

Kahului Public Library Study

This project was funded through an appropriation by the Hawaii State Legislature in Act 6, Session Laws of Hawaii 2020, for transit-oriented development planning.

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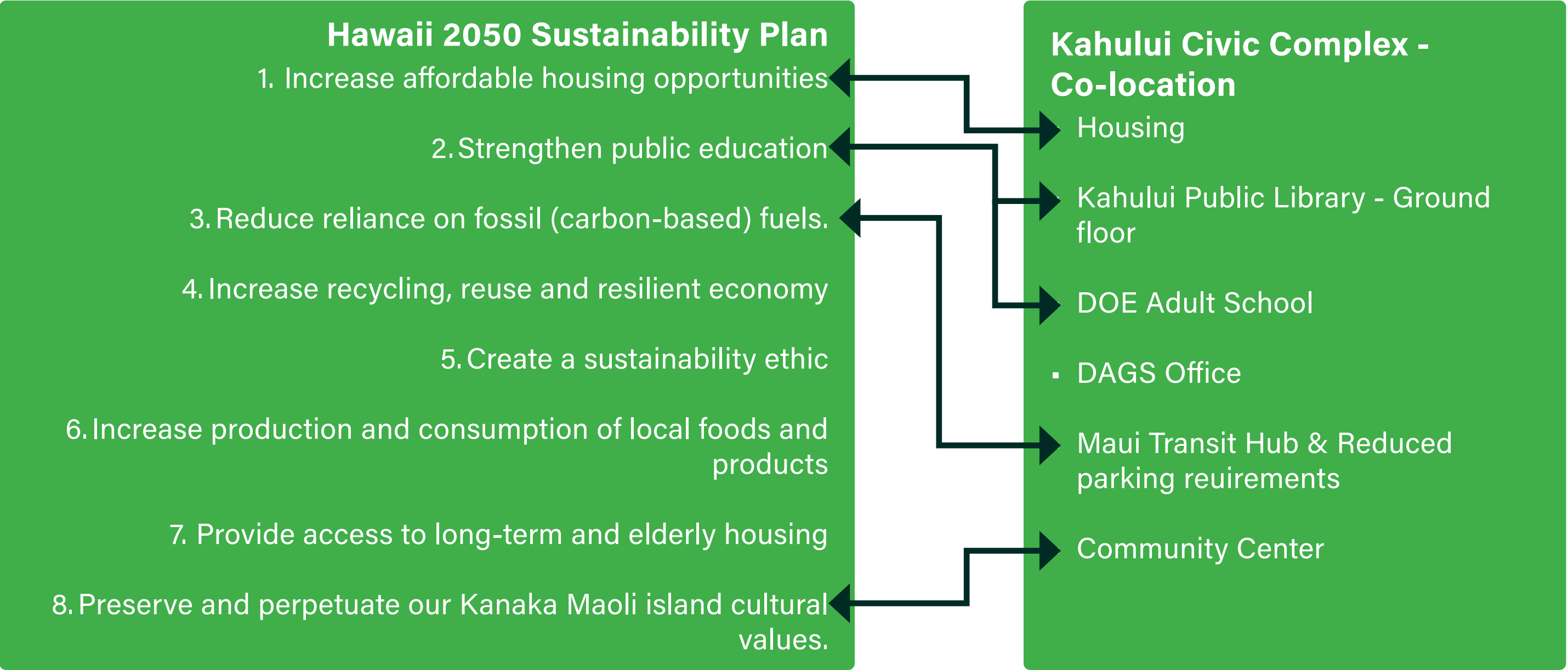


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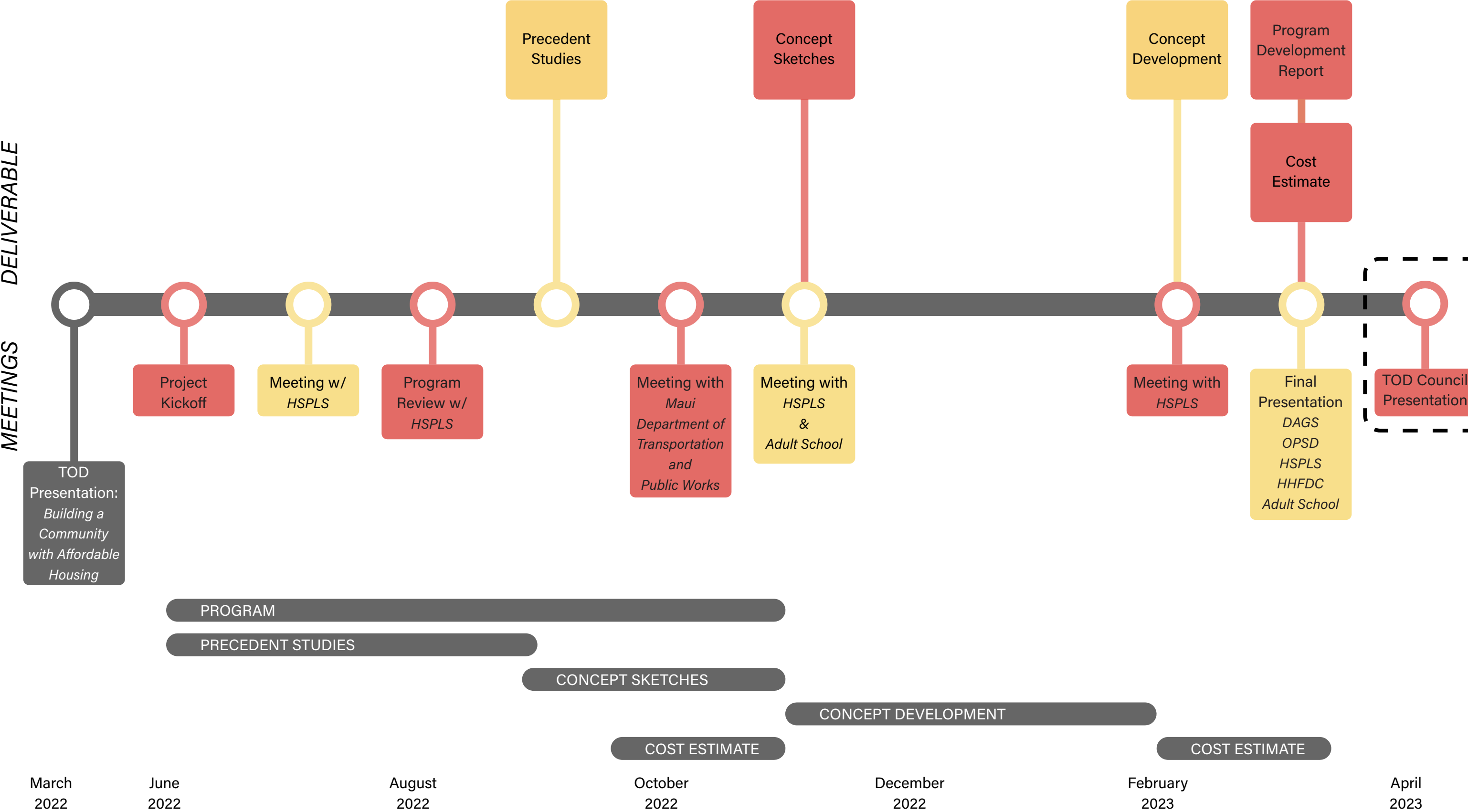
This project was undertaken with the guidance and insights of:
State of Hawaii Department of Accounting and General Services
State of Hawaii Office of Planning and Sustainable Development
Hawaii State Public Library Systems

Earth Day - Going Green

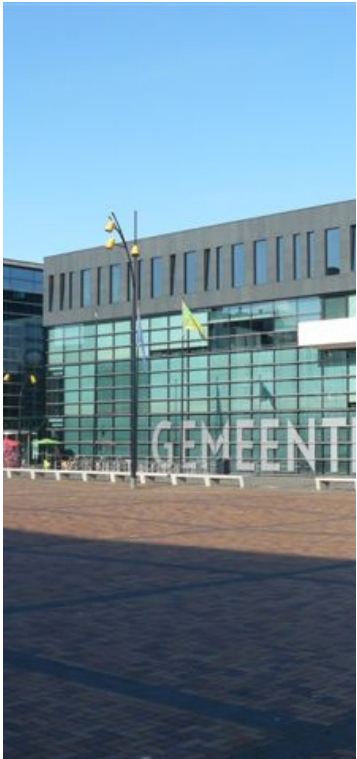
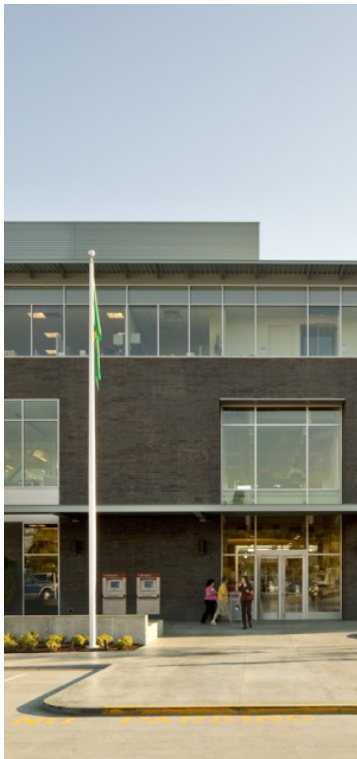
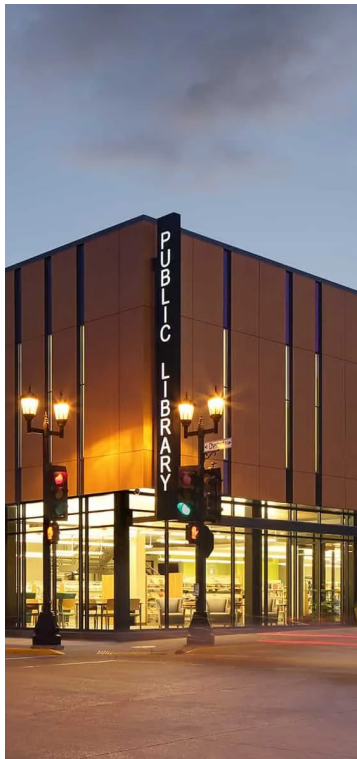
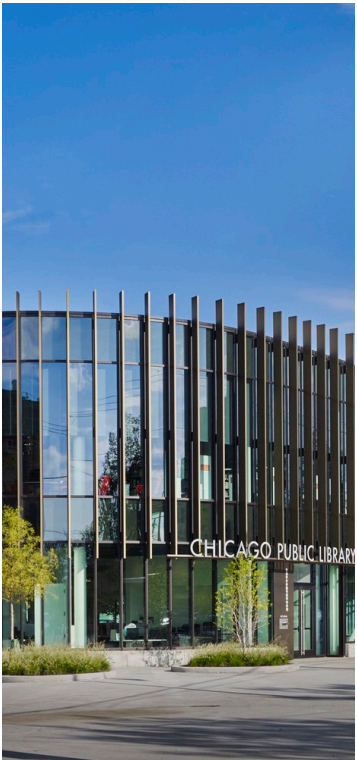
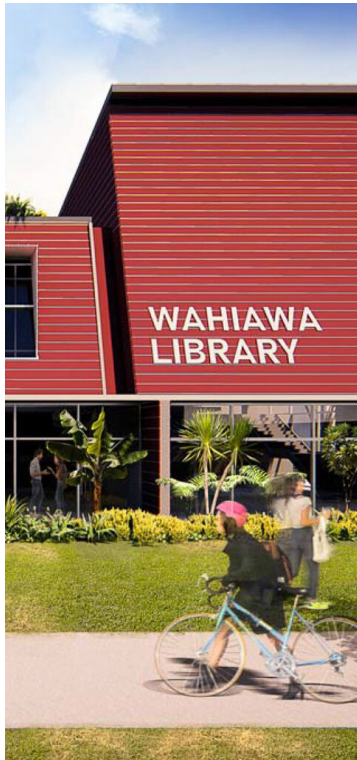
- Public transportation use saves the U.S. 4.2 billions gallons of gasoline annually
- Eliminating one car and taking public transportation insdead of driving, a saving of 30% of carbon dioxide emissions can be realized.



