

HALAWA SITE ANALYSIS

Site Analysis and Scoring:		Halawa Site			
Category	Criteria	Indicators	Notes	Score	Subtotal
Site, Infrastructure, and Environment	Total Acreage	97 acres on existing site and adjacent lots along Salt Lake Blvd.	Aloha stadium station is eastern terminus of HART Phase 1 project Kalaeloa Airport not considered due to limited cargo handling facilities  Barber's Point Harbor not considered due to lack of container facilities 87% (~28000) of hotel rooms on Oahu are in Waikiki  Per NOAA Pacific Tsunami Warning Center and FEMA flood risk maps Per NOAA circa 2100 worst-case scenario projections (3.2ft)	5 / 5	27 / 30
	HART Access	1 dedicated HART station on perimeter of site		5 / 5	
	Proximity to Daniel K. Inouye International Airport	7.1 miles (9 minutes) to/from airport		3 / 3	
	Proximity to Emergency Services	3.0 miles from Aiea Fire Station; 6.4 miles from Pearl City Police Station; 3.2 miles from Pali Momi Medical Center		3 / 3	
	Proximity to Honolulu Harbor	7.1 miles (15 minutes) to/from harbor		2 / 2	
	Proximity to Waikiki	17.5 miles (18 minutes) to/from Waikiki		1 / 2	
	Ability to Accommodate Stadium Program			2 / 2	
	Avoids Flood/Tsunami Hazards	Outside Tsunami Evacuation Zones and 1% Annual Flood Risk Zones		2 / 2	
	Avoids Sea Level Rise Hazard	Halawa Stream channel affected, but majority of site well above future sea levels		1 / 2	
	Avoids Wetlands Impact	1.5 acres designated wetlands (1.6% of total) along Halawa Stream		1 / 2	
	Suitability for Emergency Shelter	Good road and transit access, outside flood/tsunami risk zones; high coastal exposure		1 / 1	
	Bus Access	20 bus stops within 1/4 mile radius of site		1 / 1	
Development Costs	Existing Zoning	R-5 Residential District	Not likely to be an impediment due to existing use as a stadium	3 / 4	17 / 20
	P3 Potential or other Development Possibilities	Good placement, site area, and transit access for commercial development		4 / 4	
	Ceded Lands Encumbrance	Some ceded lands at site edges		2 / 3	
	Infrastructure Costs	Utilities on site for existing Aloha Stadium facilities		3 / 3	
	Land Acquisition	Owned by State of Hawaii		2 / 2	
	Development Incentives	Site covered by Aloha Stadium Federal Opportunity Zone		2 / 2	
	Complexity	Flarge, flat, easily-accessed site; existing stadium could create complications		1 / 2	
Community	Community Acceptance	Existing stadium site - community is accustomed to use		9 / 10	24 / 30
	Positive Cultural Impact			7 / 10	
	Political Viability			8 / 10	
Economic Impact	Employment Demand in Vicinity	5,772 unemployed persons in 10-min. drive distance (4.3% of pop.)	Potential to bring new employment opportunities to area	6 / 6	17 / 20
	Households Experiencing Poverty in Vicinity	8,253 households in poverty in 10-min. drive distance (10.8% of total)		3 / 6	
	Population in Proximity	257,991 persons in 76,587 households in 10-min. drive distance		6 / 6	
	Per-Capita Income in Vicinity	\$28,476	Relatively low incomes relative to other sites could reduce commercial viability	2 / 2	
Intuitive Site Qualities	Unique Site Improvement Opportunities - positive	Site is one of the largest underdeveloped parcels along HART route; Site has been subject of extensive previous study for reuse		3 / 5	2
	Anticipated Site Difficulties - negative			-1 / -5	
Total Score:				87 / 100	



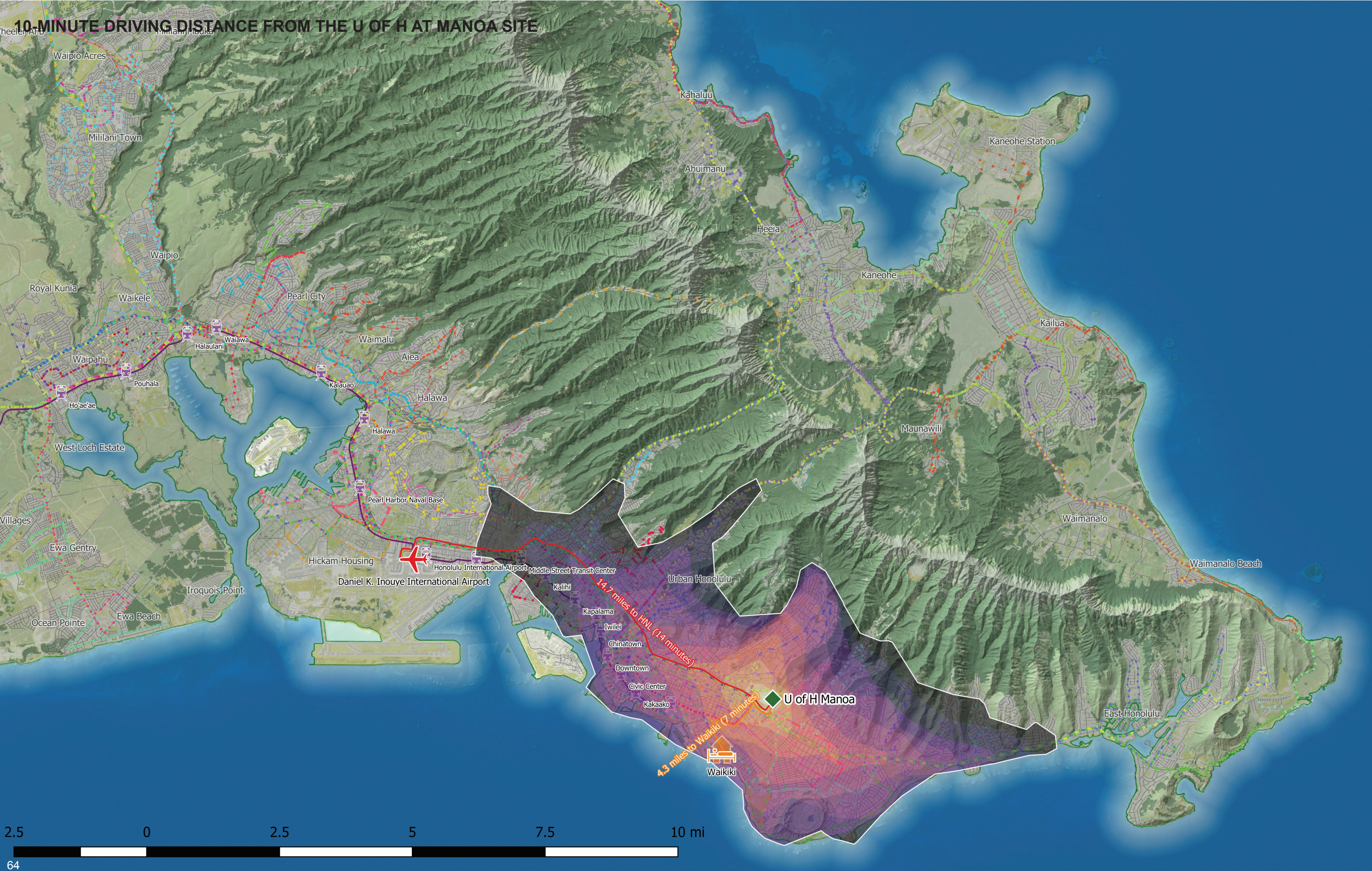
**University of Hawaii at Manoa**

During the primary campaign, both Governor Ige and his opponent, Representative Hanabusa, expressed a desire to locate the replacement for Aloha Stadium on a University of Hawaii campus at Manoa or West Oahu, depending on the preference of the university. In accordance with this desire, the team has studied the Manoa campus and located a potential site, though it comes with caveats.

The Manoa campus of the University of Hawaii is situated mauka of H1, against the base of Kalaepohaku Ridge and hemmed in by surrounding neighborhoods. The campus is heavily developed already, with minimal areas of contiguous free space. Cooke Field (the current practice fields for the Rainbow Warriors football team) represents the only potential location with the ability to support a football stadium of the necessary size. It is likely that utilizing this site effectively would also require the demolition of the Rainbow Wahine softball stadium, as well as partially or completely removing the adjacent tennis facilities. This site would also preclude the possibility of mixed-use development using the stadium as an anchor. However, the Manoa campus is centrally located in urban Honolulu (with 325,000 residents within a 10 minute drive), is walkable for students, and can leverage existing campus parking structures for game-day and event parking.



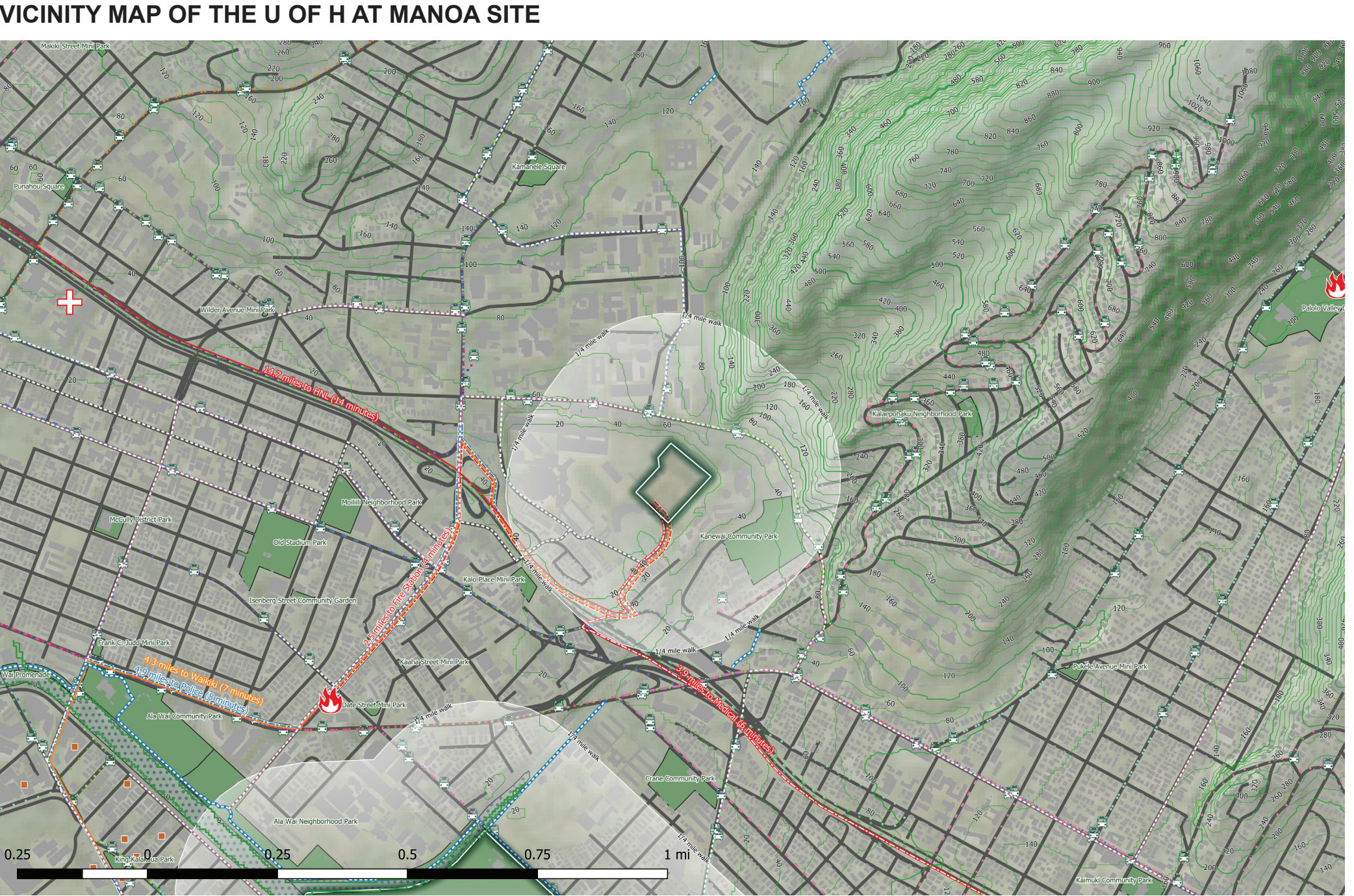
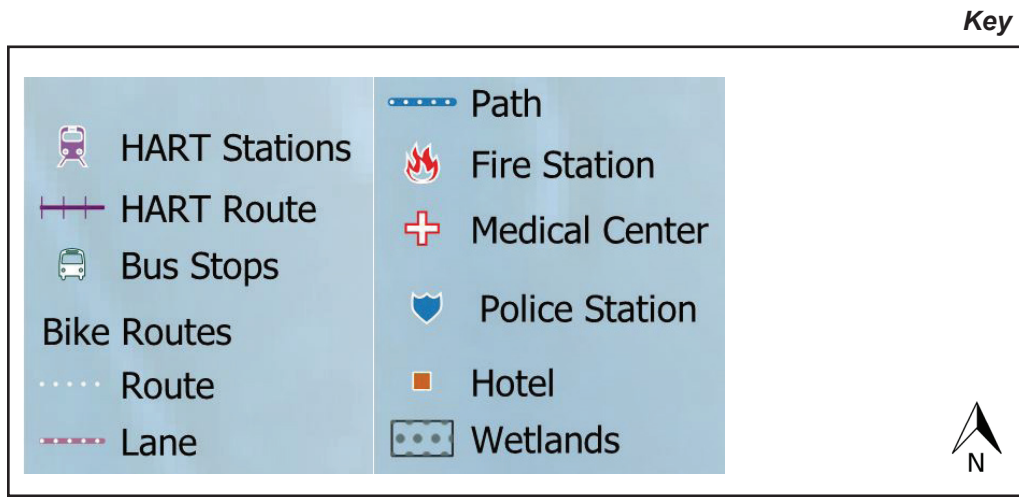




Total Site Size:	7 acres
Total Tree Cover:	0.0 acres (0.0%)
Designated Wetlands:	0.0 acres (0.0%)
Site Slope	
• Mean:	3.5-deg
• Max:	16.3-deg
• Std Dev:	3.0-deg
Bus Stops Nearby:	10
HART Stops Nearby:	0

The “10-Minute Driving Map” represents an isochronal diagram highlighting a distance around each one of the potential sites. This isochrones map show the distance that one could travel to or from the site in a 10-minute period of time, with no traffic. This catchment area is used to collect all of the data points and rubric information included in the site analysis matrixes. This is shown consistent for all the sites.

The “Vicinity Map” shows the bounds of an area that is a 15-minute (1/4-mile) walk from the site perimeter. This area provides additional information about the facilities and infrastructure immediately adjacent to the site. This is shown consistent for all the sites.





# University of Hawaii at Manoa Site

## General Description

The site is in the athletic district of the University of Hawaii, Manoa Campus. It is situated in a natural bowl on the site with student housing to the east (up the hill) and the rest of the athletic campus to the east. The campus is approximately 10 miles from Aloha Stadium at the current Halawa Site.

Pros	Cons
<ul style="list-style-type: none"><li>• U of H Manoa is the home to the Rainbow Warriors football team already; one of the major users of the proposed stadium.</li><li>• The majority of the student population who will want to watch the games is on campus; their parking requirements would be negated.</li><li>• The natural bowl could work to create a stadium form that fits neatly into campus.</li><li>• Some parking for the stadium already exists in the form of on campus parking garages.</li><li>• The setting for an on campus stadium would have views to Diamond Head, Waikiki and Downtown.</li></ul>	<ul style="list-style-type: none"><li>• The site is very tight and would likely necessitate a reduction in seating capacity from the proposed 35,000 seat stadium. Reduction in seats could have an impact on the events that would come to the stadium and its revenue generation potential.</li><li>• Construction on the tight site would be disruptive to campus.</li><li>• The closest HART station is 1.8 miles away at the Ala Manoa Center.</li><li>• There is no room for ancillary development around the site.</li><li>• There would be no room for future stadium expansion.</li><li>• Site access from the freeway is poor.</li></ul>

## Summary Observation(s)

The siting of a new stadium on the University of Hawaii, Manoa campus could potentially be done so that it fits in seamlessly with the established campus and create an intimate football/soccer venue for the campus itself. Saturday afternoon football games on university campuses across the country are a staple of American collegiate culture.



