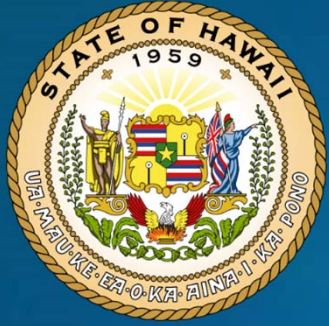




State of Hawaii Department of Transportation

Kalanianaʻole Highway Resurfacing H-1 Freeway to West Hind Drive

Public Information Meeting and Noise Variance Consultation

Kalani High School
March 15, 2018



Kalanianaʻole Highway Resurfacing, H-1 Freeway to West Hind Drive

Public Information Meeting Purpose

- Provide information to the community about the planned project improvements.
- Invite comments for the Community Noise Variance Application (CNV). Comments will be used by the State Department of Health, Indoor and Radiological Health Branch (DOH-IRHB) to evaluate the noise variance request.
- Understand community concerns and answer questions so we can make the project better.



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Public Information Meeting Agenda

- Need for the Project
- Construction Scope of Work
- Community Noise Variance Application
- Questions and Answers
- Meeting ends at 9:00 p.m.



Kalanianaʻole Highway Resurfacing, H-1 Freeway to West Hind Drive

Purpose and Need

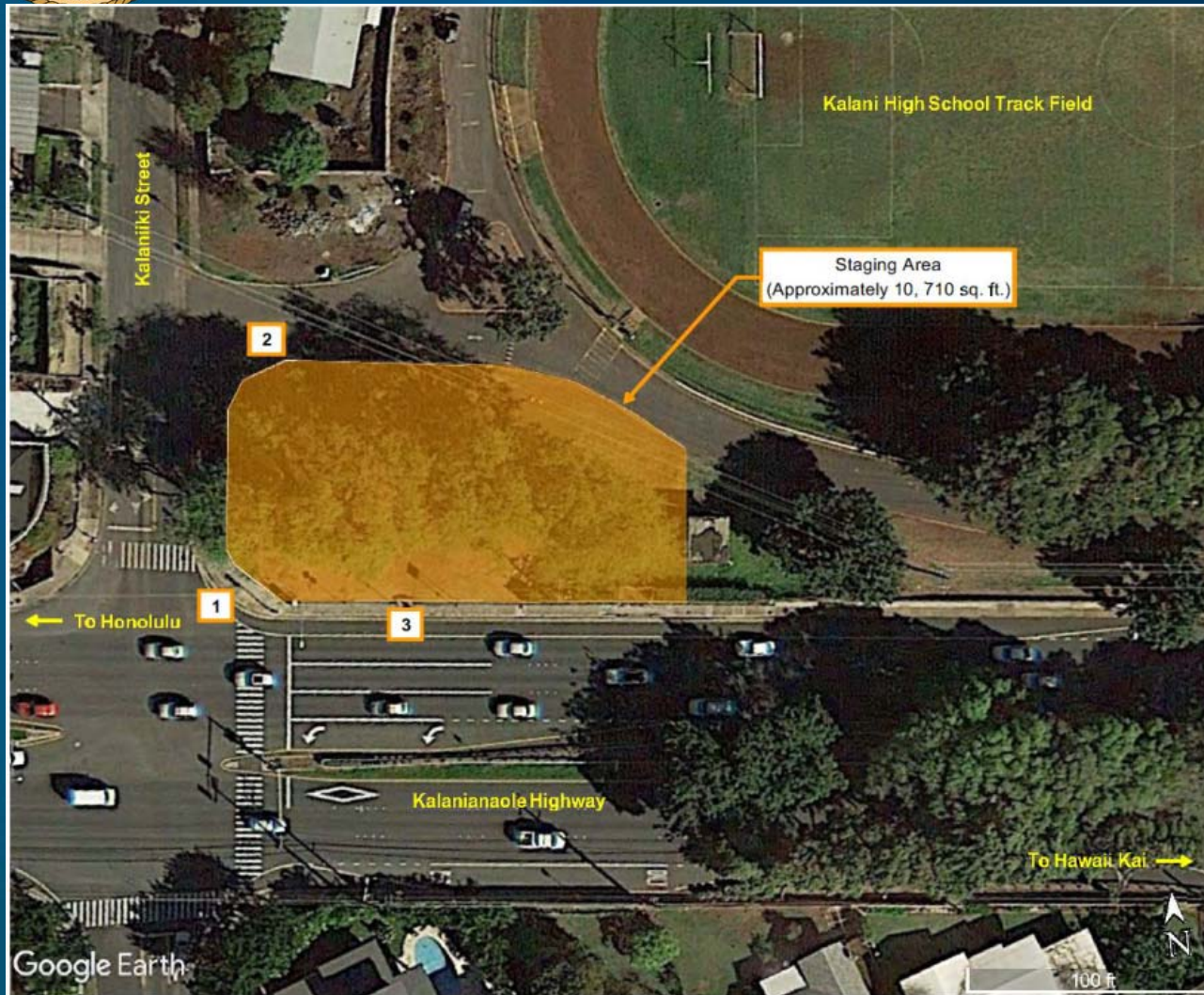
The existing Kalanianaʻole Highway from H-1 Freeway to West Hind Drive requires reconstruction of weakened pavement areas, resurfacing and restriping, replacing old signs with new signs, traffic signal modifications, loop detectors and installation of milepost markers.





