APPENDIX D

INFRASTRUCTURE AVAILABILITY REPORT

Block F
Infrastructure Availability Report

Honolulu, Oahu, Hawaii
Tax Map Key: 2-1-053:Por.001

Prepared for
The Howard Hughes Corporation
1240 Ala Moana Boulevard, Suite 202
Honolulu, HI 96814

Prepared by
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, HI 96826

July 2020

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- Hawaiian Telcom: Request Letter and Assessment Letter
- Spectrum(Formerly Oceanic and Charter Communications): Utility Assessment Request Letter and Email Correspondence
- Hawaii Gas – Email Correspondence

1 INTRODUCTION

1.1 Purpose

The purpose of this report is to confirm the availability of infrastructure utilities to accommodate the demands proposed by the project. The utilities researched include water, sanitary sewer, drainage, electrical, communication, cable, and gas.

1.2 Proposed Project Location and Description

The Howard Hughes Corporation (HHC) proposes the development of a 748-unit high-rise condominium tower and commercial/light industrial garage building in Kaka`ako on the island of Oahu (see Figures 1-1 and 1-2). The project site is approximately 2.98 acres, generally located at TMK: 2-1-053:Por.001. The project site will be bounded by the Pohukaina Street to the northeast, Kamani Street to the southeast, Auahi Street to the southwest, and existing City base yard to the northwest.

1.3 Existing Topography

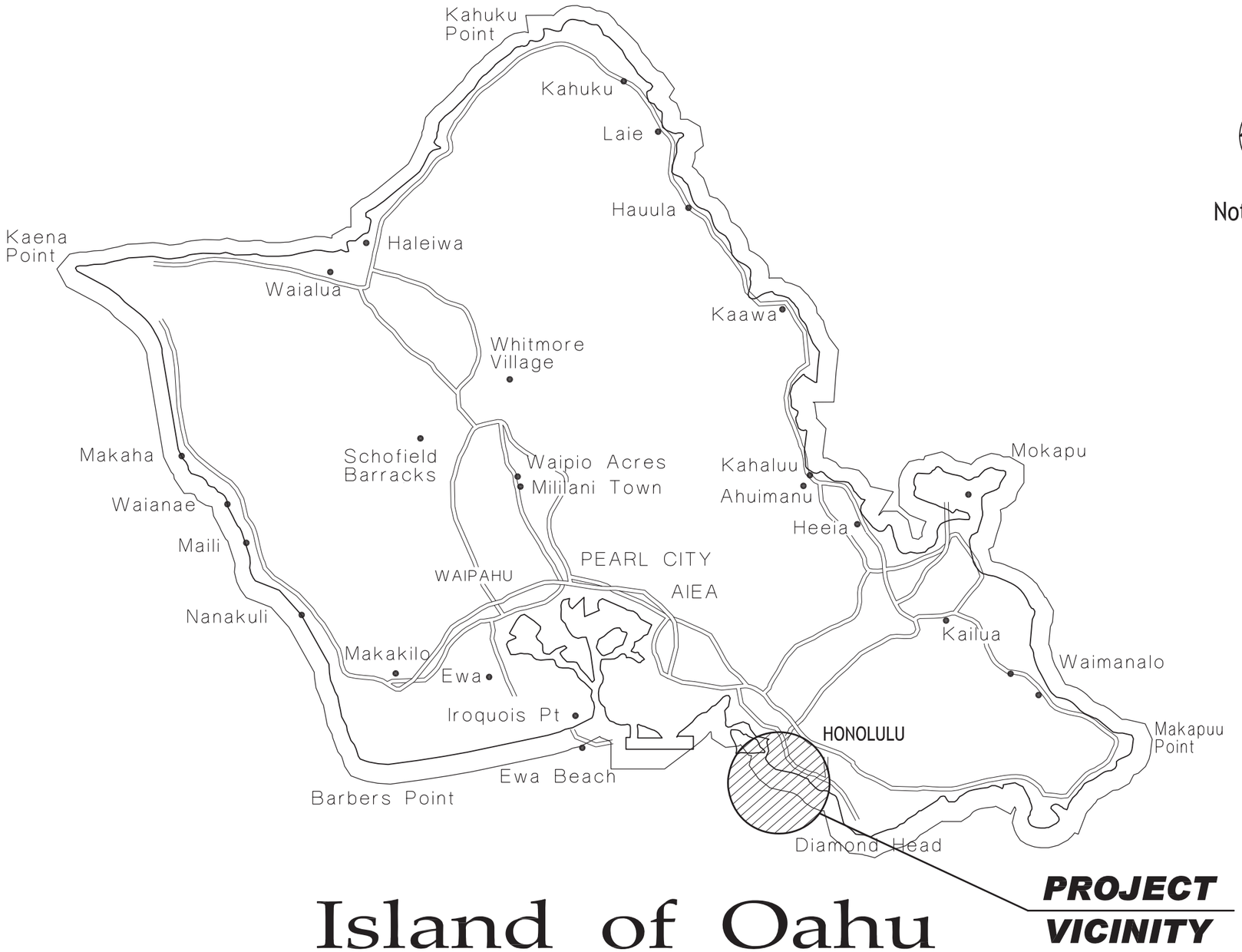
The project site is currently existing retail and office buildings. Sewer manholes are located in various locations along Pohukaina and Auahi Streets, which bound the vicinity of the project area. No drain inlets are observed within the project vicinity to collect storm water runoff. The project site is currently occupied by office buildings and parking areas. See Figure 1-3 for topographic survey prepared October 2012 by Control Point Surveying Inc.

1.4 Flood Hazard

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel No: 15003C0362G dated January 19, 2011 shows that the project is located in Zone AE (see Figure 1-4). Zone AE is characterized as a special flood hazard area, where the annual chance of flooding (100 year flood) is determined as 1%. The property's Flood Base Elevations is at 7 feet. The proposed finish floor elevation at Level 1 for the project is 7.25 feet.

1.5 Sea Level Rise

The Pacific Islands Ocean Observing System (PacIOOS) Hawai'i Sea Level Rise Viewer shows that a portion of the project area will be inundated by a 3.2-ft sea level rise by the year 2100 due to combined passive flooding and annual high wave flooding. The portion that will be affected by the sea level rise is at the northeastern side of the project area (see Figure 1-5). The proposed finish floor of the project is above the property's Flood Base elevation; thus, the project site will not be impacted by the 3.2-ft sea level rise.



