



# **LILIHA CIVIC CENTER & IWILEI INFRASTRUCTURE IMPROVEMENT MASTER PLAN PROJECT**

April 21, 2023



An aerial photograph of a city, likely San Francisco, showing a dense urban grid, a winding river (the San Francisco River), and hills in the background. The image is in grayscale and serves as a background for the title.

# **PROJECT OVERVIEW**

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# IWILEI INFRASTRUCTURE IMPROVEMENT MASTER PLAN AREA



Liliha CC MP SITE



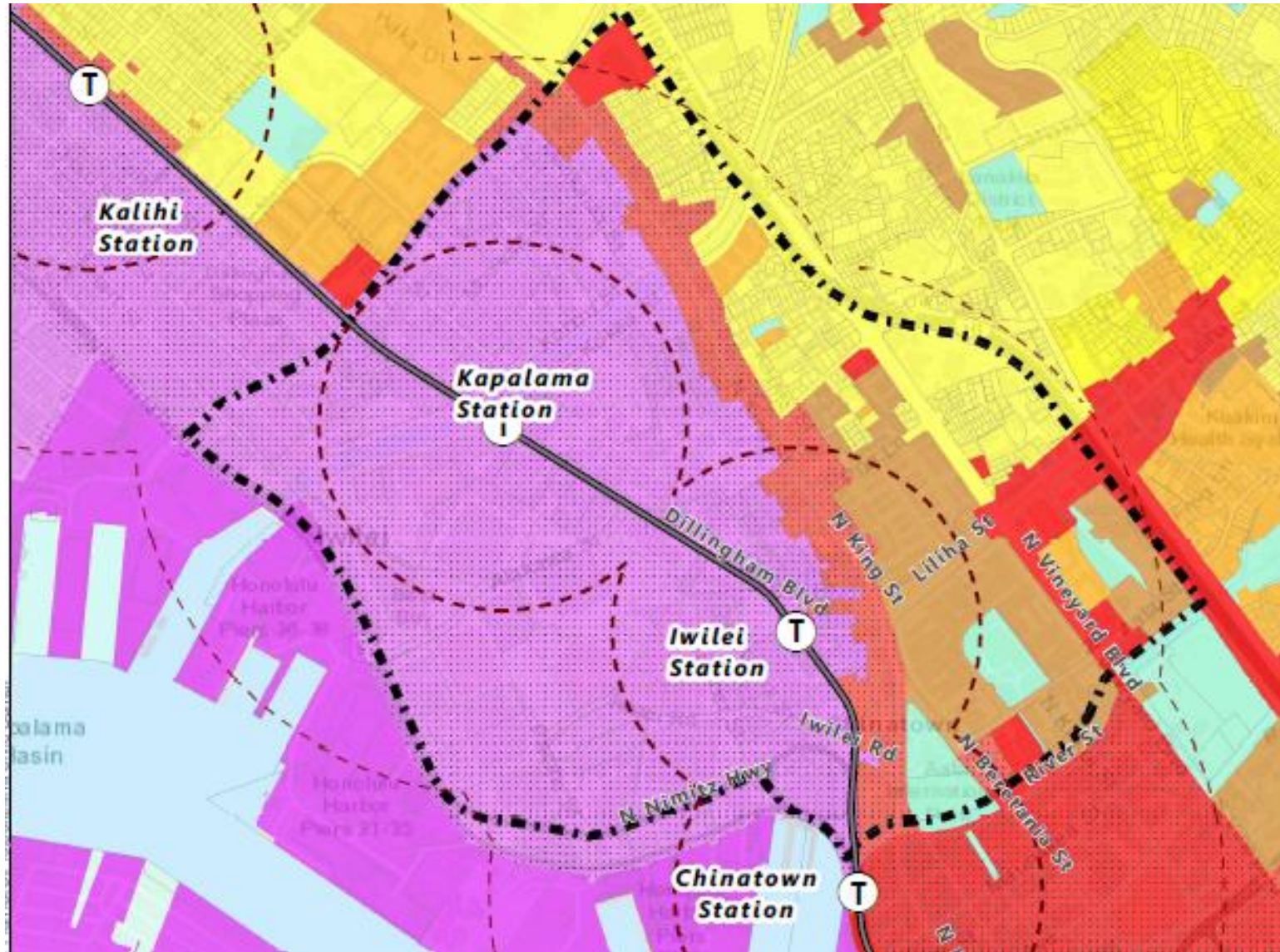
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Updated 12/2020





# EXISTING ZONING



## LEGEND



Iwilei Master Plan Area



Future Rail Stations



Future Rail Line



0.25-Mile TOD Walk Radius



0.5-Mile TOD Walk Radius

## Zoning



P-1



P-2



F-1



R-5



R-3.5



A-1



A-2

B-1

B-2

BMX-3

BMX-4

I-2

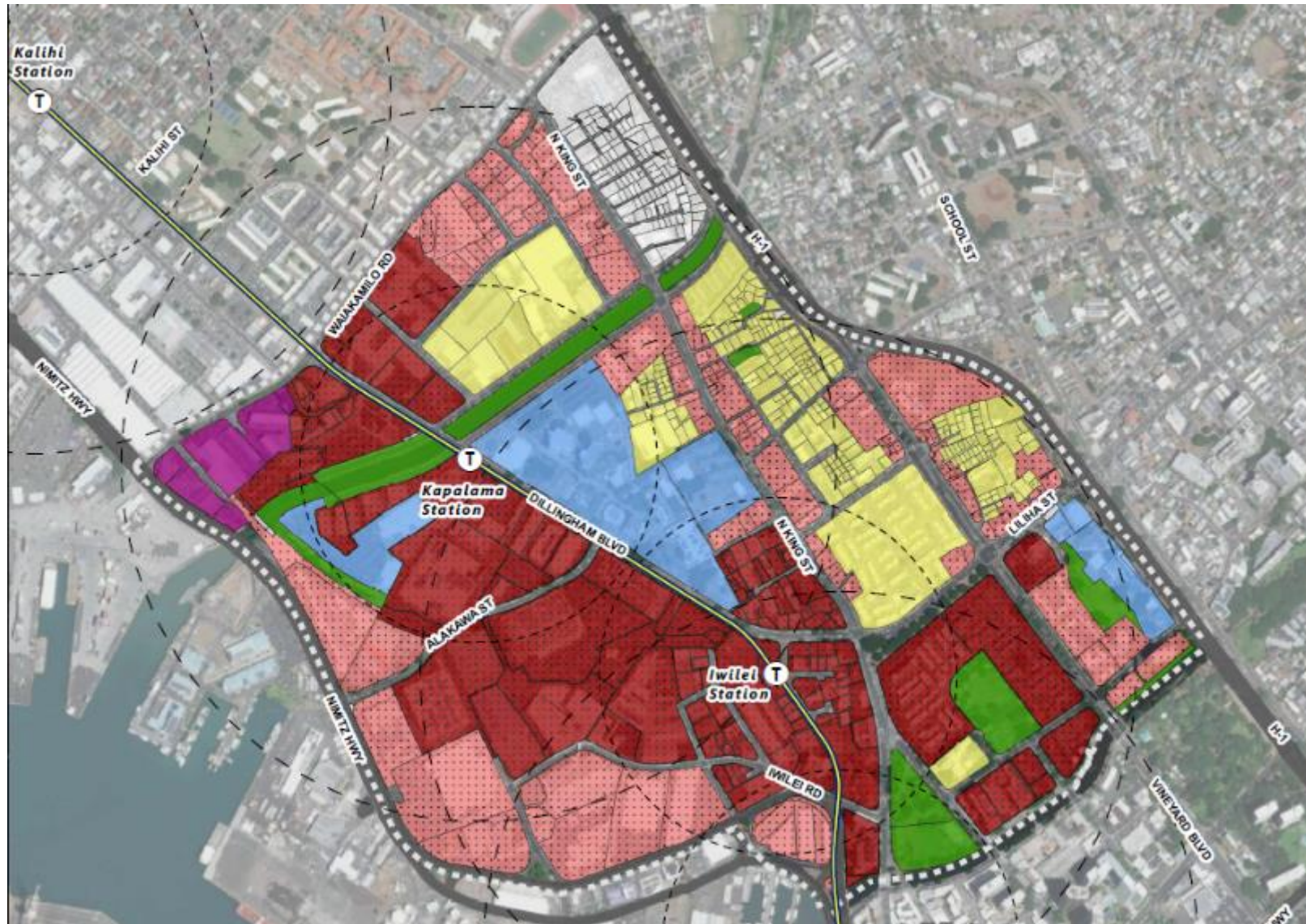
I-3

IMX-1





# PROPOSED TOD LAND USES



## Legend

- Iwilei Master Plan Area
- HART Transit Line
- HART Transit Station
- 0.25-Mile and 0.5-Mile TOD Walk Radius

## Proposed TOD Land Uses

- Residential
- Urban Mixed Use-Medium
- Urban Mixed Use-High
- School/Public Space
- Industrial Mixed Use
- Open Space
- Not Identified
- ROW/Remnant



