

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

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KIRK CALDWELL
MAYOR



GEORGE I. ATTA, FAICP
DIRECTOR

ARTHUR D. CHALLACOMBE
DEPUTY DIRECTOR

2015/ED-17(AB)

May 12, 2016

Mr. Scott Glenn, Interim Director
State of Hawaii
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Room 702
Honolulu, Hawaii 96813

Dear Mr. Glenn:

SUBJECT: Chapter 25, Revised Ordinances of Honolulu
Draft Environmental Assessment (DEA)
Project: New Residence for Charles Tsu Yew Wong
Applicant/Agent: Charles Tsu Yew Wong
Location: 46-107 Lilipuna Road - Kaneohe
Tax Map Key: 4-6-1: 7

RECEIVED
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OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

With this letter, the Department of Planning and Permitting hereby transmits the DEA and anticipated finding of no significant impact (DEA-AFONSI) for the New Residence for Charles Tsu Yew Wong project located on Tax Map Key Parcel 4-6-1: 7 in the Koolau-poko District on the Island of Oahu, for publication in the **June 8, 2016**, edition of "*The Environmental Notice*."

Enclosed, please find a completed OEQC Publication Form, a hard copy of the DEA-AFONSI, and a disk with a copy of the DEA-AFONSI. We have also emailed an electronic copy of the publication form in MS Word.

Should there are any questions, please contact Alex Beatty at 768-8032.

Very truly yours,


for George I. Atta, FAICP
Director

**NON-CHAPTER 343 DOCUMENT
PUBLICATION FORM
OFFICE OF ENVIRONMENTAL QUALITY CONTROL**

Project Name: New Residence for Charles Tsu Yew Wong
Applicable Law: Chapter 25, Revised Ordinances of Honolulu
Type of Document: Draft Environmental Assessment
Island: Oahu
District: Koolaupoko
TMK: 4-6-1: 7
Permits Required: Special Management Area Use-Major, Department of Health Wastewater System Permit, Department of Health Construction Noise Permit, Building Permits

Applicant: Charles Tsu Yew Wong
46-107 Lilipuna Road
Kaneohe, Hawaii 96744
(808) 779-6189

Approving Agency: City and County of Honolulu
Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaii 96813
Contact: Alexander Beatty
(808) 768-8032

Consultant: Charles Tsu Yew Wong
46-107 Lilipuna Road
Kaneohe, Hawaii 96744
(808) 779-6189

Status: DEA-AFONSI

Project Summary:

The Project site is located within the Special Management Area (SMA), and requires an SMA Permit (Major) because the new two-story single-family dwelling exceeds 7,500 square feet of floor area, and the development valuation exceeds \$500,000. Development includes a single-family dwelling with five bedrooms and 8.5 bathrooms, two garages, an individual wastewater system, and a detached recreation room. The dwelling will not exceed the maximum building envelope height of 30 feet and will be located more than 57 feet from the shoreline.

DRAFT ENVIRONMENTAL ASSESSMENT

New Residence for
Charles Tsu Yew Wong

46-107 Lilipuna Road, Kane'ohe, O'ahu
TMK 4-6-001-007

May 2016

Environmental Assessment prepared for Special Management Area Permit
in accordance with Revised Ordinances of Honolulu, Chapter 25

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List of Acronyms

BMP	Best Management Practices
BWS	Board of Water Supply
CMU	Concrete Masonry Unit
CRM	Concrete Rubble Masonry
DLNR	Department of Land and Natural Resources
DOH	Department of Health
DPP	Department of Planning and Permitting
EA	Environmental Assessment
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
HAR	Hawaii Administrative Rules
HECO	Hawaiian Electric Company
HRS	Hawaii Revised Statutes
NAAQS	National Ambient Air Quality Standards
ROH	Revised Ordinances of Honolulu
SCP	Sustainable Communities Plan
SHPD	State Historic Preservation Division
TMK	Tax Map Key
USDA	United States Department of Agriculture

Exhibits

- Exhibit 1 Project Location Map
- Exhibit 2 City and County of Honolulu Special Management Area Map
- Exhibit 3 Building Permit No. 662974 and 673470
- Exhibit 4 Building Permit No. 695224
- Exhibit 5 Building Permit No. 716345
- Exhibit 6 Revised Plans
- Exhibit 7 Notices of Violation
- Exhibit 8 Septic System and DOH approvals
- Exhibit 9 Grading Permits
- Exhibit 10 USDA NRCS Soils Map
- Exhibit 11 Proposed Storm Runoff Drainage Plan
- Exhibit 12 FEMA and FIRM Map-Flood Zone X
- Exhibit 13 Tsunami Evacuation Map 21 inset 1
- Exhibit 14 DOH Community Noise Permit
- Exhibit 15 Survey by Wesley Tengan, Licensed Professional Surveyor
- Exhibit 16 DLNR Historic Preservation approval
- Exhibit 17 Public Shoreline Access
- Exhibit 18 Department of Health Clean Air Branch Standard Comments
- Exhibit 19 Department of Health Clean Water Branch Standard Comments
- Exhibit 20 Department of Health Waste Water Branch Standard Comments

I. GENERAL INFORMATION:

A. Applicant: Charles Tsu Yew Wong
46-107 Lilipuna Road, Kaneohe, Hawaii 96744
(808) 779-6189

B. Recorded Fee Owner: same as above.

C. Agent: Charles Tsu Yew Wong
46-107 Lilipuna Road, Kaneohe, Hawaii 96744 (808) 779-6189

D. TMK: 4-6-001-007

E. Lot area: 0.45 acre

F. Agencies Consulted in Making Assessment:

City and County of Honolulu: Department of Planning & Permitting
City and County of Honolulu Department of Emergency Management
Department of Land and Natural Resources, Land Division
Department of Land and Natural Resources, Engineering Division
Department of Health, Clean Air Branch
Department of Health, Clean Water Branch
Department of Health, Noise Branch
Department of Health, Waste Water Branch
U.S. Department of Agriculture, Natural Resource Conservation Service

G. Approving agency: Department of Planning & Permitting

II. DESCRIPTION OF THE PROPOSED ACTION

A. General Description:

1. Brief narrative description of proposed project: Single Family Home, Five Bedrooms, 8.5 Bathrooms, Recreational Room, Basement, Storage Room.

The subject property is located on the windward side of O'ahu, in the Ko'olau Poko Sustainable Communities Plan area, in Kaneohe town on Kaneohe Bay. The street address is 46-107 Lilipuna Road, Kaneohe, Hawaii, which is located on a rectangular lot, roughly 100 feet wide, by 200 feet long, situated on a knoll, extending from Lilipuna Road down to Kaneohe Bay. The subject parcel slopes in two different directions: from the street level down to the bay, and from west to east. The subject parcel is located directly below Pohakea Point, a large townhouse development with 255 units.

2. Required permits for the project:

- Special Management Area Permit: Major with Environmental Assessment
- Building Permit for construction of boundary walls and retaining walls to protect the foundation of existing house.
- Building Permit for construction of retaining walls and basement to establish Finish Floor Grade.
- Building Permit to construct new dwelling.

3. Location map, Ko'olau kopo, located at 46-107 Lilipuna Road, Kaneohe, Hawaii 96744. Exhibit 1

4. Tax Map Key 4-6-001-007,

5. Subject parcel is located entirely within Special Management Area. Exhibit 2

6. The subject parcel is zoned R-10,

6. Approved building permits for CRM retaining wall and boundary walls BP#662974 and BP#673470, please see Exhibit 3
7. Approved building permit for CMU retaining walls and basement to establish Finished Floor grade BP#695224, Exhibit 4
8. Approved building permit for the new dwelling with stand alone recreation room, BP#716345, Exhibit 5

B. Technical Characteristics:

1. Single Family Home

Please see revised plans:
Exhibit 6

2. The original house from 1954 was demolished, with the exception of the original concrete slab. 6' high CRM walls were constructed on the perimeter of the lot in accordance with building permits 662974 and 673470.

A basement storage area was designed into a depression in the contour of the lot, and 12" thick CMU retaining walls were constructed in order to level the front of the property. The design was intended to make full utilization of the lot. A driveway from the top of the property down to the bottom was installed, in order to make all of the land fully accessible and useable in accordance with building permit 695224.

A five bedroom, 8.5 bathroom house was designed in order to maximize the spectacular views of Kaneohe Bay.

A three car garage was constructed over the basement, and a free standing 1,000 square foot recreation room was constructed on top of the East facing garage.

During the excavation of the foundation for a part of the house, adobe clay soil was discovered. It was yellowish grey in color, appeared partial translucent, and reeked a foul odor. In consultation with the project

architect, William W.W. Wong advised that the adobe clay soil needed to be removed until solid bedrock was found. 13' of adobe clay soil was excavated, but no bedrock was found. William Wong advised to backfill four feet with base course and to compact to 95%, and then to pour a 12" thick foundation slab, and to bring up the foundation walls.

Rather than backfilling the entire cavity, it was decided to make the space usable by turning it into a basement-storage area. During the construction process, the owner decided to add an Endless Pool, which is classified as a SPA, and does not ordinarily require a building permit. The Endless Pool was extended off the back deck in a 8'X20' CMU enclosure, entirely above ground.

During the construction of the second floor, the owner consulted with a Feng Shui (Geomancy) Master, by the name of Michael Wu, who had made some calculations and advised the owner to make some unforeseen modifications, alterations, and additions during the construction process.

Mr. Thomas AhSam, Building Inspector had been aware of these changes, and stated that upon completion, these changes would need to be reflected in revised plans, before the building permit could be closed out.

3. NOTICES OF VIOLATION

However, apparently due to pressure from numerous complaints by neighbors, Thomas AhSam changed his mind, and issued a Notice of Violation, 2014/NOV-05-080, on May 12, 2014, for the addition of a basement, and deck extension.

The owner, Charles Wong explained the situation with the adobe clay soil conditions, to Wendle Koh, DPP Enforcement Supervisor, that had resulted in the construction of the foundation walls (basement) of the house, as well as the addition of an Endless Pool, which does not normally require a permit, except for the electrical.

Wendle Koh understood the issues and did not have any problem with the foundation walls, and the deck extension, and gave Charles Wong verbal approval to continue construction, provided no work be done in the basement or deck extension areas, and required revised plans to be submitted showing the additions and modifications.

Upon complaints from an uninformed neighbor, Thomas AhSam issued a second Notice of Violation, on Monday, November 10, 2014. Violation No. 2014/NOV-11-045, citing the construction of an un-permitted driveway.