Project Timeline



Precedents and Case Studies Co-Located Libraries



21st Century Library

FLEXIBLE SPACE

- Allow library staff to provide various programs to the community
- Fluid access to electricity

GROUND FLOOR ACTIVATION

- Immediate line-of-sight to the library functions
- Foot traffic keeps the library active

COMMUNITY RESOURCE

- Community asset (Community Room)
- Library provides essential services (civic and health services)

Selection of the precedent studies were chosen based on libraries that are co-located with other essential services. (e.g. Civic, Residential, Educational, Health, Commercial)

Library Vision & Goals

If located within a project as proposed in this study, the library would be successful if

“there is increase in visibility, access to parking, and access to transportation”

Stacey, Mallory, and Stacie (July 2022)

Our biggest concerns about the possibility of the library being located within such a development is...

“conflicting uses outside library hours, barriers to parking, communication with all agency, not being on the first floor”

Stacey, Mallory, and Stacie (July 2022)

Our biggest challenges in our current building are

“flexible and fluid electricity, security location, entrance-parking connection”

Stacey, Mallory, and Stacie (July 2022)

The things the community needs the most from its library are...

“access to collections, resources, and materials, high-speed internet, community meeting space”

Stacey, Mallory, and Stacie (July 2022)

Our greatest hope for the library is...

“it becomes a dynamic and well-used meeting hub, that meets the needs of the community”

Stacey, Mallory, and Stacie (July 2022)

Kahului Scale



Site Context



Concept Sketches



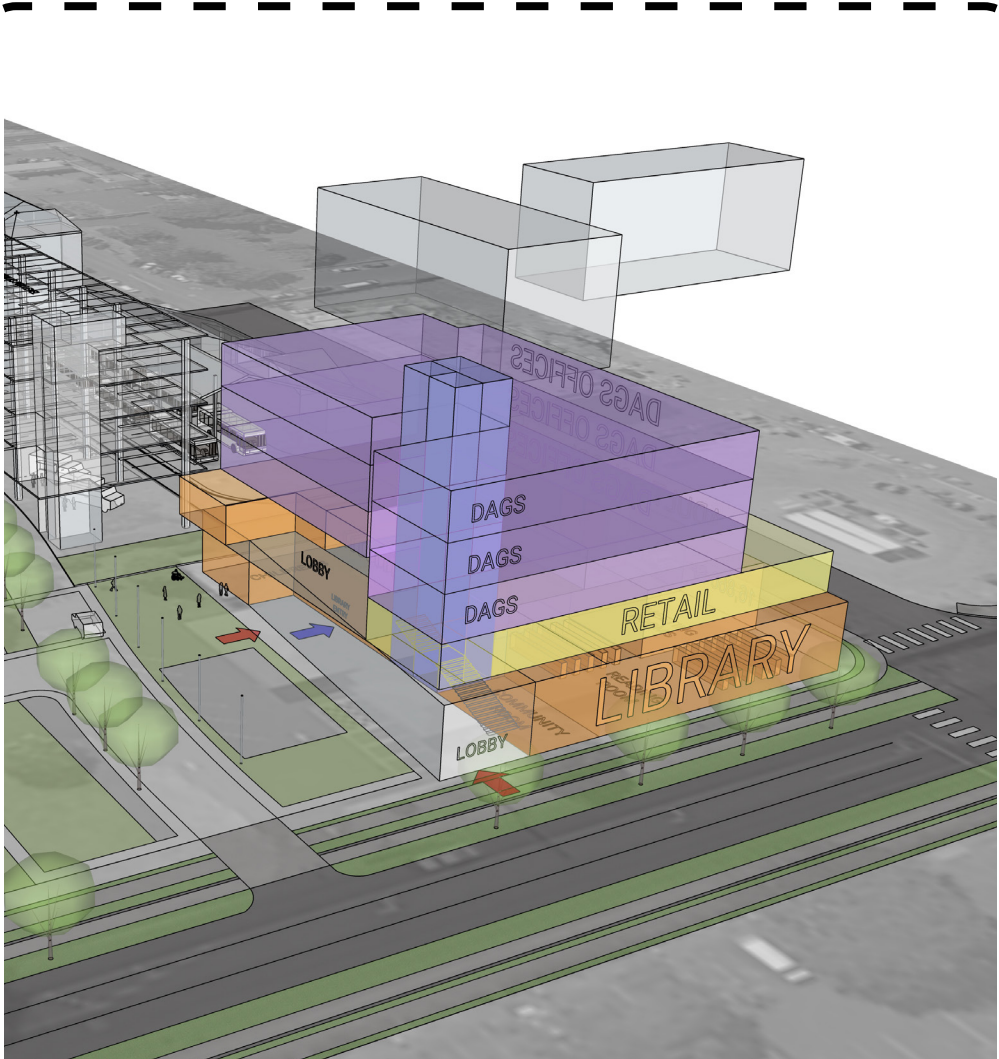
Concept 1: Developed EA

Concept one closely reflects the Final Environmental Assessment conceptual plan. Ground floor library at 16,500 sf with the remaining program above.

Library: 16,500 SF
Multi-Level
Incremental Upgrade

Civic Center Building:
66,000 SF

Key Features:
2-3 storey parking facilites,
seperate housing



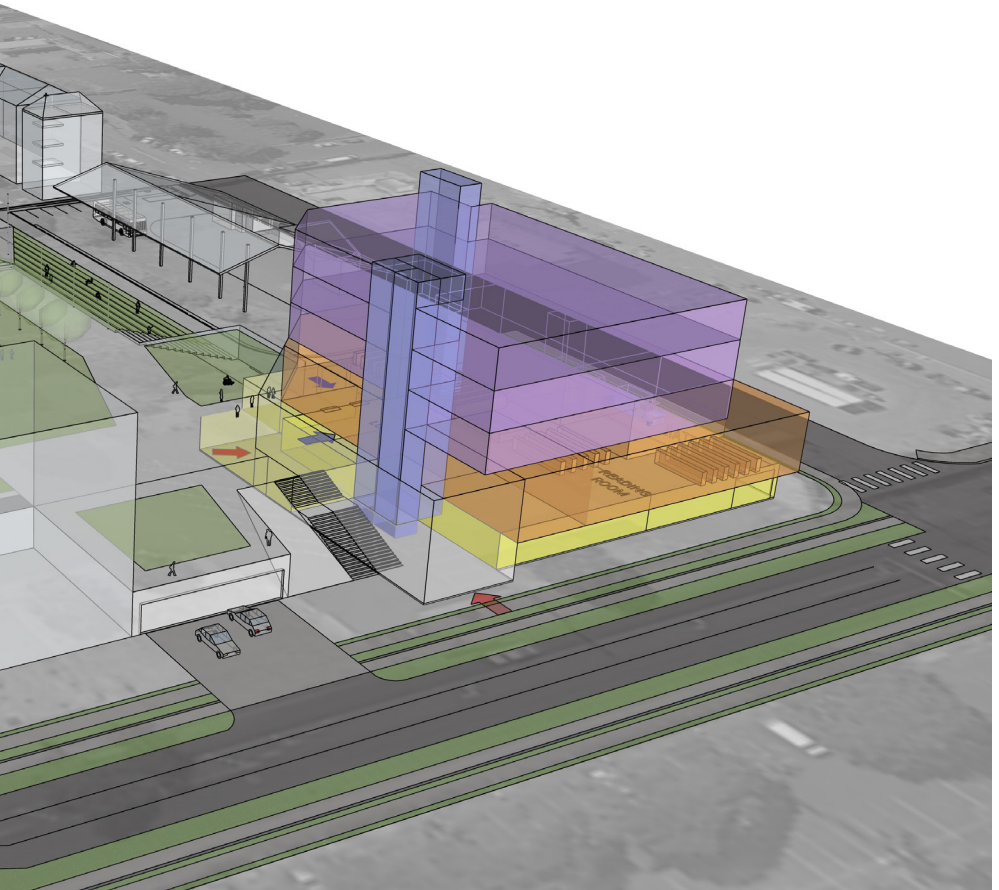
Concept 2: Inner Street

Concept 2 reimagines an activated mid-block street dedicated to enhanced open spaces. The civic center parking structure is also reanalyzed to create a better connection to the transit hub. The library is located on the ground floor.

Library: 19,000 SF
Ground Floor
Recommended Program

Civic Center Building:
67,750 SF

Key Features:
Kaahumanu vehicular access,
large open plaza



Concept 3: Platform

Concept 3 illustrates an emphasis on the integration of the civic, housing, and parking components into one seamless development. The library is on the second floor with lots of public amenities.

