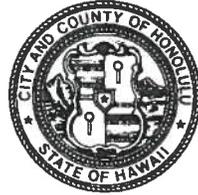


DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluluodpp.org • CITY WEB SITE: www.honolulu.gov

PETER B. CARLISLE
MAYOR



DAVID K. TANOUE
DIRECTOR

JIRO A. SUMADA
DEPUTY DIRECTOR

2012/ED-6 (LW)

April 12, 2012

The Honorable Gary L. Hooser, Director
Office of Environmental Quality Control
State of Hawaii
State Office Tower, Room 702
235 South Beretania Street
Honolulu, Hawaii 96813

RECEIVED
12 APR 13 P4:07
OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

Dear Mr. Hooser:

Subject: Chapter 25, Revised Ordinances of Honolulu, Draft Environmental Assessment
Project: New Mixed Use Commercial Building
Applicant: Sungho (Andy) Kim
Agent: On the Ball Engineering, LLC (Chris Ball)
Location: 87-1818 Farrington Highway
Request: Special Management Area Use Permit (Major)
Tax Map Key: 8-7-35: 5
Proposal: Construction of a new two-story mixed use commercial building and appurtenant site improvements.

Attached is a completed OEQC publication form and project summary, a hard copy of the Draft Environmental Assessment (DEA), and an electronic copy of the DEA on a CD. Based on the significance criteria outlined in Title 11, Chapter 200, Hawaii Administrative Rules, the applicant is not anticipating that preparation of an Environmental Impact Statement will be necessary. Please publish this notice in the next issue of "The Environmental Notice."

If you have any questions, please contact Lin Wong of our staff at 768-8033.

Very truly yours,

Antony X. Chung
FOR David K. Tanoue, Director
Department of Planning and Permitting

DKT:nw

Enclosure
cc: On the Ball Engineering, LLC (Chris Ball)

Doc. 926362

87-1818 FARRINGTON HIGHWAY
PROPOSED BUILDING PROJECT
Waianae, Oahu, Hawaii

Draft Environmental Assessment
April 2012

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APPENDICES

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- 2) 87-1818 Farrington Highway Construction Drawings

Summary of Information

Project Name	Mix Use Building Project
Applicant/Owner	Mr. Sungho (Andy) Kim 49 Oneawa Street Kailua HI 96734 (808-286-0009)
Agent	Chris Ball On the Ball Engineering, LLC 182 Opihikao Way Honolulu HI 96825 otbeng@aol.com , 271-5240
Approving Agency	Department of Planning and Permitting City and County of Honolulu 650 South King Street, 7 th Floor Honolulu HI 96813
Project Address	87-1818 Farrington Highway Waianae HI 96792
Tax Map Key	8-7-035: 005
State Land Use District	Urban
General Plan	Rural
Waianae Sustainable Communities Plan	Rural Residential
Zoning	B-1 Neighborhood Business District, 40 ft. height limit
Special Management Area	Entire Project limits inside Special Management Area
Lot Area	19,373 square feet
Existing Use	Vacant Land
Project Description	A two story building is proposed, which includes both commercial retail space, a laundry mat and accessory residential space. Parking will be provided to service the planned uses. New utilities, including sewer, water, electrical and communication will be provided to serve the facility.

Need for Environmental Assessment	Special Management Area Use Permit (Major)
Required Permits	Sewer Connection Permit (See appendix) Grading Permit (In review process) Building Permit (In review process) Special Management Area Use Permit
List of Parties Consulted	State Department of Health (SDOH) Department of Natural Resources (DLNR), State Historical Preservation Division (SHPD) Department of Planning and Permitting (DPP), City and County of Honolulu. Board of Water Supply (BWS), Honolulu
Anticipated Determination	Finding of No Significant Impact (FONSI)

Chapter 1

Introduction of the Proposed Action

1.1 Project Overview

This Environmental Assessment was prepared for the proposal to construct a two-story building and parking area, located in Waianae/Nanakuli District, on the Island of Oahu (See Figure 1 – Vicinity and Location Map).

The project will include the construction of a seven thousand six hundred four (7,604) square foot building; the total lot foot print coverage is four thousand two hundred fifty-five (4,255) square feet. The ground level portion of the building will include a larger retail area (grocery), two smaller retail spaces and a laundry facility. The second floor will include a private residence of the caretaker and office space.

1.2 Project Location

The proposed building is located at 87-1818 Farrington Highway, on the corner of Farrington Highway and Mohihi Street (see Figure 2 –Site & Utility Plan). Primary access to the site is provided from Mohihi Street which connects with Farrington Highway, secondary access is provided off Farrington Highway. The site consists of a 19,373 square foot lot and is rectangular in shape.

The project site is Tax Map Key (TMK): 8-7-035: 005, and is bordered by Farrington Highway to the west and Mohihi Street to the north. The properties to the east and south are residential single family homes. Across the street from the project site, there is a recycling redemption center (also on the corner of Farrington Highway and Mohihi Street). Just further west along Farrington Highway from the recycling redemption center, there are many additional commercial businesses. The existing site is currently vacant.

The project site is entirely within the Special Management Area (SMA) as defined in Chapter 205A, Hawaii Revised Statutes (HRS) and Chapter 25 of the Revised Ordinances of Honolulu (ROH) (See Figure 3 – Zoning & SMA Boundary Map).

1.3 Purpose of the Environmental Assessment (EA)

The purpose of this environmental assessment is; to inform interested parties of the proposed project disclose the potential for adverse environmental impacts, identify measures proposed to sufficiently mitigate potential impacts, and seek public comment on the subject property. This EA describes existing conditions at the project site and proposes mitigation measure as necessary which address potential adverse environmental impacts that may result from the proposed action. This EA complies with Chapter 25, Revised Ordinances of Honolulu (ROH), which states that an EA shall be required as follows:

Sec. 25-3.3 Procedural guidelines.

- (a) *All development within the special management area shall be subject to review by the agency under the provisions of this chapter. Such review shall be pursuant to the objectives, policies and guidelines set forth herein.*
- (b) *Consultation. Any applicant contemplating development within the special management area shall contact the agency for information regarding procedures and general information which may have a direct influence on the applicant's proposed development.*
- (c) *Assessment Requirements for Special Management Area Use Permits.*
 - i. *Any proposed development within the special management area requiring a special management area use permit shall be subject to an assessment by the agency in accordance with the procedural steps set form in HRS Chapter 343. The director may allow the assessment to be conducted concurrently with the processing of the application for a special management area use permit.*

1.4 Consulted Parties

Parties Consulted During the Pre-Environmental Assessment Consultation Period

State of Hawaii

Department of Land and Natural Resources, State Historic Preservation Division – email correspondence was sent to SHPD but no response was received at the time of publishing of this document.

Department of Health (DOH) – Telephone conversations were made to DOH to research the possibility of contamination of the project site because the last use of the site was a gas station. DOH indicated that there is no record of or any expectation that hazardous materials and/or contaminated soil is located on the project site.

City and County of Honolulu

Department of Planning and Permitting

Civil Engineering Branch (CEB) – project plans are currently in the review process with CEB.

Traffic Review Branch (TRB) – project plans are currently in the review process with TRB.

Wastewater Branch (WWB) – Sewer Connection Permit is included in the appendix

Board of Water Supply (BWS)– A letter from BWS stating water is available for the project is included in the appendix, project plans have been approved by BWS.

1.5 Permits and Approvals

- Issuance of a FONSI for the Final EA
- City and County of Honolulu, Special Management Area Permit;
- City and County of Honolulu, Sewer Connection Permit
- City and County of Honolulu, Grading Permit
- City and County of Honolulu, Building Permit

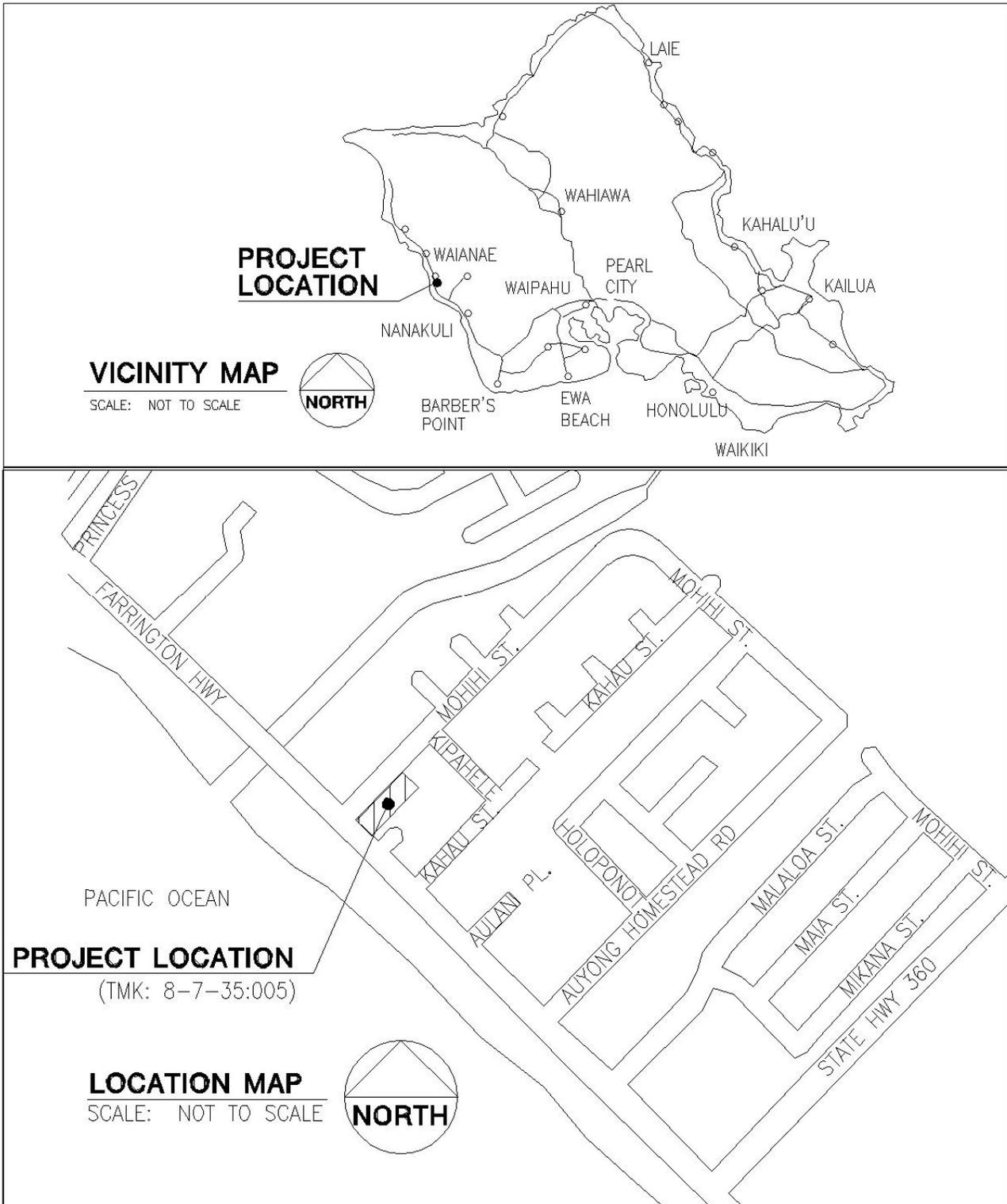


Figure 1 – Location and Vicinity Map



This work was prepared by me or under my supervision. Construction of this project will be under my observation. ("Observation of construction" shall be defined in chapter 115, Hawaii Administrative Rules for Professional Engineers, Architects, Surveyors and Landscape Architects, State of Hawaii, Subchapter 1, Section 15-115-2. Definitions effective 8/94.)

Chris Ball
04-30-12
Expiration Date of License



PROJECT
87-1818
FARRINGTON
HIGHWAY
TMK: 8-7-035:005

SHEET TITLE
SITE & UTILITY PLAN

REVISIONS

OCTOBER 1, 2010
DATE
CB
DRAWN BY SHEET NO.
C-3

LEGEND:

---	PROPERTY LINE
[Pattern]	NEW CONC. WALKWAY/ PAVEMENT, SEE DET 1/C-8
[Pattern]	2-1/2" A.C. PAVEMENT OVER 6" BASE COURSE. SEE DET 1/C-7
W2-1/2	WATER LINE
S6	SEWER LINE

BWS FLOW REQUIREMENTS

DESCRIPTION	F.U.	GPM	GPD
PREMISE ID# METER NUMBER (M/N): NEW METER			
A. PROPOSED DOMESTIC: (ALL FIXTURES BEING INSTALLED)	149	55	2200
B. PROPOSED OTHER: IRRIGATION*	0	0	0
C. TOTAL PROPOSED: (DO NOT INCLUDE IRRIGATION GPM IF LESS THAN DOMESTIC AND DONE DURING OFF-PEAK HOURS)	149	55	2200
D. DOMESTIC TO BE REMOVE/DEMO IRRIGATION TO BE REMOVED/DEMO	0	0	0
E. NET TOTAL (C-D; -CREDIT/+CHARGE)	149	55	2200
F. EXISTING TO REMAIN	0	0	0
G. GRAND TOTAL (C+F; ON METER)	149	55	2200
* NOTE: NO IRRIGATION	0	0	0
EXISTING FIRE DEMAND		2,000	

FOR ESTIMATING PURPOSES ONLY

2-1/2" DOMESTIC SERVICE 2" METER INSTALLATION CHARGE	ESTIMATE \$ 1,700.00	\$ 1,700.00
WATER SYSTEM FACILITIES CHARGES (3 COMPONENTS) 50 F.U. @ \$620.85 + 99 F.U. @ \$320.85 +	\$ 62,806.65	\$ 62,806.65
TOTAL.....		\$ 64,506.65

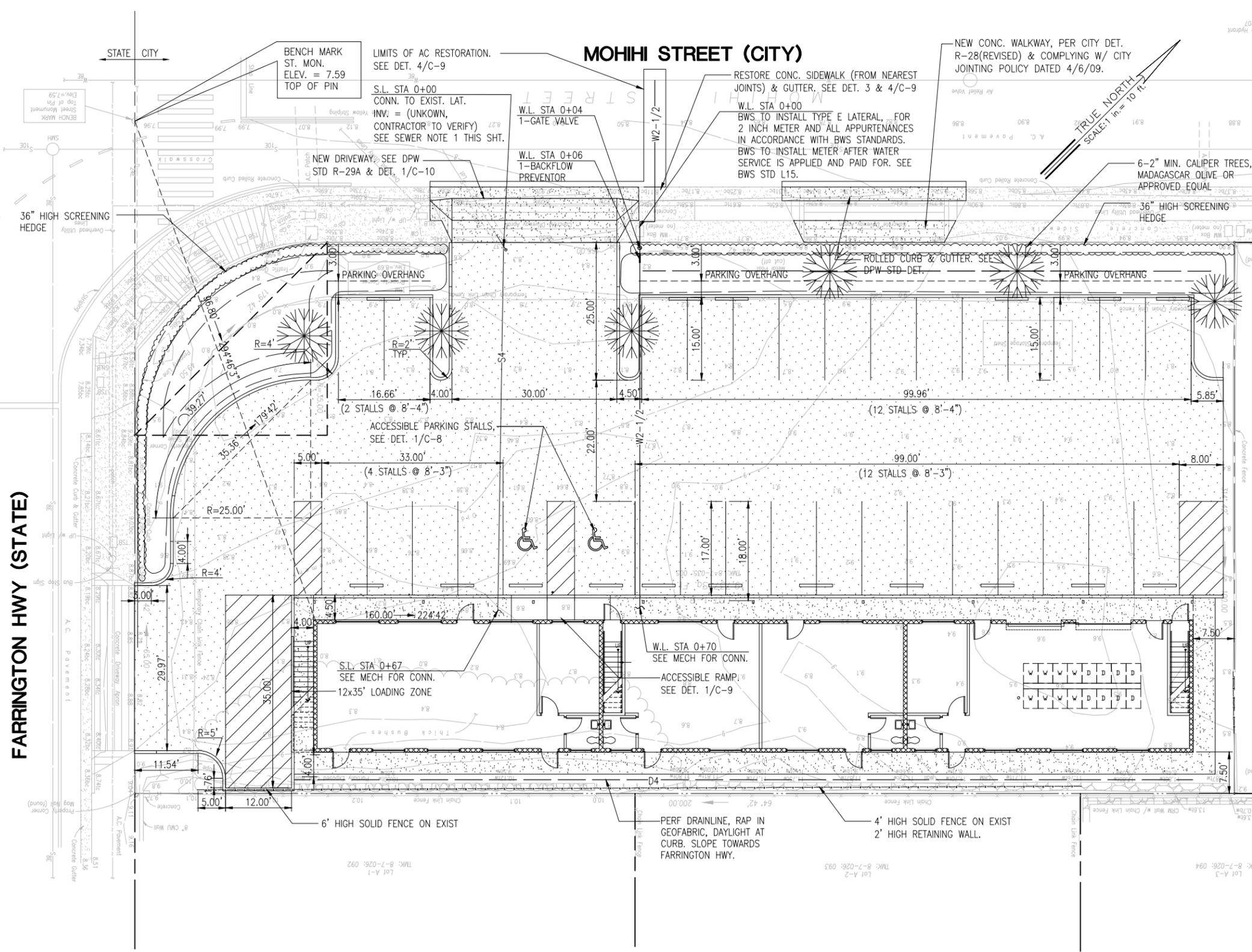
* CREDITS WILL BE DETERMINED WHEN BUILDING PERMIT APPLICATION IS SUBMITTED FOR BWS REVIEW AND APPROVAL.

THE ESTIMATE IS SUBJECT TO CHANGE. A FORMAL WRITTEN QUOTATION MAY BE OBTAINED AND ALL PAYMENTS FOR THE CHARGES SHOWN ON THE QUOTATION MADE WITHIN 30 DAYS AFTER THE CONSTRUCTION PLAN IS APPROVED BY BWS. IF PAYMENTS ARE NOT RECEIVED WITHIN THE 30 DAY PERIOD, THE PROJECT WILL BE SUBJECT TO THE PREVAILING RATES.

APPROVED

CHIEF, TRAFFIC REVIEW BRANCH, DPP DATE

CHIEF, CIVIL ENGINEERING BRANCH, DPP DATE

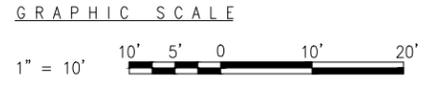


SITE & UTILITY PLAN
SCALE: 1"=10'

FIGURE 2 - Site & Utility Plan

SEWER NOTE
CONTRACTOR TO VERIFY CONDITION OF EXISTING SEWER LATERAL, IF LATERAL IS IN POOR CONDITION PROVIDE NEW LATERAL TO THE EXISTING MAIN.

PARKING PROVIDED
STANDARD PARKING STALLS: 31
ACCESSIBLE STALL: 2
TOTAL: 33



FARRINGTON HIGHWAY

FARRINGTON HWY (STATE)

MOHIHI STREET (CITY)

TRUE NORTH
SCALE: 1 in. = 10 ft.

Chapter 2

Proposed Project and Description of Proposed Action

2.1 Existing Site Conditions

Nanakuli historically has been sparsely populated because of its lack of water. The surrounding Waianae region was mostly agricultural, specifically sugar cane. However, because of the limited supply of fresh water in Nanakuli, it remained relatively untouched until 1929 when the land was subdivided for Hawaiian homesteads. Lack of water and distance from employment meant little growth for the area until Farrington Highway was constructed.

The property proposed to be redeveloped is currently a vacant lot, however it was previously a Gas Express Station gas station that was closed in 1994. The existing site is relatively flat with elevations ranging from ten (10) feet in the southeastern corner to approximately eight (8) feet in the northwestern corner. It is bordered by Farrington Highway, a 60' main arterial with two lanes in each direction to the south, and Mohihi Street, a 24' road with one lane in each direction to the west. To the north and east are single family homes.

2.2 Proposed Project Description

The project will include the construction of a seven thousand six hundred four (7,604) square foot building; the total lot foot print coverage is four thousand two hundred fifty-five (4,255) square feet. The ground level portion of the building will include a larger retail space (grocery), two smaller retail spaces and a laundry facility. The second floor will include a private residence of the caretaker and office space.

The building from ground to top of roof is proposed to be 24'-4". The first floor brick façade, and the second floor fiber cement panel siding. The roof throughout is asphalt single siding. On the first floor fronting the grocery and other retail spaces, a covered walking way with an asphalt single siding roof is provided. See the Construction Drawings in the appendices for architectural and civil plans.

The project will also include a parking area, pavement striping, and utility services for the building. Two driveways are proposed, primary access to the site is provided from Mohihi Street, secondary access is provided off Farrington Highway. The facility will require a new sewer, water, electrical and communication service connections. See Figure 2 – Site and Utility Plan.

2.2.1 Access and Parking

The proposed building is located at 87-1818 Farrington Highway (see Figure 2 –Site & Utility Plan). Primary access to the site is provided from Mohihi Street which connects with Farrington Highway, secondary access is provided off Farrington Highway. The site consists of a 19,373 square foot lot and is rectangular in shape. Parking for project will be provided onsite and will meet county zoning code requirements for urban development (City and County B-1); the site will accommodate thirty-two (32) spaces, including two accessible spaces.

2.2.2 Sidewalks

Right-of-way improvements are not proposed within the state right-of-way along Farrington Highway or within the city right-of-way along Mohihi Street. Existing along both streets are concrete sidewalks, curbs and gutters.

2.2.3 Landscaping

The lot is currently mostly aggregate base and asphalt concrete. There is minimal vegetation along the fringes of the property and the fence line. The portion of the site fronting Mohihi Street will be grassed and six canopy trees will be provided to shade the proposed parking lot. These trees will be Madagascar Olive or similar, with a minimum 2" caliper. The north and west frontages along Mohihi Street and Farrington Highway will include a 36" high screening hedge. The east and south side property lines will include a solid fence with a vine or shrub planted at the bottom of the fence. There will also be simple landscaping including small shrubs and grassed provided on both the south and eastern property boundaries adjacent to the proposed four foot wide concrete walkways. Existing rock walls along the property line will be left in place. (See Figure 2 – Site and Utility Plan)

2.2.4 Infrastructure

A new 2-1/2" inch water service lateral will be tapped off of an existing 8-inch water main on Mohihi Street, and a 2-inch water meter will be installed to service the new building.

A new 4-inch sewer lateral will connect to the building from a 10-inch City and County sewer main in Mohihi Street.

The site will be graded to be consistent with existing drainage patterns. Storm water runoff from the site will continue to sheet flow to Farrington Highway and Mohihi Street. Gutters in Farrington Highway and Mohihi Street convey the flow to an existing catch basin at the corner of Farrington Highway and Mohihi Street. (See Figure 2 – Site and Utility Plan).

New electrical and communication services will be provided to the building.

2.3 Hours of Operation

The grocery and laundry facilities will operate from 8:00 a.m. until 8:00 p.m. The smaller retail hours are unknown at this time, but will occur within the hours the grocery and laundry facilities are operating. At full capacity, with no vacancies there will be twelve (12) people working on site during peak hours.

2.4 Project Cost

The planning, design and construction costs of the proposed project is approximately \$800,000 and will be entirely privately funded.

2.5 Project Schedule

The project will take approximately 6 to 8 months of construct, which is anticipated to begin in June of 2012. The proposed new businesses are anticipated to be operational by December 2012.

Chapter 3

Affected Environment, Potential Environmental Impacts and Mitigation Measures

The purpose of this chapter is to describe existing environmental conditions in the study area of the proposed action. It also describes the environmental impacts that may result from constructing the proposed building, including impacts that may occur during construction and proposed mitigation measures.

3.1 Climate

The climate in Waianae is dry compared to the rest of the Island of Oahu. Generally, rainfall is less than 25 inches along the coastline. Relatively warm temperatures exist year round, between 72-80 degrees Fahrenheit, however in the summer temperatures can reach the mid-90's. Prevailing tradewinds are diminished by the Waianae mountain range, contributing to the arid feeling of the coast.

Potential Impacts and Mitigative Measures

The proposed project will have no impacts on regional climate conditions.

3.2 Topography and Soils

The property is currently a fenced in vacant lot (See Figure 6 – Site Photos). The project site is relatively flat with slopes between 0 to 3 percent. The southeast boundary of the site is slightly higher than the northwest boundary. According to the The U.S Department of Agriculture Soil Conservation Service's "Soils Survey for the Islands of Kauai, Oahu, Maui, Molokai and Lanai" the soil is classified as Malama stoney silty clay loam (MnC). Malama stoney silty clay loam consists of coral rock fragments and well drained soils typically found in and along the coastal plains.

Potential Impacts and Mitigative Measures

The proposed project will require some excavation, filling and grading. However, the construction activities will not significantly alter the topography of the project site. Based on the Geotechnical Investigation Report that was completed in October 2010 it was determined that beneath the top one foot of asphalt and fill, is very hard coral ledges. Slab-on-grade construction is proposed for the building, the soils report recommends that the slab be constructed with a minimum of 12-inches of select granular fill beneath it.

Other minor on-site excavation will be limited to the superficial removal and replacement of existing pavement and accommodating utility hookups. The new surface parking lot area will involve minor excavation, fill and grading. These areas will not generally require excavation to deeper levels. The topography of the area will not be significantly altered or impacted.

The area of soil disturbance within the project site will not be greater than one acre. Thus a National Pollutant Discharge Elimination System permit is not required.

Construction-related activities will conform to the “Rules Relating to Soil Erosion Standards and Guidelines”, including strict erosion control and dust control measures. A silt fence will be placed along the Farrington Highway and Mohihi Street, and temporary catch basin protection will be provided for the catch basin on Farrington Highway to prevent any sediment from reaching the existing drainage systems. Ground cover plantings, landscaping and hardscape will be in place when construction is done, thereby minimizing potential soil loss.

3.3 Water Resources

The proposed project is located approximately 400’ northeast from the Pacific Ocean. There are no streams, rivers, ponds or wetlands or other surface water bodies within the project limits. The nearest fresh water stream is Nanakuli Stream approximately 500’ to the west, and the project runoff does not drain into it.

Potential Impacts and Mitigative Measures

The proposed project will have no adverse impacts to surface waters. During construction, Best Management Practices will be employed such as silt fences and crushed rock entrances to prevent impacts.

3.4 Drainage

The existing stormwater runoff from the project site sheet flows to Farrington Highway and Mohihi Street; roadway gutters on Mohihi and Farrington Highway convey the runoff to a catch basin at the corner of Farrington Highway and Mohihi Street.

The proposed project is slightly increasing the amount of runoff, due to increase in impervious area.

Potential Impacts and Mitigative Measures

No adverse impacts are anticipated to the surrounding drainage systems. The storm drain systems will not be impacted because any additional storm water generated from the development of the site due to increase in impervious area will be stored onsite in small detention ponds. Storm water runoff from the project site during construction will be controlled in compliance the City’s “Rules Relating to Storm Drainage Standards”.

3.5 Flood Hazard

According to the FIRM Maps, the project site is located within an area Zoned D, which are “areas where flood hazards are undetermined” (See Figure 4 – FIRM Map). According to the Pacific Disaster Center, the project site lies inside the established tsunami evacuation zones (<http://www5.hawaii.gov/tsunami/maps.asp>) (See Figure 5 – Tsunami Hazard Map).

Potential Impacts and Mitigative Measures

The proposed project will have no impacts on flood hazard conditions. No mitigation measures are proposed.

3.6 Biological Resources

The proposed project is currently vacant and fenced in, with mostly aggregate base and asphalt concrete. There is minimal vegetation along the fringes of the project at the fence line. The existing vegetation is patchy weeds and grasses, and some kaiwe bushes along the perimeter.

Wildlife was not observed, however it is likely that feral cats, mongoose and rodents forage for food, water and shelter in the area.

Potential Impacts and Mitigative Measures

The proposed project will not have any adverse impacts on the area's vegetation or wildlife habitat. The project is not anticipated to result in any adverse impacts to native plant or animal species that are endangered, rare or threatened. The project will improve landscaped areas. The portion of the site fronting Mohihi Street will be grassed and six canopy trees will be provided to shade the proposed parking lot, these trees will be Madagascar Olive or similar, minimum 2 inch caliper. There will also be screening hedges, and simple landscaping such as gasses provided on both the south and eastern property boundaries adjacent to the proposed four foot wide concrete walkways.

3.7 Air Quality & Noise

Construction activities including clearing, grubbing, and grading will temporarily affect the air quality.

Farrington Highway is relatively busy main arterial and noise from the roadway is fairly high. Sources of noise from the project will occur mainly during construction, the construction activities to develop the site will involve the use of heavy machinery and vehicles that will produce high levels of noise. The State Department of Health (DOH) regulates noise from fixed mechanical equipment. Construction activities are regulated by DOH through the issuance of permits that allow excessive construction noise during limited time periods.