This second Notice of Violation was issued in error, without Thomas AhSam performing any due diligence to ascertain whether or not the driveway had as a matter of fact been permitted.

When Thomas AhSam later found out that the driveway had as a matter of fact been permitted, under Building Permit No. 695224, issued on June 25, 2012, he tried to make an issue that the driveway had not been constructed in compliance with the specifications and standards, required by the City and County of Honolulu.

However, upon thorough inspection, Thomas AhSam could not find anything wrong with the driveway. On Wednesday, November 13, 2014 Thomas AhSam closed this second Notice of Violation, 2014/NOV-11-045, and on the next day, Thursday, November 14, returned to the subject property spending several hours, in an attempt to find violations, from which to shut down the job, and issue his third Notice of Violation, NOV-11-114, which was issued on Tuesday, November 18, 2014.

The third Notice of Violation cites a 30" high CRM wall, which had been in existence for more than two years, since July 2012, and normally does not require a building permit, except for the fact that it is in the 55' shoreline setback area.

AhSam then used a catch all phrase citing all additions, modifications and alterations, that were not in accordance with all of the previously issued building permits, 662974, 673470, 695224, and 716345, as a pre-text to once again, issue his STOP WORK ORDER. Notices of Violation, please see Exhibit 7

Revised plans were submitted in June 2015, and were going through the review process, until they were stopped by the Special Area Management (SMA) Division, which prompted a meeting with Deputy Director Arthur Challacombe on July 14, 2015. Deputy Director Challacombe explained to Charles Wong that his original Building Permit No. 716345, had been issued in error, and now that Mr. Wong was submitting revised plans, to correct the Notices of Violation, that error needed to be corrected by requiring Mr. Wong to perform a Special Area Management Permit (SMP) with an Environmental (EA).

Deputy Director Challacombe was gracious, and gave Mr. Wong permission to continue his construction, while simultaneously performing his SMP and EA, because the process can easily take one year. Deputy Director Challacombe, removed Thomas AhSam, Building Inspector from Mr. Wong's property.

4. Utility requirements:

Water: Board of Water Supply

Electricity: Hawaiian Electric (HECO) and Sun Run Solar PV system. The property is currently served by HECO overhead power lines along Lilipuna Road. A new transformer has been installed on the electric pole closest to the house, in order to handle a new 400 amp meter, which was installed in order to handle the electricity fluctuations from 10 kW photovoltaic system to be installed on the roof of the new house, by Sun Run.

Telecommunications, Cable TV, and Data: Land line telephone service to the area is provided by Oceanic Time Warner Cable, Internet (data) services are provided by both Hawaiian Telecom and Oceanic Time Warner Cable.

5. Public Services:

The subject property is located in the Honolulu Police Department's District No. 4, Sector 3, and served by the Kane'ohe District Station.

The nearest fire station is the Kane'ohe Fire Station near the police station on Waikalua Road.

There is a fire hydrant located near the Southeast corner of the property, on Lilipuna Road, providing immediate water access in the event of a fire.

6. Liquid waste disposal:

A state of the art septic system was designed by Richard Cervino and Roscoe Ford of Inland Designs, who specializes only in waste water treatment systems. After a percolation test was performed by Rod Siebel of First Quality Environmental, it was found that the percolation into the Alaeloa silty clay soils was zero. Thus in Richard Cervino and Roscoe Ford's design, they advised excavating out 8' of the clay soil under two leach fields, and backfilling it with #3 gravel in order to create a very large capacity in each of the leach fields.

The septic system was designed in a most efficient and effective manner in order to maximize the capacity of the leach field, while making the area over the 1,500 gallon septic tank useable as an additional parking area, with a 6" traffic rated slab over the top. Every aspect of the septic system was over designed and over engineered.

As the waste water enters into the septic tank, it enters into a treatment chamber in which the solid waste is digested and broken down by a special bacteria into water, which flows into a separate chamber, in which the effluence is then pumped into the leach field which is located on higher ground.

In the event of a power failure, there is an emergency overflow seepage pit, also with a very large capacity.

Department of Health Waste Water Branch approvals, percolation test by First Quality Environmental, engineered stamped drawings by Inland Designs, equipment specifications from International Waste Water Technologies, and pictures please see Exhibit 8.

7. Solid waste disposal:

Solid waste from the property will be collected curbside by City & County of Honolulu Refuse Collection.

8. Access, roadways and parking:

Access is provided through two driveways, one with a ramp from Lilipuna Road. The driveway opens onto an interior courtyard and parking area approximately 28' wide by 50' long giving access to six covered parking stalls, within two separate three car garages. There is additional uncovered parking spaces for two vehicles in the setback areas.

The ramp way is 15' wide by 140' long giving access to a two car open carport, built over the septic tank area, for additional parking, for a total of 10 parking stalls: 8 covered, 2 uncovered, thus providing ample off street parking.

The driveway, ramp way, and grass block paved over one leach field can be used as additional overflow parking. The subject property does not require any on street parking.

9. Other pertinent information: none.

C. Economic and Social Characteristics:

The resident population of Kane'ohe is fairly stable. In the year 2000, the population was approximately 35,000.

In the heart of Kaneohe town is a large shopping center, Windward Mall which is the third largest shopping center on the Island of O'ahu.

Over the past 20 years, there are a number of properties on Lilipuna Road, that have been redeveloped from old beach cottages into large houses, which reflect the prime value of the land. The subject property is one amongst a number of properties that have undergone redevelopment on Lilipuna Road.

1. Estimated cost and time phasing of construction;

Four Building Permits have been issued to the subject property: 662974, 673470, 695224, 716345 for different phases of construction

Building Permit 662974, issued on October 26, 2010 concerns a number of retaining walls to protect the foundation of the original house from being eroded, and a 6' high CRM perimeter wall extending around the inner boundaries of the property, in order to replace dilapidated boundary walls and to protect the cut, where there is a difference in elevation between the neighboring lots.

Projected cost for this phase of the construction was \$75,000, from October 2010 until February 2011 (five months)

Building Permit 673470, issued on June 23, 2011 is regarding modifications and extensions to the original CRM wall permit.

Projected cost for this phase of the construction was \$30,000, from July 2011-September 2011 (three months)

Building Permit 695224, issued on June 25, 2012 is regarding the construction of a basement/storeroom into a depression on the lot, together with 12" CMU retaining walls, in order to allow for grading to level the front of the lot, adjoining Lilipuna Road. Please see grading permits, Exhibit 9.

There is a driveway opening in the center of the 100' frontage on Lilipuna Road, and a second driveway opening towards the right hand corner of the property in order to allow for access down a concrete ramp, which in turn allows for access to different elevations on the property, from the top down to the bottom.

Projected cost of this phase of construction was \$120,000, from July 2012-January 2013 (seven months).

Building Permit 716345, issued on February 11, 2013 is regarding the construction of the new house, with two three car garages, a free standing recreation room, Master Bedroom wing connected by breezeway to the second floor of the house, giving access from the street level, directly onto the second floor of the house.

The building envelope of the house, follows the contours of the lot, from 25' above the street level, to 30' as the lot slopes down to the bay.

Projected cost of this phase of construction was \$1,150,000, from February 2013-December 2015 (34 months-with 9 months stop work order from November 2014-July 2015).

Revised plans have been submitted, which include a new basement/storage room, deck extension for an Endless Pool, and internal modifications and alterations to the original Building Permit 716345.

Approval of the revised plans is pending the outcome of the Special Management Area Permit, and Environmental Assessment.

Septic System approved by Department of Health, Wastewater Branch in August 2014. Septic system includes 1,500 gallon septic tank (over engineered) with two leach fields with soil replaced with #3 gravel to a depth of 8' to overcome poor percolation clay soils, with an emergency overflow seepage pit, in the event of power failure

Estimated cost of construction \$110,000 from August to September 2014.

Total estimated value of construction \$1,485,000, for all phases including the new septic system.

D. Environmental Characteristics:

1. Climate:

Existing Condition

Oahu's subtropical location and topography are the primary influences on local climate. In general, prevailing northeasterly trade winds occur approximately 70 percent of the year with higher percentage in the Summer months, than Winter, which give way to light, variable wind conditions. Warm ocean air flowing over the Ko'olau mountain range is the primary cause for local precipitation.

The average annual rainfall at the project site is 48 inches, which is higher than most of urban Honolulu at 28 inches. According to The Rainfall Atlas of Hawai'i, during the 2011 Winter months, the high mean monthly rainfall reached 5.71 inches. During the 2011 Summer months, low mean monthly rainfall was 2.22 inches.

The project site is in an open coastal area and is thus exposed to breezes and morning, midday, and afternoon sun. Average monthly temperatures in Kane'ohe range from a low of 63 degrees Fahrenheit in the Winter, to a high of 82 degrees Fahrenheit in the Summer.

Potential Impacts and Mitigative Measures

No significant impacts to local temperatures, rainfall, or wind patterns are anticipated to be associated with the completed residence in the shoreline setback area. As such, no mitigation measures are required.

2. Soils:

Soils information for the subject property was obtained from the Natural Resources Conservation Service Web Soil Survey. According to the survey, the soil association for the subject property is Alaeloa silty clay (AeE). See Exhibit 10.

According to the USDA Soil Conservation Service's Soil Survey, Alaeloa silty clay consists of deep and very deep, well drained soils that formed in material weathered from basic igneous rock. Alaeloa soils are on uplands and have slopes of 3 to 70 percent.

In a representative profile of this soil type, the surface layer 0-10 inches is dark reddish brown silty clay, dry, strong, very fine, strongly acid (pH 5.4).

10-18 inches: dark reddish brown silty clay, dry, strong very fine and fine subangular blocky structure, hard, firm sticky and plastic, very strongly acid (pH 5.0), clear wavy boundary 6 to 8 inches thick.

18-29 inches dark red silty clay, thin continuous clay films on peds, very strongly acid (pH 4.8).

29-48 inches coarse pattern of red, dark red, and dark reddish brown silty clay, strong very fine and fine subangular blocky structure, hard, friable, sticky and plastic, very strongly acid (pH 4.9)

Potential Impacts and Mitigative Measures

The completed project involves constructing a basement in a depression in the topography of the property, constructing new retaining walls, in order to level the front of the property, from which to construct two three car garages, a top which sits a free standing recreation room on the right hand (East) side of the property and a Master Bedroom wing on the left hand (West) side of the property. Six foot high perimeter walls were built up along the inside of the property line with the neighbors and the street. A driveway from the top of the property was graded down to the bottom of the property in order to give access throughout the entire property.