Library: 19,000 SF
Second Floor
Recommended Program

Civic Center Building:
67,750 SF

Key Features:
Shared-use parking, large
elevated public space

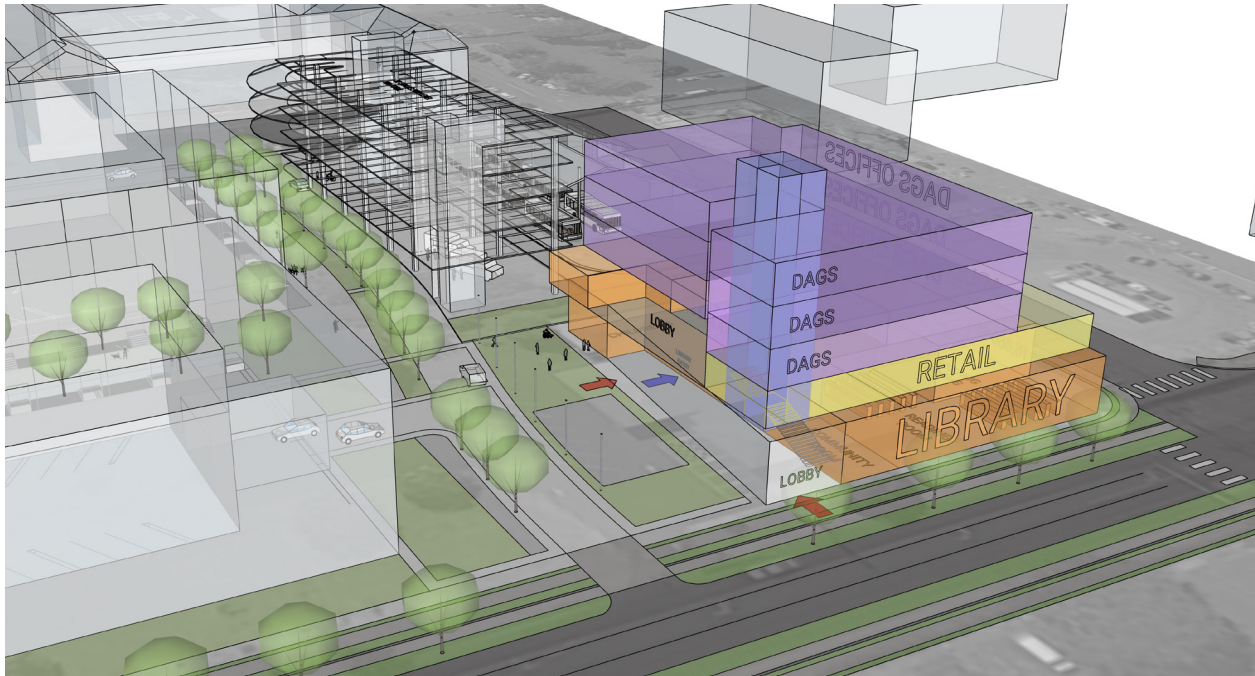
Concept Recap - Nov 2022

Library-Recommended Program
19,000 SF
Ground Floor

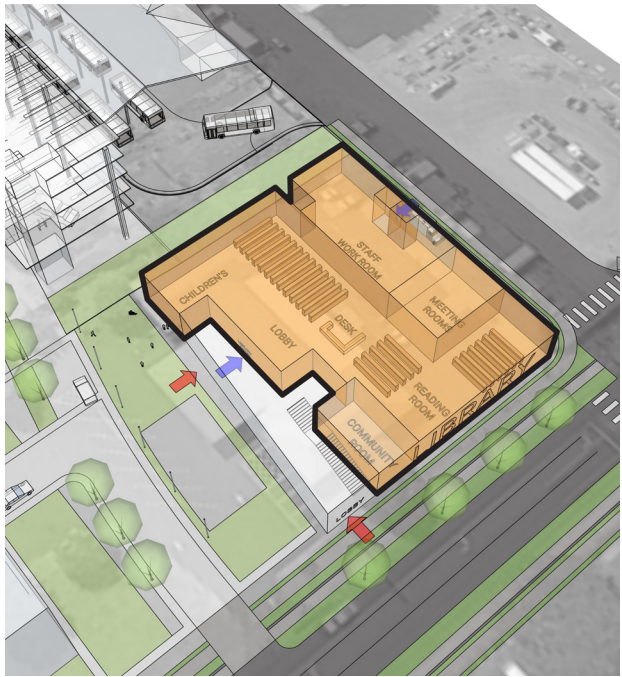
Civic Center Building:
67,650 SF
Adult School+Retail - 2nd Floor
DAGS office - 3rd-5th Floor

Housing:
300 DU
Residential Parking included

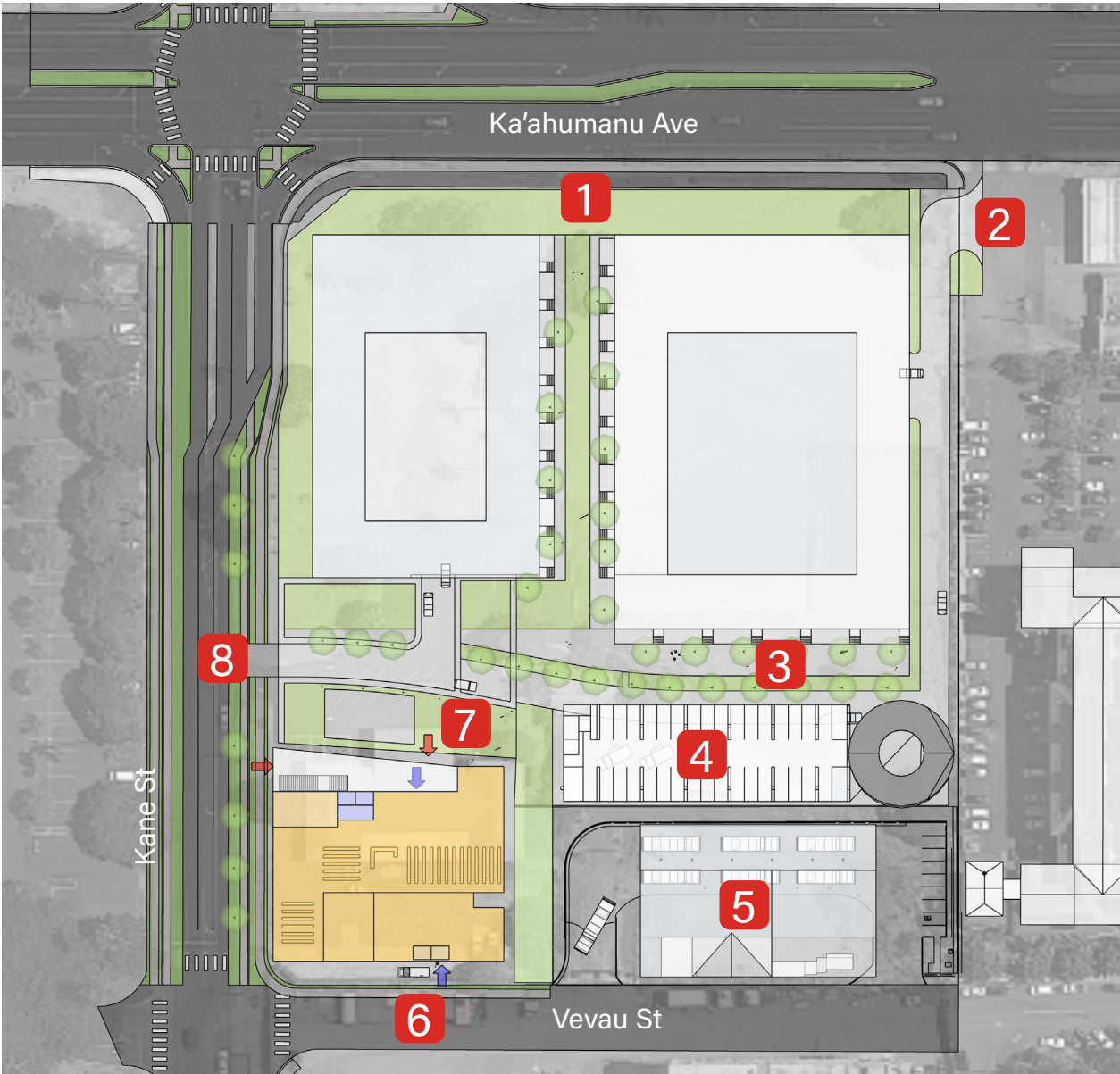
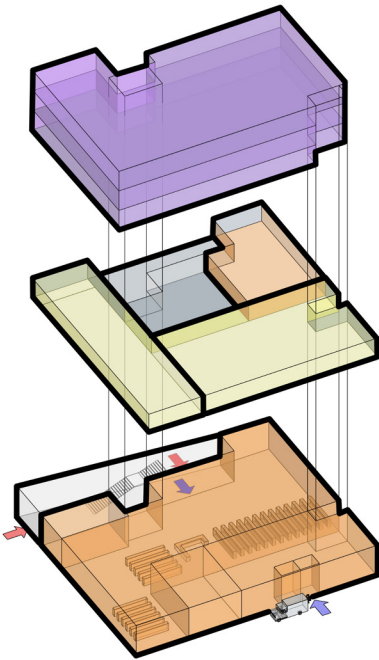
Civic Center Parking:
Parking Structure (w/Helix Ramp)
176 Stalls Provided