WILSON OKAMOTO CORPORATION

BLOCK F INFRASTRUCTURE AVAILABILITY REPORT
HONOLULU, OAHU, HAWAII

VICINITY MAP

Figure 1-1

WILSON OKAMOTO CORPORATION
ENGINEERS | PLANNERS | CONSULTANTS

WARD VILLAGE BLOCK F

HONOLULU, OAHU, HAWAII

LOCATION MAP

Figure

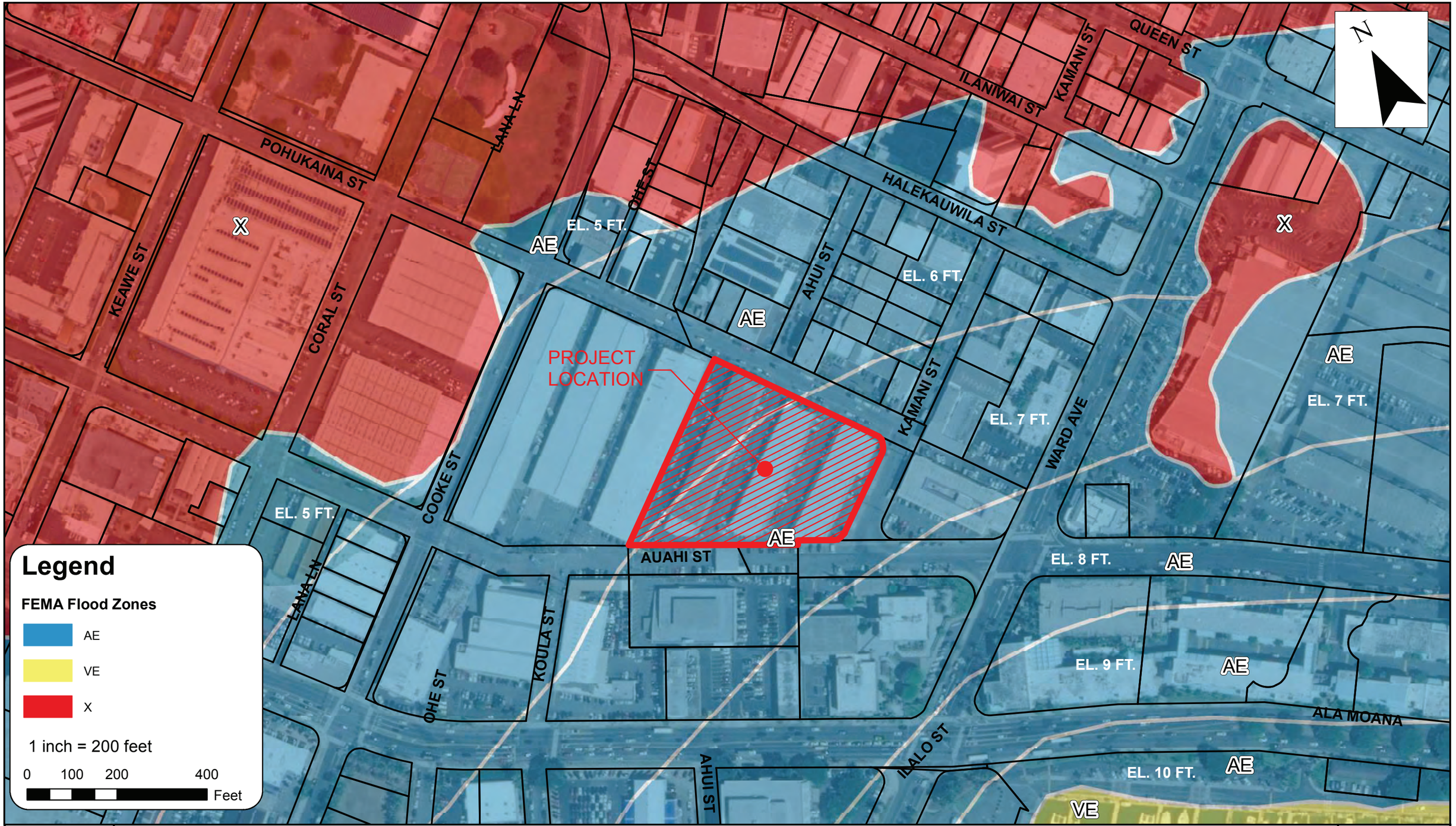
1-2

BLOCK F INFRASTRUCTURE AVAILABILITY REPORT

HONOLULU, OAHU, HAWAII

TOPOGRAPHIC SURVEY MAP

Figure 1-3



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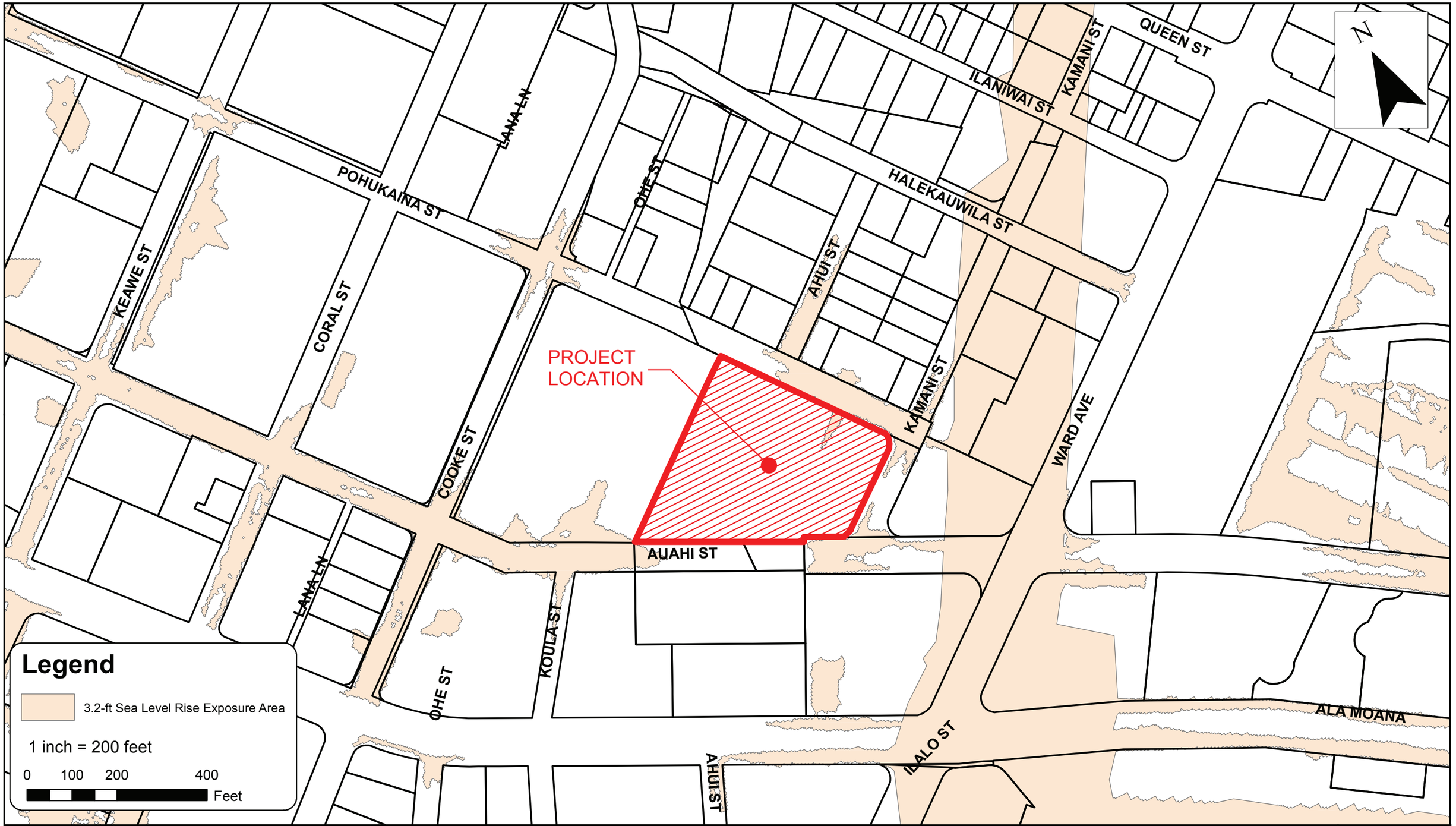
WARD VILLAGE BLOCK F

HONOLULU, OAHU, HAWAII

FLOOD HAZARD

Figure **1-4**



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WARD VILLAGE BLOCK F

HONOLULU, OAHU, HAWAII

SEA LEVEL RISE

Figure

1-5

2 UTILITIES

2.1 Sanitary Sewer System

The sanitary sewer system servicing the Kaka`ako Makai area and the project area is owned by the City and County of Honolulu (City) and maintained by its Department of Environmental Services (ENV).The wastewater flow from the project area is discharged into the Ala Moana Wastewater Pump Station and is then conveyed to the City's Sand Island Wastewater Treatment Plant, which serves the Honolulu area from Kuliouou to Moanalua.

The project proposes an 18-inch sewer main which is to be constructed within Pohukaina Street and Kamani Street that will connect to the existing 24" sewer main in Ward Avenue. See Figure 2-1 which identifies the existing sewer system within the project vicinity.

A sewer connection application was submitted on November 15, 2019 to the City Department of Planning and Permitting (DPP), Wastewater Branch (WWB) to confirm the existing sanitary sewer system can accommodate the project. An approved sewer connection application dated January 25, 2020 was received confirming available capacity (see Appendix A).

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WARD VILLAGE BLOCK F

HONOLULU, OAHU, HAWAII

EXISTING SANITARY SEWER SYSTEM

Figure

2-1

2.2 Water System

2.2.1 Potable Water

Potable water service for the project will be provided by the City and County of Honolulu's Board of Water Supply (BWS). The BWS's water system in the project area consists of a system of looped transmission mains, fire hydrants and water meters.

The project proposes connection to an existing 8-inch water main in Pohukaina Street to accommodate both the residential tower and the commercial/light industrial building. The size and location of the laterals will be confirmed during the final design phase. See Figure 2-2 which identifies the existing water system within the project vicinity. A letter request to BWS dated November 15, 2019 was sent to confirm that the existing water system can accommodate the project. An adequacy letter dated December 20, 2019 was received confirming available capacity (see Appendix A). It was stated that the developer should proceed with the upgrade of the 6-inch water main on Queen Street, from Cooke Street up to the existing 12-inch water main located between Cummins and Kamakee Streets, to a 12-inch main as indicated in the Victoria Ward, LTD. Redevelopment Project and Master Plan. BWS clarified that these developments should be completed before the start of Phase 3. Block F is within Phase 3 of the Victoria Ward Redevelopment Master Plan.

2.2.2 Fire Protection

Fire protection will be provided by public fire hydrants. Water supply from a public fire hydrant must be provided within 450 feet from the furthest point of the building to the fire access road. A fire sprinkler system will be installed in the entire high-rise residential tower building and only on the ground level commercial/light industrial spaces of the commercial/light industrial garage building. The size and location of the fire line that will supply for the sprinkler system will be confirmed during the final design phase. The Honolulu Fire Department (HFD) was consulted on June 24, 2020 to discuss the project and proposed fire protection methods. A figure was prepared as per the recommendations by HFD (see Appendix A). Recommendations provided by HFD will be maintained during the final design phase.

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BLOCK F INFRASTRUCTURE AVAILABILITY REPORT
HONOLULU, OAHU, HAWAII

EXISTING WATER SYSTEM

Figure
2-2

2.3 Site Drainage and Low Impact Development

The drainage system within the City right-of-way and City drainage easements servicing the Kaka`ako Makai area and the project area is owned by its Department of Facilities Maintenance (DFM). Drainage systems within private property are owned and maintained by the respective property owner.

The runoff from the project site will be collected within a private drainage system owned and maintained by HHC with a series of grated drain inlets. It is anticipated that the drainage pattern of the project site will be maintained and the peak flow rate and volume will not increase. For this reason, the project will not adversely impact the existing performance of the City system. See Figure 2-3 for the existing drainage system within the project site.

The project proposes to treat the overall storm water quality for the site with vegetated buffer strips, which will be located in the two parks within the property. The vegetated buffer strips will be surrounding the drain inlets located within the parks. Storm water will be collected by the drain inlets and will be directed to the existing catch basin located between Auahi Street (Private) and Kamani Street (Private). Email correspondence for the LID Site Design Strategies is attached in Appendix A.

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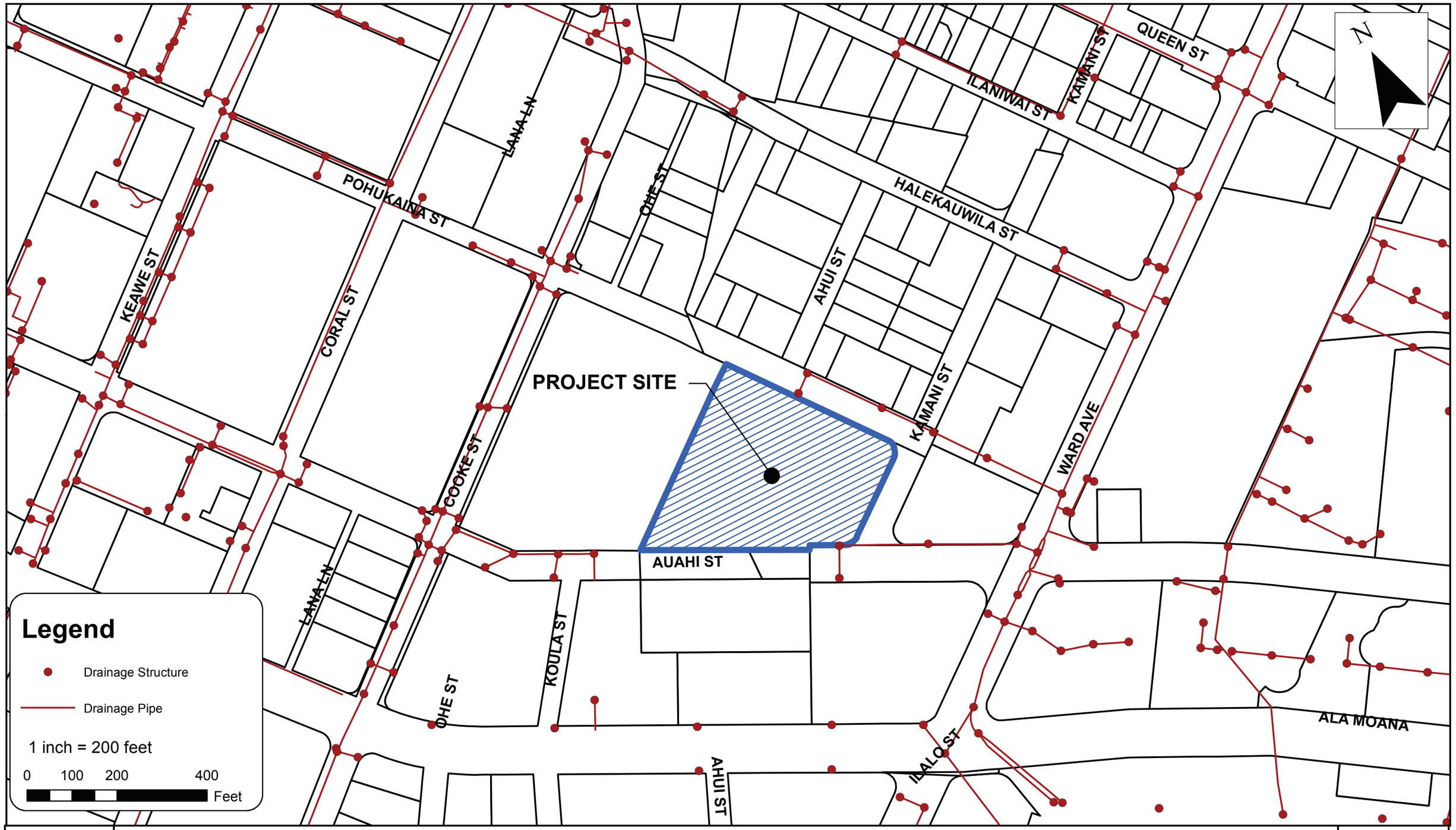

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WARD VILLAGE BLOCK F

HONOLULU, OAHU, HAWAII

EXISTING DRAINAGE SYSTEM

Figure

2-3

2.4 Electrical Power Facilities

The Hawaiian Electric Company (HECo) was consulted on December 20, 2019 by Ronald N. S. Ho & Associates, Inc. to confirm that the existing electrical system can accommodate the project. A Will Serve letter was received on May 29, 2020 confirming that the proposed circuits that will be installed to feed Block H will serve Block F and other Howard Hughes developments in the area (see Appendix A).