While excavating the foundation for the new house, adobe clay soil was found and excavated to a depth of 13 feet, and then backfilled with four feet of select borrough gravel, compacted to 95% in order to make a solid foundation, for foundation walls of a part of the house. The concrete slab of the original house from 1954, was reused, and the soil underneath, undisturbed.

Short term construction related impacts included minor soil loss and erosion, but construction activities employed Best Management Practices (BMPs) to minimize such occurrences. BMPs employed included silt fences to minimize airborne dirt particles, and multiple layers of silt fences and an environmental sock was deployed to minimize water borne dirt particles. In addition to BMPs on land, a floating orange silt boom was deployed into the surrounding waters on Kaneohe Bay, to contain any muddy runoff within a small area fronting the subject property.

3. Topography:

The subject property and the adjacent parcel, located at 46-109 Lilipuna Road, Kaneohe, sits atop a knoll that gently slopes from the street level down to Kaneohe Bay, which gives the parcel an unobstructed panoramic view of the Heeia area within Kaneohe Bay. To the mauka of the subject property is the Pohakea Point townhouse development, which consists of 255 units. The town house development sits on a hillside, 35'-70' above Lilipuna Road overlooking the vistas of Kaneohe Bay. On the hillside in back of the subject property is a grove of mature trees, which affords both the townhouse neighbors and the subject property privacy.

4. For analysis of runoff and drainage pattern of former dwelling vs. new proposed project, please see PROPOSED STORM DRAINAGE RUNOFF PLAN. The civil engineered plans show former dwelling over laid by the new proposed project. Arrows denote the flow of runoff water down a swale in the driveway. Proposed Best Management Practice (BMPs) include covering all exposed soil with El Toro Zoysia grass, and constructing a Retention Basin, to prevent runoff into Kaneohe Bay. Exhibit 11
5. According to the Department of Land and Natural Resources, Flood Hazard Assessment Report, the subject property is located completely within, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Zone X. Zone X areas are outside the 0.2 percent annual chance of flood plain, with low to moderate risk of flooding. Exhibit 12.

6. Based on information provided by the City & County of Honolulu, Department of Emergency Management (DEM), the subject property is located within the Extreme Tsunami Evacuation Zone, which is classified as a 1:1000 year event, which would most likely be precipitated by an earthquake greater than 9.0 on the richter magnitude scale, to form what is known as a Great Aleutian Tsunami (GAT). The Tsunami Evacuation Map for the subject property is 21, inset 1 for Heeia, which shows the shoreline within Kaneohe Bay, between Kaneohe and Heeia, the minimum safe distance is inland of an improved street or road. The subject property is located in the Extreme Tsunami Evacuation Zone, demarcated in yellow. The Safe Zone demarcated in green, is located approximately 50 feet uphill of the subject property, within the subdivision of Pohakea Point. Exhibit 13.

7. Hydrology:

There are no streams or wetland within the subject property. The construction of retaining walls, and a concrete ramp with a swale in the middle will channel surface runoff down to the bottom of the property, where it will percolate into a grassy area of approximately 50' before running off into Kaneohe Bay.

8. Air Quality:

National Ambient Air Quality Standards (NAAQS) have been established for seven major air pollutants: carbon monoxide (CO), nitrogen oxides (NOx), ozone (O3) particulate matter smaller than 10 microns (PM10), particulate matter smaller than 2.5 microns (PM2.5), sulfur oxides (SOx), and lead. Air pollutants levels are monitored by the State Department of Health, Clean Air Branch at a network of sampling stations statewide. Based on ambient air monitoring data, the U.S. Environmental Protection Agency has classified the island of O'ahu and the entire State of Hawai'i as being in attainment of Federal standards.

Potential Impacts and Mitigative Measures

Air quality impacts attributed to the construction of the house will likely include exhaust from heavy earth moving equipment emissions and dust

generated by short-term construction activities. Dust screen barriers and manual water spraying was used to mitigate the impact of fugitive dust in accordance with State air pollution control regulations as outlined in HAR, Chapter 11-60.1-33, Fugitive Dust.

9. Noise:

Existing Condition:

Noise levels in the vicinity of the project site are relatively low, consistent with the character of the surrounding residential uses and recreational use of the waters of Kaneohe Bay. There are occasional jet engine noise created by a Lockheed C-5 Galaxy military transport plane doing touch and go exercises from the MCBH-Kaneohe Bay.

Potential Impacts and Mitigative Measures:

Impacts on noise levels were limited to construction activities over the short-term. The operation of construction vehicles, machinery, tools, and the increased activity due to construction likely increased noise levels above the existing and pre-existing levels. Construction noise is regulated by the DOH under HAR Chapter 11-46, Community Noise Control. Two Community Noise Permits for Construction Activities were applied for and granted by the DOH, Noise Branch, in order to conduct construction related activities on Saturdays and only quiet work on Sundays. Permit No. O 14-183, Permit No. O 15-456.

Please see Exhibit 14.

10. Flora and Fauna:

Existing Condition:

As a residential property that has been inhabited for many decades, the subject property and general area have been impacted over time by human use. There was a depression on the property that was filled with weeds, vines, and low lying species that was cleared, to make way for the basement, and retaining walls to level the front of the property. There were a number of trees that had been hollowed out from the inside by

subterranean termite infestation that were removed from the subject property.

There was a large mangrove approximately 50 feet in width by 150 feet in length in the bay fronting the subject property that was cleared by the owner. Mangrove is a very invasive marine weed, that is taking over the shoreline of the Hawaiian Islands, and has become a particularly chronic and severe problem in the mudflats of Kaneohe Bay. Along a stream bed near the He'eia State Park, the invasive mangrove has already reached heights of 70-80' tall, and have completely cut off all access into the stream. If left unchecked, it would only have been a matter of time, before the mangrove took over the entire shoreline fronting the subject property.

The owner had made requests to the Department of Land and Natural Resources, Office of Conservation and Coastal Lands (DLNR-OCCL) for permission to remove the mangrove, but was referred to the wrong division, who granted permission in error.

Permission was later granted to the owner by the DLNR in the form of an Emergency Clean Up Order. A qualified contractor by the name of Busby Hufanga, who had previously received a US\$2 million contract to remove mangrove in Pearl Harbor by the Department of Defense, performed the mangrove clean up for the owner. The DLNR was very satisfied with the subsequent mangrove removal and clean up.

No fauna or avifauna were observed on the site.

11. Other information pertinent to the Special Management Area.

The house is setback 57.72' from the property line, rather than 55' from the shoreline. In front of Charles Wong's property is State Parcel 52, creating a buffer between Mr. Wong's property and the shoreline of Kaneohe Bay. A survey performed by Wesley Tengan, Licensed Professional Surveyor shows that the house is setback more than 70' from the shoreline. Exhibit 15

III. DESCRIPTION OF THE AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATIVE MEASURES

A. A brief description of subject site in relation to surrounding area and the description of surrounding area.

The subject property is located on the makai side of Lilipuna Road, near the neighborhood known as Ali'i Shores, and directly below Pohakea Point, a 255 unit townhouse development. The subject property sits on a knoll that gently slopes from Lilipuna Road, down to Kaneohe Bay. The subject property ranges in elevation from approximately 2.5 feet above sea level to 40 feet above sea level, where the property adjoins Lilipuna Road. The subject property sits on 0.45 acres of land, and is zoned R-10.

B. Project site in relation to publicly owned or used beaches, parks and recreation areas or other costal/natural resources.

The subject property does not contain, nor is it located near any park, trail, or public right of way. The property does not contain nor is it located near public shoreline access. The existing shoreline consists of mudflats in Kaneohe Bay. There is no sandy beach nearby. There are many areas overgrown with impenetrable vegetation as well. Ocean recreation in the area is active, but the majority of it is likely to be boating related.

The subject property is located within a residential neighborhood, and has been inhabited for decades. The construction of a new Single Family Home is expected to have a **Finding of No Significant Impact (FONSI)**.

C. Relation to historic, cultural, and archaeological resources.

It is not known if any subterranean historic, cultural, or archaeological sites exist on the subject property. The property has been used as a residential site for decades and the likelihood of subsurface remains low. The DLNR Historic Preservation Division gave its approval for the demolition of the previous house, which dated back to 1954. Also the property is not on the National and State Registers of Historic Places. Exhibit 16

D. Coastal views from surrounding public viewpoints and from the nearest coastal highway across the site to the ocean or to coastal landform.

The subject property lies within the Kaneohe Bay Viewshed, as defined by the City & County of Honolulu's Coastal View Study. The City's Ko'olau Poko Sustainable Communities Plan also documents important scenic views. The property is not within any significant view plane or stationary viewing area. The subject property is not along any coastal highway.

E. Quality of receiving waters and ground water (including potable water) resources.

There is no use of ground water or well water by the subject property. The subject property uses municipal Board of Water Supply water.

IV. PROJECT IMPACTS

Identify impacts of the project relative to the Coastal Zone Management objectives and policies (Section 205A-2, HRS) and the Special Management Area guidelines (Section 25-3.2, ROH).

The construction of the new single family dwelling is consistent with applicable land use policies set forth in the State Land Use Law, State Coastal Zone Management Program, Ko'olau Poko Sustainable communities plan, Land Use Ordinance and Special Management Area, which are discussed below.

A. HAWAII STATE LAND USE DISTRICT BOUNDARIES

The State of Hawaii Land Use Law regulates the classification and uses of lands in the State to accommodate growth and development, and to retain the natural resources in the area. All State lands are classified by the State Land Use Commission, as Urban, Rural, Agricultural, or Conservation, with consideration given to the General Plan of the County.

Discussion:

The location of the proposed action includes lands that are designated Urban District. The Hawaii State Plan, Chapter 205-2 (b) Hawaii Revised Statutes, states that:

“Urban districts shall include activities or uses as provided by ordinances or regulations of the county within which the urban district is situated.”

The proposed action is consistent with this Statute, as the proposed land uses are consistent with the Ko'olau Poko Sustainable Communities Plan, and Land Use Ordinance, as discussed below.

B. HAWAII COASTAL ZONE MANAGEMENT PROGRAM

The Coastal Zone Management Act of 1972 (16 USC Section 1451), as amended through Public Law 104-150, created the coastal management program and the National Estuarine Research Reserve system. The coastal states are authorized to develop and implement a state coastal zone management program. Hawaii Coastal Zone Management (CZM) Program received federal approval in the late 1970's. The objectives of the State's Hawaii Coastal Zone Management (CZM) Program, Section 205A-2, HRS, are to protect valuable and vulnerable coastal resources such as coastal ecosystems, special scenic and cultural values and recreational opportunities. The objectives of the program are also to reduce coastal hazards and to improve the review process for activities proposed within the coastal zone. Each county is responsible for designating a Special Management Area (SMA) that extends inland from the shoreline. Development within this SMA is subject to County approval to ensure the proposal is consistent with the policies and objectives of the Hawaii CZM Program.