After construction, sources of noise include not only typical automobiles and motorcycles, but also delivery and semi-trucks. Other sources of noise include emergency vehicles with sirens at all hours of the day or night. The contractor will comply with the Community Noise Control regulations, and construction will be limited to daytime hours.

Potential Impacts and Mitigative Measures

City and County approved best management practices (BMP's) will be implemented during construction. These measures will include silt and dust fencing along limit of work and will comply with Chapter 60.1, Air Pollution Control, Title 11, Department of Health, State of Hawaii. Mitigation measures to address short-term impacts include minimizing movement of construction vehicles during peak traffic periods to avoid traffic congestion and its associated increase in vehicular emissions. Also, frequent watering of unpaved and disturbed areas on the project site will help control the generation of dust. Landscaping disturbed areas as soon as possible is yet another mitigation measure. No long term impacts on air quality are

anticipated. Short-term construction noise will be generated during construction activity and the use of heavy machinery. Significant adverse impacts due to construction noise are not anticipated due to the temporary nature of the work. Project-related construction noise will and must comply with the State Department of Health Hawaii Administrative Rules, Chapter 11-46, Community Noise Control.

In the long term during the operational phase of the project, the new building will be air-conditioned so that will mitigate both noise impacts to those working inside and it will prevent noise from leaving the building. Any increase in noise levels that might result in the vicinity of the project site are not anticipated to exceed regulated noise levels. Long term operational noise, (after construction is complete and the new building is occupied) must also meet the State noise regulations.

3.8 Views

Currently, there are no views of the coast from the ground level of the project site. The project site is on the Mauka side of Farrington Highway, the opposite side of the beach. A small hill or berm, approximately six feet high on the ocean side of Farrington Highway blocks this view. However it is anticipated that the new structure will have a view of the ocean from the second story. See project site photos in Figure 6.

Potential Impacts and Mitigative Measures

The proposed building will be visible from nearby properties and Farrington Highway. The proposed building and related landscaping will comply with all applicable development standards and regulations regarding height, density, open space, building setbacks, and landscaping of the Land Use Ordinance. The proposed building will not have significant negative impacts on views in the project area.

3.9 Socio-Economic Characteristics

3.9.1 Cultural & Recreational Resources

The proposed project is surrounded by several different uses. Adjacent to the project on the northern and eastern sides are single family homes and across Mohihi Street on the western side is Maile Commercial Center and a Redemption and Recycling Facility.

Recreational resources in the project area are primarily beach and ocean related.

Potential Impacts and Mitigative Measures

The proposed project will not negatively impact any cultural resources. Approximately one mile south along Farrington Highway is a portion of the proposed “Nanakuli Village Center” which is currently in the planning phase. The proposed Nanakuli Commercial Center is a 47,000 square foot retail/commercial project that will display a Hawaiian cultural plantation theme.

There will be no adverse impacts to any recreational resources, the site is currently fenced in and is not available or functioning as an active use. Any space used for the building or parking will not reduce or remove recreational resources.

3.9.2 Population, Housing and Economic

The 2000 Census reported the population of Oahu at just under 900,000. Based on the City and County of Honolulu's Department of Planning and Permitting (DPP) demographic profile for various Oahu neighborhoods, Nanakuli has a population of near 11,000.

According to 2000 census data compiled by the City's DPP, median household income in 1999 for the Nanakuli Area was just under \$50,000, which is lower than the median household income of \$52,280 for Oahu.

Potential Impacts and Mitigative Measures

The second floor of the proposed building will provide housing for the site caretaker, therefore impacts to Nanakuli's population housing inventory are not significant.

The project will have positive short term construction related economic impacts. In the long term, the project will create job opportunities associated with the businesses and office space.

3.10 Public Services and Solid Waste

3.10.1 Protective Services

The Nanakuli Fire Station located at 89-334 Nanakuli Avenue will serve this project. The station is located 1.5 miles to the southeast.

The Waianae Police Station is located at 85-939 Farrington Highway, approximately 2 miles north of the project.

The closest hospitals to the project site are Pali Momi Medical Center and Kaiser Permanente Moanalua.

Potential Impacts and Mitigative Measures

The project is anticipated not to have significant impacts on the fire and police services. Unfortunately, due to the closure of Hawaii Medical Center the distance to medical services has increased, however the proposed project is anticipated to have negligible impacts on the Pali Momi and Kaiser facilities.

3.10.2 Solid Waste

Solid waste pickup will be contracted out to either the City and County of Honolulu or a private contractor such as King Recycling and Waste Disposal for a monthly fee. Final decisions will be determined upon the completion of construction.

Potential Impacts and Mitigative Measures

If waste pickup will be provided by the City and County of Honolulu, or a private contractor, the impact will not be significant.

3.11 Utilities and Infrastructure

3.11.1 Storm Drain System

There is no underground storm drain piping proposed on site, storm water runoff from the site will continue to sheet flow to Farrington Highway and Mohihi Street. Gutters in Farrington Highway and Mohihi Street convey the flow to an existing catch basin at the corner of Farrington Highway and Mohihi Street.

Potential Impacts and Mitigative Measures

The storm drain systems will not be impacted because any additional storm water generated from the development of the site due to increase in impervious area will be stored onsite in small detention ponds.

3.11.2 Water

Potable water is supplied by the Board of Water Supply, City and County of Honolulu. Existing facilities include an 8-inch main in Mohihi Street.

The building will be serviced by a 2 ½-inch service and a 2-inch domestic water meter. The lateral connects to the existing 8-inch main in Mohihi Street (See Figure 2 – Site & Utility Plan).

Average daily consumption is estimated at less than 2200 gallons per day.

There is one hydrant on Mohihi Street across the street by the mauka corner.

Potential Impacts and Mitigative Measures

Based on correspondence with the Board of Water Supply, the existing water system is presently adequate to accommodate the proposed development. See BWS letter included in the appendix.

3.11.3 Sewer

City and County sewer lines surround the site. An 8-inch sewer main in Farrington Highway connects to a 10-inch on Mohihi Street. Wastewater is transmitted to Waianae Wastewater Treatment Plant. WWT treats to secondary and is not operating a full capacity.

The building will be serviced by a 4” lateral which drains to an existing 10-inch in Mohihi Street.

Wastewater flow from the building averages less than 2000 gallons per day.

Potential Impacts and Mitigative Measures

Based on correspondence with the DPP Wastewater Branch, the existing sewer system is presently adequate to accommodate the proposed development. An Approved Sewer Connection Permit is attached in the Appendix.

3.11.4 Electrical Power

Overhead power lines are located on the mauka side of Farrington Highway, the lines are owned and maintained by Hawaiian Electric Company (HECO).

Overhead telephone and communication lines share the utility poles with HECO

Potential Impacts and Mitigative Measures

No negative impacts from the proposed project are anticipated in regards to electrical power.

3.12 Archaeological Resources

No Archaeological investigation is known to have been done on the site by the previous owners of the property, however available surveys in the area do not document any historical or cultural resources on the project site. There are sites documented at the 57.65 acre Ulehawa Beach Park Parcel (TMK:8-7--05:01,03 and 05; 8-7-06:03; 8-7-07:01, 8-7-08:26) which is across Farrington Highway from the project site. An Archaeological Inventory Survey of the beach park identified four historic properties: including SIHP # 50-80-12-9714, the tracks of the OR&L railroad; SIHP # 50-80-07-5761, three concrete WWII bunkers and two concrete foundations; and SIHP # 50-80-07-5762 and -5763 two discrete subsurface cultural layers (McDermott and Hammatt, 2000).

Potential Impacts and Mitigative Measures

Based on archaeological surveys it is extremely unlikely that any potentially significant archaeological sites are present due to the relatively high amount of historic and modern disturbance related to commercial and residential development.

No further archaeological investigations are recommended for the project site. However, in the unlikely event that potentially significant archaeological resources, including human burials, are encountered during construction excavations, work should halt and the State Historic Preservation Division (808-692-8015) should be notified.

3.13 Traffic

The project site is bordered by two existing roads, Farrington Highway and Mohihi Street. Farrington Highway is a State-owned two-way, four-lane, paved roadway that runs parallel to the Pacific Ocean. The road has curbs, gutters and sidewalks on both sides of the street.

Mohihi Street is a City-owned two-way, two lane paved road that runs in an east-west direction at the project site. Primary access to the project will be provided off of Mohihi Street. Secondary access will be provide from Farrington Highway at an existing driveway to the project site.

The City & County DPP, Traffic Review Branch (TRB) and Civil Engineering Branch (CEB) are in the processes of reviewing the plans; comments received to date will be address in the construction plan review process.

The number of employees, customers, and deliveries associated with the small grocery store and other commercial facilities are anticipated to be the same or less than the gas station that operated on the site.

Potential Impacts and Mitigative Measures

All of the construction will be limited to the project site except for the connection of a new water lateral in Mohihi Street, therefore impacts from construction traffic will be minimal. Traffic near the intersection of Farrington Highway and Mohihi Street may be temporarily impacted by construction traffic. The contractor will minimize impact to normal traffic activity by:

- Keeping one lane of traffic in either direction open at all times;
- Posting warning signs on both sides of the work area to alert motorists of road work and to slow traffic speed;
- Positioning traffic cones or other directional devices in the roadway to guide vehicles around work areas;
- Posting off-duty police officers for traffic control;
- Limiting construction to between 7:00 AM and 3:30 PM, Monday through Friday.

Based on plan reviews with TRB and CEB, the primary access is provided off of Mohihi Street. There are no additional comments on the plan and site layout.

Chapter 4

Relationship to Land Use, Policies and Controls

This chapter discusses State and City and County of Honolulu land use controls, plans, and policies relating to the proposed project.

State Land Use District	Urban
General Plan	Rural
Waianae Sustainable Communities Plan	Rural Residential
Zoning	B-1 Neighborhood Business District
Special Management Area	Inside Special Management Area
Special District	None

4.1 State Land Use District

The State of Hawaii – Land Use Commission designated the Nanakuli area as Urban. State Land Use Urban District is essentially defined as a “city-like” concentration of a population and its required services. Most of the populated areas near and around Farrington Highway are classified at “Urban”.

Discussion

The proposed project is consistent with the State Urban classification.

4.2 City and County of Honolulu

4.2.1 General Plan

The City and County of Honolulu General Plan defines the entire Waianae Coast Area as “Rural”. This area has a fairly small population compared with the other areas on the Island. The idea is to keep the Waianae area with a rural feel and preserve the natural environment, while also meeting the retail and housing needs of the existing residents. The proposed building meets these requirements by providing the residents with needed commercial uses, such as laundry facilities, while not significantly impacting the rural feel, as this site has previously been used for commercial purposes and has a fairly small footprint.

4.2.2 Waianae Sustainable Communities Plan

As noted above, the City and County of Honolulu’s objective is to keep Waianae as rural in both its landscape as well as its feel. The Waianae Sustainable Communities Plan is consistent with that theme. The Waianae Sustainable Communities Plan principal policies are to: Preserve Open Space; Preserve Historic and Cultural Resources; Preserve Agricultural Lands; No increase in lands designated for residential use; Encourage commercial and light industrial businesses that will serve the community. The project will be constructed on previously developed land, and

will provide the community with commercial services such as future retail and a small grocery store.

4.2.3 Zoning

As stated in the Land Use Ordinance (LUO) the Neighborhood Business District intent is to provide areas that meet the commercial and business needs of a city that supports the economic growth. The project is located within a B-1 district which is primarily to provide daily commercial needs for smaller areas. The Nanakuli area is a much more rural portion of Oahu, therefore it is appropriate that the proposed development be located along Farrington Highway which is the major travel route for the area. Therefore the two-story retail establishment (grocery and smaller retail), laundry facility, office space and the accessory residence are permitted within the B-1 zoning district.

Table 1 – B-1 Neighborhood Business Zoning District

Development Standard		Proposed Project
Minimum Lot Area	5000 sq. ft.	19,373 sq. ft.
Minimum Lot Width and Depth	50 ft.	100 ft.
Yards	10 ft. front, 5 ft side & rear	10 ft. front, 7.5 ft side & rear
Maximum Building Area	Not regulated	n/a
Maximum Density (FAR)	1.0	0.39
Open Space Bonus	n/a	n/a
Maximum Height (ft)	40 ft.	24 ft 4 inch
Height Set Back	Per Sec. 21-3.110-1(c)	7.5 ft @ 1 st flr., 7.5 ft @ 2 nd flr

4.2.4 Special Management Area

The site is located within the Special Management Area delineated by the County (See Figure 4 – SMA Boundary Map). Therefore the proposed improvements are subject to the requirements of Chapter 25 ROH. A Special Management Area Use Permit (Major) will be required prior to the start of construction. The project must meet the objectives and policies relating to the Coastal Zone Management (CZM) and Special Management Area (SMA), as set forth in Chapter 205A-26, HRS as discussed below.

- 1. All development in the special management in the special management area shall be subject to reasonable terms and conditions set by the authority in order to ensure:**
 - A. Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas, and national reserves is provided to the extent consistent with sound conservations principles;*
 - B. Adequate and properly located public recreation areas and wildlife preserves are reserved;*
 - C. Provisions are made for solid and liquid waste treatment, disposition, and management which will minimize adverse effects upon special management area resources; and*

- D. *Alterations to existing land forms and vegetation, except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational, erosion, siltation, or failure in the event of earthquake.*

Discussion: The Proposed Action would not adversely affect access to publicly-owned recreational areas, beaches, or natural reserves, nor would it impact public recreation areas of wildlife reserves. The Proposed Action would appropriately manage and dispose of regulated materials in accordance with applicable federal, State, and local regulations and ordinances. The Proposed Action would not adversely impact water resources or scenic and recreational amenities and would ensure minimum danger of floods, wind damage, landslides, erosion, siltation or failure in the event of earthquake.

2. No development shall be approved unless the authority has first found:

- A. *That the development will not have any substantial adverse environmental or ecological effect, except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, or compelling public interests. Such adverse effects shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which take in itself might not have substantial adverse effect, and elimination of planning options;*
- B. *That the development is consistent with the objectives, policies, and special management area guidelines of this chapter and any guidelines enacted by the legislature; and*
- C. *That the development is consistent with the county general plan and zoning. Such a finding of consistency does not preclude concurrent processing where a general plan or zoning amendment may also be required.*

Discussion: The Proposed Action would require that appropriate permit application be prepared and reviewed by the City for approval.

3. The authority shall seek to minimize, where reasonable:

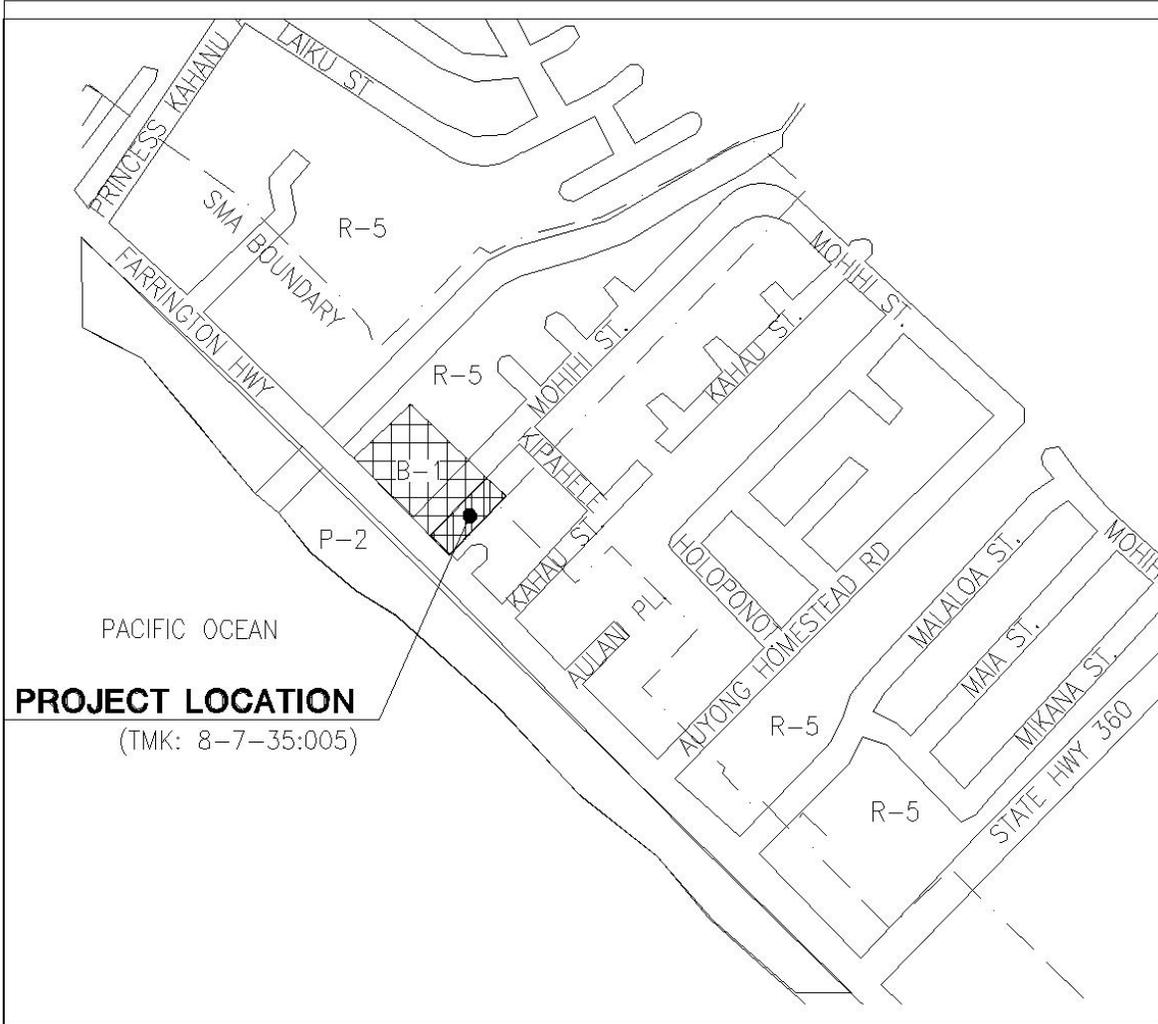
- A. *Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough or lagoon;*
- B. *Any development which would reduce the size of any beach or other area usable for public recreation;*
- C. *Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the special management areas and the mean high tide line where there is no beach;*
- D. *Any development which would substantially interfere with or detract from the line of sight toward the sea from the state highway nearest the coast; and*
- E. *Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.*

Discussion: The Proposed Action would not impact by dredging, filling, altering any water body. The Proposed Action would not impact public access to or use of coastal areas, including tidal and submerged lands and beaches, or portions of rivers or streams. The Proposed Action would not interfere with or detract from the line of sight toward the sea from any roadway. The project would not adversely impact water quality of ground water or surface waters or shoreline areas, fisheries, fishing grounds, wildlife habitats, or agricultural lands.

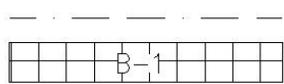
The project relates to the CZM objectives and policies in the following ways:

- 1) *Recreational resources.* As stated in section 3.9.1 Cultural and Recreational Resources, The site is currently fenced in and is not available or functioning as an active use. Any space used for the building or parking will not reduce or remove recreational resources.
- 2) *Historic resources.* As stated in section 3.12 Archeological Resources, no historical or cultural resources are documented or known to be onsite.
- 3) *Scenic and open space resources.* The scenic and open space resources will not be impacted by the project. As stated in previous sections, the building will not impact scenic views and currently the project is a fenced in vacant lot and is not a quality coastal scene.
- 4) *Coastal Ecosystems.* The project will not impact coastal ecosystems because any drainage leaving the project site is diverted into storm drains and will not adversely impact nearby coastal ecosystems.
- 5) *Economic uses.* The project will provide facilities and improvements important to the State's economy. The site is located in an appropriate location to meet the communities' commercial needs and provide economic uses to the nearby population.
- 6) *Coastal Hazards.* As stated in section 3.5 Flood Hazard, according to the Pacific Disaster Center, the project site lays inside the established tsunami evacuation zones. Therefore there is a possibility of hazard to life and property from tsunami and flooding, however the project is with sounding range of evacuation sirens and adjacent to Farrington Highway where emergency vehicles would alert businesses and residents of a tsunami. The development will comply with the requirements of the Federal flood Insurance Program. The development has been design so the building is the highest portion of the site; therefore no flooding of the building is anticipated.
- 7) *Managing Development.* The project will follow the requirements of the SMA process and the CZM objectives of managing the proposed development.
- 8) *Public participation.* The project will engage the public as well as provided public participation.
- 9) *Beach Protection.* The project is on the mauka side of Farrington Highway and will therefore not impact the nearby beach.
- 10) *Marine Resources.* The project is on the mauka side of Farrington Highway and will not impact marine resources.

The proposed project will not have any adverse environmental effects, and will meet required Hawaii Revised Statutes (HRS). The project is also in compliance with general plan, development plans and zoning as stated above.



LEGEND:



SMA BOUNDARY
PROJECT CITY & COUNTY ZONING

FIGURE 3

ZONING & SMA BOUNDARY MAP

87-1818 FARRINGTON HIGHWAY

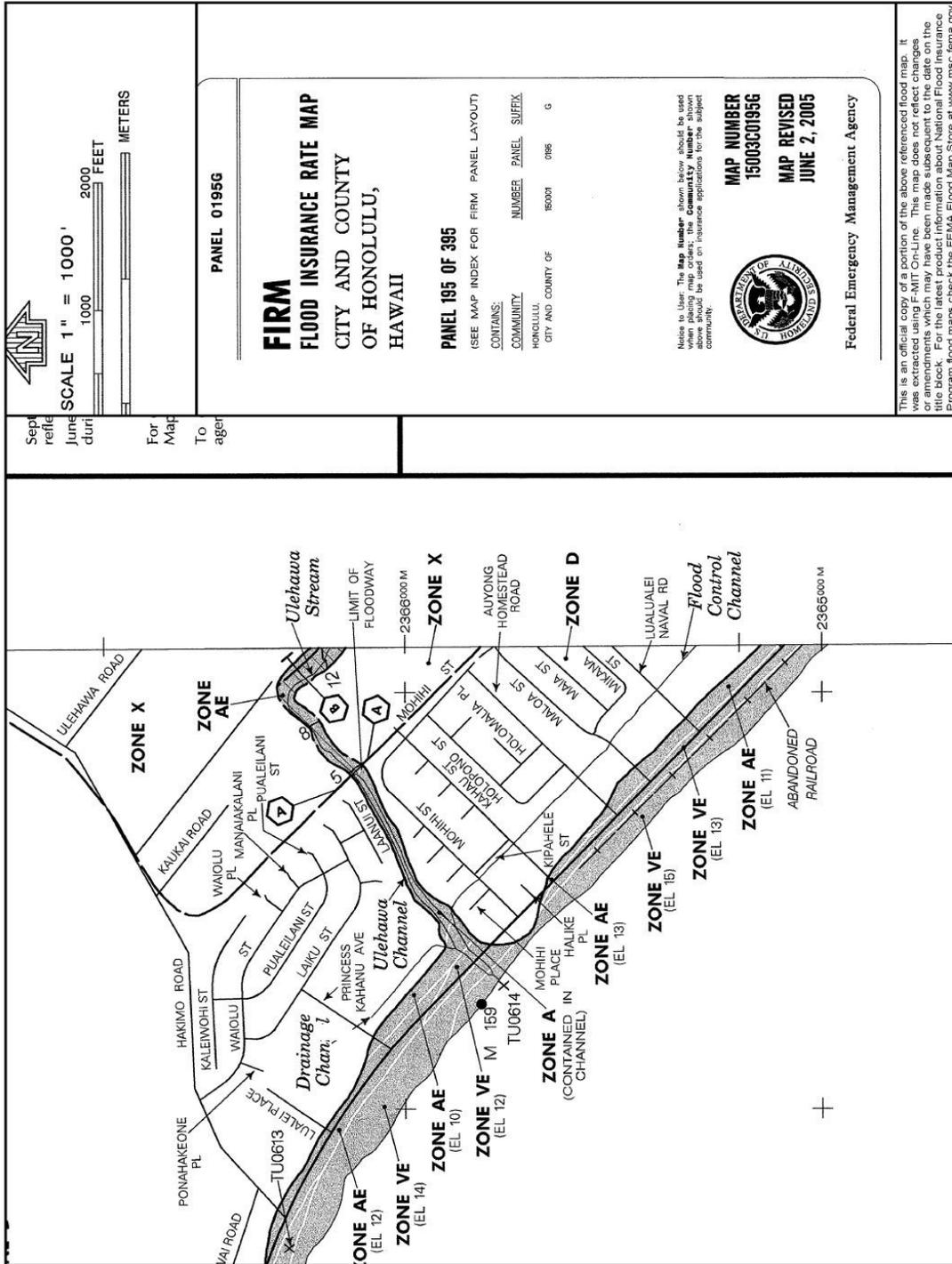


FIGURE 4 – Flood Insurance Rate Map

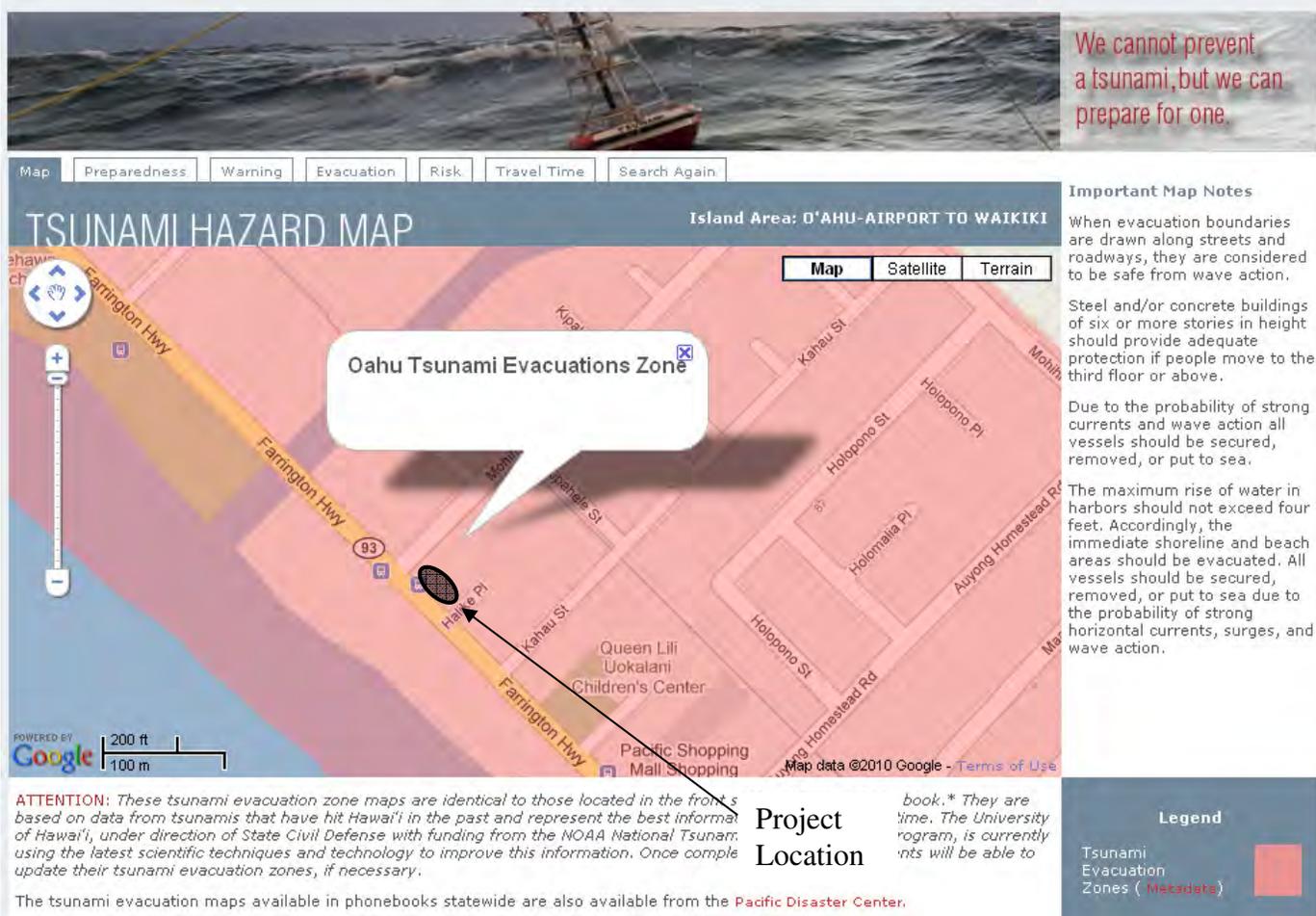


FIGURE 5 - Tsunami Hazard Map



View from Farrington Hwy looking mauka at project site



View from Mohihi Street looking Diamond Head at project site

FIGURE 6 – Site Photos



View from Project Site looking makai towards Farrington Highway



View from Project Site looking makai towards Farrington Highway and Mohihi Street