Kalanianaʻole Highway Resurfacing, H-1 Freeway to West Hind Drive

Project Location (Staging Area)



Staging Area - Kalani High School

Area is currently used as parking. There are a few trees but equipment and vehicles would be able to park around them. No apparent school facilities would be disrupted from use of this area. Need to obtain permission from Kalani High School.





Kalanianaʻole Highway Resurfacing, H-1 Freeway to West Hind Drive

Project Location (Staging Area)



Staging Area - Board of Water Supply (BWS) Station

There are two trees in the area but equipment and vehicles would be able to park around them. No apparent BWS facilities would be disrupted from use of this area. Need to obtain permission from BWS.





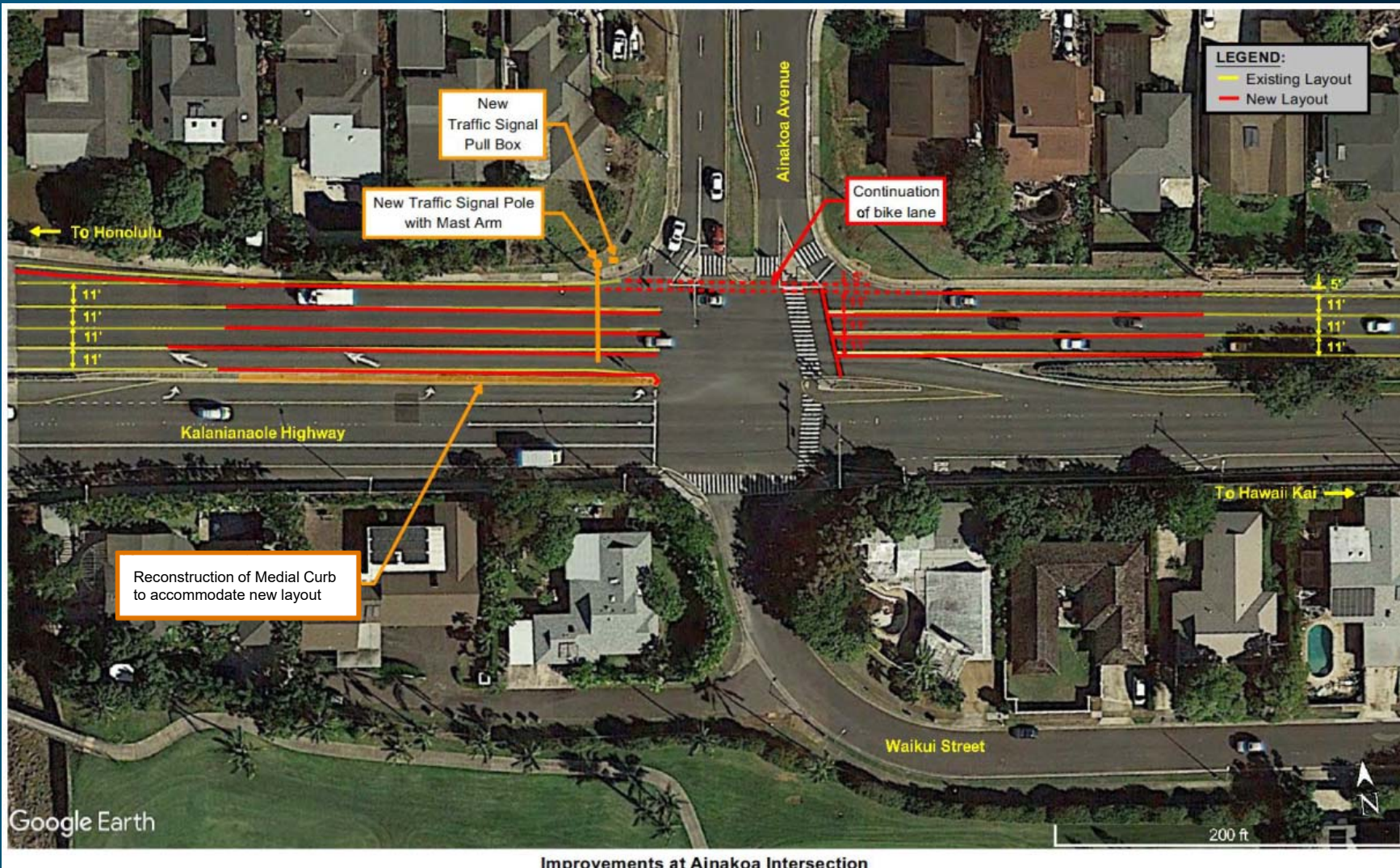
Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Project Scope