The subject site is within the SMA as delineated by the City and County of Honolulu.

Described below are the seven objectives of the Hawaii CZM Program and an assessment of the action's impact relative to the State's CZM objectives and policies. The specific City and County SMA policies are also discussed in further detail, below.

1. RECREATIONAL RESOURCES

Objectives: Provide Coastal Recreational Opportunities Accessible to the Public.

(A) Improve coordination and funding of coastal recreation planning and management.

(B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:

- Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;
- Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites and sandy beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;
- Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
- Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
- Encouraging expanded public recreational use of county, state and federally owned or controlled shoreline lands and waters having recreational value;
- Adopting water quality standards and regulating point and non-point sources of pollution to protect and where feasible, restore the recreational value of coastal waters;
- Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, artificial reefs for surfing and fishing; and
- Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of the discretionary approvals of permits by the land use Commissions, board of land and natural resources, county planning commissions; and crediting such dedication against the requirements of section 46-6.

The proposed impact would have no impact on coordination and funding of coastal recreation planning and management. The proposed action will be constructed and operated in accordance with State and federal water quality regulations. Storm water and septic system will be maintained and

new infrastructure constructed to meet applicable standards. The new septic system has been over engineered with adequate capacity to address the anticipated load from the action. There will be no discharge points into coastal waters.

2. HISTORIC RESOURCES

Objective: Protect, Preserve and, Where Desirable, Restore Those Natural and Man-Made Historic and Pre-Historic Resources in the Coastal Zone Management Area that are Significant in Hawaiian and American History and Culture.

- (A) Identify and analyze significant archaeological resources.
- (B) Maximize information retention through preservation of remains and artifacts or salvage operations; and
- (C) Support state goals for protection, restoration, interpretation and display of historic resources.

The pre-existing beach cottage had existed for six decades, dating back to 1954. When the beach cottage was demolished to make way for the new dwelling, and the footers for the house were excavated, nothing of any archeological significance was found. The site area has undergone extensive disturbance from previous development. The site does not possess any historically or culturally significant resources.

3. SCENIC AND OPEN SPACE RESOURCES

Objective: Protect, Preserve and, Where Desirable, Restore or Improve the Quality of Coastal Scenic and Open Space Resources.

- (A) Identify valued scenic resources in the coastal management area;
- (B) Insure the new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;

- (C) Preserve, maintain and where desirable, improve and restore shoreline open space and scenic views to and along the shoreline;
- (D) Encourage those developments which are not coastal dependent to locate in inland areas.

The proposed action will not affect vistas or scenic resources. The proposed plan is consistent with the Ko'olau Poko Sustainable Communities Plan and Zoning regulations. The residential use will blend into the surrounding urban residential neighborhood. The scale and size of the action are appropriate to the site, and meet the design controls established in the LUO. The facility will not exceed the building envelope of 30 feet in height on the slope and will not interfere with existing prominent public vantage points.

4. COASTAL ECOSYSTEMS

Objective: Protect Valuable Coastal Ecosystems from Disruption and Minimize Adverse Impacts on all Coastal Ecosystems

- (A) Improve the technical basis for natural resource management;
- (B) Preserve valuable coastal ecosystems of significant biological or economic importance;
- (C) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and
- (D) Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate state water quality standards.

The action will not affect coastal ecosystems or natural resource management. During construction BMP's will be deployed to screen silt from runoff waters, by using silt screens, environmental sock, and float silt

boom deployed in the surrounding waters to contain runoff to a small area.

5. ECONOMIC USES

Objective: Provide Public or Private Facilities and Improvements Important to the State's Economy in Suitable Locations:

- (A) Concentrate in appropriate areas the location of coastal dependent development necessary to the state's economy;
- (B) Ensure that coastal dependent development such as harbors and ports, visitor industry facilities, and energy generating facilities are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and
- (C) Direct the location and expansion of coastal dependent development to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:
 - Utilization of presently designated locations is not feasible;
 - Adverse environmental effects are minimized; and
 - Important to the State's economy.

The action is consistent with State and County plans and land regulations and will not result in any adverse social, visual, and environmental impacts in the coastal zone management area.

6. COASTAL HAZARDS

Objective: Reduce Hazard to Life and Property From Tsunami, Storm Waves, Stream Flooding, Erosion and Subsidence.

- (A) Develop and communicate adequate information on storm wave, tsunami, flood erosion, and subsidence hazard;

- (B) Control development in areas subject to storm wave, tsunami, flood erosion, and subsidence hazard;
- (C) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and
- (D) Prevent coastal flooding from inland projects.

The subject property is located in the Extreme Tsunami Evacuation Zone, City and County of Honolulu, Department of Emergency Management Tsunami Map 21, inset 1, Heeia for the Island of O'ahu. The Tsunami Safe Zone is located 50' above the subject property, which can be easily reached within walking distance. The subject property is not located in a coastal floodplain or storm wave action zone.

Second, the new dwelling will be constructed from 12" CMU blocks grouted with rebar for the retaining walls, and 8" CMU blocks grouted with rebar for the house walls, which is constructed to protect against hurricanes. The nearest designated shelters are Benjamin Parker Elementary School and King Intermediate School.

7. MANAGING DEVELOPMENT

Objective: Improve the Development and Review Process, Communication, and Public Participation in the Management of Coastal Resources and Hazards

- (A) Effectively utilize and implement existing law to the maximum extent possible in managing present and future coastal zone development;
- (B) Facilitate timely processing of application for development permits and resolve overlapping or conflicting permit requirements; and
- (C) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their lifecycle and in terms understandable to the general public to facilitate public participation in the planning and review process.

This Environmental Assessment (EA) communicates the potential short-term and long-term impact of the action on the environment. Procedurally, this EA conforms to ROH Section 25-3.3(c)(1). The public is allowed to review the EA through three public hearings. During the pre-consultation agencies were consulted and will continue to be informed throughout the planning process.

C. CITY AND COUNTY OF HONOLULU LAND USE ORDINANCE GUIDELINES

The purpose of the LUO is to regulate land use in a manner that will encourage orderly development in accordance with adopted land use policies, including the Ko'olau Poko Sustainable Communities Plan. The LUO is also intended to provide reasonable development and design standards. These standards are applicable to the location, height, bulk and size of the structures, yard areas, off-street parking facilities, and open spaces, and the use of structures and land for agriculture, industry, business, residences or other purpose (Revised Ordinance for the City and County of Honolulu, Chapter 21).

Discussion:

The subject property is designated as "R-10: Residential" zone by the City and County of Honolulu. The design meets the R-10 standard as defined in the LUO.

SPECIAL MANAGEMENT AREA

The subject property is located within the Special Management Area (SMA), which was established to preserve, protect, and where possible, to restore the natural resources of the coastal zone of Hawaii. The action will comply with the requirements of the SMA. An SMA Approval application will be submitted to the City and County of Honolulu, Department of Planning and Permitting.

Special controls on development within this area are necessary to avoid permanent loss of valuable resources. The review guidelines of Section 25-3.2 of the Revised Ordinances of Honolulu (ROH) are used by the Department of Planning and Permitting and the City Council for the review

of developments proposed in the Special Management Area (SMA). These guidelines are derived from Section 205A-26 HRS. The consistency of the proposed action with the guidelines is discussed below.

(1) All Development in the Special Management Area shall be subject to reasonable terms and conditions set by the council in order to ensure that:

- Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas, and natural reserves is provided to the extent consistent with sound conservation principles;
- Adequate and properly located public recreation areas and wildlife preserves and reserved;
- Provisions are made for solid and liquid waste treatment, disposition, and management which will minimize adverse effects upon special management area resources; and
- 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 amenities and minimum danger of floods, landslides, erosion, siltation or failure in the event of earthquake.

Discussion:

The closest public access to the beach is Heeia State Park, which is located 2.1 miles from the subject property. The second closest public access beach is Kaneohe Beach Park, located 2.2 miles from the subject property. The proposed action will not adversely affect access to any public shoreline or recreation area. Please see Public Shoreline Access, Exhibit 16.

No wildlife preserve or public areas are affected by the action.

Wastewater will flow into the state of art, septic system, which has been approved by the Department of Health, Wastewater Branch.

Solid waste will be handled and disposed of by the City and County of Honolulu Refuse Department.

Alterations to the land and vegetation will not adversely affect coastal areas or recreational resources. The action will implement required permit conditions and best management practices. The action is a redevelopment of an existing residential lot. The action will not increase the potential hazard risk associated with flooding, landslides, erosion, siltation or earthquake. The design and construction will meet or exceed County building standards.

(2) City Council approval of the Special Area Management Permit will depend on a number of factors:

- The development will not have any substantial, adverse environmental or ecological effects except such adverse effect is minimized to the extent practicable and clearly outweighed by public health and safety, or compelling public interests. Such adverse effect shall include, but not limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect, and the elimination of planning options;
- The development is consistent with the objectives and policies set forth in Section 25-3.2 and area guidelines contained in Section 205A-26, Hawaii Revised Statutes; and
- The development is consistent with the Ko'olau Poko Sustainable Communities Plan, Zoning and subdivision codes and other applicable ordinances.

Discussion:

No substantial adverse environmental or ecological direct, indirect or cumulative impacts are anticipated from the action. The action is consistent with applicable plans and policies of the State of Hawaii and City and County of Honolulu.

(3) The City Council Shall Seek to Minimize Where Reasonable:

- Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough or lagoon;
- 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 Area and the mean high tide line where there is no beach;
- 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
- Any development which would adversely affect water quality, existing areas of open water free of visible structure, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.

Discussion:

There will be no adverse impact to public access, public beaches or recreation areas. The action will have no adverse impacts on areas of open water, potential fisheries, fisheries, wildlife habitat, or agricultural land. The action will adhere to LUO height and size restrictions. The action would not adversely limit the line of sight to the ocean from the nearest State highway.

E. CONFORMANCE WITH THE KO'OLAU POKO SUSTAINABLE COMMUNITIES PLAN

The Ko'olau Poko Sustainable Communities Plan (KPSCP) is the City's land use plan for the region of O'ahu spanning Kualoa to Makapu'u, and including Káne'ohe. The plan is guided by a community developed vision for the region's future. The plan takes inventory of the region's assets-population, housing, transportation networks, historic resources, scenic resources, environmentally sensitive areas, social assets, etc.-and identifies needs. The plan sets policies and guidelines for development over the next few decades.

