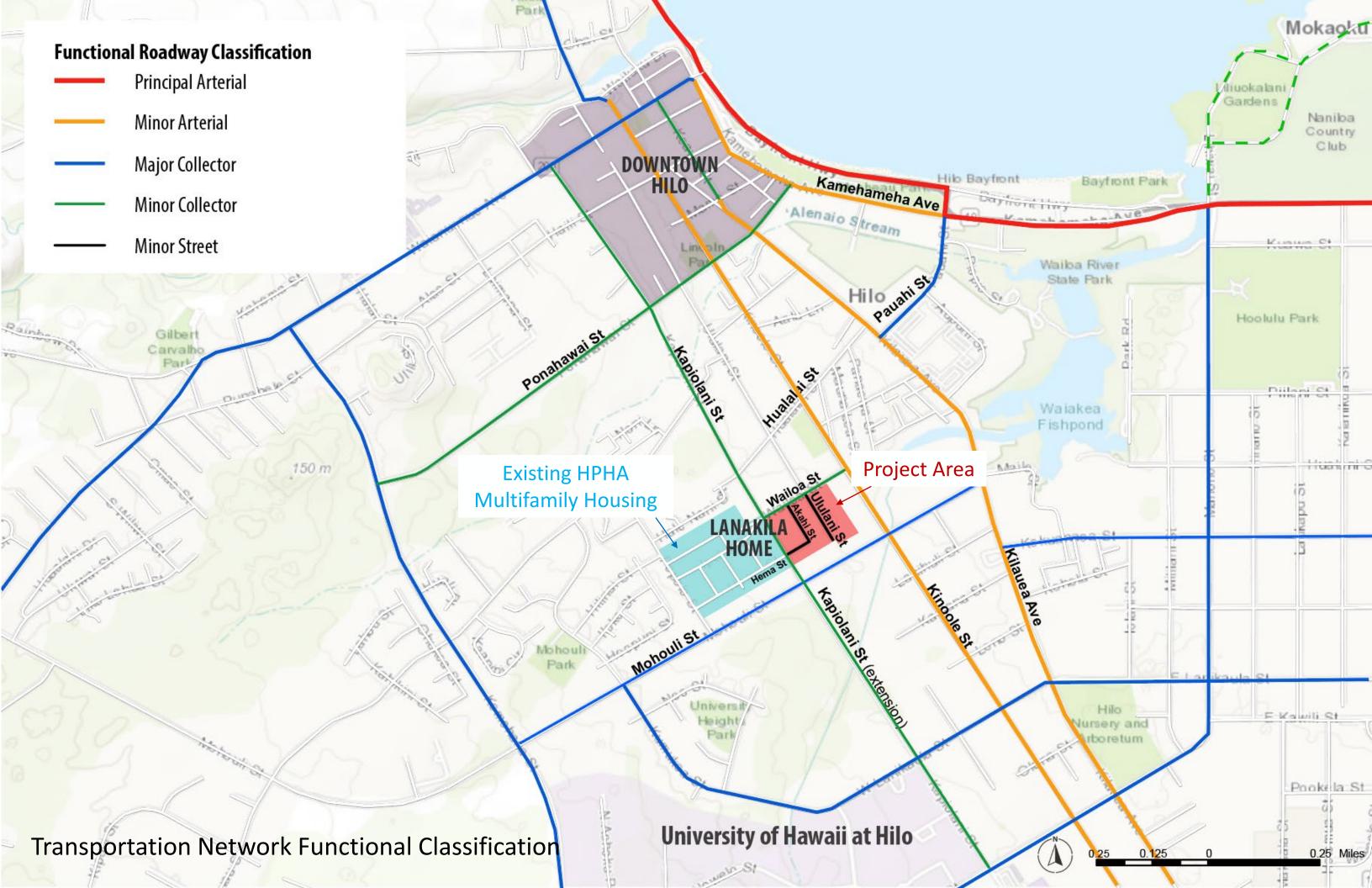
(north of project area)

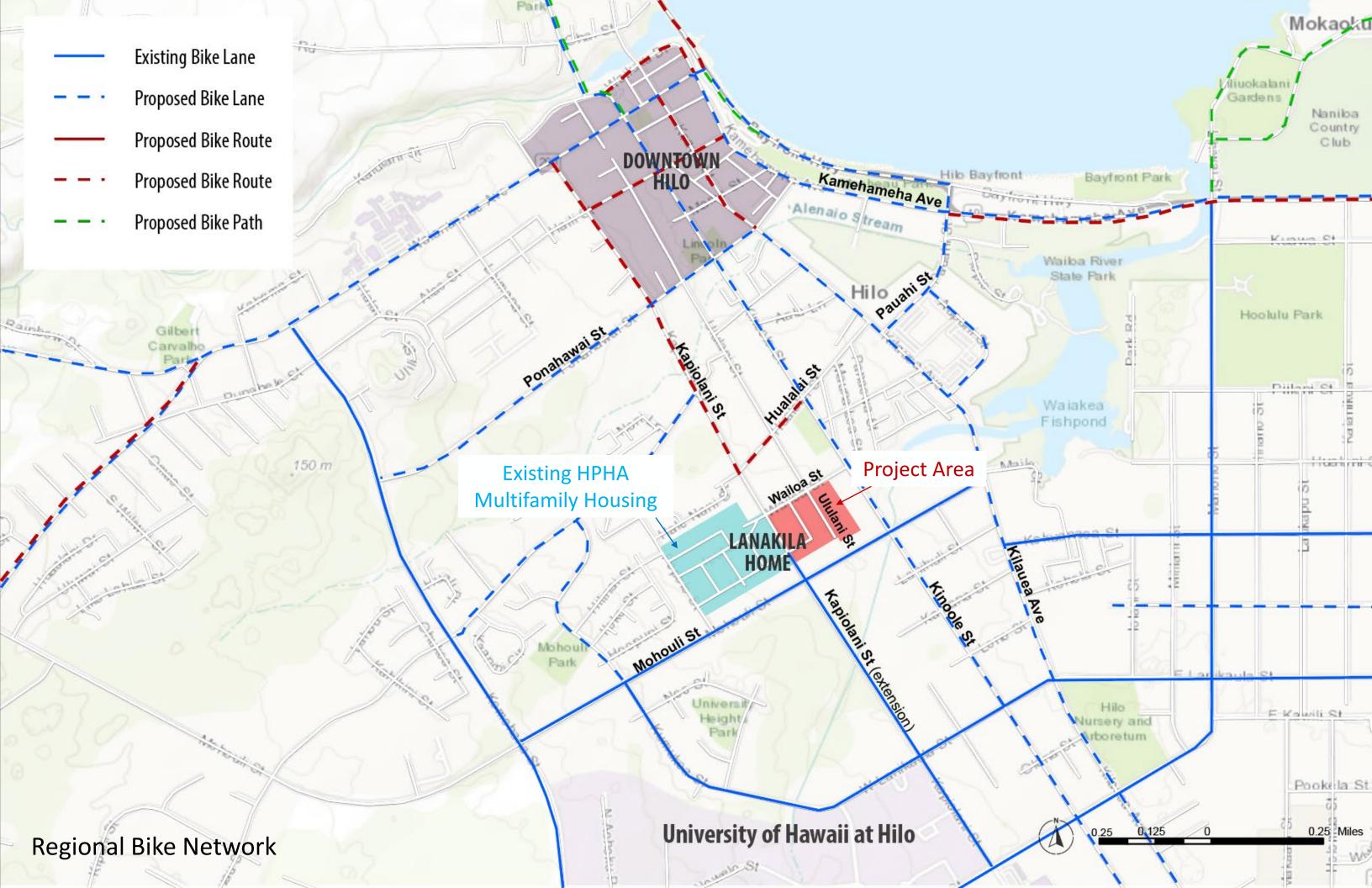
# Kapiolani Street Extension COH Transit MMTMP COH Street Design Manual & DHMMP