2.5 Telephone System

The Hawaiian Telecom Inc. was consulted on December 20, 2019 by Ronald N. S. Ho & Associates, Inc. to confirm that the existing communication system can accommodate the project. An assessment letter dated December 26, 2019 was received confirming available service connection for the Block F project (see Appendix A).

2.6 Cable Television System

The Spectrum (formerly Oceanic and Charter Communications) was consulted on December 20, 2019 by Ronald N. S. Ho & Associates, Inc. to confirm that the existing cable system can accommodate the project. An email correspondence was received confirming available capacity for the Block F project (see Appendix A).

2.7 Gas System

The Hawaiian Gas was consulted on December 23, 2019 to confirm that the existing gas system can accommodate the project. An email correspondence was received confirming available capacity for the Block F project (see Appendix A).

APPENDIX A

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- Hawaii Gas: Email Correspondence

City and County of Honolulu - Department of Planning and Permitting
Wastewater Branch

Approved Sewer Connection Application

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET * HONOLULU, HAWAII 96813
Phone: (808) 768-8209 * Fax: (808) 768-4210

SEWER CONNECTION APPLICATION

APPLICATION NO.: **2019/SCA-1693** STATUS: **Approved**
DATE RECEIVED: **11/14/2019** IWDP APP. NO.:
PROJECT NAME: **2019/SCA-1693 VWL Block F 748 New Residential Multi-Family Dwelling Units**

$3,483,985.60
Estimated Wastewater System Facility Charge*

LOCATION:

Zone	Section	Plat	Parcel
2	1	053	001

820 AUAHI ST Honolulu / Downtow **214,867** Sq. Ft.

SPECIFIC LOCATION: **Pohukina Street, Honolulu, Hawaii 96813**

APPLICANT: Kevin T. Goto
1907 S Beretania St, Suite 400
Honolulu, HI 96826-1301

DEVELOPMENT TYPE: **Dwelling, Multi-family**
OTHER USES: **Restaurant 1215 Seats Per Day**
Retail 5625 sf
Industrial 36000 sf
NON-RESIDENTIAL AREA: **14,325.00** s.f.

SEWER CONNECTION WORK DESIRED:

APPROXIMATE DATE OF CONNECTION:

PROPOSED UNITS	EXISTING UNITS	UNITS TO BE DEMOLISHED
No. of New Units: **748**	No. of Existing Units: **0**	No. of Units to be Demolished: **0**
Studios: **132**	Studios:	Studios:
1-Bedroom: **220**	1-Bedroom:	1-Bedroom:
2-Bedroom: **264**	2-Bedroom:	2-Bedroom:
3-Bedroom: **132**	3-Bedroom:	3-Bedroom:
4-Bedroom:	4-Bedroom:	4-Bedroom:
5-Bedroom:	5-Bedroom:	5-Bedroom:
6-Bedroom:	6-Bedroom:	6-Bedroom:

REMARKS

APPROVAL DATE: **01/25/2020**

EXPIRATION DATE: **01/24/2022**

Valid 2-years after approval date. Construction plans shall be completed and approved within this 2-year period. Construction shall commence within 1-year after approval of plans.
** Applicable WSFC shall be collected at the prevailing rate in accordance with ROH 1990, Chapter 14, Sections 14-10.3, 14-10.4, 14-10.5 and Appendix 14-D.*

REVIEWED BY: *Jon Coloma*
Site Development Division, Wastewater Branch

ExternalID: **077742566-001** JobId: **77742566**

Initial Print Date: Saturday January 25, 2020 8:46 am

Honolulu Board of Water Supply

Request Letter
Adequacy Letter

WILSON OKAMOTO CORPORATION
INNOVATORS • PLANNERS • ENGINEERS

8206-65
November 15, 2019

City and County of Honolulu
Board of Water Supply
Customer Care Operating Unit
630 South Beretania Street
Honolulu, HI 96813

Attention: Mr. Robert Chun

Subject: Ward Village Block F – BWS Water System Adequacy

Dear Mr. Chun:

We are requesting Board of Water Supply assistance to determine adequacy of the existing source, storage, and water distribution systems in Kaka'ako to support 3.0-acre residential and commercial development located at TMK: 2-1-053: 001.

The development will include the construction of a new residential high-rise condominium:

- Residential – 748 units
- Restaurant – 2,700 sf
- Retail – 5,625 sf
- Industrial – 36,000 sf

In addition to your review of the existing water system, we are requesting Board of Water Supply flow information, pressure information, record drawings, and facility maps related to the property. Any existing facility information that can be provided will be used in the project planning and design process to minimize potential conflicts during construction

Feel free to call or email me at kgoto@wilsonokamoto.com should you have any questions or require additional information.