The KPSCP designates this area as low-density residential. The subject project is consistent with the designation.

The KPSCP recognizes that the shoreline along Kane'ohe Bay is not pristine and untouched, but developed with a variety of man made structures and that physical and visual access to the shoreline is limited. The subject property has a history of having been the original site of the Kane'ohe Bay Yacht Club, with the pilings for the original pier, still visible in front of the property. The original house dated from 1954, when Kane'ohe was primarily rural and much less urbanized, featuring pasture grazing lands for cattle, and even rice farming. The original dwelling consisted of a small beach cottage, that was most likely used over the weekends, as a countryside get away. Over the past more than 60 years, since the original beach cottage was constructed, Kane'ohe has become rapidly urbanized with a number of shopping centers, namely Windward Mall (the third largest shopping center on O'ahu, Kane'ohe Bay Shopping Center, and Windward City Shopping Center, serving a population of approximately 35,000 residents.

1. KPSCP VISION

The vision statement for the KPSCP is as follows:

PROTECT COMMUNITY RESOURCES

- **Protect Natural and Scenic Resources.** Significant scenic views of ridges, upper valley slopes, shoreline areas from major public parks highways, coastal waters and hiking trails must be protected. Furthermore, access to shoreline areas and mountainous regions should be improved and provided for all to use.
- **Preserve Cultural and Historical Resources.** These resources should be preserved by retaining visual landmarks and significant views, protecting access rights relating to traditional cultural practices, and preserving significant historic, cultural, and archaeological features from Koolaupoko's past.
- **Preserve Agricultural Resources.** Koolaupoko contains productive and potentially productive agricultural lands that should be preserved by adopting protective regulatory policies and implementing incentives and programs to promote active agricultural use of these lands.
- **Protect the Residential Environment of Neighborhoods.** Preserve and enhance residential neighborhoods by improving infrastructure (roads, sewer, drainage, transportation) and by creating appropriate densities and design guidelines for residential communities.

2. ADAPT TO CHANGING COMMUNITY NEEDS

Discussion: Pertaining to the above project, the new single family dwelling does not affect significant scenic views or shoreline access. It also does not impact cultural and historical resources, agricultural resources, or the residential neighborhood character. The construction of the new residence is in line with the redevelopment of the area, from old 1940's-50's beach cottages, to a more modern and contemporary

dwelling, of which there have been a number of similar size and scope over the past 20 years, on Lilipuna Road.

The KPSCP calls for implementation of the vision to be guided by the follow key elements:

- Adapt the concept of “ahupua’a” in land use and natural resource management;
- Preserve and promote open space throughout the region:
- Preserve and promote agricultural uses and defined boundaries for these areas;
- Preserve and enhance scenic, recreational and cultural features that define Koolaupoko’s sense of place.

Physical access to the shoreline and mountain areas should also be increased and enhanced especially along Kaneohe Bay between the MCBH Kaneohe and Heeia Fishpond; along Kailua Beach between Kailua Road and Kawainui Channel; and to beaches within the Marine Corps Base Hawai’i-Kaneohe. To maintain lateral access along public beaches the challenges of long-term and seasonal erosion of the shoreline needs to be addressed. In addition, the disposition of beach accretion should be reviewed as a statewide issue, with the intent of making it public land in perpetuity.

- Emphasize alternatives to the private passenger vehicle as modes of travel;
- Adapt housing and public works standards to community character and changing needs;
- Protect residential neighborhoods;
- Define and enhance existing commercial and civic districts; and

- Establish Urban Communities, Rural Communities, Agriculture and Preservation boundaries.
- Maintain the predominantly low-rise, low-density, single family character of the urban fringe and rural communities.

Discussion: The construction of the new single family dwelling does not conflict with the above key elements. The redevelopment of the property is consistent with KPSCP guidelines, and significantly upgrades, as well as enhances the overall neighborhood.

3. POLICIES, PRINCIPLES, AND GUIDELINES

The following KPSCP guidelines are applicable to shoreline areas:

- Open Space Preservation
- Guidelines
- Shoreline Areas

Guidelines pertaining to shoreline areas are listed below:

- Maintain existing makai view channels along Kalanianaʻole Highway between Makapuu Point and Waimanalo Beach Park; along Kawaioloa Road and North Kalaheo Avenue in Kailua, along Lilipuna Road in Kaneohe; and along Kamehameha Highway north of Kaneohe. Avoid visual obstructions, such as walls and dense landscaping.
- Create and maintain new makai view channels along Kamehameha Highway and Kahekili Highway north of Kaneohe through selective clearing of dense vegetation and the removal of structures. Such view channels should be created by public acquisition of shoreline properties along the highway or by obtaining easements and maintenance agreements with private landowners. Priority should be given to the areas where clearing would open up vistas of perennial streams, wetlands, fishponds and offshore islands.
- Place high priority on maintaining the untamed landscape quality of the Makapuu viewshed. Any modification to this shoreline area should be

done in a manner that continues the landscape character of the proposed scenic shoreline corridor on the East Honolulu side of Makapuu Point.

- Consideration should be given to the establishment of buffer zones for the protection of rare coastal resources and recognition that such resources should be defined and identified.
- Increased opportunities for physical access to the shoreline areas of Kaneohe and Kailua by acquiring additional shorefront areas. The top priority for such acquisition is in Kaneohe. In Kaneohe, access is being designed at the site of the Kaneohe Wastewater Pre-Treatment Facility, to be named Waikalua Bayside Park. The park is adjacent to the Kaneohe Stream, which will be dredged to a depth of nine feet. Future expansion maybe possible by either acquiring the adjacent Kokokahi YWCA facility or entering into a cooperative agreement with this organization for the joint use of both properties. Other sites in Kaneohe are at King Intermediate School and at a spot north of Heeia Kea Landing. The latter may require realignment of a portion of Kamehameha Highway to create adequate land area makai of the roadway. In Kailua, an additional park site should be sought in either the Oneawa Beach area, near the surf spot known as "Castles" or in the frontage along Kalaheo Avenue between Kailua Beach Park and Kalama Beach Park. The latter beach park could also be expanded if there is an opportunity to acquire an adjoining property.
- Existing pedestrian rights-of-way to the shoreline should be improved by providing on street or off-street parking nearby; secured bicycle racks where the access point adjoins an existing or planned bikeway, such as along Mokulua Drive in Lanikai and Kaneohe Bay Drive in Kaneohe; and provisions for emergency vehicles access and lateral access along the shoreline.
- To maintain lateral access along popular beaches that are subject to long term and seasonal erosion, particularly at Lanikai and Kualoa, beach management plans should be developed and implemented, with an emphasis on non-structural approaches and prevention of adverse effects on adjacent coral reef ecosystems. Greater shoreline setbacks should be established for new structures along these and other unstable shoreline

areas, using criteria developed in various shoreline studies. Plans and activities should be consistent with the objectives and policies of the State Coastal Zone Management Program.

- The placement and design of exterior lighting in areas adjacent to the shoreline may contribute to disorientation, injury and death of seabirds. Therefore, lighting should be designed and constructed to avoid such effects using DLNR guidelines.
- The Alala Point of Wailea shoreline should be designated as an erosion-prone area and a beach management plan prepared and implemented. Periodic beach restoration activities should also focus on the Bellows Air Force Station beach and Kaupo beach.
- The shoreline along Kamehameha highway adjacent to Kualoa Ranch to Kualoa Point should be designated as a erosion-prone area and be subject to a beach management plan.
- To preserve public ownership and use of shoreline resources, legislation should be pursued to render all shoreline accretion as public (State) property in perpetuity.
- Discourage the use of shore armoring structures.

Discussion: The subject property is not adjacent to Kalaniana'ole or Kamehameha Highways and the subject new house construction does not affect scenic views of the ocean from these highways. It does not affect the Makapuu viewshed, rare coastal resources, beach right of ways, and lateral access to popular beaches; nor does it prohibit opportunities for the City to acquire usable shorefront areas. Greater shoreline setbacks for new structures are called for by the KPSCP guidelines, but this is for documented unstable areas that affect access to popular recreation spots. No exterior lighting is associated with the subject property, and the property is not in the Alala Point to Wailea shoreline or the Kualoa shoreline. The subject property does not have any shore armoring structure, and is in accordance with the above guidelines.

V. MITIGATION MEASURES

The re-development of the pre-existing residential lot, zoned R-10, with pre-existing residence is not anticipated to have any short or long term adverse impact on the environment. The Environmental Assessment recommends mitigation measures to alleviate impact when such impacts are identified.

VI. ALTERNATIVES CONSIDERED

- “As is” nothing alternative, i.e. keeping old house from 1954. The old house from 1954 had serious subterranean termite damage and structural issues, with a leaking roof, outdated electrical, plumbing, and cesspool. Keeping the old house and renovating it was considered at first, but later determined to be not worth it for a tear down structure.
- “maximum” alternative, the building code allows for a footprint covering 50% of the land area, 19,598 square feet, or 9,799 square feet.
- The proposed project has a foot print of approximately 4,500 square feet or less than 25% of the lot area, which is considered reasonable.
- The proposed project was designed specifically to suit the needs of the new owner’s family.
- The maximum allowable height limit on the sloped portion of the lot is 30’ high, but the maximum height of the proposed project is less than that.
- The design of the house is intended to make full utilization of the land. Where there was a pit or depression on the property, there is a proposed basement, to fill in the pit and to make the area useable, with a 1,000 square foot recreation room, which is allowed by the building code.
- Where there was no access from the top of the property (street level) to the bottom of the property, the proposed project has a ramp driveway to access different elevations on the property, thus being reasonable.

- The slab of the old house from 1954 was reused, in order to minimize demolition and excavation for a new foundation, because the old slab had settled for the past 60 years, and was in good condition, thus minimizing impact to the environment.
- The old house from 1954 had an inadequate cesspool which would fill up and overflow during the winter rains. The proposed project has a state of the art, over engineered septic system, which is much healthier for the environment, minimizing any liquid waste impact to the environment, thus being reasonable.
- The new proposed project is consistent with other new houses built on the Kaneohe Bay side of Lilipuna Road in Kaneohe over the past 20 years, thus being a sign of progress in the redevelopment of the old neighborhood, and thus is reasonable.

VII. FINDINGS AND ANTICIPATED DETERMINATION

The action is consistent with the Hawaii State Land Use District Boundaries; the Hawaii Coastal Zone Management Plan, the Ko'olau Poko Sustainable Communities Development Plan, the City's Zoning Ordinance, and Special Area Management regulations.

