

HART'S INDUSTRY DAY

May 5, 2014



H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION

20 Miles and 21 Stations

Four Park-and-Ride Lots located at:
East Kapolei, UH-West O`ahu, Pearl Highlands & Aloha Stadium



Operating Details

When will trains run?

- 4 a.m. to midnight
- Every 5 minutes during peak travel times
- Every 10 minutes during non-peak travel times
- Single systemwide fare system for rail and TheBus
- ADA compliant
- Bicycles, surfboards, wheelchairs, strollers, and luggage allowed
- Free Wi-Fi

How fast will trains travel?

- 55 mph top speed & 30 mph average including station stops

Project Update

- Federal lawsuit resolved
- Funding in place: \$1.55 billion in Federal Transit Administration (FTA) funds; local General Excise Tax on track to provide \$3.6 billion
- More than half of the project's \$5.2-billion systems contracts have been awarded
- Interim opening of the first 10 miles in 2017
- Full 20-mile system opens in 2019





UPCOMING CONTRACTS

H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

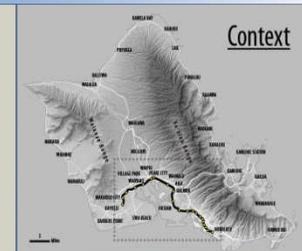
HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION



LEGEND

- Ⓧ Station with Park-and-Ride
- Design-Build Contracts**
 - Yellow line: West O'ahu Farrington Highway Guideway
 - Orange line: Kamehameha Highway Guideway
 - Purple square: Maintenance and Storage Facility
- Final Design & Design-Bid-Build Contracts**
 - Yellow square: West O'ahu Station Group¹
 - Orange square: Farrington Highway Station Group
 - Blue square: Kamehameha Highway Station Group²
 - Orange circle: Pearl Highlands Parking Structure/Bus Transit Center³
 - Blue line: Airport and City Center Guideway
 - Pink dashed line: Airport Utilities
 - Blue dashed line: City Center Utilities
 - Pink square: Airport Stations
 - Blue square: City Center Stations

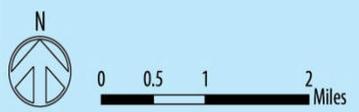
¹ Construction of the UH West O'ahu Station park-and-ride lot and Ho'opili Station finishes are a separate DBB contract
² Includes one H2 freeway ramp and Aloha Stadium park-and-ride lot
³ Includes one ramp from H2 freeway