Sincerely,

Kevin Goto, PE, LEED AP
Project Manager

1907 S. Beretania Street, Suite 400 • Honolulu, Hawaii • 96826 • (808) 946-2277

Enclosures: Project Vicinity and Location Map
Tax Map Key

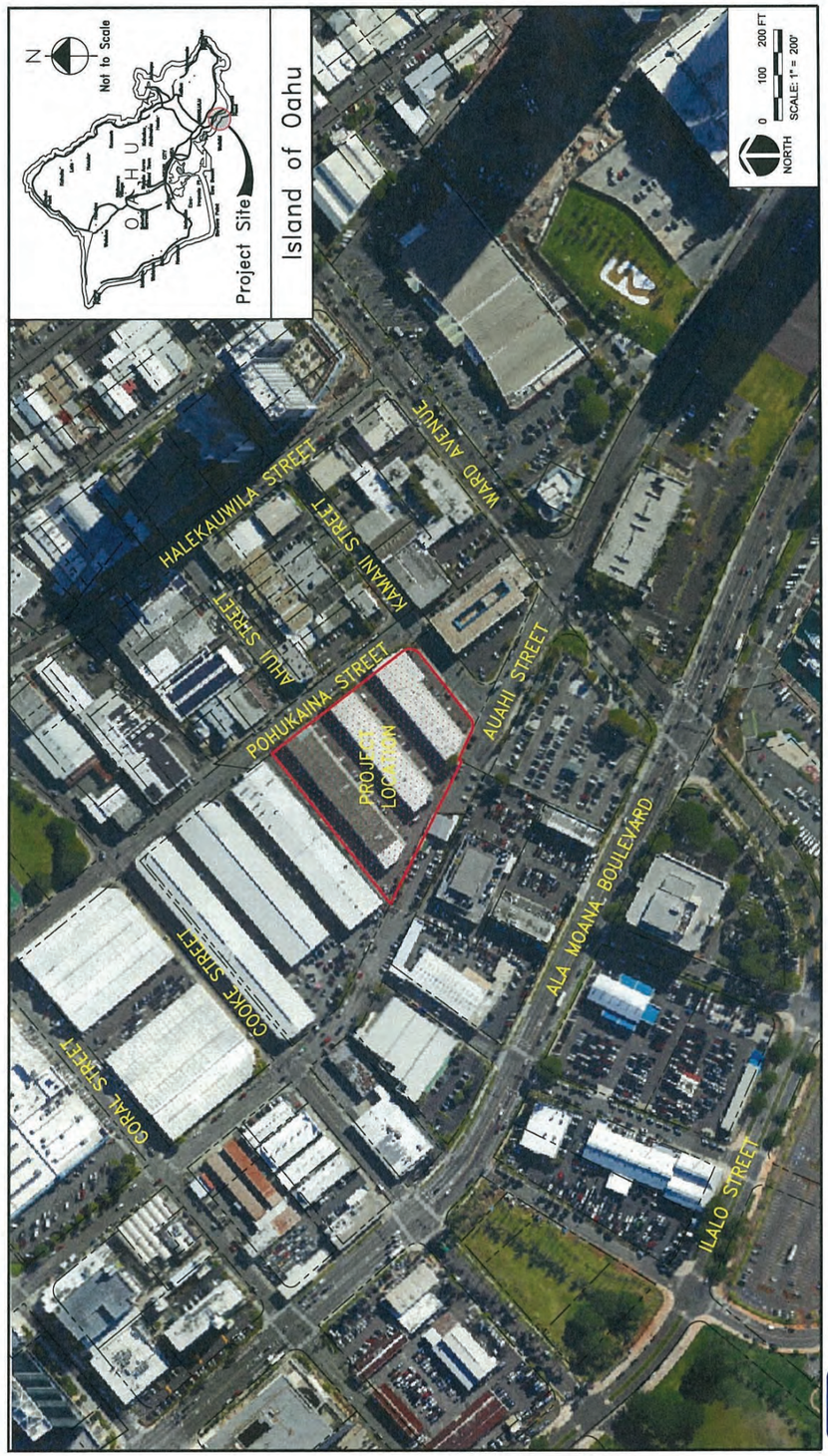


FIGURE 1
PROJECT VICINITY AND LOCATION MAP
WARD VILLAGE BLOCK F / HONOLULU, OAHU, HAWAII

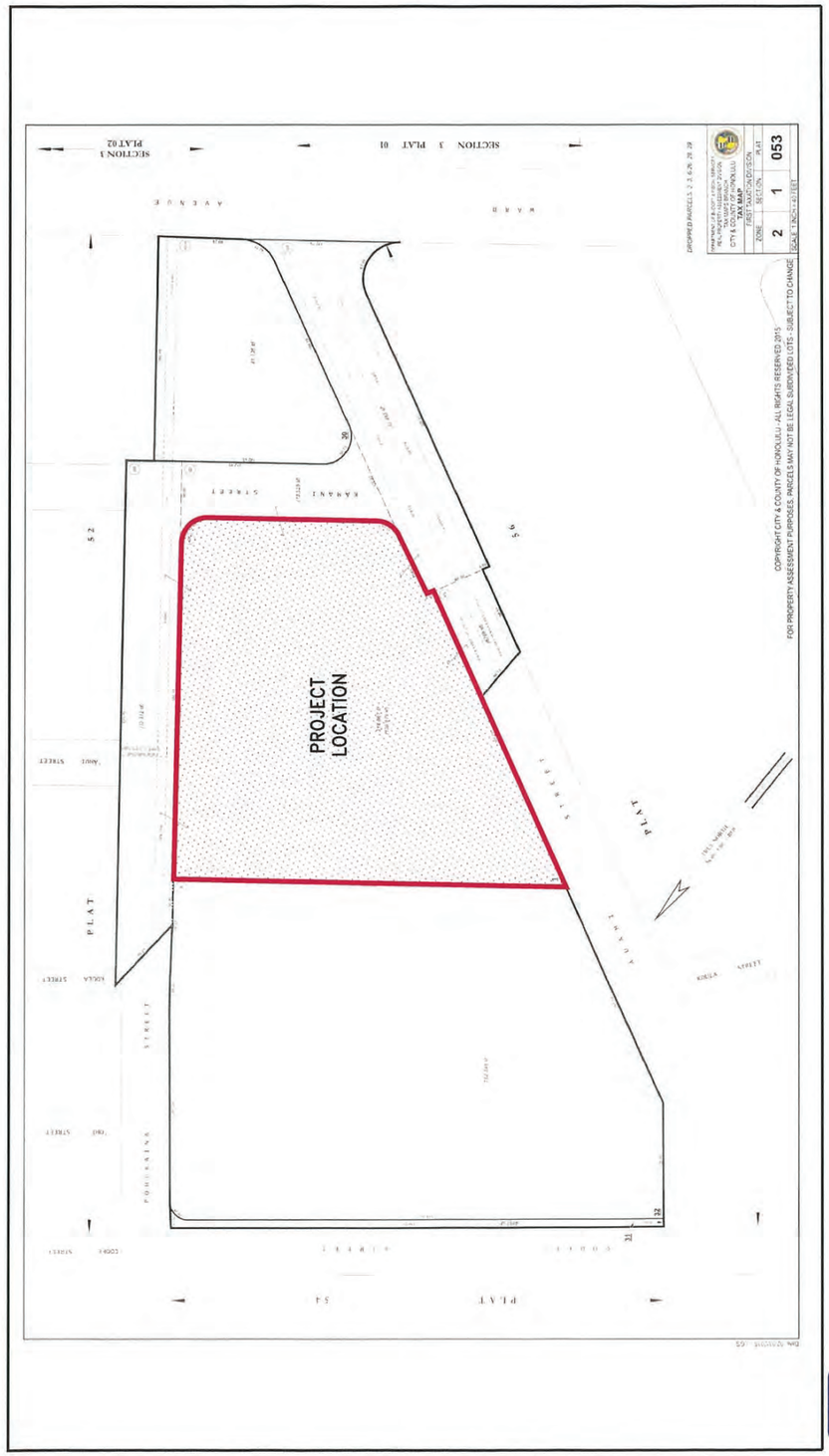


FIGURE 2
TAX MAP KEY

WARD VILLAGE BLOCK F / HONOLULU, OAHU, HAWAII

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843
www.boardofwatersupply.com

December 20, 2019

KIRK CALDWELL, MAYOR

BRYAN P. ANDAYA, Chair
KAPUA SPROAT, Vice Chair
KAY C. MATSUI
RAY C. SOON
MAX J. SWORD

ROSS S. SASAMURA, Ex-Officio
JADE T. BUTAY, Ex-Officio

ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

ELLEN E. KITAMURA, P.E.
Deputy Manager and Chief Engineer

RECEIVED

Mr. Kevin Goto
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Goto:

Subject: Your Letter Dated November 15, 2019 Requesting Water Availability and Fire Flow and Pressure Data for the Proposed Mixed-Use High-Rise Condominium Development at Ward Village Block F – Tax Map Key: 2-1-053: 001

Thank you for your letter regarding the proposed mixed-use high-rise condominium with 748 residential units, 2,700 square feet (sf) of restaurant space, 5,625 sf retail space, and 36,000 sf of industrial space.

The existing water system is adequate to accommodate the domestic water demands and off-site fire protection of the proposed development. However, please be advised that this information is based upon current data, and therefore, the Board of Water Supply (BWS) reserves the right to change any position or information stated herein up until the final approval of the building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

Proposed mixed-use developments are required to install separate domestic water meters and laterals serving the residential and non-residential spaces.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

Water conservation measures are required for all proposed developments. These measures include utilization of nonpotable water for irrigation using rain catchment, drought tolerant plants, xeriscape landscaping, efficient irrigation systems, such as a drip system and moisture sensors, and the use of Water Sense labeled ultra-low flow water fixtures and toilets.

High-rise buildings with booster pumps will be required to install water hammer arrestors or expansion tanks to reduce pressure spikes and potential main breaks in our water system.

The proposed project is subject to BWS Cross-Connection Control and Backflow Prevention requirements prior to the issuance of the Building Permit Application.

The proposed Ward Village Block F is within Phase 3 of the Victoria Ward Redevelopment Master Plan. The developer shall complete the upgrade of the 6-inch water main on Queen Street, from Cooke Street up to the existing 12-inch water main located between Cummins and Kamakee Streets, to a 12-inch main as indicated in our comments regarding the Victoria Ward, LTD. Redevelopment Project and Master Plan, before the start of Phase 3.

The construction drawings should be submitted for our approval and the construction schedule should be coordinated to minimize impact to the water system.

The BWS has suspended fire flow tests on fire hydrants as a water conservation measure. However, you may use the following calculated flow data for the following Fire Hydrants:

Fire Hydrant Number	Location	Static Pressure (psi)	Residual Pressure (psi)	Flow (gpm)
M00146	Auahi Street	76	63	4,000
M02052	Pohukaina Street	76	47	4,000
M02054	Pohukaina Street	76	54	4,000
M04775	Auahi Street	76	60	4,000
M04776	Kamani Street	76	56	4,000

The data is based on the existing water system, and the static pressure represents the theoretical pressure at the point of calculation with the reservoir full and no demands on the water system. The static pressure is not indicative of the actual pressure in the field. Therefore, in order to determine the flows that are available to the site, you will have to determine the actual field pressure by taking on-site pressure readings at various times of the day and correlating that field data with the above hydraulic design data.

The map showing the location of the fire hydrants is attached.

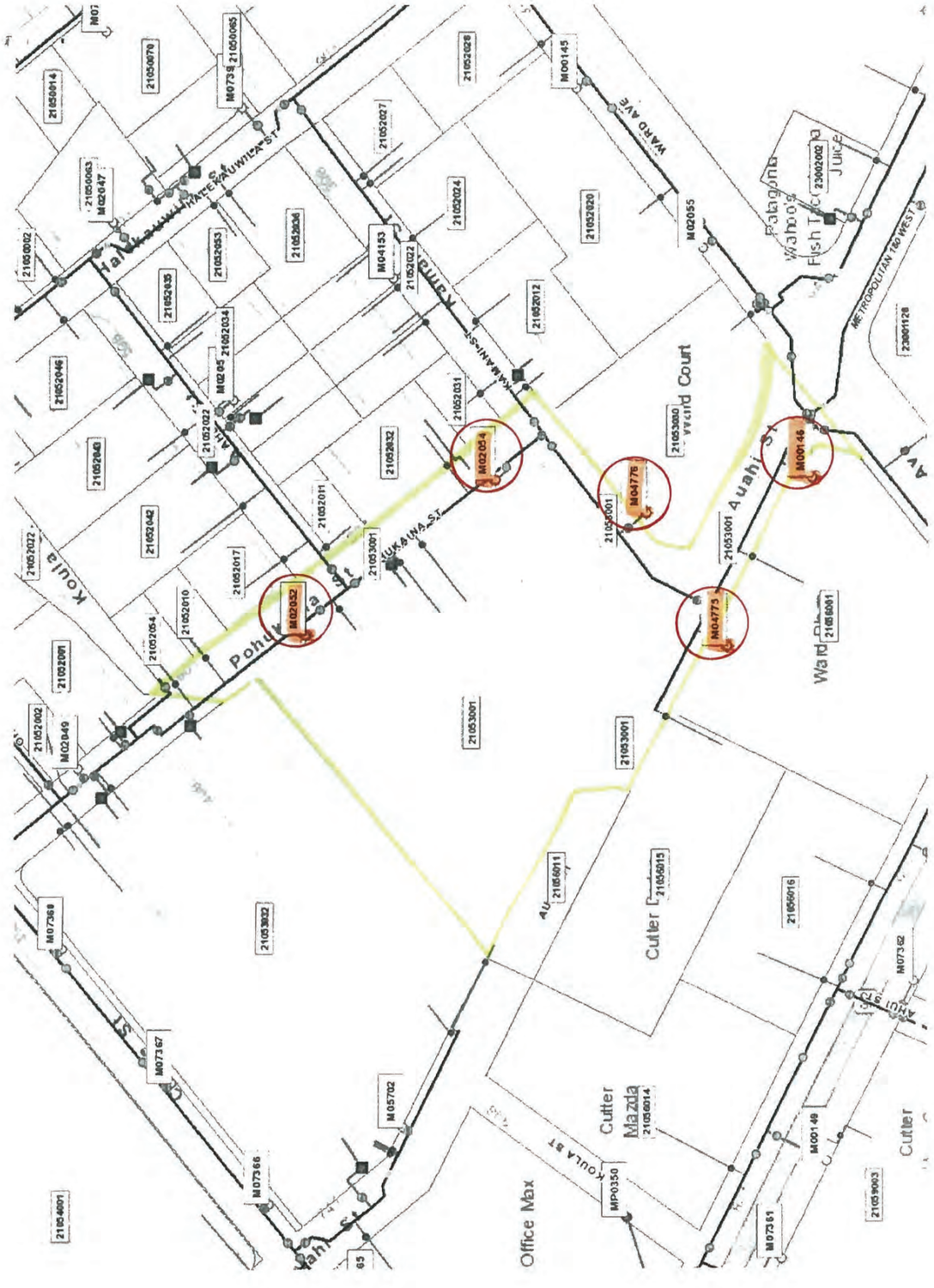
The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

If you have any questions, please contact Robert Chun, Project Review Branch of our Water Resources Division at 748-5443.

Very truly yours,

ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

Attachment



Honolulu Fire Department

HFD REQUIREMENTS

From: Zapata, Ricardo A <rzapata@honolulu.gov>
Sent: Saturday, June 27, 2020 4:31 AM
To: Rika Okino
Subject: RE: High-Rise Condo and Commercial/Garage Building Figure for HFD Review

Layout looks Good!

From: Rika Okino [mailto:ROkino@wilsonokamoto.com]
Sent: Friday, June 26, 2020 10:26 AM
To: Zapata, Ricardo A <rzapata@honolulu.gov>
Cc: Kevin Goto <kgoto@wilsonokamoto.com>; Cara Itai <CItai@wilsonokamoto.com>
Subject: RE: High-Rise Condo and Commercial/Garage Building Figure for HFD Review

Hi Ricardo,
The required fire flow will be provided.
Does any of this affect the dimensions that were sent to you previously? Or, is the proposed layout still acceptable?
Please let me know.
Thanks,

Rika Okino
Civil Engineer

WILSON OKAMOTO CORPORATION

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T (808) 946-2277 F (808) 946-2253
W http://www.wilsonokamoto.com

From: Zapata, Ricardo A [mailto:rzapata@honolulu.gov]
Sent: Thursday, June 25, 2020 8:53 AM
To: Rika Okino <ROkino@wilsonokamoto.com>
Subject: RE: High-Rise Condo and Commercial/Garage Building Figure for HFD Review

Hello Rika,
If the commercial/light industrial building will only be sprinklered on the 1st floor, then the fire flow requirement will be as specified in table 18.4.5.1.2 of the 2012 NFPA 1. The fire flow requirement is reduced if the building is sprinklered throughout, not only partially.
Ricardo

From: Rika Okino [mailto:ROkino@wilsonokamoto.com]
Sent: Wednesday, June 24, 2020 4:11 PM
To: Zapata, Ricardo A <rzapata@honolulu.gov>
Cc: Kevin Goto <kgoto@wilsonokamoto.com>; Cara Itai <CItai@wilsonokamoto.com>
Subject: RE: High-Rise Condo and Commercial/Garage Building Figure for HFD Review

Ricardo,
We have updated the note in our figure because the architect had pointed out that only the ground level of the commercial/light industrial spaces will have the fire sprinkler system, not the rest of the garage.
Does this change make a difference?