- Cold planing
- Repaving
- Reconstructing weakened pavements areas
- Replacing loop detectors
- Upgrading traffic counting stations
- Adjusting utility manhole frames and covers
- Installing traffic signal light backplates with retroreflective borders on all overhead traffic signals.
- Installing milepost reference markers, pavement markings, striping, and signing



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive Improvements at Ainakoa Intersection





Kalanianaʻole Highway Resurfacing, H-1 Freeway to West Hind Drive

Improvements at Waa Street to Wailupe Circle



Traffic Signalization, Crosswalk and Bus Stop Improvements



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Lane Closures

- 2 lanes closed in one direction
- Contra-flow will be provided resulting in 2 lanes opened in each direction



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

What to Expect?

Proposed Schedule

Target Start Date

June 1, 2018

Target Completion

November 30, 2018

Proposed Time of Construction Activities:

- Sunday 8:00 p.m. to Monday 4:00 a.m.
- Monday 8:00 p.m. to Tuesday 4:00 a.m.
- Tuesday 8:00 p.m. to Wednesday 4:00 a.m.
- Wednesday 8:00 p.m. to Thursday 4:00 a.m.
- Thursday 8:00 p.m. to Friday 4:00 a.m.



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

What to Expect?

Construction Scope of Work

For each phase of construction work:

- Installation of traffic controls.
- Mobilization of equipment and tools to the project site.

Phase 1	• Reconstruction of Pavement. • Installation of Temporary Striping.
Phase 2	• Cold Planing work. • Paving work and Installation of Temporary Striping.
Phase 3	• Adjustment of Manhole Frames and Covers
Phase 4	• Installation of Permanent Striping.
Phase 5	• Installation of Loop Detectors/Piezors/Traffic Counting Stations.



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Community Noise Variance Application

Why Nightwork?

HDOT is requesting the Noise Variance as construction during the daytime would have severe impacts associated with traffic delays that would be detrimental to the community.