Honolulu Rail Transit Project

Corridor and Contracts Map

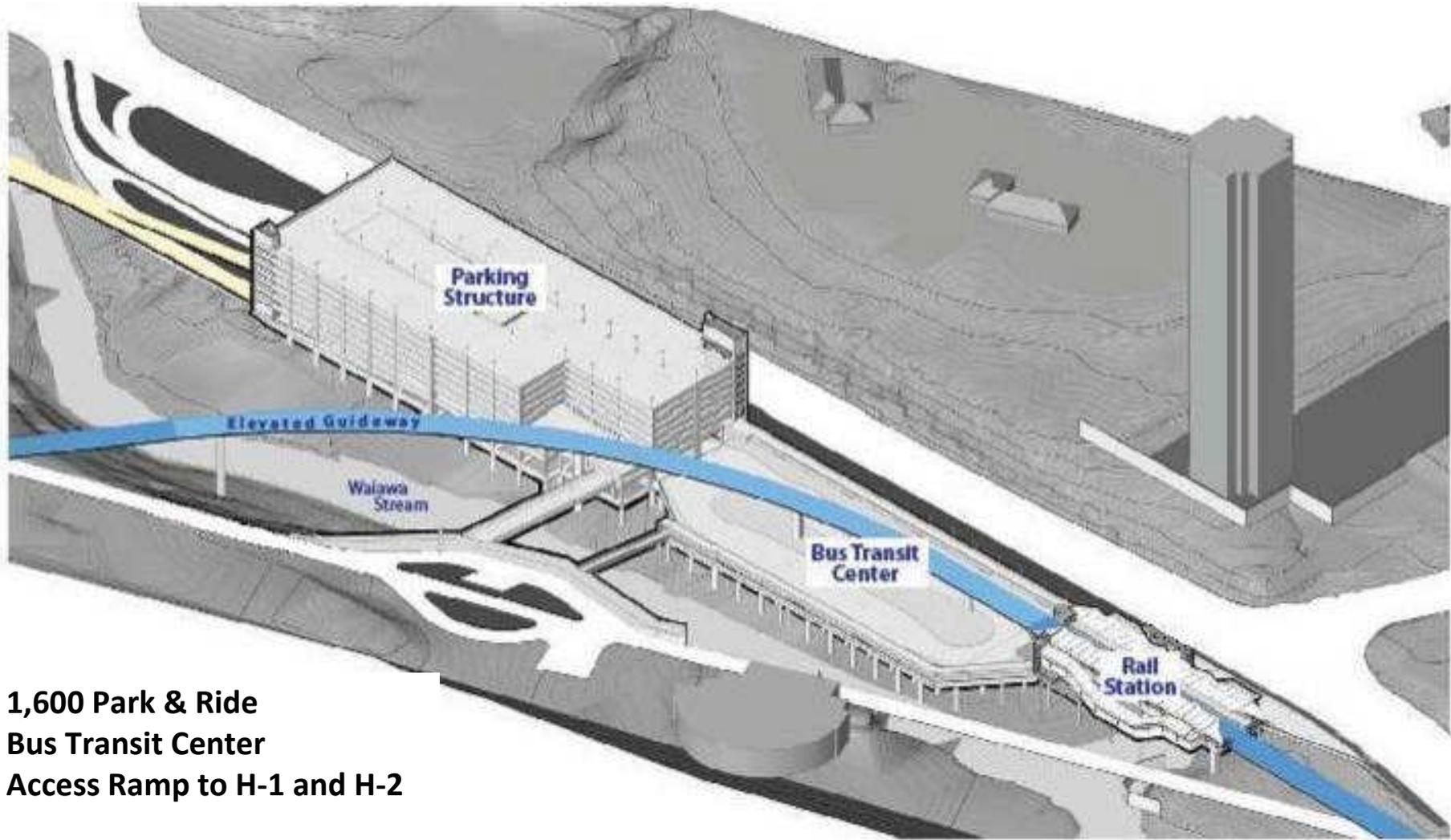
May 2013



Major Construction Contracts to be Issued

- Pearl Highlands Parking Structure & Ramps (Design-Build) (\$173m) – In Progress
- West Oahu/Farrington Highway/Kamehameha Highway Stations (9) (\$150m) - May 2014
- Airport & City Center Guideway, including City Center Utilities (\$745m) - July 2014
- Airport Stations (4) (\$63m) - November 2014
- Dillingham and Kakaako Stations (8) (\$125M) – August 2015
- University of Hawaii-West Oahu Park-and-Ride (\$10M) – March 2016