Thanks,
Rika Okino
Civil Engineer

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Honolulu, Hawaii 96826
T (808) 946-2277 F (808) 946-2253
W http://www.wilsonokamoto.com

From: Rika Okino
Sent: Wednesday, June 24, 2020 11:41 AM
To: 'Zapata, Ricardo A' <rzapata@honolulu.gov>
Subject: RE: High-Rise Condo and Commercial/Garage Building Figure for HFD Review

Ricardo,
Thank you for your feedback.
Rika Okino
Civil Engineer

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Honolulu, Hawaii 96826
T (808) 946-2277 F (808) 946-2253
W http://www.wilsonokamoto.com

From: Zapata, Ricardo A [mailto:rzapata@honolulu.gov]
Sent: Wednesday, June 24, 2020 10:40 AM
To: Rika Okino <ROkino@wilsonokamoto.com>
Subject: RE: High-Rise Condo and Commercial/Garage Building Figure for HFD Review

Rika,
Great question, But no that is not a problem. The fire trucks can take Kamani street and continue onto Pohukaina Street.
Thanks,
Ricardo

From: Rika Okino [mailto:ROkino@wilsonokamoto.com]
Sent: Wednesday, June 24, 2020 9:05 AM
To: Zapata, Ricardo A <rzapata@honolulu.gov>
Cc: Kevin Goto <kgoto@wilsonokamoto.com>; Cara Itai <CItai@wilsonokamoto.com>
Subject: High-Rise Condo and Commercial/Garage Building Figure for HFD Review

Hi Ricardo,
I have attached the figure of the high-rise condominium and commercial/parking garage building in Ward Village with dimensions for HFD review.
Please let us know if you have any questions or concerns.
Thanks,

Rika Okino
Civil Engineer

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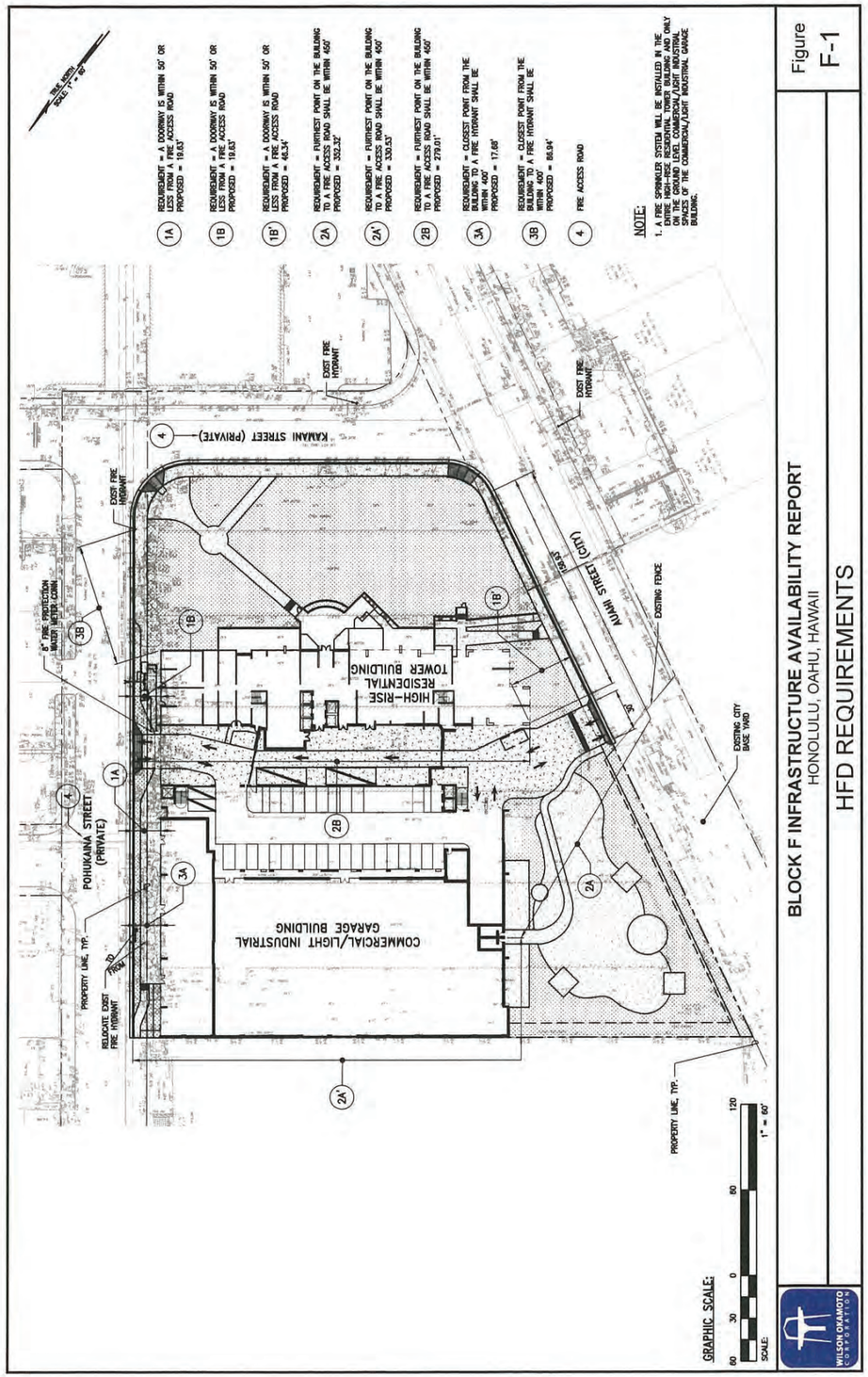
W http://www.wilsonokamoto.com

City and County of Honolulu - Department of Planning and Permitting
Civil Engineering Branch

LID Correspondence with Keith Miyashiro



From: Miyashiro, Keith K <kmiyashiro1@honolulu.gov>
Sent: Wednesday, July 8, 2020 3:23 AM
To: Rika Okino
Cc: Kevin Goto; Cara Itai
Subject: RE: Block F - Storm Water Quality Analysis

Rika,

Based on the concept, the proposed buffer strips addresses CEB's storm water quality however confirmation of approval is contingent upon the review of the SWQR and PCBMP plan.

Thanks,

Keith K. Miyashiro
Civil Engineer
City and County of Honolulu
Department of Planning and Permitting
Civil Engineering Branch
650 S. King Street, Honolulu, HI 96813
Email: kmiyashiro1@honolulu.gov
Phone: 808-768-8106

From: Rika Okino [mailto:ROkino@wilsonokamoto.com]
Sent: Tuesday, July 07, 2020 8:19 AM
To: Miyashiro, Keith K
Cc: Kevin Goto; Cara Itai
Subject: RE: Block F - Storm Water Quality Analysis

Hi Keith,
See attached for the updated figure after incorporating your feedback.
Please let me know if you have any questions or concerns.
Thank you,
Rika Okino
Civil Engineer

WILSON OKAMOTO CORPORATION

1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826
T (808) 946-2277 F (808) 946-2253
W http://www.wilsonokamoto.com

From: Rika Okino
Sent: Monday, July 6, 2020 10:38 AM
To: Miyashiro, Keith K <kmiyashiro1@honolulu.gov>
Cc: Kevin Goto <kgoto@wilsonokamoto.com>; Cara Itai <CItai@wilsonokamoto.com>
Subject: RE: Block F - Storm Water Quality Analysis

Hi Keith,

Understood. Thank you for the feedback. We will revise our figure and send back the updated version.
Thanks,
Rika Okino
Civil Engineer

WILSON OKAMOTO CORPORATION

1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826
T (808) 946-2277 F (808) 946-2253
W http://www.wilsonokamoto.com

From: Miyashiro, Keith K [mailto:kmiyashiro1@honolulu.gov]
Sent: Monday, July 6, 2020 9:55 AM
To: Rika Okino <ROkino@wilsonokamoto.com>
Cc: Kevin Goto <kgoto@wilsonokamoto.com>; Cara Itai <CItai@wilsonokamoto.com>
Subject: RE: Block F - Storm Water Quality Analysis

Rika,

Vegetated buffer strips require a minimum of 15 feet of flow length. I am not able to confirm from the drawing but it appears that you may need to adjust the strips designation such that the minimum 15 feet is met at all angles of entry into the inlet.

For DMA 2 since there are two inlets, you would need to split the DMA into two separate DMAs and designate a buffer strip for each so that we can check if the flow depth and velocity requirements are met.

For DMA 3 please revise the DMA such that the inlet is not located within the de minimus area.

Conceptually the plan can meet water quality requirements for this project however actual confirmation is contingent upon the information presented in the SWQR and the review of the construction plans.

Thanks,

Keith K. Miyashiro
Civil Engineer
City and County of Honolulu
Department of Planning and Permitting
Civil Engineering Branch
650 S. King Street, Honolulu, HI 96813
Email: kmiyashiro1@honolulu.gov
Phone: 808-768-8106

From: Rika Okino [mailto:ROkino@wilsonokamoto.com]
Sent: Thursday, July 02, 2020 5:21 PM
To: Miyashiro, Keith K
Cc: Kevin Goto; Cara Itai
Subject: RE: Block F - Storm Water Quality Analysis

Hi Keith,
See attached for our updated figure.
We have adjusted it so that vegetated buffer strips do not discharge into other DMAs and self-mitigating areas do not accept runoff from other DMAs.

Runoff from the buildings or from areas between the buildings will sheet flow over vegetated buffer strips before entering the site's drainage system.
Please let us know if you have any questions or concerns.
Thanks,

Rika Okino
Civil Engineer

WILSON OKAMOTO CORPORATION

1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826
T (808) 946-2277 F (808) 946-2253
W http://www.wilsonokamoto.com

From: Rika Okino
Sent: Wednesday, July 1, 2020 12:22 PM
To: Miyashiro, Keith K <kmiyashiro1@honolulu.gov>
Cc: Kevin Goto <kgoto@wilsonokamoto.com>; Cara Itai <CItai@wilsonokamoto.com>
Subject: RE: Block F - Storm Water Quality Analysis

Keith,
Thank you for your response. We will adjust our figure and get back to you.
Thanks,

Rika Okino
Civil Engineer

WILSON OKAMOTO CORPORATION

1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826
T (808) 946-2277 F (808) 946-2253
W http://www.wilsonokamoto.com

From: Miyashiro, Keith K [mailto:kmiyashiro1@honolulu.gov]
Sent: Wednesday, July 1, 2020 10:12 AM
To: Rika Okino <ROkino@wilsonokamoto.com>
Cc: Kevin Goto <kgoto@wilsonokamoto.com>; Cara Itai <CItai@wilsonokamoto.com>
Subject: RE: Block F - Storm Water Quality Analysis

Hi Rika,

The self-mitigating areas appear to be inappropriately called out since they are hydraulically connected based on the DMA map. A self-mitigating area cannot accept runoff from other DMAs, need to comprised of landscaping surfaces, and discharge directly or indirectly offsite.