County of Hawaii Street
Design Manual

Provides roadway crosssection design treatment guidelines based on street typology.





## Hele-On Bus Route - #104 Intra-Hilo Mohouli Legend 104 Intra-Hilo A Timepoint Transit Hub Clem Akina C Medical Facility O College/University Amauulu St 6 School O Key Destination www.heleonbus.org schematic map - not to scale Mo'oheau Bus Terminal Project Area Roads St Vaseph O School O HILO **Project Area** Nawaii County Office on Aging Senior Center Kupuna Hts Housing Mohouli S

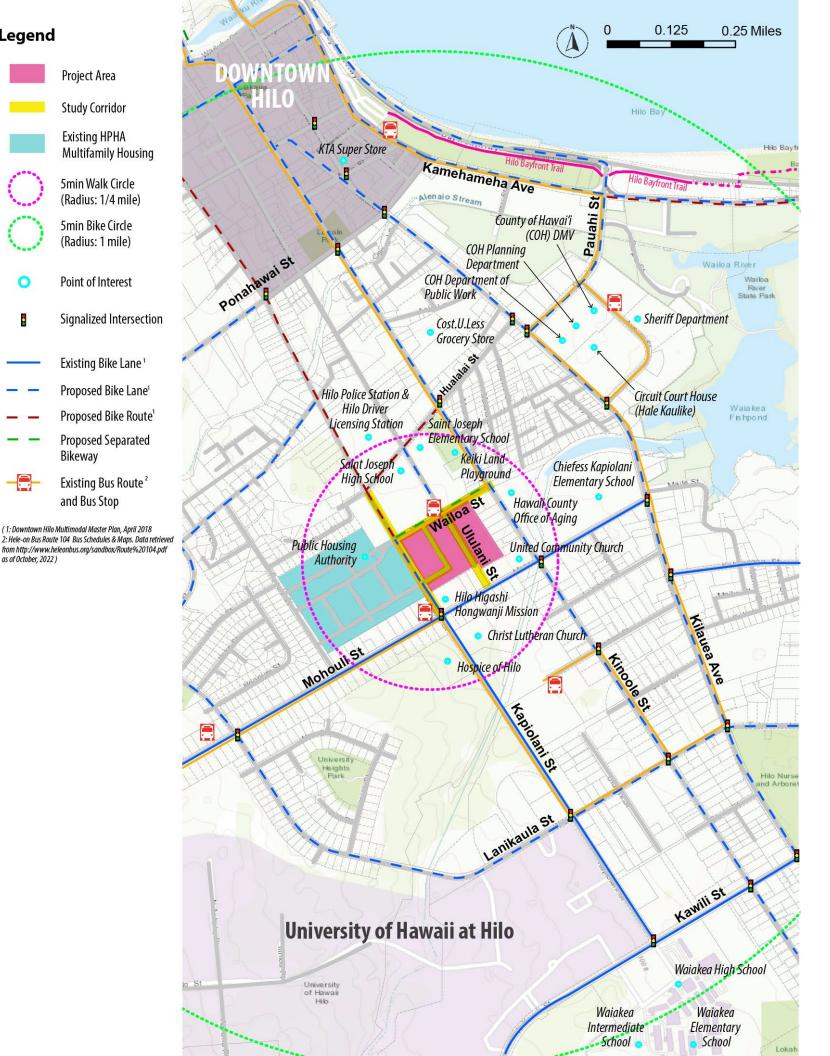
Not to Scale

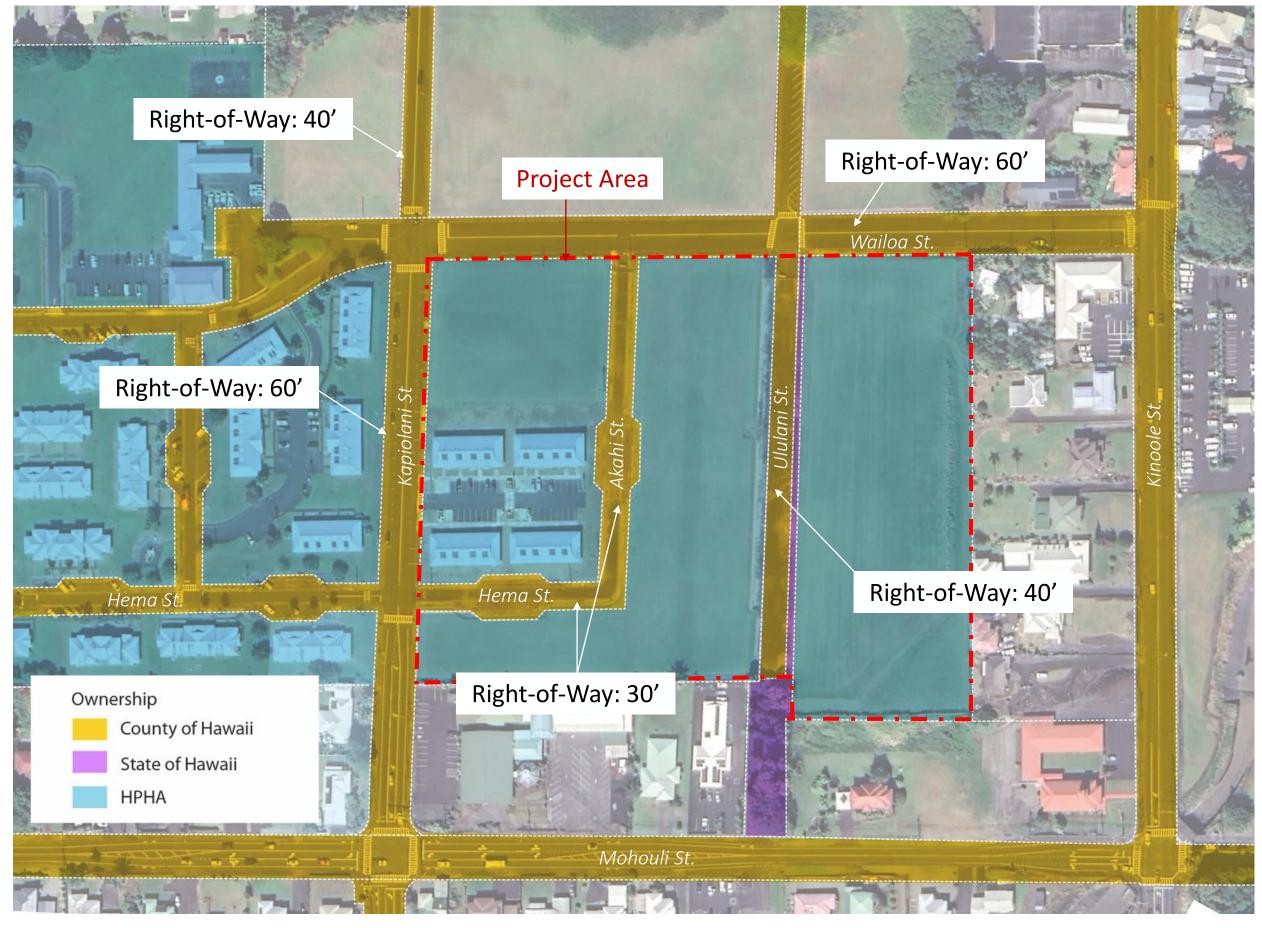
<sup>\*</sup> Taken from <a href="http://www.heleonbus.org/sandbox/Route%20104.pdf">http://www.heleonbus.org/sandbox/Route%20104.pdf</a> as of August 2022