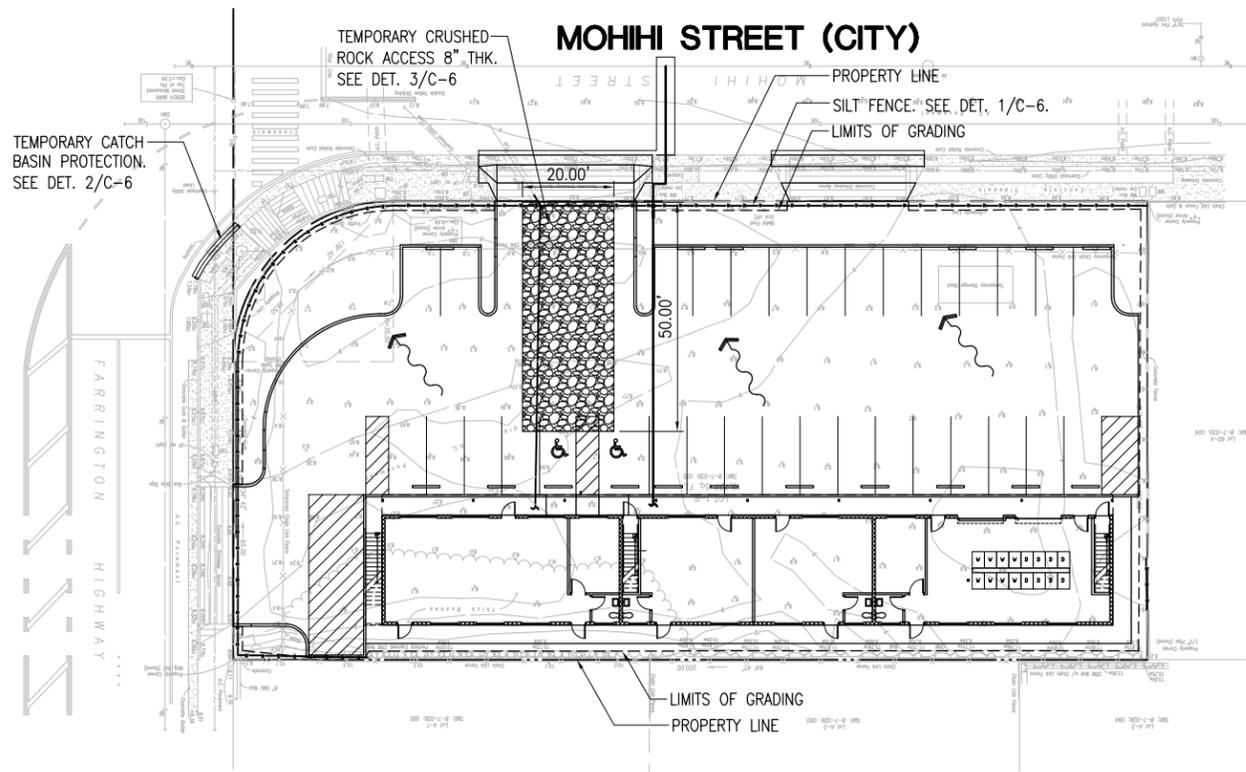
FIGURE 6 – Site Photos



View from Mohihi Street looking makai towards Farrington Highway

FIGURE 6 – Site Photos

FARRINGTON HWY (STATE)



LEGEND:

- — — — — PROPERTY LINE
- x — x — SILT FENCE SEE DET. 1/C-6
- - - - - LIMITS OF GRADING
- [Patterned Box] TEMPORARY #2 CRUSHED ROCK ACCESS
- ~ ~ ~ ~ ~ APPROXIMATE FLOW DIRECTION W/ SLOPE

EROSION CONTROL NOTES / BMP'S

TEMPORARY EROSION CONTROL NOTES:

- FOLLOW SEQUENCE OF OPERATION AS RECOMMENDED ON PAGES 23 AND 24 OF THE "RULES RELATING TO SOIL EROSION STANDARDS AND GUIDELINES", APRIL 1999, OF THE DEPARTMENT OF PLANNING AND PERMITTING, CITY & COUNTY OF HONOLULU.
- THE CONTRACTOR SHALL MINIMIZE THE AMOUNT OF LAND TO BE EXPOSED AT ANY TIME.
- EXPOSED AREAS THAT ARE NOT AT FINAL GRADE AND ARE EXPECTED TO BE EXPOSED FOR MORE THAN 30 DAYS SHALL BE PLACED WITH A VEGETATIVE COVER OR BE MULCHED (AT A RATE OF 45 CUBIC FEET PER 1,000 SQUARE FEET) IN ORDER TO PREVENT EROSION AND SILT RUNOFF.
- TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN PLACE AND ESTABLISHED.
- TEMPORARY #2 CRUSHED ROCK ACCESS 8" THICK SHALL BE USED AS A STABILIZATION CONTROL AT ALL CONSTRUCTION ENTRY AND EXIT LOCATIONS.

PERMANENT EROSION CONTROL MEASURES:

- ALL SLOPES AND EXPOSED AREAS SHALL BE SODDED OR PLANTED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED.
- 2:1 SLOPES SHALL BE TREATED WITH GEOFABRIC OR TREATED WITH SOIL CONDITIONER TO AID IN THE ESTABLISHMENT OF TURF/ PLANTING.

BMP NOTES:

TEMPORARY EROSION CONTROL MEASURES:

- PRIOR TO CLEARING LAND FOR GRADING, TEMPORARY EROSION CONTROL MEASURES, SUCH AS SILT FENCES SHALL BE INSTALLED.
- #2 CRUSHED ROCK ENTRY/EXIT DRIVEWAYS SHALL BE ESTABLISHED PRIOR TO CLEARING OPERATIONS. DRIVEWAYS SHALL BE 8" THICK, 20' WIDE AND 50' LONG, MINIMUM.
- OPENING AND CLEARING OF LAND FOR GRADING SHALL BE PERFORMED INCREMENTALLY TO MINIMIZE EROSION POTENTIAL.
- AREAS NOT WITHIN THE LIMITS OF GRADING SHALL REMAIN VEGETATED DURING GRADING OPERATIONS.
- SILT WHICH HAS ACCUMULATED ON SILT FENCE SHALL BE REMOVED AND DISPOSED OF ON A BI-WEEKLY BASIS.
- WHEN CLEARED OR GRUBBED AREAS ARE NOT TO BE GRADED OR DISTURBED FOR 30 DAYS OR MORE, SEED, PLANT OR HYDROSEED TEMPORARY VEGETATION.
- THE CONTRACTOR'S EQUIPMENT STORAGE AREAS SHALL BE PROTECTED THROUGH THE USE OF EARTH BERMS AND/OR ABSORPTION MATERIALS TO PREVENT POLLUTANTS FROM DISCHARGING INTO STATE WATERS. THE CONTRACTOR SHALL INSPECT AND MAINTAIN STORAGE AREAS.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY WASH MAT WITH BERM FOR WASHING DOWN OF CONSTRUCTION EQUIPMENT AND CONCRETE TRUCKS (WESTERN WATER PRODUCTS HEAVY DUTY VINYL WASH MAT WITH BERM 2050-18M OR APPROVED EQUAL).

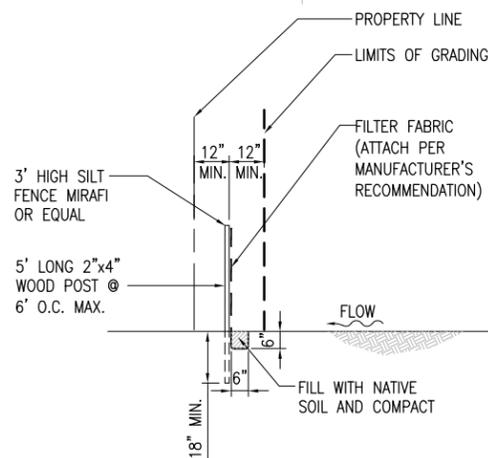
SEQUENCE FOR SEDIMENT CONTROL:

- INSTALL SILT FENCE, AND TEMPORARY #2 CRUSHED ROCK ENTRY/EXIT.
- COMMENCE GRADING OPERATIONS.
- GROUND COVER, SUCH AS GRASSING, MULCHING OR NETTING TO BE INSTALLED IMMEDIATELY AFTER FINAL GRADES ARE ESTABLISHED.

EROSION CONTROL PLAN

SCALE: 1"=20'

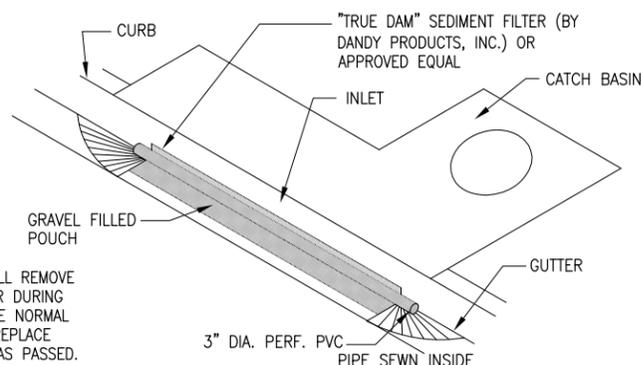
GRAPHIC SCALE



1 SILT FENCE SECTION

SCALE: 3/8" = 1'-0"

C-5

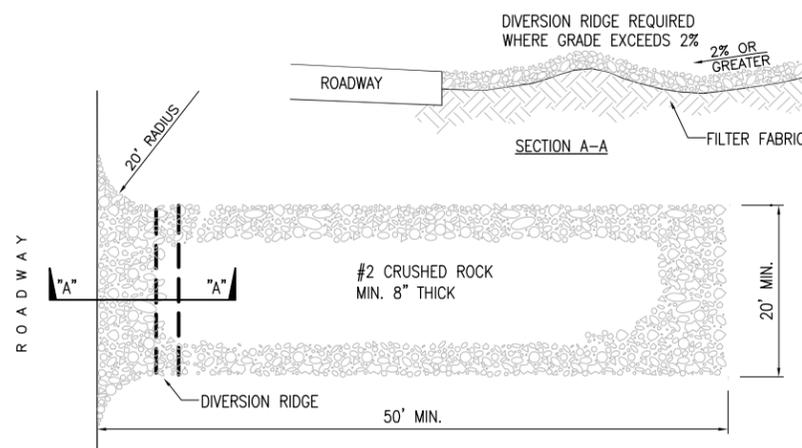


NOTE: CONTRACTOR WILL REMOVE SEDIMENT FILTER DURING EVENT OF ABOVE NORMAL RAINFALL AND REPLACE AFTER EVENT HAS PASSED.

2 TEMP. CATCH BASIN PROTECTION DET.

NOT TO SCALE

C-5



NOTES:

- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

3 TEMPORARY 8" THICK #2 CRUSHED ROCK ACCESS

NOT TO SCALE

C-5

FIGURE 7 - Erosion Control Plan



This work was prepared by me or under my supervision. Construction of this project will be under my observation. ("Observation of construction" shall be defined in chapter 115, Hawaii Administrative Rules for Professional Engineers, Architects, Surveyors and Landscape Architects, State of Hawaii, Subchapter 1, Section 16-115-2, Definitions effective 8/94.)

Chris Ball

04-30-12
Expiration Date of License



PROJECT

**87-1818
FARRINGTON
HIGHWAY**

TMK: 8-7-035:005

SHEET TITLE
EROSION CONTROL PLAN

REVISIONS

OCTOBER 1, 2010
DATE

CB
DRAWN BY SHEET NO.

C-5

Chapter 5

Alternatives

5.1 No Action Alternative

The “No Action” alternative would result in not providing the community with a grocery; laundry facility, retail space and office space for businesses. The “No Action” alternative would prevent short and long term beneficial and adverse impacts described in this EA.

5.2 Alternate Site

The proposed site is zoned as Mixed-Use Development, consequently the proposed project is consistent with this use and will provide mixed-use needs in one central location to the community. Therefore, no alternative sites are being considered.

5.3 Alternative Design

Alternative site layouts were considered while developing the project. These included a single story option to limit costs and possible view impacts, however in order to meet all the needs, the footprint became too large to accommodate parking and access. Other options included different building orientations on the property, however these options as well were found to not provide the owner with the required parking and access requirement.

A two-story building was chosen because it provides the multiple mixed uses while minimizing the building footprint. Vehicular access is provided at two locations to streamline traffic flow and all required parking is provided on site.

Chapter 6

References

National Oceanic and Atmospheric Administration. NOAA Pacific Services Center. "Tsunami Hazard Map.", NOAA, 2010.

http://tsunami.csc.noaa.gov/map.html?mapname=O_AHU-AIRPORT+TO+WAIKIKI&submit1=Search+Island+AreaFirm. April 23, 2010

Federal Emergency Management Agency. City and County of Honolulu, Hawaii Panel 195. Map. 1"=1,000 feet. Washington D.C.: FEMA, Flood Insurance Rate Map, June 2, 2005.

McDermott, Matt, and Hallett H. Hammatt "2000 Archeological Inventory Survey of the 57.65 Acre 'Ulehawa Beach Park Parcel, Ahupua'a of Lualualei, Wai'anae District, Island of O'ahu, (TMK:8-7-05:01,03 and 05; 8-7-06:03; 8-7-07:01, 8-7-08:26). Cultural Surveys Hawaii, Kailua, Hawaii.

Wilson Okamoto Inc. "Final Environmental Assessment, Nanakuli Community Center, Nanakuli, Oahu, Hawaii." January 2006.

City and County of Honolulu, Revised Ordinances of Honolulu, as amended.

State of Hawaii Department of Health website, <http://www.hawaii.gov/health>

State of Hawaii, Hawaii Administrative Rules, as amended

State of Hawaii, Hawaii Revised Statutes, as amended

Coastal Zone Management objectives and policies

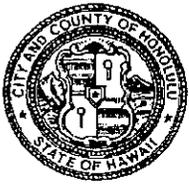
Special Management Area guidelines

U.S. Environmental Protection Agency website, <http://epa.gov>

U.S. Geographic Survey website, <http://hi.water.usgs.gov>

APPENDICES

- 1) Agency correspondence
- 2) 87-1818 Farrington Highway Construction Drawings



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.: **2012/SCA-0027**

STATUS: **Approved**

\$74,191.00

DATE RECEIVED: **01/17/2012**

IWDP APP. NO.:

Estimated Wastewater System Facility Charge*

PROJECT NAME: **2012/SCA-0027 New mix use development-supermarket/offices**

LOCATION:

Zone	Section	Plat	Parcel
8	7	035	005

87-1818 FARRINGTON HWY 19,737 Sq. Ft.

SPECIFIC LOCATION: **87-1818 Farrington Highway**

APPLICANT: **BALL, CHRIS**
 182 OPIHIKAO WAY
 HONOLULU, HI 96825

DEVELOPMENT TYPE: **Commercial (Misc.)**

SEWER CONNECTION WORK DESIRED: **Existing**

OTHER USES: **Supermarket/Offices, 12 employees**

NON-RESIDENTIAL AREA: s.f.

APPROXIMATE DATE OF CONNECTION: **02/01/2012**

PROPOSED UNITS

EXISTING UNITS

UNITS TO BE DEMOLISHED

No. of New Units: **0**

No. of Existing Units: **0**

No. of Units to be Demolished: **0**

- Studios:
- 1-Bedroom:
- 2-Bedroom:
- 3-Bedroom:
- 4-Bedroom:
- 5-Bedroom:
- 6-Bedroom:

- Studios:
- 1-Bedroom:
- 2-Bedroom:
- 3-Bedroom:
- 4-Bedroom:
- 5-Bedroom:
- 6-Bedroom:

- Studios:
- 1-Bedroom:
- 2-Bedroom:
- 3-Bedroom:
- 4-Bedroom:
- 5-Bedroom:
- 6-Bedroom:

REMARKS **Connect to existing lateral for 10 inch line on Mohihi Street.**

APPROVAL DATE: **01/30/2012**

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.

EXPIRATION DATE: **01/29/2014**

** 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: **Tessa Ching**

Site Development Division, Wastewater Branch

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843



January 30, 2012

PETER B. CARLISLE, MAYOR

RANDALL Y. S. CHUNG, Chairman
DENISE M. C. DE COSTA, Vice Chair
THERESIA C. McMURDO
DUANE R. MIYASHIRO
ADAM C. WONG

WESTLEY K.C. CHUN, Ex-Officio
GLENN M. OKIMOTO, Ex-Officio

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

DEAN A. NAKANO
Deputy Manager

Mr. Chris Ball
On The Ball Engineering LLC.
182 Opihikao Way
Honolulu, Hawaii 96825

Dear Mr. Ball:

Subject: Your Letter Dated January 14, 2012 Requesting the Availability of Water to the Proposed Residential and Commercial Development, TMK: 8-7-35: 5

Thank you for your letter on the proposed residential and commercial development.

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

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

If you have any questions, please contact Robert Chun at 748-5443.

Very truly yours,

SUSAN UYESUGI
Program Administrator
Customer Care Division

87-1818 FARRINGTON HWY

WAIANAE, OAHU, HAWAII



This work was prepared by me or under my supervision. Construction of this project will be under my observation.

(Observation of construction shall be defined in chapter 115, Hawaii Administrative Rules for Professional Engineers, Architects, Surveyors and Landscape Architects, State of Hawaii, Subchapter 7) Section 16-115-2, Definitions effective 8/94.

01-30-12
Expiration Date of License

PROJECT
87-1818
FARRINGTON
HIGHWAY
TMK: 8-7-035:005

SHEET TITLE
TITLE
ABBREVIATION,
GENERAL NOTES,
CODE DATA,
SYMBOL LEGEND,
PROJECT TEAM,
PROJECT LOCATION,
VICINITY MAP,
DRAWING INDEX

REVISIONS

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OCTOBER, 2010
DATE
AK
DRAWN BY SHEET NO.

G-1

ABBREVIATION

A .B. Anchor Bolt	F .D. Floor Drain	R .D. Radius
A.C. Asphaltic Concrete	FIN. Finish	REF. Reference
A/C Air Conditioner	FL. Floor	REINF. Reinforced or Reinforcing
ACSBL. Accessible	FT. Foot or Feet	REQ. Required
A.D. Area Drain	FTG. Footing	R.H. Robe Hook
A.D.A.A.G. Americans with Disabilities Act Accessibility Guidelines	G ALV. Galvanized	S .S. South
ADJ. Adjustable	G.B. Grab Bar	S.C. Solid Core
AL. Aluminum	GYP. Gypsum	S.F. Square Feet
ALT. Alternate	H .B. Hose Bibb	S.C.D. Seat Cover Dispenser
APPROX. Approximate	HDWR. Hardware	SCHED. Schedule
ARCH. Architect, Architectural	H.M. Hollow Metal	S.D. Soap Dispenser
ASPH. Asphalt	HORIZ. Horizontal	SECT. Section
B D. Board	I NT. Interior	SHT. Sheet
BLDG. Building	J AL. Jalousie	SIM. Similar
BLKG. Blocking	JAN. Janitor	SL. Slope
BM. Beam	L AM. Laminate	S.L.D.G. Sliding
BOT. Bottom	LAV. Lavatory	S.N.D. Sanitary Napkin Dispenser
BRKT. Bracket	L.F. Linear Feet	SPEC. Specification
BTB Basaltic Termite Barrier	LT. Light	SQ. Square
C EM. Cement	M AIN. Maintenance	SST. Stainless Steel
CER. Ceramic	MAX. Maximum	STA. Station
CLG. Ceiling	MECH. Mechanical	STD. Standard
CLR. Clear	MET. Metal	STOR. Storage
C.M.U. Concrete Masonry Units	MIN. Minimum	STRUC. Structural
CNTR. Counter	MISC. Miscellaneous	SUSP. Suspended
COL. Column	M.O. Masonry Opening	T EL. Telephone
CONC. Concrete	MOD. BIT. Modified Bitumen	T & G Tongue And Groove
CONSTR. Construction	MTD. Mounted	THK. Thick
CONT. Continuous	MTG. Mounting	T.P.D. Toilet Paper Dispenser
D BL. Double	N .N.C. North Not In Contract	TRD. Tread
DEPT. Department	NO. or # Number	TYP. Typical
DET. Detail	N.T.S. Not To Scale	U .U.F.A.S. Uniform Federal Accessibility Standards
D.F. Drinking Fountain	O .C. On Center	UR. Urinal
DISP. Dispenser	O.D. Outside Diameter	V .V.C.T. Vinyl Composition Tile
DN. Down	OPNG. Opening	VERT. Vertical
DR. Door	P .L.A.M. Plate Plastic Laminate	VTR. Vent Thru Roof
DWG. Drawing	PLAS. Plaster	W .W. West
E .EA. East	PLYWD. Plywood	W/ Water Closet
E. Each	P.T.D. Paper Towel Dispenser	W.C. Wood
EFS Exterior Finish System	PTN. Partition	WD. Window
E.J. Expansion Joint	P.T.R. Paper Towel Receptacle	WD/W. Window Water Heater
EL. Elevation		W/O. Without
ELEC. Electrical		
EQ. Equal		
EQPT. Equipment		
EXP. Expansion		
EXIST. Existing		
EXT. Exterior		

CODE DATA

ADDRESS: 87-1818 FARRINGTON HWY
WAIANAE, HAWAII 96792

TMK: 8-7-035:005

LOT AREA: 19,737 SF (0.453 Acres)

FLOOD ZONE: FIRM ZONE D

HEIGHT LIMIT: 40 FEET

ZONING (LUO): B-1, NEIGHBORHOOD BUSINESS DISTRICT

PROJECT TEAM

CIVIL: ON THE BALL ENGINEERING, LLC.
182 OPIHIKAO WAY
HONOLULU, HAWAII 96825
(808) 227-5806

STRUCTURAL: TANIMURA & ASSOCIATES, INC.
925 BETHEL STREET, SUITE 309
HONOLULU, HAWAII 96813
(808) 536-7692

ARCHITECTURAL: ASK Architects, LLC.
ASKTEC@GMAIL.COM
(808) 781-9667

MECHANICAL: ENGINEERING SYSTEMS HAWAII, INC
1617 KAPIOLANI BLVD. SUITE 208
HONOLULU, HAWAII 96815
(808) 952-6142

ELECTRICAL: ELECTECH HAWAII, INC
1100 WARD AVENUE, SUITE 750
HONOLULU, HAWAII 96814
(808) 522-1866

GEOTECHNICAL: AMEL TECHNOLOGY, INC
2800 WOODLAWN DRIVE, SUITE 251
HONOLULU, HI 96822
E-MAIL: ABIDINKAYA@AMELTECH.COM
PHONE: 808-988-0200 FAX: 808-988-0204

DRAWING INDEX

DRAWING #	DESCRIPTION
G-1	TITLE, ABBREVIATION, GENERAL NOTES, CODE DATA, ARCHITECTURAL SYMBOL LEGEND, PROJECT TEAM, PROJECT LOCATION, VICINITY MAP, DRAWING INDEX
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C-2	DEMOLITION PLAN
C-3	SITE & UTILITY PLAN
C-4	GROUND FLOOR PLAN
C-5	EROSION CONTROL PLAN
C-6	SITE SECTIONS
C-7	TRAFFIC CONTROL PLAN
C-8	SITE DETAILS
C-9	MISCELLANEOUS DETAILS
	STRUCTURAL
S1.1	GENERAL NOTES
S1.2	TYPICAL DETAILS
S1.3	TYPICAL DETAILS
S1.4	WIND STRAPPING DETAILS
S2.1	FOUNDATION PLAN
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A1.1	SITE & GROUND FLOOR PLAN
A1.2	2nd FLOOR PLAN, ROOF PLAN
A2.1	EXTERIOR ELEVATIONS
A3.1	BUILDING SECTIONS
A4.1	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS
A5.1	FINISH SCHEDULE, MOUNTING HEIGHT, WALL TYPES
A5.2	DOOR & WINDOW SCHEDULES, TYPES, DETAILS
	MECHANICAL
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M-3	PIPING DIAGRAMS AND DETAILS
	ELECTRICAL
E-100	ELECTRICAL SYMBOLS, ELECTRICAL SPECIFICATION, LUMINARIES SCHEDULE, BUILDING ENERGY STANDARD CALCULATION
E-101	ELECTRICAL SITE PLAN
E-102	2nd FLOOR ELECTRICAL PLAN, REFLECTED CEILING PLAN
E-102	SINGLE LINE DIAGRAM, PANEL SCHEDULE

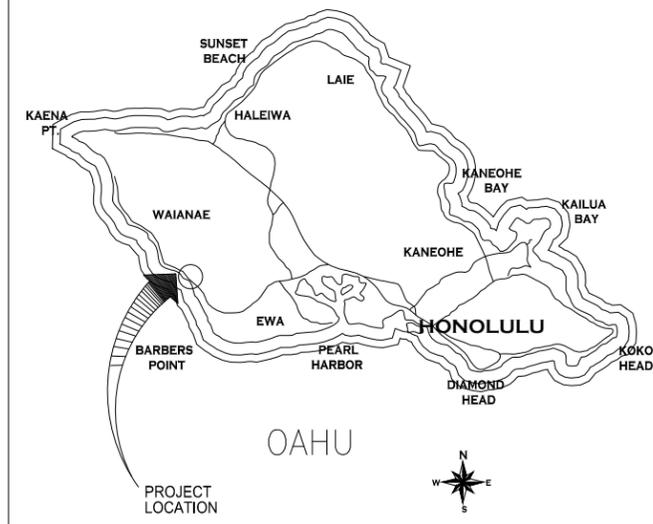
GROSS AREA & PARKING CALCULATION

USE	FLOOR	ROOM NAME	AREA (SQ. FT.)	PARKING REQUIRED	PARKING PROVIDED	REMARKS
COMMERCIAL	1st FLR	GROCERY [101]	1,256	5	1/300	10 INCLUDE SUB SPACES
		RETAIL 1 [102]	626			INCLUDE SUB SPACES
		RETAIL 2 [103]	632	4	1/400	6 INCLUDE SUB SPACES
		LAUNDROMAT [104]	1,181	8	1/2 WASHER	8 INCLUDE SUB SPACES
COMMERCIAL	2nd FLR	OFFICE 1 [201]	489			INCLUDE SUB SPACES
		OFFICE 2 [202]	489			INCLUDE SUB SPACES
		OFFICE 3 [203]	489	4	1/400	6 INCLUDE SUB SPACES
		COMMERCIAL SUB TOTAL	5,162	19		30
COMMON AREA	1st FLR	COVERED OPEN WALKWAY [W1]	560	N/A	N/A	N/A
		COVERED OPEN WALKWAY [W2]	391	N/A	N/A	N/A
		STAIR 1 [S1]	110	N/A	N/A	N/A
		STAIR 1 [S2]	123	N/A	N/A	N/A
COMMON AREA SUB TOTAL	1,184					
DWELLING	2nd FLR	LIVING AREA	1,258	2	2 PER DWELLING UNITS 2,500 SQ. FT.	2
		DWELLING SUB TOTAL	1,258	2		2

TOTAL LOT COVERAGE: 4,255 SQ. FT.
TOTAL BUILD FLOOR AREA: 7,604 SQ. FT.