Vegetated buffer strips should also not discharge into other DMAs or self-mitigating areas therefore the designation of the buffer strips would need to be revised. The DMAs themselves may also need to be adjusted in order to satisfy this requirement. Use of biofiltration for water quality treatment also depends if retention is justified as infeasible in which documentation in the SWQR is required.

Based on the layout of the project, variances will be required since the planting strips are in the City's RoW as well as the use of a meandering sidewalk. If the finish of the sidewalk is non-standard then it should be added to the variance request. Additionally if there are future plans to dedicate Pohukaina Street to the City then a driveway variance would be required since the flares look irregular. Justification as to why the deviation from City's standards will be required in order to approve the variances.

Keep in mind that CEB's approval for storm water quality is contingent upon the review of the contents of the SWQR and PCBMP plan.

Thanks,

Keith K. Miyashiro
Civil Engineer
City and County of Honolulu
Department of Planning and Permitting
Civil Engineering Branch
650 S. King Street, Honolulu, HI 96813
Email: kmiyashiro1@honolulu.gov
Phone: 808-768-8106

From: Rika Okino [mailto:ROkino@wilsonokamoto.com]
Sent: Wednesday, July 01, 2020 9:37 AM
To: Miyashiro, Keith K
Cc: Kevin Goto; Cara Itai
Subject: Block F - Storm Water Quality Analysis

Hi Keith,
We are currently working on Block F. The Block F site is bounded by Pohukaina Street, Kamani Street, Auahi Street, and a city base yard in Ward Village. The project includes two buildings: a high-rise condominium and a commercial/light industrial garage building. We plan on treating all of the storm water from the site with vegetated buffer strips located in the two parks on the property. I have attached the design concept on this email.

The client, Howard Hughes Corporation, is preparing the Developmental Permit application to HCDA, thus we were wondering if you could please do an initial review of this design concept? Please let me know if you have any questions or comments.
Thanks,

Rika Okino
Civil Engineer

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Hawaiian Electric Company

Request Letter and Will Serve Letter

Ronald N. S. Ho & Associates, Inc. *electrical engineers*

Sean K. Sugai, P.E. • Steven H. Sakai, P.E. • Dennis I. Toba, P.E. • Ronald N. S. Ho, P.E. • Gary I. Funasaki, P.E

20 December 2019

Hawaiian Electric Co.
P. O. Box 2750
Honolulu, HI 96840

Attention: Eric Shimono, P.E.

Project: Ward Village Block F Utility Assessment

Enclosures: (a) Block F Concept Site Plan
(b) TMK No. 2-1-053:001, 030 and 032

Please be advised that we are working with Wilson Okamoto Corporation who is under contract to Howard Hughes Corporation to develop a utility assessment report for the Block F development (TMK No. 2-1-053:001, 030 and 032). Please find attached for your review and comment enclosure (a) and enclosure (b) which indicate the conceptual site plan and location. It is currently anticipated that the building will consist of 748 dwelling units, 5,625 square foot retail space, 2,700 restaurant and 36,000 square feet of light industrial space. Based on a diversified per unit demand load of 3.5 kVA, a pro-rated common area demand load of 1kVA per residential unit, a demand load of 11 VA per square foot for the restaurant and a demand loads of 5 VA per square foot for the light industrial and retail space, the preliminary peak demand load would be 3,603 kVA. This peak demand load is for planning purposes and it should be noted that the building load, when calculated based on the currently enforced edition of the National Electrical Code, will be higher than this calculation. Please advise on the following:

1. HECO's preferred service connection point for this development. Also please verify whether HECO's 12 kV (nominal) distribution system in the area has sufficient capacity to provide service to this development. If off-site improvements are required to provide service to this site, please advise as to the nature and scope of the improvements and whether the Developer might be expected to participate in the cost of these off-site improvements. If the Developer's cost participation is anticipated, please provide an order-of-magnitude budget of the cost.

2. If we may obtain the existing HECO distribution plans for any existing overhead and underground facilities within or adjacent to the site and, if possible, a color e-map of the project area. These will assist with the development of the utility assessment.

2153 North King Street #201 • Honolulu, Hawaii 96819 • Tel (808) 941-0577 • E-mail: postmaster@rnsha.com • Website: www.rnsha.com

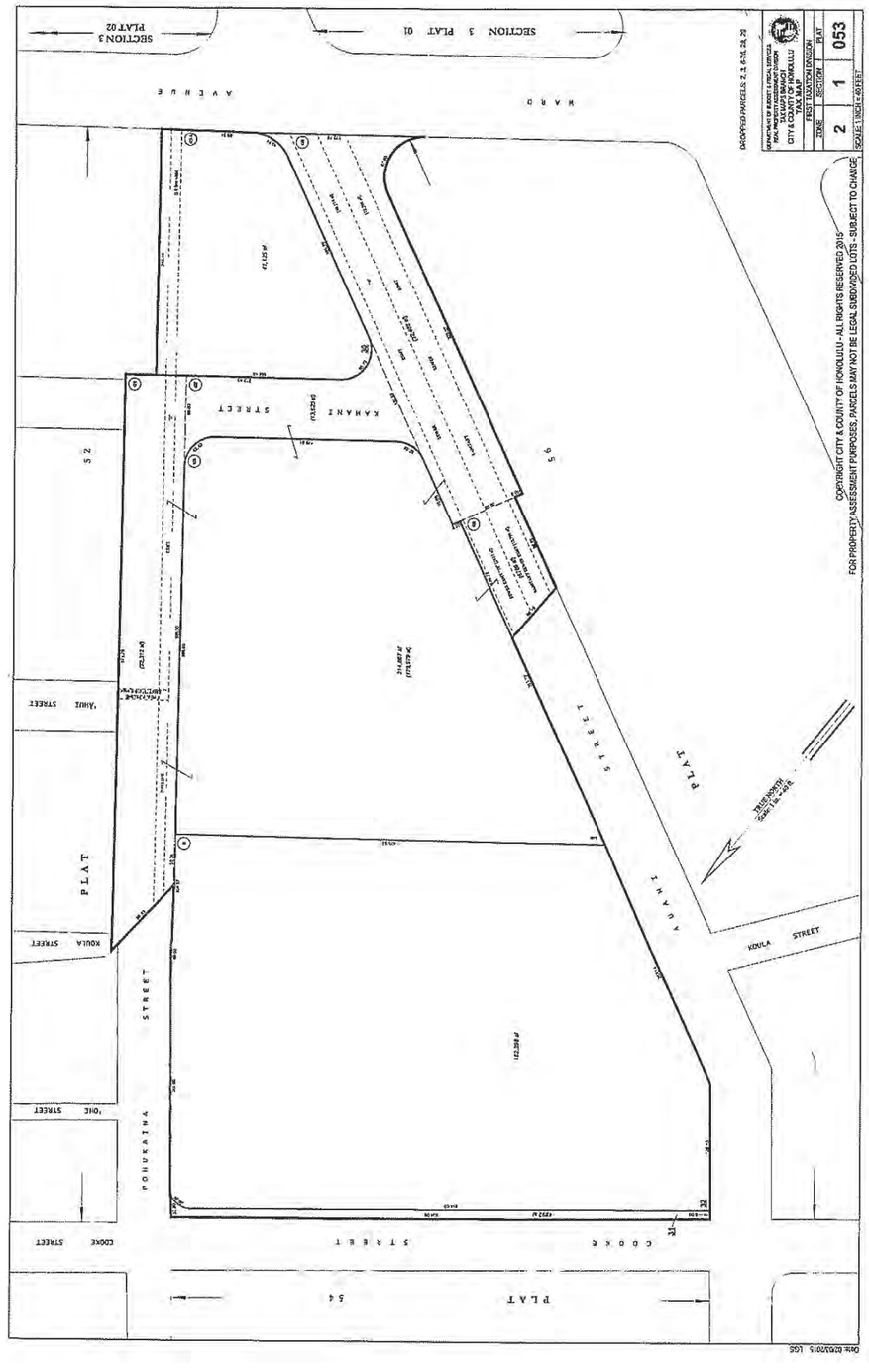
3. HECO would provide a "will serve" letter for this project which will be included in the project's application for approval by the Hawaii Community Development Authority.

We are trying to complete the draft utility assessment report as quickly as feasible and would appreciate any information you can furnish within the next three weeks. Your assistance in expediting this matter is greatly appreciated. Should you have any questions, please call.

Very truly yours,

Steven Sakai

cc: Gary Fukumoto, HECO
Kevin Goto, WOC



May 29, 2020

Mr. Steve Sakai
Ronald N.S. Ho & Associates
2153 N. King Street #201
Honolulu, HI. 96819

Dear Mr. Sakai:

Re: Ward Village – Block F

This is in response to your request for a "Will Serve" letter for the above project location.

The existing 11.5 kv distribution circuits within the development area are inadequate to serve the proposed project. However, there are proposed circuits that will be installed to feed the Ward Village Block H project that will be used to serve Block F and other Howard Hughes developments in the area. We look forward to working with you on your design as they are being developed.

We request that you keep us informed on the status of your project. As soon as you have detailed plans, please create a Service Request with us, and be sure to allow sufficient time for us to work on the project.

Please let us know if we can be of assistance in any other way. Should you have any questions, please call me at 543-7590.

Sincerely,

Shimono, Eric
Digitally signed by Shimono, Eric
Date: 2020.05.29 17:32:52 -10'00'

Eric Shimono
Sr. Engineer
Planning & Design Division
Customer Installation Dept.

ES:es

Hawaiian Telcom

Request Letter and Assessment Letter

Ronald N. S. Ho & Associates, Inc. electrical engineers
Sean K. Sugai, P.E • Steven H. Sakai, P.E. • Dennis I. Toba, P.E. • Ronald N. S. Ho, P.E. • Gary I. Funasaki, P.E

20 December 2019

Hawaiian Telecom Inc.
1177 Bishop Street, 10th Floor
Honolulu, HI 96813

Attention: Mr. Kalani Andrade

Project: Ward Village Block F Utility Assessment

Enclosures: (a) Block F Concept Site Plan
(b) TMK No. 2-1-053:001, 030 and 032

Please be advised that we are working with Wilson Okamoto Corporation who is under contract to Howard Hughes Corporation to develop a utility assessment report for the Block F development (TMK No. 2-1-053:001, 030 and 032). Please find attached for your review and comment enclosure (a) and enclosure (b) which indicate the conceptual site plan and location. It is currently anticipated that the building will consist of 748 dwelling units, 5,625 square foot retail space, 2,700 restaurant and 36,000 square feet of light industrial space. Please advise on the following:

1. HTCO's preferred service connection point for this development. Also please verify that HTCO's distribution system in the area has sufficient capacity to provide service to this development. If off-site improvements are required to provide service to this site, please advise as to the nature and scope of the improvements and whether the Developer might be expected to participate in the cost of these off-site improvements. If the Developer's cost participation is anticipated, please provide an order-of-magnitude budget of the cost.

2. If we may obtain the existing HTCO distribution maps for any existing overhead and underground facilities within or adjacent to the site. These will assist with the development of the utility assessment.