student pedestrian path thru Athletic District



tennis & softball facilities, Diamond Head & Waikiki in the back



football practice field, Les Murakami Stadium in the background



duck pond

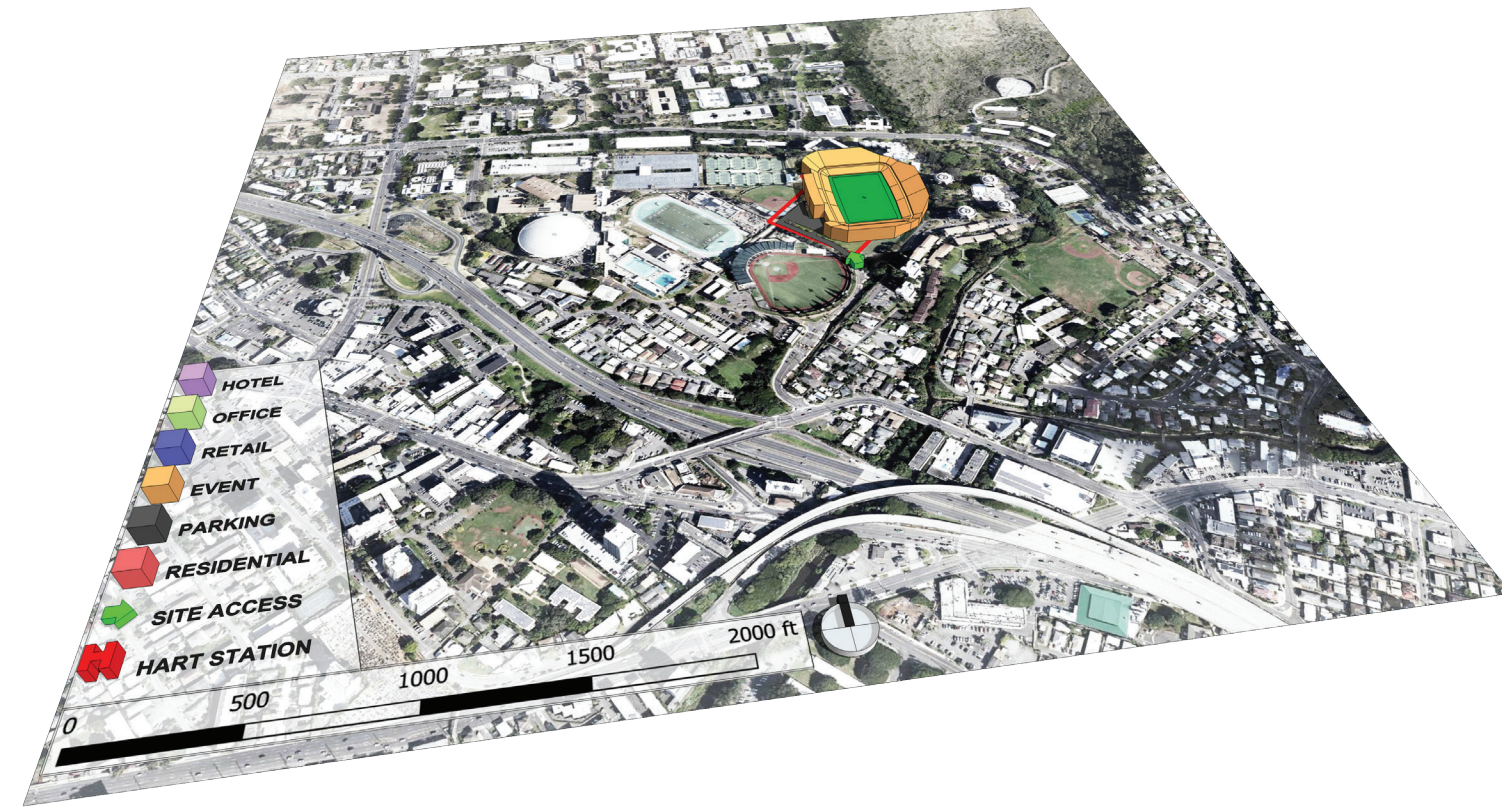


view of Waikiki from above the football practice field

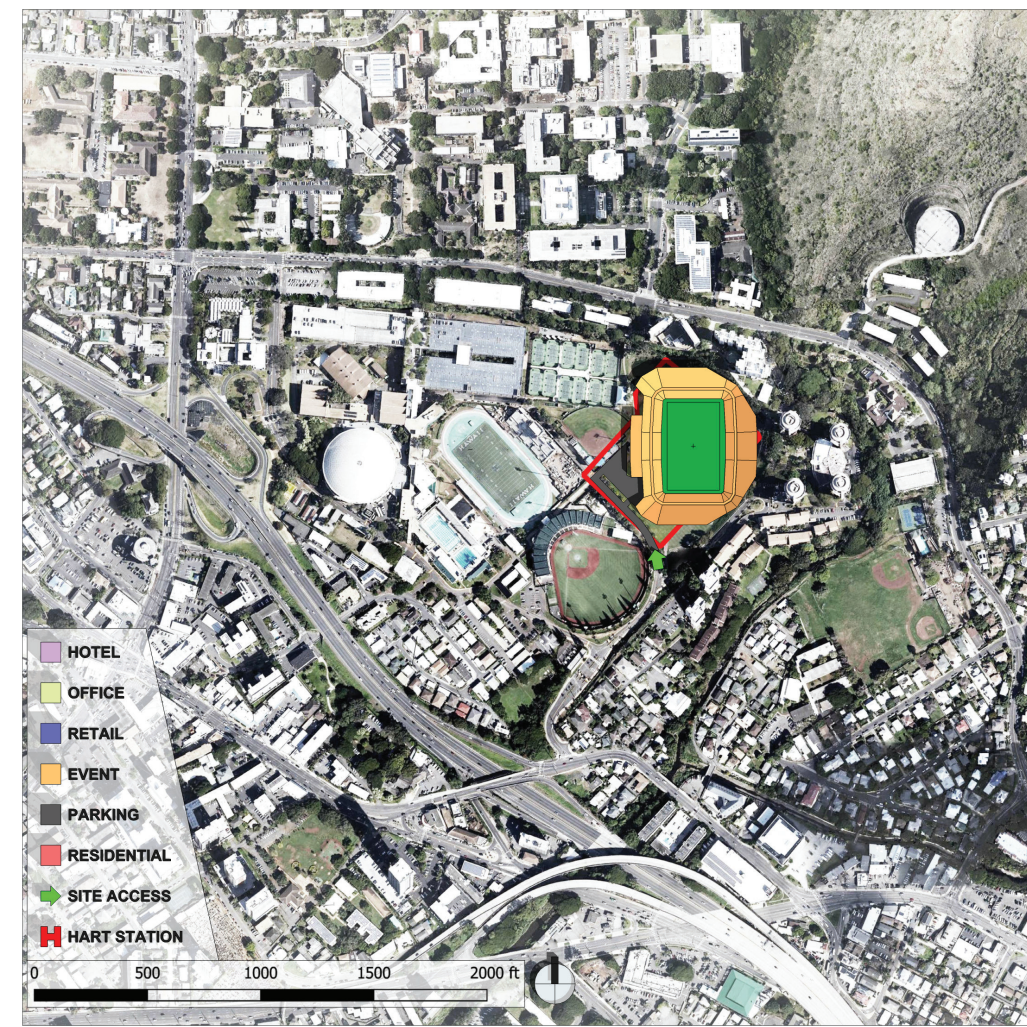
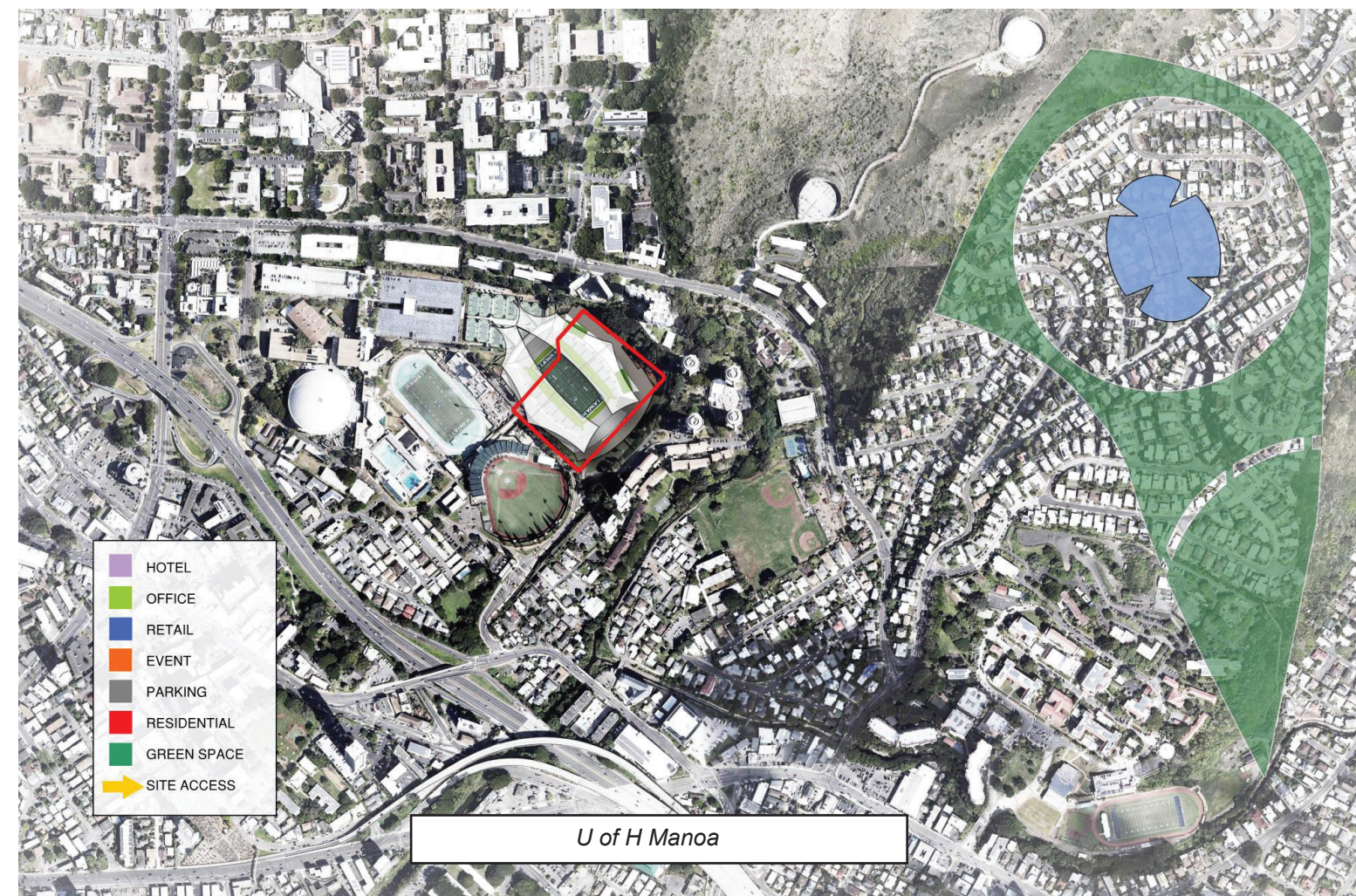


practice field with residential towers overlooking

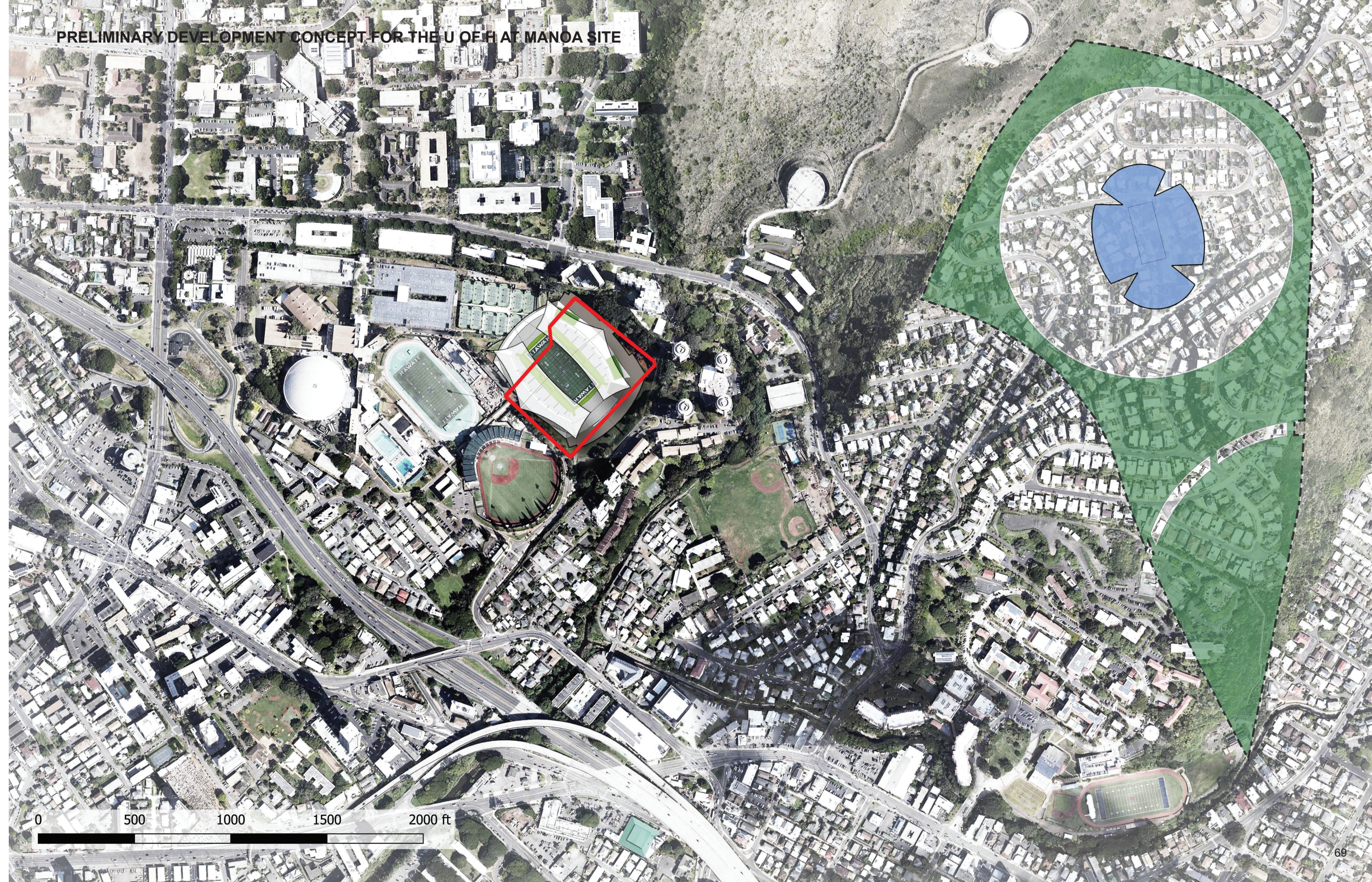




DEVELOPMENT CONCEPTS AT THE U OF H MANOA SITE



PRELIMINARY DEVELOPMENT CONCEPT FOR THE U OF H AT MANOA SITE





UNIVERSITY OF HAWAII AT MANOA SITE ANALYSIS

Site Analysis and Scoring:		University of Hawaii - Manoa			
Category	Criteria	Indicators	Notes	Score	Subtotal
Site, Infrastructure, and Environment	Total Acreage	Approximatley <b>7 acres</b> on existing practice fields		1 / 5	20 / 30
	HART Access	no pedestrian access to HART	2.3 miles to Ala Moana station	1 / 5	
	Proximity to Daniel K. Inouye International Airport	<b>14.7 miles</b> (14 minutes) to/from airport	Kalaeloa Airport not considered due to limited cargo handling facilities	2 / 3	
	Proximity to Emergency Services	<b>2.5 miles</b> to Fire Station 29 McCully-Moiliili; <b>4.9 miles</b> to Waikiki Police Substation; <b>3.9 miles</b> to Leahi Hospital		3 / 3	
	Proximity to Honolulu Harbor	<b>8.7 miles</b> (20 minutes) to/from harbor	Barber's Point Harbor not considered due to lack of container facilities	2 / 2	
	Proximity to Waikiki	<b>4.3 miles</b> (7 minutes) to/from Waikiki	87% (~28000) of hotel rooms on Oahu are in Waikiki	2 / 2	
	Ability to Accommodate Stadium Program	Reductions to program or demolition of existing facilities probably needed to make site viable		0 / 2	
	Avoids Flood/Tsunami Hazards	Outside Tsunami Evacuation Zones and 1% Annual Flood Risk Zones	Per NOAA Pacific TsunamiWarning Center and FEMA flood risk maps	2 / 2	
	Avoids Sea Level Rise Hazard	Not endangered by sea level rise	Per NOAA circa 2100 worst-case scenario projections (3.2ft)	2 / 2	
	Avoids Wetlands Impact	no designated wetlands		2 / 2	
	Suitability for Emergency Shelter	Outside flood/tsunami risk zones; no coastal exposure; good road access/marginal transit access; minimal room for additional facilities		2 / 1	
	Bus Access	<b>10 bus stops</b> within 1/4 mile radius of site		1 / 1	
Development Costs	Existing Zoning	<b>R-5 Residential District</b>	Not likely to be an impediment due to existing campus use	3 / 4	11 / 20
	P3 Potential or other Development Possibilities	No on-site capacity for ancillary development		0 / 4	
	Ceded Lands Encumbrance	Unknown		3 / 3	
	Infrastructure Costs	Ability to tie into campus facilities and utilities for infrastructure needs; nearby campus parking structures		3 / 3	
	Land Acquisition	<b>Owned by State of Hawaii</b>		2 / 2	
	Development Incentives	No state or federal development incentives		0 / 2	
	Complexity	Extremely tight site likely to complicate design and construction		0 / 2	
Community	Community Acceptance	Potential community pushback from relocation of existing practice fields to other parkland in area		5 / 10	16 / 30
	Positive Cultural Impact	Placement of stadium on campus could improve student attendance and enable new campus programming		7 / 10	
	Political Viability	Site has been supported by Governor Ige		4 / 10	
Economic Impact	Employment Demand in Vicinity	<b>7,074 unemployed persons</b> in 10-min. drive distance (4.0% of pop.)	Minimal opportunity for ancillary development drastically limits potential economic impacts	3 / 6	10 / 20
	Households Experiencing Poverty in Vicinity	<b>14,669 households in poverty</b> in 10-min. drive distance (12.0% of total)		3 / 6	
	Population in Proximity	<b>325,042 persons</b> in 120,221 households in 10-min. drive distance		3 / 6	
	Per-Capita Income in Vicinity	<b>\$36,118</b>		1 / 2	
Intuitive Site Qualities	Unique Site Improvement Opportunities - positive	Potential new campus amenity		2 / 5	-2
	Anticipated Site Difficulties - negative	Site is prohibitively small and difficult to fit program on - functionality of stadium may be compromised		-4 / -5	
Total Score:				55 / 100	



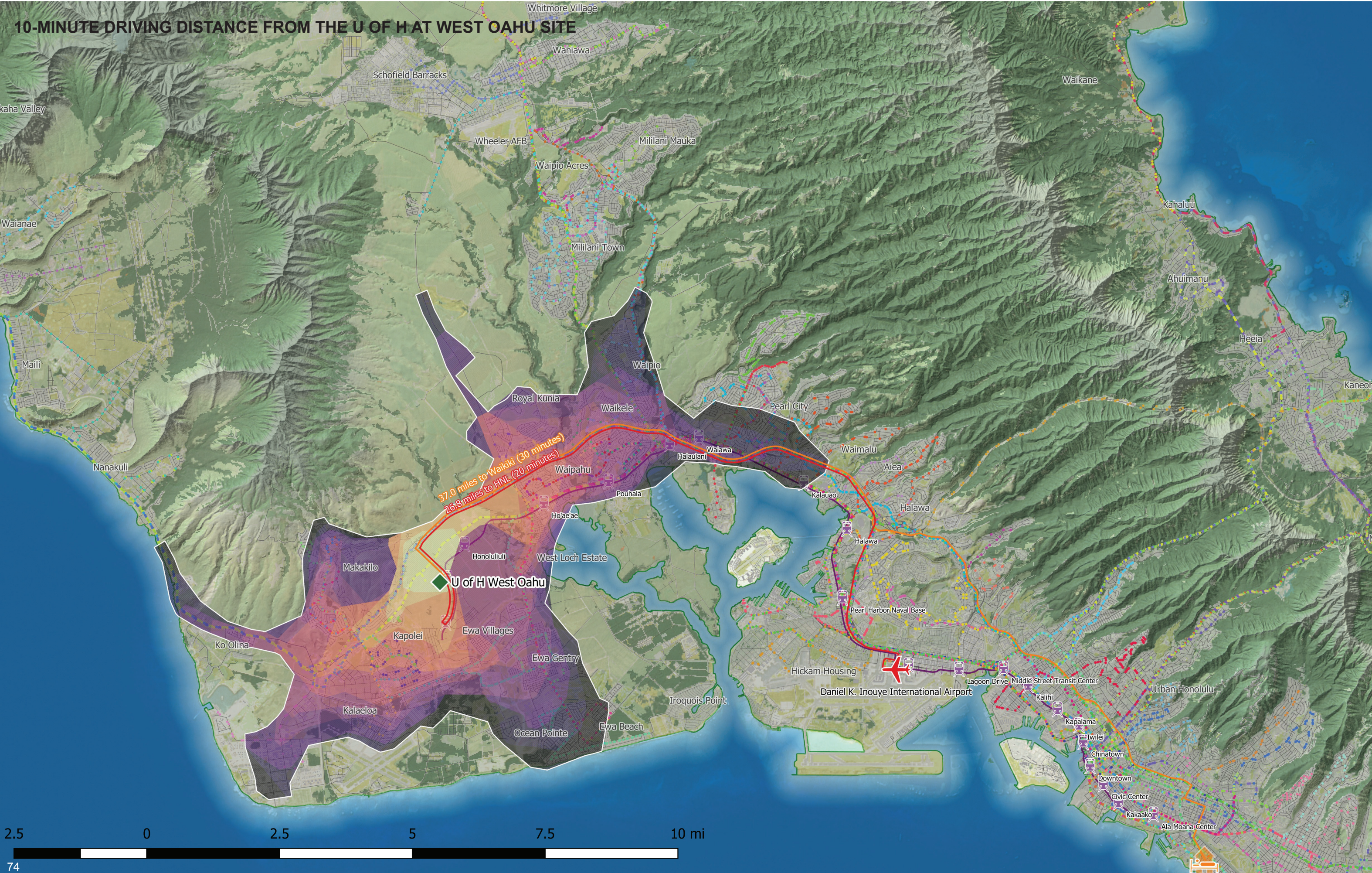
**University of Hawaii at West Oahu**

The West Oahu campus is the other site mentioned by Governor Ige, and presents almost the exact opposite pros and cons of the Manoa campus. Situated on farmland between H1 and Kapolei, the West Oahu site offers the most developable acreage of any of the options studied at 187 acres. It is also the only site with adjacency to multiple HART stops, with the Kualaka'i end station adjoining its southern tip and the Keone'ae station near its northern extent. Bus connections are weaker, with only a single bus line serving the area. Despite good transit connections, however, the West Oahu location is somewhat remote to urban Honolulu, which is reflected in long commute times from Daniel K. Inouye International and hotels in Waikiki, as well as a middling 231,000 residents within 10 minutes of the site, averaging \$28,900 in annual income per capita.

Emergency services are reasonably close to the site, with nominal drive times to police, fire, and medical services well under 10 minutes, and existing zoning is amenable to mixed-use development.