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Community Noise Variance Application

Noise Regulations

HAR Title 11, Chapter 46 sets the rules and restrictions on sound levels for construction projects. It states:

“No permit shall allow any construction activities which emit noise:

- Monday through Friday before 7 a.m. and after 6 p.m. of the same day*
- Saturday before 9 a.m. and after 6 p.m.*
- Sundays and on Holidays”*

A Community Noise Variance must be obtained for any construction activities to occur outside the permissible hours (e.g., after 6 p.m. weekdays).



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Community Noise Variance Application

Proposed Noise Variance

- Variance application requests work be allowed every night, except Friday and Saturday nights, from 8:00 p.m. to 4:00 a.m.
- Requesting up to six (6) months to allow for unforeseen events/conditions.
- Equipment producing noise levels of 85 decibels or higher will only be used when necessary.



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Community Noise Variance Application

Typical Sound Levels

Relative Sound Level	½ as loud	Baseline			Twice as loud		Four times as loud	
Typical Sound Environment	Indoor Office	Urban Residential			Urban Commercial			
Lmax of Common Noise Sources		Washing Machine (3 ft)	Auto (50 mph at 50 ft)	Vacuum Cleaner (3 ft)		Garbage Disposal (3 ft)	Delivery Truck (50 mph at 50 ft)	Dump Truck (50 mph at 50 ft) Blender (3 ft)
Sound Level dBA	60	65	70	75	80	85	90	
Lmax at 50 ft of Transit Noise Source		Rail Transit with a Barrier (50 mph)			Rail Transit City Bus (50 mph) (50 mph)			

Source: EPA 1971, EPA 1974, FTA 2006



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Equipment List

Equipment	Decibels at 50 ft.
Power Broom	67
Spreader (Paving Machine)	82
Front Loader	79
Concrete Saw	78
Vacuum*	85
Static Rollers	75
Vibratory Rollers	83
60 to 80 lbs. Pneumatic Pavement Breaker (Jackhammer)*	88
Compressor (Air)	81
Generator	76
Grader*	85
Pick up Truck	75
Labor Truck	75
Flatbed Truck	75
Hauling Truck	78
Backhoe*	85
Water Truck	75

Equipment	Decibels at 50 ft.
Striping Machine	78
Cold Planing Machine	83
Pump	76
Bobcat Skid Loader*	85
Electric Mudgun*	85
Komatsu Mini Excavator*	85
Backhoe with Hammer*	90
Paver*	93.1
Shuttlebuggy*	94.2
Rubber Tire Roller (Sakai)*	91.6
Steel Drum Roller (Dynapac)*	89.7
Steel Drum Roller (Hypac)*	99
Steel Drum Roller w/vibration (Bomag)*	95.6
Kickout broom (Kubota)	84
Backhoe (Case)*	94.1
Steel Drum Roller (Sakai)*	103

* Equipment with Noise Level Readings of 85 Decibels or more



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Activity List and Equipment

Activity	Day/Time	Description of Work	Equipment
NIGHT WORK			
1	8:00 p.m.	Traffic Control, Mobilize Equipment and Tools to Site	All Equipment
PHASE 1			
2	8:00 p.m. – 4:00 a.m	Reconstruction and Temporary Striping	Concrete Saw (78 db) Vacuum (85 db) Generator (76 db) Spreader (Paving Machine)(82 db) Static Rollers (75 db) Vibratory Rollers (83 db) Striping Machine (temp 3) (78 db) Cold Planing Machine (83 db) Paver (93.1 db)* Shuttlebuggy (94.2 db)* Rubber Tire Roller (Sakai) (91.6 db)* Steel Drum Roller (Dynapac) (89.7 db)* Steel Drum Roller (Hypac) (99 db) Steel Drum Roller with Vibration (Bomag) (95.6 db)* Steel Drum Roller (Sakai) (103 db)