Pearl Highlands



1,600 Park & Ride
Bus Transit Center
Access Ramp to H-1 and H-2

Pearl Highlands Station & Transit Center



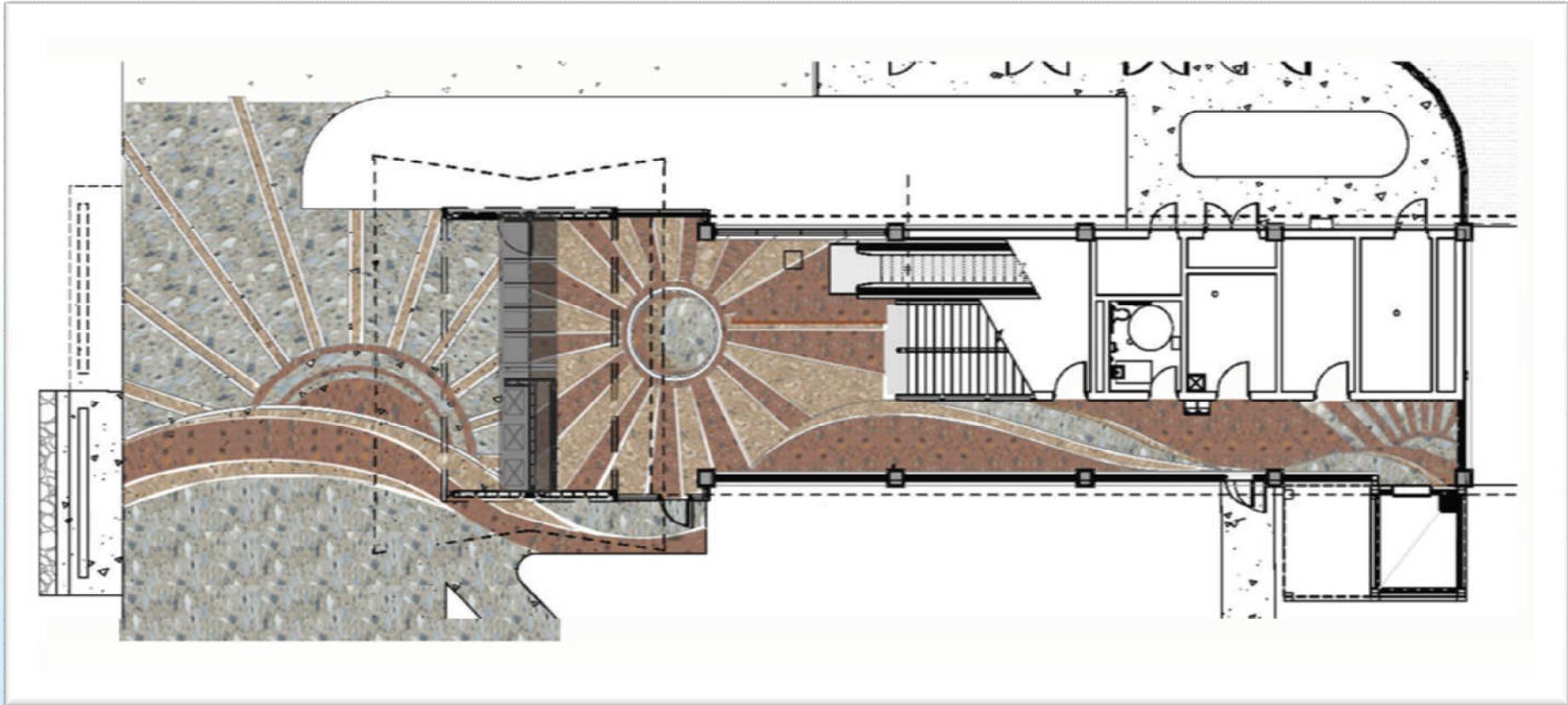
System-Wide Station Standardization Program



Architectural Rendering of Platform Canopy

Station Plaza Paving Program

University of Hawai'i West O'ahu Station Entrance



*Seasons of Growth—Coming Into the Light—Enlightenment
Ka makani (wind) and seasonal elements represented by the specific times of the day*

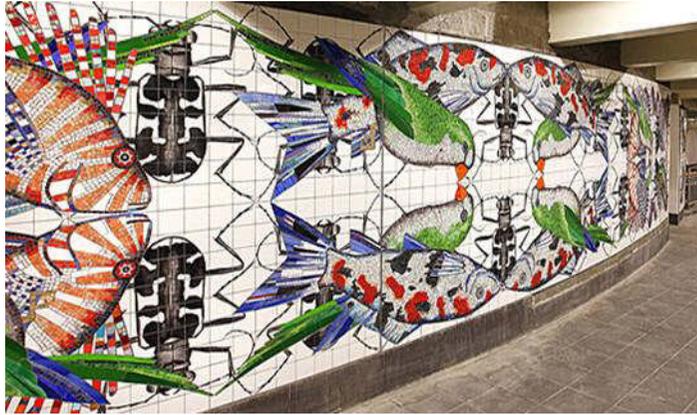
H O N O L U L U R A I L T R A N S I T P R O J E C T

www.HONOLULUTRANSIT.ORG

HART

HONOLULU AUTHORITY for RAPID TRANSPORTATION

Station Art Program



Departures and Arrivals, Ben Snead, MTA, New York City Transit



See It Split, See It Change, Doug & Mike Starn, MTA, New York City Transit

Site-specific Art Opportunities will include:

- Wall reliefs and murals
- Grille and fencing
- Paving designs and patterns
- Other integrated elements

Types of materials:

- Metal
- Stone
- Glass
- Concrete
- Ceramic
- Mosaic tile
- Other durable materials impervious to environmental conditions

Examples of Station Art



East Kapolei Station – Overall Site Plan



East Kapolei Station Entrance

H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION



University of Hawai'i West O'ahu Station – Aerial View

H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION



University of Hawai'i West O'ahu Station Entrance

H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION



Pearl Highlands Station – Aerial View

H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION



Pearl Highlands Station Entrance From Farrington Highway

H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION



Pearlridge Station Aerial View

H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION



Pearlridge Station Kamehameha Highway View

H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION

Aloha Stadium Station



H O N O L U L U R A I L T R A N S I T P R O J E C T

www.HONOLULUTRANSIT.ORG

HART

HONOLULU AUTHORITY for RAPID TRANSPORTATION

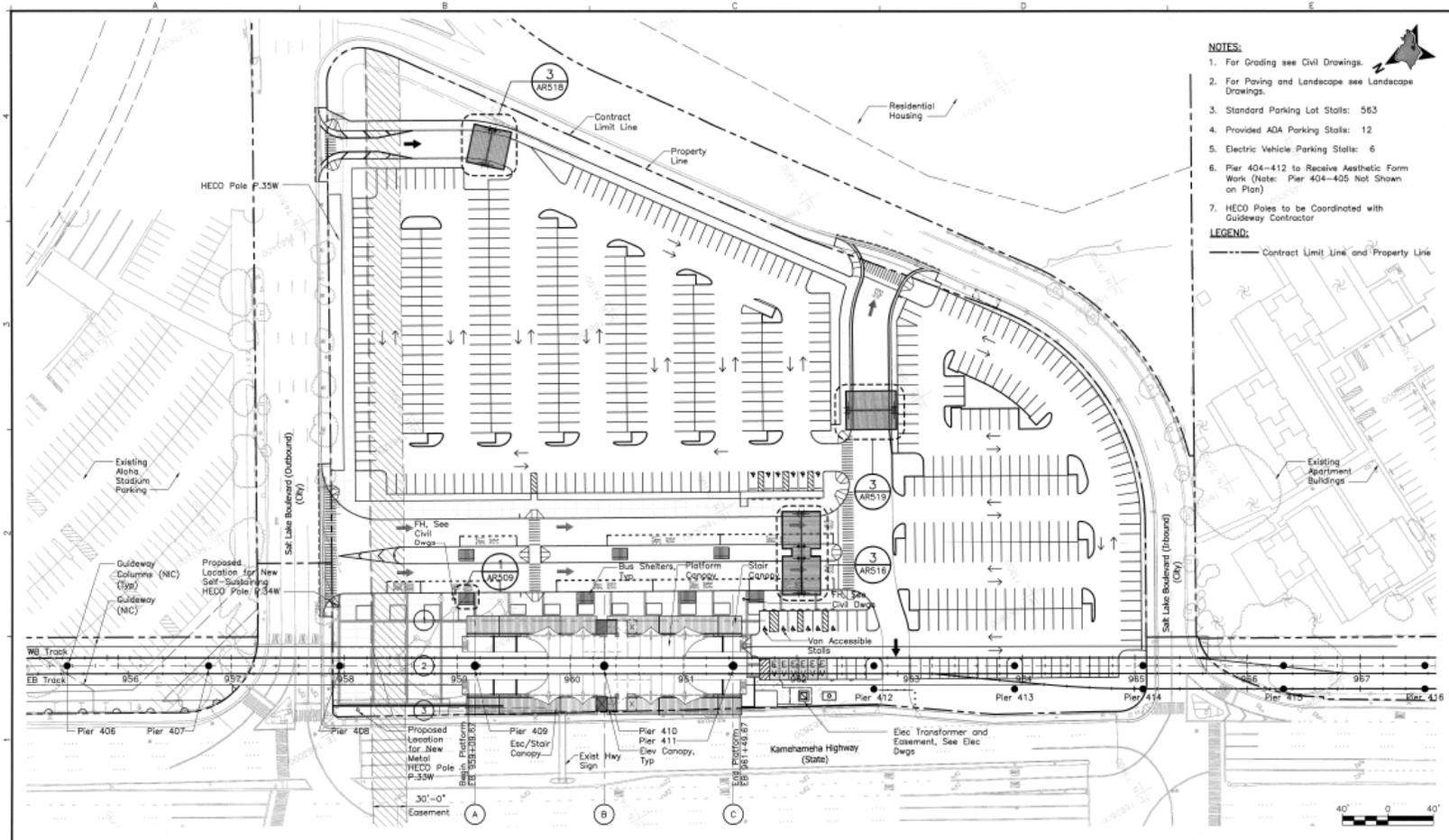


Aloha Stadium Station View from Stadium Parking

H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

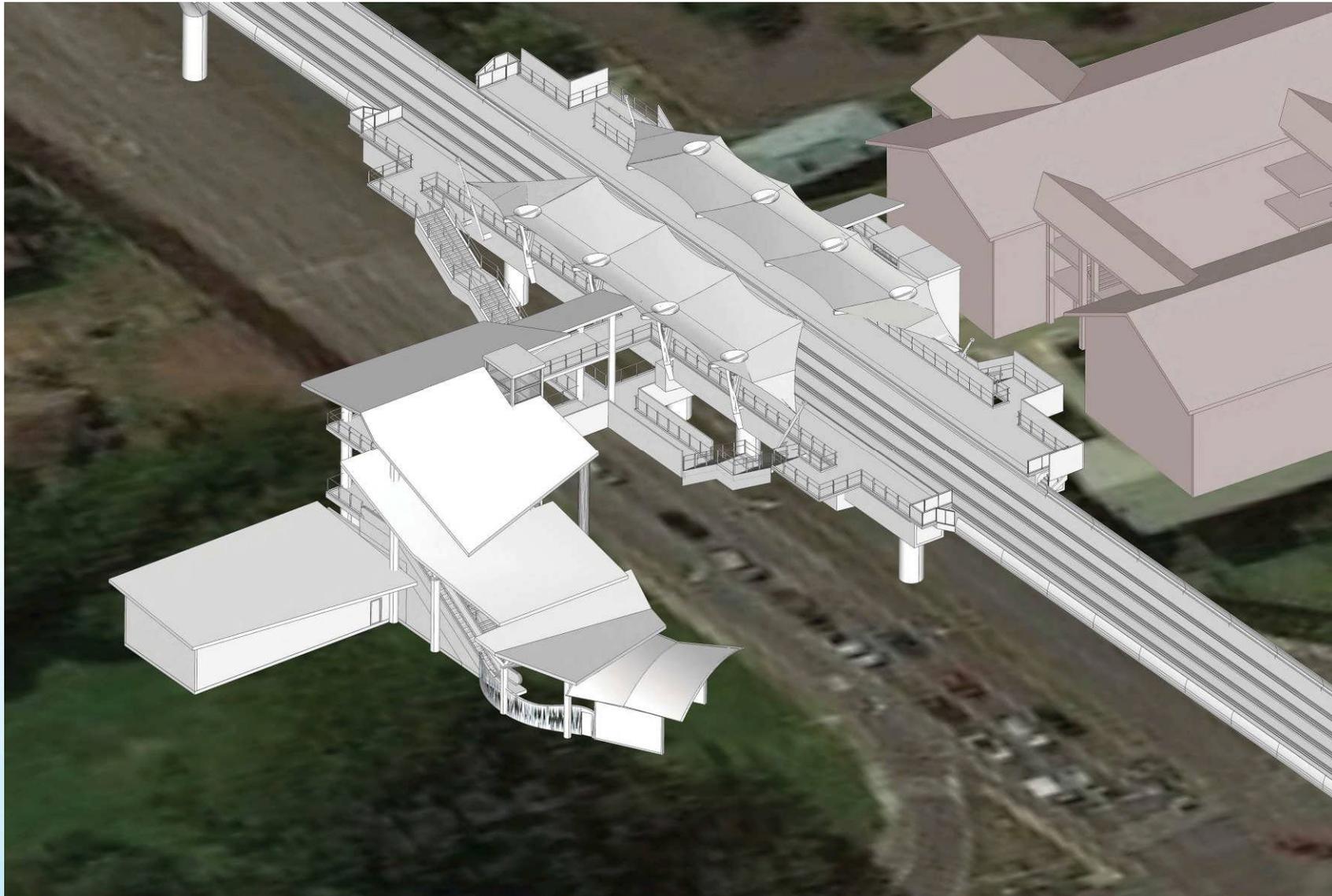
HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION

Aloha Stadium Park-and-Ride



- NOTES:**
1. For Grading see Civil Drawings.
 2. For Paving and Landscape see Landscape Drawings.
 3. Standard Parking Lot Stalls: 563
 4. Provided ADA Parking Stalls: 12
 5. Electric Vehicle Parking Stalls: 6
 6. Pier 404-412 to Receive Aesthetic Form Work (Note: Pier 404-405 Not Shown on Plan)
 7. HECO Poles to be Coordinated with Guideway Contractor
- LEGEND:**
- Contract Limit Line and Property Line

<table border="1"> <tr> <th>Rev</th> <th>By</th> <th>Date</th> <th>Description</th> </tr> <tr> <td>0</td> <td>RK</td> <td>01-27-14</td> <td>Issued for Bid</td> </tr> </table>	Rev	By	Date	Description	0	RK	01-27-14	Issued for Bid	<p>This work was prepared by me or under my supervision.</p> <p><i>Rodney M. Kato</i> Signature</p> <p>4/11/2014 Expiration date of license</p>	Designed: D. Uchida Drawn: R. Shidaki Checked: M. Walter Approved: R. Kato Date: 01-27-14	HONOLULU RAIL TRANSIT PROJECT HONOLULU AUTHORITY FOR RAPID TRANSPORTATION Prime Consultant: Anil Verma Associates, Inc. 841 Bernal Street, Suite 1000, Honolulu, HI 96813 Phone: (808) 589-8108 www.anilverma.com For reduced prints, original page size in inches.	Subconsultant: kya design group 4000 Kalia Road, Suite 1000, Honolulu, HI 96813 www.kyadesign.com We'll enhance your creative solutions.	ALOHA STADIUM STATION ARCHITECTURAL SITE PLAN Contract No.: RFB-708002 File: S11-H02-AR101 Drawing No.: AR101 Rev: 0 Scale: 1"=40' Page No: 126 of 274
	Rev	By	Date	Description									
0	RK	01-27-14	Issued for Bid										
2014-02-06 2:17 PM C:\pwworkdir\yym\ss\m02723\S11-H02-AR101.dwg													