# Legend Project Area Study Corridor Existing HPHA Multifamily Housing 5min Walk Cirde (Radius: 1/4 mile) 10 min Walk Circle (Radius: 1/2 mile) 5min Bike Circle (Radius: 1 mile) Point of Interest Signalized Intersection **Existing Bike Lane** Proposed Bike Lane **Proposed Bike Route Existing Bus Route Future Bus Route** and Bus Stop

Legend

Bikeway



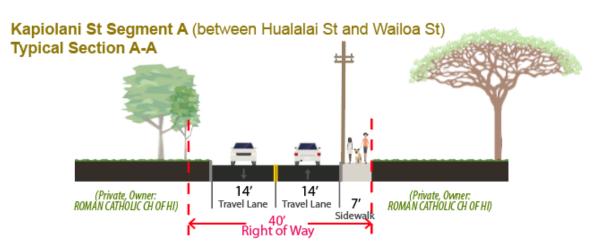


### **Project Area Road ROW**

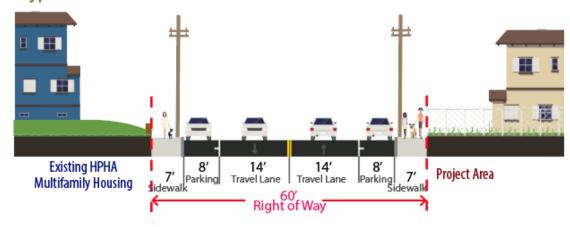
- Kapiolani St (Wailoa St to Mohouli St): 60' ROW
- Wailoa St (Kapiolani St to Kinoole St): 60' ROW
- Ululani St (Wailoa St to Mohouli St): 40' ROW
- Akahi St: 30' ROW
- Hema St (Kapiolani St to Akahi St): 30' ROW



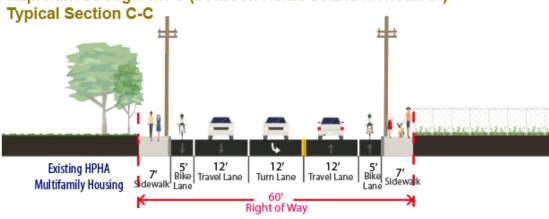
### **Existing Conditions**



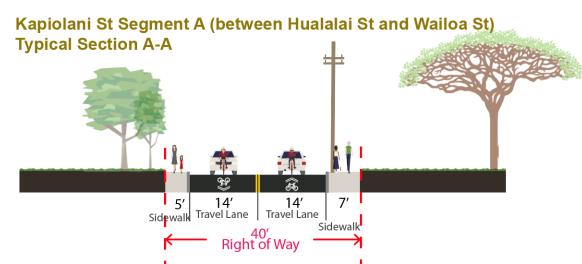
Kapiolani St Segment B (between Wailoa St and Hema St)
Typical Section B-B



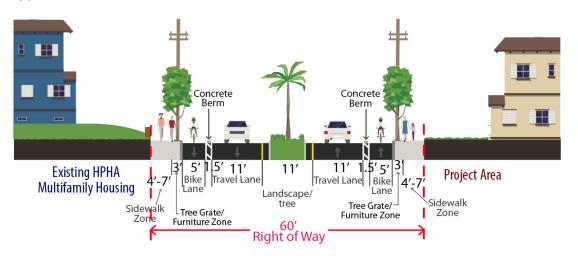
Kapiolani St Segment C (between Hema St and Mohouli St)