# PROJECT COMPONENTS

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Three (3) main components:

1. Liliha Civic Center Development Program and Master Plan
2. **Iwilei Infrastructure Improvement Master Plan**
3. Environmental Impact Statement (EIS) / Chapter 343 Hawai'i Revised Statutes (HRS-343) Compliance Documentation





# IWILEI INFRASTRUCTURE IMPROVEMENT MASTER PLAN – PURPOSE

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- **Identify infrastructure improvements** that will **advance landowner goals** in the Master Plan Area;
- **Support broader TOD goals** for the State and City; and
- Facilitate the vision for **redeveloping the Iwilei neighborhood** into a **more walkable community with affordable housing and access to services and employment centers.**



# LANDOWNER CONSULTATION

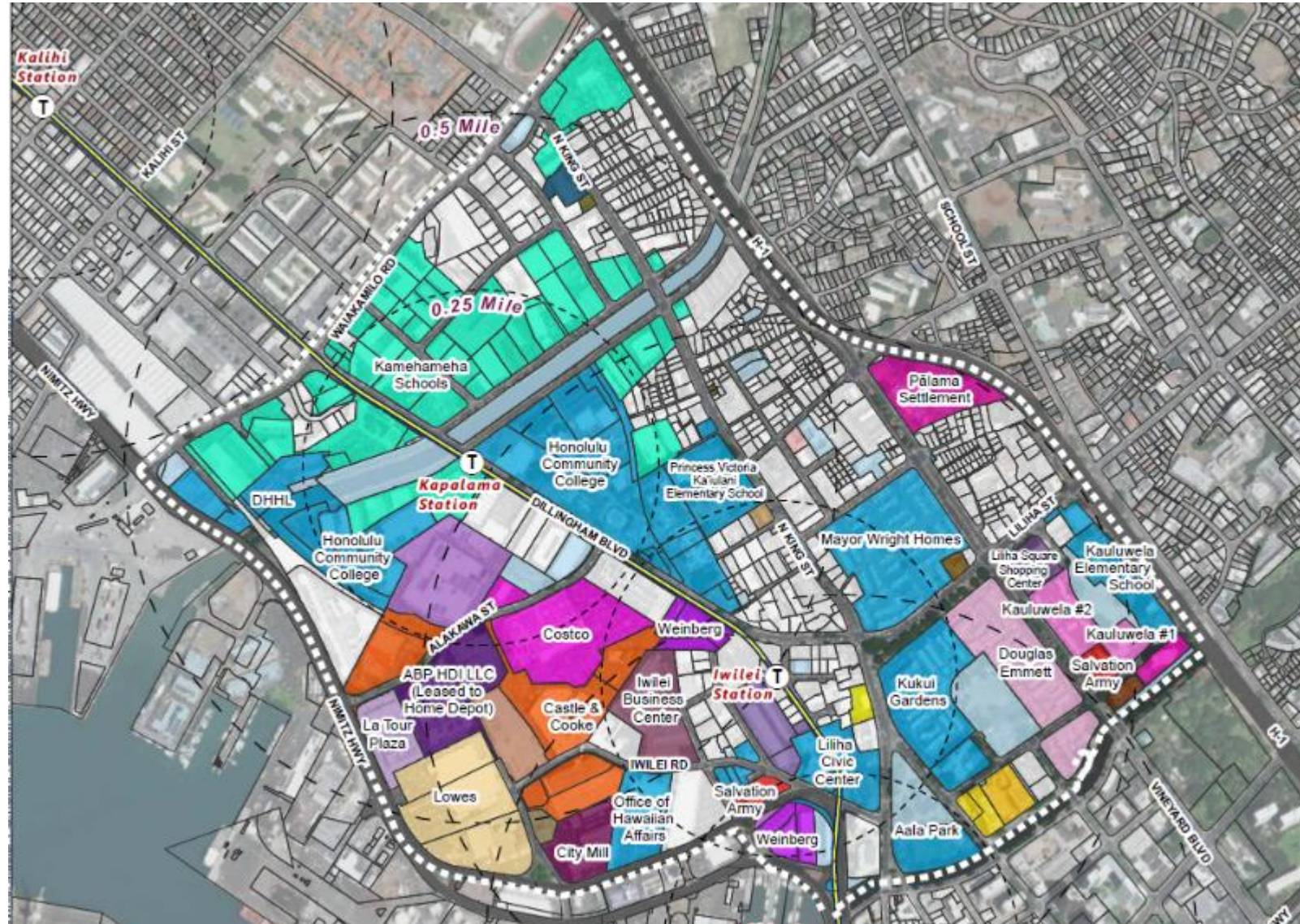
**Reached out to major landowner in the area for updates on potential development over the next 30+ years.**

- City and County of Honolulu (various owned properties)
- Department of Accounting and General Services (DAGS)
- Department of Hawaiian Homelands (DHHL)
- Hawai'i Housing Finance and Development Corporation (HHFDC)
- Hawai'i Public Housing Authority (HPHA)
- Honolulu Community College (HCC)
- Office of Hawaiian Affairs (OHA)
- Castle and Cooke
- Costco
- Kamehameha Schools
- Liliha Square Shopping Center
- Pālama Settlement
- The Salvation Army
- Weinberg/HRT
- Douglas Emmett – Waena Apartments
- City Mill
- EAH Housing





# MAJOR LANDOWNERS



## Legend

- Iwilei Master Plan Area
- TMK Boundaries
- Planned Rail Stations
- Planned Rail Line
- TOD Walk Radius (0.25 & 0.5-mile from Stations)
- Major Road

## Major Landowners

- |                                    |                                |
|------------------------------------|--------------------------------|
| Other Landowners                   | Kauluwela #1                   |
| ABP HDI LLC (Leased to Home Depot) | Kauluwela #2                   |
| Aloha United Way                   | Keola Ho'onanea                |
| American Savings Bank              | Kobayashi Hotel                |
| Cannery Row Condo Master           | La Tour Plaza                  |
| Castle & Cooke                     | Liliha Square Shopping Center  |
| City Mill                          | Lowes                          |
| Costco                             | Methodist Episcopal Church     |
| DHX                                | Olu Hale Kanoa Condo Master    |
| Douglas Emmett                     | O'ahu Stations LLC             |
| First Hawaiian Bank                | Pacific Auto Service           |
| Govt. County Honolulu              | Pālama Settlement              |
| Govt. Federal                      | Private - Hung/Hong            |
| Govt. State                        | Salvation Army                 |
| HART                               | Tensho Kotai Jingu Kyo Hawai'i |
| Hawai'i USA Federal Credit Union   | Various                        |
| Iwilei Business Center             | Weinberg                       |
| Iwilei Center LLC                  | Weinberg (via Govt. State)     |
| Kamehameha Schools                 |                                |





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# **ANTICIPATED DEVELOPMENT**

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# SUMMARY OF ANTICIPATED DEVELOPMENT & PHASING

Land Use Type	Existing	New					Total
		Phase 1 (Up to 2030)	Phase 2 (2031-2040)	Phase 3 (2041-2050)	Phase 4 (2051+/TBD)	Combined	Cumulative (new + existing)
Residential (Units)	4,200	±8,300	±9,700	±2,500	±6,900	±27,400	31,600
Commercial/ Institutional (SF)	8,025,600	(±34,600)	(±493,300)	(±150,500)	(±1,214,500)	(±1,892,900)	±6,958,300
Industrial (SF)	825,600						

Anticipated number of units based on an average assumption of 1,000-1,500 SF per unit. Assumptions do not identify unit mix (bedrooms) or occupancy (number of actual residents).



# CONSULTATION WITH DEPARTMENTS AND AGENCIES

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- Consulted the following departments and agencies based on the development model/needs:
  - Department of Environmental Services (ENV)
  - Board of Water Supply (BWS),
  - Department of Transportation Services (DTS)
  - State of Hawai'i Department of Transportation (DOT)
  - Hawaiian Electric (HECO)
  - Hawaiian Telcom / Charter Communications / Spectrum





An aerial photograph of a city, showing a dense urban area with a river winding through it. The image is in grayscale and serves as a background for the text.