Pearl Harbor Naval Base Station – Aerial View



Pearl Harbor Naval Base Station Entrance



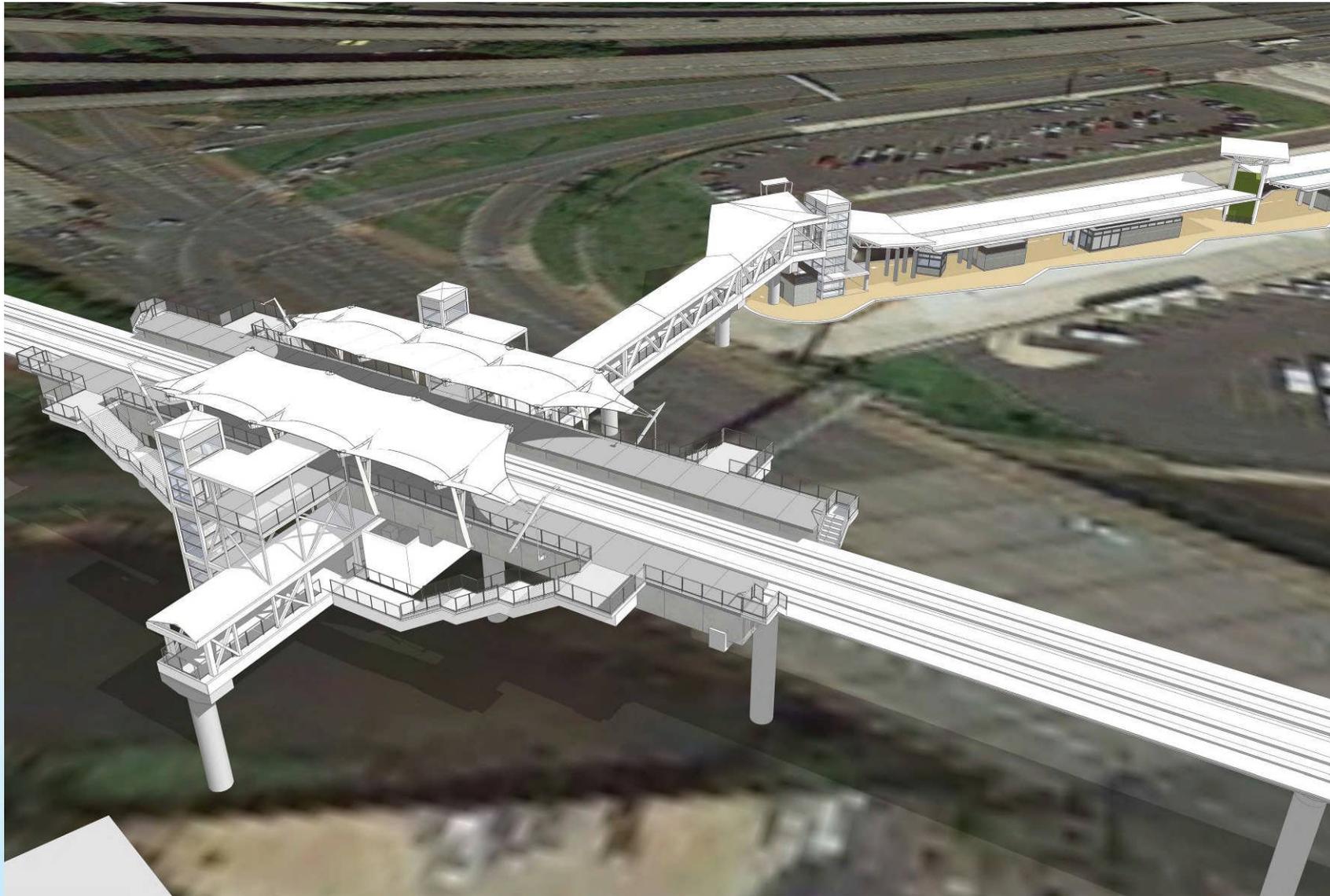
Lagoon Drive Station – Aerial View

H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION



Lagoon Drive Station Entrance



Middle Street Transit Center Station– Aerial View

H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION



Middle Street Transit Center – Exterior View

Corridor and Contracts Map



Airport and City Center Guideway Contracts

- Construction of approximately nine (9) miles of elevated viaduct to accommodate the Honolulu Rail project
- Two different box girders are utilized on the project, a double track box girder accounts for approximately 375 spans and a single track box girder accounting for approximately 22 spans
- HART has identified and obtained access to a precast casting yard site, it will be the contractor's responsibility to build out the casting yard

Airport and City Center Guideway Contracts (cont'd)

- Over 5,400 precast superstructure segments are required for this project
- Typical span supported on a single column and drilled shaft
- Drilled shafts vary in diameter from seven (7) to ten (10) feet, and extend thirty (30) to over two-hundred (200) feet below ground surface

Airport and City Center Guideway Contracts (cont'd)