TOTAL PARKING COUNT: 32 STALLS > 21 STALLS REQUIRED
ACCESSIBLE STALL: 2 PROVIDED
LOADING: 2 SPACE PROVIDED

PROJECT LOCATION



SYMBOL LEGEND

	NORTH ARROW		DETAIL SECTION
	KEY TO INTERIOR ELEVATIONS		ELEVATION REFERENCE BUBBLE
	BUILDING SECTION REFERENCE BUBBLE		DOOR SYMBOL
	WALL SECTION REFERENCE BUBBLE		WINDOW SYMBOL
	ROOM ID		WALL TYPE ID

VICINITY MAP



GENERAL NOTES

- THE OBJECTIVE OF THIS PROJECT IS THAT THE CLIENT, THE ARCHITECT, AND THE CONTRACTOR WORK COOPERATIVELY TO PRODUCE A COMPLETE AND QUALITY PROJECT, WITHIN TIME SCHEDULED.
- VERIFY CONDITIONS AND DIMENSIONS RELATING TO THE PROJECT BEFORE BEGINNING. PROMPTLY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES AND/OR CONDITIONS WHICH NEED CLARIFICATION OR MAY ADVERSELY AFFECT THE FINISHED PROJECT. WORK CARRIED OUT DISREGARDING THESE INSTRUCTIONS IS SUBJECT TO REPLACEMENT AT THE EXPENSE OF THE CONTRACTOR.
- PROGRESS SCHEDULE: KEEP AN UP-TO-DATE PROGRESS SCHEDULE GRAPH OR CHART POSTED ON THE JOB SITE, FOR READY REFERENCE BY THE ARCHITECT AND THE OWNER.
- DRAWINGS AND SUBMITTALS PACKAGE: UPON COMPLETION OF THE WORK AND PRIOR TO FINAL PAYMENT, SUBMIT TO THE OWNER A PACKAGE LABELED WITH THE PROJECT NAME, CONTAINING AS-BUILT REPRODUCIBLE DRAWINGS OF ALL STRUCTURAL AND ELECTRICAL WORK, AND FINAL RECORD DRAWINGS, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES (SEE AIA A201 PARAGRAPH 4.11.1)
- DOCUMENTS EXISTING CONDITIONS AFFECTED BY THE WORK BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR DAMAGE CAUSED BY THE WORK.
- WORK SHALL CONFORM TO APPLICABLE CODES OF THE APPROPRIATE GOVERNING AUTHORITIES AND THE BEST PRACTICE PREVAILING IN THE TRADES PERFORMING THE WORK.
- COORDINATE WORK WITH THE OWNER AND OBSERVE REGULATIONS AND SPECIFICATIONS OF THE OWNER.
- WORK SHOWN IS BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
- WORK SHALL BE "NEW" UNLESS INDICATED "EXISTING".
- THE WORD "REPLACE" MEANS REMOVE EXISTING WORK AND PROVIDE NEW WORK AS INDICATED OR REQUIRED TO COMPLETE THE WORK.
- TAKE MEASURES TO KEEP DUST TO A MINIMUM. REMOVE ALL WASTE MATERIALS AND DISPOSE OF OFFSITE. CLEAN JOB SITE DAILY.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS. DIMENSIONS ARE TO FACE OF CONCRETE, CMU OR STUDS, UNLESS NOTED OTHERWISE.
- TAKE CARE NOT TO DAMAGE ADJACENT STRUCTURES, LANDSCAPING OR UTILITIES, REPAIR DAMAGES TO EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE CLIENT.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY LOCATION OF ALL UTILITY LINES.
- MAINTAIN ALL EXISTING FIRE CONTROLS DURING CONSTRUCTION.
- COLORS: PAINT ALL NEW SURFACES TO MATCH ADJACENT SURFACE UNLESS NOTED OTHERWISE. GALVANIZED PIPE MOUNTS TO REMAIN UNPAINTED.



This work was prepared by me or under my supervision. Construction of this project will be under my observation.

(Observation of construction shall be defined in chapter 115, Hawaii Administrative Rules for Professional Engineers, Architects, Surveyors and Landscape Architects, State of Hawaii, Subchapter 7, Section 16-115-2, Definitions effective 8/04.)

OL-30-12
Expiration Date of License

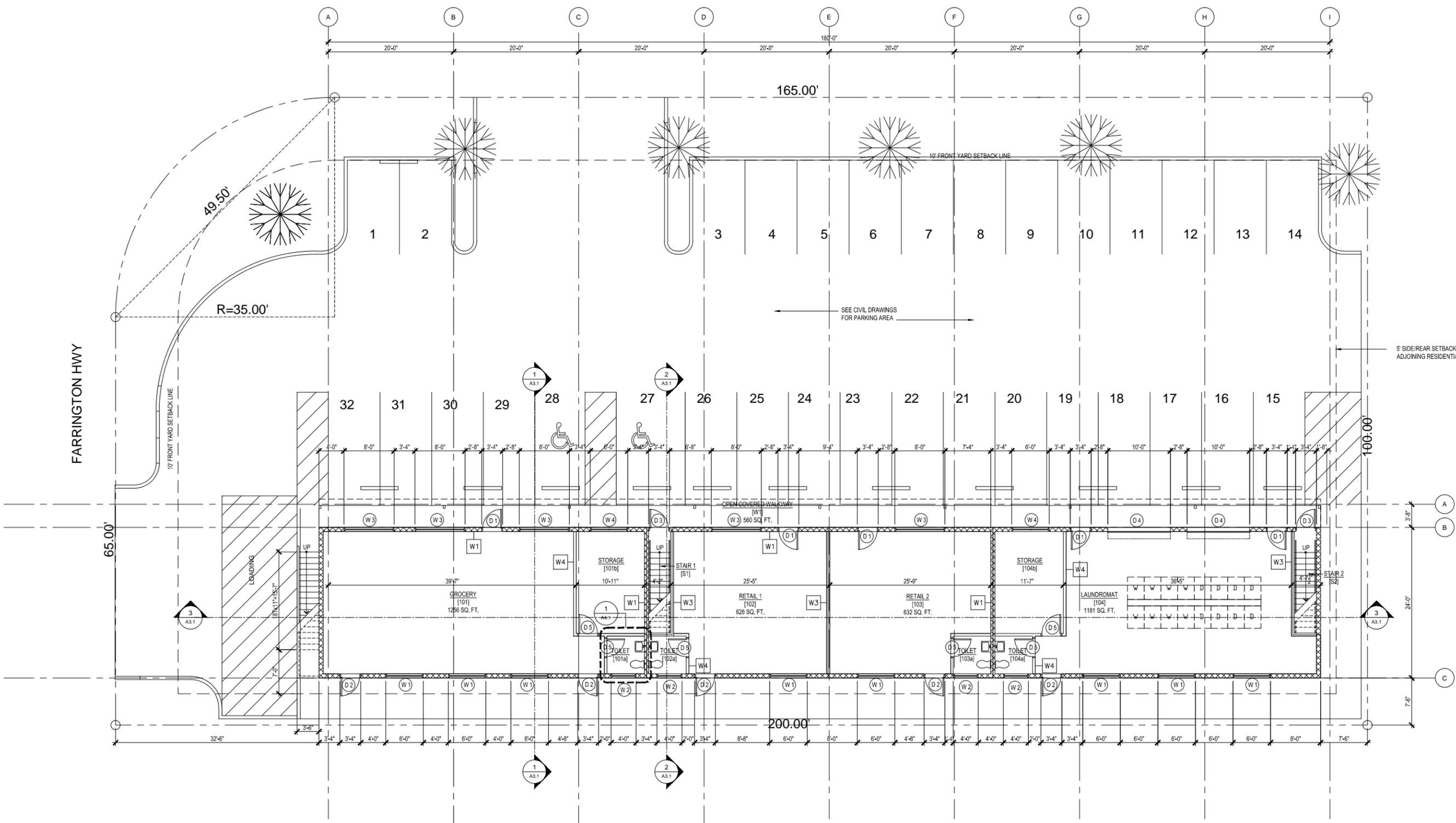
PROJECT
87-1818
FARRINGTON
HIGHWAY
TMK: 8-7-035:005

SHEET TITLE
SITE & GROUND FLOOR
PLAN

REVISIONS

OCTOBER, 2010
DATE
AK
DRAWN BY SHEET NO.
A1.1

MOHINI STREET



1 SITE / GROUND FLOOR PLAN
Scale: 1/8" = 1'-0"





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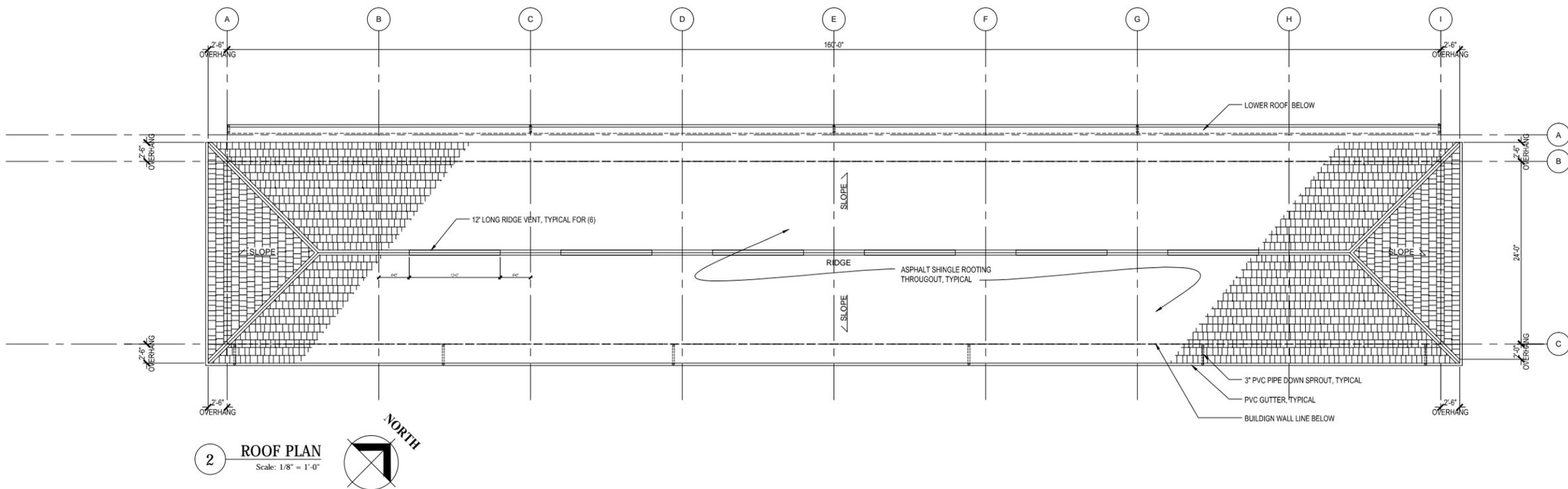
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 04-30-12
 Expiration Date of License

PROJECT
 87-1818
 FARRINGTON
 HIGHWAY
 TMK: 8-7-035:005

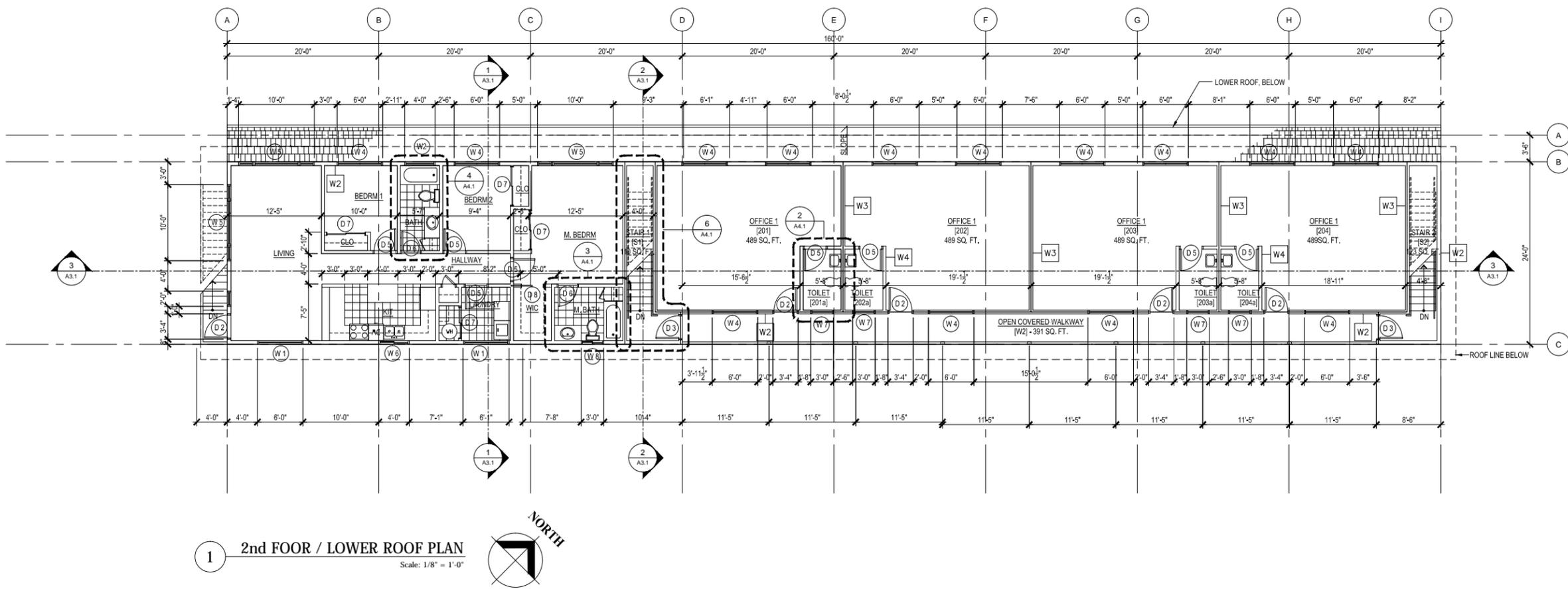
SHEET TITLE
 2nd FLOOR PLAN,
 ROOF PLAN

REVISIONS

OCTOBER, 2010
 DATE
 AK
 DRAWN BY SHEET NO.
A-102



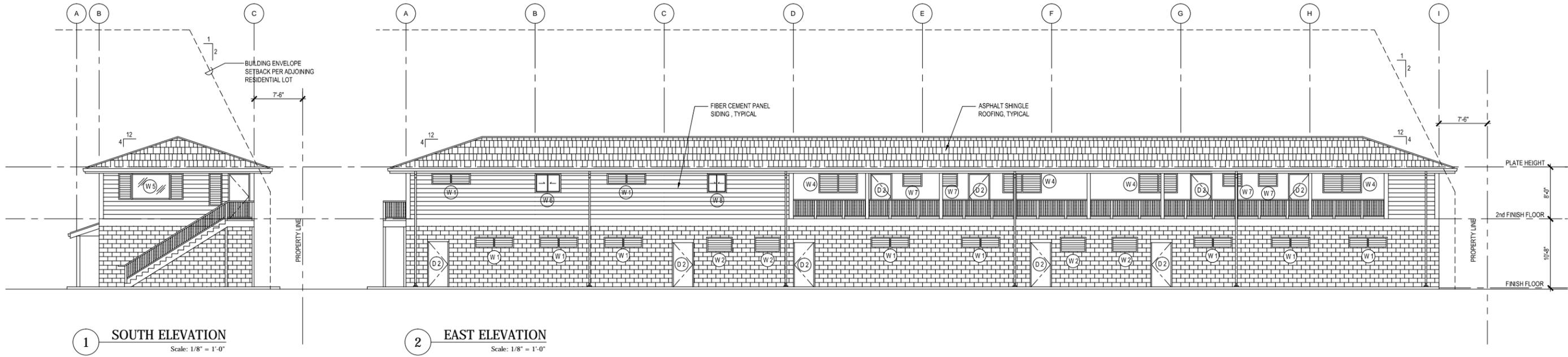
2 ROOF PLAN
 Scale: 1/8" = 1'-0"



1 2nd FOOR / LOWER ROOF PLAN
 Scale: 1/8" = 1'-0"

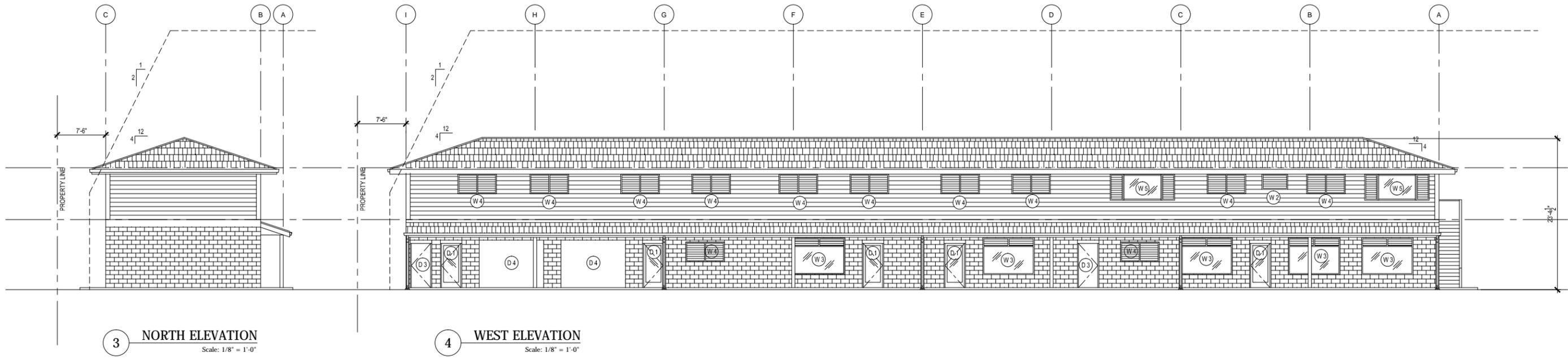


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04-30-12
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1 SOUTH ELEVATION
Scale: 1/8" = 1'-0"

2 EAST ELEVATION
Scale: 1/8" = 1'-0"



3 NORTH ELEVATION
Scale: 1/8" = 1'-0"

4 WEST ELEVATION
Scale: 1/8" = 1'-0"

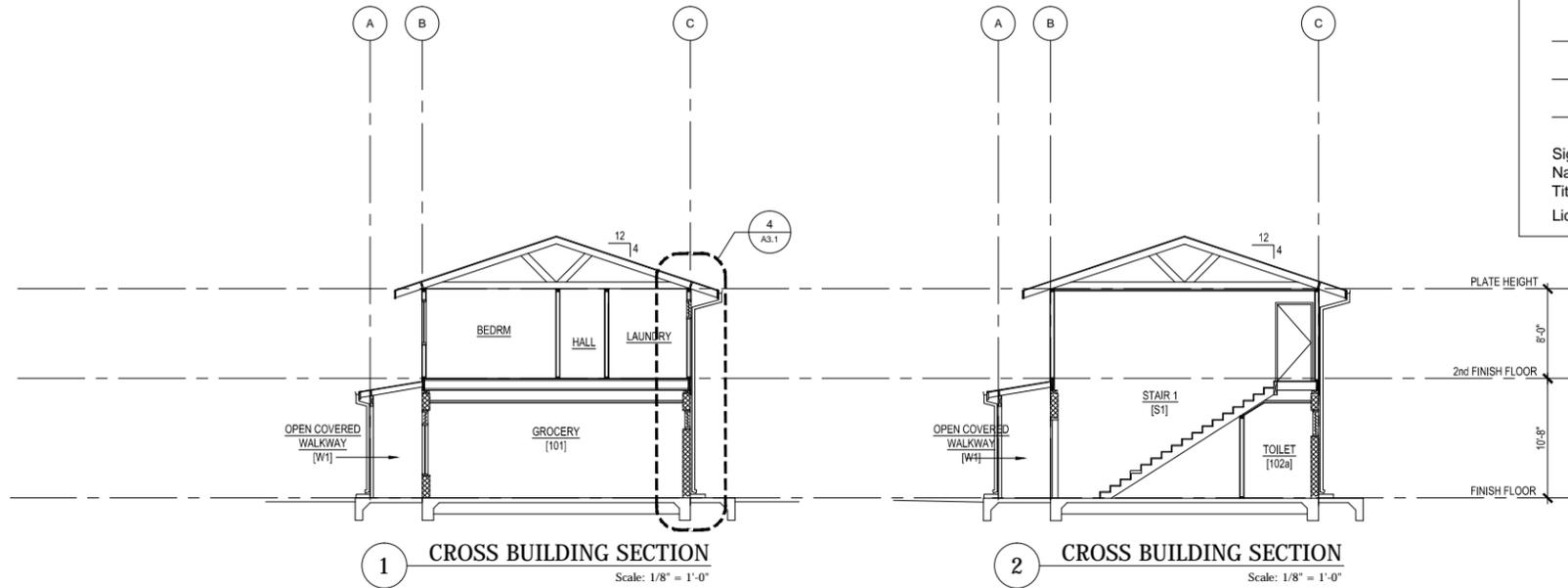
PROJECT
87-1818
FARRINGTON
HIGHWAY
TMK: 8-7-035:005

SHEET TITLE
EXTERIOR
ELEVATIONS

REVISIONS

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OCTOBER, 2010
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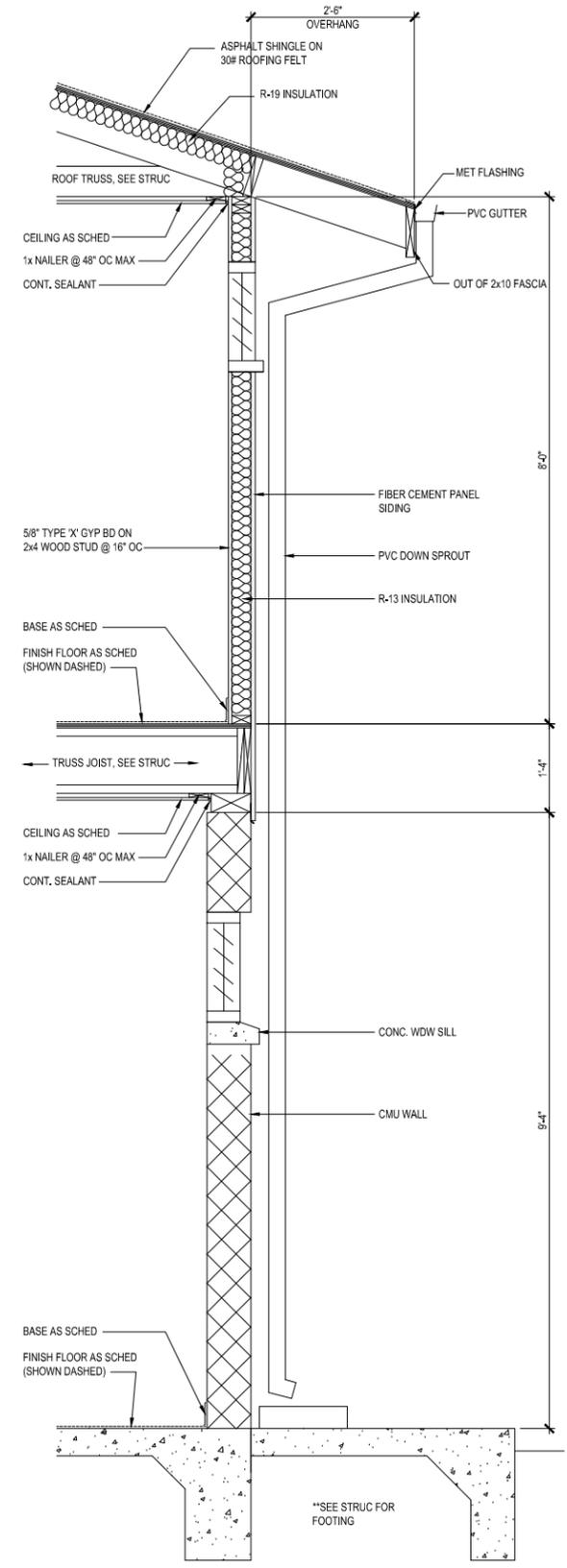
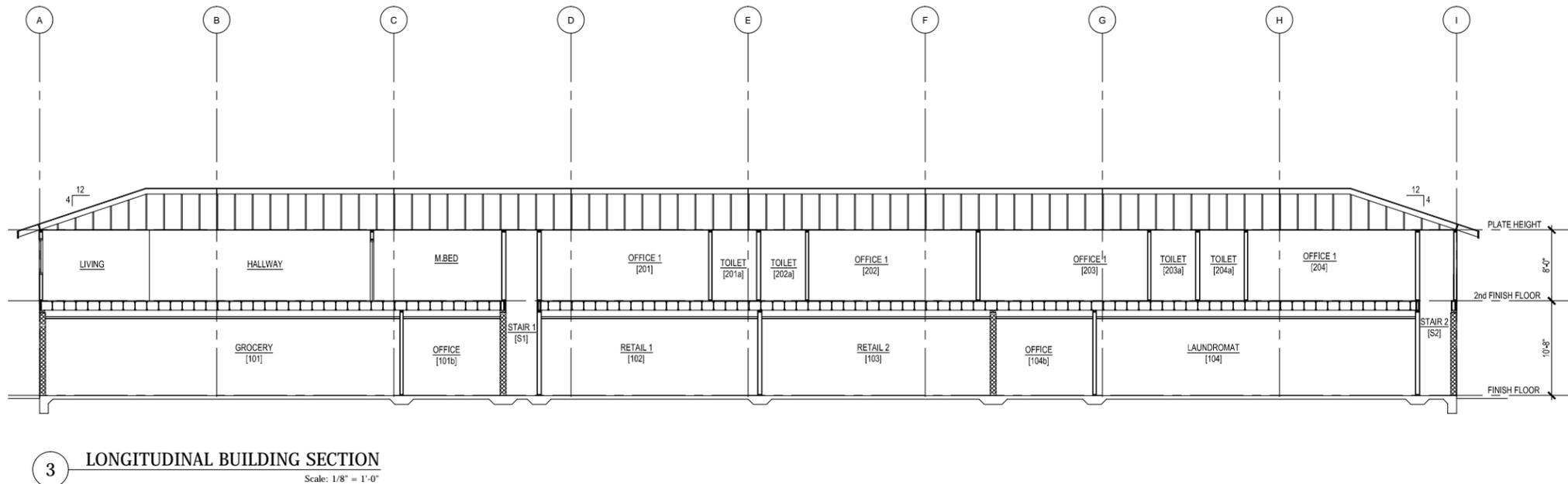


CITY AND COUNTY OF HONOLULU
 REVISED ORDINANCE CHAPTER 32,
 HONOLULU COUNTY CODE 1990, AS AMENDED

To the best of my knowledge, this project's design substantially conforms to the Building Energy Conservation Code for:

Building Component Systems
 Electrical Component Systems
 Mechanical Component Systems

Signature: *[Signature]* Date: 11/5/2010
 Name: JOONGKU ALLEN KANG
 Title: ARCHITECT
 License No.: AR-13042"



JOONGKU ALLEN KANG
 LICENSED PROFESSIONAL ARCHITECT
 No. 13042
 HAWAII, U.S.A.

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[Signature]
 01-30-12
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PROJECT

87-1818
 FARRINGTON
 HIGHWAY

TMK: 8-7-035:005

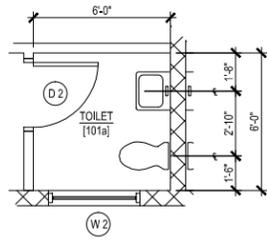
SHEET TITLE
 BUILDING SECTIONS
 TYP. WALL SECTION

REVISIONS
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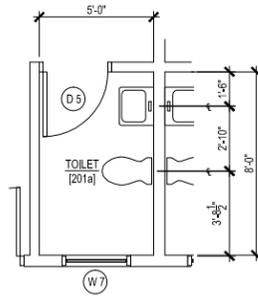
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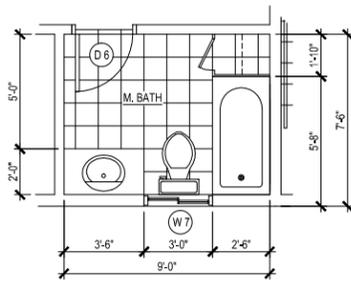
A3.1



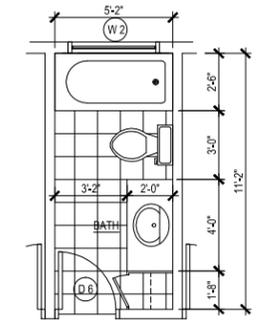
1 ENLARGED FLOOR PLAN AND INTERIOR ELEVATION (TOILET 101a)
TOILET 102a, 103a, 104a SIMILAR Scale: 1/4" = 1'-0"



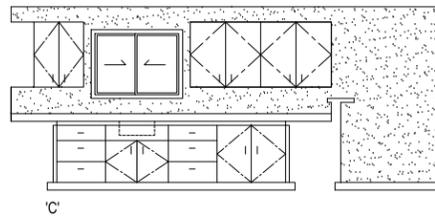
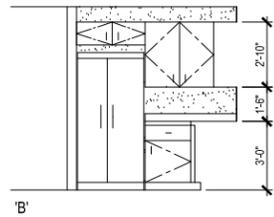
2 ENLARGED FLOOR PLAN AND INTERIOR ELEVATION (TOILET 201a)
TOILET 202a, 203a, 204a SIMILAR Scale: 1/4" = 1'-0"



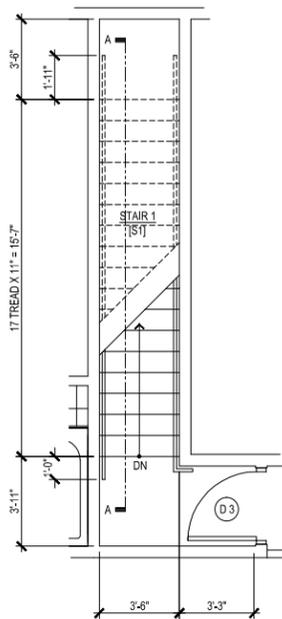
3 ENLARGED FLOOR PLAN AND INTERIOR ELEVATION (M. BATH)
Scale: 1/4" = 1'-0"



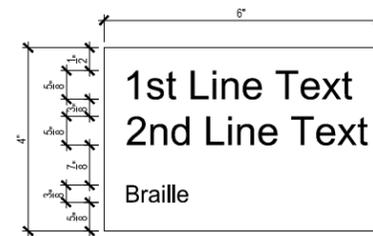
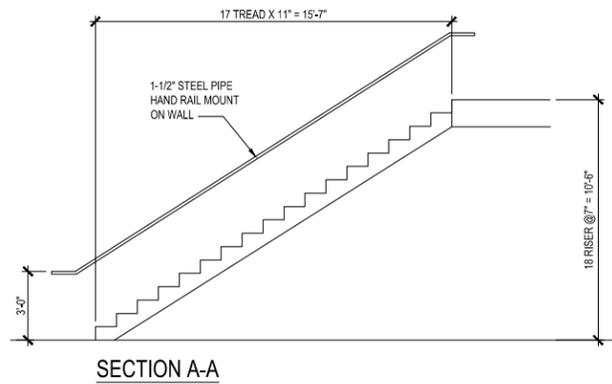
4 ENLARGED FLOOR PLAN AND INTERIOR ELEVATION (BATH)
Scale: 1/4" = 1'-0"



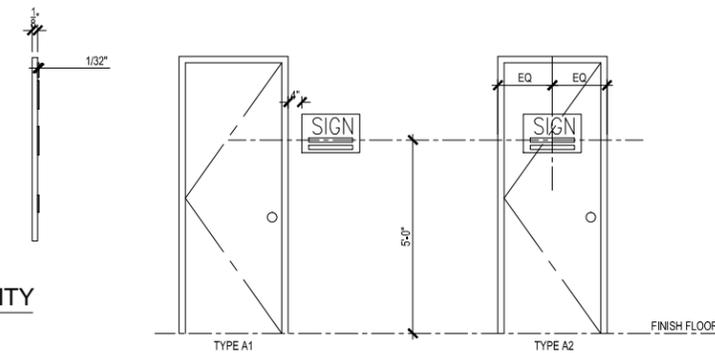
5 INTERIOR ELEVATIONS (KITCHEN)
Scale: 1/4" = 1'-0"



6 ENLARGED FLOOR PLAN (STAIR S1)
STAIR S2 SIMILAR OPPOSITE HAND Scale: 1/4" = 1'-0"



SIGN TYPE A1 & A2: ROOM IDENTITY



SIGN MOUNTING DETAIL

SCALE: NTS

7 SIGNAGE MOUNTING DETAILS
Scale: 6" = 1'-0"

JOONGKU ALLEN KANG
 LICENSED PROFESSIONAL ARCHITECT
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 HAWAII, U.S.A.