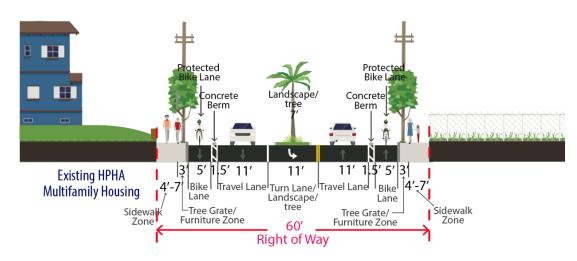
### **Proposed Cross-Section**

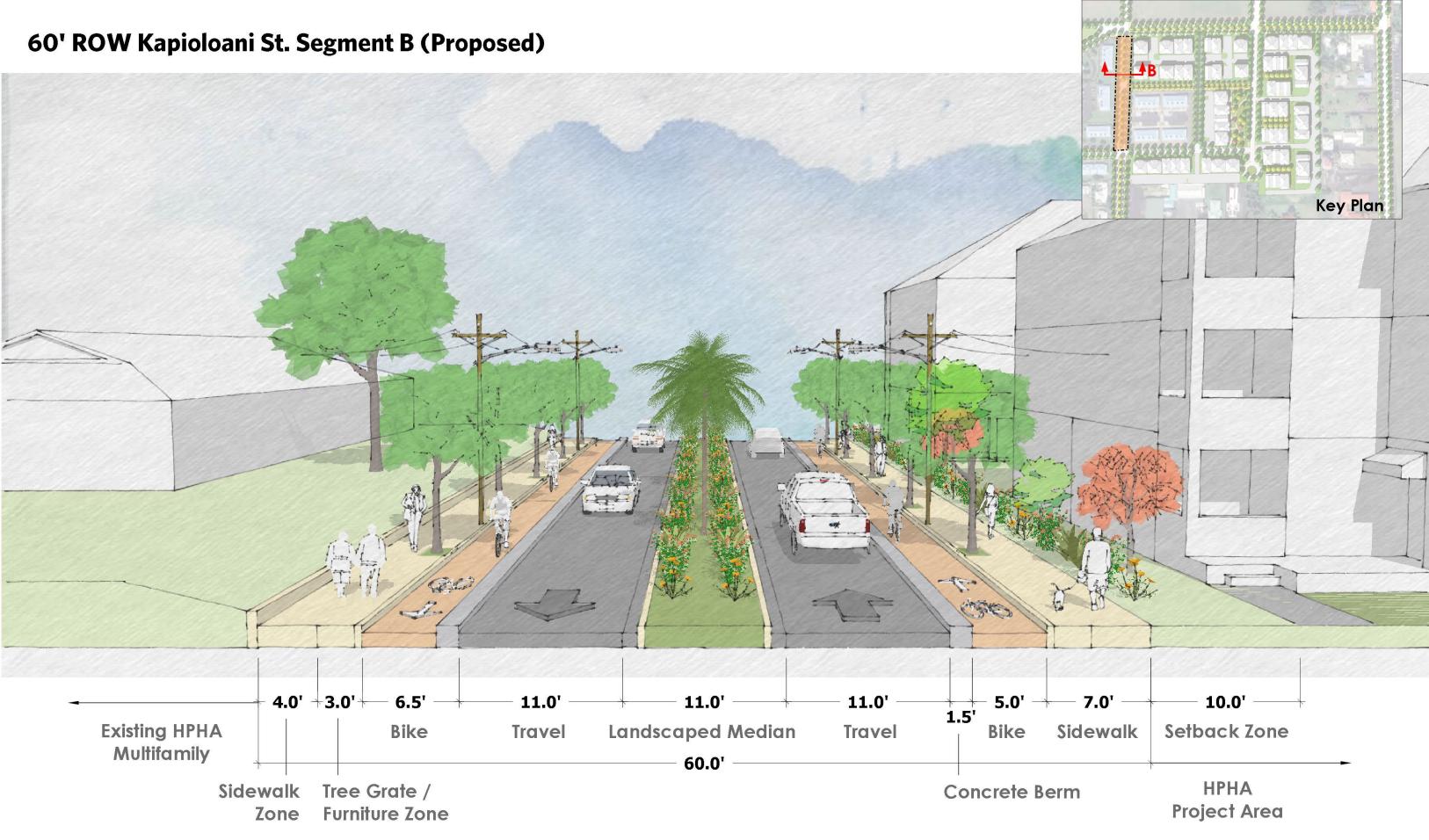


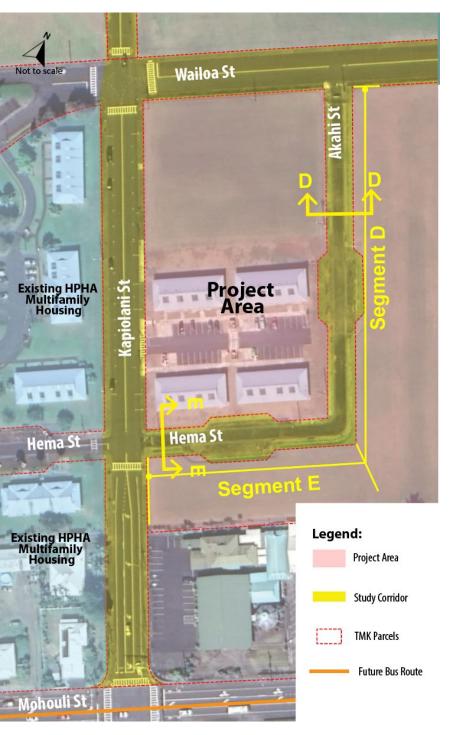
Kapiolani St Segment B (between Wailoa St and Hema St)
Typical Section B-B



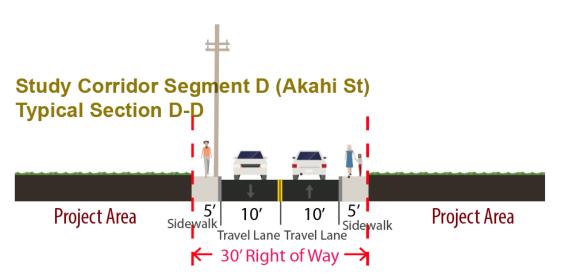
**Kapiolani St Segment C (between Hema St and Mohouli St) Typical Section C-C** 