# **INFRASTRUCTURE IMPROVEMENTS**

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# SEWER

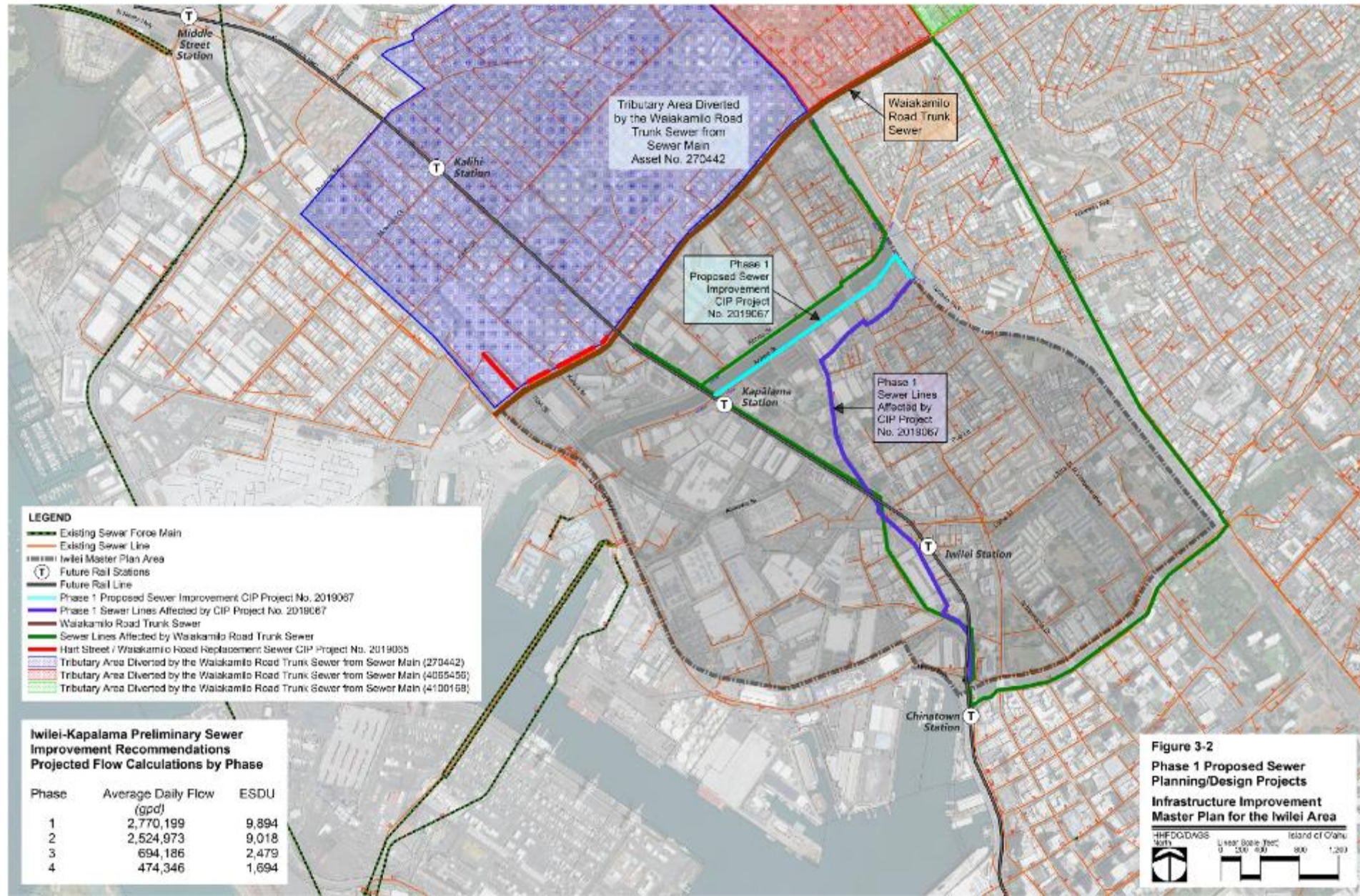
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- ENV is in the process of improving the area sewer capacity.
- Most of the projects currently being implemented by ENV focus on relieving the known sewer issues in the system.
- ENV has been working with developers in the area on a “case by case” basis.
- Since the completion of the Waiakamilo Road Trunk Sewer, the sewer system in the Iwilei has improved capacity to serve new TOD developments until the ‘Awa Street WWPS is relieved and upgraded.
- Based on the anticipated TOD development, new and upsized sewer lines will be needed to implement Mayor Wright Homes, Liliha CC, and Kalanihuia Homes. ENV is studying the area under the Iwilei, King Street, Kōkea Street Area Sewer Improvements Project.