ANTICIPATED DETERMINATION

Based on the findings of this Environmental Assessment (EA), as outlined in the Coastal Zone Management objectives and policies (Section 205A-2, HRS) and the Special Management Area guidelines (Section 25-3.2 ROH), it is anticipated that the approving agency, the City and County of Honolulu, Department of Planning and Permitting will have a determination that the project will not have a significant environmental impact, and an Environmental Impact Statement (EIS) will not be required. **Therefore, a Finding of No Significant Impact (FONSI) is anticipated.**

FINDINGS SUPPORTING THE ANTICIPATED DETERMINATION

The Department of Health Administrative Rules Section 11-200-12 provides thirteen "Significant Criteria" for determining if an action will have a significant impact on the environment. This includes all phases of a project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. According to the Rules, an action shall be determined to have a significant impact on the environment if it meets any one of the criteria listed below.

- 1. Involves an irrevocable commitment to loss or destruction of any natural cultural resources.*

The project will not result in an irrevocable commitment to loss or destruction of any natural or cultural resource. The project is a re-development of an existing residential lot, that has been inhabited for many decades.

- 2. Curtails the range of beneficial uses of the environment.*

The area in which the subject project and property are located has a land use zoning of R-10 residential and has been heavily modified and inhabited for decades. The shoreline area has also been heavily modified by human activity and permanent structures such as docks, piers, groin, fishponds, man-made lagoons, and sea walls still exist. Cumulatively, these structures and other human activities such as dredging, affect lateral access to the shore and alter the littoral processes. The subject project, however, does not curtail the range of beneficial uses of the environment nor does it curtail residential uses of the surrounding properties.

- 3. Conflicts with the State's long-term environmental policies or goals and guideline as expressed in Chapter 344, HRS; and any revisions thereof and amendments thereto, court decisions, or executive orders.*

The re-development of the prior existing residence does not conflict with the environmental policies established in HRS, Chapter 344. The new dwelling is setback more than 55' from the property line, rather than the

shoreline, thus exceeding shoreline setback rules, and does not alter the area's currently existing natural processes or resources and would not lower the quality of life for Hawaii residents.

4. Substantially affect the economic or social welfare of the community or state.

The re-development of the prior existing residence will have no significant effect on the socio-economic welfare of the community or state.

5. Substantially affects public health.

The re-development of the prior existing residence will not affect public health. As mentioned above, construction likely produced some short-term impacts to air quality and noise, but these impacts were minor, with best management practices employed during construction to minimize the impact, when ever practicable.

6. Involves substantial secondary impacts, such as population changes or effects on public facilities.

The re-development of the prior existing residence does not involve substantial secondary impacts.

7. Involves a substantial degradation of environmental quality.

It is not anticipated the the re-development of the prior existing residence would further degrade overall environmental quality.

8. Is Individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions.

The subject project is individually limited, and would itself have no significant impact on the environment, and does not involve a commitment of larger actions.

9. Substantially affect a rare, threatened or endangered species or its habitat.

There are no rare, threatened, or endangered plants or animal species on the subject property.

10. Detrimentially affects air or water quality or ambient levels.

As previously discussed, re-development of the prior existing residence likely produced temporary impacts to air quality and noise levels. Long-term impacts to air and water quality, as well as ambient noise levels, will be negligible.

11. Affects or is likely to suffer damage by being located in an environmentally sensitive area, such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, freshwater, or coastal water.

The subject property is located outside of the tsunami zone, on a knoll 10-12 feet above the water line. The shoreline in front of the property consists of mudflats, where the flat contour of the bottom of the bay is not conducive towards tsunami formation.

12. Substantially affects scenic vistas and view planes identified in county and state plans or studies.

The re-development of the prior existing residence does not substantially affect scenic vistas and view planes identified in county or state plans or studies.

13. Requires substantial energy consumption.

The energy consumption of the new single family dwelling is mitigated by a new 10 kW solar photovoltaic system, that is likely to offset almost all electricity consumption on the property.

The construction of the new residence features multiple layers of energy saving technologies, from solar PV, solar hot water, radiant barrier, insulation, skylights, solar tubes, LED recessed lighting, ceiling fans in every room, to Energy Star appliances.

VIII. AGENCIES AND PARTIES CONSULTED

The following agencies and groups were in contact with the applicant prior to the publication of this Draft Environmental Assessment.

City and County of Honolulu

Department of Planning and Permitting

Persons consulted: Arthur Challacombe, Randy Carvalho, Jamie Pierson, Joyce Shoji regarding Special Management Area Permit with Environmental Assessment.

Department of Emergency Management

Person consulted: Crystal Van Beelen, Community Liaison Officer, regarding emergency procedures in the event of a tsunami.

State of Hawaii

Department of Land and Natural Resources, Land Division

Person consulted: Barry Cheung, Land Agent

Department of Land and Natural Resources, Office of Conservation & Coastal Lands

Person consulted: Lauren Yasaka regarding jurisdiction, if any.

Department of Land and Natural Resources, Engineering Division, Flood Control and Dam Safety

Person consulted: Carol Tyau-Beam regarding Flood Hazard Assessment National Flood Insurance Program NFIP

Department of Health, Waste Water Branch

Person consulted: Mark Tomomitsu, Engineer, regarding septic system. Referred to Waste Water Branch Standard Comments. Exhibit 17

Department of Health, Clean Air Branch

Person consulted: Mark Saewong, Engineer, regarding control and minimizing fugitive dust. Referred to Clean Air Standard Comments. Exhibit 18

Department of Health, Clean Water Branch

Person consulted: Darryl Lum, Engineer, regarding control of storm runoff water into the receiving waters in Kaneohe Bay. Referred to Clean Water Standard Comments. Exhibit 19

Department of Health, Noise Branch

Person consulted: Kevin Nakamura, regarding any stationary equipment for construction, agricultural or industrial.

Federal Government

U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS)

Person consulted: Amy Koch, Acting Assistant Director for Soil Science, regarding any issue with prime farm land or hydronic soils (wetland), not applicable.

U.S. Army, Corps of Engineers

Person consulted: Vera Koskelo, regarding any issues, none found.

IX. LIST OF REFERENCES

City and County of Honolulu, Department of Land Utilization. 1987. Coastal View Study.

City and County of Honolulu, Department of Emergency Management. Crystal Van Beelen, Community Liaison Officer.

City and County of Honolulu, Department of Planning and Permitting. Honolulu Land Information System, <http://gis.hicentral.com/>

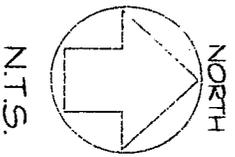
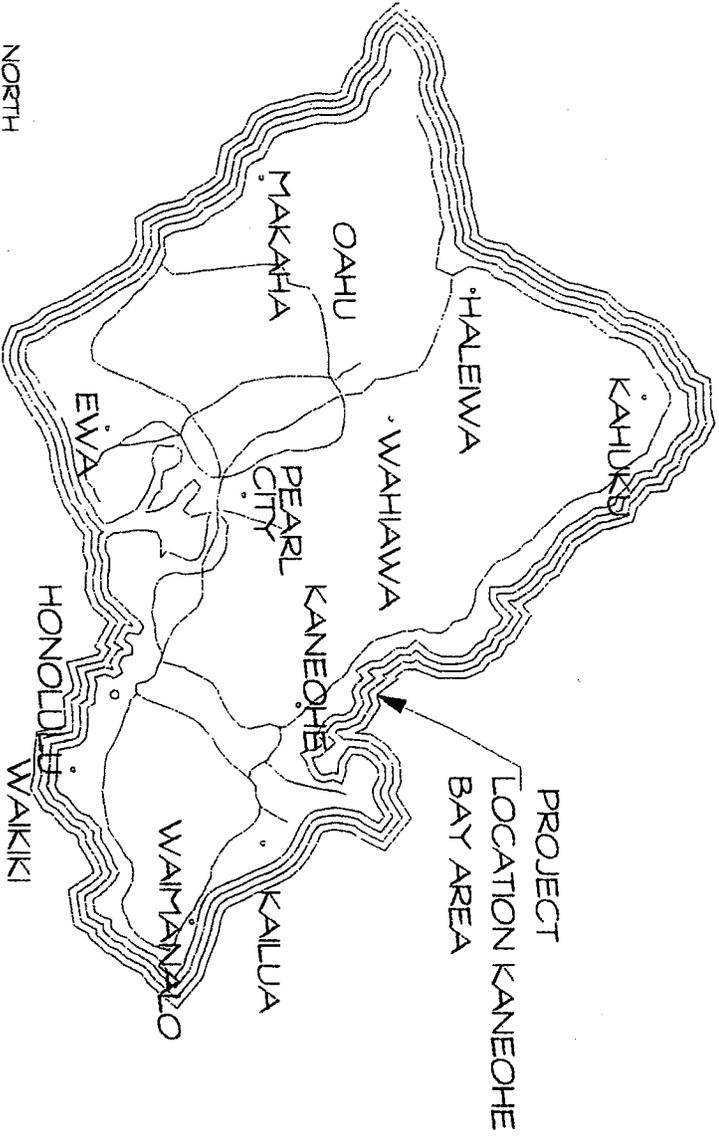
City and County of Honolulu, Department of Planning and Permitting. 2000. Koolaupoko Sustainable Communities Plan.