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PROJECT

87-1818
 FARRINGTON
 HIGHWAY
 TMK: 8-7-035:005

SHEET TITLE
ENLARGED FLOOR PLANS,
INTERIOR ELEVATIONS

REVISIONS

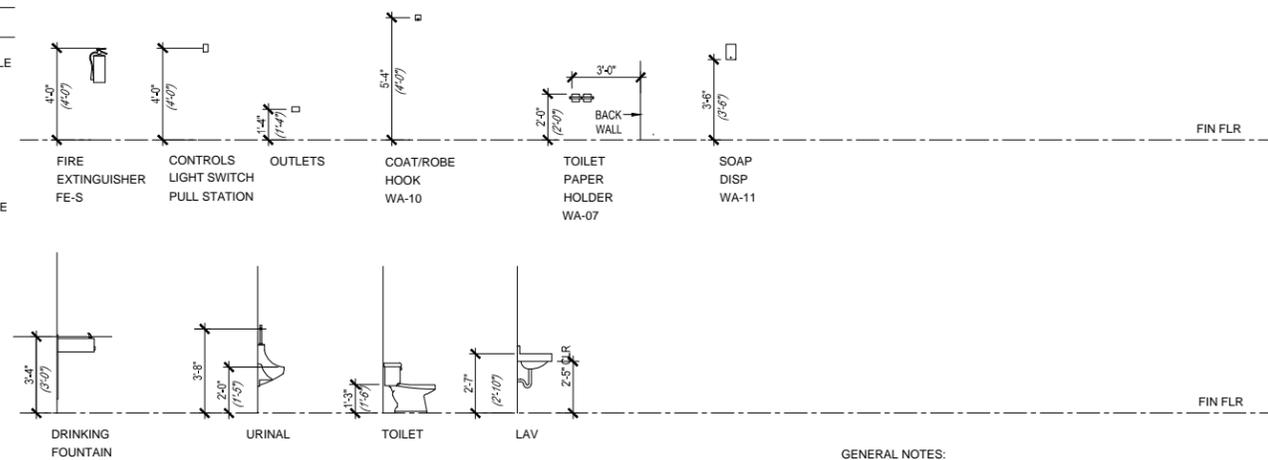
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A4.1

NATURAL LIGHT & VENTILATION CALC.

USE	FLOOR	ROOM NAME	NET FLOOR AREA (SF)	WINDOW AREA (SF)	NAT'L LIGHT (10% MIN)	NAT'L VENT (5% MIN)
COMMERCIAL	1st FLR	GROCERY [101]	936	166	18% > 10 %	18% > 5 %
		TOILET [101a]	36	9	25% > 10 %	25% > 5 %
		STORAGE [101b]	177	18	10% > 10 %	10% > 5 %
		RETAIL 1 [102]	538	55	10.1% > 10 %	10.1% > 5 %
		TOILET [102a]	36	9	25% > 10 %	25% > 5 %
		RETAIL 2 [103]	543	55	10.2% > 10 %	10.2% > 5 %
		TOILET [103a]	36	9	25% > 10 %	25% > 5 %
	2nd FLR	LAUNDROMAT [104]	870	157	18% > 10 %	18% > 5 %
		TOILET [104a]	36	9	25% > 10 %	25% > 5 %
		STORAGE [104b]	177	18	10.1% > 10 %	10.1% > 5 %
		OFFICE 1 [201]	416	54	13% > 10 %	13% > 5 %
		TOILET [201a]	40	6	15% > 10 %	15% > 5 %
		OFFICE 2 [202]	416	54	13% > 10 %	13% > 5 %
		TOILET [202a]	40	6	15% > 10 %	15% > 5 %
COMMON AREA	1st FLR	COVERED OPEN WALKWAY [W1]	-	-	-	-
	2nd FLR	COVERED OPEN WALKWAY [W2]	-	-	-	-
	2nd FLR	STAIR 1 [S1]	-	-	-	-
		STAIR 1 [S2]	-	-	-	-
DWELLING	2nd FLR	LIVING ROOM + HALLWAY + KITCHEN	486	102	21% > 10 %	21% > 5 %
		BEDROOM 1	107	24	22% > 10 %	22% > 5 %
		BEDROOM 2	113	24	21% > 10 %	21% > 5 %
		BATHROOM	58	9	15% > 10 %	15% > 5 %
		MASTER BEDROOM	248	40	16% > 10 %	16% > 5 %
		MASTER BATHROOM	63	9	14% > 10 %	14% > 5 %
		LAUNDRY ROOM	59	10	16% > 10 %	16% > 5 %

FINISH SCHEDULE

USE	FLOOR	ROOM NAME	FLOOR	BASE	WALL	CEILING	FINISH CODE	
COMMERCIAL	1st FLR	GROCERY [101]	SC	RB	PT	AC	SC = SEAL CONCRETE VCT = VINYL COMPOSITE TILE CER = CERAMIC TILE CP = CARPET WD = WOOD FLOORING	
		TOILET [101a]	SC	RB	PT	AC		
		STORAGE [101b]	SC	RB	PT	AC		
		RETAIL 1 [102]	SC	RB	PT	AC		
		TOILET [102a]	SC	RB	PT	AC	RB = RUBBER BASE WB = WOOD BASE CB = CERAMIC TILE BASE	
		RETAIL 2 [103]	SC	RB	PT	AC		
		TOILET [103a]	SC	RB	PT	AC	PT = PAINT AC = ACOUSTIC CEILING TILE	
	2nd FLR	LAUNDROMAT [104]	SC	RB	PT	AC		
		TOILET [104a]	SC	RB	PT	AC		
		STORAGE [104b]	SC	RB	PT	AC		
		OFFICE 1 [201]	VCT	RB	PT	AC		
		TOILET [201a]	VCT	RB	PT	AC		
		OFFICE 2 [202]	VCT	RB	PT	AC		
		TOILET [202a]	VCT	RB	PT	AC		
COMMON AREA	1st FLR	COVERED OPEN WALKWAY [W1]	SC	-	PT	PT		
	2nd FLR	COVERED OPEN WALKWAY [W2]	SC	-	PT	PT		
	2nd FLR	STAIR 1 [S1]	VCT	RB	PT	PT		
		STAIR 1 [S2]	VCT	RB	PT	PT		
	DWELLING	2nd FLR	LIVING ROOM	WD	WB	PT	PT	
			BEDROOM 1	CP	WB	PT	PT	
			BEDROOM 2	CP	WB	PT	PT	
			BATHROOM	CER	CB	PT	PT	
MASTER BEDROOM			CP	WB	PT	PT		
MASTER BATHROOM			CER	CB	PT	PT		
LAUNDRY ROOM			CER	CB	PT	PT		
HALLWAY			WD	WB	PT	PT		



1 MOUNTING HEIGHT DETAILS
Scale: 1/4" = 1'-0"

- GENERAL NOTES:
- NOT ALL ITEMS SHOWN MAYBE USED.
 - ALL TYPICAL DIMENSIONS SHOWN ARE MINIMUM UNLESS OTHERWISE NOTED.
 - ALL ACCESSIBLE DIMENSIONS SHOWN AS ABSOLUTE DIMENSIONS. SEE PLANS FOR DIMENSIONAL VARIATIONS.
 - PROVIDE BACKING PLATES AT ALL WALL MOUNT ACCESSORIES
 -

This work was prepared by me or under my supervision. Construction of this project will be under my observation.
 (Observation of construction shall be defined in chapter 115, Hawaii Administrative Rules for Professional Engineers, Architects, Surveyors and Landscape Architects, State of Hawaii, Subchapter 7) Section 16-115-2, Definitions effective 8/04.

OL-30-12
 Expiration Date of License

PROJECT

87-1818
 FARRINGTON
 HIGHWAY
 TMK: 8-7-035:005

SHEET TITLE

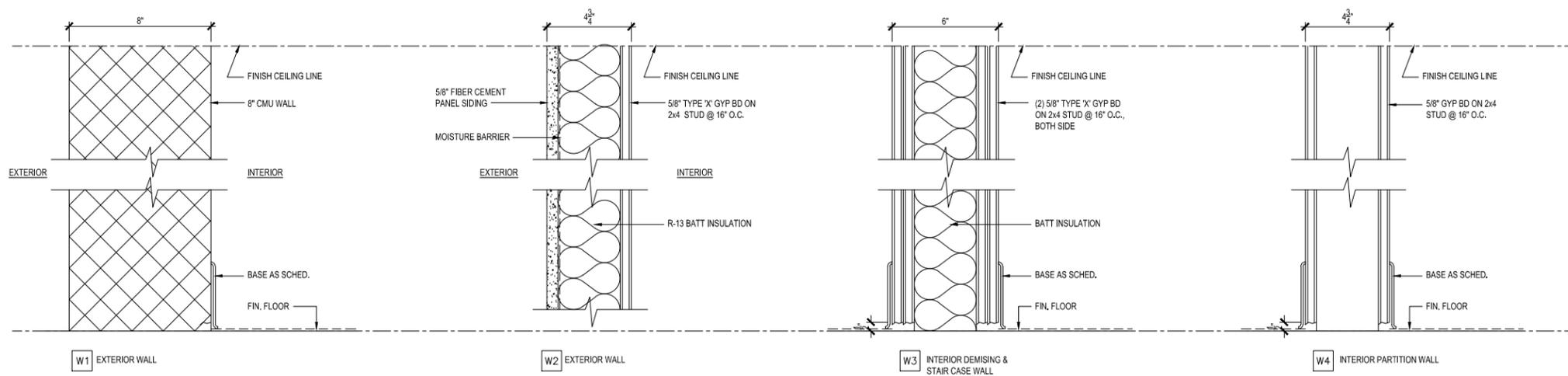
FINISH SCHEDULE,
 MOUNTING DETAIL,
 WALL TYPES

REVISIONS

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OCTOBER, 2010
 DATE
 AK
 DRAWN BY SHEET NO.

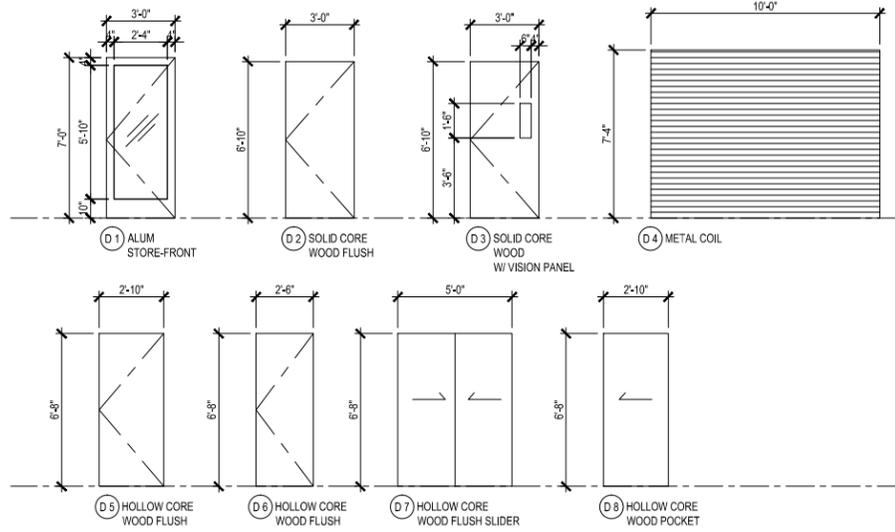
A5.1



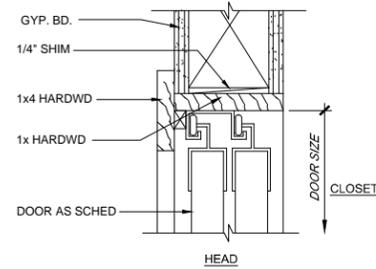
2 WALL TYPES
Scale: 3" = 1'-0"

DOOR SCHEDULE

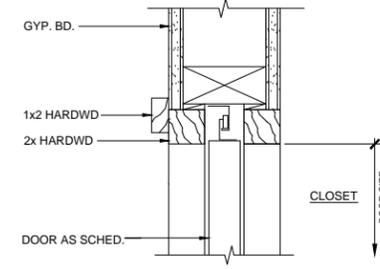
DOOR TYPE (DOOR MARK)	DOOR SIZE WIDTH x HEIGHT	THK	MATERIAL			DETAIL			REMARK
			DOOR	FRAME	HEAD	JAMB	SILL		
D1	3'-0" x 7'-0"	1-3/4"	ALUM	ALUM	4/A5.2	4/A5.2	-	ALUM STOREFRONT DOOR	
D2	3'-0" x 7'-0"	1-3/4"	ALUM	MET	5/A5.2	5/A5.2	6/A5.2	DET 5/A5.2 FOR CMU WALL & 6/A5.2 FOR STUD WALL	
D3	3'-0" x 7'-0"	1-3/4"	MET	MET	5/A5.2	5/A5.2	6/A5.2	DET 5/A5.2 FOR CMU WALL & 6/A5.2 FOR STUD WALL	
D4	7'-4" x 10'-0"	-	STEEL	-	7/A5.2	7/A5.2	7/A5.2	-	
D5	2'-10" x 6'-8"	1-3/4"	WOOD	WOOD	3/A5.2	3/A5.2	-	-	
D6	2'-6" x 6'-8"	1-3/4"	WOOD	WOOD	3/A5.2	3/A5.2	-	-	
D7	5'-0" x 6'-8"	1-3/8"	WOOD	WOOD	1/A5.2	1/A5.2	1/A5.2	-	
D8	2'-10" x 6'-8"	1-3/8"	WOOD	WOOD	2/A5.2	2/A5.2	2/A5.2	-	



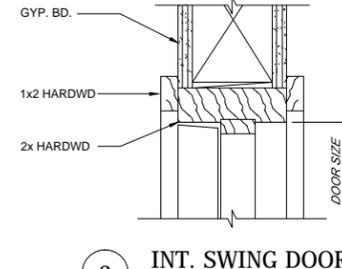
AA DOOR TYPES
Scale: 1/4" = 1'-0"



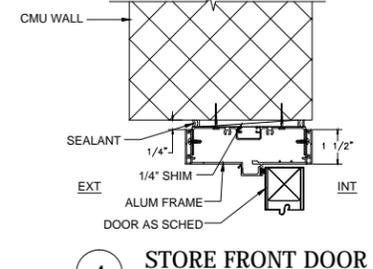
1 CLOSET BI-PASS
Scale: 3" = 1'-0"



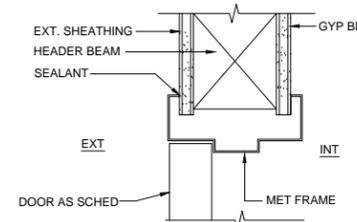
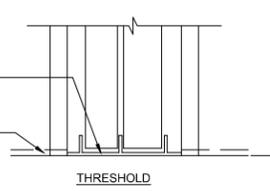
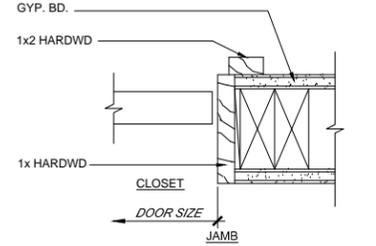
2 POCKET DOOR
Scale: 3" = 1'-0"



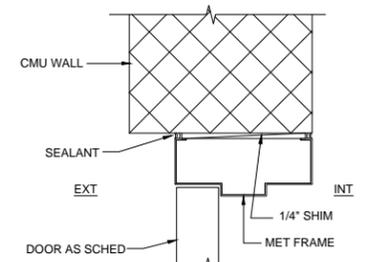
3 INT. SWING DOOR
Scale: 3" = 1'-0"



4 STORE FRONT DOOR
Scale: 3" = 1'-0"



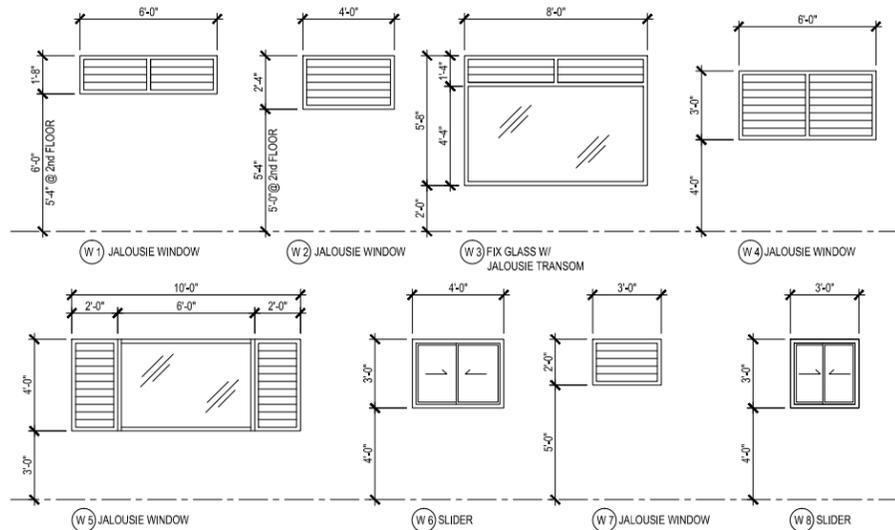
6 MET EXT DOOR
Scale: 3" = 1'-0"



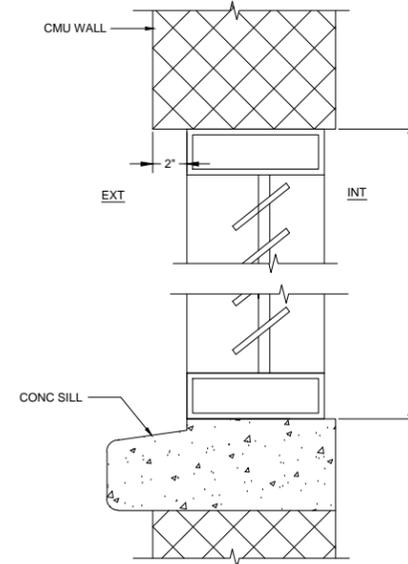
5 MET EXT DOOR
Scale: 3" = 1'-0"

WINDOW SCHEDULE

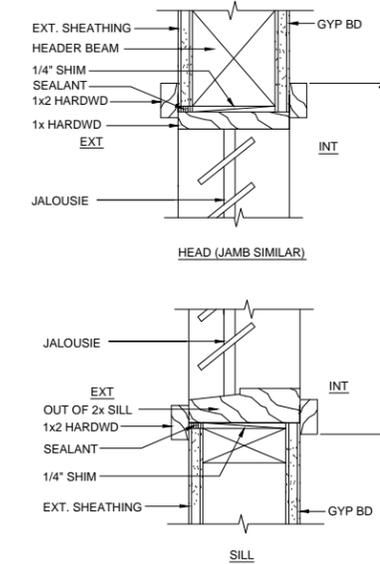
DOOR TYPE (DOOR MARK)	WINDOW SIZE WIDTH x HEIGHT	FRAME MTL	DETAIL			REMARK
			HEAD	JAMB	SILL	
W1	6'-0" x 1'-8"	ALUM / WOOD	A/A5.2	A/A5.2	A/A5.2	DET A/A5.2 FOR CMU WALL & B/A5.2 FOR STUD WALL
W1	4'-0" x 2'-4"	ALUM / WOOD	A/A5.2	A/A5.2	A/A5.2	DET A/A5.2 FOR CMU WALL & B/A5.2 FOR STUD WALL
W3	8'-0" x 5'-8"	ALUM	A/A5.2	A/A5.2	A/A5.2	-
W4	6'-0" x 3'-0"	ALUM / WOOD	A/A5.2	A/A5.2	A/A5.2	DET A/A5.2 FOR CMU WALL & B/A5.2 FOR STUD WALL
W5	10'-0" x 4'-0"	WOOD	B/A5.2	B/A5.2	B/A5.2	-
W6	4'-0" x 3'-0"	WOOD	B/A5.2	B/A5.2	B/A5.2	-
W7	3'-0" x 2'-0"	WOOD	B/A5.2	B/A5.2	B/A5.2	-
W8	3'-0" x 3'-0"	WOOD	B/A5.2	B/A5.2	B/A5.2	-



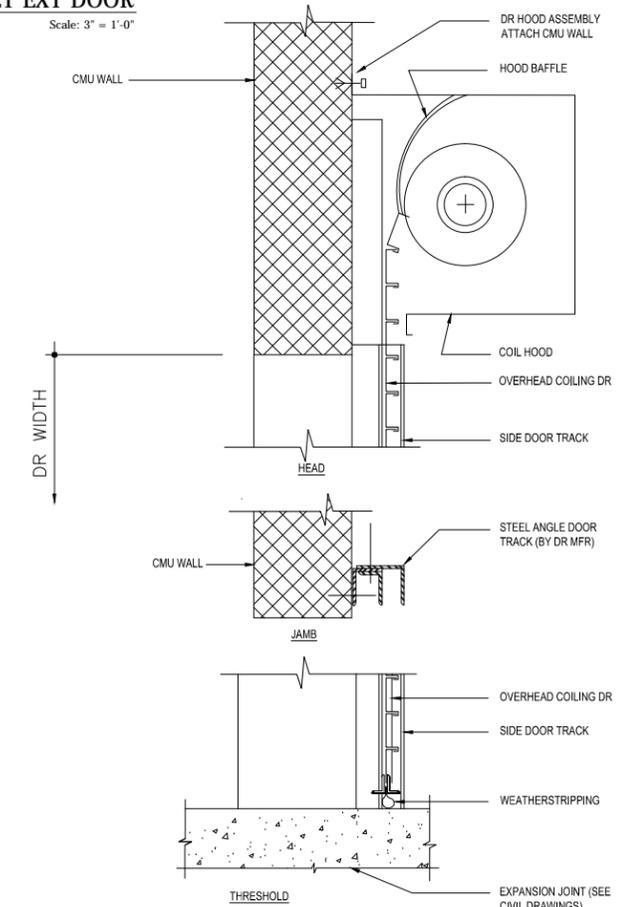
BB WINDOW TYPES
Scale: 1/4" = 1'-0"



A WINDOW DETAIL
Scale: 3" = 1'-0"



B WINDOW DETAIL
Scale: 3" = 1'-0"



7 COILING DOOR
Scale: 3" = 1'-0"

JOONGKU ALLEN KANG
LICENSED PROFESSIONAL ARCHITECT
No. 13042
HAWAII, U.S.A.

This work was prepared by me or under my supervision. Construction of this project will be under my observation.

(Observation of construction shall be defined in chapter 115, Hawaii Administrative Rules for Professional Engineers, Architects, Surveyors and Landscape Architects, State of Hawaii, Subchapter 7) Section 16-115-2, Definitions effective 8/94.

OL-30-12
Expiration Date of License

PROJECT

87-1818
FARRINGTON
HIGHWAY

TMK: 8-7-035:005

SHEET TITLE
DOOR / WINDOW
SCHEDULE, TYPES,
DETAILS

REVISIONS

OCTOBER, 2010
DATE

AK
DRAWN BY SHEET NO.

A5.2

GENERAL CONSTRUCTION NOTES

- ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986 AND STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU AND THE COUNTIES OF KAUAI, MAUI, AND HAWAII, AND HRS 103.50.
- THE OWNER WILL ASSURE THE WORK WILL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS.
- THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. WHEREVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.
- THE EXISTING UTILITIES HAVE BEEN SHOWN ON THESE PLANS INsofar AS IT IS POSSIBLE TO DO SO. THEIR LOCATIONS AS SHOWN ARE APPROXIMATE ONLY AND THE CONTRACTOR SHALL MAKE INDEPENDENT CHECK ON THE GROUND BY PROBING AND WITH THE VARIOUS UTILITY COMPANIES AND GOVERNMENTAL AGENCIES TO ASCERTAIN THEIR EXACT LOCATIONS. IF UTILITIES NOT SHOWN ARE SUSPECTED, REQUIRE TONING OF THESE AREAS PRIOR TO EXCAVATION TO LOCATE THEM.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. BEFORE DISRUPTING SERVICE OF ANY UTILITY, THE CONTRACTOR SHALL CONTACT THE CITY'S REPRESENTATIVE AND APPROPRIATE RESPONSIBLE UTILITY AUTHORITY. DAMAGE TO EXISTING UTILITIES AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY OR STATE.
- THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR UTILITIES SUCH AS ELECTRICITY, ETC. REQUIRED FOR HIS OPERATIONS, AND ALL COSTS FOR THESE UTILITIES SHALL BE BORNE BY THE CONTRACTOR.
- ALL EXISTING UTILITIES TO REMAIN IN USE, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE PROTECTED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION UNLESS SPECIFIED ON THE PLANS TO BE ABANDONED. ANY DAMAGE TO THE EXISTING UTILITIES SHALL BE REPAIRED AND PAID FOR BY THE CONTRACTOR.
- UNLESS RELOCATION IS CALLED FOR ON THE PLANS, EXISTING UTILITIES SHALL REMAIN IN-SERVICE AND IN PLACE. IF RELOCATION OF EXISTING UTILITIES IS REQUIRED FOR THE CONTRACTOR'S CONVENIENCE, INTERRUPTION OF SERVICE SHALL BE KEPT TO A MINIMUM AND SHALL BE DONE AT THE CONTRACTOR'S EXPENSE AND ONLY WITH THE APPROVAL OF THE ENGINEER.
- THE CONTRACTOR SHALL VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
- THE EXISTING IMPROVEMENTS ON THE PREMISES AND IN ADJACENT AREA THAT ARE NOT TO BE REMOVED, SHALL BE PRESERVED AND PROTECTED. ANY AND ALL DAMAGES RESULTING FROM THE CONTRACTOR'S CONSTRUCTION OPERATION SHALL BE REPLACED AND REPAIRED TO ORIGINAL CONDITION, AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING AND RESTORATION TO ORIGINAL OR BETTER CONDITION, NEARBY IMPROVEMENTS AFFECTED BY DUST AND/OR OTHER REASONS RESULTING FROM THE CONSTRUCTION ACTIVITY.
- NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING DRAINAGE SYSTEMS, OR ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS", AND TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL", AS WELL AS CHAPTER 14 OF THE REVISED ORDINANCES OF HONOLULU, AS AMENDED. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING, AT 768-8084 TO ARRANGE FOR INSPECTIONAL SERVICES AND SUBMIT TWO (2) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK.
- CONFINED SPACE
 - ALL SAFETY EQUIPMENT REQUIRED BY THE CONFINED SPACE REGULATIONS APPLICABLE TO ALL PARTIES OTHER THAN THE CONSTRUCTION INDUSTRY, TO INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:
 - FULL BODY HARNESSES FOR UP TO TWO PERSONNEL.
 - LIFELINE AND ASSOCIATED CLIPS.
 - INGRESS/EGRESS AND FALL PROTECTION EQUIPMENT.
 - TWO-WAY RADIOS (WALKIE-TALKIES) IF OUT OF LINE-OF-SIGHT.
 - EMERGENCY (ESCAPE) RESPIRATOR (10 MINUTE DURATION).
 - CELLULAR TELEPHONE TO CALL FOR EMERGENCY ASSISTANCE.
 - CONTINUOUS GAS DETECTOR (CALIBRATED) TO MEASURE OXYGEN, HYDROGEN SULFIDE, CARBON MONOXIDE AND FLAMMABLES (CAPABLE OF MONITORING AT A DISTANCE AT LEAST 20- FEET AWAY).
 - PERSONAL MULTI-GAS DETECTOR TO BE CARRIED BY INSPECTOR.
 - CONTINUOUS FORCED AIR VENTILATION ADEQUATE TO PROVIDE SAFE ENTRY CONDITIONS.
 - ONE ATTENDANT/RESCUE PERSONNEL TOPSIDE (TWO, IF CONDITIONS WARRANT IT).
- WHEN CONNECTING TO A LIVE SEWER LINE, THE CONTRACTOR SHALL ABIDE BY ALL CONDITIONS THAT THE STATE DEPARTMENT OF HEALTH SETS FORTH TO MITIGATE ANY WASTEWATER SPILL THAT MAY OCCUR. THE CONTRACTOR SHALL INFORM THE CITY INSPECTOR FIVE (5) WORKING DAYS PRIOR TO THE ACTUAL CONNECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES AND PENALTIES DUE TO ANY SPILLS RESULTING FROM THE CONNECTION.