- The guideway typically runs down the middle of existing roadways including, Kamehameha Highway, Ualena Street, Dillingham Blvd, Nimitz Highway, Halekauwila Street, Queen Street and Kona Street
- Many roadways are being widened to the makai side
- Roadway widening work includes various utility relocations
- Numerous overhead electrical lines to be relocated underground

Guideway



H O N O L U L U R A I L T R A N S I T P R O J E C T
www.HONOLULUTRANSIT.ORG

HART
HONOLULU AUTHORITY for RAPID TRANSPORTATION

Aesthetic Column Program



Stay Connected

- Monthly HART Facts Ad
- Public Access Television Program
- Weekly e-Blast
- Weekly Traffic Advisories
- Website and Social Media



HART FACTS
March 2014

HART CEO Dan Grabauskas answers community questions about rail transit.

QUESTION: When will the trains start running?

DAN GRABAUSKAS: The first ten miles of the transit system will begin operating in 2017. Two years later, trains are scheduled to begin running along the entire route, from East Kapolei to Ala Moana Center.

Visit HonoluluTransit.org for more information.

PROJECT REVENUE STATUS As of March 1, 2014	Projections To Date ¹	Collected or Committed to Date	Percentage (of projections)
REVENUE SOURCE:	(in millions)	(in millions)	
Project Beginning Cash Balance (Dec. 2009)	\$ 298	\$ 298	100%
General Excise Tax (GET) Surcharge ²	3,291	808	25%
Federal New Starts Funds	1,550	556	36%
Other Federal Transportation Funds	214	4	2%
Interest Income	2	9	-
TOTAL	\$5,355	\$1,675	31%

1 - Projections to date from the June 2012 Financial Plan.
2 - Total GET surcharge revenue collected since January 1, 2007, is \$1.19 billion (includes \$378 million collected before December 2009).

PROJECT COST STATUS As of March 1, 2014	Current Budget ¹	Amount Committed ²	Amount Expended ³
	(in millions)	(in millions)	(in millions)
Guideway & Track Elements	\$1,138	\$ 524	\$ 42
Stations, Stops, Terminals, Intermodal	397	51	0
Support Facilities, Yards, Shops, Admin	194	104	20
Sitework & Special Conditions	959	600	271
Systems	246	231	0
Vehicles	192	192	6
SUB-TOTAL*	\$3,035	\$1,702	\$ 340
Right-of-Way (ROW), Land, Existing Improvements	\$ 198	\$ 57	\$ 54
Professional Services (e.g., Planning and Design)	1,076	927	492
Contingency	641	8	0
Finance Charges	215	0	0
SUB-TOTAL*	\$2,129	\$ 992	\$ 545
TOTAL*	\$5,164	\$2,695	\$ 885

1 - Current Budget reflects the June 2012 Baseline Budget with executed Budget Transfers.
2 - Approved contract value. 3 - Portion of the work that has been paid.
* All costs are rounded to the millions therefore subtotals may not add up to the amounts shown.

DID YOU KNOW? Trains will operate daily, from 4 a.m. until midnight.



HONOLULU AUTHORITY for RAPID TRANSPORTATION
HART WEEKLY eBLAST | MARCH 28, 2014

HART ANSWERS YOUR QUESTIONS



The Honolulu Authority for Rapid Transportation (HART) participates in more than 200 presentations, community meetings and events each year, connecting with the community. Some of the most frequently asked questions we hear deal with train operations. Here are three of the most frequently asked questions and answers:

Q:How often will the trains arrive?
A:HART's four-car trains will arrive about every 5 minutes during peak times, and about every 10 minutes during non peak travel times. The frequency can also be adjusted to accommodate major community events, including events at the Aloha Stadium or in urban Honolulu.



HART Rapid Response:

- 24-Hour Project Hotline
- Email Inquiries:
info@HonoluluTransit.org
- Website Inquiries

Mahalo!



HONOLULU RAIL TRANSIT

H O N O L U L U R A I L T R A N S I T P R O J E C T

www.HONOLULUTRANSIT.ORG

HART
HONOLULU AUTHORITY FOR RAPID TRANSPORTATION