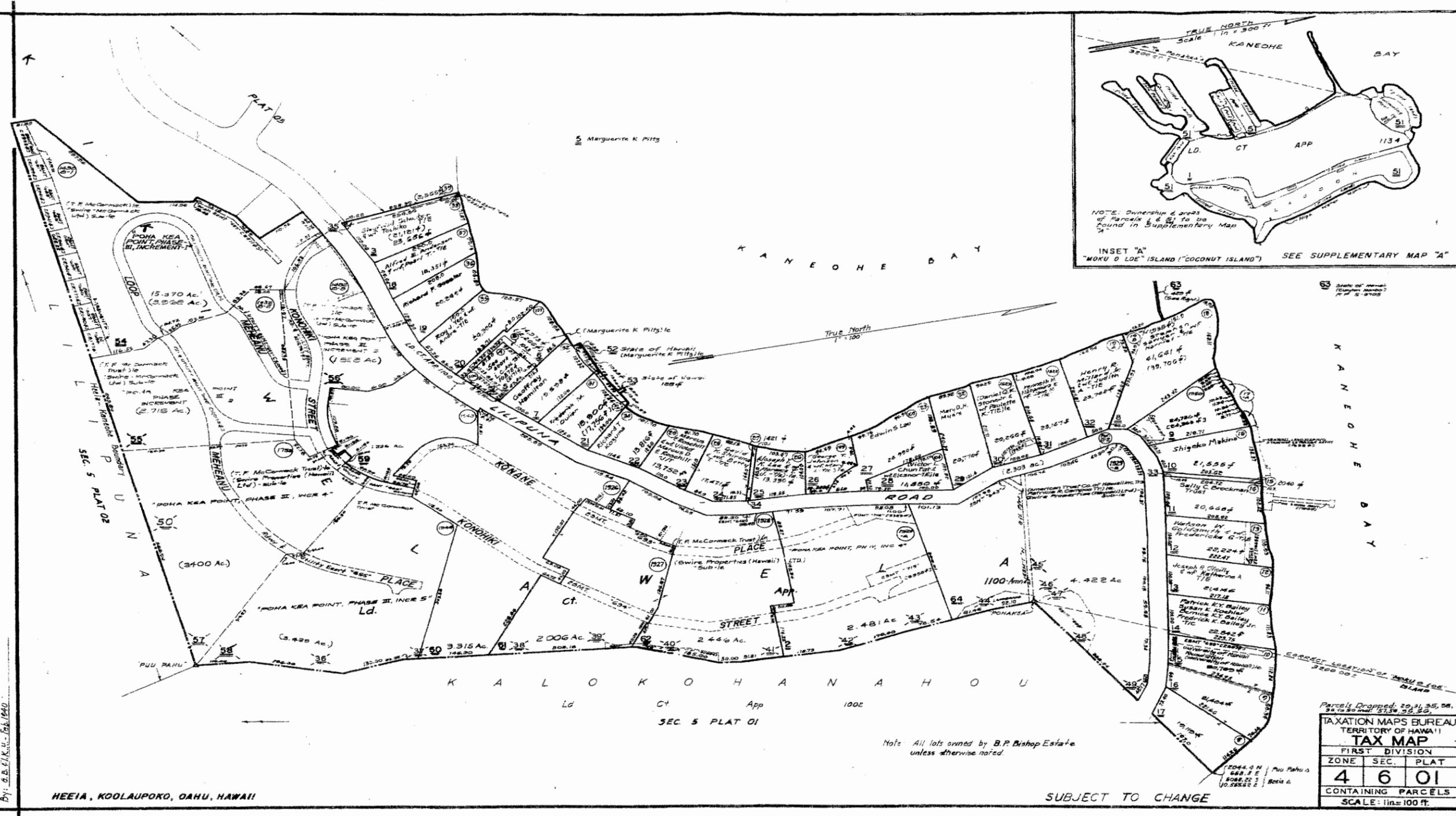
City and County of Honolulu, Department of Planning and Permitting, Land Use Ordinance.

Giambelluca TW, Chen Q, Frazier AG, Price JP, Chen Y-L, Chu P-S, Eischeid J., and Delparte, D. 2011. The Rainfall Atlas of Hawaii. <http://rainfall.geography.hawaii.edu>.

U.S. Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, <http://websoilsurvey.nrcs.usda.gov/app/Home Page.htm>

ISLAND LOCATION





HEEIA, KOOLAUPOKO, OAHU, HAWAII

SUBJECT TO CHANGE

By: G.B.E.K.U. 6/6/1940

Exhibit 2

City and County of Honolulu Special Management Area Map



Lilipuna Rd

Keope Pl

Ikonane Pl

Konohiki St

ESMT 74

IN SMA

OUTSIDE SMA

Meheanu Pl

Meheanu Pl

OUTSIDE SMA

ESMT 653 ESMT 654 ESMT 655 ESMT 657

35134 35127 35085 34195 35085 35089 35048 34935 35052 34039 34637 35028

34803

34921

35047

35074

Driveway ESMT

35074

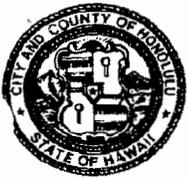
35074

35074

35074

Exhibit 3

Building Permit No. 662974 and 673470



DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET * HONOLULU, HAWAII 96813

Phone: (808) 768-8220 * Fax: (808) 768-6111

BUILDING PERMIT

FOR THE PERFORMANCE OF WORK UNDER THE
 BUILDING ELECTRICAL, PLUMBING, AND SIDEWALK CODES
 CHAPTERS 16, 17, 19, AND 20, RESPECTIVELY, AND UNDER CHAPTER 18
 (FEES AND PERMITS) OF THE REVISED ORDINANCES OF
 THE CITY AND COUNTY OF HONOLULU

LOCATION

Zone	Section	Plat	Parcel
4	6	001	007

46-107 LILIPUNA RD

19,598 Sq. Ft.

\$111.00

PERMIT FEE

Type of Payment(s)

Cash
 Check **X**
 Charge

Accepted Value of Work: **\$5,000**

Site Address (if other than primary):

**PROJECT: (BP #673470) [TMK: 46001007] WONG RESIDENCE -- Revisions to
 rock wall permit 662974
 change height from 5' tall to 6' tall, change material from CMU to
 CRM**

TYPE OF WORK

Retaining Wall Y

RIGHT OF WAY WORK

Driveway:	New:	Existing:	Private:
Sidewalk Types:	Curbing Types:	Driveway Types:	
Linear Ft. of Sidewalk:	Linear Ft. of Curbing:	Linear Ft. of Driveway:	

Please notify the Building Inspector listed below at least 24 hours before starting work in the Right-Of-Way.

GENERAL CONTRACTOR

WONG, CHARLES
 Contact Info: **450-0530**
 Lic. No.: **OWNER**

NOTES

Fence Clauses

All footings shall rest on firm, stable, undisturbed soil and built entirely within property. For the work under this building permit, the City shall not be responsible, or liable for any potential drainage problems resulting from the flow of surface waters, or the alteration or concentration of surface water run-off on any property. It is a civil matter between affected parties.

DATE ISSUED: 06/23/2011

Location Permit Issued: **FMB**

Location Application Created: **FMB**

Permission is hereby given to do above work according to conditions hereon and according to approved plans and specifications pertaining thereto, subject to compliance with ordinances and laws of the City and County of Honolulu and State of Hawaii.

FOR DIRECTOR OF DEPARTMENT OF PLANNING AND PERMITTING

THIS PERMIT MUST BE POSTED IN A CONSPICUOUS PLACE ON THE SITE DURING THE PROGRESS OF WORK. THIS PERMIT MAY BE REVOKED IF WORK IS NOT STARTED WITHIN 180 DAYS OF DATE OF ISSUANCE OR IF WORK IS SUSPENDED OR ABANDONED FOR 120 DAYS.

ELECTRICAL AND PLUMBING WORK TO BE DONE BY LICENSED PERSONS AS REQUIRED UNDER CHAPTER 448 E, HAWAII REVISED STATUTES:

NOTICE TO HOMEOWNERS: This is to inform all homeowners that improvements to your home may require approval by your Homeowners Association or authorized representative prior to the commencement of construction.

Approval by the Department of Planning and Permitting does not certify compliance with the Covenants, Conditions and Restrictions or other design restrictions administered and enforced by your Homeowners Association.

ALL CONSTRUCTION UNDER THIS BUILDING PERMIT IS SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL. IT SHALL BE THE DUTY OF THE PERSON DOING THE WORK AUTHORIZED BY THIS PERMIT TO NOTIFY THE BUILDING OFFICIAL THAT THE WORK IS READY FOR INSPECTION.

THE FOLLOWING ARE THE INSPECTORS ASSIGNED TO INSPECT THE CONSTRUCTION UNDER THIS PERMIT AND THEIR TELEPHONE NUMBERS:

	<u>Building Inspector</u>	<u>Electrical Inspector</u>	<u>Plumbing Inspector</u>
Name:	THOMAS AH SAM		
Phone No.:	(808) 768-8132		

APPLICATION NO.: **A2011-03-1091**

JobID: **42247923**
 ExternalID: **042207233-002**

PERMIT NO.: **673470**

Tax Map Key: 46-6-001-2007
Application Index No.: A2011-03-1091
Project Name: Wm
Building Permit No.: 073470

BUILDING DIVISION
DEPARTMENT OF PLANNING AND PERMITTING

**SUPPLEMENTAL INFORMATION FOR BUILDING OWNER,
PERMIT APPLICANT AND CONTRACTOR**

The following information should prove helpful in determining whether additional information should be obtained before starting your project.

- 1. A Phone Call May Save Your Life – if you have underground utilities, investigate before you start work. Call:
Hawaii One-Call Center 1-866-423-7287 or 811

According to the Hawaii One Call Law (Call Before You Dig) effective January 1, 2006, an excavator is required to call for utility toning at least 5 working days (excluding holidays and weekends) before starting excavation. One call does it all, as all the utility operators who have underground utilities will be notified. You will be required to pre-mark your proposed area of excavation with white paint.

For more information, go to www.callbeforeyoudig.org

Be Aware of the Sign, Asbestos, Lead-based Paint, Noise, and OSH Regulations

Sign Regulations – Building Division	768-8220
Asbestos and Lead-Based Paint	
Regulations – Department of Health	586-5800
Noise Regulations – Department of Health	586-4700
Occupational Safety & Health – DOSH	586-9100
Department of Labor	

- 2. Owners will be responsible to notify the Federal Aviation Administration (FAA) for structures which exceed 200 feet in height above ground line and certain structures within 4 miles from the nearest point of the nearest runway of each airport. (Single-family dwellings exempted). FAA telephone is 541-1243.
- 3. REMINDER – Owners should check their deeds, lease agreements, and/or association by-laws for any building restrictions.
- 4. HOUSE NUMBERING REQUIREMENTS - All main entrances to buildings shall be numbered with numbers at least two inches in height. Address signs shall not exceed one square foot. Emergency service agencies such as fire, police, ambulance, etc., can respond more readily with minimum delays when buildings are properly numbered.
- 5. To prevent termite entry, the building code requires openings around pipes or other penetrations in concrete slab-on-grade to be filled with non-shrink grout.
- 6. Plumbing and/or Electrical plans not checked. Project subject to inspection for code compliance.
- 7. Plumbing and/or electrical work shall be inspected and approved prior to concealment.
- 8. PROTECTION OF ADJOINING PROPERTY - The owner and contractor doing the excavation or fill shall be responsible to implement safety measures to protect adjoining properties, streets or natural watercourses from falling rocks, boulders, soil, debris and other dangerous objects.
- 9. EROSION AND SEDIMENT CONTROL – Since it is unlawful to discharge pollutants from the construction site, the owner and the contractor shall check the criteria for handling drainage discharges and ensure compliance with all appropriate regulations including Best Management Practices (BMP) requirements for construction sites. Call 768-8218 or 768-8219, or go to www.honoluluapp.org for more information.