- PURSUANT TO CHAPTER 6E, HRS, IN THE EVENT ANY ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND WORK AND NOTIFY THE HONOLULU POLICE DEPARTMENT, THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES-HISTORIC PRESERVATION DIVISION (692-8015). IN ADDITION, FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL INFORM THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING (768-8084).
- FOR BENCH MARK, SEE SHEET C-2.
- FOR PROJECTS ABUTTING STATE HIGHWAYS' THE OWNER OR HIS AUTHORIZED REPRESENTATIVE SHALL NOTIFY STATE DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION, OAHU DISTRICT, DRAINAGE DISCHARGE UNIT AT 831-6793 FOR AN ASSESSMENT OF STATE HIGHWAYS PERMIT REQUIREMENTS.
- TOPOGRAPHIC MAP PROVIDED BY IMATA & ASSOCIATES, DATED APRIL 2010.

SEWER NOTES (PRIVATE)

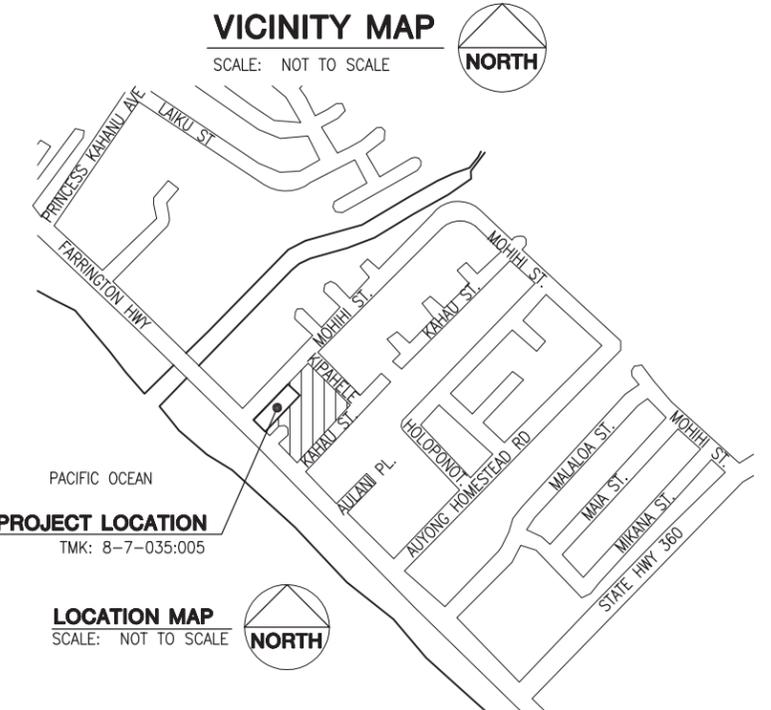
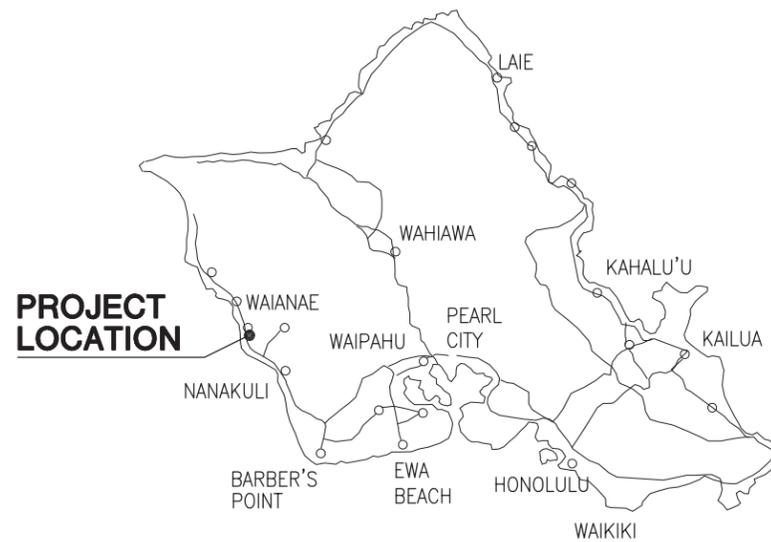
- ALL SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY'S STANDARD SPECIFICATIONS, SEPTEMBER 1986, THE DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS, SEPTEMBER, 1984, CURRENT CITY PRACTICES AND REVISED ORDINANCES OF HONOLULU, 1990, AS AMENDED, AND THE DESIGN STANDARDS OF THE DEPARTMENT OF WASTEWATER MANAGEMENT VOL. 1, JULY 1993.
- CRUSHED ROCK CRADLE IS PERMITTED WHERE SOIL IS STABLE. IN AREAS OF UNSTABLE SOIL, THE MAKER OF THE PLANS AND THE CONSTRUCTION ENGINEER WILL DETERMINE THE PIPE SUPPORT REQUIRED.
- THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS RESEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF THE FACILITIES, INCLUDING AND AFFECTING SEWER LINES, IN THE PRESENCE OF THE WASTEWATER INSPECTOR AND EXERCISE PROPER CARE IN EXCAVATING THE AREA. THE CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR ALL DAMAGED UTILITIES.
- SLOPE FOR SEWER LATERALS SHALL BE 1.00% UNLESS OTHERWISE NOTED.
- BUILDING PLUMBING FACILITIES SHALL BE CONTROLLED BY SEWER LATERAL INVERTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS SEWER SERVICE TO ALL AFFECTED AREAS DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SEWAGE SPILLS CAUSED DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE STATE DEPARTMENT OF HEALTH AND UTILIZE APPROPRIATE SAMPLING AND ANALYZING PROCEDURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PUBLIC NOTIFICATIONS AND PRESS RELEASES.
- THE CONTRACTOR SHALL INSTALL "RAINSTOPPER" MANHOLE INSERTS IN ALL SEWER MANHOLES WITH TYPE "SA" FRAME AND COVER.
- ALL DROP AND SHALLOW DROP SEWER MANHOLES SHALL BE LINED WITH PLASTIC LINERS. ALSO, IF THE VELOCITY EXCEEDS 10 FEET PER SECOND (FPS), THE SEWER MANHOLE SHALL BE PLASTIC LINED. SEE SPECIFICATION SECTION 2720.
- CONFINED SPACE

FOR ENTRY BY CITY PERSONNEL, INCLUDING INSPECTORS, INTO A PERMIT REQUIRED CONFINED SPACE AS DEFINED IN 29 CFR PART 1910.146(b), THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING:

- ALL SAFETY EQUIPMENT REQUIRED BY THE CONFINED SPACE REGULATIONS APPLICABLE TO ALL PARTIES OTHER THAN THE CONSTRUCTION INDUSTRY, TO INCLUDE, BUT NOT LIMITED TO THE FOLLOWING:
 - FULL BODY HARNESSES FOR UP TO TWO PERSONNEL.
 - LIFELINE AND ASSOCIATED CLIPS.
 - INGRESS/EGRESS AND FALL PROTECTION EQUIPMENT.
 - TWO-WAY RADIOS (WALKIE-TALKIES) IF OUT OF LINE-OF-SIGHT.
 - EMERGENCY (ESCAPE) RESPIRATOR (10 MINUTE DURATION).
 - CELLULAR TELEPHONE TO CALL FOR EMERGENCY ASSISTANCE.
 - CONTINUOUS GAS DETECTOR (CALIBRATED) TO MEASURE OXYGEN, HYDROGEN SULFIDE, CARBON MONOXIDE AND FLAMMABLES (CAPABLE OF MONITORING AT A DISTANCE AT LEAST 20- FEET AWAY).
 - PERSONAL MULTI-GAS DETECTOR TO BE CARRIED BY INSPECTOR.
- CONTINUOUS FORCED AIR VENTILATION ADEQUATE TO PROVIDE SAFE ENTRY CONDITIONS.
- ONE ATTENDANT/RESCUE PERSONNEL TOPSIDE (TWO, IF CONDITIONS WARRANT IT).
- WHEN CONNECTING TO A LIVE SEWER LINE, THE CONTRACTOR SHALL ABIDE BY ALL CONDITIONS THAT THE STATE DEPARTMENT OF HEALTH SETS FORTH TO MITIGATE ANY WASTEWATER SPILL THAT MAY OCCUR. THE CONTRACTOR SHALL INFORM THE CITY INSPECTOR FIVE (5) WORKING DAYS PRIOR TO THE ACTUAL CONNECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES AND PENALTIES DUE TO ANY SPILLS RESULTING FROM THE CONNECTION.

PUBLIC HEALTH SAFETY & CONVENIENCE NOTES

- THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO TITLE 11, DEPARTMENT OF HEALTH, CHAPTER 46, COMMUNITY NOISE CONTROL, IN WHICH MAXIMUM ALLOWABLE NOISE LEVELS HAVE BEEN SET. IF THE CONSTRUCTION WILL BE REQUIRED TO OBTAIN A PERMIT FROM THE DIRECTOR OF THE DEPARTMENT OF HEALTH, THE CONTRACTOR SHALL OBTAIN A COPY OF CHAPTER 46 AND BECOME FAMILIAR WITH THE NOISE LEVEL RESTRICTIONS AND THE PROCEDURES FOR OBTAINING A PERMIT FOR CONSTRUCTION ACTIVITIES. APPLICATION AND INFORMATION ON VARIANCES FROM THE ENVIRONMENTAL HEALTH SERVICES DIVISION, 591 ALA MOANA BLVD., RM. 125, HONOLULU, HAWAII OR BY TELEPHONE 586-4576.
- WHERE PEDESTRIAN WALKWAYS EXIST, THEY SHALL BE MAINTAINED IN PASSABLE CONDITION OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. TEMPORARY PASSAGE WAYS SHALL BE ACCESSIBLE PER ADAAG 4.3.1.



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5	C-3	SITE & UTILITY PLAN
6	C-4	SITE GRADING PLAN
7	C-5	EROSION CONTROL PLAN
8	C-6	SITE SECTIONS
9	C-7	TRAFFIC CONTROL PLAN
10	C-8	SITE DETAILS - 1
11	C-9	MISCELLANEOUS DETAILS
12	C-10	DRIVEWAY DETAILS

ABBREVIATIONS

ac	asphalt concrete
bfp	back flow preventer
bx	box
cmu	concrete masonry unit
co	clean out
conc.	concrete
crm	concrete rubble masonry
di	drain inlet
ds	downspout
d/w	driveway
fn.	found
ft	feet
ga	guy anchor
gp	gate post
h	height
hb	hose bib
heco	hawaiian electric company
in	inches
inv	invert
mb	mailbox
mon	monument
pp	power pole
pvc	polyvinyl chloride
ref	reflect
s	spread
sdmh	storm drain manhole
smh	sanitary sewer manhole
spr	sprinkler
st	street
sta	station
s/w	sidewalk
sv	sanitary sewer valve
typ	typical
wm	water meter
wmh	water manhole
wv	water valve

APPROVED:

DIRECTOR, DEPARTMENT OF PLANNING & PERMITTING DATE
CITY AND COUNTY OF HONOLULU
(FOR GRADING AND CONSTRUCTION WITHIN CITY R/W ONLY)

CHIEF, CIVIL ENGINEERING BRANCH, DPP DATE



This work was prepared by me or under my supervision. Construction of this project will be under my observation. ("Observation of construction" shall be defined in chapter 115, Hawaii Administrative Rules for Professional Engineers, Architects, Surveyors and Landscape Architects, State of Hawaii, Subchapter 1, Section 16-115-2, Definitions effective 8/94.)

Chris Ball

04-30-12
Expiration Date of License



PROJECT

**87-1818
FARRINGTON
HIGHWAY**

TMK: 8-7-035:005

SHEET TITLE
GENERAL NOTES

REVISIONS



OCTOBER 1, 2010

DATE

CB

DRAWN BY

SHEET NO.

C-1

GRADING NOTES

1. ALL GRADING WORK SHALL BE DONE IN ACCORDANCE WITH CHAPTER 14, ARTICLES 13, 14, 15 AND 16, AS RELATED TO GRADING, SOIL EROSION AND SEDIMENT CONTROL OF THE REVISED ORDINANCES OF HONOLULU, 1990, AS AMENDED.
2. THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. WHEREVER CONNECTIONS OF NEW UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.
3. NO CONTRACTOR SHALL PERFORM ANY GRADING OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.
4. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS CONTAINED IN THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 60.1, "AIR POLLUTION CONTROL".
5. ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE SITE.
6. ALL SLOPES AND EXPOSED AREAS SHALL BE SODDED OR PLANTED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED. PLANTING SHALL NOT BE DELAYED UNTIL ALL GRADING WORK HAS BEEN COMPLETED. GRADING TO FINAL GRADE SHALL BE CONTINUOUS, AND ANY AREA WITHIN WHICH WORK HAS BEEN INTERRUPTED OR DELAYED SHALL BE PLANTED.
7. FILLS ON SLOPES STEEPER THAN 5:1 SHALL BE KEYED.
8. THE CITY SHALL BE INFORMED OF THE LOCATION OF THE BORROW/DISPOSAL SITE FOR THE PROJECT WHEN THE APPLICATION FOR A GRADING PERMIT IS MADE. THE BORROW/DISPOSAL SITE MUST ALSO FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE.
9. NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR NOTICE TO THE DIRECTOR, DEPARTMENT OF PLANNING & PERMITTING, PROVIDED SUCH GRADING WORK IS ALSO IN CONFORMANCE WITH THE COMMUNITY NOISE CONTROL STANDARDS CONTAINED IN THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 46, "COMMUNITY NOISE CONTROL".
10. THE LIMITS OF THE AREA TO BE GRADED SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
11. ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS", AND TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL".
12. WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY EARTH MOVING PHASE OF THE GRADING IS INITIATED.
13. TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
14. TEMPORARY EROSION CONTROL PROCEDURES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO APPLICATION FOR GRADING PERMIT.
15. IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS.
16. FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, D.P.P. AT 768-8084 TO ARRANGE FOR INSPECTIONAL SERVICES AND SUBMIT TWO (2) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK.
17. A BUILDING PERMIT FOR RETAINING WALLS SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF GRADING WORK ON SITE.
18. PURSUANT TO CHAPTER 6E, HRS, IN THE EVENT ANY ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND WORK AND NOTIFY THE HONOLULU POLICE DEPARTMENT, THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES-HISTORIC PRESERVATION DIVISION (692-8015). IN ADDITION, FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL INFORM CIVIL ENGINEERING BRANCH, D.P.P. (768-8084); AND FOR CITY PROJECTS, NOTIFY THE RESPONSIBLE CITY AGENCY.
19. FOR ALL PROJECTS, WHICH WILL DISTURB ONE (1) ACRE OR MORE OF LAND, THE CONTRACTOR SHALL NOT START CONSTRUCTION UNTIL A NOTICE OF GENERAL PERMIT COVERAGE (NGPC) IS RECEIVED FROM THE DEPARTMENT OF HEALTH, STATE OF HAWAII, AND HAS SATISFIED ANY OTHER APPLICABLE REQUIREMENTS OF THE NPDES PERMIT PROGRAM. ALSO, FOR NON-CITY AND OTHER NON-GOVERNMENTAL AGENCY PROJECTS, THE CONTRACTOR SHALL PROVIDE A WRITTEN COPY OF THE NGPC TO THE PERMITTING AND INSPECTION SECTION, CIVIL ENGINEERING BRANCH, D.P.P., AT LEAST SEVEN (7) CALENDAR DAYS BEFORE THE START OF THE CONSTRUCTION. FOR CITY OR OTHER GOVERNMENTAL PROJECTS, THE CONTRACTOR SHOULD PROVIDE A WRITTEN COPY OF THE NGPC TO THE APPROPRIATE CITY DEPARTMENT OR GOVERNMENTAL AGENCY PER THEIR REQUIREMENTS.
20. ALL GRADING AND CONSTRUCTION WORK SHALL IMPLEMENT MEASURES TO ENSURE THAT THE DISCHARGE OF POLLUTANTS FROM THE CONSTRUCTION SITE WILL BE REDUCED TO THE MAXIMUM EXTENT PRACTICABLE AND WILL NOT CAUSE OR CONTRIBUTE TO AN EXCEEDANCE OF WATER QUALITY STANDARDS.



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Chris Ball

04-30-12
 Expiration Date of License



PROJECT
**87-1818
 FARRINGTON
 HIGHWAY**
TMK: 8-7-035:005

SHEET TITLE GENERAL NOTES 2	
REVISIONS	
△	_____
△	_____
△	_____
△	_____
△	_____

OCTOBER 1, 2010
 DATE
 CB
 DRAWN BY SHEET NO.
C-1.2



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04-30-12
Expiration Date of License



PROJECT

**87-1818
FARRINGTON
HIGHWAY**

TMK: 8-7-035:005

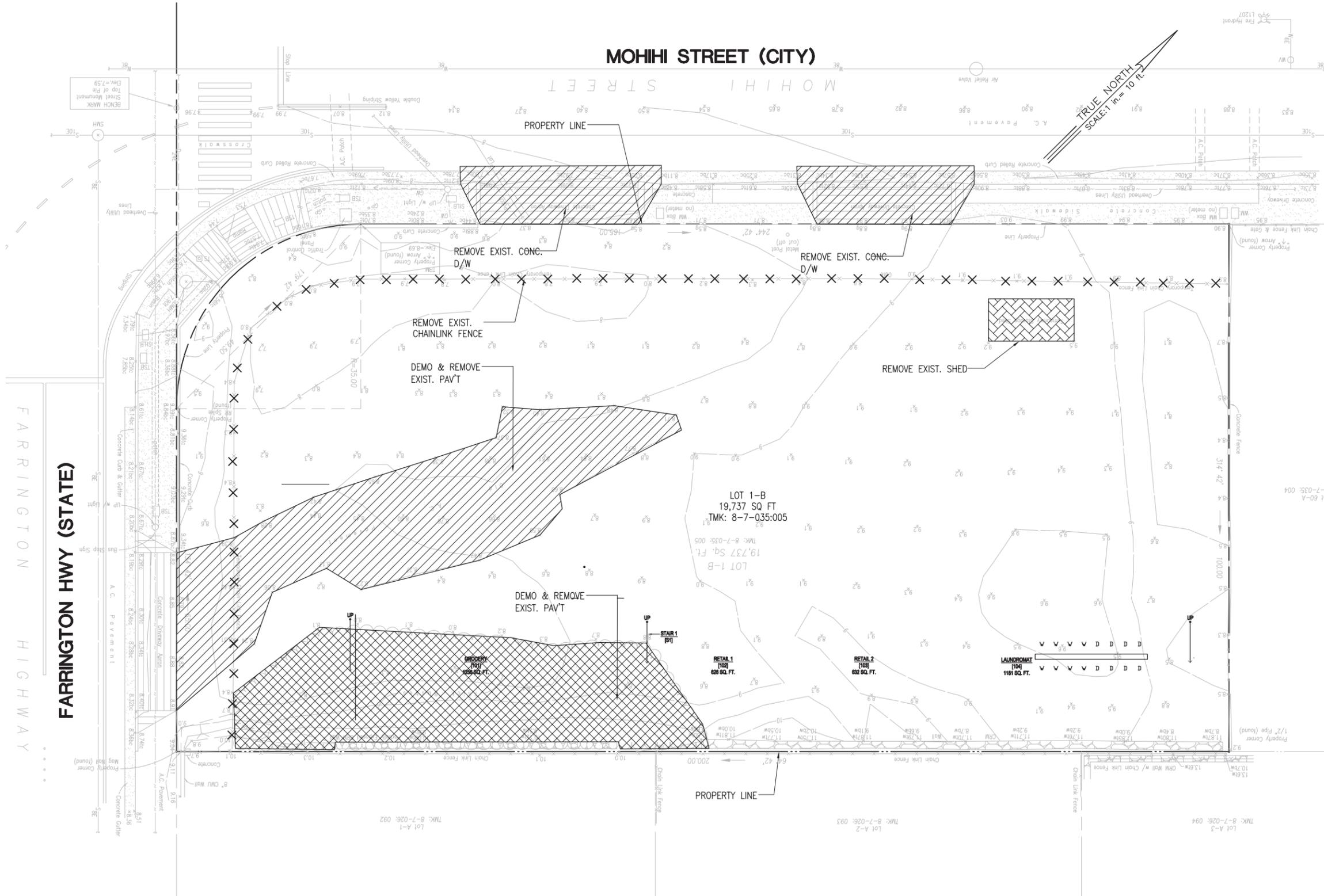
SHEET TITLE
DEMOLITION PLAN

REVISIONS

OCTOBER 1, 2010
DATE
CB
DRAWN BY SHEET NO.

C-2

- LEGEND**
- PROPERTY LINE
 - DEMOLISH AND REMOVE A.C. PAVEMENT OR CONC D/W
 - DEMOLISH AND REMOVE EXIST. BUSHES
 - DEMOLISH AND REMOVE EXIST. STRUCTURES
 - REMOVE EXIST. CHAINLINK FENCE



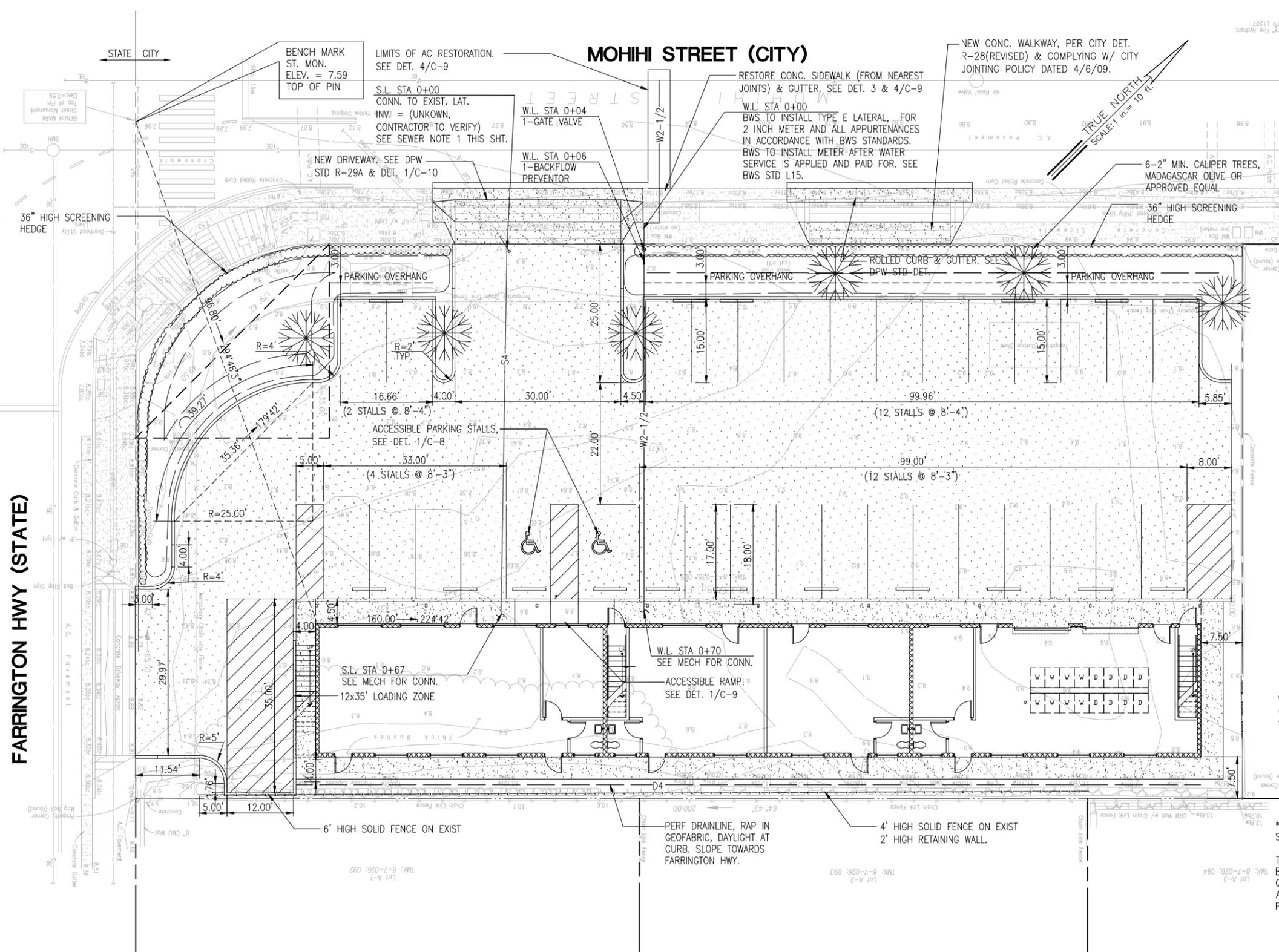
DEMOLITION PLAN
SCALE: 1"=10'



FARRINGTON HWY (STATE)
FARRINGTON HIGHWAY

MOHIHI STREET (CITY)

TRUE NORTH
SCALE: 1 in. = 10 ft.



LEGEND:

---	PROPERTY LINE
[Pattern]	NEW CONC. WALKWAY/ PAVEMENT, SEE DET 1/C-8
[Pattern]	2-1/2" A.C. PAVEMENT OVER 6" BASE COURSE. SEE DET 1/C-7
W2-1/2	WATER LINE
S6	SEWER LINE

BWS FLOW REQUIREMENTS

PREMISE ID#
METER NUMBER (M/N): NEW METER

DESCRIPTION	F.U.	GPM	GPD
A. PROPOSED DOMESTIC: (ALL FIXTURES BEING INSTALLED)	149	55	2200
B. PROPOSED OTHER: IRRIGATION*	0	0	0
C. TOTAL PROPOSED: (DO NOT INCLUDE IRRIGATION GPM IF LESS THAN DOMESTIC AND DONE DURING OFF-PEAK HOURS)	149	55	2200
D. DOMESTIC TO BE REMOVE/DEMO	0	0	0
IRRIGATION TO BE REMOVED/DEMO	0	0	0
E. NET TOTAL (C-D; -CREDIT/+CHARGE)	149	55	2200
F. EXISTING TO REMAIN	0	0	0
G. GRAND TOTAL (C+F; ON METER)	149	55	2200
* NOTE: NO IRRIGATION	0	0	0
EXISTING FIRE DEMAND			2,000

FOR ESTIMATING PURPOSES ONLY

	ESTIMATE	
2-1/2" DOMESTIC SERVICE		
2" METER INSTALLATION CHARGE	\$ 1,700.00	\$ 1,700.00
WATER SYSTEM FACILITIES CHARGES (3 COMPONENTS) 50 F.U. @ \$620.85 + 99 F.U. @ \$320.85 +	\$ 62,806.65	\$ 62,806.65
TOTAL.....	\$ 64,506.65	

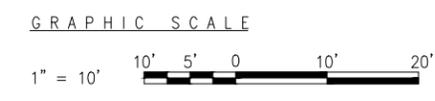
* CREDITS WILL BE DETERMINED WHEN BUILDING PERMIT APPLICATION IS SUBMITTED FOR BWS REVIEW AND APPROVAL.