3D VIEW



LEFT:
LIBRARY ON SITE
RIGHT:
PROGRAM AXON



CONCEPTUAL
SITE PLAN

- 1

Pedestrian Pathway
- 2

Ka'ahumanu Ave access
- 3

Woonerf/Living Street
- 4

Parking Structure
- 5

Maui Transit Hub
- 6

Delivery/Drop-off Parking (HSPLS)
- 7

Public Lobby/Entrance
- 8

Vehicular Entrance for Civic Center

Project Overview & Takeaways

Site & Program

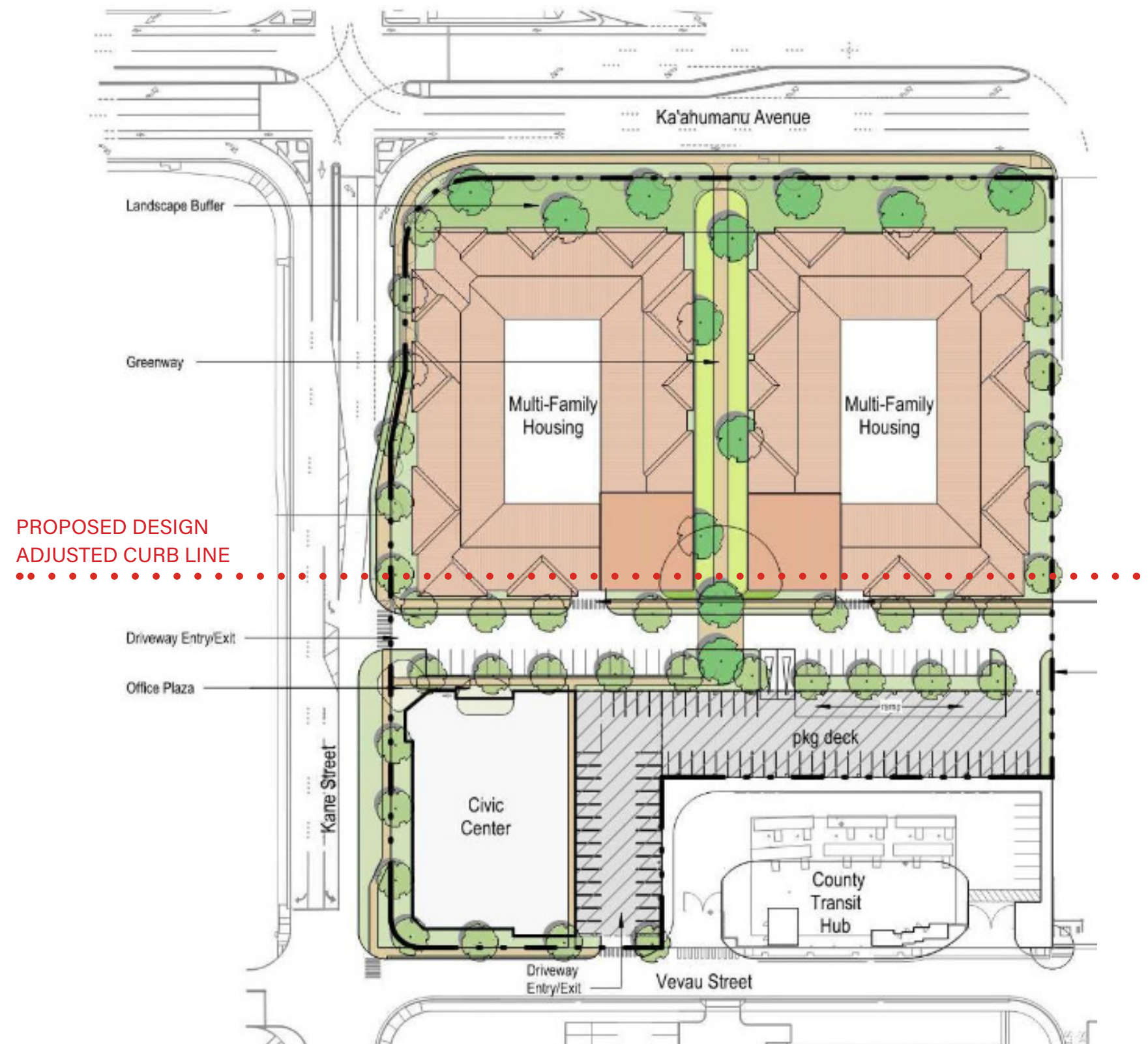
- Planning study to see how the library would fit into the proposed Civic Center
- Provide a direct pedestrian connection from the Transit Hub to the Civic Center
- Optimize public amenities and open space (civic plaza, extension of community room, open events under parking)
- Parking Structure - location, circulation, program, connection to Civic Center
- Reduce parking requirement (TOD Transit Hub proximity)

Library Objectives

- Increase the existing Library Program to provide additional services (19,000 SF)
- Library to operate on one floor
- Library to occupy ground floor
- Provide a vibrant Community Space
- Visibility on Kane Street - Street Activation
- Civic Plaza - Indoor/Outdoor integration
- Pedestrian circulation and safety priority

Design Adjustments from FEA

- Moved driveway entry/exit north by 25 feet to proposed curbline
- Increase building footprint due to increase in the Library programmed to 19,000 SF.
- Revised parking structure to allow better pedestrian access from the Transit Hub
- Create ground level open space under the parking structure
- Secondary vehicular access either through Kaahumanu Ave or through the Transit Hub on Vevau St.
- Larger open public plaza space
- Include a community space

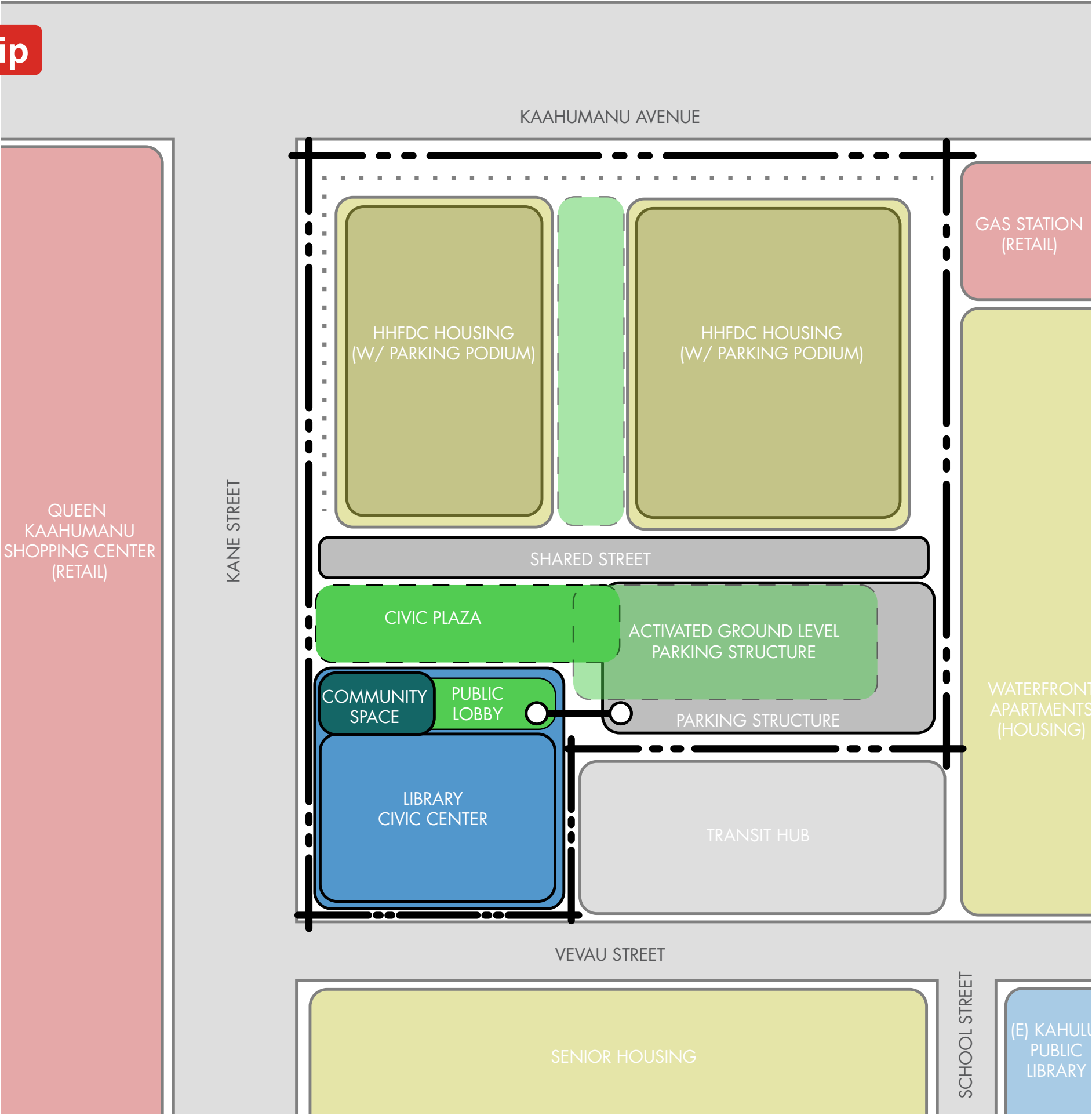


Final Environmental Assessment conceptual site plan

Site Engagement - Functional Relationship

Provide public amenities for the community connecting to the immediate neighborhood

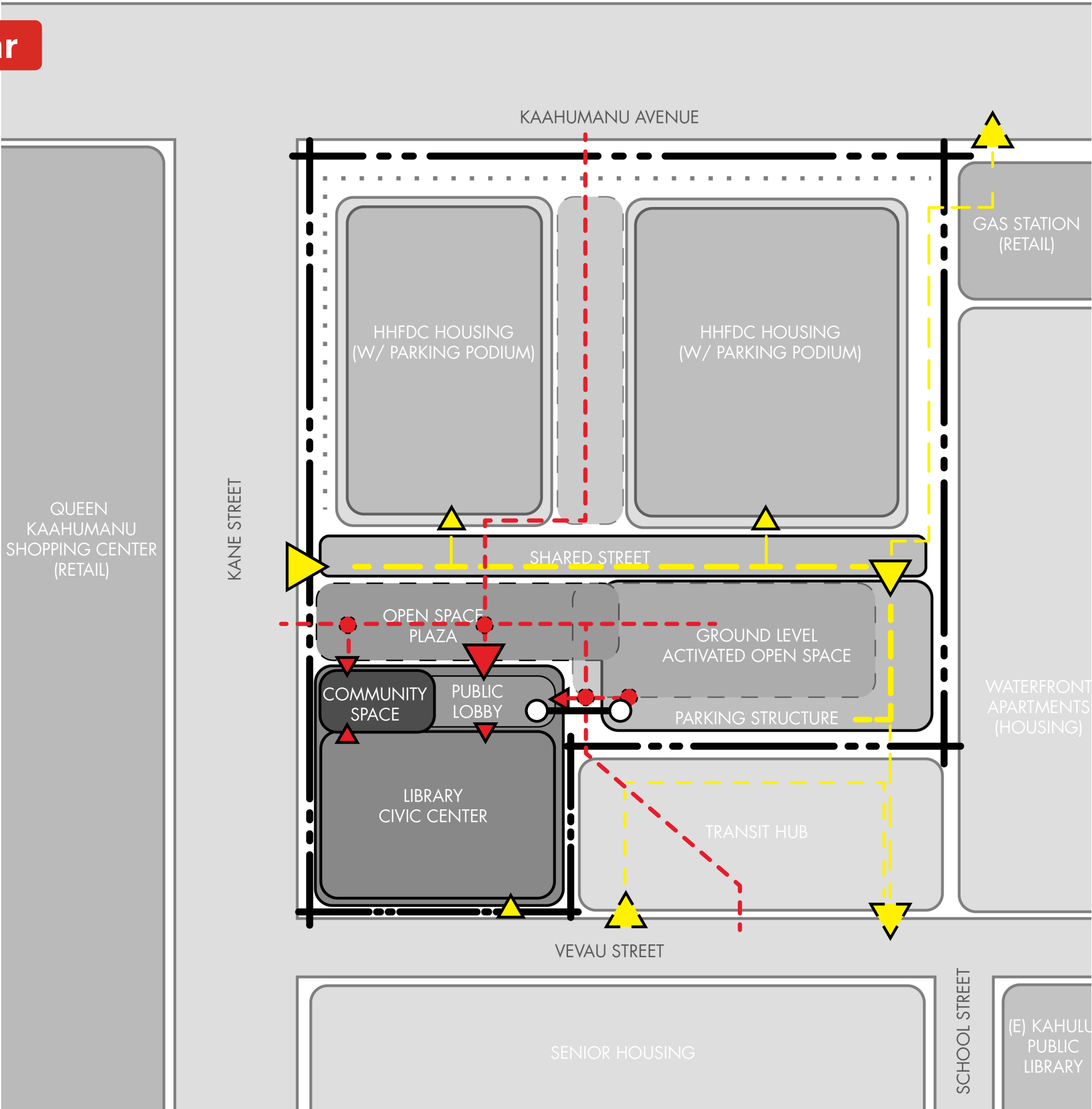
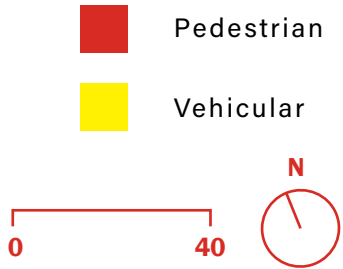
- Increase building footprint due to increase in the Library programmed to 19,000 SF.
- Create ground level open space under the parking structure
- Larger open public plaza space
- Include a community space



Site Engagement - Pedestrian & Vehicular

Reduce and limit the amount of pedestrian and vehicular intersections

- Revised parking structure to allow better pedestrian access from the Transit Hub
- Provide a second floor bridge to the Civic Center for employees and patrons.
- Secondary vehicular access either through Kaahumanu Ave or through the Transit Hub on Vevau St.