* Equipment with Noise Level Readings of 85 Decibels or more



Kalanianaʻole Highway Resurfacing, H-1 Freeway to West Hind Drive

Activity List and Equipment

Activity	Day/Time	Description of Work	Equipment
PHASE 2			
3	8:00 p.m. – 12 midnight	Cold Planing	Concrete Saw (78 db) Vacuum (85 db) Generator (76 db) Power Broom (67 db) Front Loader (79 db) Compressor (Air) (81 db) Grader (85 db)* Pick Up Truck (75 db) Labor Truck (75 db) Flatbed Truck (75 db)
4	12 midnight – 4:00 a.m	Paving and Temporary Striping	Backhoe (85 db)* Water Truck (75 db) Cold Planing Machine (83 db) Bobcat Skid Loader (85 db)* Backhoe with Hammer (90 db)* Kickbroom (Kubota) (84 db) Backhoe (Case) (94.1 db)* Spreader (Paving Machine) (82 db) Static Rollers (75 db) Vibratory Rollers (83 db) Striping Machine (temp 3) (78 db) Paver (93.1 db)* Shuttlebuggy (94.2 db)* Rubber Tire Roller (Sakai) (91.6 db)* Steel Drum Roller (Dynapac) (89.7 db)* Steel Drum Roller (Hypac) (99 db)* Steel Drum Roller with Vibration (Bomag) (95.6 db)* Steel Drum Roller (Sakai) (103 db)

* Equipment with Noise Level Readings of 85 Decibels or more



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Activity List and Equipment

Activity	Day/Time	Description of Work	Equipment
PHASE 3			
5	8:00 p.m. – 12 midnight	Adjust Manhole Frames and Covers	60-80 lb Pneumatic Pavement Breaker (Jackhammer) (88 db)* Compressor (Air) (81 db) Generator (76 db) Pick Up Truck (75 db) Flatbed Truck (75 db) Backhoe (Case) (94.1 db)*
PHASE 4			
6	8:00 p.m. – 4:00 a.m	Install Permanent Striping	Compressor (Air) (81 db) Generator (76 db) Pick Up Truck (75 db) Flatbed Truck (75 db) Striping Machine (temp 3) (78 db)
PHASE 5			
7	8:00 p.m. – 4:00 a.m	Installation of Loop Detectors/Piezos/Traffic Counting Stations	Concrete Saw (78 db) Compressor (Air) (81 db) Generator (76 db) Pick Up Truck (75 db) Flatbed Truck (75 db) Electric Mudgun (85 db)*

* Equipment with Noise Level Readings of 85 Decibels or more



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Community Noise Variance Application

Construction Noise Reduction

- Maintain all equipment in good working order
- Use of adequate sound mufflers and intake silencers for construction equipment
- Locate compressors and generators as far from residences as possible
- Contact information for the designated Contractor Representative to address complaints and will be available 24/7:

Grace Pacific LLC

Project Manager, Leo Nuneza
Phone No.: 808-479-8995
E-mail: lnuneza@gracepacific.com

Project Manager, Troy Okada
Phone No.: 808-479-0241
E-mail: tokada@gracepacific.com



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Community Noise Variance Application

Community Noise Variance Application

- Application was submitted to Department of Health for night work to occur, except Friday and Saturday nights, from 8:00 p.m. to 4:00 a.m.



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Public Comment Period

The 30-day Public Comment Period for the
Proposed Community Noise Variance is until
April 15, 2018.

- There are Comment Sheets at the Reception Table.
Please provide comments to:
Indoor Radiological and Health Branch
99-945 Halawa Valley Street
Aiea, Hawaii 96701
Phone: 586-4700



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Questions and Answers

- Please be respectful to those speaking
- Please keep focused on the noise variance issues for the proposed project





Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

More Information

HDOT

dotpao@hawaii.gov

hidot.hawaii.gov

HDOT Facebook & Twitter

587-2160

HDOT Oahu Lane Closures

<http://hidot.hawaii.gov/highways/roadwork/oahu/>



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

More Information

Comments on Noise Variance

State Department of Transportation
Highways Division, Oahu District
727 Kakoi Street
Honolulu, Hawaii 96819

Phone: 808-831-6802

Fax: 808-831-6808

E-mail: marvin.luckfield@Hawaii.gov



Kalaniana'ole Highway Resurfacing, H-1 Freeway to West Hind Drive

Mahalo!