THE ESTIMATE IS SUBJECT TO CHANGE. A FORMAL WRITTEN QUOTATION MAY BE OBTAINED AND ALL PAYMENTS FOR THE CHARGES SHOWN ON THE QUOTATION MADE WITHIN 30 DAYS AFTER THE CONSTRUCTION PLAN IS APPROVED BY BWS. IF PAYMENTS ARE NOT RECEIVED WITHIN THE 30 DAY PERIOD, THE PROJECT WILL BE SUBJECT TO THE PREVAILING RATES.

SITE & UTILITY PLAN
SCALE: 1"=10'

SEWER NOTE
CONTRACTOR TO VERIFY CONDITION OF EXISTING SEWER LATERAL, IF LATERAL IS IN POOR CONDITION PROVIDE NEW LATERAL TO THE EXISTING MAIN.

PARKING PROVIDED
STANDARD PARKING STALLS: 31
ACCESSIBLE STALL: 2
TOTAL: 33



APPROVED

CHIEF, TRAFFIC REVIEW BRANCH, DPP _____ DATE _____

CHIEF, CIVIL ENGINEERING BRANCH, DPP _____ DATE _____

CHRISTOPHER H. BALL
LICENSED PROFESSIONAL ENGINEER
No. 12144-C
HAWAII, U.S.A.

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Chris Ball
04-30-12
Expiration Date of License

ON THE BALL
ENGINEERING LLC
152 Ohiokoa Way
Honolulu, HI 96825
808-277-0262
otbeng@att.com

PROJECT

87-1818 FARRINGTON HIGHWAY

TMK: 8-7-035:005

SHEET TITLE
SITE & UTILITY PLAN

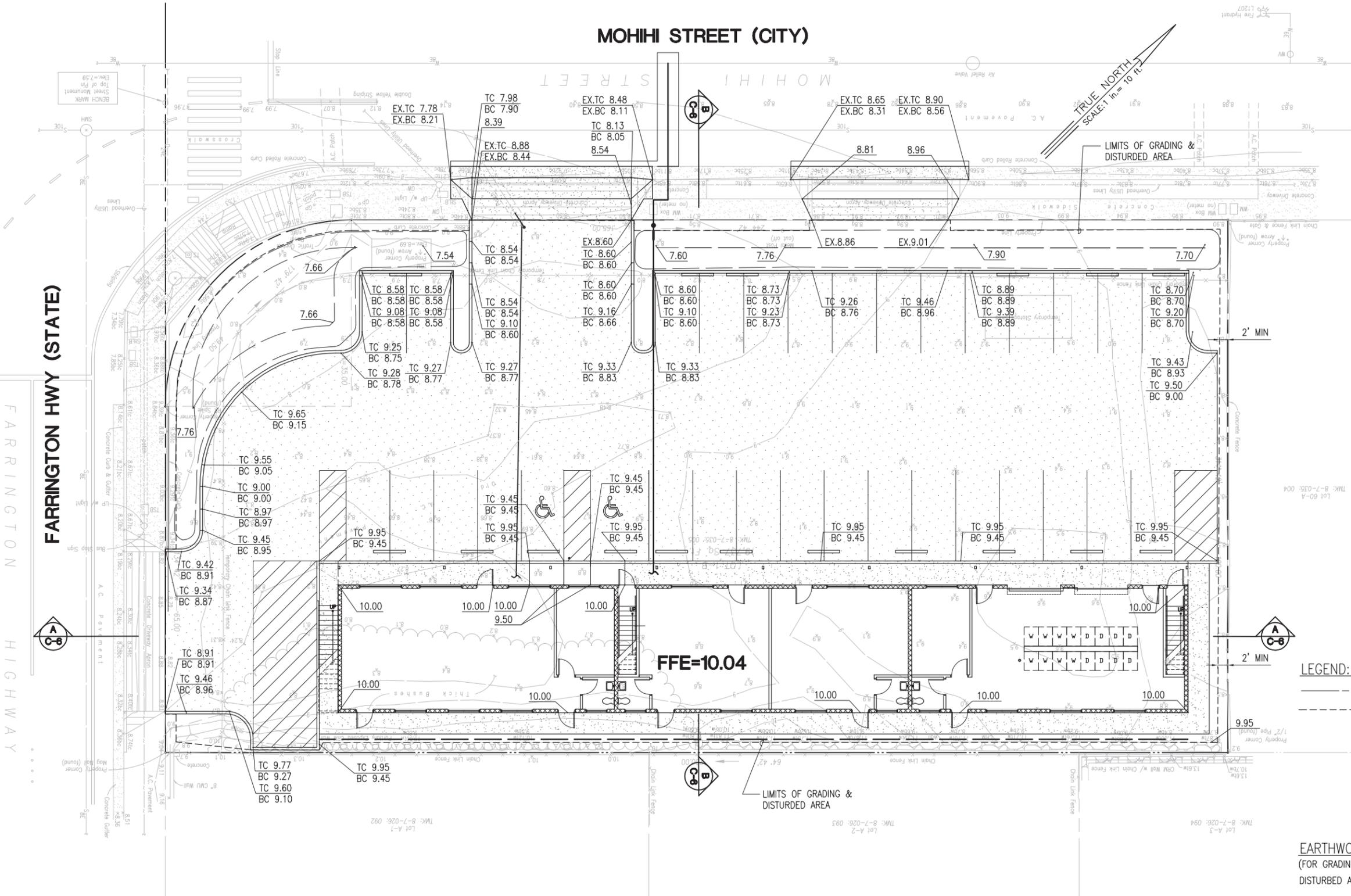
REVISIONS

OCTOBER 1, 2010
DATE

CB
DRAWN BY

SHEET NO.
C-3

MOHIHI STREET (CITY)



GRADING PLAN
SCALE: 1"=10'

LEGEND:

---	PROPERTY LINE
- - - -	LIMITS OF GRADING & LIMITS OF DISTURBED AREA

EARTHWORK QUANTITIES:
(FOR GRADING PERMIT PURPOSES ONLY)

DISTURBED AREA	0.43 ACRES
GRADED AREA	0.43 ACRES
EXCAVATION	25 CY
EMBANKMENT	110 CY

APPROVED



CHIEF, CIVIL ENGINEERING BRANCH, DPP _____ DATE _____



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PROJECT
87-1818 FARRINGTON HIGHWAY
TMK: 8-7-035:005

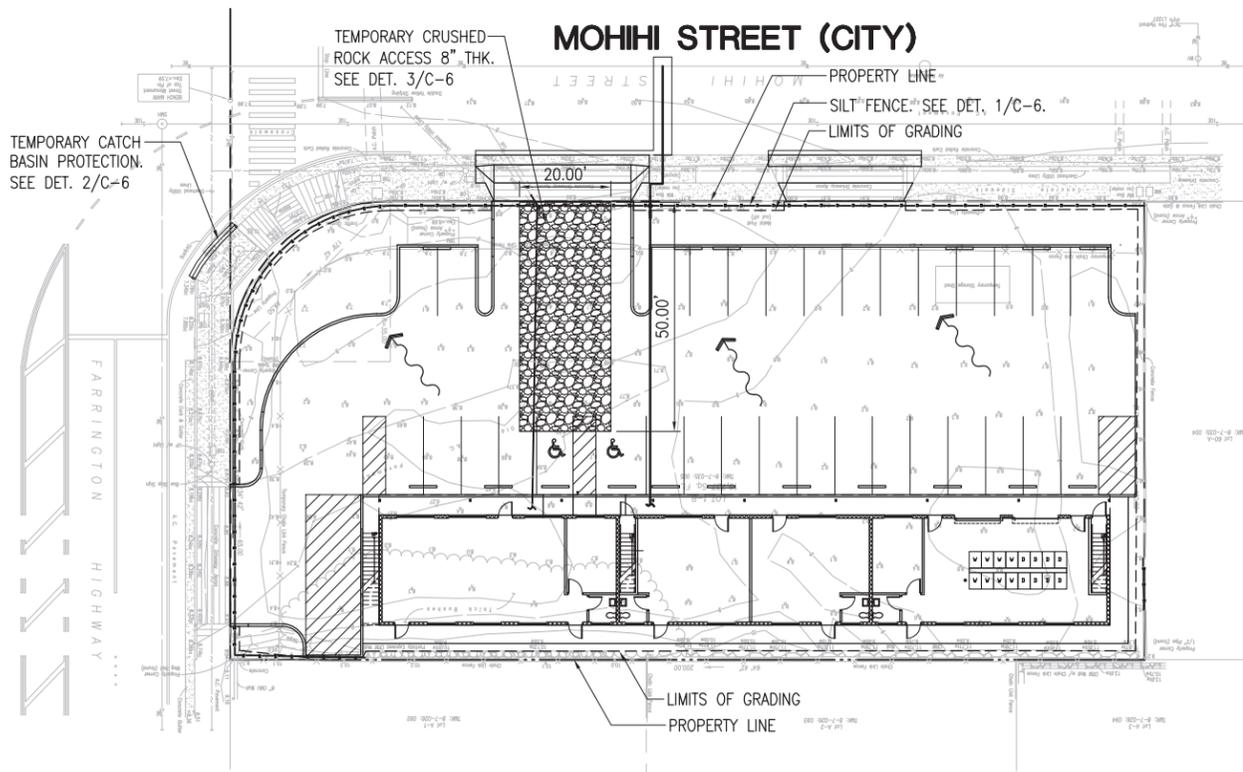
SHEET TITLE
GRADING PLAN

REVISIONS

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OCTOBER 1, 2010
DATE
CB
DRAWN BY SHEET NO.
C-4

FARRINGTON HWY (STATE)



LEGEND:

- x — x — SILT FENCE SEE DET. 1/C-6
- - - - - LIMITS OF GRADING
- [Patterned Box] TEMPORARY #2 CRUSHED ROCK ACCESS
- ~> APPROXIMATE FLOW DIRECTION W/ SLOPE

EROSION CONTROL NOTES / BMP'S

TEMPORARY EROSION CONTROL NOTES:

1. FOLLOW SEQUENCE OF OPERATION AS RECOMMENDED ON PAGES 23 AND 24 OF THE "RULES RELATING TO SOIL EROSION STANDARDS AND GUIDELINES", APRIL 1999, OF THE DEPARTMENT OF PLANNING AND PERMITTING, CITY & COUNTY OF HONOLULU.
2. THE CONTRACTOR SHALL MINIMIZE THE AMOUNT OF LAND TO BE EXPOSED AT ANY TIME.
3. EXPOSED AREAS THAT ARE NOT AT FINAL GRADE AND ARE EXPECTED TO BE EXPOSED FOR MORE THAN 30 DAYS SHALL BE PLACED WITH A VEGETATIVE COVER OR BE MULCHED (AT A RATE OF 45 CUBIC FEET PER 1,000 SQUARE FEET) IN ORDER TO PREVENT EROSION AND SILT RUNOFF.
4. TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN PLACE AND ESTABLISHED.
5. TEMPORARY #2 CRUSHED ROCK ACCESS 8" THICK SHALL BE USED AS A STABILIZATION CONTROL AT ALL CONSTRUCTION ENTRY AND EXIT LOCATIONS.

PERMANENT EROSION CONTROL MEASURES:

1. ALL SLOPES AND EXPOSED AREAS SHALL BE SODDED OR PLANTED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED.
2. 2:1 SLOPES SHALL BE TREATED WITH GEOFABRIC OR TREATED WITH SOIL CONDITIONER TO AID IN THE ESTABLISHMENT OF TURF/ PLANTING.

BMP NOTES:

TEMPORARY EROSION CONTROL MEASURES:

1. PRIOR TO CLEARING LAND FOR GRADING, TEMPORARY EROSION CONTROL MEASURES, SUCH AS SILT FENCES SHALL BE INSTALLED.
2. #2 CRUSHED ROCK ENTRY/EXIT DRIVEWAYS SHALL BE ESTABLISHED PRIOR TO CLEARING OPERATIONS. DRIVEWAYS SHALL BE 8" THICK, 20' WIDE AND 50' LONG, MINIMUM.
3. OPENING AND CLEARING OF LAND FOR GRADING SHALL BE PERFORMED INCREMENTALLY TO MINIMIZE EROSION POTENTIAL.
4. AREAS NOT WITHIN THE LIMITS OF GRADING SHALL REMAIN VEGETATED DURING GRADING OPERATIONS.
5. SILT WHICH HAS ACCUMULATED ON SILT FENCE SHALL BE REMOVED AND DISPOSED OF ON A BI-WEEKLY BASIS.
6. WHEN CLEARED OR GRUBBED AREAS ARE NOT TO BE GRADED OR DISTURBED FOR 30 DAYS OR MORE, SEED, PLANT OR HYDROSEED TEMPORARY VEGETATION.
7. THE CONTRACTOR'S EQUIPMENT STORAGE AREAS SHALL BE PROTECTED THROUGH THE USE OF EARTH BERMS AND/OR ABSORPTION MATERIALS TO PREVENT POLLUTANTS FROM DISCHARGING INTO STATE WATERS. THE CONTRACTOR SHALL INSPECT AND MAINTAIN STORAGE AREAS.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY WASH MAT WITH BERM FOR WASHING DOWN OF CONSTRUCTION EQUIPMENT AND CONCRETE TRUCKS (WESTERN WATER PRODUCTS HEAVY DUTY VINYL WASH MAT WITH BERM 2050-18M OR APPROVED EQUAL).

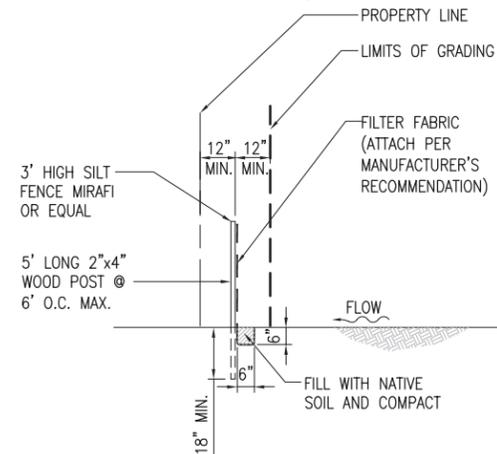
SEQUENCE FOR SEDIMENT CONTROL:

1. INSTALL SILT FENCE, AND TEMPORARY #2 CRUSHED ROCK ENTRY/EXIT.
2. COMMENCE GRADING OPERATIONS.
3. GROUND COVER, SUCH AS GRASSING, MULCHING OR NETTING TO BE INSTALLED IMMEDIATELY AFTER FINAL GRADES ARE ESTABLISHED.

EROSION CONTROL PLAN

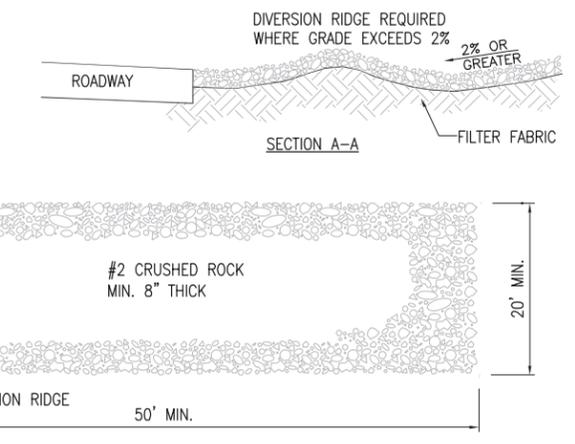
SCALE: 1"=20'

GRAPHIC SCALE



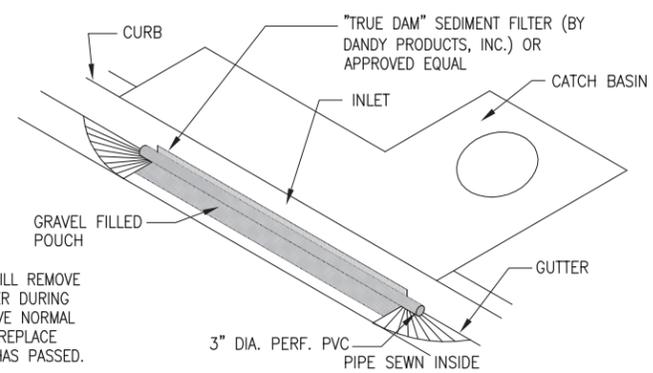
1 SILT FENCE SECTION

SCALE: 3/8" = 1'-0"



NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.



2 TEMP. CATCH BASIN PROTECTION DET.

NOT TO SCALE

3 TEMPORARY 8" THICK #2 CRUSHED ROCK ACCESS

NOT TO SCALE



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Chris Ball
04-30-12
Expiration Date of License



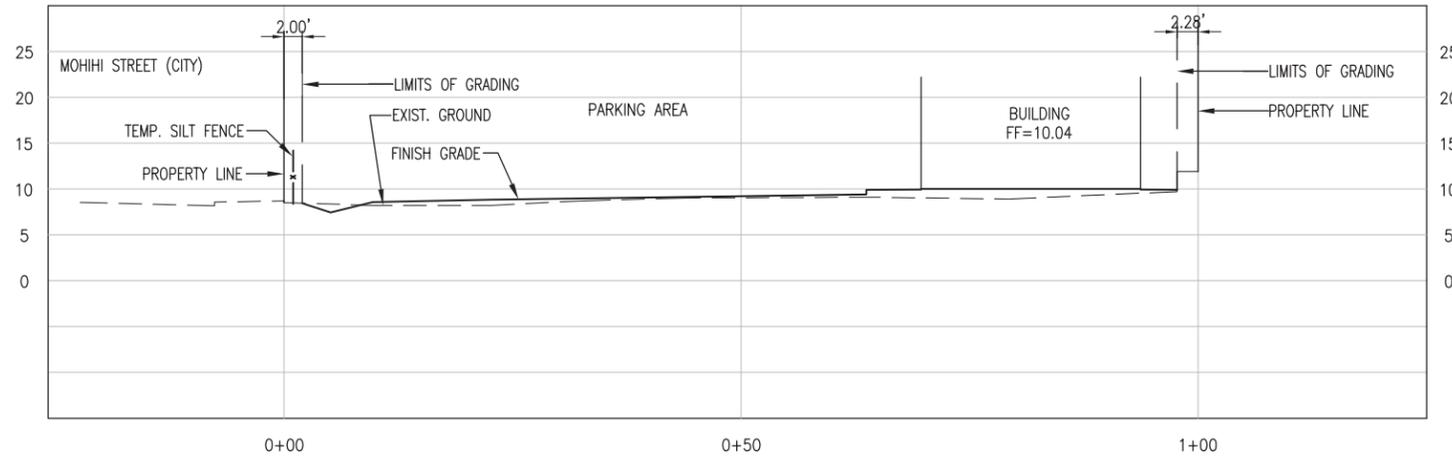
PROJECT
87-1818 FARRINGTON HIGHWAY
TMK: 8-7-035:005

SHEET TITLE
EROSION CONTROL PLAN

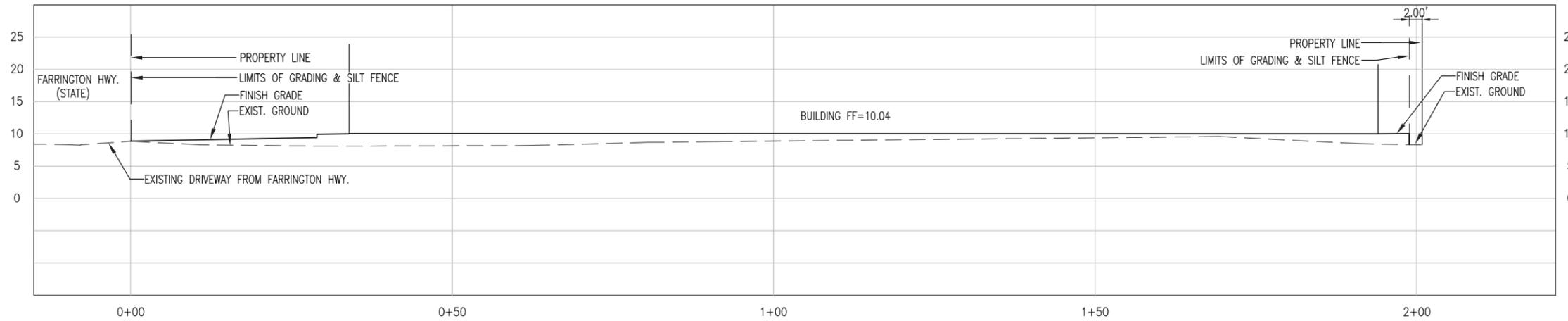
REVISIONS

OCTOBER 1, 2010
DATE
CB
DRAWN BY SHEET NO.

C-5



SITE SECTION B-B
SCALE: 1" = 10'-0"



SITE SECTION A-A
SCALE: 1" = 10'-0"

GRAPHIC SCALE



A P P R O V E D

CHIEF, CIVIL ENGINEERING BRANCH, DPP

DATE



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PROJECT

**87-1818
FARRINGTON
HIGHWAY**

TMK: 8-7-035:005

SHEET TITLE
SITE SECTIONS

REVISIONS



OCTOBER 1, 2010

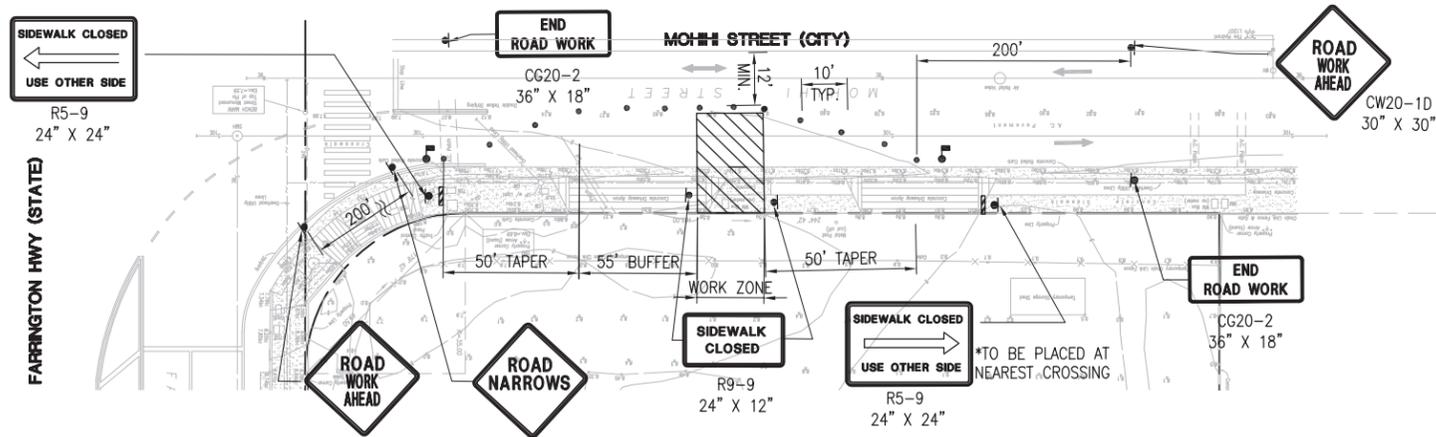
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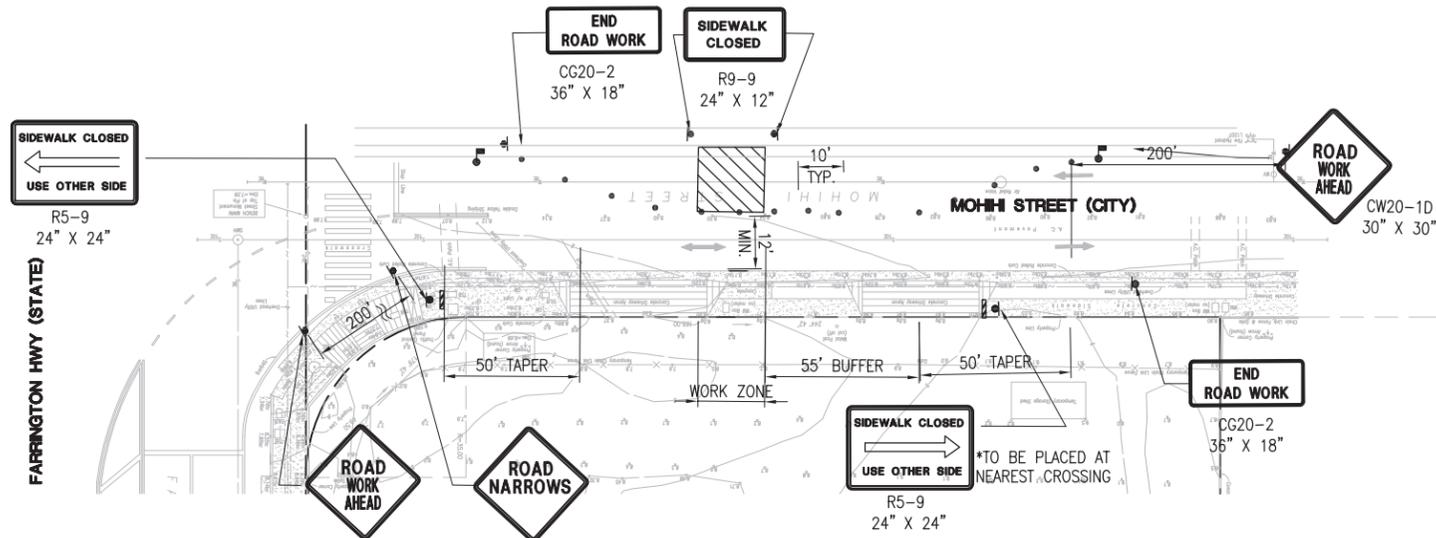
SHEET NO.

C-6



TRAFFIC CONTROL PLAN 1

SCALE: 1"=20'



TRAFFIC CONTROL PLAN 2

SCALE: 1"=20'

GRAPHIC SCALE



GENERAL NOTES FOR TRAFFIC CONTROL PLAN:

1. THE PERMITEE SHALL MAKE MINOR ADJUSTMENTS AT INTERSECTIONS, DRIVEWAYS, BRIDGES, STRUCTURES, ETC., TO FIT FIELD CONDITIONS.
2. CONES OR DELINEATORS SHALL BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
3. TRAFFIC CONTROL DEVICES SHALL BE INSTALLED SUCH THAT THE SIGN OR DEVICE FARTHEST FROM THE WORK AREA IS PLACED FIRST. THE OTHERS SHALL THEN BE PLACED PROGRESSIVELY TOWARD THE WORK AREA.
4. REGULATORY AND WARNING SIGNS WITHIN THE CONSTRUCTION ZONE THAT ARE IN CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR COVERED.
5. FLAGGERS AND/OR POLICE OFFICERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
6. WHEN REQUIRED BY THE ISSUING OFFICE, THE PERMITEE SHALL INSTALL A FLASHING ARROW SIGNAL AS SHOWN ON THE TRAFFIC CONTROL PLANS.
7. ALL TRAFFIC LANES SHALL BE A MINIMUM OF 10 FEET WIDE.
8. ALL CONSTRUCTION WARNING SIGNS SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE MESSAGE IS NOT APPLICABLE OR NOT IN USE.