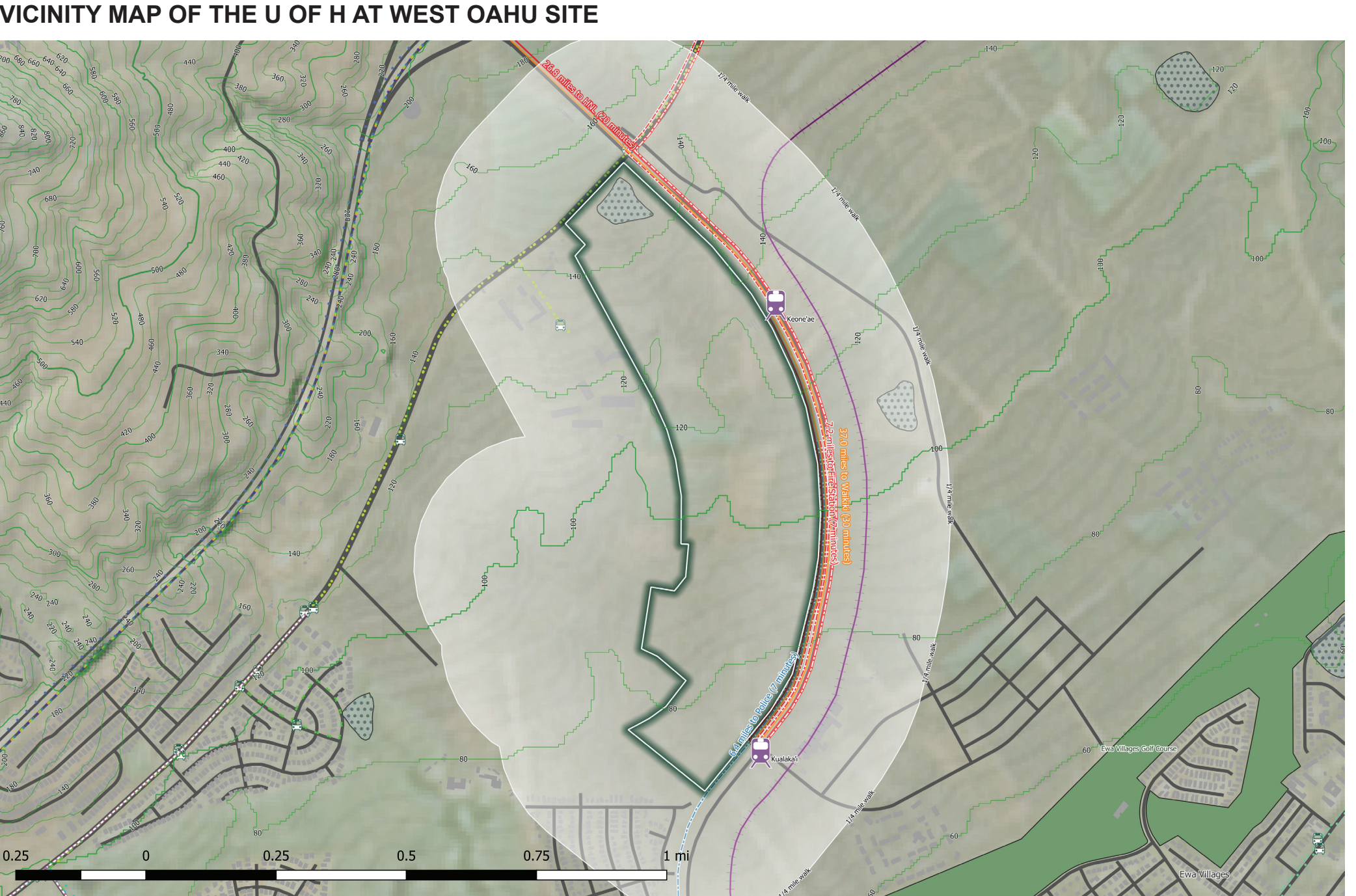
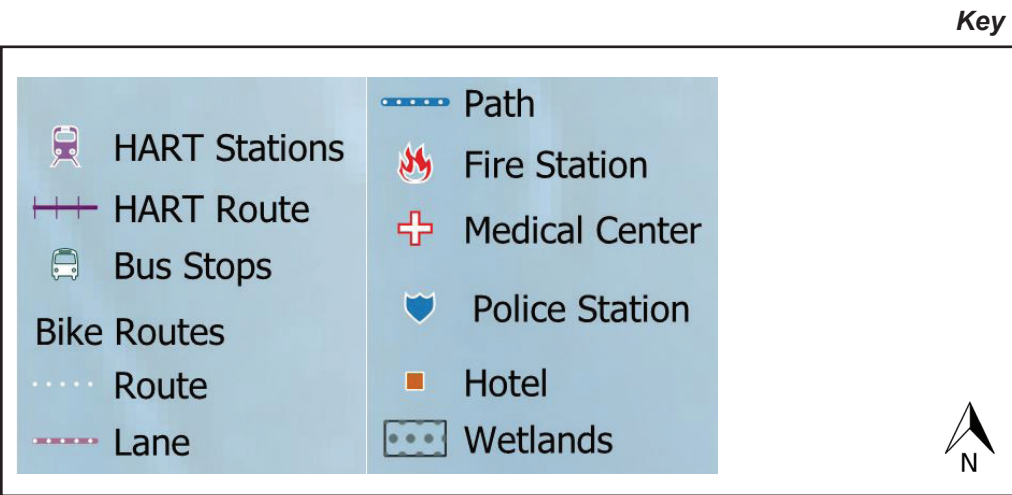




Total Site Size:	187 acres
Total Tree Cover:	1.5 acres (0.8%)
Designated Wetlands:	3.3 acres (1.8%)
Site Slope	
• Mean:	1.8-deg
• Max:	15.1-deg
• Std Dev:	2.4-deg
Bus Stops Nearby:	3
HART Stops Nearby:	2

The “10-Minute Driving Map” represents an isochronal diagram highlighting a distance around each one of the potential sites. This isochrones map show the distance that one could travel to or from the site in a 10-minute period of time, with no traffic. This catchment area is used to collect all of the data points and rubric information included in the site analysis matrixes. This is shown consistent for all the sites.

The “Vicinity Map” shows the bounds of an area that is a 15-minute (1/4-mile) walk from the site perimeter. This area provides additional information about the facilities and infrastructure immediately adjacent to the site. This is shown consistent for all the sites.





# University of Hawaii at West Oahu Site

## General Description

The site accommodates the current and future needs of the University’s expanding student population serving the higher education needs of the surrounding population centers. The site comprises a large and predominantly physically unencumbered land area. The campus is approximately 12.5 miles from Aloha Stadium in Halawa.

Pros	Cons
<ul style="list-style-type: none"><li>• Ample site area comprising flat, easily developable land, affording multiple site locations for a new stadium.</li><li>• Well connected to the freeway (H1).</li><li>• Two HART stations serve the site connecting the location with other destinations.</li><li>• Population centers nearby provide a potential ample labor pool.</li><li>• Ample site area for car parking and additional/ancillary development potential.</li><li>• Site has some, telegenic/aesthetic quality, including mountain views to the northwest and probable distant water views to the south from elevated positions within a new stadium.</li></ul>	<ul style="list-style-type: none"><li>• The University’s master plan doesn’t include a site for a new stadium.</li><li>• Distant from U of H (Manoa) football fans.</li></ul>

## Summary Observation(s)

Good potential for a new stadium but may lack necessary endorsement from U of H West Oahu decision-makers and other influencers.



U of H West Oahu northern HART stop



elevated HART line



detail of column at HART station



end of the line, south of U of H West Oahu southern HART stop



Kualakai Pkwy and elevated HART line adjacent to site

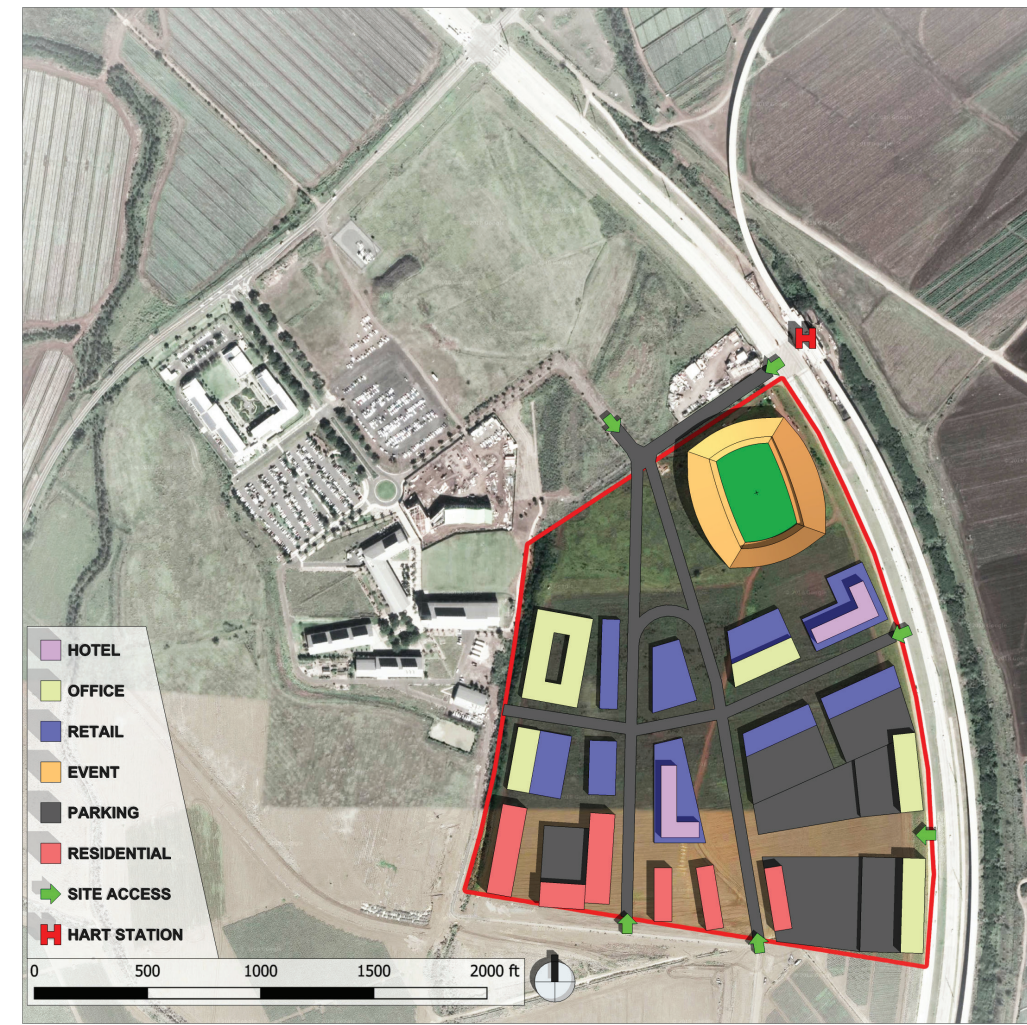
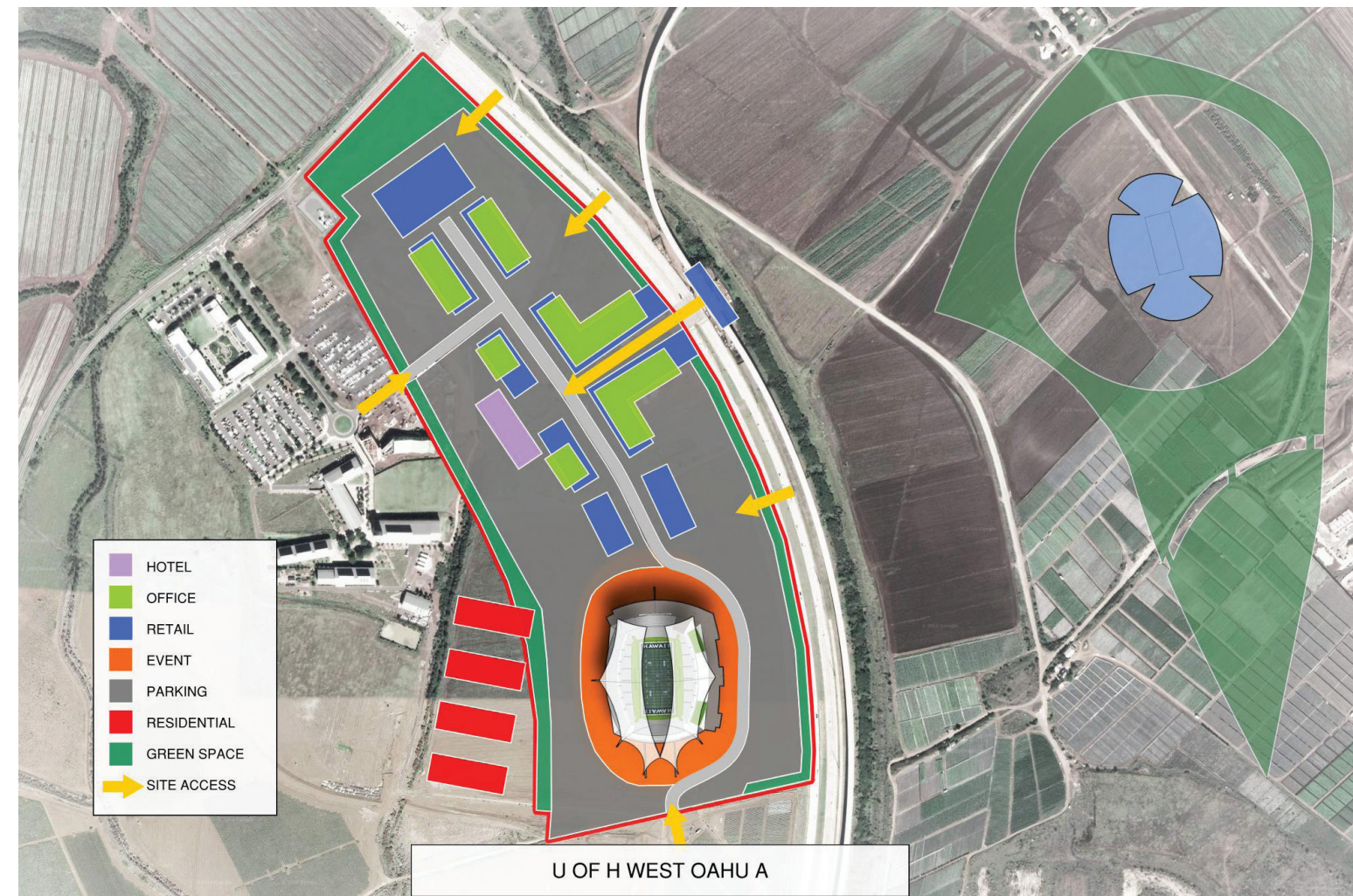