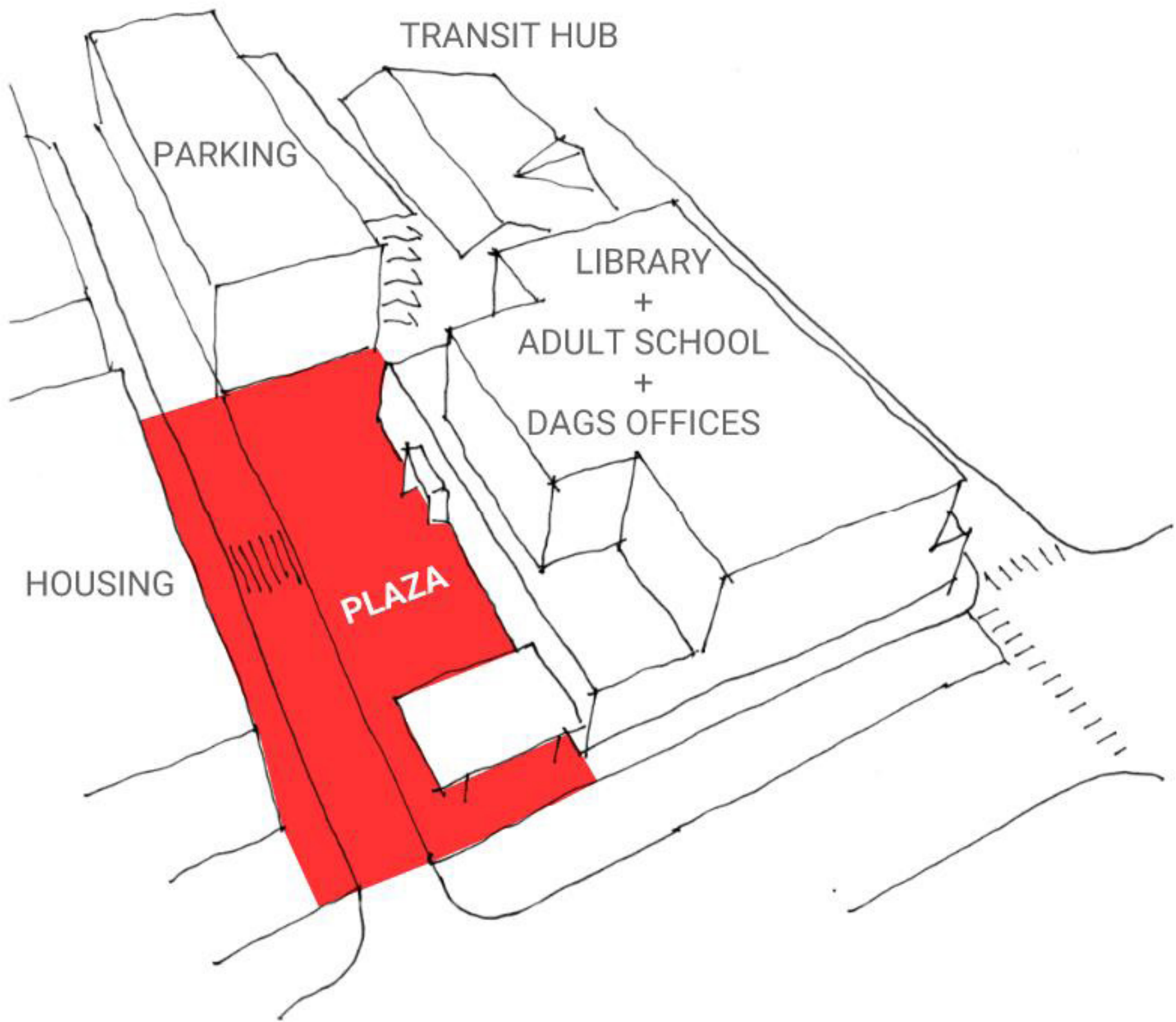


Site Plan - Civic Complex

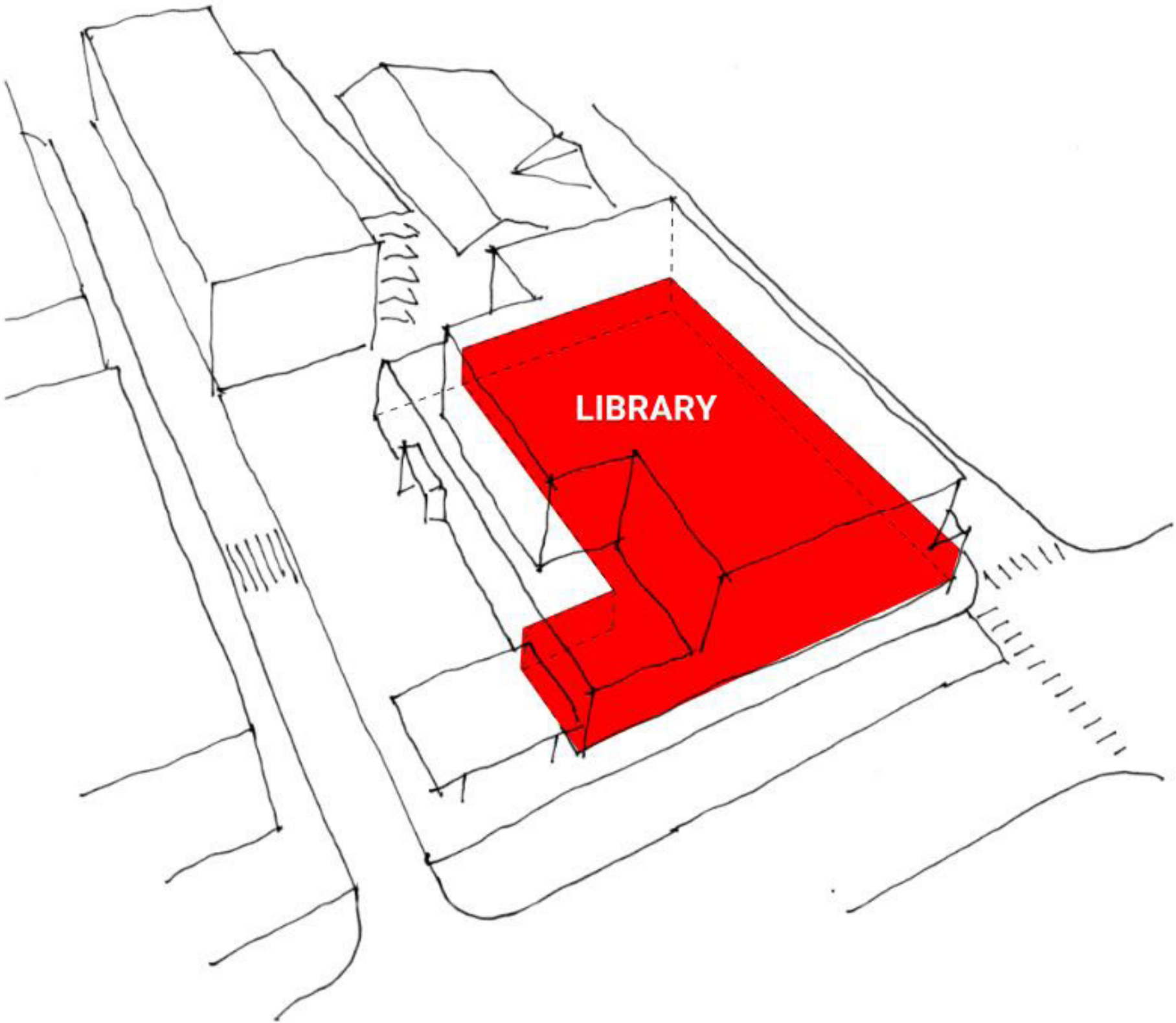
- 1 extended covered community space onto plaza
- 2 civic center main entrance
- 3 drop-off parking
- 4 parking structure above
- 5 second level pedestrian bridge
- 6 service loading zone