9. THE BACKS OF ALL SIGNS USED FOR TRAFFIC CONTROL SHALL BE APPROPRIATELY COVERED TO PRELUDE THE DISPLAY OF INAPPLICABLE SIGN MESSAGES (I.E., WHEN SIGNS HAVE MESSAGES ON BOTH FACES).
10. LANE CLOSURE SHALL BE LIMITED TO THE EXTENT OF ACCOMPLISHING EACH DAY'S WORK. AS SOON AS EACH DAY'S WORK IS COMPLETED, THE PERMITEE SHALL REMOVE ALL TRAFFIC CONTROL DEVICES NO LONGER NEEDED TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC. REMOVAL SHALL BE IN THE REVERSE ORDER OF INSTALLATION. EXISTING FADED OR OBLITERATED PAVEMENT MARKINGS THAT ARE NECESSARY FOR SAFE TRAFFIC FLOW IN THE CONSTRUCTION AREA SHALL BE REPLACED WITH TEMPORARY OR PERMANENT MARKINGS BEFORE OPENING THE ROADWAY TO PUBLIC TRAFFIC EACH DAY.
11. PERMANENT PAVEMENT MARKINGS AND TRAFFIC SIGNS SHALL BE REPLACED UPON COMPLETION OF EACH PHASE OF WORK.
12. CONES AND DELINEATORS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 20 FEET APART. A MINIMUM OF SIX CHANNELIZING DEVICES SHALL BE USED FOR EACH TAPER LENGTH.
13. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THE RIGHT-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY. FURTHER, THE PERMITEE SHALL CONTROL TRAFFIC GOING IN AND OUT OF DRIVEWAYS.
14. BUFFER AND TAPER AREAS ON APPROACH TO ANY WORK AREA SHALL BE KEPT CLEAR OF VEHICLES AND EQUIPMENT.
15. A HIGH LEVEL WARNING DEVICE (FLAG TREE) SHALL BE INSTALLED ON APPROACH TO ALL WORK AREAS.
16. "NO PARKING" SIGNS SHALL BE POSTED WITHIN ANY WORK AREA AND FOR THE BUFFER AND TAPER AREAS APPROACHING THE WORK AREA.
17. TRAFFIC CONTROL PLANS ARE APPROVED FOR WORK ON ANY CITY STREET AREA ONLY BETWEEN THE HOURS OF 8:30 A.M. AND 3:30 P.M.

LEGEND :

- PROPERTY LINE
- ▨ WORK AREA
- ▬ BARRICADE
- TRAFFIC CONE
- ↑ SIGN
- ← DIRECTION OF TRAFFIC
- ♩ FLAG MAN

TRAFFIC NOTES FOR WORK ON CITY & COUNTY STREETS

1. A PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF TRANSPORTATION SERVICES BEFORE WORK ON ANY PORTION OF A PUBLIC STREET OR HIGHWAY MAY BEGIN. CONSTRUCTION TRAFFIC CONTROL PLANS APPROVED BY THE DEPARTMENT OF TRANSPORTATION SERVICES AND/OR THE DEPARTMENT OF PLANNING AND PERMITTING MUST BE PROVIDED WHEN APPLYING FOR THE PERMIT.
2. THE CONTRACTOR SHALL PROVIDE, INSTALL, AND MAINTAIN ALL NECESSARY SIGNS AND OTHER PROTECTIVE FACILITIES, WHICH SHALL CONFORM WITH THE "HAWAII ADMINISTRATION RULES GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS" ADOPTED BY THE DIRECTOR OF TRANSPORTATION, AND THE CURRENT U.S. FEDERAL HIGHWAYS ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI - TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS."
3. WORK ON ANY CITY STREET AREA MAY BE PERFORMED ONLY BETWEEN THE HOURS OF 8:30 A.M. TO 3:30 P.M., MONDAY THROUGH FRIDAY, UNLESS OTHERWISE PERMITTED BY THE DEPARTMENT OF TRANSPORTATION SERVICES.
4. DURING WORKING HOURS, THE CONTRACTOR SHALL PROVIDE FOR THROUGH TRAFFIC. DURING NON-WORKING HOURS, ALL TRENCHES SHALL BE COVERED WITH A SAFE NON-SKID BRIDGING MATERIAL AND ALL LANES SHALL BE OPEN TO TRAFFIC.
5. AS REQUIRED BY THE DEPARTMENT OF TRANSPORTATION SERVICES, THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO CONTROL THE FLOW OF TRAFFIC.
6. WHERE PEDESTRIAN WALKWAYS EXIST, THEY SHALL BE MAINTAINED IN PASSABLE CONDITION OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. PASSAGE BETWEEN WALKWAYS AT INTERSECTIONS SHALL LIKEWISE BE PROVIDED.
7. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THESE RIGHTS-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY.
8. CONTRACTORS SHALL REFERENCE TO THE APPROVAL OF THE DEPARTMENT OF TRANSPORTATION SERVICES AND THE DEPARTMENT OF PLANNING AND PERMITTING, ALL EXISTING TRAFFIC SIGNS, POSTS AND PAVEMENT MARKINGS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNS, POSTS AND PAVEMENT MARKINGS DISTURBED BY HIS ACTIVITIES.
9. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PLANNING AND PERMITTING AT 768-8084 ONE (1) WEEK PRIOR TO ANY WORK TO BE DONE ON SIGNS, POSTS AND PAVEMENT MARKINGS.
10. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN STREET RIGHTS-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION SERVICES.
11. THE OWNER (PALISADES BAPTIST CHURCH) SHALL ENSURE THAT THE CONTRACTOR INSTALLS THE CONSTRUCTION TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE MUTCD AND THE HAWAII ADMINISTRATION RULES AS SPECIFIED IN TRAFFIC NOTE #2.

A P P R O V E D :

CHIEF, TRAFFIC REVIEW BRANCH, DPP

DATE



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Chris Ball

04-30-12
Expiration Date of License



PROJECT

**87-1818
FARRINGTON
HIGHWAY**

TMK: 8-7-035:005

SHEET TITLE

TRAFFIC CONTROL PLAN

REVISIONS

- △
- △
- △
- △
- △

OCTOBER 1, 2010

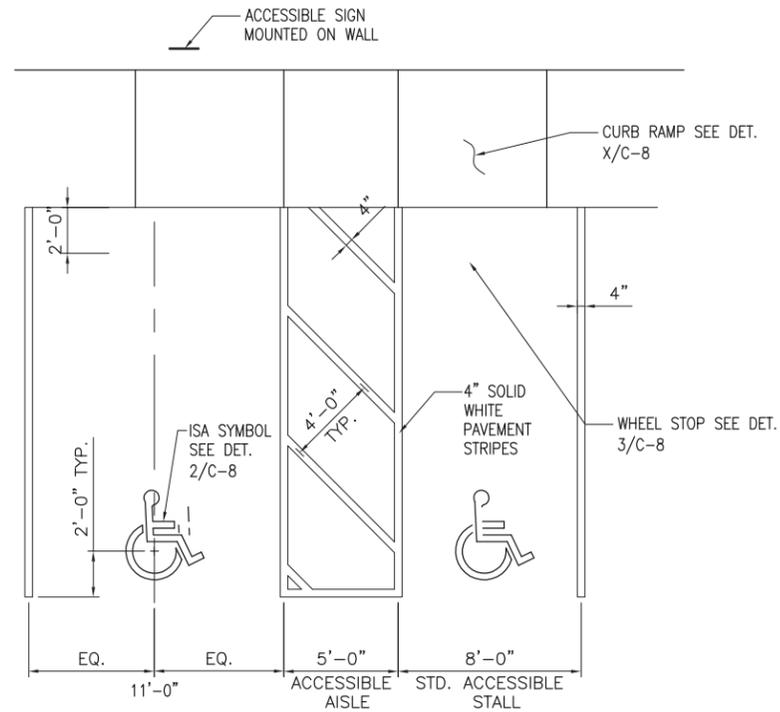
DATE

CB

DRAWN BY

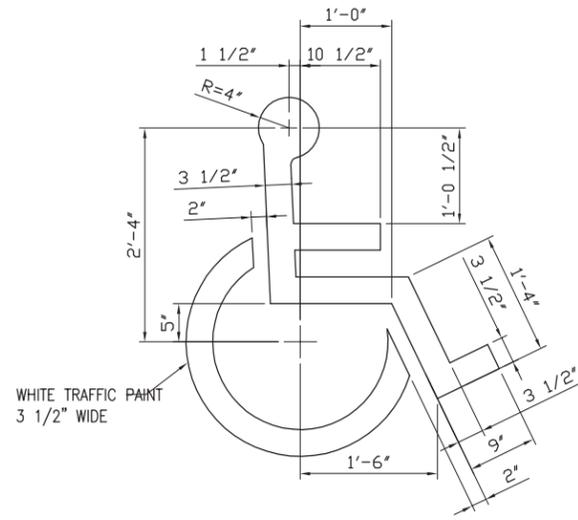
SHEET NO.

C-7

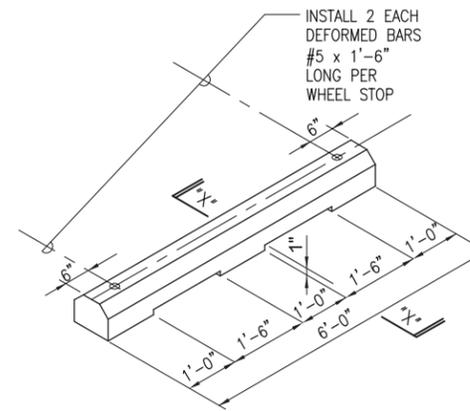


NOTE:
THE SLOPE IN ANY DIRECTION OF ACCESSIBLE PARKING STALL AND ACCESS AISLE SHALL BE 2% MAXIMUM.

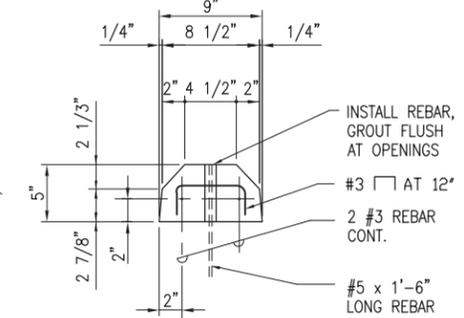
1 ACCESSIBLE PARKING DETAIL
SCALE: 1/4"=1'-0"



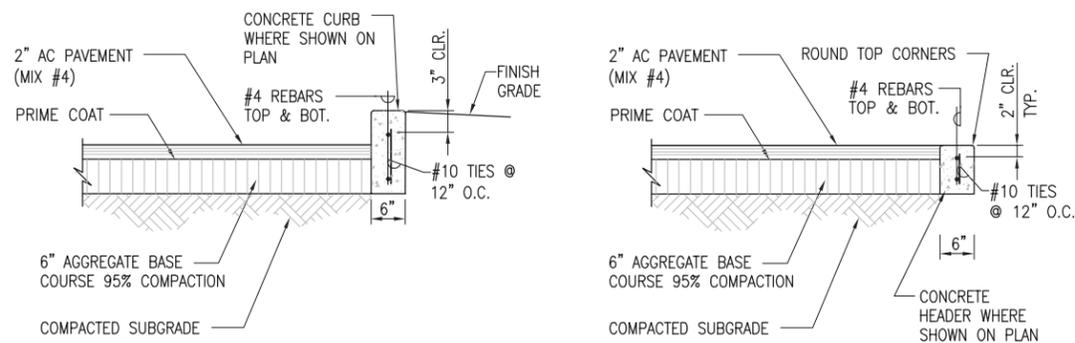
2 ISA SYMBOL DETAIL
SCALE: 1"=1'-0"



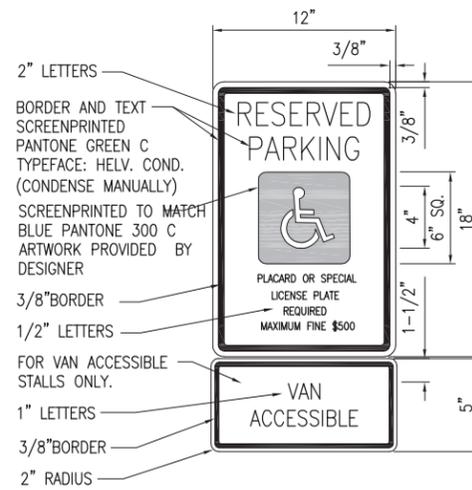
9"x 6'-0" WHEEL STOP



TYPICAL SECTION "X"-X"

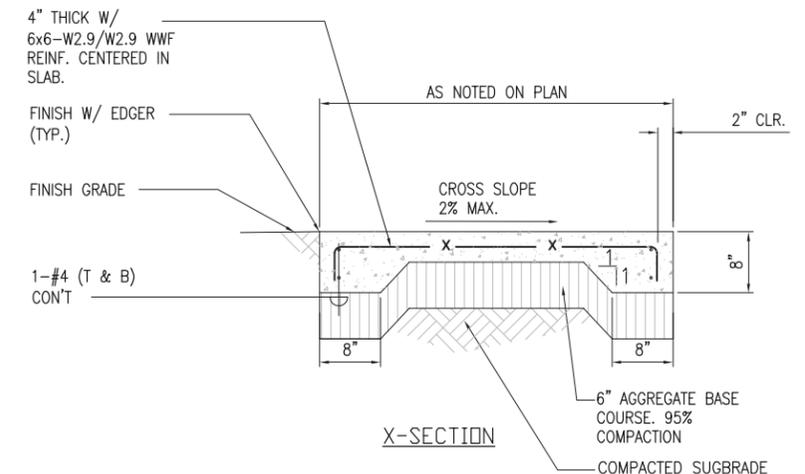


4 A.C. PAVEMENT DETAIL
SCALE: 3/4" = 1'-0"



NOTES:
1. SIGNS SHALL BE ALUM T6061 SHEET COVERED WITH ENGINEERING GRADE REFLECTIVE SHEETING.
2. SIGN LETTERING SHALL BE UPPERCASE LETTERS OF THE TYPE APPROVED BY FEDERAL HIGHWAY ADMINISTRATION.

5 VAN ACCESSIBLE & ACCESSIBLE STALL SIGNS DETAIL
SCALE: 2"=1'-0"



6 CONCRETE WALKWAY DETAIL
SCALE: 1" = 1'-0"



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PROJECT

87-1818 FARRINGTON HIGHWAY

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SHEET TITLE
SITE DETAILS

REVISIONS



OCTOBER 1, 2010

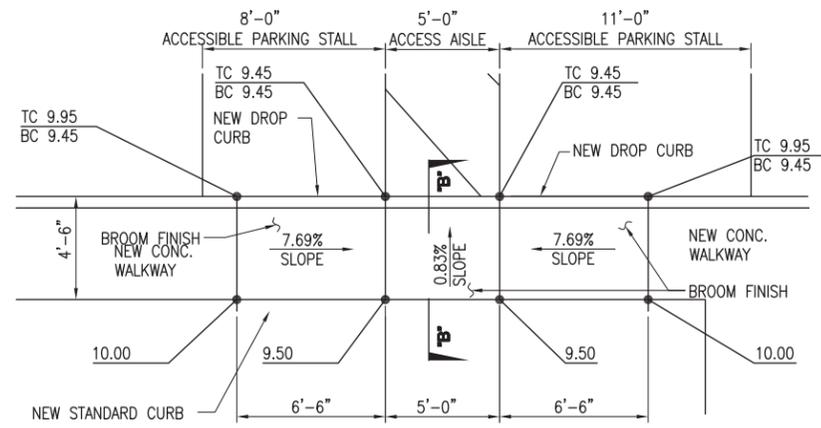
DATE

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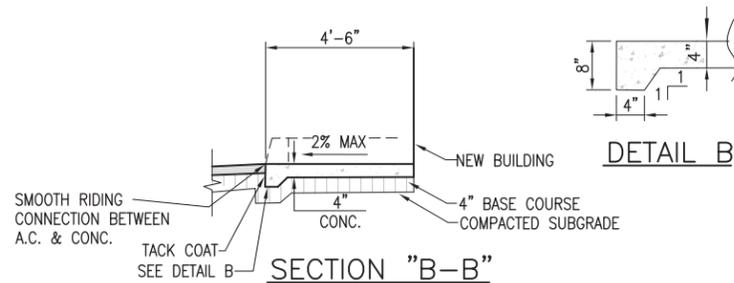
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SHEET NO.

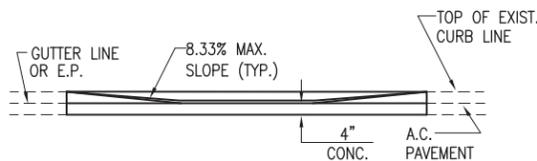
C-8



PLAN VIEW

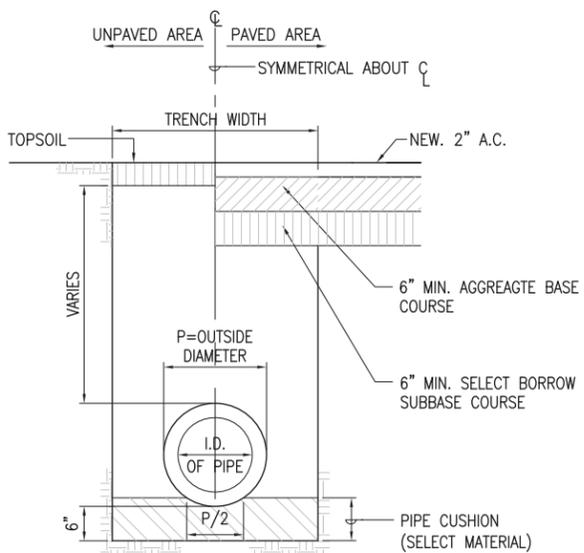


SECTION "B-B"



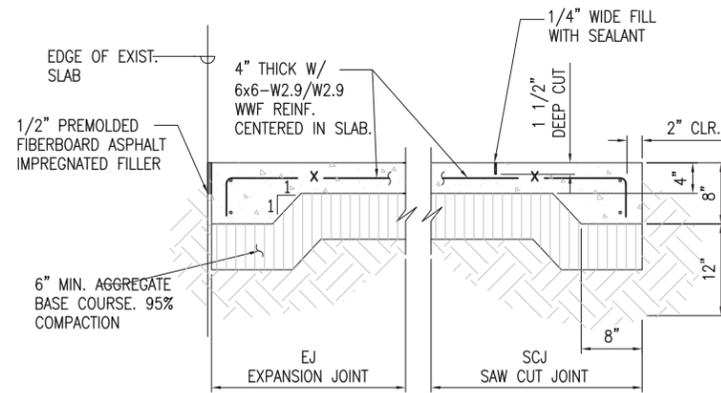
ELEVATION

1 CURB RAMP DETAIL-1
C-9 SCALE: 1/4" = 1'-0"

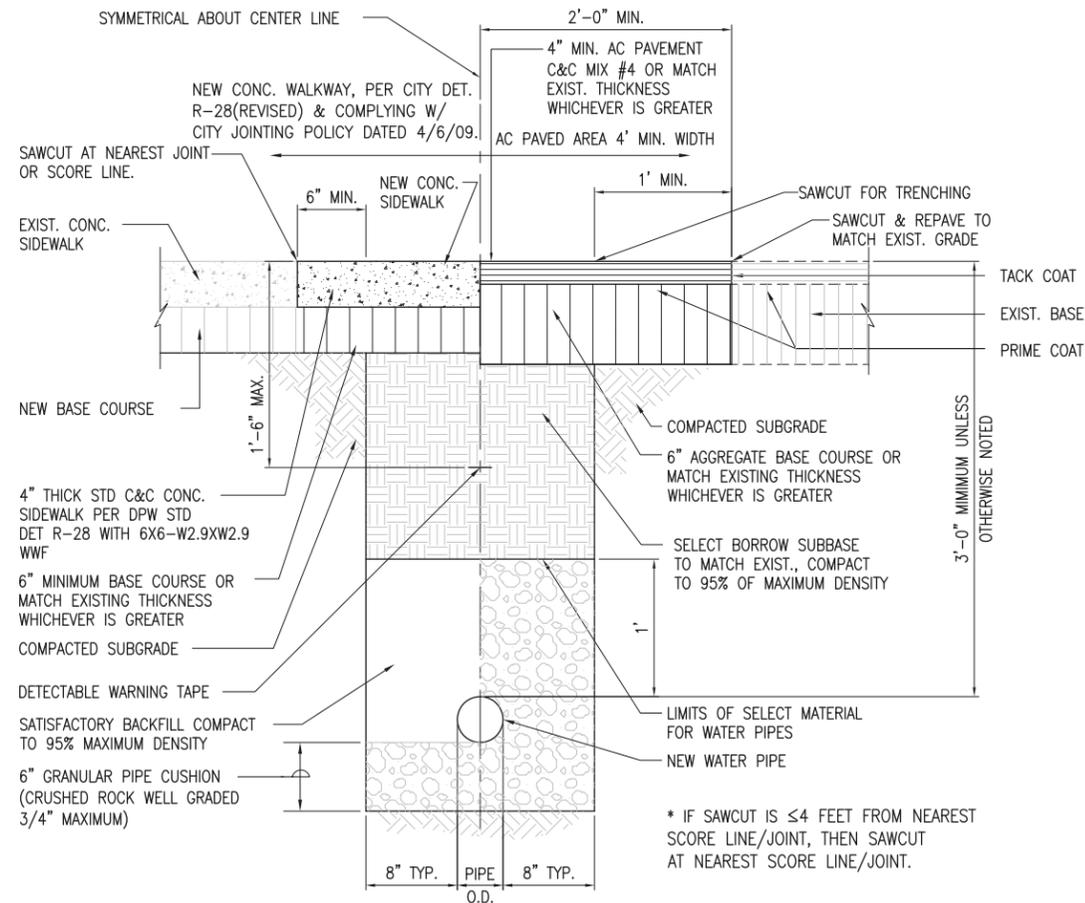


NOTE: SEE DPW STD DETAIL D-31 FOR TRENCH WIDTH.

3 TYPICAL TRENCH DETAIL (PRIVATE)
C-9 NOT TO SCALE



2 JOINTING DETAIL (PRIVATE)
C-9 SCALE: 1" = 1'-0"



- NOTE:
- PAVEMENT STRUCTURE SHALL BE RESTORED TO EQUAL OR BETTER THAN EXISTING IN THICKNESS & QUALITY.
 - THE LENGTH OF THE REPAVED TRENCH SHALL BE REMOVED TWO (2) FEET IN ADDED LENGTH TO EACH END OF THE TRENCH.
 - WATER AND SEWER UTILITY CONNECTIONS ARE PART OF THE ON-SITE PROJECT PLANS, PROJECT NO. 2006/CP-307
 - NEW CONC. WALKWAY, PER CITY DET. R-28(REVISED) & COMPLYING W/ CITY JOINTING POLICY DATED 4/6/09.
- A P P R O V E D:

4 TYPICAL TRENCH (CITY R/W)
C-9 NOT TO SCALE

JOINTING NOTES:

- ALL JOINTING ON WALKWAYS WITHIN THE CITY & COUNTY R/W SHALL BE LOCATED IN THE FIELD BY THE CONTRACTOR WITH THE HELP AND APPROVAL OF THE CITY CEB INSPECTOR. ALL JOINTING WITHIN CITY & COUNTY R/W SHALL BE IN ACCORDANCE WITH CITY POLICY NO. CEB-1-09, APRIL 6, 2009.
- MAXIMUM SPACING BETWEEN ANY TWO CONSECUTIVE CONTROL JOINTS OR CONSTRUCTION JOINTS SHALL BE 6 FEET.
- ALL CONTROL JOINTS SHALL BE SAW CUT WITHIN 24 HOURS OF PLACEMENT OF SEALANT.
- ALL SAW CUT JOINTS SHALL BE CLEAN AND FREE OF DIRT, DUST AND WATER PRIOR TO PLACEMENT OF SEALANTS.
- ALL CONTROL JOINTS SHALL BE STRAIGHT AND PERPENDICULAR TO CENTERLINE OF WALKWAY.
- ALL PROPOSED WALKWAYS SHALL BE BROOM FINISHED. THE FINISHED SURFACE SHALL BE SCORED INTO SQUARES WITH SIDES EQUAL TO SIDEWALK WIDTH, IN 5 FOOT SQUARES OR AS OTHERWISE SHOWN ON THE PLANS.
- EXPANSION JOINTS TO BE SPACED AT A MAXIMUM OF 50 FOOT INTERVALS AND WHERE WALKWAY CHANGES DIRECTIONS OR BUTTS AGAINST A CURB OR STRUCTURE.



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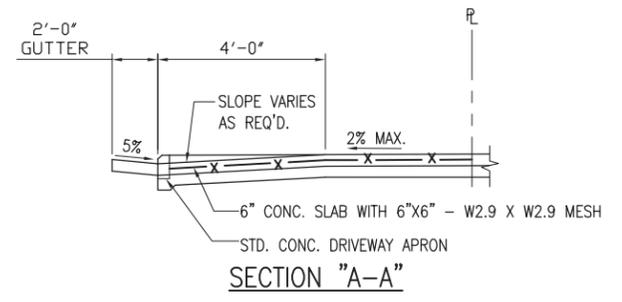
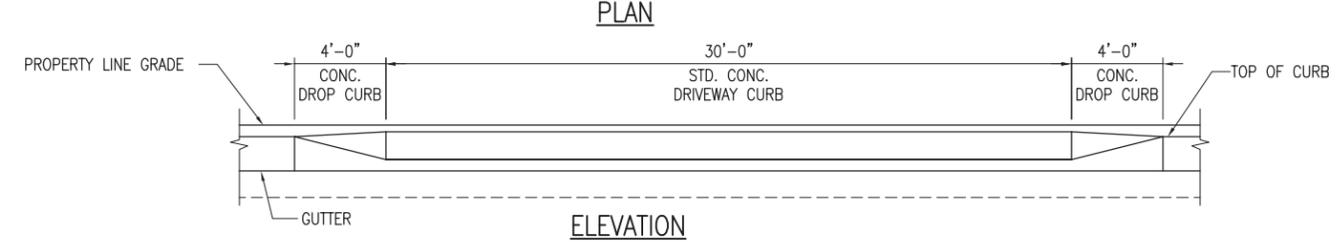
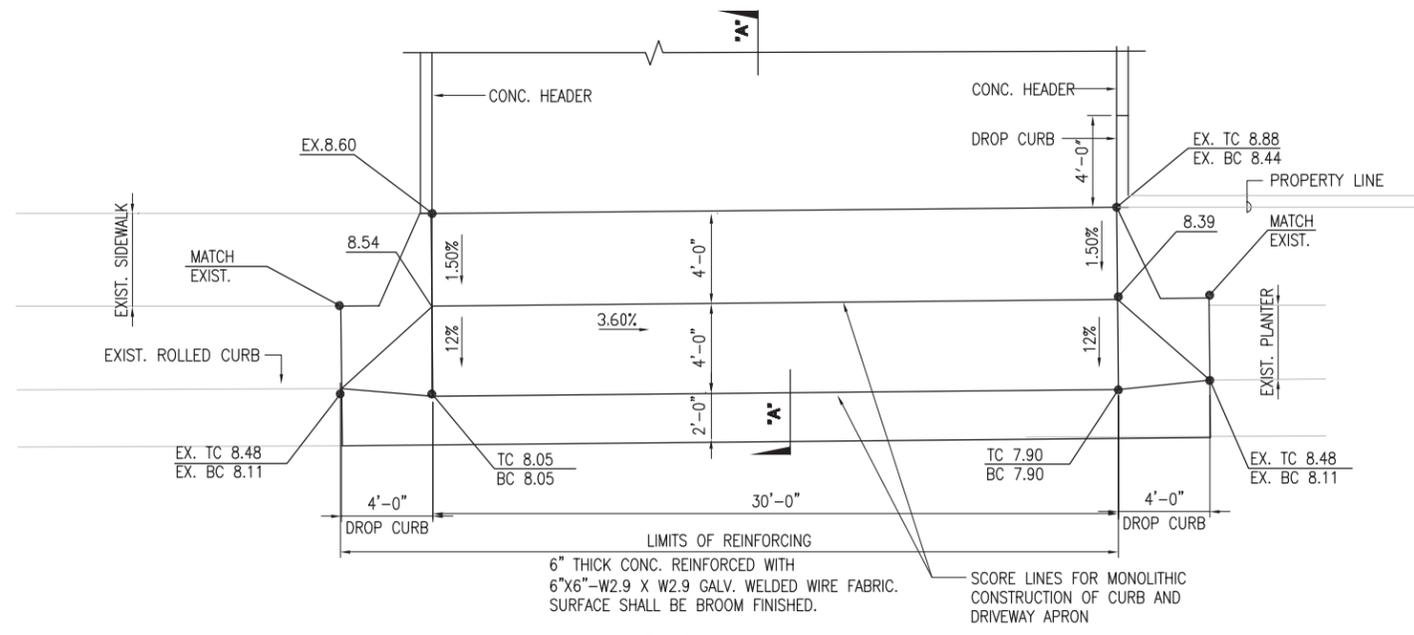
PROJECT
87-1818
FARRINGTON
HIGHWAY
TMK: 8-7-035:005

SHEET TITLE
MISCELLANEOUS
DETAILS

REVISIONS

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DATE
CB
DRAWN BY

SHEET NO.
C-9



1 DRIVEWAY APRON DETAIL
 SCALE: 1/4" = 1'-0"



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PROJECT
87-1818 FARRINGTON HIGHWAY
 TMK: 8-7-035:005

SHEET TITLE
 DRIVEWAY DETAILS

REVISIONS

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APPROVED:

CHIEF, CIVIL ENGINEERING BRANCH, DPP

DATE

OCTOBER 1, 2010
 DATE
 CB
 DRAWN BY SHEET NO.
C-10