Kualakai Pkwy and elevated HART line adjacent to site

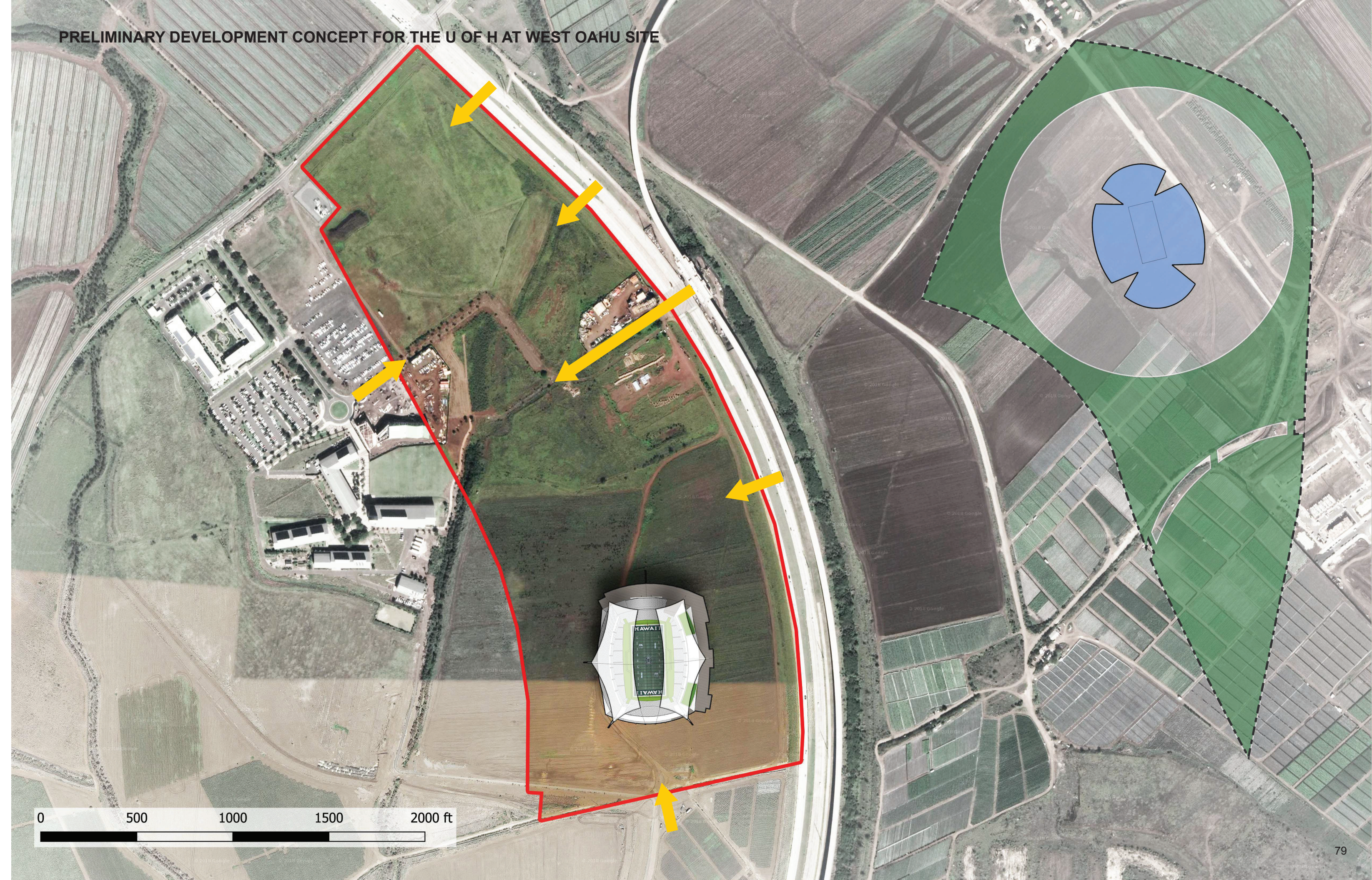




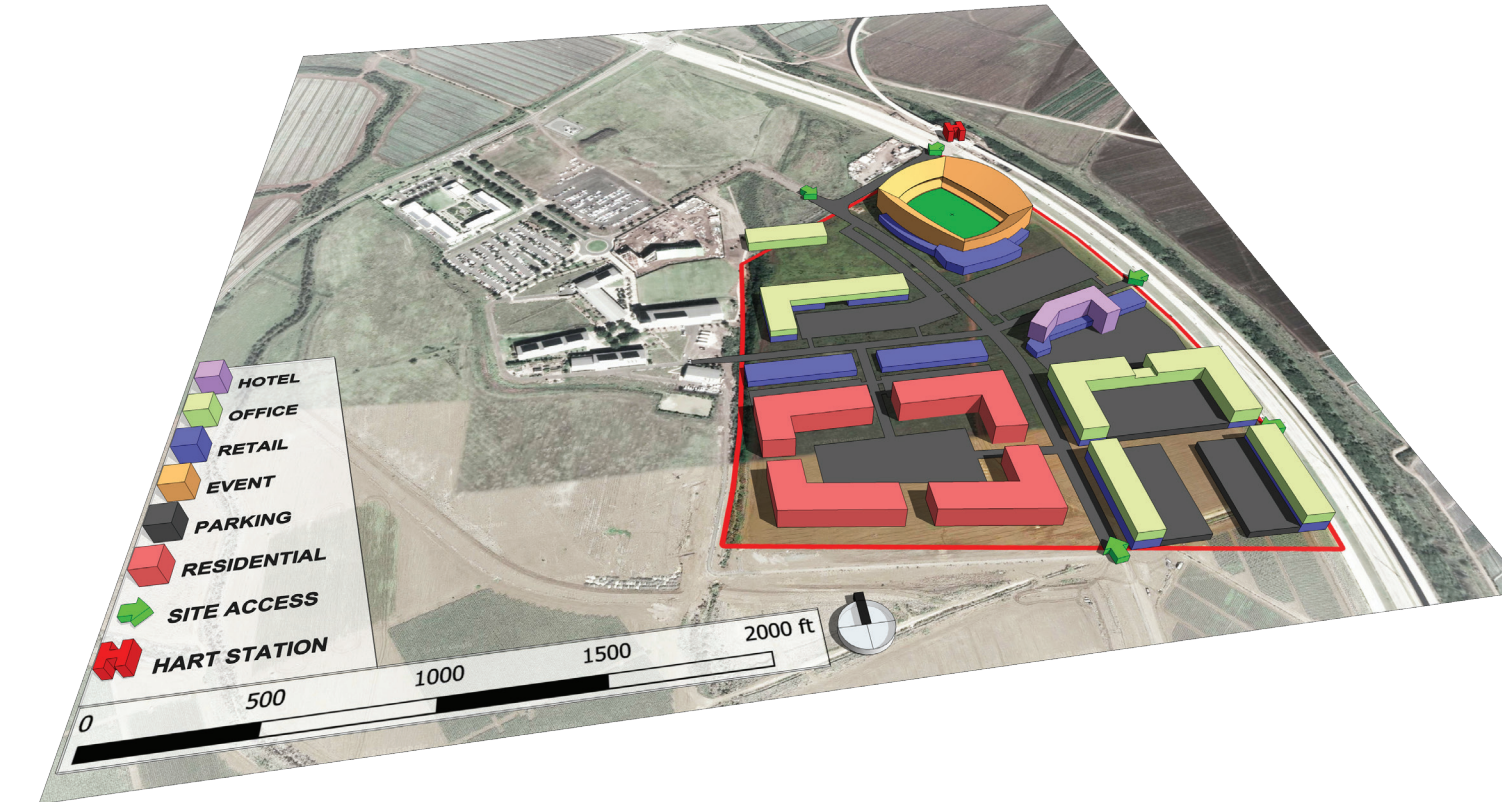
DEVELOPMENT CONCEPTS AT THE U OF H WEST OAHU SITE



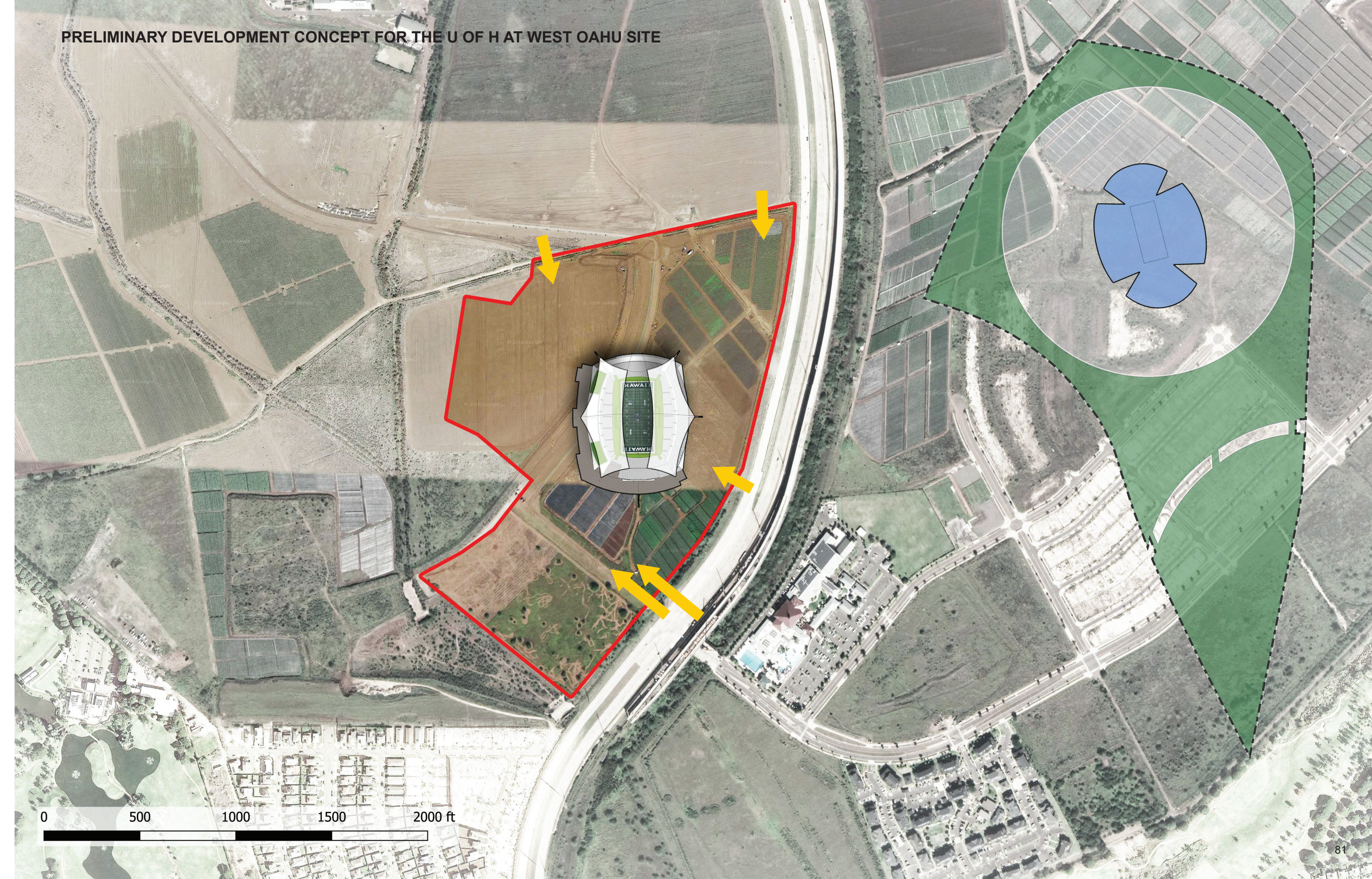
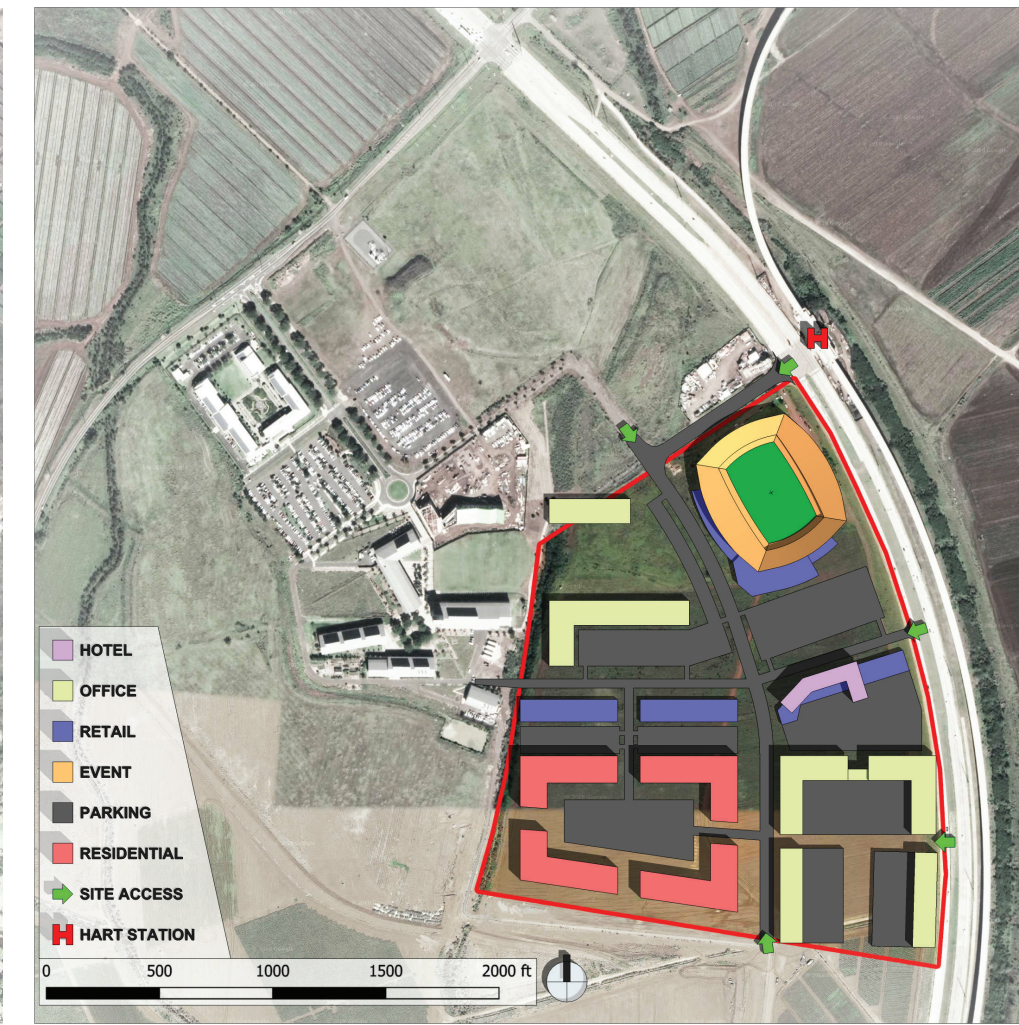
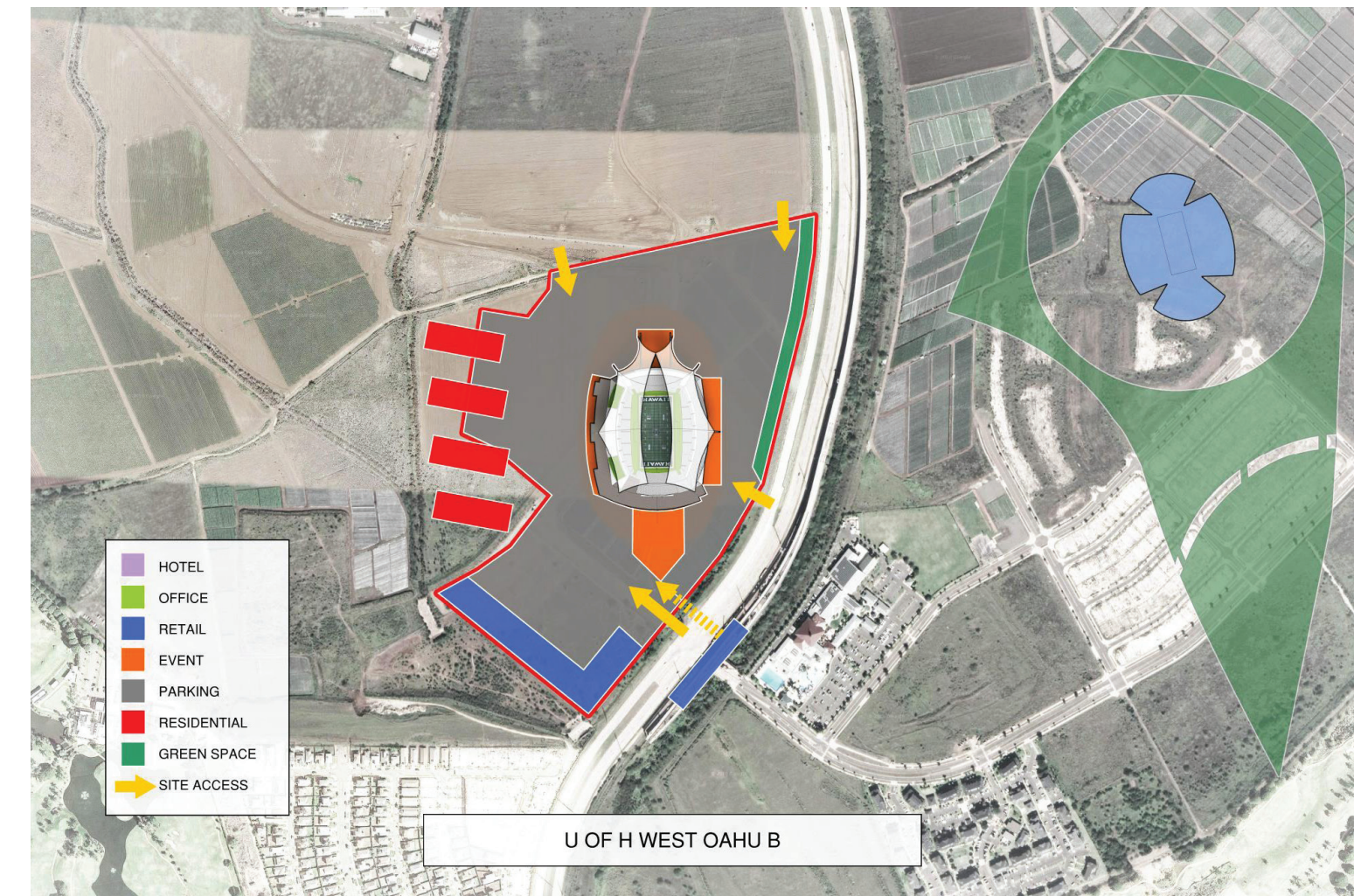
PRELIMINARY DEVELOPMENT CONCEPT FOR THE U OF H AT WEST OAHU SITE



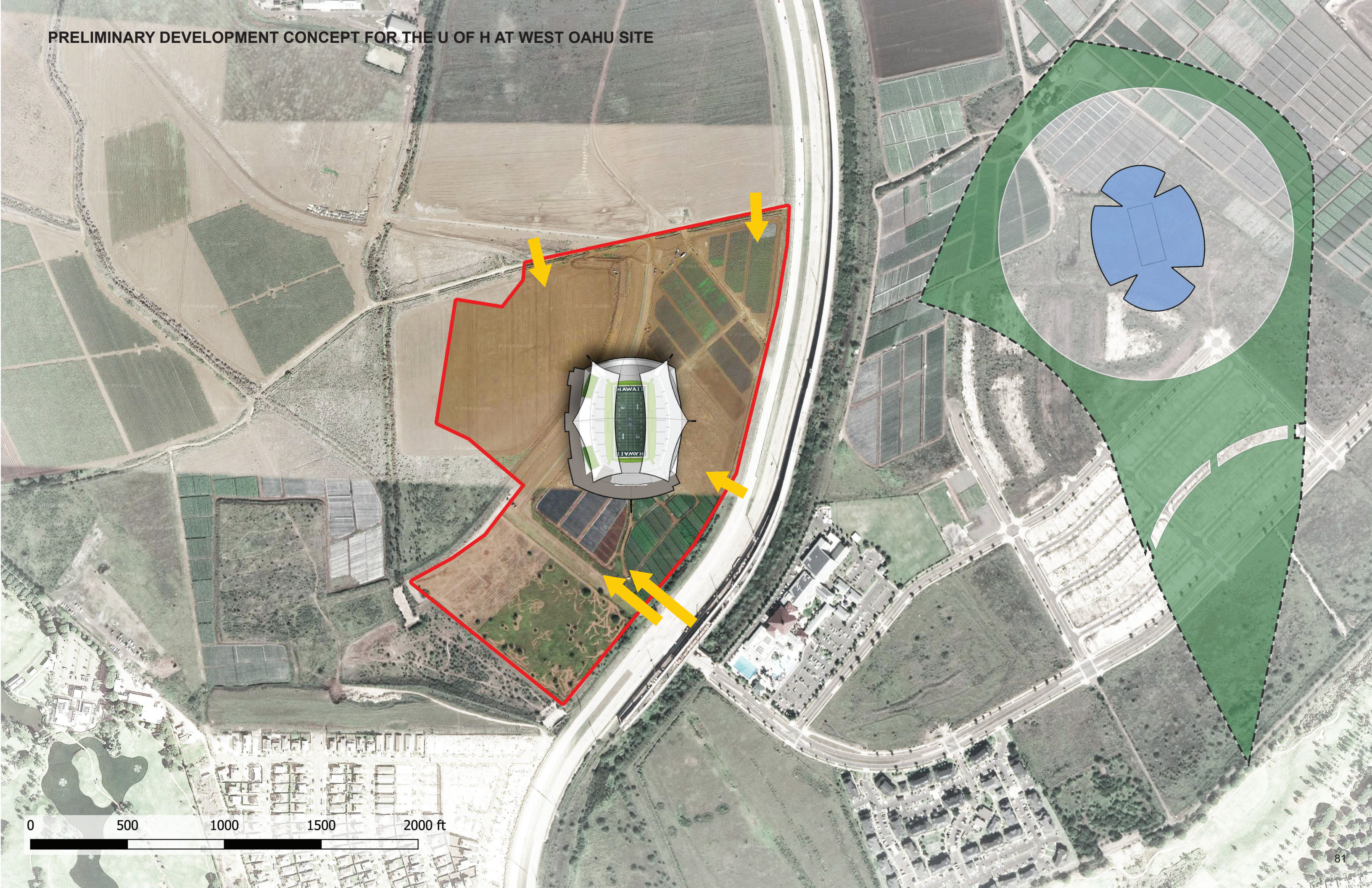




DEVELOPMENT CONCEPTS AT THE U OF H WEST OAHU SITE



PRELIMINARY DEVELOPMENT CONCEPT FOR THE U OF H AT WEST OAHU SITE





UNIVERSITY OF HAWAII AT WEST OAHU SITE ANALYSIS

Site Analysis and Scoring:		University of Hawaii - West Oahu			
Category	Criteria	Indicators	Notes	Score	Subtotal
Site, Infrastructure, and Environment	Total Acreage	Up to <b>187 acres</b> along Kualakai Parkway (approximately <b>83 acres</b> used for site plan study)	<i>Need to coordinate development with existing West Oahu campus master plan</i>	5 / 5	21 / 30
	HART Access	<b>2 HART stations</b> along Kualakai Parkway		5 / 5	
	Proximity to Daniel K. Inouye International Airport	<b>26.8 miles</b> (20 minutes) to/from airport	<i>Kalaeloa Airport not considered due to limited cargo handling facilities</i>	1 / 3	
	Proximity to Emergency Services	<b>7.2 miles</b> to Fire Station 12 Waipahu; <b>6.4 miles</b> to Kaploe Police Station; <b>7.1 miles</b> to The Queen's Medical Center - West Oahu		0 / 3	
	Proximity to Honolulu Harbor	<b>19.3 miles</b> (29 minutes) to/from harbor	<i>Barber's Point Harbor not considered due to lack of container facilities</i>	1 / 2	
	Proximity to Waikiki	<b>37.0 miles</b> (30 minutes) to/from Waikiki	<i>87% (~28000) of hotel rooms on Oahu are in Waikiki</i>	0 / 2	
	Ability to Accommodate Stadium Program			2 / 2	
	Avoids Flood/Tsunami Hazards	Outside Tsunami Evacuation Zones and 1% Annual Flood Risk Zones	<i>Per NOAA Pacific Tsunami Warning Center and FEMA flood risk maps</i>	2 / 2	
	Avoids Sea Level Rise Hazard	Not endangered by sea level rise	<i>Per NOAA circa 2100 worst-case scenario projections (3.2ft)</i>	2 / 2	
	Avoids Wetlands Impact	<b>3.3 acres</b> designated wetlands (1.8% of total) at north end of site		1 / 2	
	Suitability for Emergency Shelter	Outside flood/tsunami risk zones; no coastal exposure; good road and transit access		1 / 1	
	Bus Access	<b>3 bus stops</b> within 1/4 mile radius of site		1 / 1	
Development Costs	Existing Zoning	<b>159 acres BMX-3 Community Business Mixed Use District; 28 acres R-3.5 Residential District</b>	<i>Lack of adjacent residential areas could limit commercial appeal</i>	4 / 4	16 / 20
	P3 Potential or other Development Possibilities	Plentiful land to support ancillary commercial development and/or P3 development of additional facilities for West Oahu campus		4 / 4	
	Ceded Lands Encumbrance	Unknown		2 / 3	
	Infrastructure Costs	Some existing infrastructure in place to support West Oahu campus; modest surface parking lots on campus to west of site		2 / 3	
	Land Acquisition	<b>Owned by State of Hawaii</b>		2 / 2	
	Development Incentives	No state or federal development incentives		0 / 2	
	Complexity	Greenfield site with good access		2 / 2	
Community	Community Acceptance	Chance to build amenities complementing emerging Kapolei community south of site		6 / 10	16 / 30
	Positive Cultural Impact	Brings stadium to campus, but places it relatively remote from most students and fans; no sports focus on West Oahu campus		5 / 10	
	Political Viability			5 / 10	
Economic Impact	Employment Demand in Vicinity	<b>6,177 unemployed persons</b> in 10-min. drive distance (4.9% of pop.)	<i>Less opportunity to improve fhusehold incomes than with other sites</i>	4 / 6	14 / 20
	Households Experiencing Poverty in Vicinity	<b>3,614 households in poverty</b> in 10-min. drive distance (5.8% of total)		3 / 6	
	Population in Proximity	<b>231,132 persons</b> in 62,617 households in 10-min. drive distance		5 / 6	
	Per-Capita Income in Vicinity	<b>\$28,868</b>		2 / 2	
Intuitive Site Qualities	Unique Site Improvement Opportunities - positive	P3 development could jumpstart new opportunities for U of H - West Oahu campus		3 / 5	2
	Anticipated Site Difficulties - negative			-1 / -5	
Total Score:					69 / 100



**Ala Wai Golf Course**

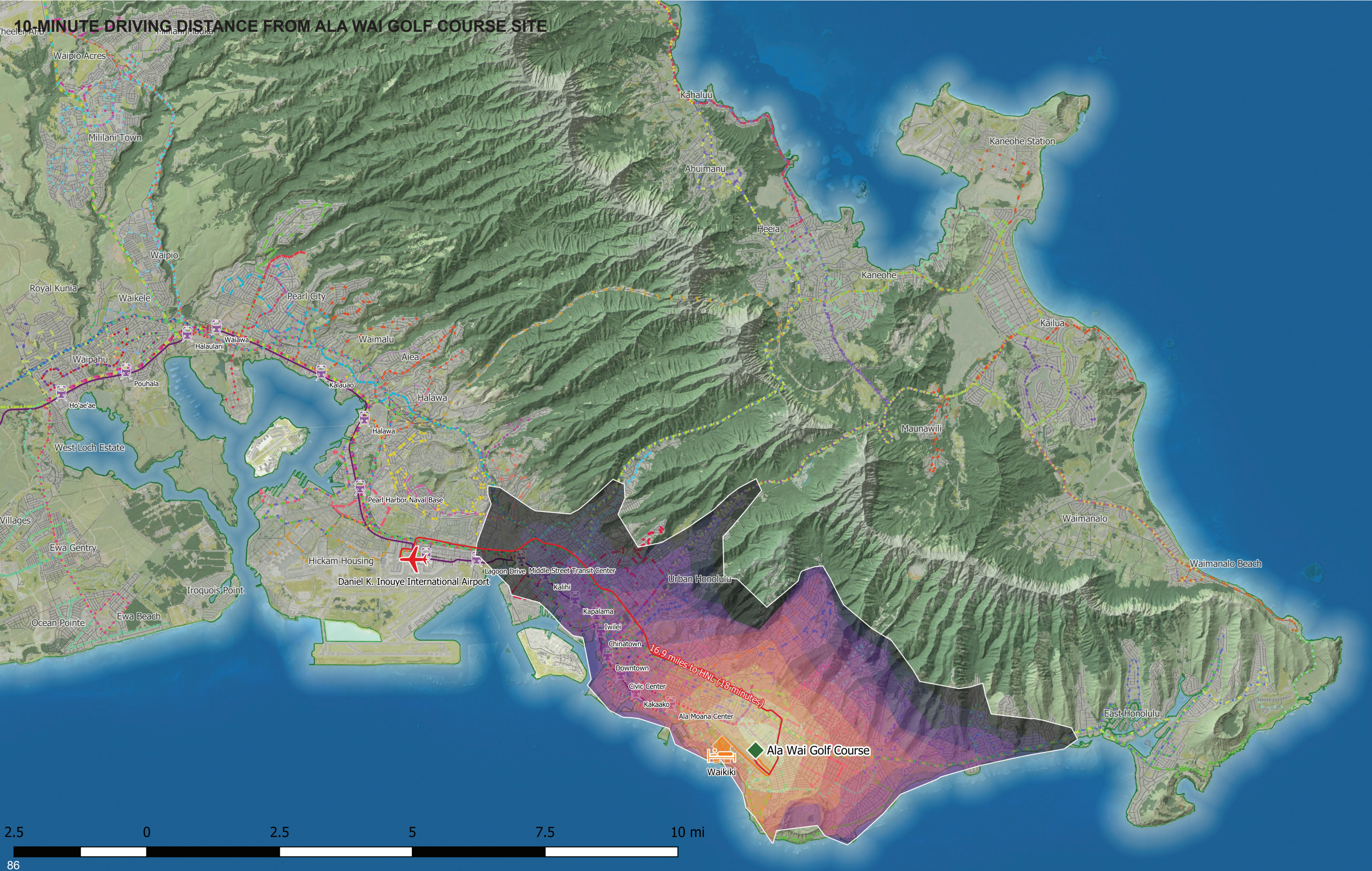
As an alternative to the Manoa campus site, the team studied the existing Ala Wai municipal golf course, just north of Waikiki, as a potential development site. While the course is currently very heavily used, it is considered a somewhat dated amenity. The driving range has been recently replaced with a TopGolf franchise; as such, this area was removed from the area to be redeveloped. Nevertheless, the remaining 128 acres represents the second-largest potential site under consideration, and its proximity to Waikiki (directly across Ala Wai Canal) means that it can rely on the hotels and amenities of the district to support any development (though road and/or pedestrian connections across the canal would likely have to be built to fully connect the areas). Additionally, emergency services are close by, only 3-6 minutes and not more than 3 miles away. Bus connections are abundant, with 48 stops in a quarter mile radius, but the closest HART station will be Ala Moana Center, which at 1.7 miles distant is well out of pedestrian range. While separated from the Manoa campus by H1, the site is close enough to campus to be feasibly served by event-day shuttles.