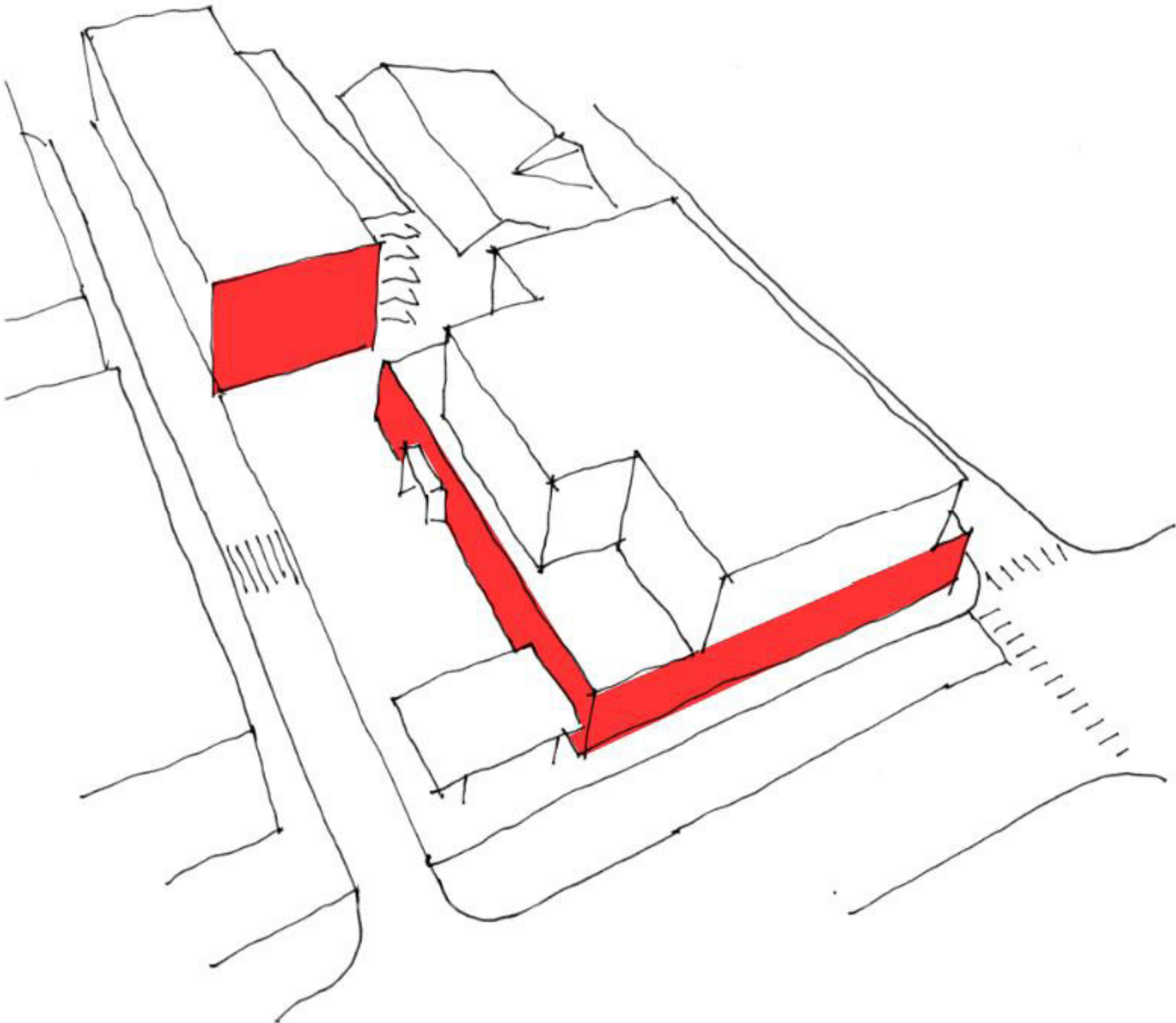
Civic Presence



Library: Full Program at Street Level

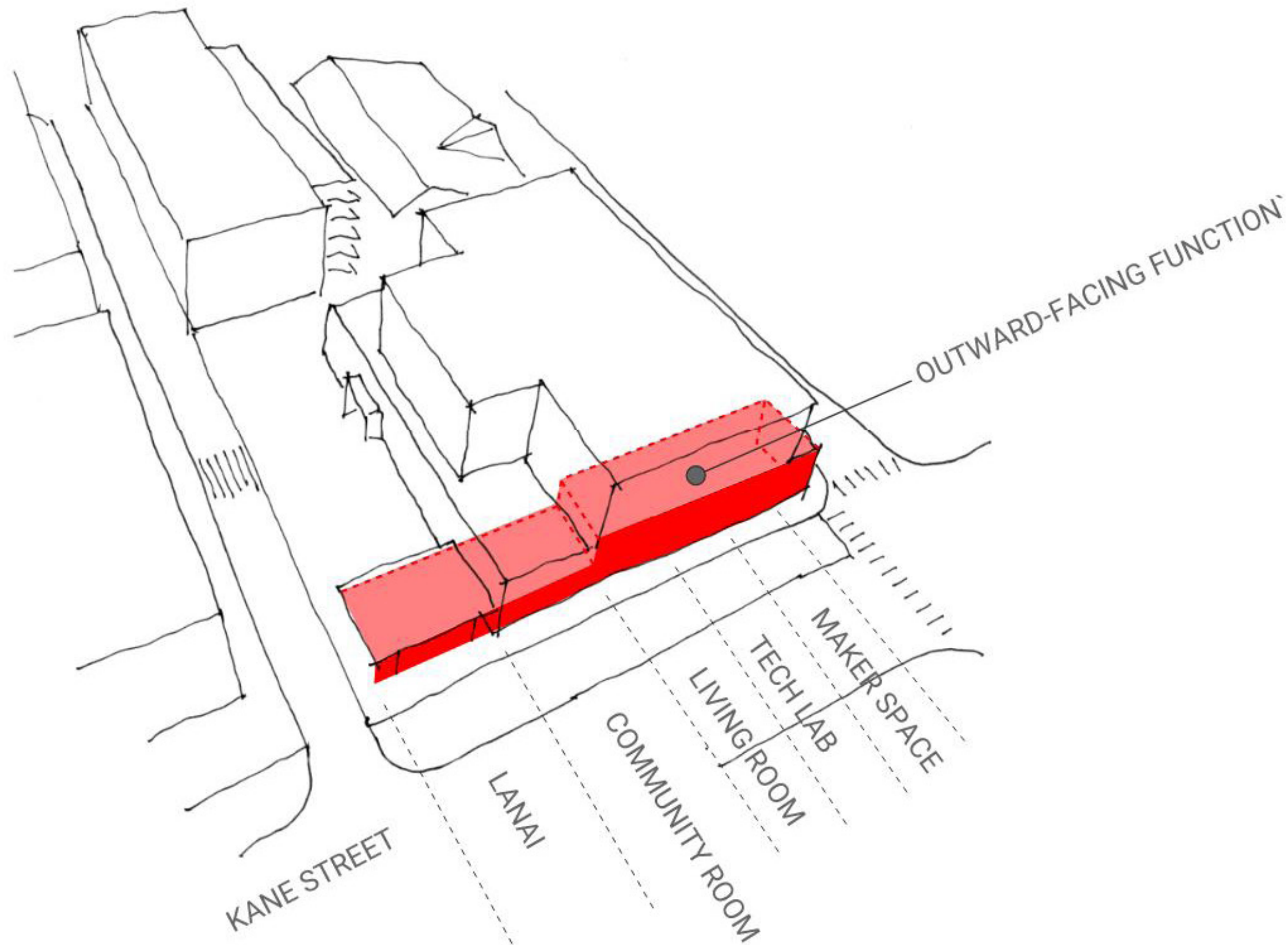


Intuitive Welcome

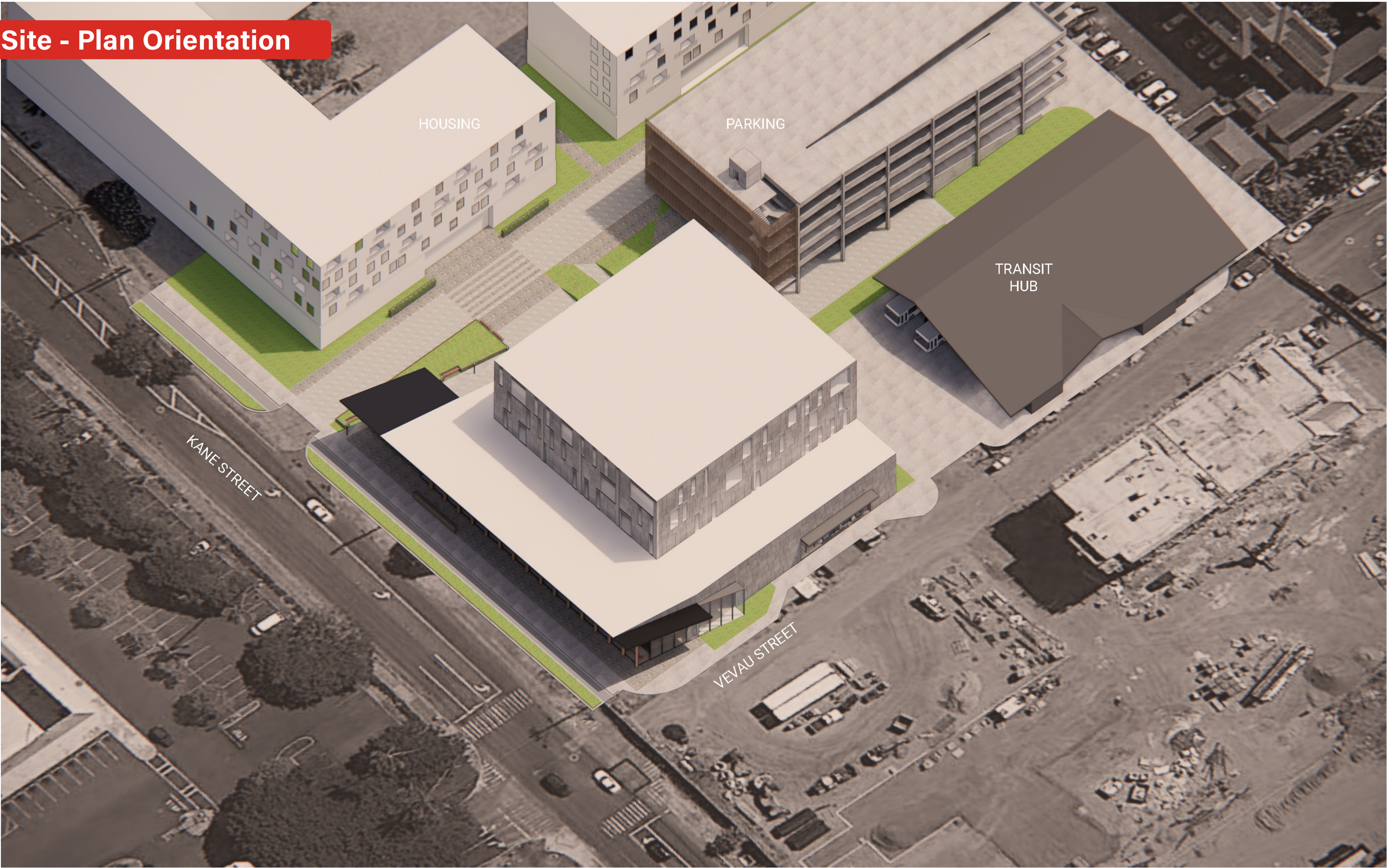




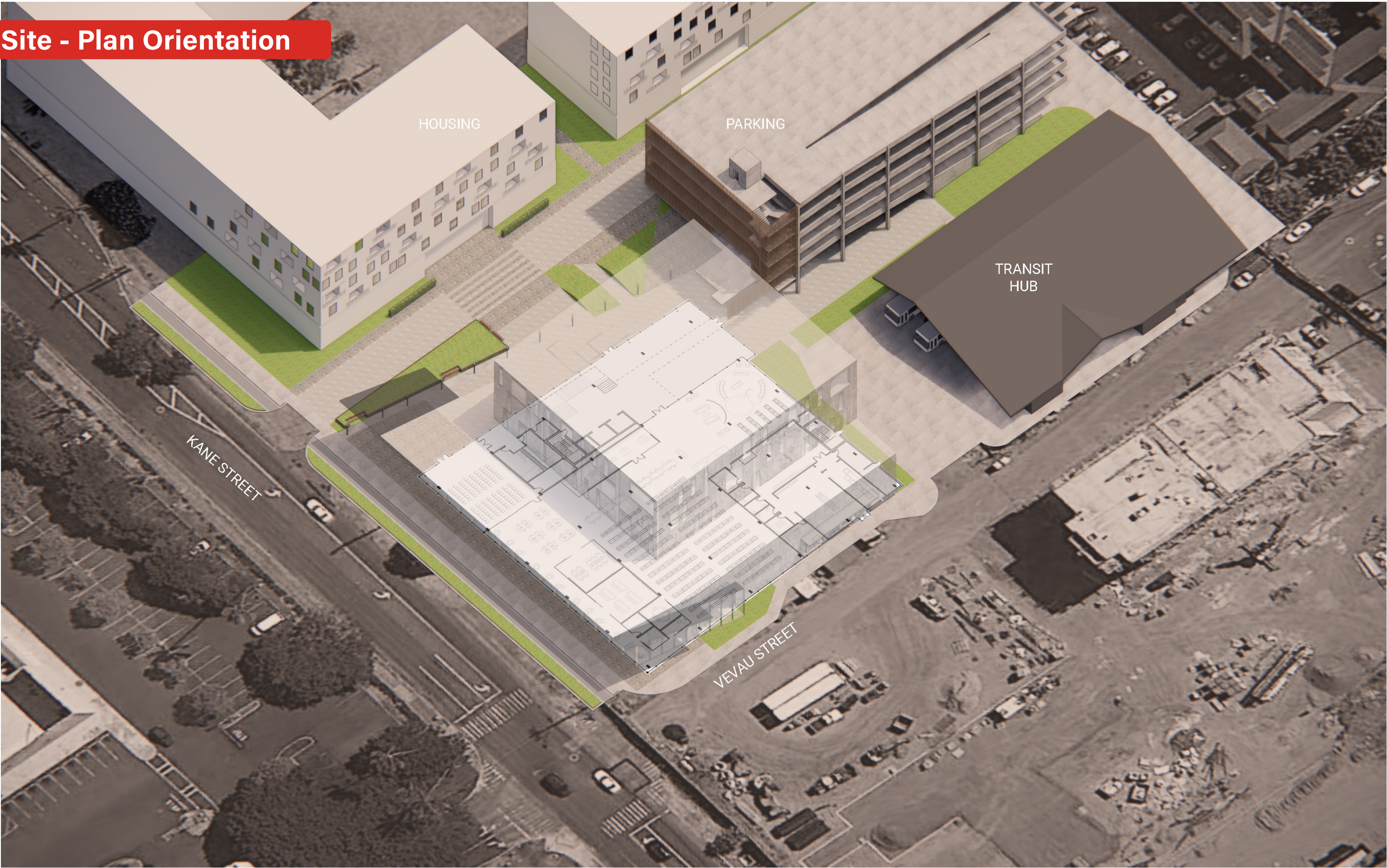
Visibility of Library to Kane Street



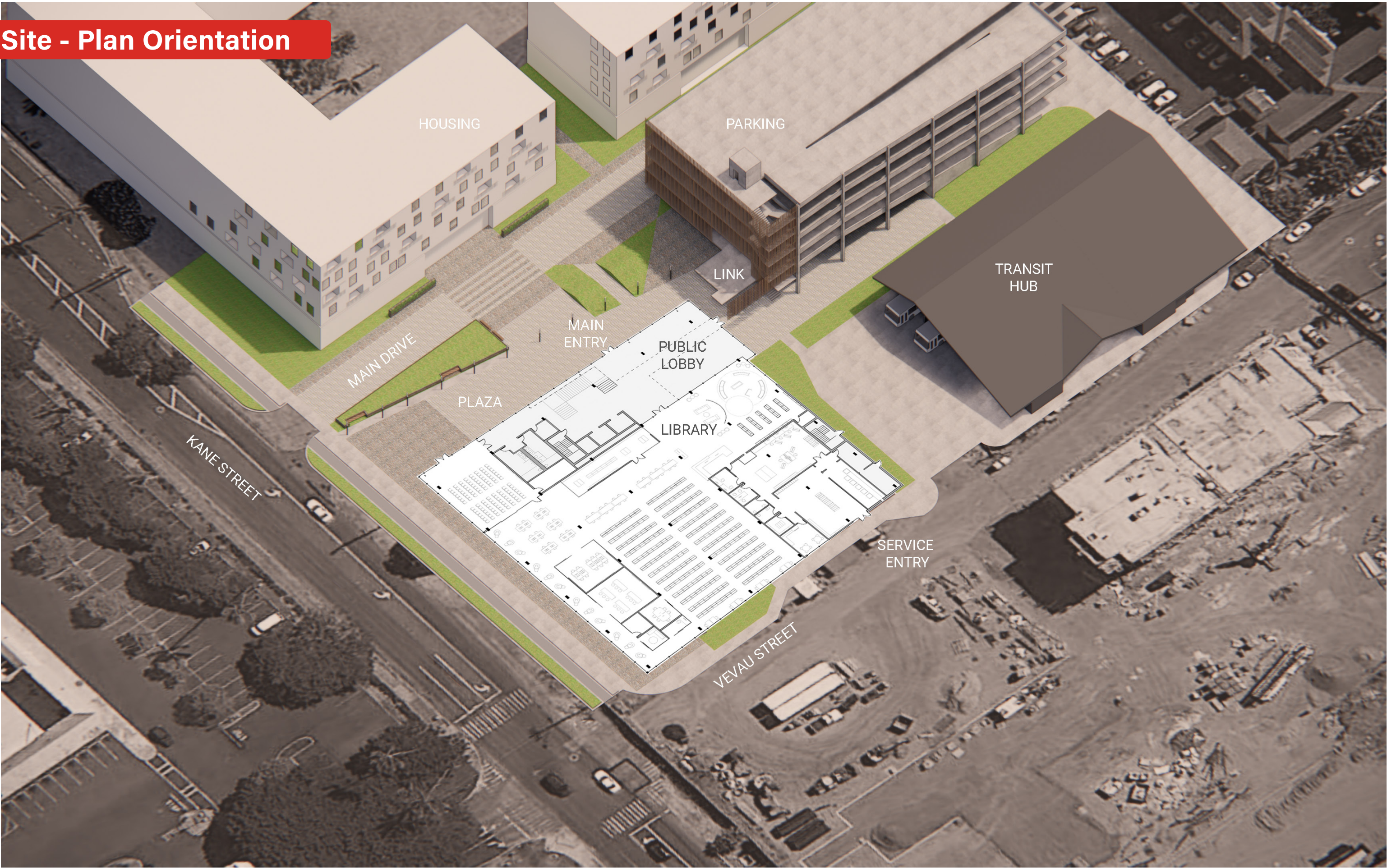
Site - Plan Orientation



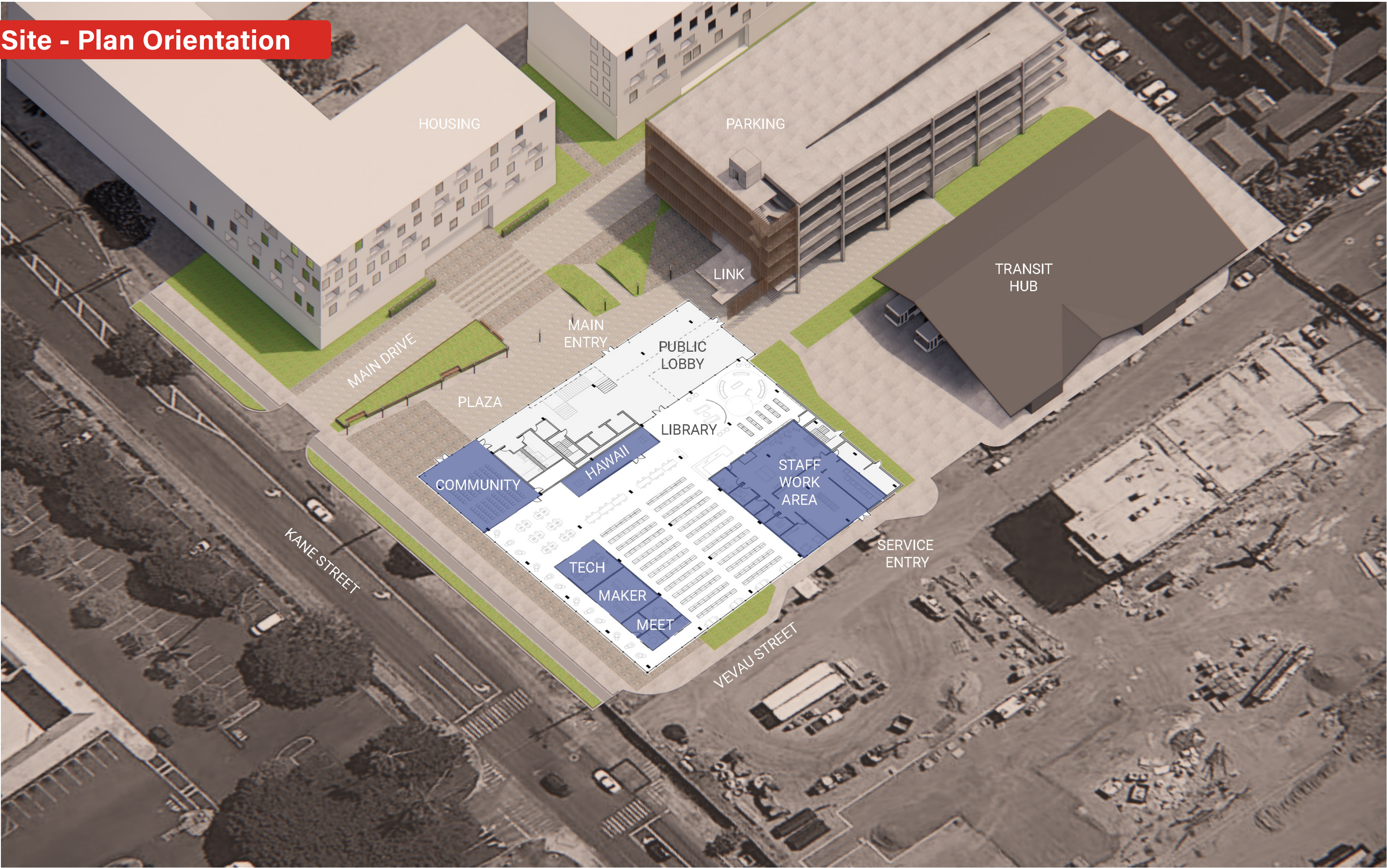
Site - Plan Orientation



Site - Plan Orientation



Site - Plan Orientation



Library Program

	EXISTING KAHULUI LIBRARY SPACES <i>as is</i>	INCREMENTAL UPGRADE <i>better</i>	Delta from Existing in Sq Ft	% Delta from Existing	RECOMMENDED PROGRAM <i>optimum</i>	Delta from Existing in Sq Ft	% Delta from Existing	AS DRAWN	Notes
STAFF SPACES	4,086	3,603	483	12%	3,616	470	12%	3,668	Meeting room is shifted from staff to public; staff can still use (see Meeting Rooms, below). An AMHS and book drop are added.
COLLECTIONS SHELVING	3,075	3,500	425	14%	4,000	925	30%	3,925	The existing library has 3,075 SF of shelf space. However, the planned shelving will be lower in height, meaning more floor area is needed. Using shorter shelving matches our recommendation.
LOBBY	1,027	1,205	178	17%	1,210	183	18%	1,010	Increase includes missing elements of queuing space, self-checkout, internal bookdrop, message board, etc.
MEETING & SPECIALTY ROOMS	1,187	2,190	1,003	84%	3,375	2,188	184%	4,083	Increase reflects trend toward libraries offering more space to meet, collaborate, make things, and childrens and community events.
CHILDRENS	1,574	1,750	176	11%	2,110	536	34%	2,080	Increase reflects room for basic amenities that will attract parents and offer more to children, such as interactive zone, early literacy computers, etc.
READING ROOM, COMPUTERS	2,176	2,176	-	0%	2,176	-	0%	2,175	This area is carried through from the existing as the quantity and size of furniture is on target with libraries of this size.
SUPPORT SPACES	280	570	290	104%	570	290	104%	620	Most support spaces are assumed to be outside of the library. This accounts for inclusion of family restrooms near the Children's area, and an I.T. Room.
SUBTOTAL	13,405	14,994	1,589	12%	17,057	3,652	27%	17,561	
Grossing Factor	12%	10%			10%			10%	This accounts for interior walls, structure, shafts, and excludes exterior walls, since the library is a space within a larger building.