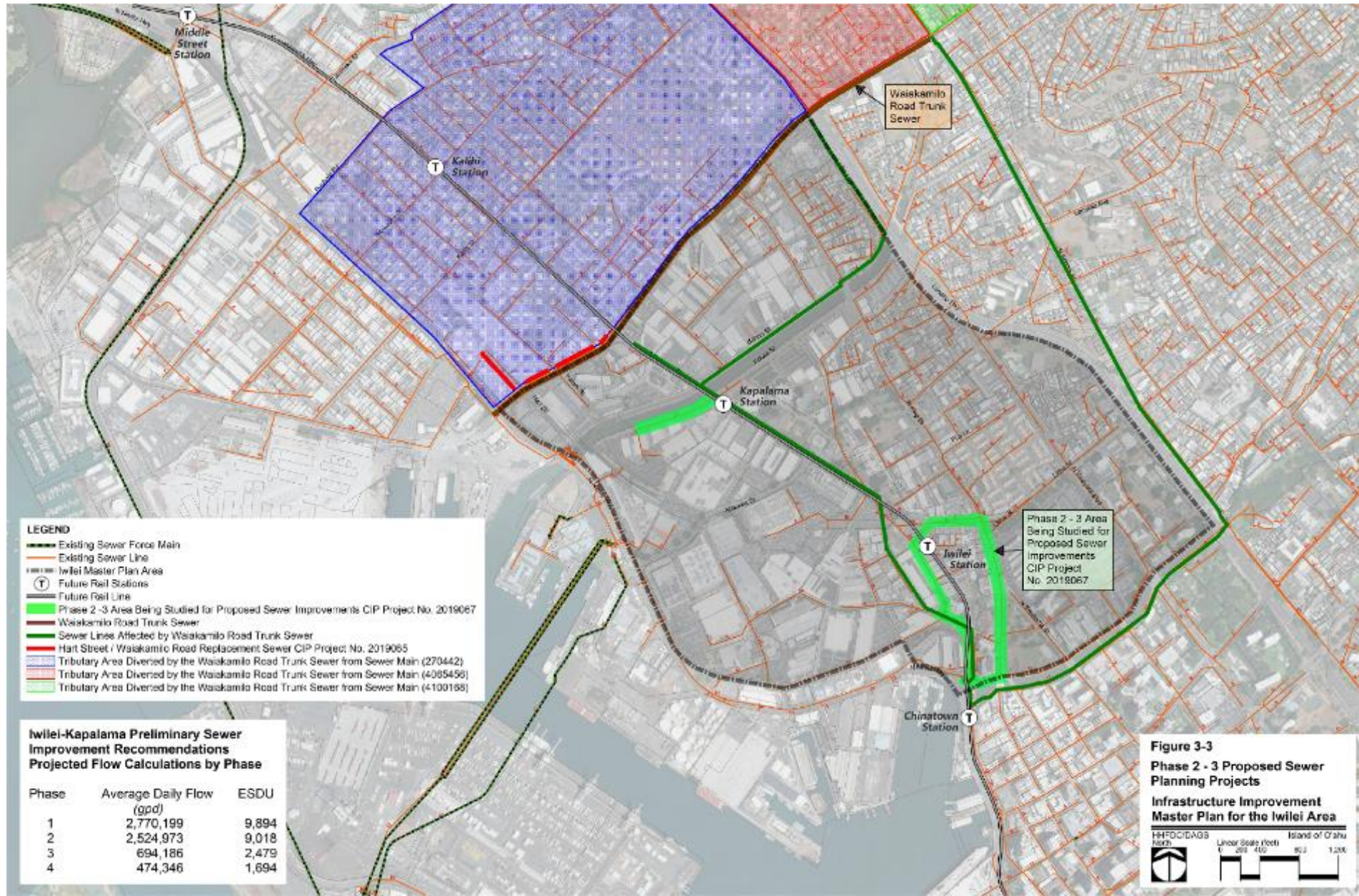


# Proposed Sewer Projects: Phase 1





# Proposed Sewer Projects: Phases 2 & 3





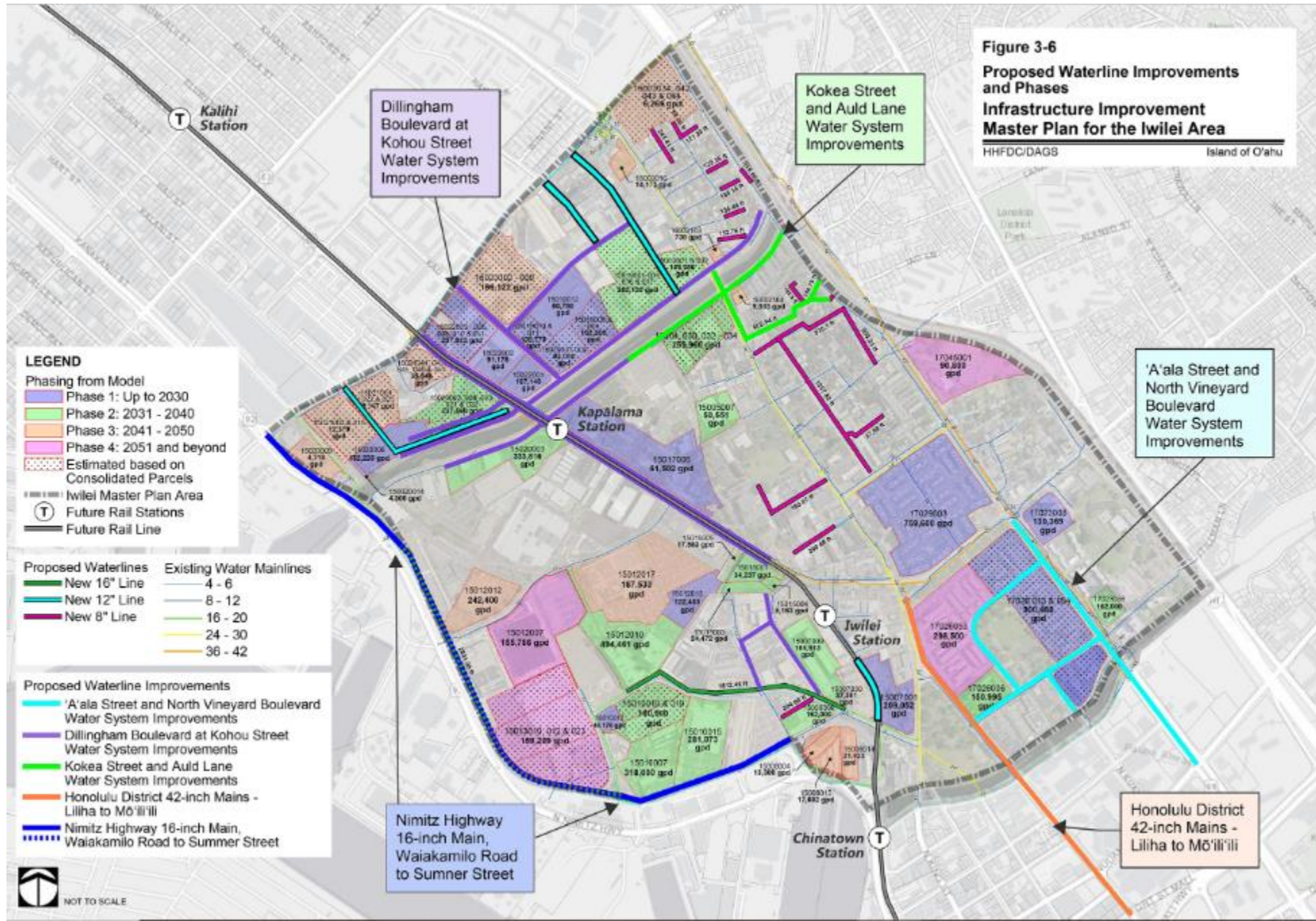
# WATER

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- The backbone water infrastructure is relatively strong
- Aging infrastructure is an ongoing challenge
- In the short-term, water availability is a concern for new development until the Red Hill water contamination issue is resolved
- Water system improvements are presently needed based on the existing water line sizes and the required fire flow for anticipated land uses
- The BWS has multiple projects in its CIP projects that will address current deficiencies and increase local and regional capacity



# Proposed Water Line Improvements and Phases





# DRAINAGE

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- The drainage system does not meet the City Drainage Standards and will need to be upgraded
- The City has requested additional flood studies from the Federal Emergency Management Agency (FEMA)
- The existing backbone drainage systems consist of drain lines owned by the City, State, and private entities and have various deficiencies and constraints due to low-lying terrain and high-water table
- Each individual development must submit a drainage report to demonstrate that the development causes no impact on adjacent properties due to runoff