Demographically, the site is one of the most amenable, with 326,000 residents in a 10-minute driving range, and an average per-capita income of about \$36,100 per year. The central placement of the site also means that it could bring job opportunities closest to the largest number of unemployed persons and households in poverty of any site.

The site is currently owned by the state, though currently zoned P-2 General Preservation District. Given the popularity of the existing golf course, rezoning for new development may be contentious. No geographically-defined state or federal incentives are in place for the site. Significant portions of the site are covered by flood risk zones, and due to the proximity of Ala Wai Canal, a portion of the site is covered by a Tsunami Evacuation zone. The Extreme Tsunami Evacuation Zone covers the entirety of the site.



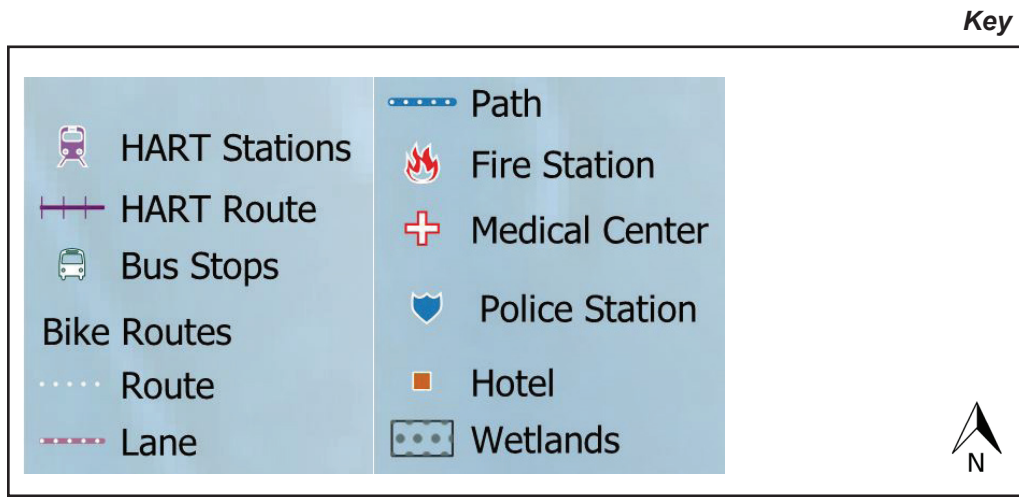




Total Site Size:	128 acres
Total Tree Cover:	1.3 acres (1.0%)
Designated Wetlands:	1.6 acres (1.3%)
Site Slope	
• Mean:	0.5-deg
• Max:	5.6-deg
• Std Dev:	1.5-deg
Bus Stops Nearby:	48
HART Stops Nearby:	0

The “10-Minute Driving Map” represents an isochronal diagram highlighting a distance around each one of the potential sites. This isochrones map show the distance that one could travel to or from the site in a 10-minute period of time, with no traffic. This catchment area is used to collect all of the data points and rubric information included in the site analysis matrixes. This is shown consistent for all the sites.

The “Vicinity Map” shows the bounds of an area that is a 15-minute (1/4-mile) walk from the site perimeter. This area provides additional information about the facilities and infrastructure immediately adjacent to the site. This is shown consistent for all the sites.



### VICINITY MAP OF ALA WAI GOLF COURSE SITE





# Ala Wai Golf Course Site

## General Description

The Ala Wai Golf Course is located immediately north-east of Waikiki, across the Ala Wai Canal. The site has a significant amount of open land that is used by members and recreational golfers. It is several blocks from the H1 highway interchange at King Street.

Pros	Cons
<ul style="list-style-type: none"><li>Ala Wai’s close proximity to Waikiki, an established center of tourism and visitors to the potential stadium development.</li><li>Close proximity to downtown Honolulu, the Blaisdell Center, Ala Moana Center, and the convention center allows opportunity for synergy between businesses and development.</li><li>Many visitors could walk from the hotels in the area, minimizing parking requirements.</li><li>Fairly close to the University of Hawaii, Manoa Campus, less than a mile for student population to attend Rainbow Warrior games or other events.</li><li>Siting of a stadium at this location would create stunning views to Diamond Head. Additionally, aerial views of the stadium in this location would add to the already iconic images of Honolulu.</li><li>New development could work with the already planned Top Golf facility.</li><li>Enough land exists that green space could be preserved in this area promoting continued use by the general public while allowing for ancillary development.</li></ul>	<ul style="list-style-type: none"><li>Nearest HART station is 1.7 miles away at Ala Moana Center.</li><li>Density of Waikiki already creates traffic and some overcrowding issues.</li><li>Would likely run into opposition from existing golf course members and other stakeholders, as the golf course is a well-known course and has historically been one of the busiest golf courses on the island.</li></ul>

## Summary Observation(s)

The undeveloped land (large acreage controlled by one owner) at such close proximity to Waikiki sets up a unique opportunity to significantly increase the amount of tourist development in one of the most desirable locations in the world. Not only would a stadium venue fit easily on this site, but a large amount of development (hotels, retail, etc.) complimenting and adding to Waikiki would result as well.



view of Diamond Head from Ala Wai



Ala Wai Parking lot, looking towards Waikiki and Downtown



Ala Wai Clubhouse



Ala Wai Driving Range



canal between Ala Wai and Waikiki



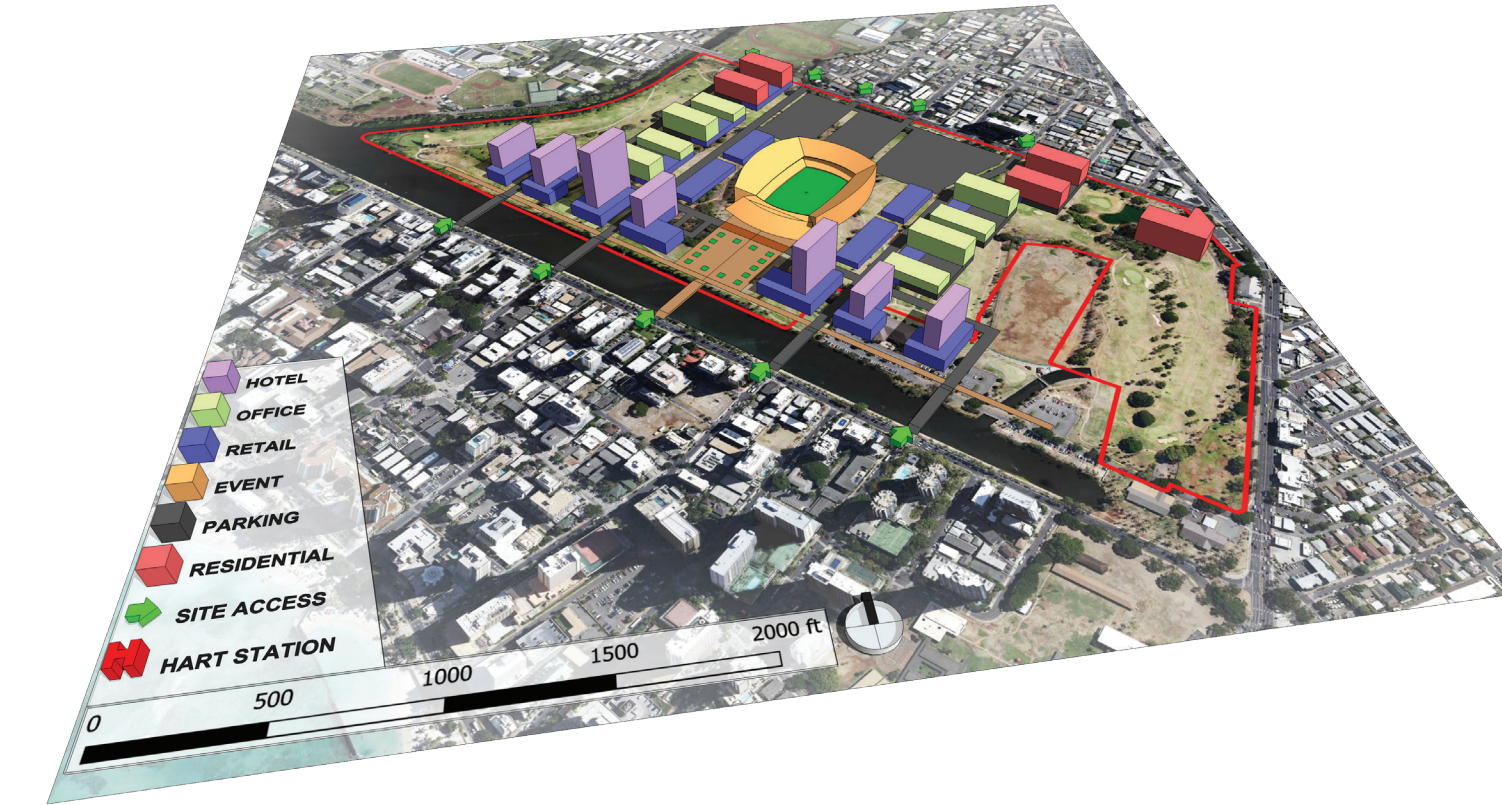
Ala Wai Golf Course



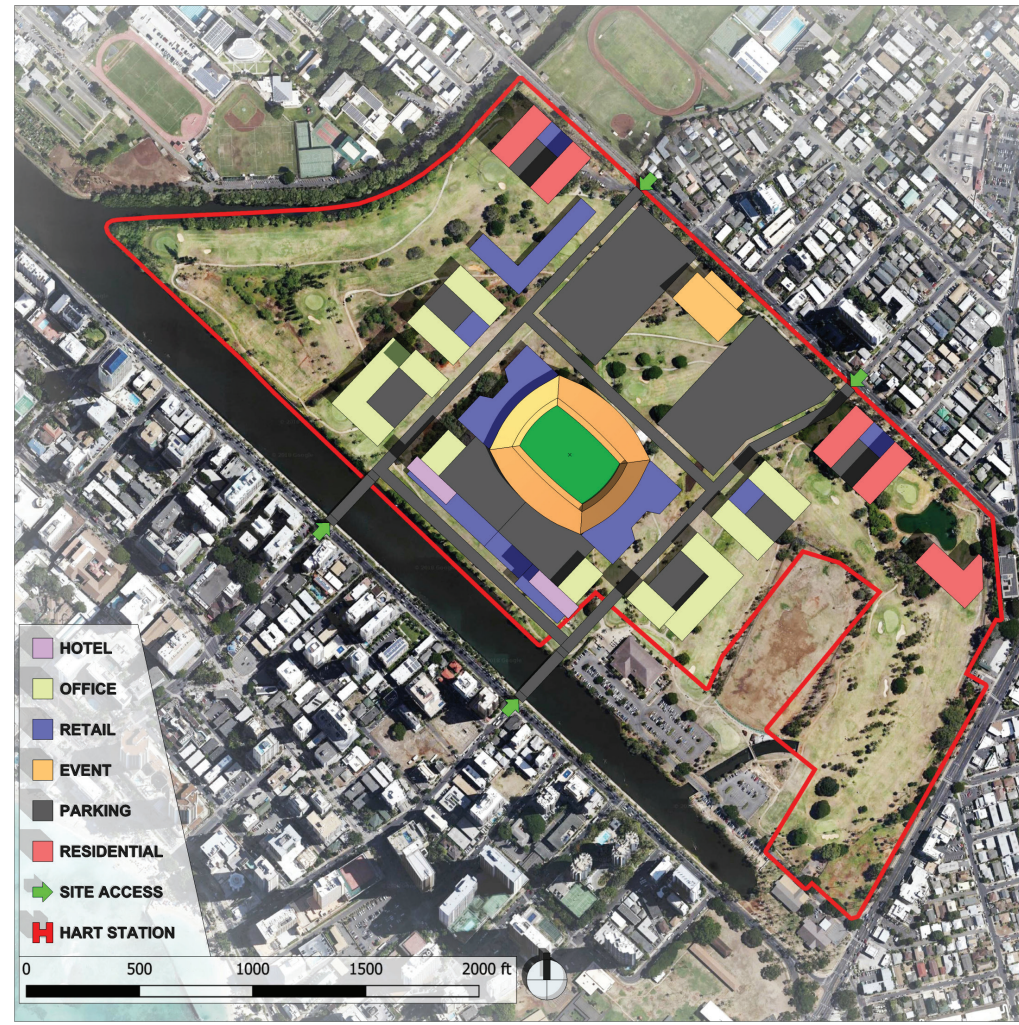
PRELIMINARY DEVELOPMENT CONCEPT FOR ALA WAI GOLF COURSE SITE



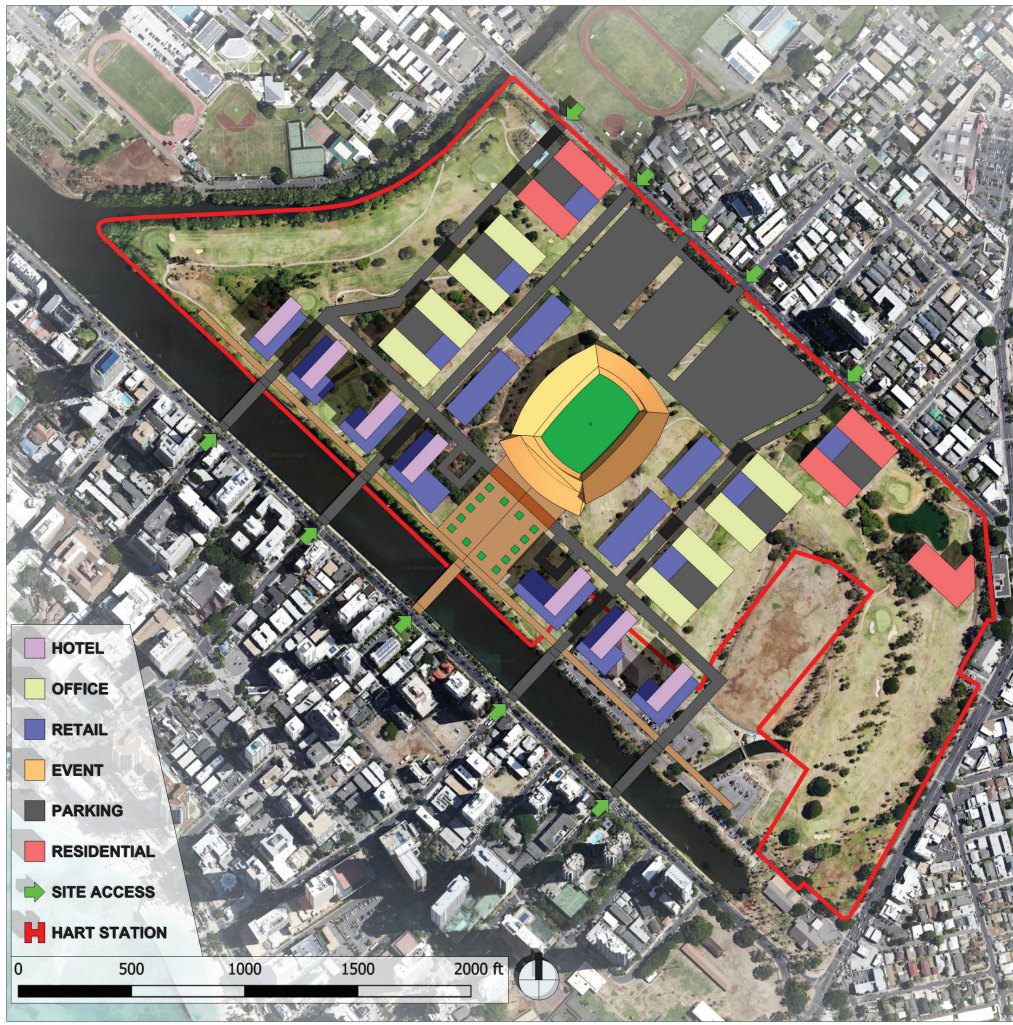
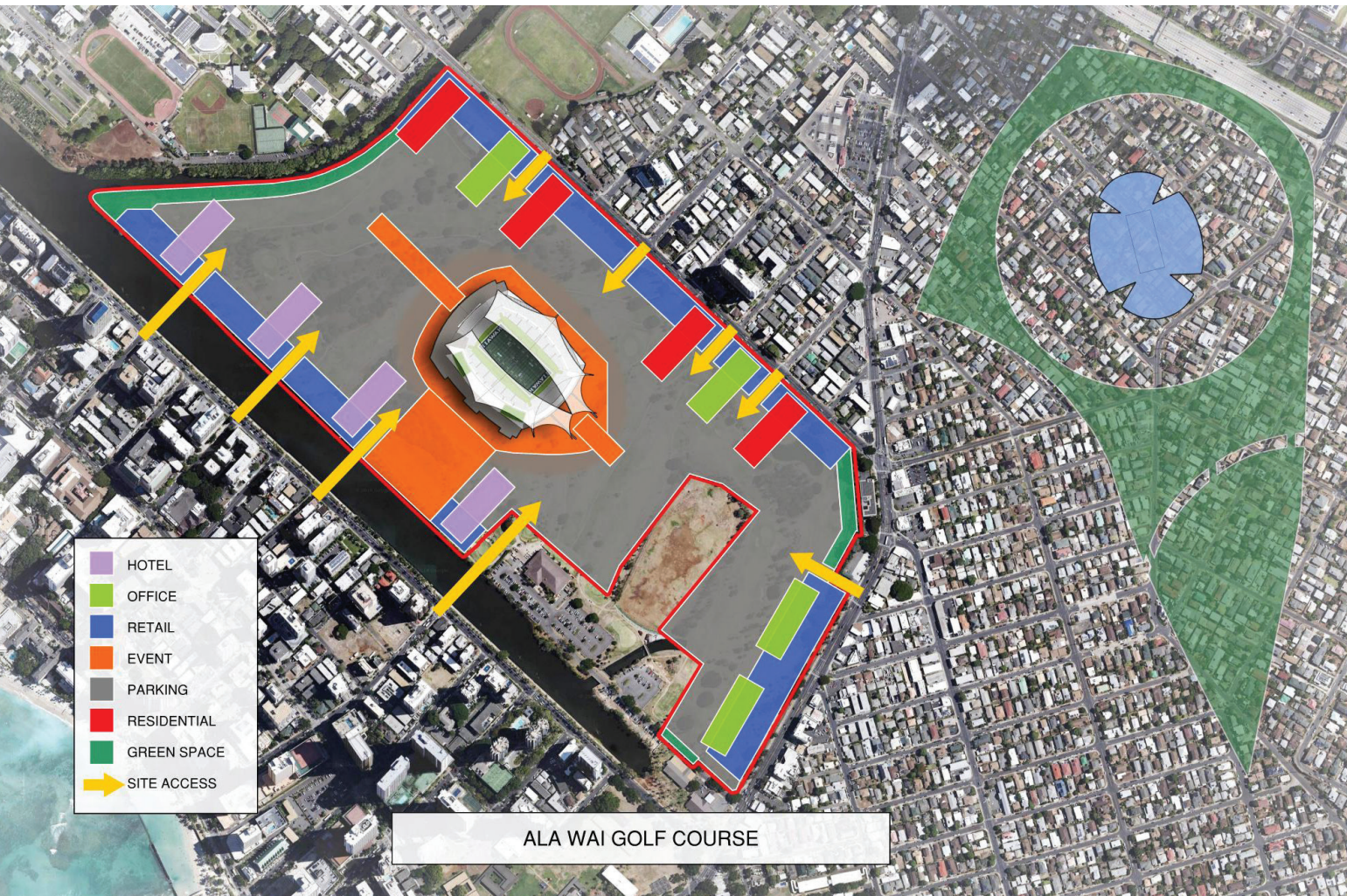