TOTAL	15,170	16,493	1,323	9%	18,763	3,593	24%	19,317	This is INTERIOR square footage. Also, the library program does not include common spaces that may be on the same floor, but outside the library.

SUMMARY:
The key difference between the Incremental and the Recommended increase of the meeting rooms and childrens space. The Staff and Support spaces are consistent between the two proposed programs which we find appropriate in trends with a modern library.

Note that as of this draft, collections data in the form of numbers of volumes needed to be held on shelves is still forthcoming from HSPLS. Therefore, the square footage figures for Collections Shelving are estimates, taking into account shifting from current shelving to shorter shelving as used at Liliha.

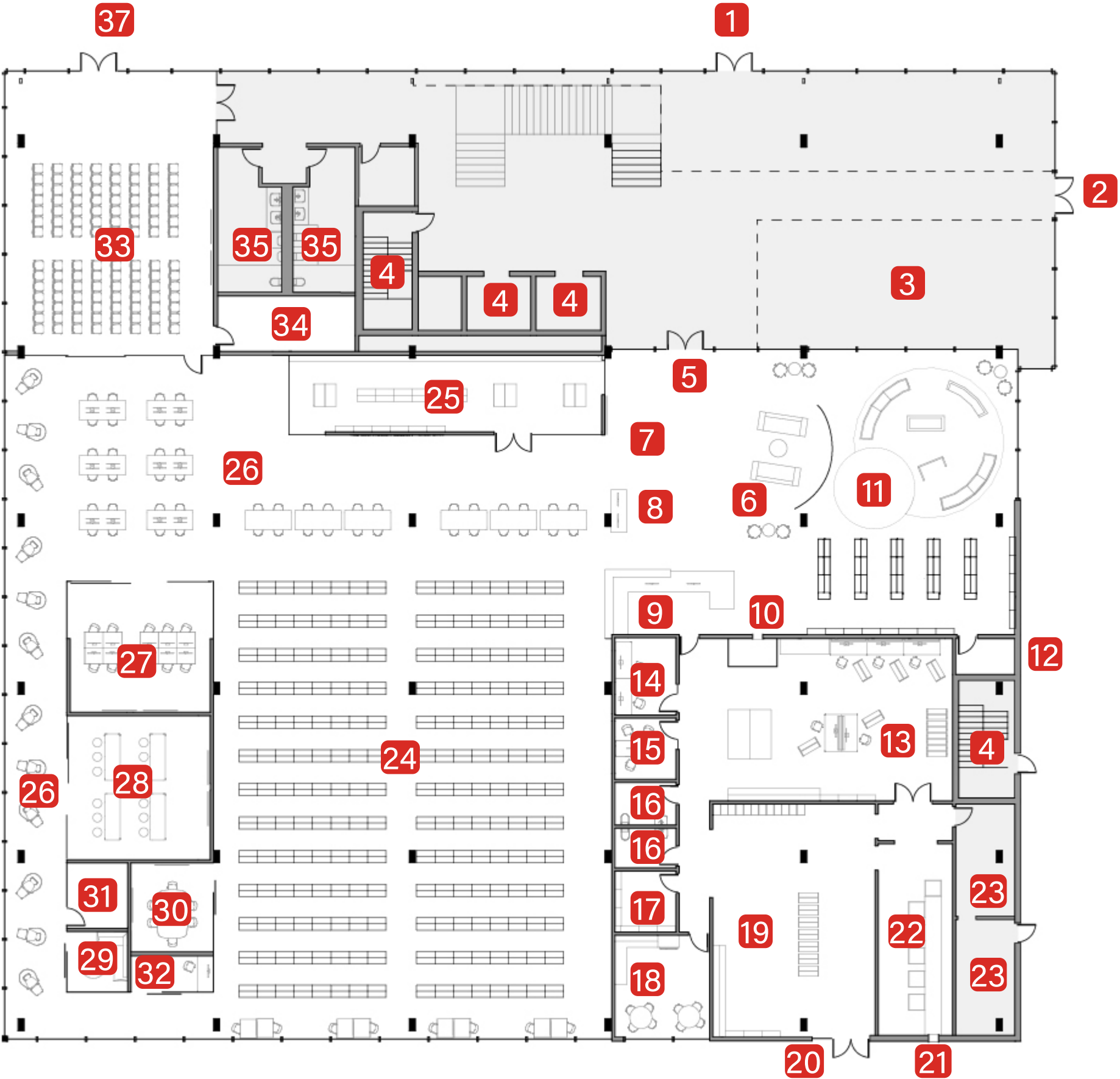
Library Program Diagram



STAFF SPACES
COLLECTIONS SHELVING
LOBBY
MEETING & SPECIALTY ROOMS
CHILDRENS
READING ROOM, COMPUTERS
SUPPORT SPACES



First Floor Plan: Library



- 1 Public Entry
- 2 Parking Entry
- 3 Public Lobby
- 4 Vertical Circulation
- 5 Library Entry
- 6 Waiting
- 7 Info Board
- 8 Kiosk
- 9 Service Desk
- 10 Internal Book Drop
- 11 Childrens
- 12 Quiet
- 13 Work Room
- 14 Shared Office
- 15 Staff Toilet
- 16 Staff Toilet
- 17 Magazine Storage
- 18 Break Room
- 19 Delivery & IT
- 20 Service Entry
- 21 Exterior Book Drop
- 22 AMHS
- 23 Building Service
- 24 Collections
- 25 Hawaiian Room
- 26 Living Room
- 27 Tech Room
- 28 Maker Space
- 29 Small Conference Room
- 31 Med Conference Room
- 32 Study Room
- 33 Community Room
- 34 Community Storage Room
- 35 Public Toilet
- 36 Mothers Room
- 37 Community Room Entry



Second Floor Plan: DOE Adult School



- 1 Public Entry Below
- 2 Parking Bridge Entry
- 3 Second Level Public Lobby
- 4 Vertical Circulation
- 5 Public Restrooms
- 6 Adult School Entry
- 7 Adult School
- 8 Mech Room
- 9 Future Library Growth
- 10 Library Growth
- 11 Building Service



Cost Estimate

Project Cost Summary

Cost per square foot for a library varies depending on items such as shelving, furniture, technology, and the automated materials handling system are included in the construction contract or procured by the owner. Based on prior libraries of similar size, and factoring in current market conditions (recent price increase due to inflation, supply chain shortages, etc) and premiums for items being shipped, the list below are recommendations for general budgeting purposes for Library-specific Soft Costs.	