# Proposed Drainage Improvements

### LEGEND

Iwilei Master Plan Area

**T** Future Rail Stations

== Future Rail Line

— Surcharged Line

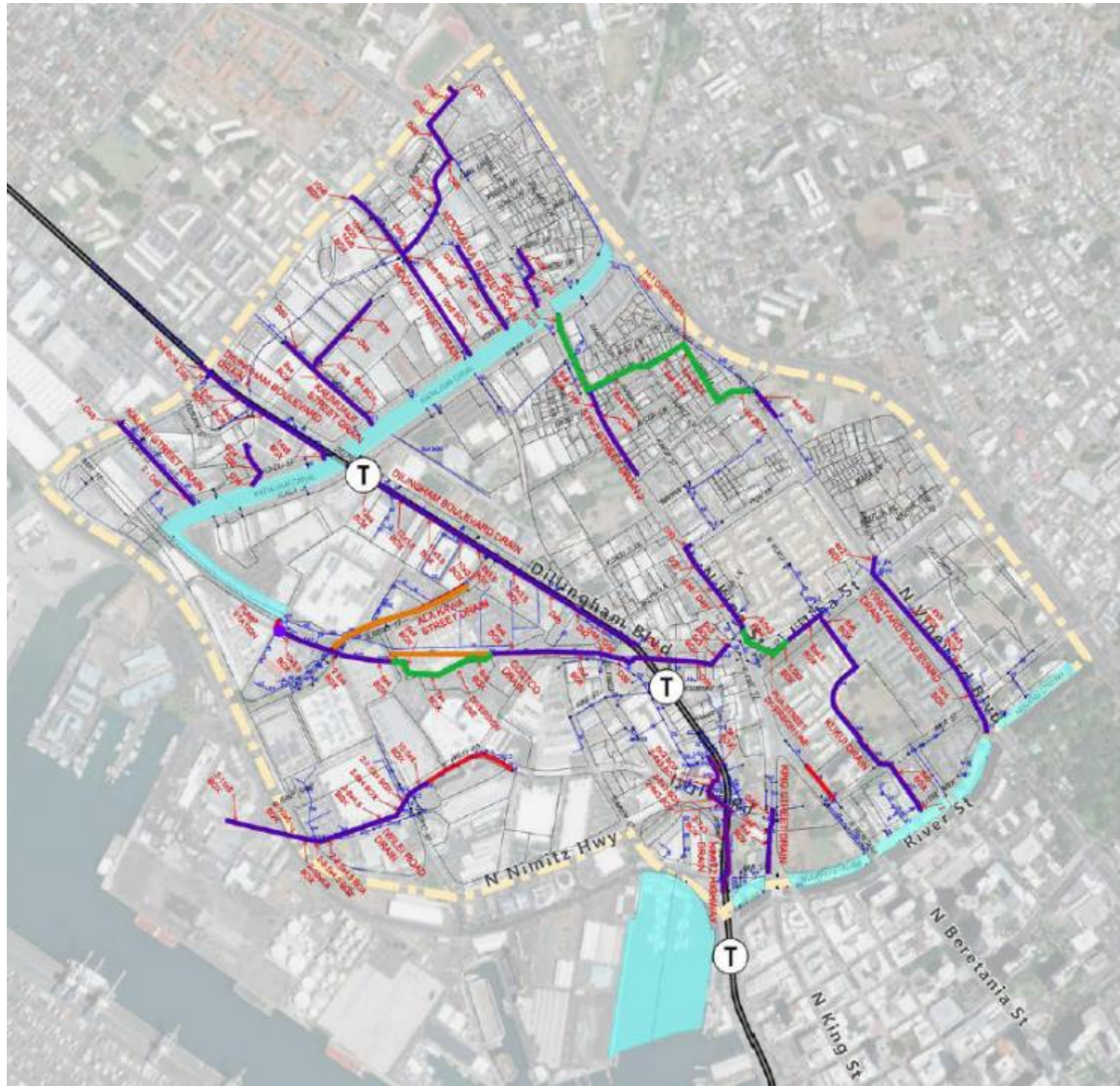
 New Drain Line

 Diversion Drain Line

— Relieved by the Diversion line

D36 Proposed Drain Line Diameter

**4x5 BOX** Proposed Box Drain Size





# TRANSPORTATION – ROADWAYS AND MULTIMODAL

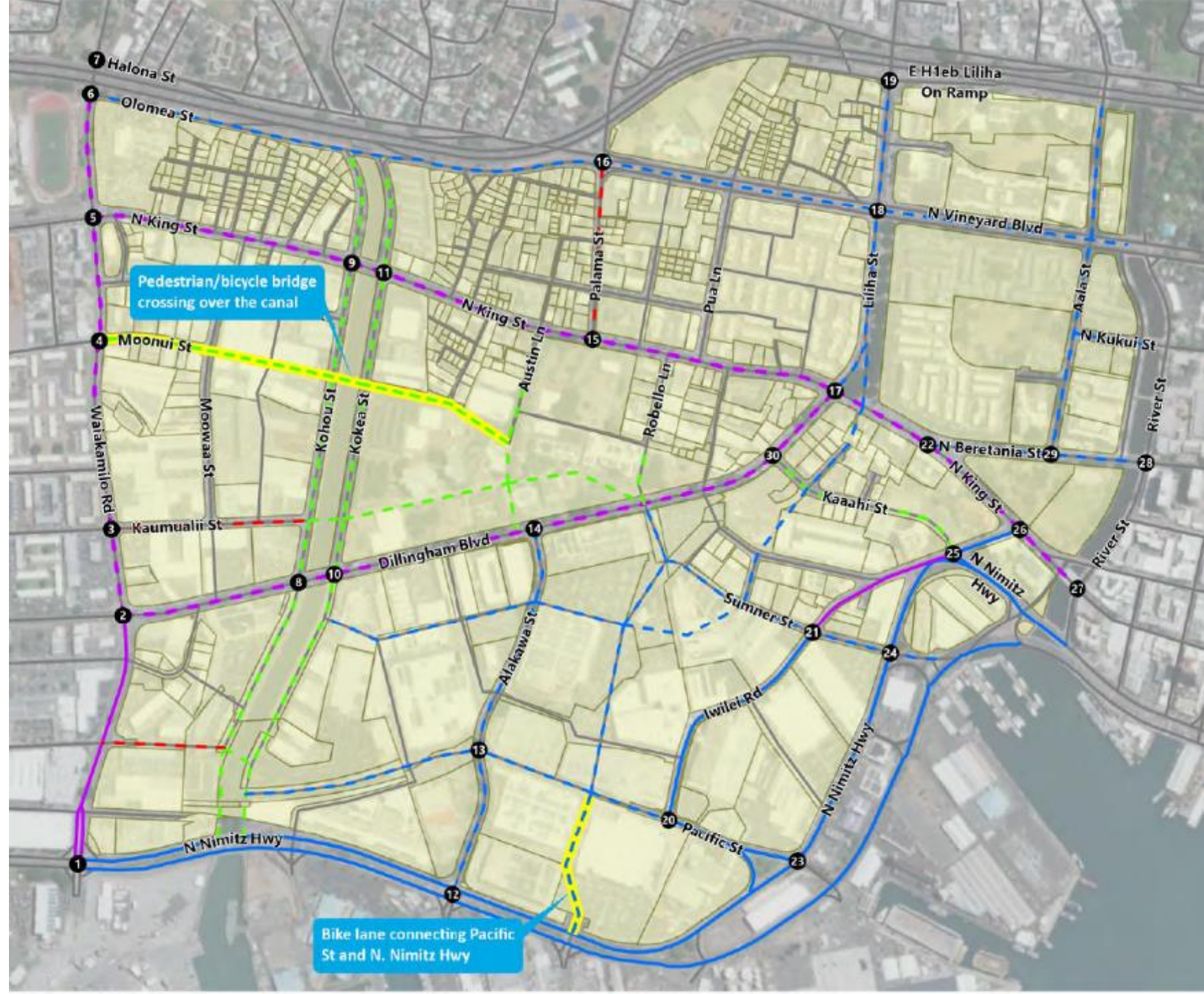
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- The Iwilei Master Plan Area lacks a safe connected network, particularly for bicycling and walking
- Most roadways are built to capacity and major improvements such as widening roadway segments are not considered feasible
- In general, peak hour traffic operations will degrade due to the existing urban nature of the area, and the study area will essentially become an extension of the Downtown Honolulu core
- With the major expansion of housing and the anticipated new rail stations one of the primary transportation objectives of this infrastructure master plan was to recommend improvements that improve pedestrian and bicyclist safety, improve mobility, and encourage the use of non-automobile modes



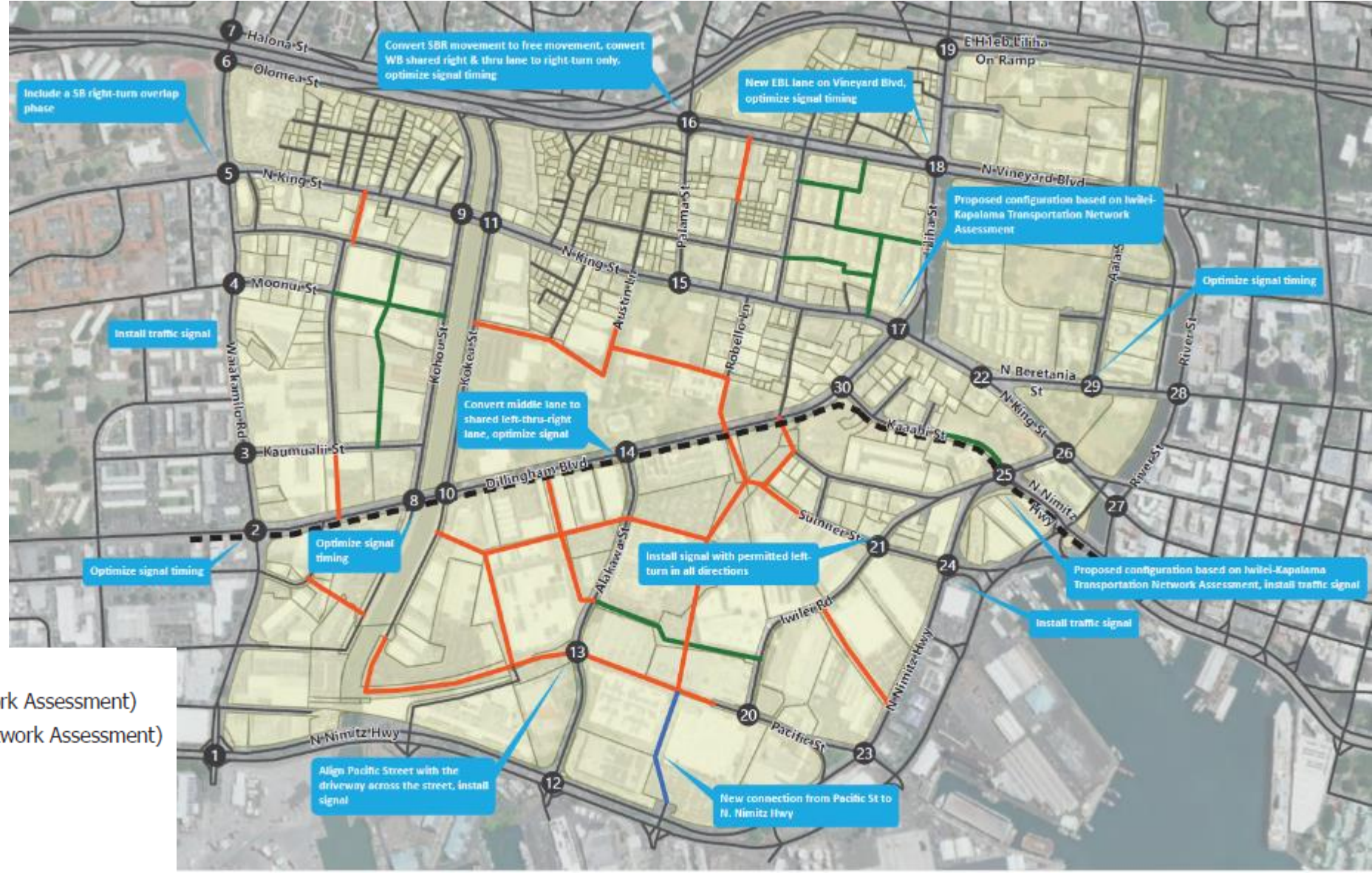
# Recommended Pedestrian and Bike Network Improvements

- Existing Bike Lane
- Existing Buffered Bike Lane
- Future Shared Use Path
- Future Bike Lane
- Future Shared Roadway
- Future Protected Bike Lane
- Recommended Bike Lane
- Recommended Shared Use Path
- Study Intersections
- Iwilei\_Infrastructure\_Master\_Plan





# Recommended Roadway and Circulation Network Improvements



# ELECTRICAL

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- The existing electrical system has sufficient capacity for present day needs and can support limited growth
- HECO plans to serve large redevelopment projects.
- Electrical improvements identified by this analysis include:
  - Increasing the capacity of the existing 12-kV distribution lines (reconductor or “up conductor”), where applicable;
  - Extending 25-kV distribution infrastructure and circuits throughout the Iwilei Master Plan Area;
  - Providing an additional 46-kV transmission line; and
  - Providing additional transmission station and distribution substation capacity.
- Discussions should continue between major landowners to extend 25-kV circuits from their Iwilei transmission substation to support the larger redevelopment projects.