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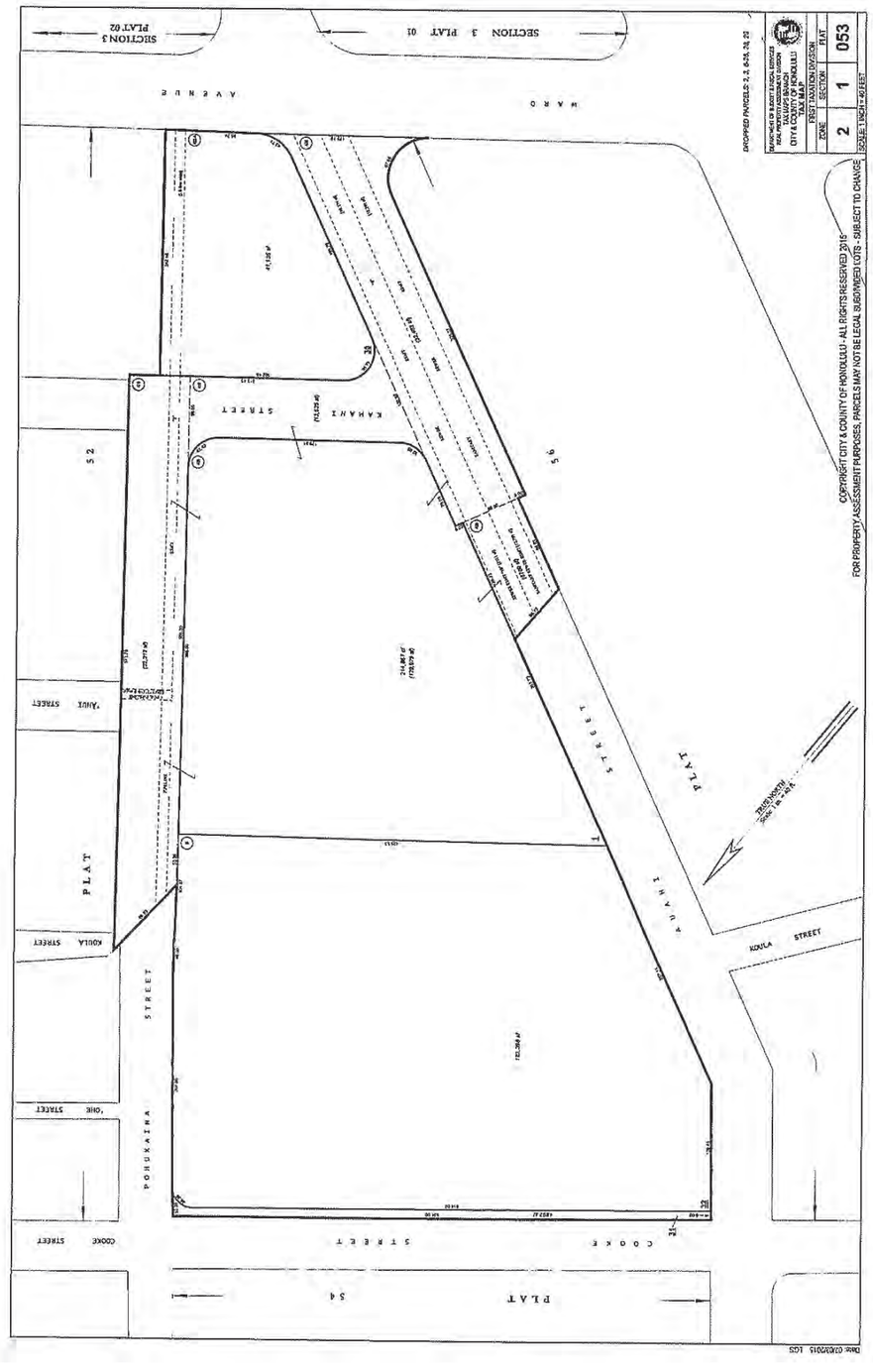
We are trying to complete the draft utility assessment report as quickly as feasible and would appreciate any information you can furnish within the next three weeks. Your assistance in expediting this matter is greatly appreciated. Should you have any questions, please call.

Very truly yours,

Steven Sakai

cc: Tracy Hiyane, HTCO
Kevin Goto, WOC



Hawaiian Telcom
HAWAII'S TECHNOLOGY LEADER

December 26, 2019

Ronald N. S. Ho & Associates, Inc.
2153 North King St. #201
Honolulu, HI 96819
Attention: Steven Sakai

Steven,

Subject: **Ward Village Block F Utility Assessment**

Thank you for the opportunity to review and comment on the Ward Village Block F Utility Assessment.

Hawaiian Telcom submits the following questions, revisions, and comments:

- The preferred service connection point is utility Pole 24 located on Pohukaina St. The specified site requires no offsite improvements to provide service.
- Please see attached for a distribution map of existing HTCO facilities in the area.

If you have any questions or require assistance in the future on this project, please call me at 546.5438

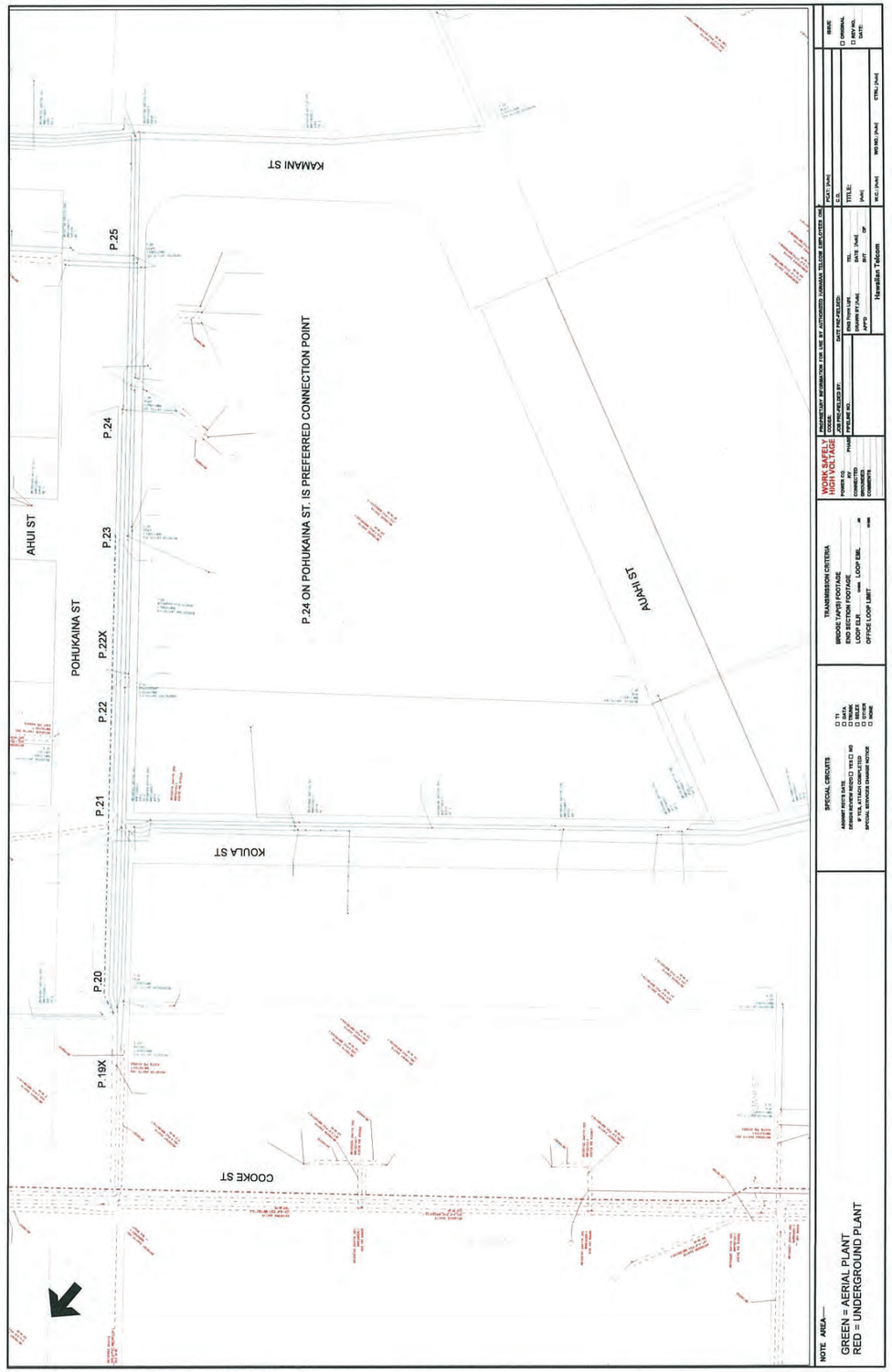
Regards,

Royce Light

Royce Light
Network Engineer—Outside Plant Engineering

Attachments: (1)

cc: File [Kakaako]



Charter Communications aka Spectrum

Utility Assessment Request Letter and Email Correspondence

Ronald N. S. Ho & Associates, Inc. electrical engineers
Sean K. Sugai, P.E. • Steven H. Sakai, P.E. • Dennis I. Toba, P.E. • Ronald N. S. Ho, P.E. • Gary I. Funasaki, P.E.

20 December 2019

Spectrum Oceanic
200 Akamainui Street
Mililani, HI 96789

Attention: Ms. Allyson Ka'ai

Project: Ward Village Block F Utility Assessment

Enclosures: (a) Block F Concept Site Plan
(b) TMK No. 2-1-053:001, 030 and 032

Please be advised that we are working with Wilson Okamoto Corporation who is under contract to Howard Hughes Corporation to develop a utility assessment report for the Block F development (TMK No. 2-1-053:001, 030 and 032). Please find attached for your review and comment enclosure (a) and enclosure (b) which indicate the conceptual site plan and location. It is currently anticipated that the building will consist of 748 dwelling units, 5,625 square foot retail space, 2,700 restaurant and 36,000 square feet of light industrial space. Please advise on the following

1. Spectrum's preferred service connection point for this development. Also, please verify that Spectrum's distribution system in the area has sufficient capacity to provide service to this development. If off-site improvements are required to provide service to this site, please advise as to the nature and scope of the improvements and whether the Developer might be expected to participate in the cost of these off-site improvements. If the Developer's cost participation is anticipated, please provide an order-of-magnitude budget of the cost.

2. If we may obtain the existing Spectrum distribution maps for any existing overhead and underground facilities within or adjacent to the site. These will assist with the development of the utility assessment.