DEVELOPMENT CONCEPTS AT THE ALA WAI GOLF COURSE SITE



DEVELOPMENT CONCEPTS AT THE ALA WAI GOLF COURSE SITE





ALA WAI GOLF COURSE SITE ANALYSIS

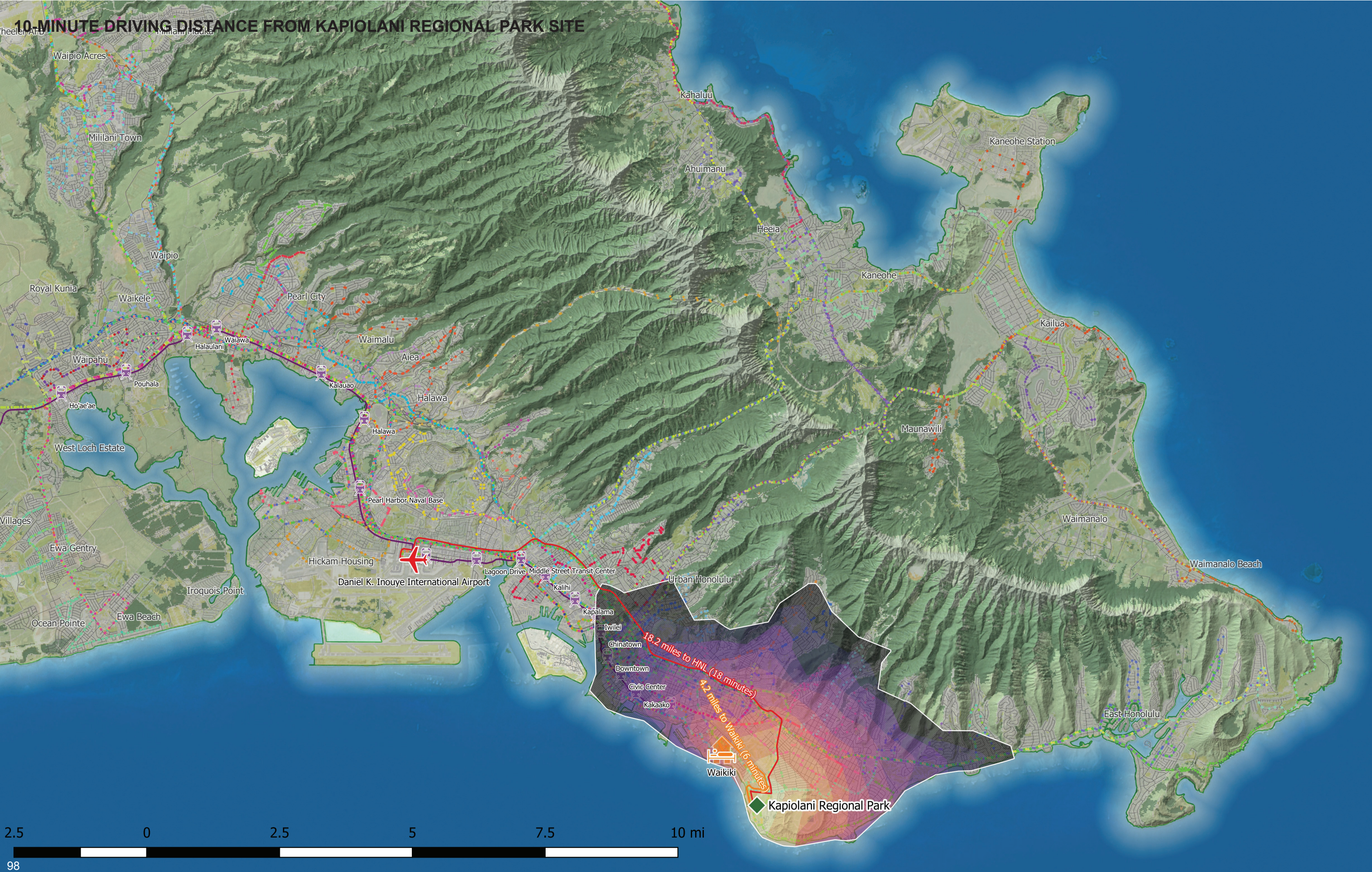
Site Analysis and Scoring:		Ala Wai Golf Course			
Category	Criteria	Indicators	Notes	Score	Subtotal
Site, Infrastructure, and Environment	Total Acreage	128 acres on existing Ala Wai Golf Course property	Excludes driving range/TopGolf facility	5 / 5	19 / 30
	HART Access	no pedestrian HART access	1.7 miles to Ala Moana Center Station	1 / 5	
	Proximity to Daniel K. Inouye International Airport	16.9 miles (18 minutes) to/from airport	Kalaeloa Airport not considered due to limited cargo handling facilities	2 / 3	
	Proximity to Emergency Services	0.8 miles to Fire Station 07 Waikiki; 3.1 miles to Waikiki Police Substation; 2.5 miles to Leahi Hospital		3 / 3	
	Proximity to Honolulu Harbor	9.9 miles (22 minutes) to/from harbor	Barber's Point Harbor not considered due to lack of container facilities	2 / 2	
	Proximity to Waikiki	3.1 miles (6 minutes) to/from Waikiki	Could be incorporated into Waikiki area with bridges over canal	2 / 2	
	Ability to Accommodate Stadium Program			2 / 2	
	Avoids Flood/Tsunami Hazards	Within flood zone AE (1% annual flood risk); 100% of site covered by Tsunami/Extreme Tsunami Evacuation Zone	Manoa Stream floodway zone; 500' from Ala Wai Canal in Tsunami Evac Zone	0 / 2	
	Avoids Sea Level Rise Hazard	Approximately 30% of site along Ala Wai Canal directly threatened by sea level rise	Per NOAA circa 2100 worst-case scenario projections (3.2ft)	0 / 2	
	Avoids Wetlands Impact	1.6 acres designated wetlands (1.3% of total) along Ala Wai Canal		1 / 2	
	Suitability for Emergency Shelter	Good road access; Site at risk in flooding or tsunami scenario		0 / 1	
	Bus Access	48 bus stops within 1/4 mile radius of site		1 / 1	
Development Costs	Existing Zoning	P-2 General Preservation District	Conversion from existing use could be a challenge	1 / 4	11 / 20
	P3 Potential or other Development Possibilities	Large site within urban Honolulu, with direct adjacency to Waikiki tourist areas		4 / 4	
	Ceded Lands Encumbrance	Unknown		2 / 3	
	Infrastructure Costs	Minimal existing public parking and no major services currently on site		1 / 3	
	Land Acquisition	Owned by State of Hawaii	Course operated by Honolulu Dept. of Enterprise Services	2 / 2	
	Development Incentives	No state or federal development incentives		0 / 2	
	Complexity	Developing site responsibly would require interventions to protect against flooding, tsunami risk, and sea level rise		1 / 2	
Community	Community Acceptance	Existing Ala Wai golf course is an extremely popular public amenity		3 / 10	13 / 30
	Positive Cultural Impact			8 / 10	
	Political Viability			2 / 10	
Economic Impact	Employment Demand in Vicinity	7,044 unemployed persons in 10-min. drive distance (4.0% of pop.)	Site presents opportunity to do "the most good for the most people" in terms of offering employment to disadvantaged Hawaiians	6 / 6	17 / 20
	Households Experiencing Poverty in Vicinity	14,669 households in poverty in 10-min. drive distance (12.2% of total)		5 / 6	
	Population in Proximity	326,174 persons in 120,565 households in 10-min. drive distance		6 / 6	
	Per-Capita Income in Vicinity	\$36,114		0 / 2	
Intuitive Site Qualities	Unique Site Improvement Opportunities - positive			4 / 5	3
	Anticipated Site Difficulties - negative			-1 / -5	
Total Score:				63 / 100	

### ***Kapiolani Regional Park***

The team selected Kapiolani Regional Park as an additional alternative to the nearby Manoa Campus site. Kapiolani offers less developable land and poorer connections to transit and major roads, but would not necessitate the elimination of a public amenity as popular as Ala Wai Golf Course in order to convert the site. Excluding the Waikiki Shell Amphitheater, the site offers 69 developable acres in close proximity to Waikiki. Access to Waikiki is complicated by one-way streets, but emergency services are very close to site, 5 minutes or less. Due to the distance of the park from H1 and lack of links into the city grid due to one-way streets in Waikiki and Diamond Head adjacent to the site, access is the poorest here of any urban Honolulu site – only ~243,000 residents live within a 10 minute driving radius. However, those residents have a relatively high ~\$38,200 average per capita income.



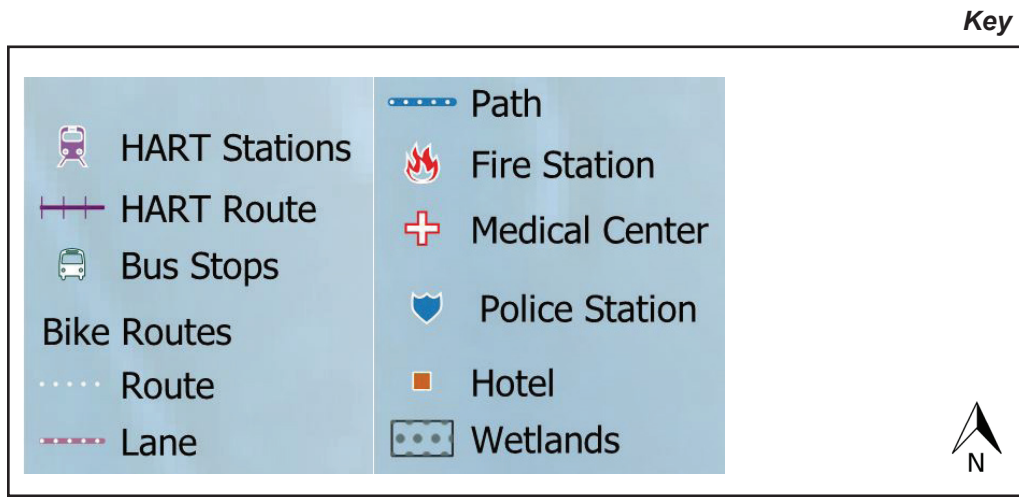




Total Site Size:	69 acres
Total Tree Cover:	0.1 acres (0.2%)
Designated Wetlands:	0.0 acres (0.0%)
Site Slope	
• Mean:	0.4-deg
• Max:	5.6-deg
• Std Dev:	1.4-deg
Bus Stops Nearby:	20
HART Stops Nearby:	0

The “10-Minute Driving Map” represents an isochronal diagram highlighting a distance around each one of the potential sites. This isochrones map show the distance that one could travel to or from the site in a 10-minute period of time, with no traffic. This catchment area is used to collect all of the data points and rubric information included in the site analysis matrixes. This is shown consistent for all the sites.

The “Vicinity Map” shows the bounds of an area that is a 15-minute (1/4-mile) walk from the site perimeter. This area provides additional information about the facilities and infrastructure immediately adjacent to the site. This is shown consistent for all the sites.



VICINITY MAP OF KAPIOLANI REGIONAL PARK SITE





# Kapiolani Regional Park Site

## General Description

Kapi'olani Park is a large public park situated at the east end of Waikiki and at the foot of Diamond Head. It is a large, open, flat park with a few recreation fields and minimal tree cover in the center and is used by the general public for recreation and relaxation.

Pros	Cons
<ul style="list-style-type: none"><li>• Close proximity to Waikiki, Diamond Head and the beach.</li><li>• Close to the zoo, the aquarium and the Waikiki shell (outdoor amphitheater venue).</li><li>• Creates an anchor at the south-east end of Waikiki without creating congestion in the heart of Waikiki.</li><li>• Siting of a stadium at this location would create a stunning venue at the foot of Diamond Head.</li><li>• Aerial views of the stadium in this location would add to the already iconic images of Honolulu.</li><li>• Many visitors could walk from the hotels in the area, minimizing parking requirements.</li><li>• Flat, open site already used by many for recreational purposes, which could be preserved and enhanced.</li></ul>	<ul style="list-style-type: none"><li>• Nearest HART station is 3.0 miles away at Ala Moana Center.</li><li>• Density of Waikiki already creates traffic and some overcrowding issues.</li><li>• Availability of the land is in question, based on possible deed restrictions and the proposed use. Potential that no additional for-profit development could be added on the site.</li><li>• Opposition from many who use the park for recreation, picnicking, field sports, etc.</li><li>• Loss of public green space in a dense area.</li></ul>

## Summary Observation(s)

The existing park is set up nicely to create a public venue that could work hand-in-hand with the Waikiki shell and maintain the outdoor recreation areas that are already in use by the public.



open park area at Kapiolani



outdoor bleachers and venue



picnicking at Kapiolani, Waikiki in the background



open park area at Kapiolani



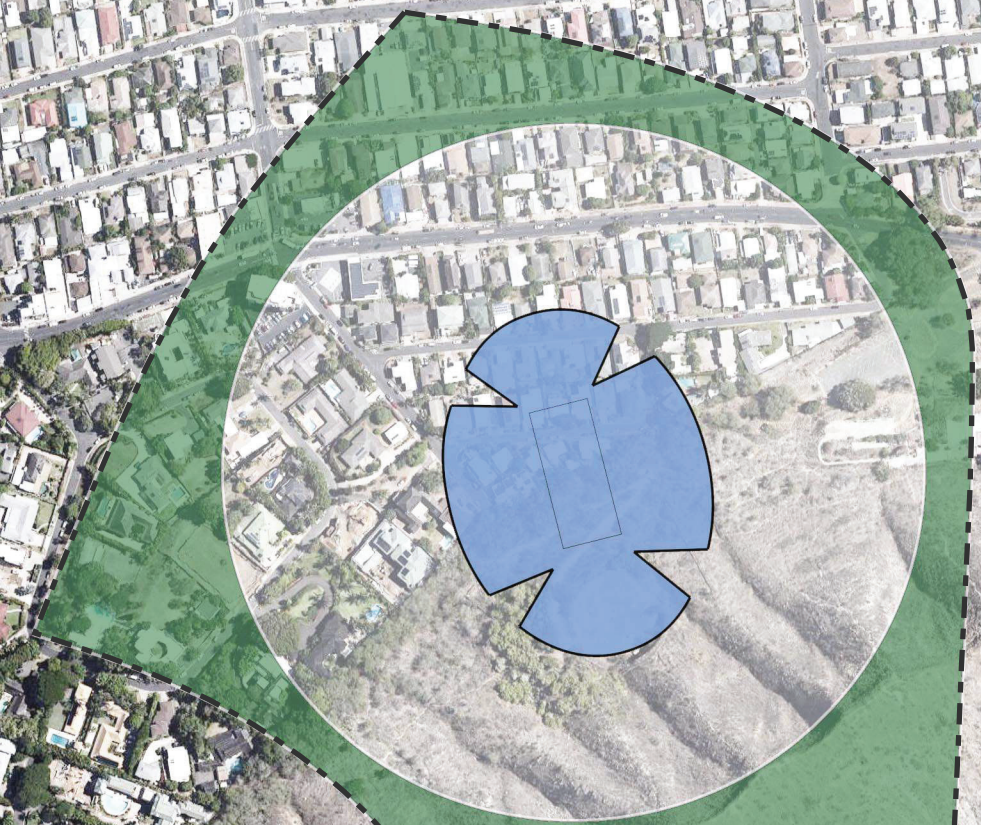
View of Diamond Head from Kapiolani



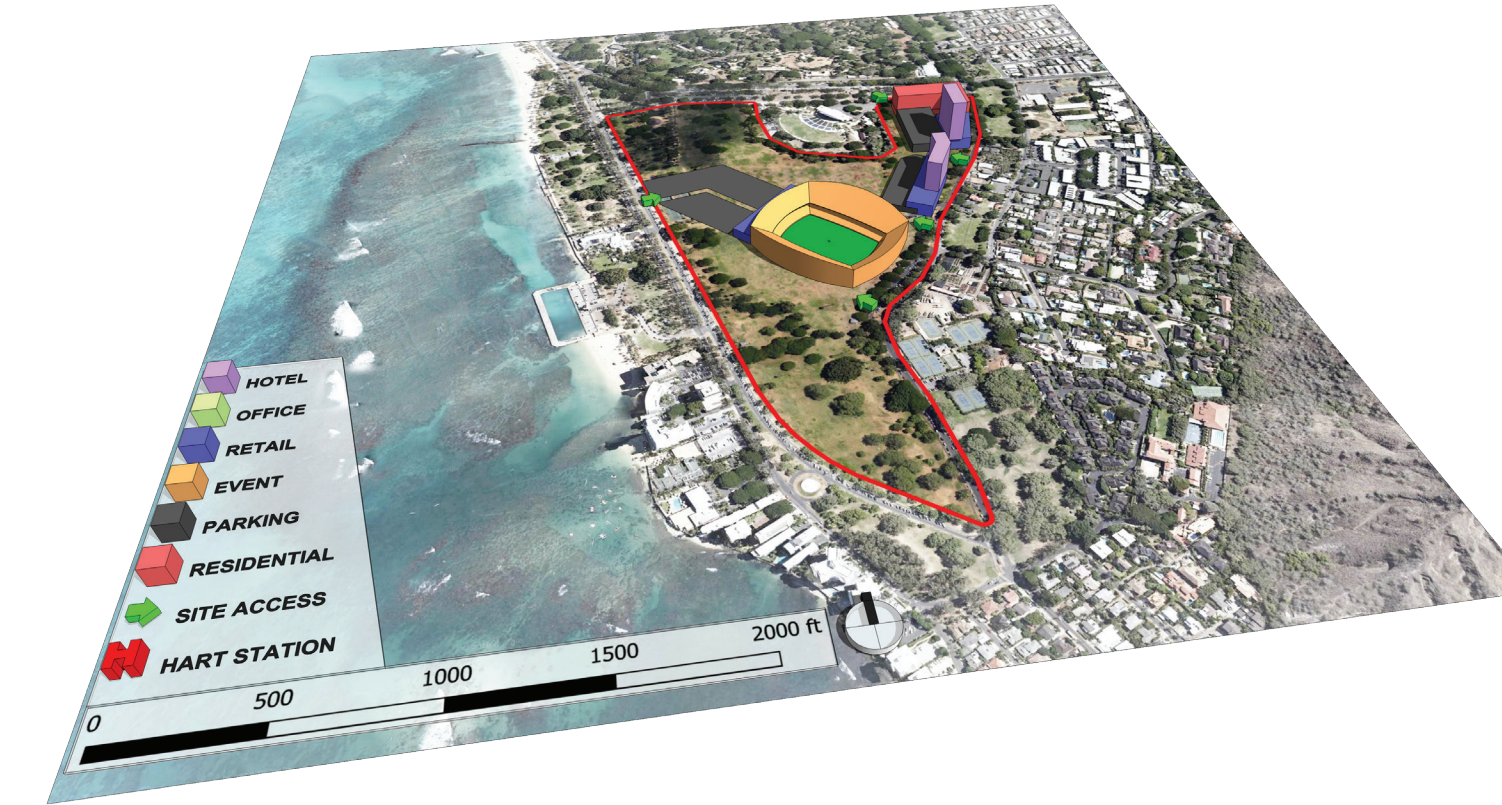
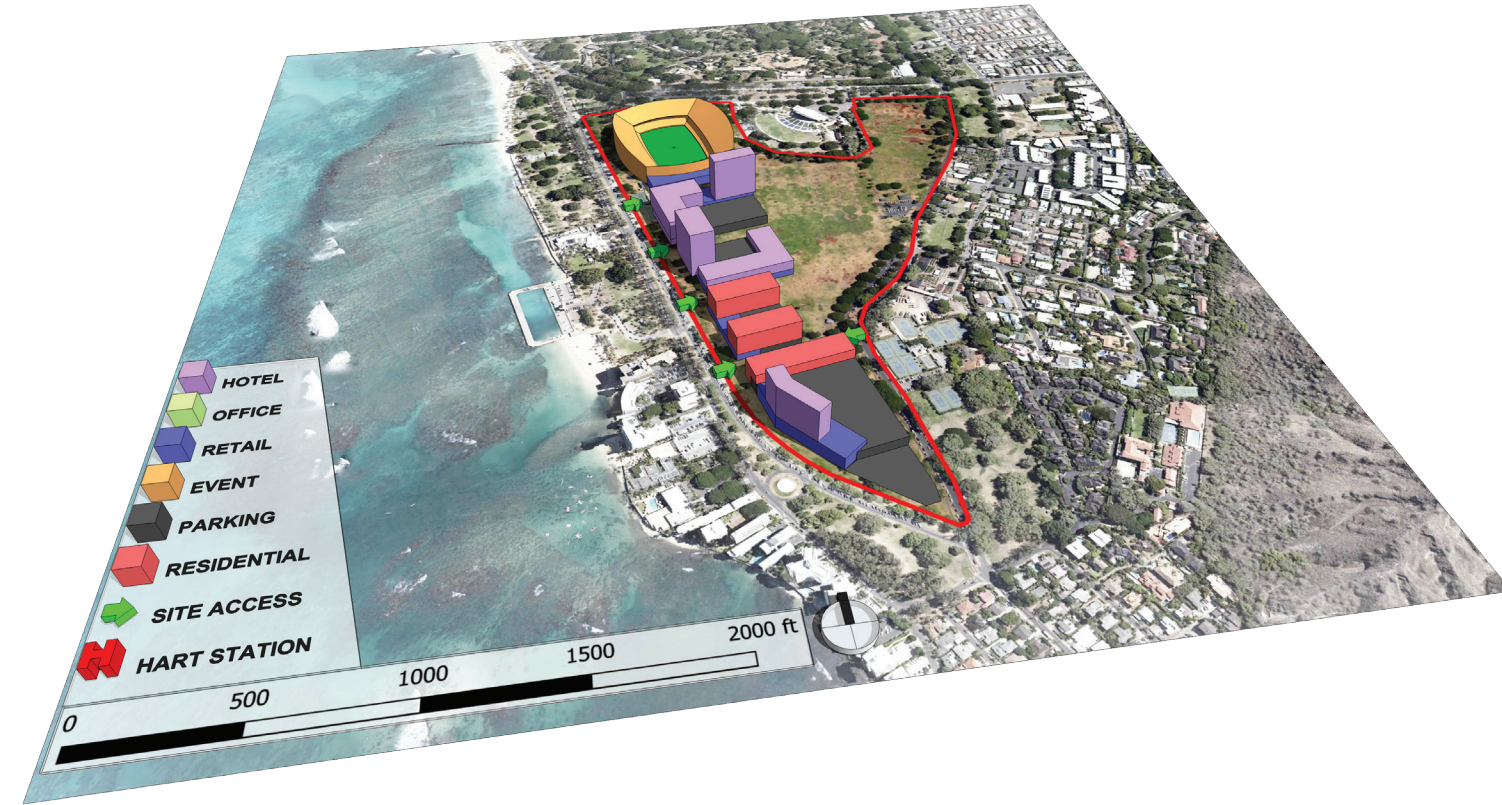
Waikiki Shell Outdoor Amphitheater