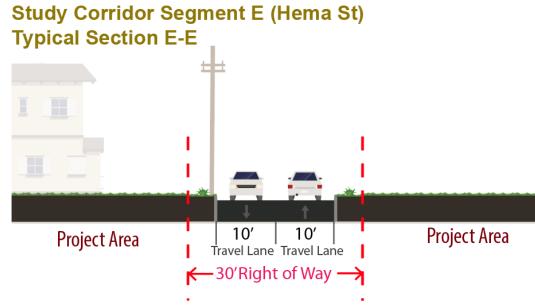




### Existing Conditions (Akahi St)

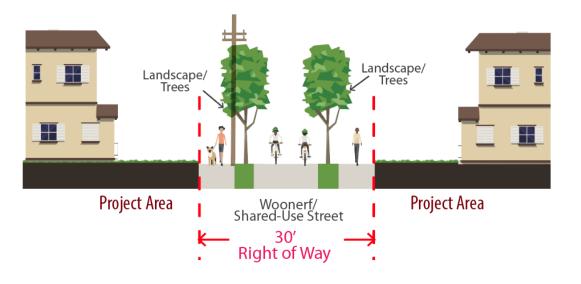


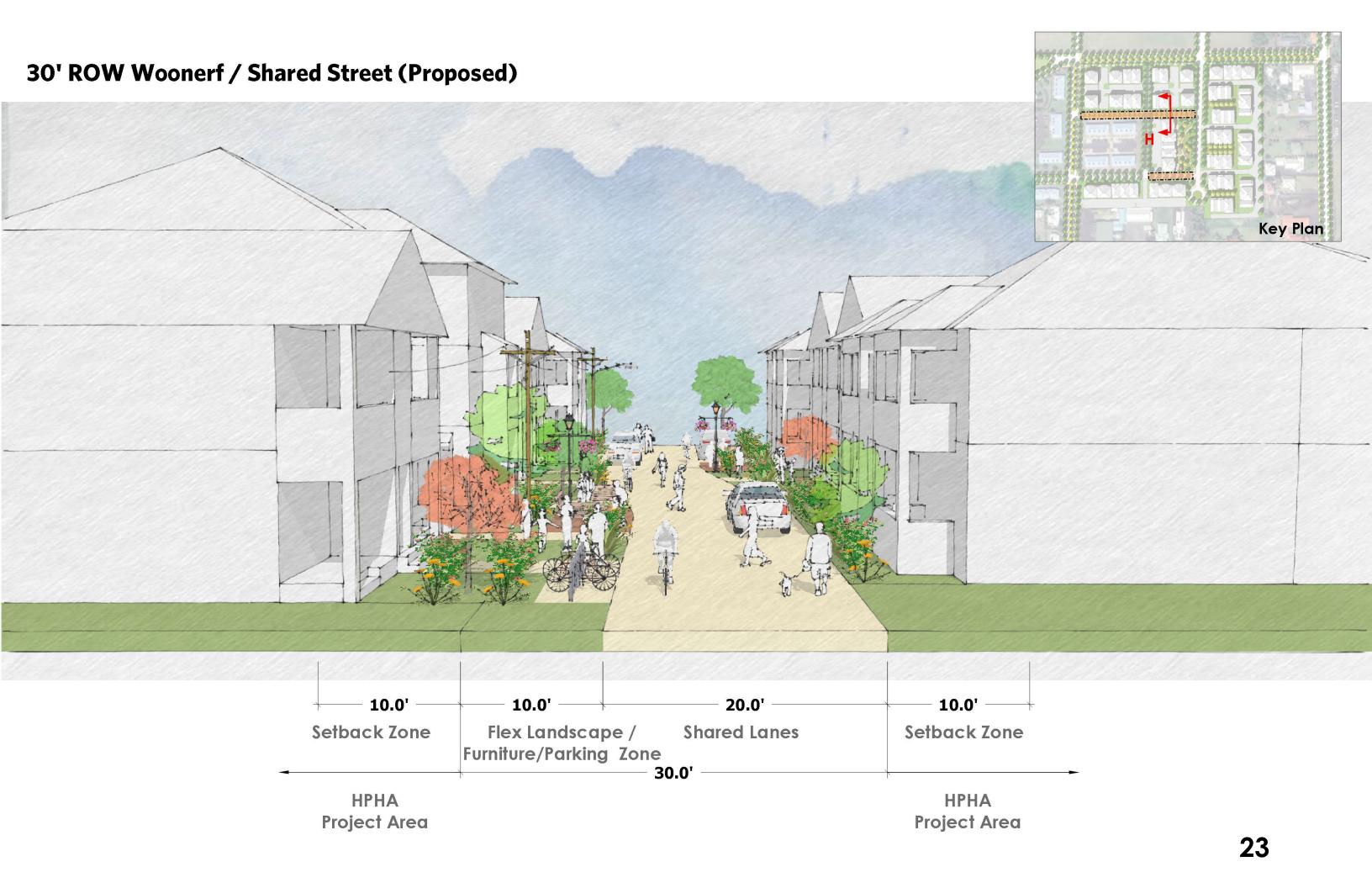
### Existing Conditions (Hema St)



### **Proposed Cross-Section**

# Akahi St and Hema St (between Wailoa St and Kapiolani St) Typical Section D-D, E-E

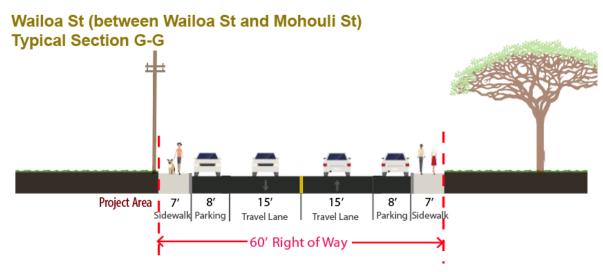




### Wailoa St & Ululani St (between Kapiolani St and Kinoole St)

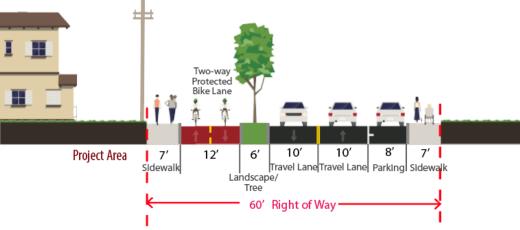
# Project Area

### Existing Conditions (Wailoa St)



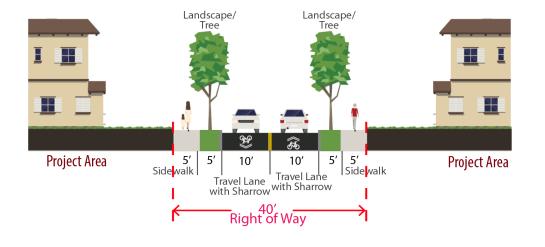
### Proposed Cross-Section (Wailoa St)