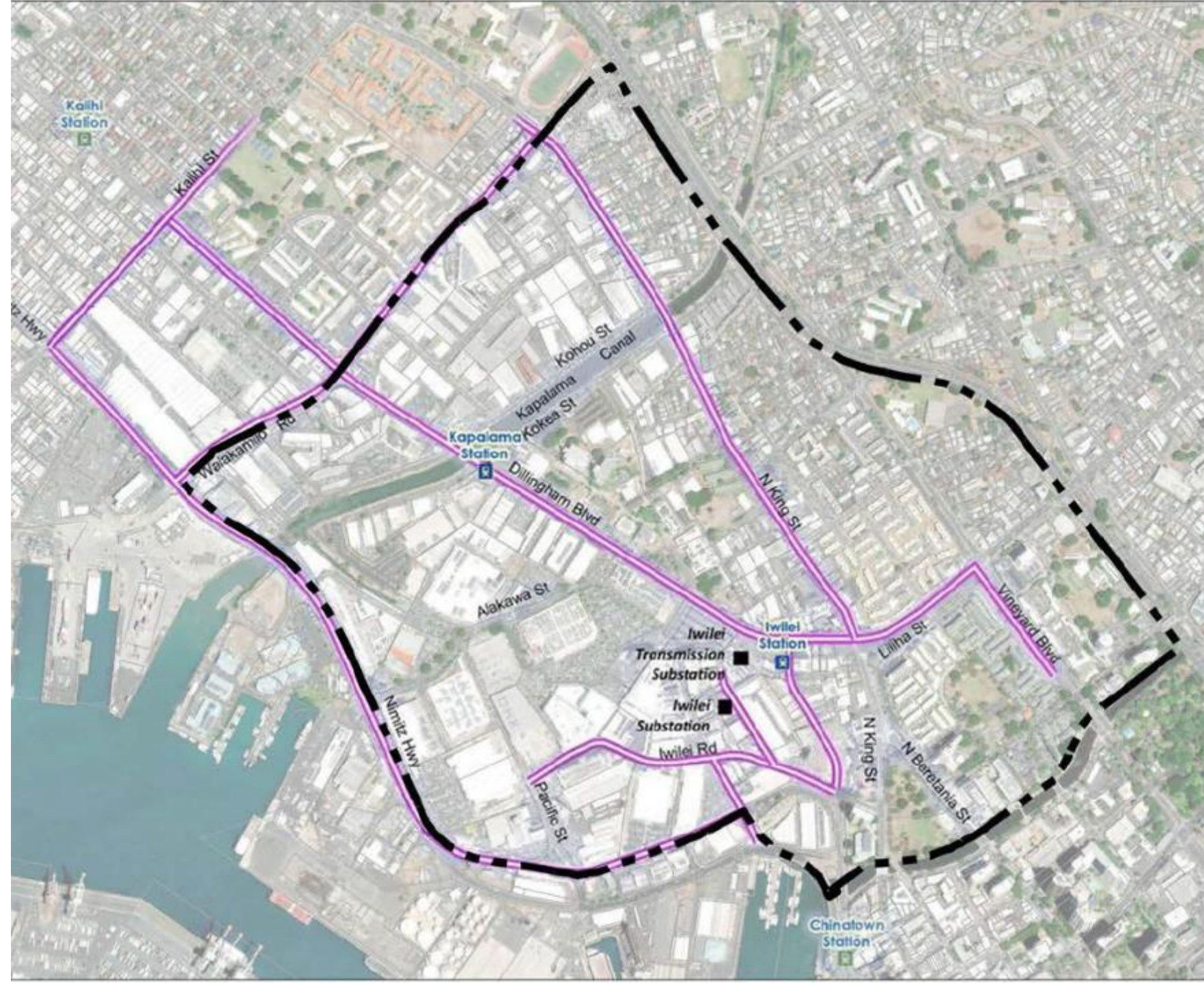




# Proposed Underground Electrical Improvements

## LEGEND

- Iwilei Master Plan Area
-  Rail Station
-  Proposed Underground Electrical/Communications Improvements
- HECO Substation





# INFRASTRUCTURE PROJECTS AND COSTS

System	Subcategory	Costs
Sewer	WWPS	\$14,704,000
	Force main	\$5,754,000
	Sewer Lines	\$211,202,170
Water	Regional Capacity	TBD pending Red Hill and Regional considerations
	Water Lines	\$382,451,000
Drainage	Drains/Drain Lines	\$147,449,044
	Canal/Stream Improvements	\$75,300,000
Storm Water Quality	The location and method of the post-construction treatment control BMPs will be determined during the design phase of each individual redevelopment project in the Iwilei Master Plan Area	
Transportation	Pedestrian Facilities	\$14,061,345
	Bike Facilities	\$20,904,566
	New Roadways	\$135,831,707
Electrical	25-kV	\$65,670,000 - \$72,600,000
	46-kV	\$158,600,000 - \$165,530,000
	Transmission Stations / Substations	TBD pending location and agreements
Total		<b>\$1,231,927,832 - \$1,245,787,832</b>



# **LILIHA CIVIC CENTER**

KA'AAHI ST

N KING ST

IWILEI RD



# LILIIHA CIVIC CENTER MASTER PLAN SITE

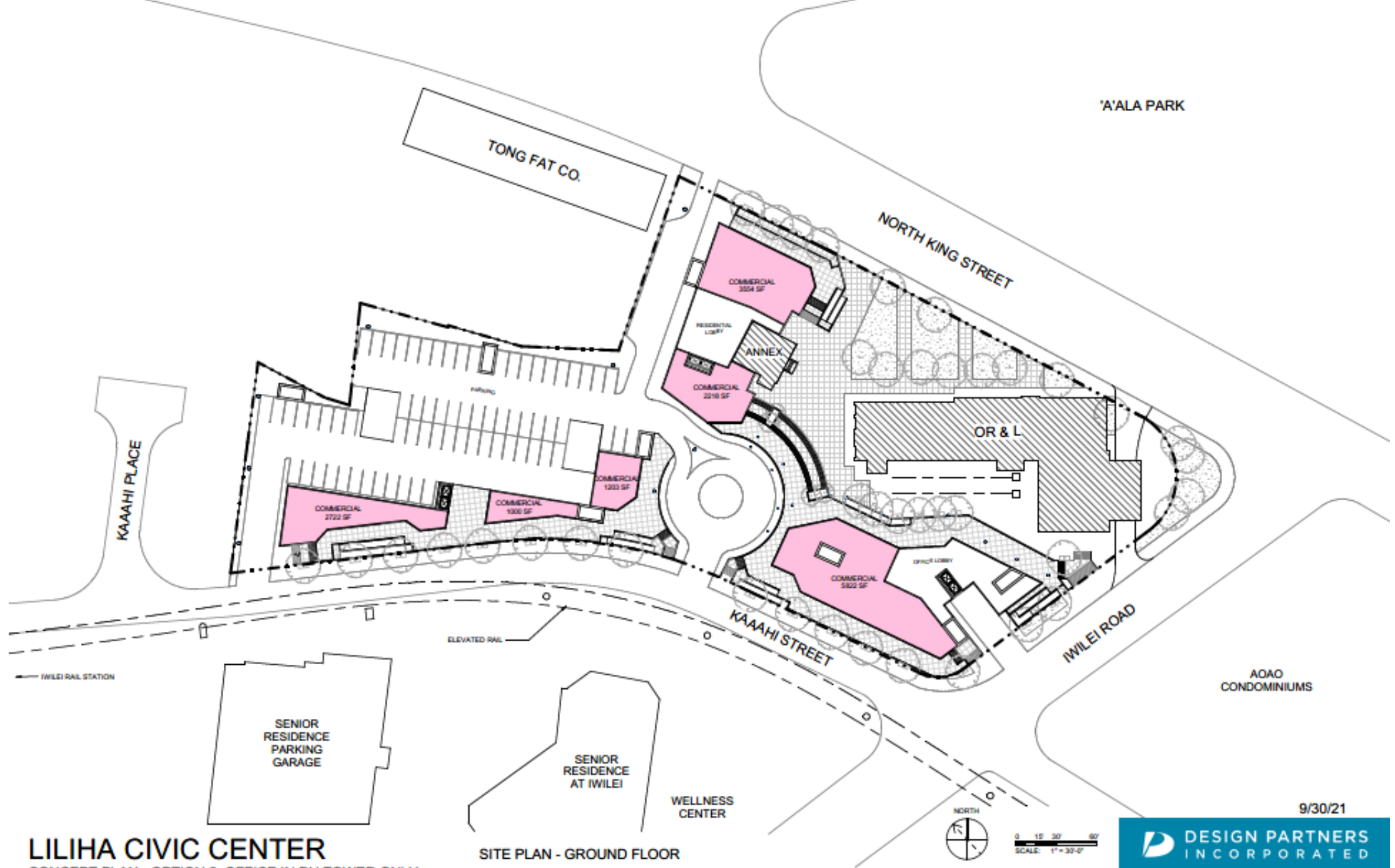


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Source: Google Earth, Accessed 2020





## LILIHA CIVIC CENTER

CONCEPT PLAN - OPTION 2: OFFICE IN DH TOWER ONLY

SITE PLAN - GROUND FLOOR

## SUMMARY

### RESIDENTIAL

EWA TOWER: 26 RESIDENTIAL FLOORS  
GROUND FLOOR: COMMERCIAL

LEVEL 2 (BRIDGE) = 10,527 SF  
LEVEL 3 TO 26 = 311,590 SF (12,480 SF x 25 FLRS)  
SUB TOTAL = 322,117 SF

RESIDENTIAL OVER PARKING GARAGE: 5 FLOORS  
ABOVE PARKING = 67,510 SF (13,502 SF x 5 FLRS)

TOTAL = 389,627 SF

#### UNIT COUNT

EWA TOWER  
LEVEL 2 (BRIDGE) = 9 UNITS  
LEVEL 3 TO 14 = 144 UNITS (12 UNITS x 12 FLRS)  
LEVEL 15 TO 26 = 182 UNITS (14 UNITS x 13 FLRS)  
SUB TOTAL = 335 UNITS