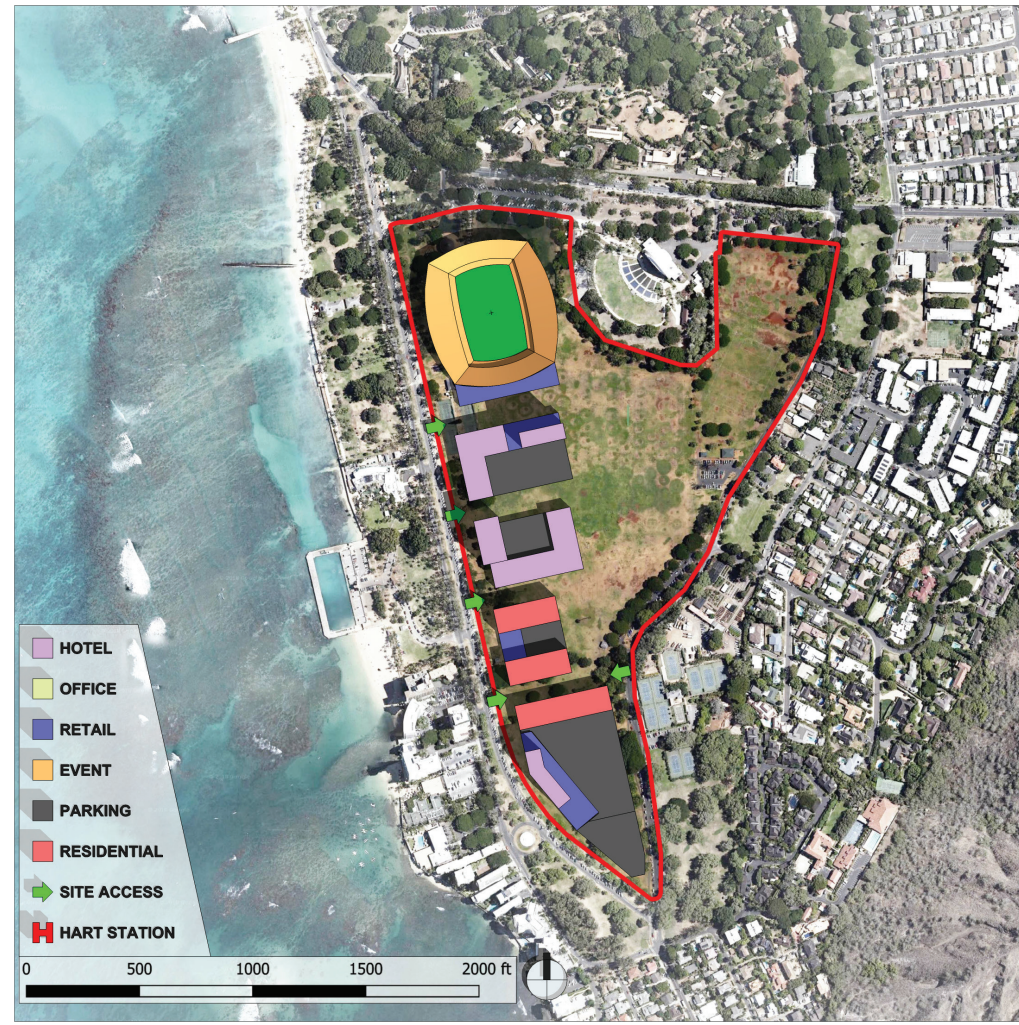
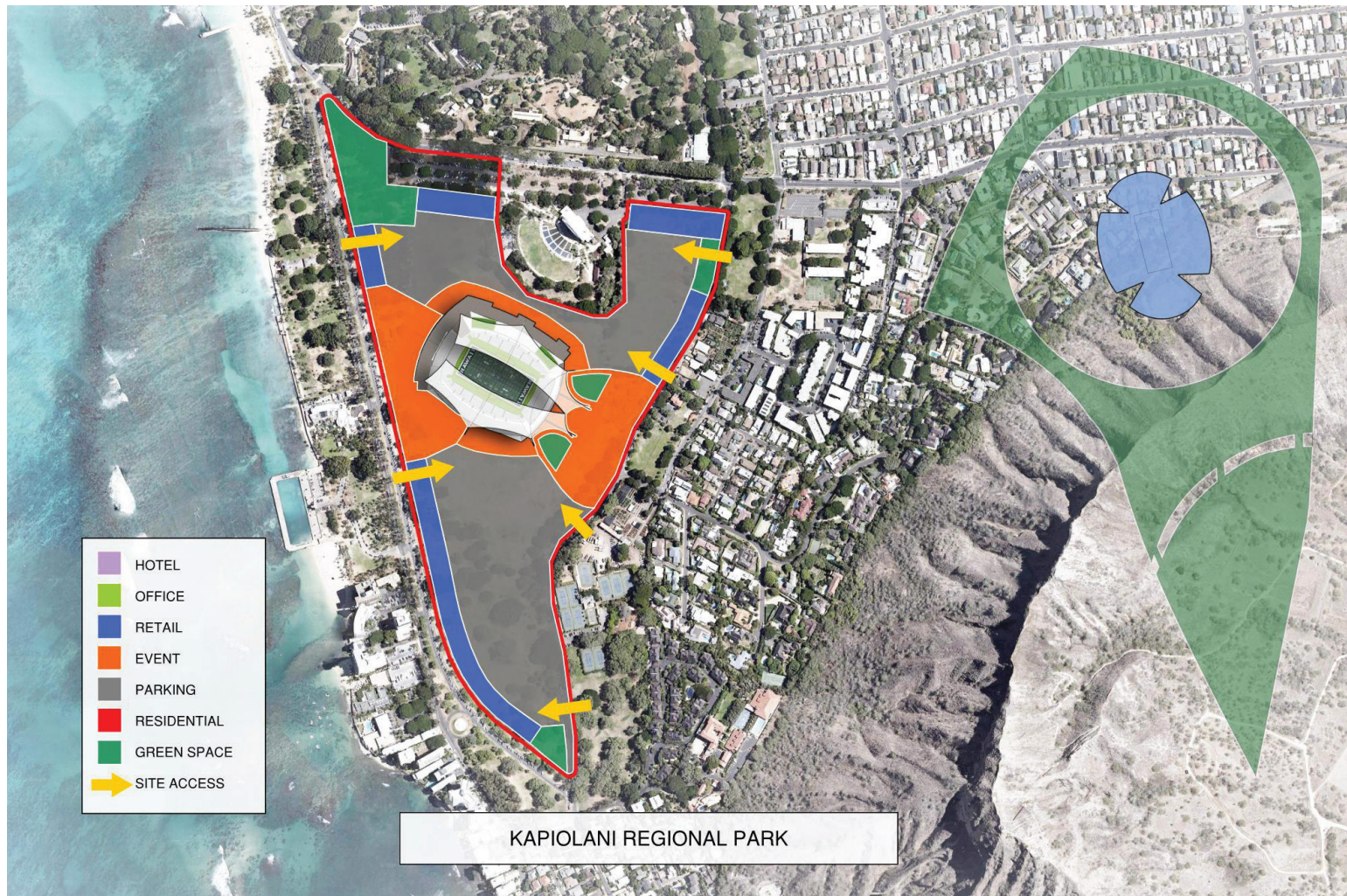
PRELIMINARY DEVELOPMENT CONCEPT FOR KAPIOLANI REGIONAL PARK SITE



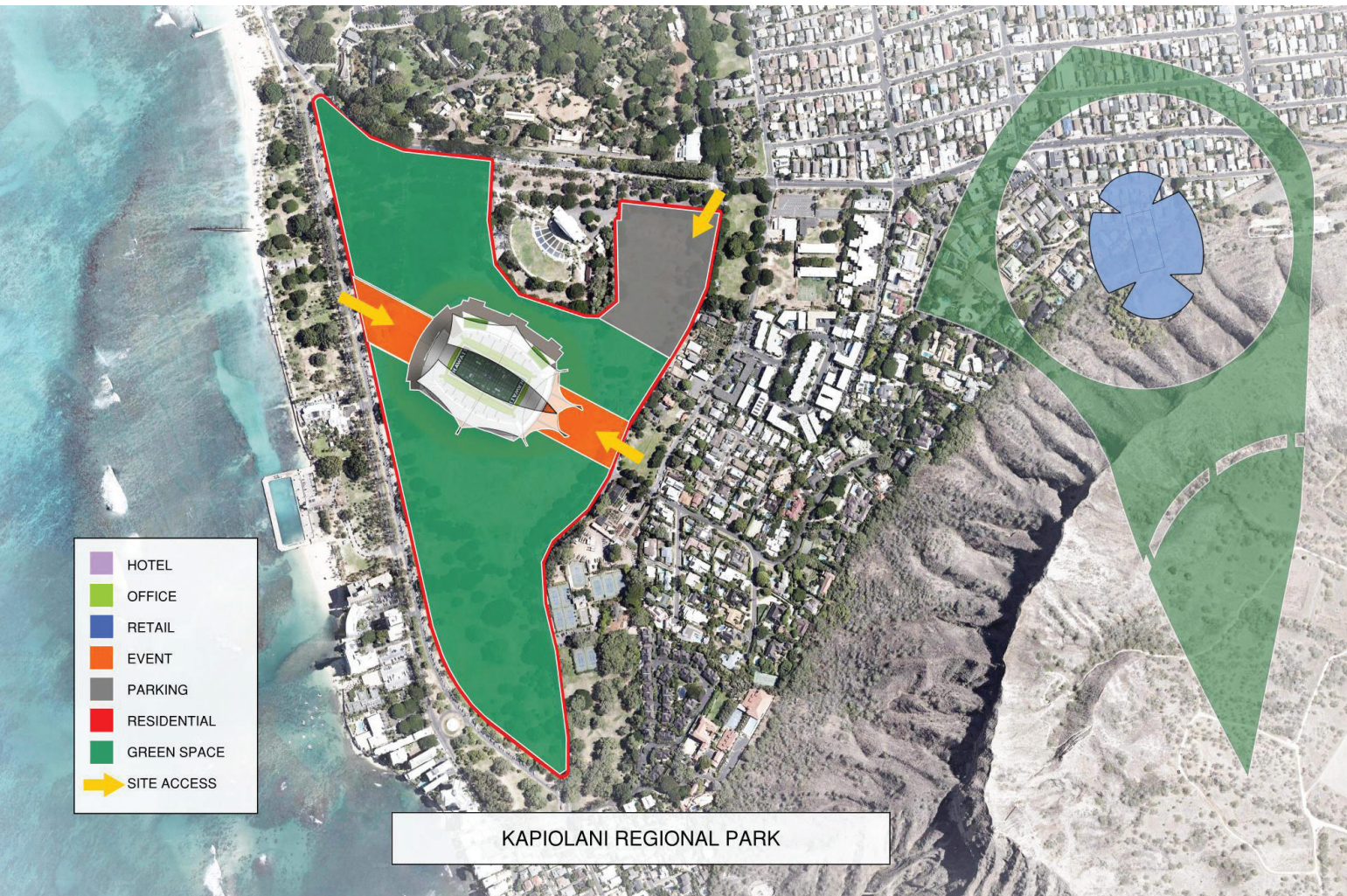




DEVELOPMENT CONCEPTS AT THE KAPIOLANI REGIONAL PARK SITE



DEVELOPMENT CONCEPTS AT THE KAPIOLANI REGIONAL PARK SITE





KAPIOLANI REGIONAL PARK SITE ANALYSIS

Site Analysis and Scoring:		Kapiolani Regional Park			
Category	Criteria	Indicators	Notes	Score	Subtotal
Site, Infrastructure, and Environment	Total Acreage	69 acres at existing Kapiolani Regional Park		4 / 5	19 / 30
	HART Access	no pedestrian HART access	2.7 miles to Ala Moana Center Station	0 / 5	
	Proximity to Daniel K. Inouye International Airport	18.2 miles (18 minutes) to/from airport	Kalaheo Airport not considered due to limited cargo handling facilities	2 / 3	
	Proximity to Emergency Services	0.9 miles to Fire Station 07 Waikiki; 3.3 miles to Waikiki Police Substation; 2.3 miles to Leahi Hospital		3 / 3	
	Proximity to Honolulu Harbor	10.6 miles (22 minutes) to/from harbor	Barber's Point Harbor not considered due to lack of container facilities	1 / 2	
	Proximity to Waikiki	4.9 miles (6 minutes) to/from Waikiki	87% (~28000) of hotel rooms on Oahu are in Waikiki	2 / 2	
	Ability to Accommodate Stadium Program			2 / 2	
	Avoids Flood/Tsunami Hazards	Within flood zone AE (1% annual flood risk); 100% of site covered by Tsunami Evacuation Zone	8'-9' calculated BFE	0 / 2	
	Avoids Sea Level Rise Hazard	Not endangered by sea level rise	Per NOAA circa 2100 worst-case scenario projections (3.2ft)	2 / 2	
	Avoids Wetlands Impact	no designated wetlands		2 / 2	
	Suitability for Emergency Shelter	Site at risk in flooding or tsunami scenario		0 / 1	
	Bus Access	20 bus stops within 1/4 mile radius of site		1 / 1	
Development Costs	Existing Zoning	P-2 General Preservation District		1 / 4	10 / 20
	P3 Potential or other Development Possibilities	Mid-sized site within urban Honolulu, with direct adjacency to Waikiki tourist areas		4 / 4	
	Ceded Lands Encumbrance	Unknown		2 / 3	
	Infrastructure Costs	Minimal existing public parking and no major services currently on site		0 / 3	
	Land Acquisition	Owned by State of Hawaii		2 / 2	
	Development Incentives	No state or federal development incentives		0 / 2	
	Complexity	Existing road access complicated by one-way traffic flows around Waikiki and nearby residential neighborhoods		1 / 2	
Community	Community Acceptance			2 / 10	9 / 30
	Positive Cultural Impact			6 / 10	
	Political Viability			1 / 10	
Economic Impact	Employment Demand in Vicinity	5,243 unemployed persons in 10-min. drive distance (3.9% of pop.)	Site presents somewhat poor opportunities for job creation for disadvantaged Hawaiians	6 / 6	16 / 20
	Households Experiencing Poverty in Vicinity	12,653 households in poverty in 10-min. drive distance (12.6% of total)		5 / 6	
	Population in Proximity	243,095 persons in 100,620 households in 10-min. drive distance		5 / 6	
	Per-Capita Income in Vicinity	\$38,238		0 / 2	
Intuitive Site Qualities	Unique Site Improvement Opportunities - positive			4 / 5	2
	Anticipated Site Difficulties - negative			-2 / -5	
Total Score:					56 / 100



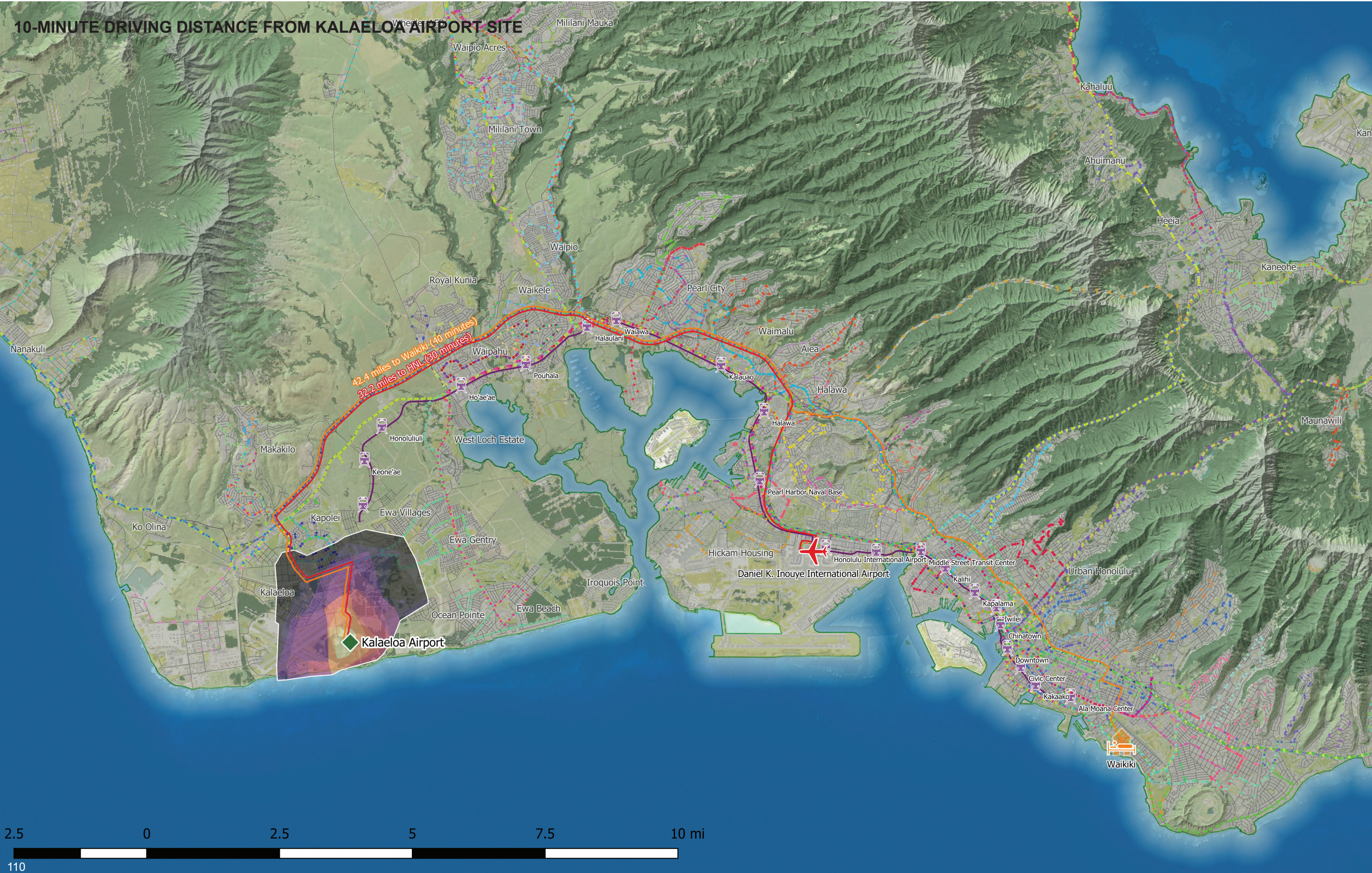
**Kalaeloa Airport**

The land on and around Kalaeloa Airport, on the west end of Oahu, represents a large swath of underdeveloped area in proximity to the fast-growing community of Kapolei. While there are a number of potential sites in the area, the team selected Lot C (previously studied for an OCCC detention facility) as a representative option. There are 50 acres on Lot C, which is currently held by the Department of Hawaiian Homelands.