### Proposed Cross-Section (Ululani St)

### Ululani St (between Wailoa St and Mohouli St) Typical Section F-F



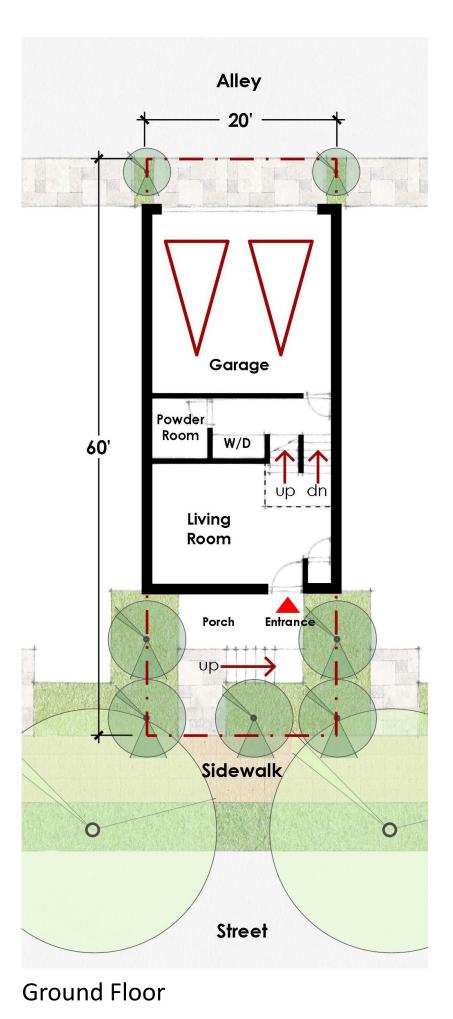


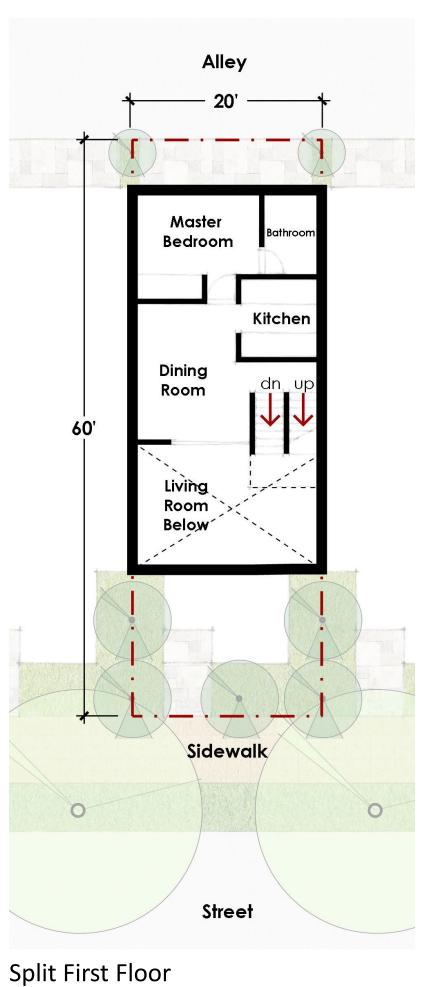


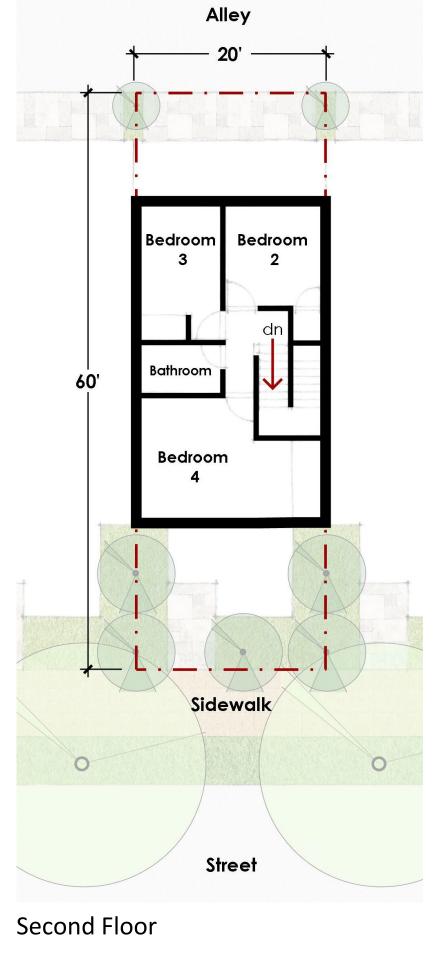




**BUILDING TYPES & SITE PLANS** 







SINGLE FAMILY: 20' x 60' STANDARD TOWNHOME

Lot Size: 20' x 60'

Density:

32 du/ac (with 1/2 of alley)

Floors:

2 (split-level)

Unit Size:

4 Bedroom unit

1,500 sf

Parking: Alley



Ewa Beach, Honolulu



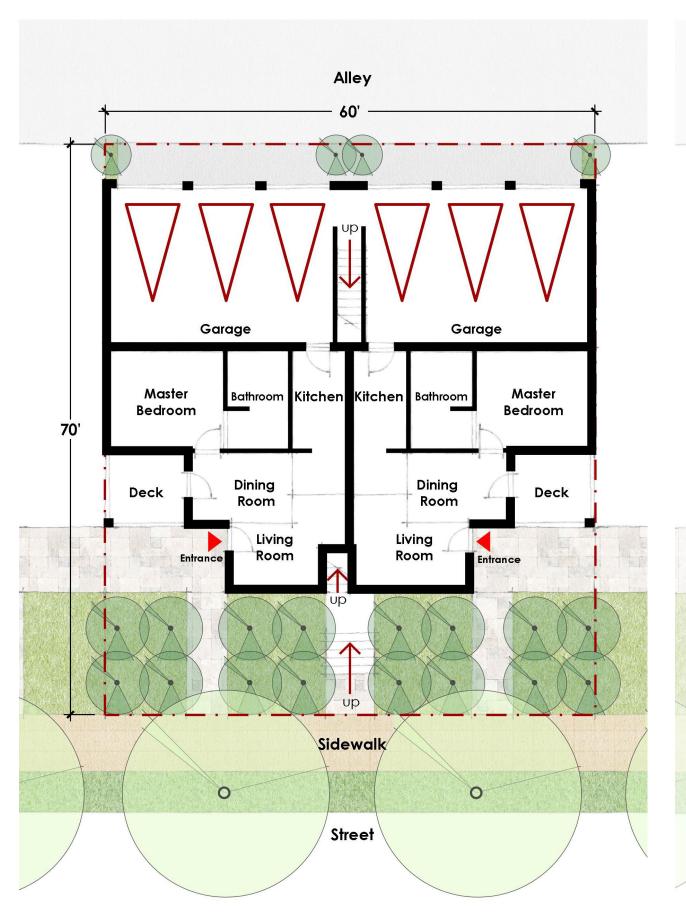
Kaikoi @ Ho'opili, Honolulu



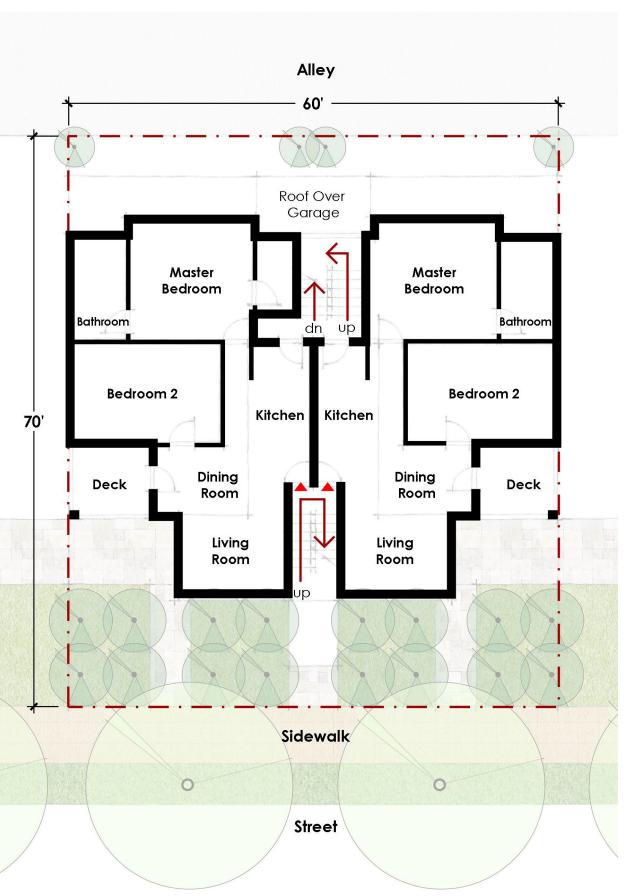
Issaquah Highland, Washington



Ewa Beach, Honolulu



First Floor 1 Bedroom – 2 units



Second & Third Floor 2 Bedroom – 2 units/floor

MULTIFAMILY: 60' x 70' 6 - FLAT

Lot Size: 60' x 70'

Gross Density: 40 du/ac (with 1/2 of alley)

Floors:

Unit Sizes:
First Floor:
1-bed unit - 700 sf
2 units Total

2nd/3rd Floor:2 Bedroom unit - 1150 sf2 units/floor, 4 units Total

6 Units / Building

Parking:
Tuck under & Surface Parked



Studio – 2 units

MULTIFAMILY: 40' x 70' 4 - FLAT

Lot Size: 40' x 70'

Gross Density: 40 du/ac (with 1/2 of alley)

Floors:

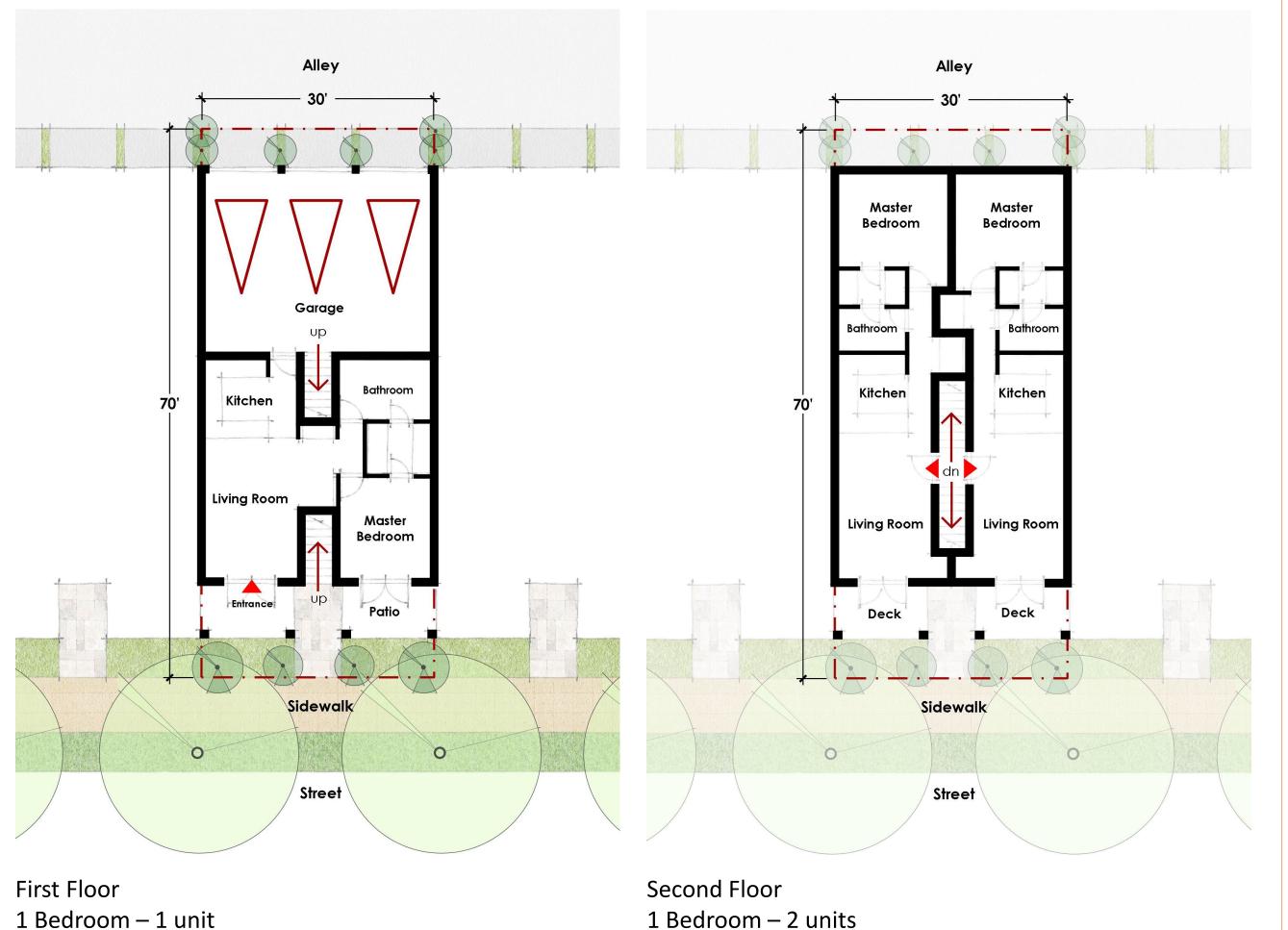
Unit Sizes: First Floor: Studio - 650 sf 2 units Total

Second Floor: 2 Bedroom unit - 1030 sf 2 units Total

4 Units / Building

Parking:
Tuck under & Surface Parked

Second Floor 2 Bedroom – 2 units



MULTIFAMILY: 30' x 70' 3 - FLAT

Lot Size: 40' x 70'

Gross Density: 40 du/ac (with 1/2 of alley)

Floors:

Unit Sizes:
First Floor:
1 Bedroom unit - 900 sf
1 unit Total

Second Floor: 1 Bedroom unit - 800 sf 2 units Total

6 Units / Building

Parking:
Tuck under & Surface Parked









Kaikoi @ Ho'opili, Honolulu



Daybreak, Utah

Ewa Beach, Honolulu

Image	Option	Unit Count	Square Footage	Capital Cost (ROM) NIC Hawaiian Escalation +10-20% Contingency (\$265-446/Sf)		Schedule Risk	Pros	Cons	Cost Per Unit (Building Only)	Overall Cost
	Option 1	MF: 0 Town homes:60 6 Plex: 24 4 Plex: 28 3 Plex: 6 Total: 118	146,900 SF	\$40M-\$66M	Limited to trenching for utilities	Low	<ul> <li>No modification to existing roads</li> <li>Minimal effects to SMA</li> <li>Stick Frame Construction</li> <li>Matt Slab Foundation avoids disturbing contaminated soil</li> </ul>	· Fewest number of units added to site.	\$330K-\$555K	\$
	Option 2	MF: 0 Town homes: 50 6 Plex: 36 4 Plex: 28 3 Plex: 12 Total: 126	149,700 SF		Limited to trenching for utilities	High	<ul> <li>Minimal effects to SMA</li> <li>Stick Frame Construction</li> <li>Matt Slab Foundation avoids disturbing contaminated soil</li> </ul>	· Requires modifications to Ululani, demapping and adding new County roads.	\$314K-\$530K	\$
	Option 3	MF: 0 Town homes:57 6 Plex: 66 4 Plex: 44 3 Plex: 27 Total: 194	219,500 SF	\$58M-\$98M		High	<ul> <li>Stick Frame Construction</li> <li>Matt Slab Foundation avoids disturbing contaminated soil</li> </ul>	<ul> <li>Large impact to SMA including but not limited to site grading/filling.</li> <li>Requires modifications to Ululani, demapping and adding new County roads.</li> </ul>	\$300K-\$504K	\$\$
	Option 4	MF: 0 Town homes: 0 6 Plex: 102 4 Plex: 100 3 Plex: 48 <b>Total: 250</b>	241,500 SF		Limited to trenching for utilities	Medium	<ul> <li>No modification to existing roads</li> <li>Increased onsite parking</li> <li>Stick Frame Construction</li> <li>Matt Slab Foundation avoids disturbing contaminated soil</li> </ul>	· Large impact to SMA including but not limited to site grading/filling.	\$256K-\$431K	\$\$

Image	Option	Unit Count	Square Footage	(DOMA) NUC Havesiian		Schedule Risk	Pros	Cons	Cost Per Unit (Building Only)	Overall Cost
	Option 5	MF:152 Town homes:17 6 Plex:12 4 Plex:12 3 Plex:6 Total:199	215,600	\$57M- \$116M	<ul> <li>Trenching for utilities</li> <li>Foundations of Multifamily</li> <li>Apartment buildings will require relocation of 3500CF of contaminated soils.</li> </ul>	Medium	<ul> <li>No modification to existing roads</li> <li>Minimal effects to SMA</li> </ul>	<ul> <li>4-story building introduces steel frame construction and pile foundations adding cost/sf for more expensive building type.</li> <li>Foundation system requires removal of contaminated soil</li> <li>More surface parking lots req'd</li> </ul>	\$287K-\$585K	\$\$\$
	Option 6	MF: 118 Town homes: 0 6 Plex: 66 4 Plex: 84 3 Plex: 30 Total: 298	337,300	\$89M- \$182M	· Trenching for utilities · Foundations of Multifamily Apartment buildings will require relocation of 2700CF of contaminated soils.	High	<ul> <li>Maximized housing quantities.</li> <li>Second largest addition of units.</li> <li>20% more units than maximum requested</li> </ul>	· 4-story building introduces steel frame construction and pile foundations adding cost/sf for more expensive building type. · Foundation system requires removal of contaminated soil · More surface parking lots req'd	\$300-\$611K	\$\$\$\$
	Option 7	MF: 152 Town homes: 6 6 Plex: 42 4 Plex: 64 3 Plex: 45 Total: 309	369,900	\$98M- \$200M	<ul> <li>Trenching for utilities</li> <li>Foundations of Multifamily</li> <li>Apartment buildings will require relocation of 3500CF of contaminated soils.</li> </ul>	Medium	<ul> <li>No modification to Ululani St. required.</li> <li>Option with the most units, 24% greater than maximum requested</li> </ul>	<ul> <li>4-story building introduces steel frame construction and pile foundations adding cost/sf for more expensive building type.</li> <li>Foundation system requires removal of contaminated soil</li> <li>More surface parking lots req'd</li> </ul>	\$317K-\$646K	\$\$\$\$













Ka Malanai, Kailua

Multifamily Apartments - Lofts





Image	Option	Unit Count	Square Footage	(DONA) NUC Havesiles	Impacts	Schedule Risk	Pros	Cons	Cost Per Unit (Building Only)	Overall Cost
	Option 4	MF: 0 Town homes: 0 6 Plex: 102 4 Plex: 100 3 Plex: 48 <b>Total: 250</b>	241,500 SF	\$64M- \$108M	Limited to trenching for utilities		<ul> <li>No modification to existing roads</li> <li>Increased onsite parking</li> <li>Stick Frame</li> <li>Construction</li> <li>Matt Slab</li> <li>Foundation avoids disturbing contaminated soil</li> </ul>	· Large impact to SMA including but not limited to site grading/filling.	\$256K-\$431K	\$\$
	Option 5	MF:152 Town homes:17 6 Plex:12 4 Plex:12 3 Plex:6 Total:199	215,600	\$57M- \$116M	<ul> <li>Trenching for utilities</li> <li>Foundations of Multifamily</li> <li>Apartment buildings will require relocation of 3500CF of contaminated soils.</li> </ul>	Medium	<ul> <li>No modification to existing roads</li> <li>Minimal effects to SMA</li> </ul>	<ul> <li>4-story building introduces steel frame construction and pile foundations adding cost/sf for more expensive building type.</li> <li>Foundation system requires removal of contaminated soil</li> <li>More surface parking lots req'd</li> </ul>	\$287K-\$585K	\$\$\$
	Option 3	MF: 0 Town homes: 57 6 Plex: 66 4 Plex: 44 3 Plex: 27 Total: 194	219,500 SF	\$58M-\$98M	Limited to trenching for utilities		<ul> <li>Stick Frame</li> <li>Construction</li> <li>Matt Slab</li> <li>Foundation avoids disturbing</li> <li>contaminated soil</li> </ul>	<ul> <li>Large impact to SMA including but not limited to site grading/filling.</li> <li>Requires modifications to Ululani, demapping and adding new County roads.</li> </ul>	\$300K-\$504K	\$\$