Furniture Fixtures & Equipment – General	\$875,000
Furniture Equipment – Library Shelving	included in FF&E
Technology	\$115,000 (cabling included in construction budget)
Appliances	\$15,000
RFID and Misc Materials	provided by HSPLS
Microfilm Reader	provided by HSPLS
Special Furniture for Children’s Area	\$85,000
Artwork	1.00% of construction budget
Automated Materials Handling System	\$125,000

Description	Area (SF)	Total Area (SF)	Cost Multiplier (\$)	Cost	Notes/Assumptions
Program Area Analysis					
Primary Facility: Civic Center					
Library	19,000		550	10,450,000	
DOE Adult School	7,000		500	3,500,00	
DAGS Office Space	38,000		500	19,000,000	
Common Spaces	7,500		500	3,750,000	
Total Primary Facility		71,500		36,700,000	Civic Center: Library located on Ground Floor (19000SF) Library Program selected for Incremental Upgrade Parking: Rectangular Parking Structure
Supporting Facility					
Parking: Level 1	9,200				228 stalls provided (36 at ground level) Assumes parking is precast due to multiple level repeated stack. (Simple stack should justify economy of scale efficiencies of precast.) Assumes Conc 2 Office will have varied faced with some transfer conditions to create L1 indoor / outdoor plaza public space creation. (more costly office const. costs)
Parking: Level 2-5	94,600				
Total Parking		103,800	110	11,418,000	
Driveway	9,400				
Landscape	17,200				
Plaza/Pavement	19,900				
Total Open Space		46,500	40	1,860,000	
Subtotal Direct Cost				49,978,000	
Design Contingency			15%	7,496,700	
Escalation			12%	5,997,360	
Subtotal, Estimated Direct Cost to Prime				63,472,060	
Prime Contractor Markups					
Prime Contractor’s JOOH			13%	8,251,368	
Prime Contractor’s HOOH			5%	3,173,603	
Prime Contractor’s Profie			6%	3,808,324	
Bonds Insurance			1.5%	952,081	
G.E. Tax			4.71%	2,989,534	
Total Estimated Contract Cost				82,646,969	
Rounded				82,647,000	

Exterior View



During a food truck event underneath the parking structure looking toward Kane Street.

Street View



Looking from Kane Street looking towards the Civic Center and residential housing.