The principal and overwhelming drawback of the Kalaeloa site is its remoteness. Only the suburban Kapolei neighborhoods lay within its 10-minute travel isochrone, covering a mere ~29,400 residents. Mass transit is sparse in the vicinity as well, with no existing bus lines serving the Lot C site or any other potential options. The closest HART station, Kualaka’i, is 4 miles away. Significant access improvements between the site and H1 would be required to support event-day traffic flows. The site is also the farthest – geographically and temporally – from Daniel K. Inouye International (32 miles and ~30 minutes) and Waikiki (42 miles and ~40 minutes), with travel times likely to be much higher due to event-day traffic and/or commuter congestion.



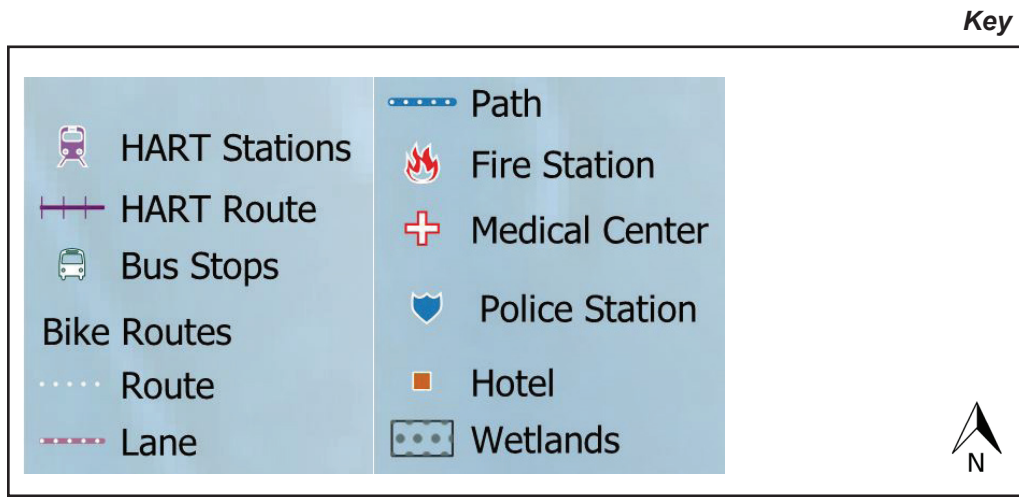




Total Site Size:	50 acres
Total Tree Cover:	25.5 acres (51.3%)
Designated Wetlands:	0.0 acres (0.0%)
Site Slope	
• Mean:	1.1-deg
• Max:	5.6-deg
• Std Dev:	1.9-deg
Bus Stops Nearby:	0
HART Stops Nearby:	0

The “10-Minute Driving Map” represents an isochronal diagram highlighting a distance around each one of the potential sites. This isochrones map show the distance that one could travel to or from the site in a 10-minute period of time, with no traffic. This catchment area is used to collect all of the data points and rubric information included in the site analysis matrixes. This is shown consistent for all the sites.

The “Vicinity Map” shows the bounds of an area that is a 15-minute (1/4-mile) walk from the site perimeter. This area provides additional information about the facilities and infrastructure immediately adjacent to the site. This is shown consistent for all the sites.



**VICINITY MAP OF KALAELOA AIRPORT SITE**





Kalaeloa Airport Site

General Description

Located on the south west of the island is Oahu’s second airport which was originally operated by the Navy for marine patrol aircraft. Taken over in 1999 it now operates as a joint civil-military regional airport of the state of Hawaii serving the needs for commercial air transportation and other aviation demands. The airport is approximately 16 miles from Aloha Stadium in Halawa.

Pros	Cons
<ul style="list-style-type: none"><li>• Commercial airport provides fly-in-fly-out connectivity for visiting teams, fans (inter-island, national and international), and touring events.</li><li>• Connection potential to the H1 freeway.</li><li>• Ample site area comprising flat, easily developable land with low scrub-like vegetative cover affording alternative site locations for a stadium.</li><li>• Ample site area for car parking and additional/ancillary development potential.</li><li>• Commercial center nearby in Kapolei (Costco, Home Depot, Target, restaurants, etc.).</li><li>• Surrounding population centers provide a potential labor pool.</li><li>• HART line is nearby (approximately 3-miles over land) connecting the location with other destinations; and the HART line could easily be extended closer to the airport</li><li>• Ko Olina Resort is nearby providing high-end, luxury accommodation for visitors.</li><li>• Investment in the airport could be an economic stimulus for the area.</li><li>• Site has unique, telegenic/aesthetic qualities, including water views to the south and west from the stadium.</li></ul>	<ul style="list-style-type: none"><li>• The site is the most distant from Honolulu’s more typical places of interest.</li><li>• Infrastructure is under-capacity (such as pipe and wire services); roads and intersections (for site access) need improving, etc.</li><li>• Flight path restrictions.</li><li>• Lacks commercial visibility/presence.</li><li>• Last HART station is approximately 4-miles driving distance.</li><li>• Airport and supporting facilities may need to be upgraded.</li><li>• Most distant from U of H (Manoa) football fans.</li></ul>

Summary Observation(s)

The site is a surprisingly well-endowed location that could be suitable for a new stadium location.



White Plains Beach near Kalaeloa



potential site



nearby Ko Olina Resort Development



typical vegetation and tree cover

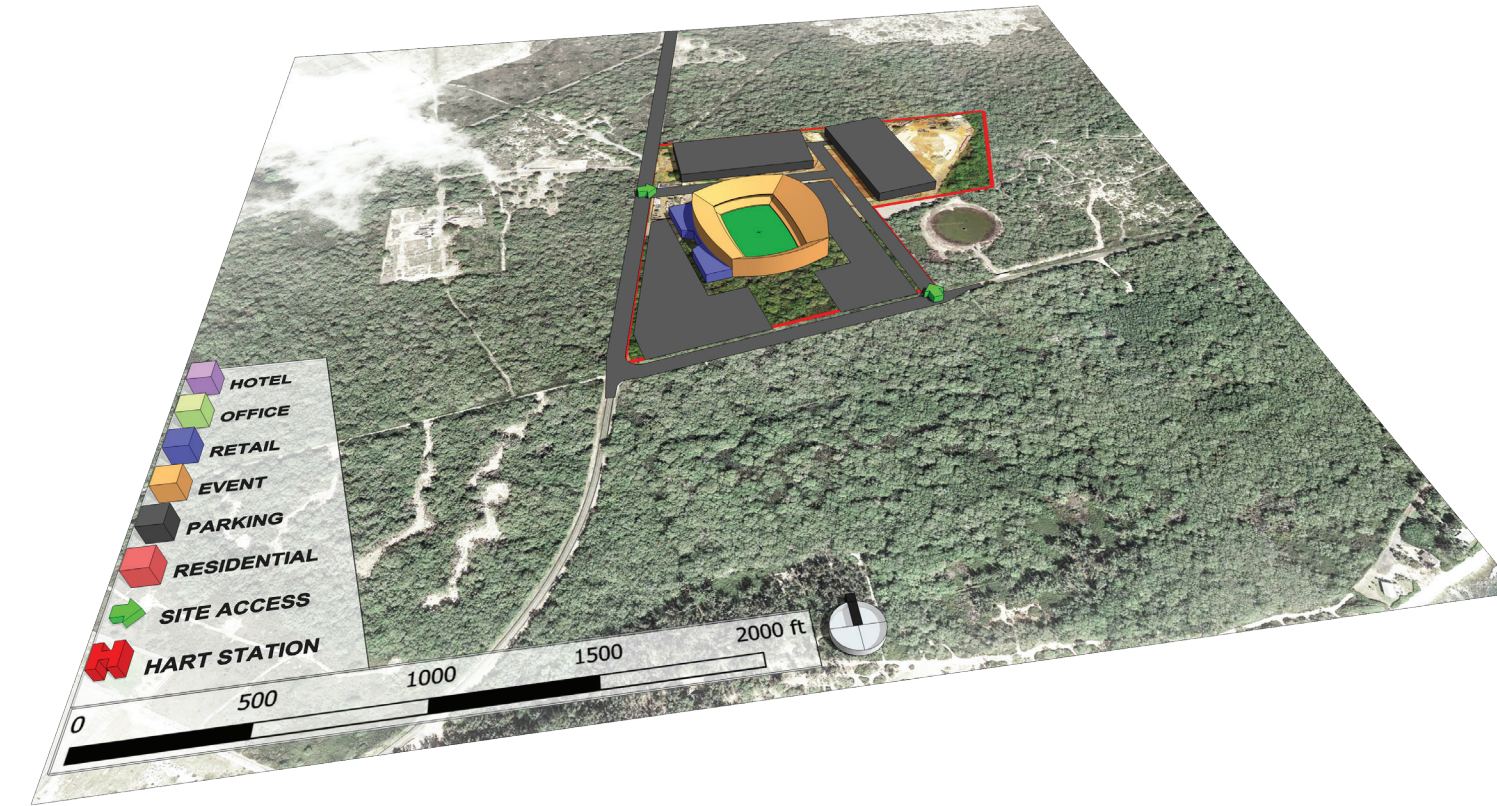


potential site

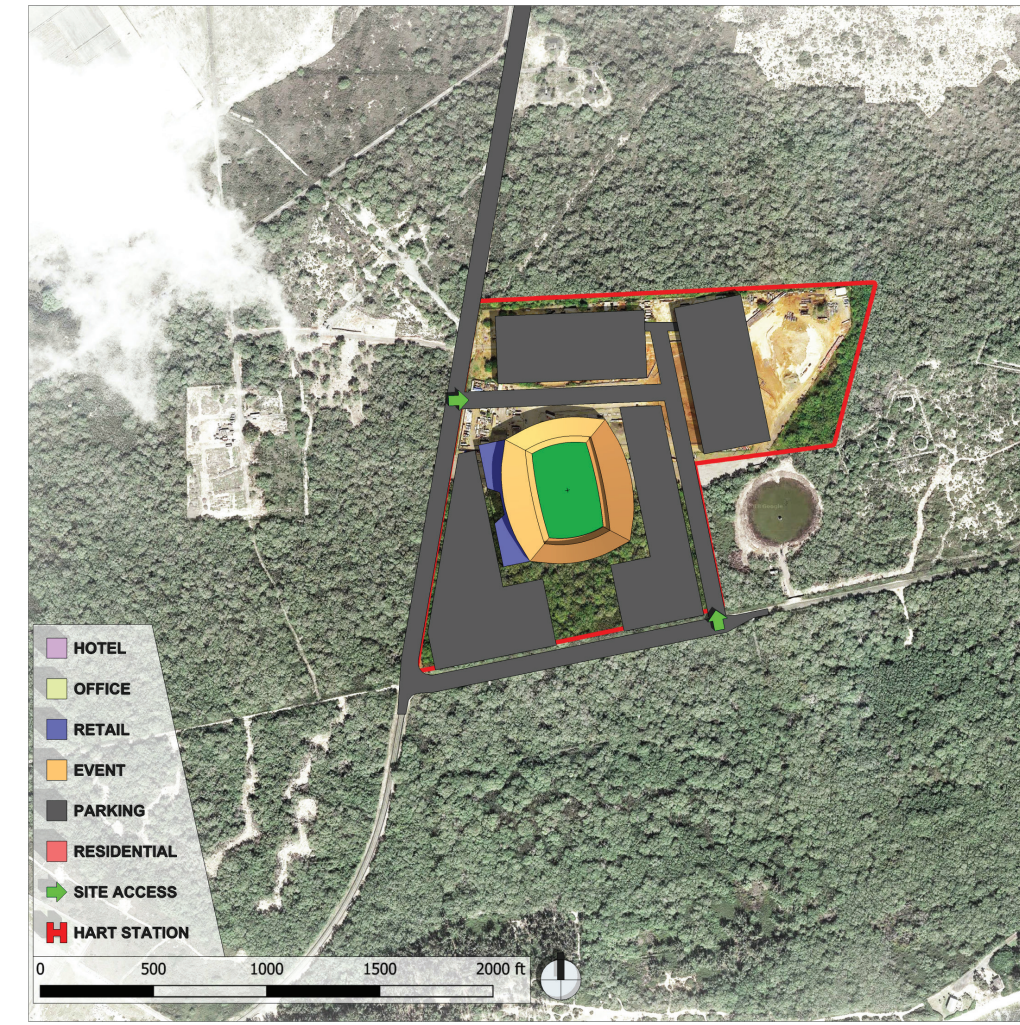
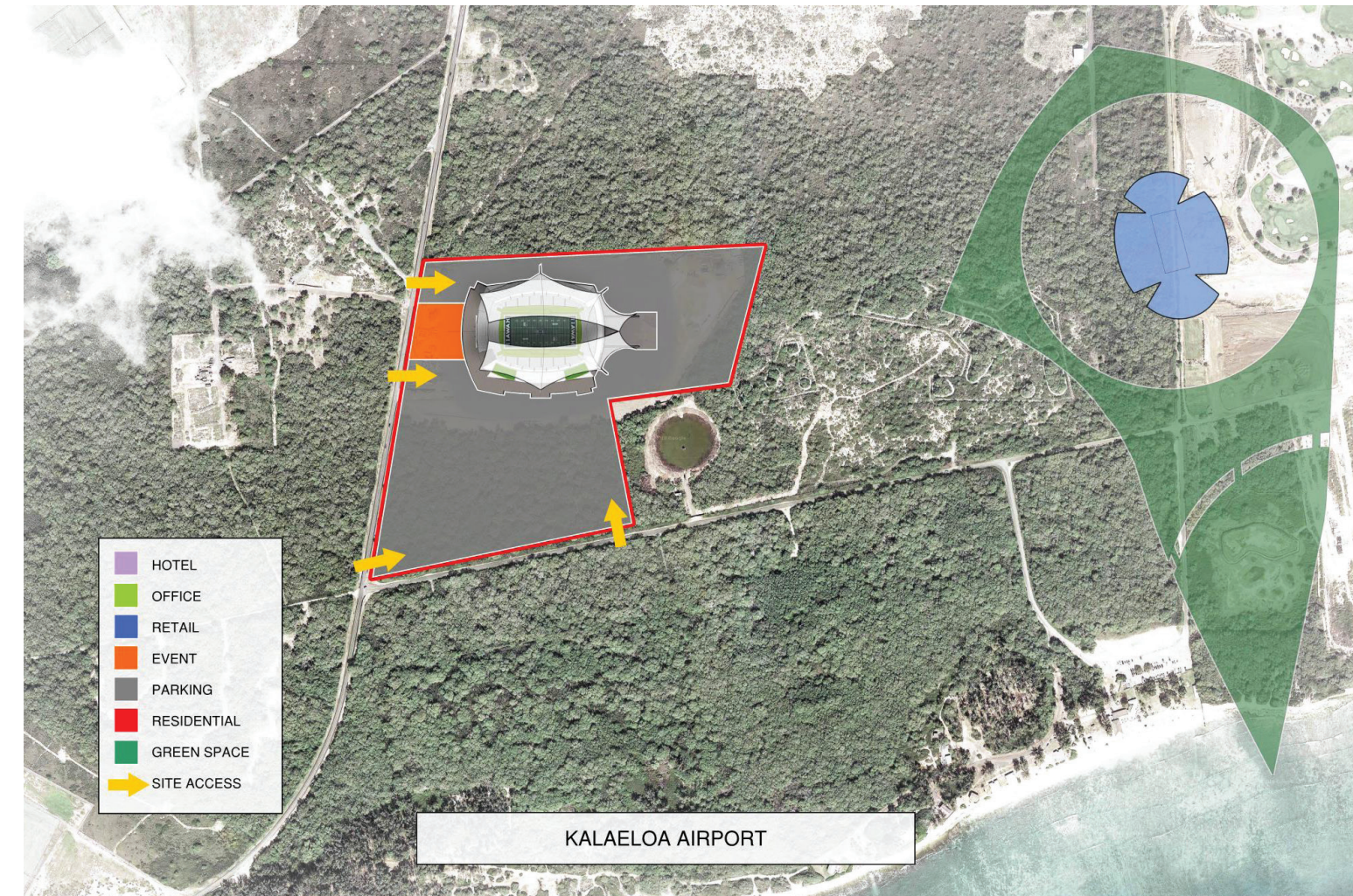


nearby Ko Olina Resort Development





DEVELOPMENT CONCEPTS AT THE KALAELOA AIRPORT SITE



PRELIMINARY DEVELOPMENT CONCEPT FOR THE KALAELOA AIRPORT SITE





KALAELOA AIRPORT SITE ANALYSIS

Site Analysis and Scoring:		Kalaeloa			
Category	Criteria	Indicators	Notes	Score	Subtotal
Site, Infrastructure, and Environment	Total Acreage	50 acres on DHHL property east of Kalaeloa Airport		5 / 5	13 / 30
	HART Access	no pedestrian HART access	4.0 miles to Kualaka'i Station	1 / 5	
	Proximity to Daniel K. Inouye International Airport	32.2 miles (30 minutes) to/from airport	Kalaeloa Airport not considered due to limited cargo handling facilities	0 / 3	
	Proximity to Emergency Services	7.2 miles to Fire Station 40 Kapolei; 6.6 miles to Kapolei District Station; 11.0 miles to The Queen's Medical Center - West Oahu		0 / 3	
	Proximity to Honolulu Harbor	24.2 miles (43 minutes) to/from harbor	Barber's Point Harbor not considered due to lack of container facilities	0 / 2	
	Proximity to Waikiki	42.4 miles (40 minutes) to/from Waikiki	87% (~28000) of hotel rooms on Oahu are in Waikiki	0 / 2	
	Ability to Accommodate Stadium Program			2 / 2	
	Avoids Flood/Tsunami Hazards	100% of site covered by Extreme Tsunami Evacuation Zone		1 / 2	
	Avoids Sea Level Rise Hazard	Not endangered by sea level rise	Per NOAA circa 2100 worst-case scenario projections (3.2ft)	2 / 2	
	Avoids Wetlands Impact	No designated wetlands		2 / 2	
	Suitability for Emergency Shelter	Site at risk in tsunami scenario; limited road and no transit access		0 / 1	
	Bus Access	0 bus stops within 1/4 mile radius of site		0 / 1	
Development Costs	Existing Zoning	F-1 Federal and Military Presevation District		3 / 4	13 / 20
	P3 Potential or other Development Possibilities	Remote site with limited appeal for commercial development		2 / 4	
	Ceded Lands Encumbrance	Unknown		2 / 3	
	Infrastructure Costs	Significant road improvement and utility construction needs anticipated		0 / 3	
	Land Acquisition	Owned by State of Hawaii - Department of Hawaiian Homelands		2 / 2	
	Development Incentives	Site covered by federal Kalaeloa Opportunity Zone		2 / 2	
	Complexity	Flat site with no prior development		2 / 2	
Community	Community Acceptance			7 / 10	19 / 30
	Positive Cultural Impact			7 / 10	
	Political Viability			5 / 10	
Economic Impact	Employment Demand in Vicinity	940 unemployed persons in 10-min. drive distance (5.8% of pop.)		0 / 6	2 / 20
	Households Experiencing Poverty in Vicinity	268 households in poverty in 10-min. drive distance (3.6% of total)		0 / 6	
	Population in Proximity	29,368 persons in 7,427 households in 10-min. drive distance		0 / 6	
	Per-Capita Income in Vicinity	\$28,948		2 / 2	
Intuitive Site Qualities	Unique Site Improvement Opportunities - positive			4 / 5	2
	Anticipated Site Difficulties - negative	Remoteness and inaccessiblity of site make it difficult to imagine it supporting anything other than a stadium and associated parking		-2 / -5	
Total Score:					49 / 100





### SUMMARY AND RECOMMENDATION

The recommendation from this report is that the Halawa Site is the best site for the construction of a new stadium and any ancillary development around it. The findings are conclusive in the fact that the site rated the highest, or equal highest, in all categories.

The Halawa Site is the most ready for development. It has the transportation infrastructure in place in terms of visitor access and will only get better with the addition of the rail stop. It has the land available to create additional program on site, enhancing its value to residents and increasing its desirability for developers. It is a site already used for the specific purpose of a stadium, and thus likely to be accepted by the community, at least from a use stand point. Its construction will not take away any beloved parks, landmarks or other uses. It is an opportunity to take something that is already highly used and accepted by the community, and to make it even better.

## 6. SUMMARY AND RECOMMENDATION