We are trying to complete the draft utility assessment report as quickly as feasible and would appreciate any information you can furnish within the next three weeks. Your assistance in expediting this matter is greatly appreciated. Should you have any questions, please call

Very truly yours,

Steven Sakai

cc: Randy Makizuru, Spectrum
Kevin Goto, WOC

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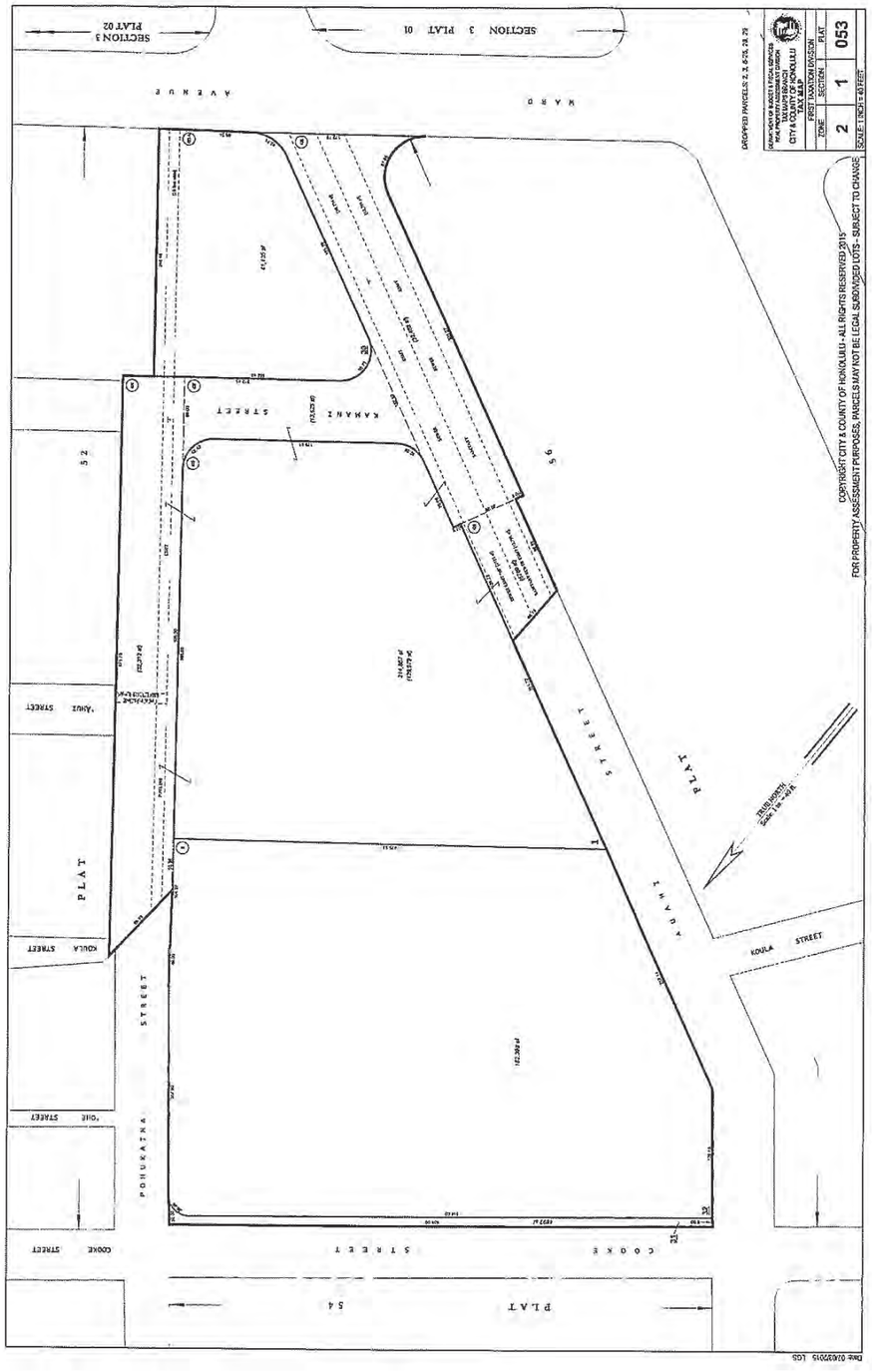

From: ssakai@rnsha.com [mailto:ssakai@rnsha.com]
Sent: Tuesday, December 31, 2019 12:00 PM
To: Kevin Goto <kgoto@wilsonokamoto.com>
Cc: 'Lee Cranmer' <Lee.Cranmer@howardhughes.com>; 'Naona Ferreira' <naona.ferreira@howardhughes.com>
Subject: RE: HHC Block F - CATV infrastructure

To: Kevin Goto, WOC
From: Steve Sakai, RHA

The replacement underground duct system for Spectrum will need to take the service to Block F into account.

From: Kevin Goto <kgoto@wilsonokamoto.com>
Sent: Tuesday, December 31, 2019 11:47 AM
To: ssakai@rnsha.com
Cc: 'Lee Cranmer' <Lee.Cranmer@howardhughes.com>; 'Naona Ferreira' <naona.ferreira@howardhughes.com>; 'Scott Lee' <SLee@rnsha.com>; Michael Fujita <mfujita@wilsonokamoto.com>; Cara Itai <CItai@wilsonokamoto.com>
Subject: RE: HHC Block F - CATV infrastructure

Steve:

What does this mean since HHC had requested that Pole #23 be removed?

Thanks.

Kevin Goto, PE, LEED AP
Civil Engineer

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W http://www.wilsonokamoto.com

From: ssakai@rnsha.com [mailto:ssakai@rnsha.com]
Sent: Tuesday, December 31, 2019 7:01 AM
To: Kevin Goto <kgoto@wilsonokamoto.com>; Michael Fujita <mfujita@wilsonokamoto.com>
Cc: 'Lee Cranmer' <Lee.Cranmer@howardhughes.com>; 'Naona Ferreira' <naona.ferreira@howardhughes.com>; 'Scott Lee' <SLee@rnsha.com>
Subject: FW: HHC Block F - CATV infrastructure

To: Kevin Goto, WOC; Michael Fujita, WOC
From: Steve Sakai, RHA

Please note the attached response from Spectrum to our utility assessment inquiry.

From: Makizuru, Randy T <Randy.Makizuru@charter.com>
Sent: Tuesday, December 31, 2019 6:45 AM

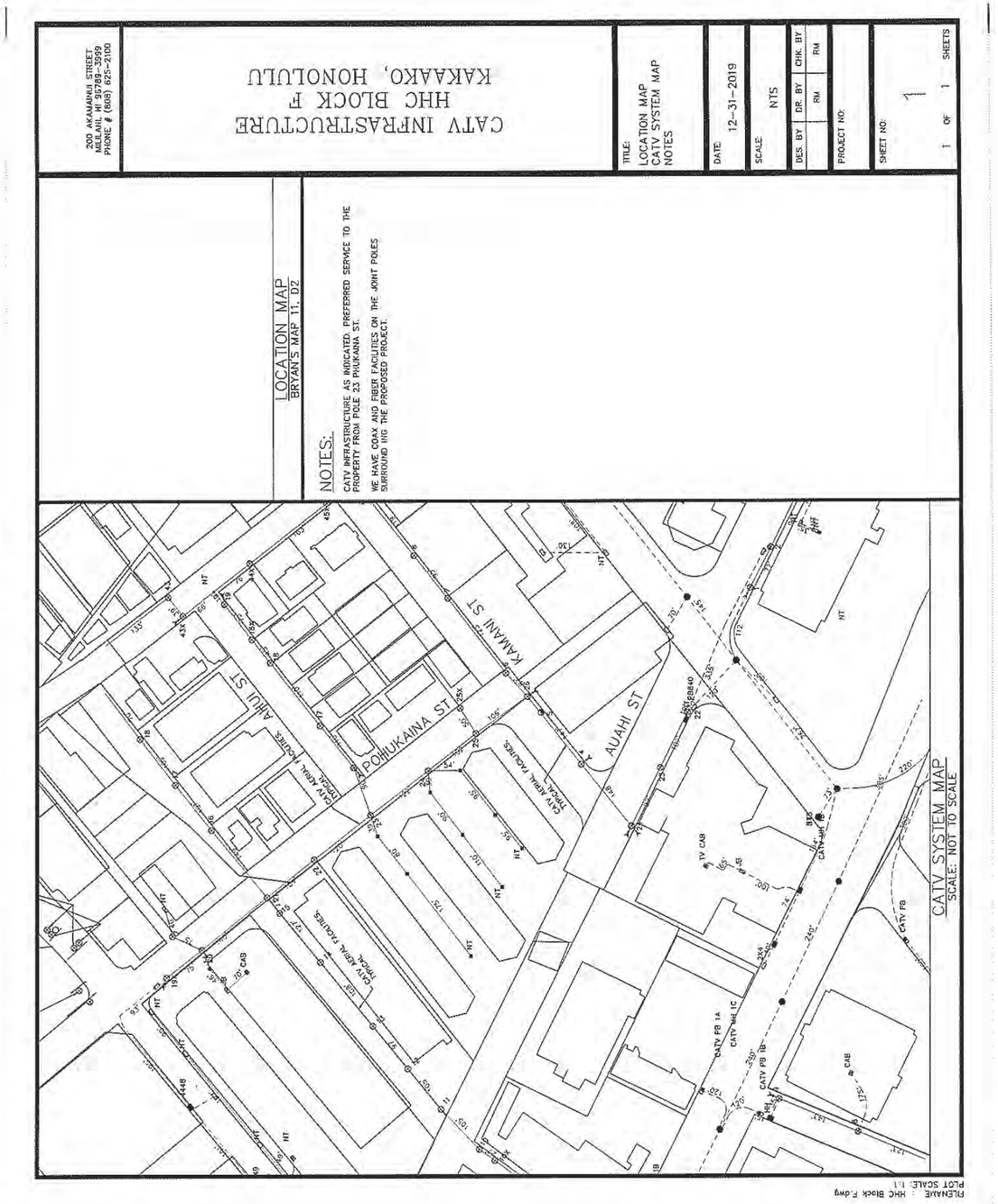
To: Steve Sakai <SSakai@rnsha.com>
Subject: HHC Block F - CATV infrastructure

Good morning Steve,

Please see attached pdf file of Spectrum's existing infrastructure surrounding the proposed HHC Block F site. Our preferred service point would be Pole 23 on Pohukaina ST. We currently have coax and fiber facilties on the Joint Poles.

Should you have any questions or need anything clarified, please let me know.

Thank you,
Randy Makizuru
Spectrum Oceanic
Engineering
#625-8346



Hawaii Gas

Email Correspondence

From: Yamamoto, Keith [mailto:kkyamamo@hawaiigas.com]
Sent: Monday, December 23, 2019 4:11 PM
To: Kevin Goto <kgoto@wilsonokamoto.com>
Cc: Rebecca Candilasa <rcandilasa@wilsonokamoto.com>; Cara Itai <CItai@wilsonokamoto.com>
Subject: RE: Ward Village Block F - Gas Availability

Kevin,

There is a 1-1/4 or 2" main on Pohukaina Street which will be able to provide gas supply to the project. Attached is a gas map for your info.

Please let me know if you have any questions.

Thanks.

--
Keith K. Yamamoto - Manager, Engineering
Phone: 808-594-5574 | Mobile: 808-351-9746
515 Kamake'e Street | Honolulu, Hawai'i 96814
http://www.hawaiigas.com

HAWAI'I GAS

From: Kevin Goto [mailto:kgoto@wilsonokamoto.com]
Sent: Monday, December 23, 2019 3:18 PM
To: Yamamoto, Keith <kkyamamo@hawaiigas.com>
Cc: Rebecca Candilasa <rcandilasa@wilsonokamoto.com>; Cara Itai <CItai@wilsonokamoto.com>
Subject: Ward Village Block F - Gas Availability

Keith:

I hope you are doing well.

Howard Hughes is proceeding with another high-rise residential condominium tentatively named Block F with the following programming:

Residential – 748 units.
Restaurant – 2,700 sf.
Retail – 5,625 sf.
Industrial – 36,00 sf.

This is another reserved housing component (similar to Ke Kilohana), thus they said that there will be minimal gas usage limited to perhaps only the restaurant and amenity barbecues.

Please let us know if it is possible for gas service to be provided.

Thanks again for your help.

Kevin Goto, PE, LEED AP
Civil Engineer

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