OVER PARKING GARAGE  
ABOVE PARKING = 65 UNITS (13 UNITS x 5 FLRS)

TOTAL = 400 UNITS

### OFFICE

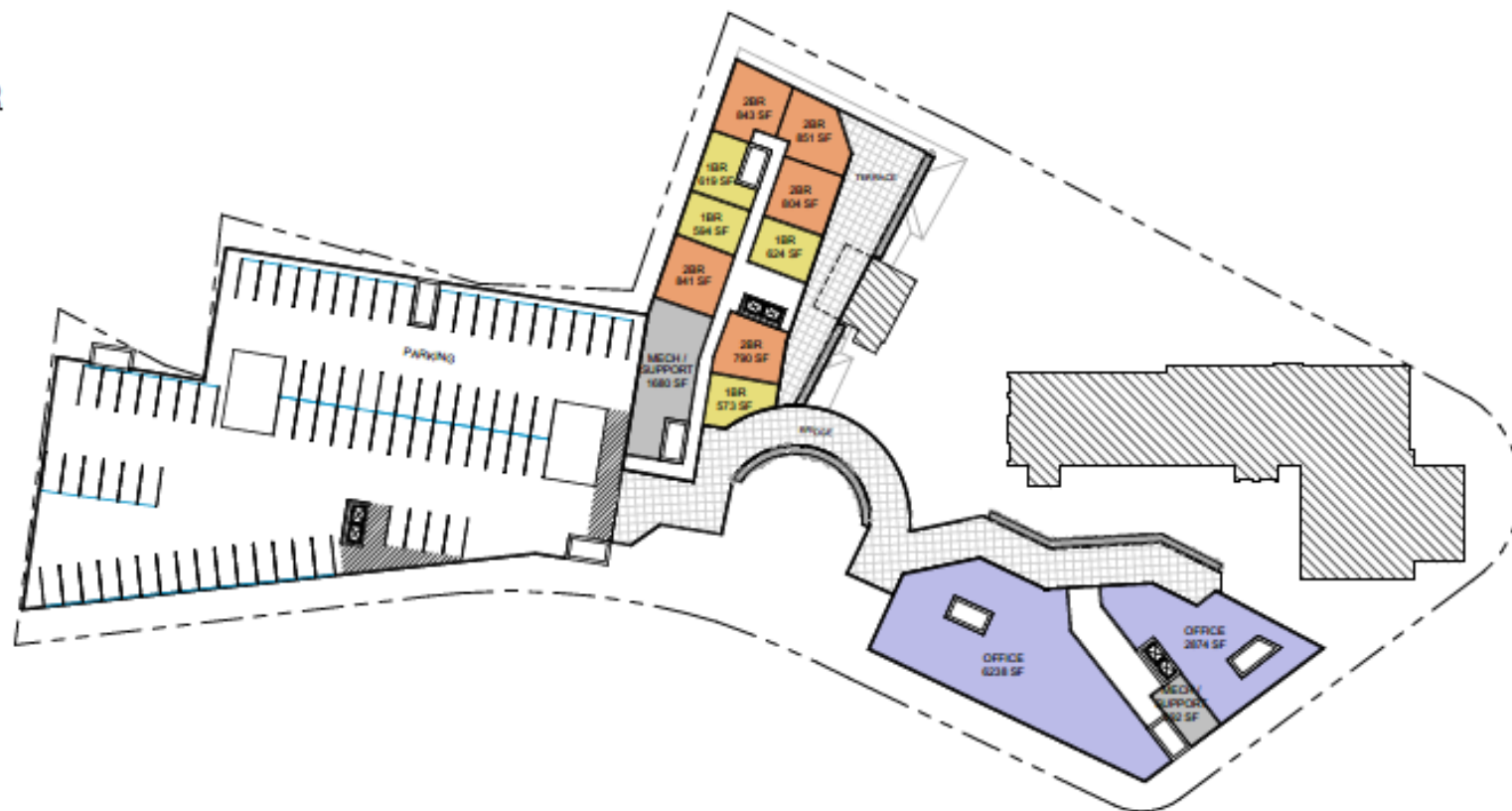
DH TOWER = 9,112 SF (11,151 GSF) / FLR  
TOTAL = 218,688 SF (9,112 x 25 FLRS)

### COMMERCIAL

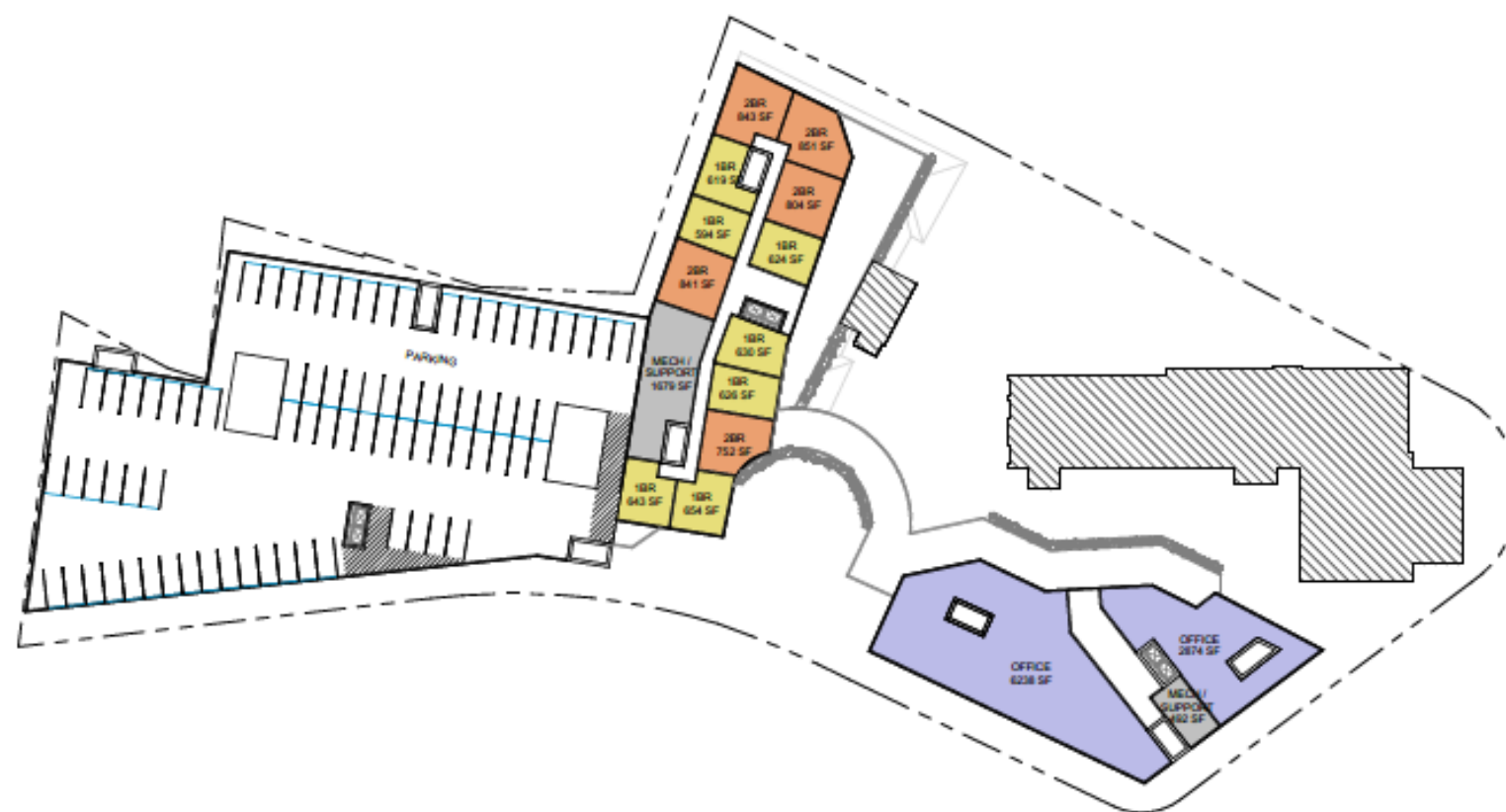
EWA TOWER = 5,772 SF  
DH TOWER = 5,822 SF  
PARKING LINER = 4,925 SF  
TOTAL = 16,519 SF

### PARKING

GROUND LEVEL = APPROX. 60 STALLS  
LEVEL 2 TO 12 = 360,000 SF (12 FLRS)  
TOTAL = 1,040 STALLS







# LILIHA CIVIC CENTER

CONCEPT PLAN - OPTION 2: OFFICE IN DH TOWER ONLY

PARKING GARAGE LEVELS



0 15' 30' 60'  
SCALE: 1" = 30'-0"

9/30/21

**DESIGN PARTNERS**  
INCORPORATED



# LILIHA CIVIC CENTER

CONCEPT PLAN - OPTION 2: OFFICE IN DH TOWER ONLY

AMENITY FLOOR / REC. DECK



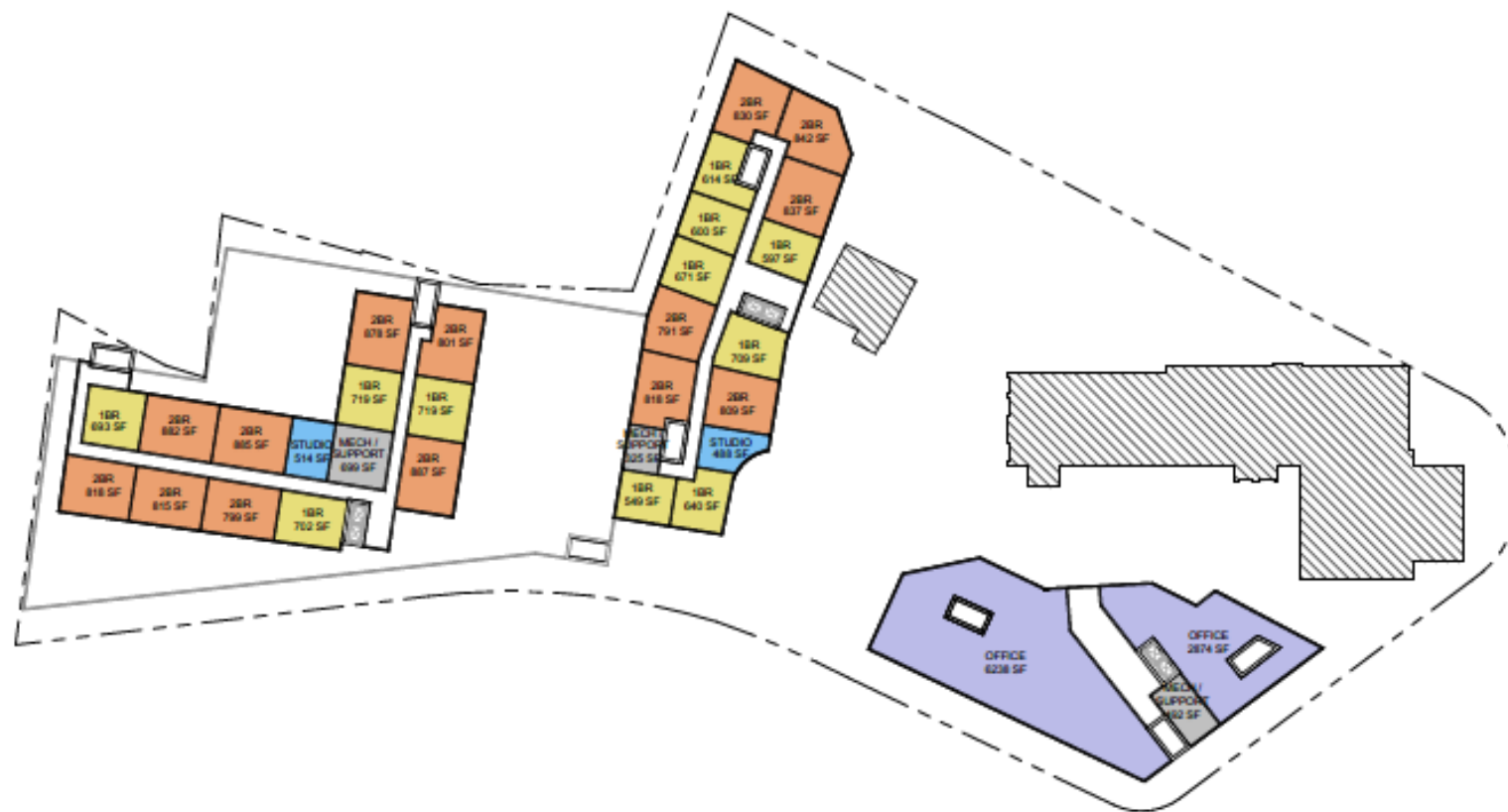
0 15' 30' 60'  
SCALE: 1" = 30'-0"

9/30/21



DESIGN PARTNERS  
INCORPORATED





# LILIHA CIVIC CENTER

CONCEPT PLAN - OPTION 2: OFFICE IN DH TOWER ONLY

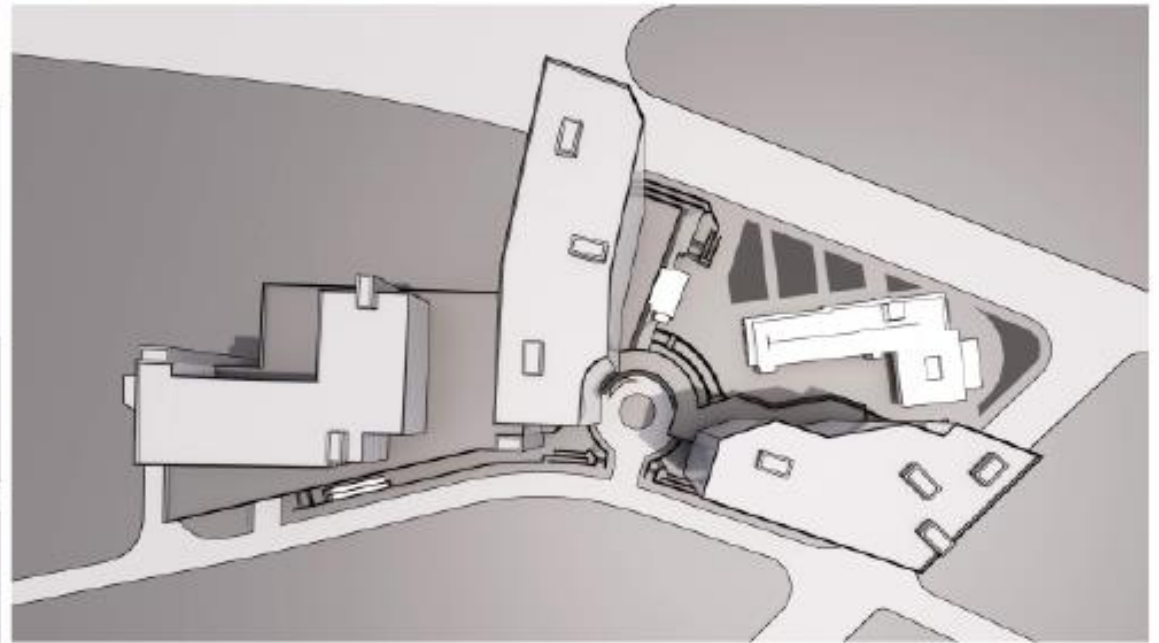
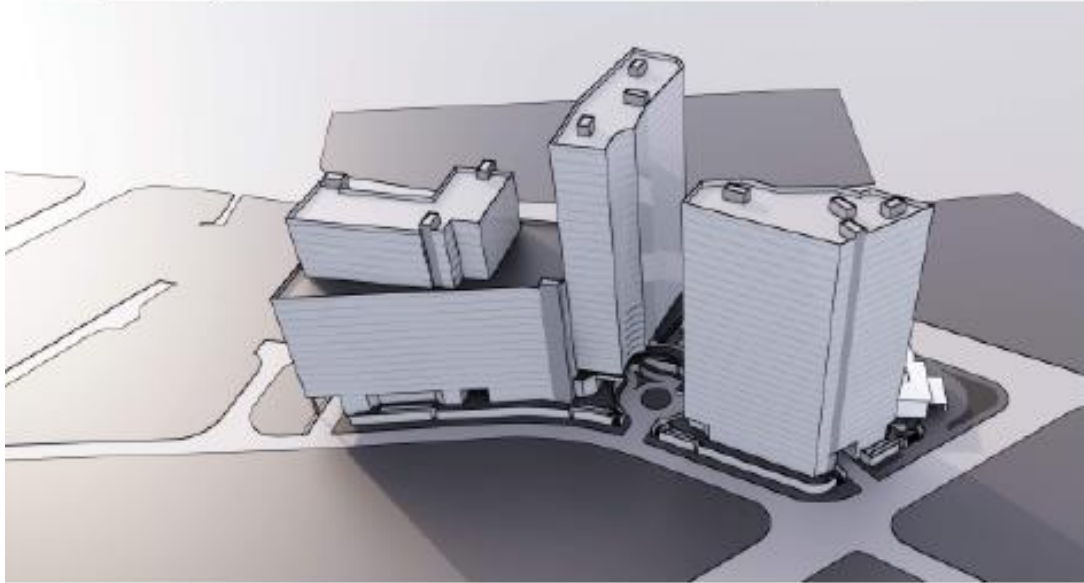
FLOORS (TYP.) ABOVE PARKING GARAGE



0 15' 30' 60'  
SCALE: 1" = 30'-0"

9/30/21

**DESIGN PARTNERS**  
INCORPORATED



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## LILIHA CIVIC CENTER

CONCEPT PLAN - OPTION 2: OFFICE IN DH TOWER ONLY





# MAHALO!