[Signature]
Signature of Applicant

3/23/11
Date

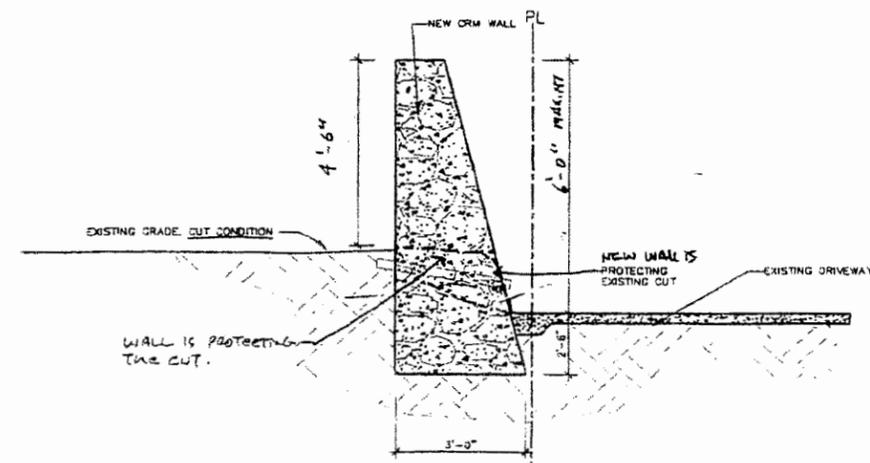
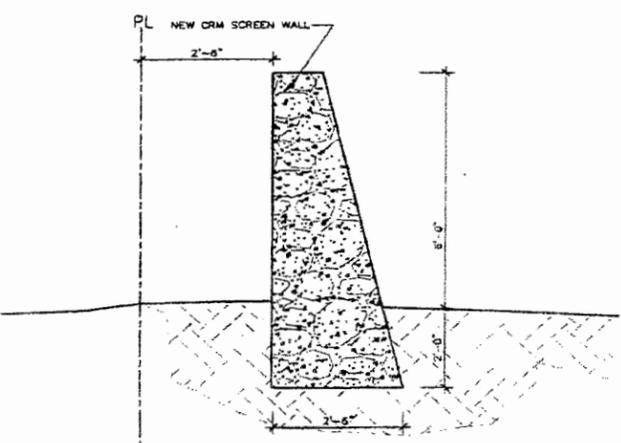
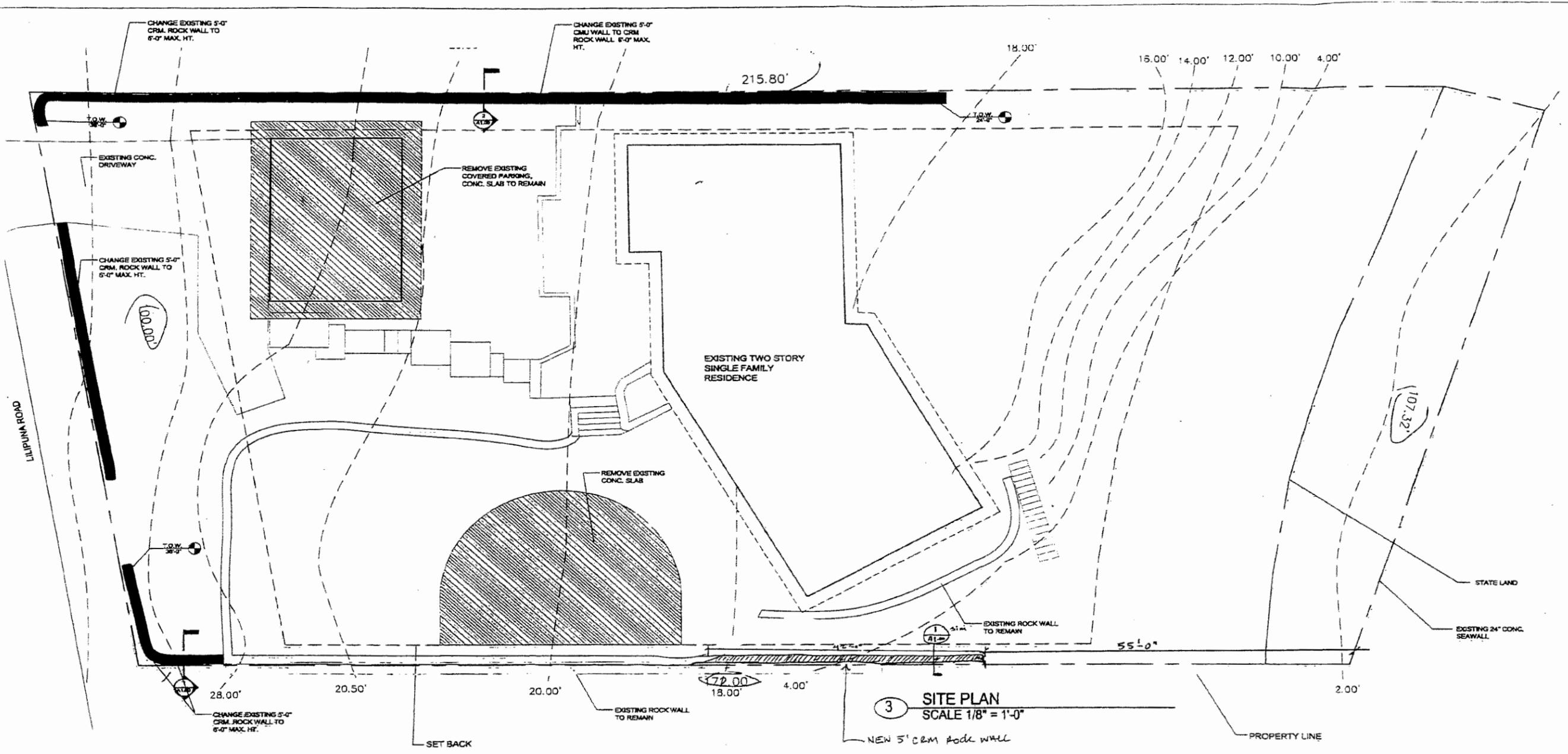
This work was prepared by me or under my direct supervision and I am a duly Licensed Professional Engineer in the State of Hawaii.
 Signature: *[Signature]*
 License Expiration Date: 4-30-2012

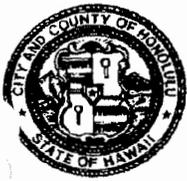
SITE IMPROVEMENTS
 for
Charles Wong
 46-107 Lilipuna Rd. Kaneohe, HI 96744
 Trmk 4-6-001:007

For permit 2-14-11
 verify all dimensions in field

Revised _____ Date _____

A-1.00





DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET * HONOLULU, HAWAII 96813
 Phone: (808) 768-8220 * Fax: (808) 768-6111

BUILDING PERMIT

FOR THE PERFORMANCE OF WORK UNDER THE
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 CHAPTERS 16, 17, 19, AND 20, RESPECTIVELY, AND UNDER CHAPTER 18
 (FEES AND PERMITS) OF THE REVISED ORDINANCES OF
 THE CITY AND COUNTY OF HONOLULU

LOCATION

Zone	Section	Plat	Parcel
4	6	001	007

46-107 LILIPUNA RD
19,598 Sq. Ft.

\$1,140.00

PERMIT FEE

Type of Payment(s)
 Cash
 Check X
 Charge

Accepted Value of Work: **\$30,000**

Site Address (if other than primary):

PROJECT: (BP #662974) [TMK: 46001007] WONG RESIDENCE - New crm retaining wall (various heights 8'-6' max.) 6'-0" max. at required yard setback unless retaining a cut at front; front/left and at right/rear portion of property. New on grade concrete steps at right/rear portion of property and new 6'-0" high max. cmu retaining wall at left side of property.

TYPE OF WORK

Fence Y

Retaining Wall Y

RIGHT OF WAY WORK

Driveway: New: Existing: Private:
 Sidewalk Types: Curbing Types: Driveway Types:
 Linear Ft. of Sidewalk: Linear Ft. of Curbing: Linear Ft. of Driveway:

Please notify the Building Inspector listed below at least 24 hours before starting work in the Right-Of-Way.

GENERAL CONTRACTOR

WONG, CHARLES
 Contact Info: **450-0530**
 Lic. No.: **owner**

NOTES

Fence Clauses

For the work under this building permit, the City shall not be responsible, or liable for any potential drainage problems resulting from the flow of surface waters, or the alteration or concentration of surface water run-off on any property. It is a civil matter between affected parties. All footings shall rest on firm, stable, undisturbed soil and built entirely within property. For the work under this building permit, the City shall not be responsible, or liable for any potential drainage problems resulting from the flow of surface waters, or the alteration or concentration of surface water run-off on any property. It is a civil matter between affected parties.

DATE ISSUED: 10/26/2010

Permission is hereby given to do above work according to conditions hereon and according to approved plans and specifications pertaining thereto, subject to compliance with ordinances and laws of the City and County of Honolulu and State of Hawaii.

Location Permit Issued: **FMB**

Location Application Created: **FMB**

FOR DIRECTOR OF DEPARTMENT OF PLANNING AND PERMITTING

THIS PERMIT MUST BE POSTED IN A CONSPICUOUS PLACE ON THE SITE DURING THE PROGRESS OF WORK. THIS PERMIT MAY BE REVOKED IF WORK IS NOT STARTED WITHIN 180 DAYS OF DATE OF ISSUANCE OR IF WORK IS SUSPENDED OR ABANDONED FOR 120 DAYS.

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THE FOLLOWING ARE THE INSPECTORS ASSIGNED TO INSPECT THE CONSTRUCTION UNDER THIS PERMIT AND THEIR TELEPHONE NUMBERS:

	<u>Building Inspector</u>	<u>Electrical Inspector</u>	<u>Plumbing Inspector</u>
Name:	THOMAS AH SAM		

APPLICATION NO.: **A2010-08-0435**

JobID: **39984545**
 ExternalID: **039984072-002**

PERMIT NO.: **662974**

Tax Map Key: 4-6-001: 007
Application Index No.: A200-08-0435
Project Name: Wong
Building Permit No.: 122474

BUILDING DIVISION
DEPARTMENT OF PLANNING AND PERMITTING

**SUPPLEMENTAL INFORMATION FOR BUILDING OWNER,
PERMIT APPLICANT AND CONTRACTOR**

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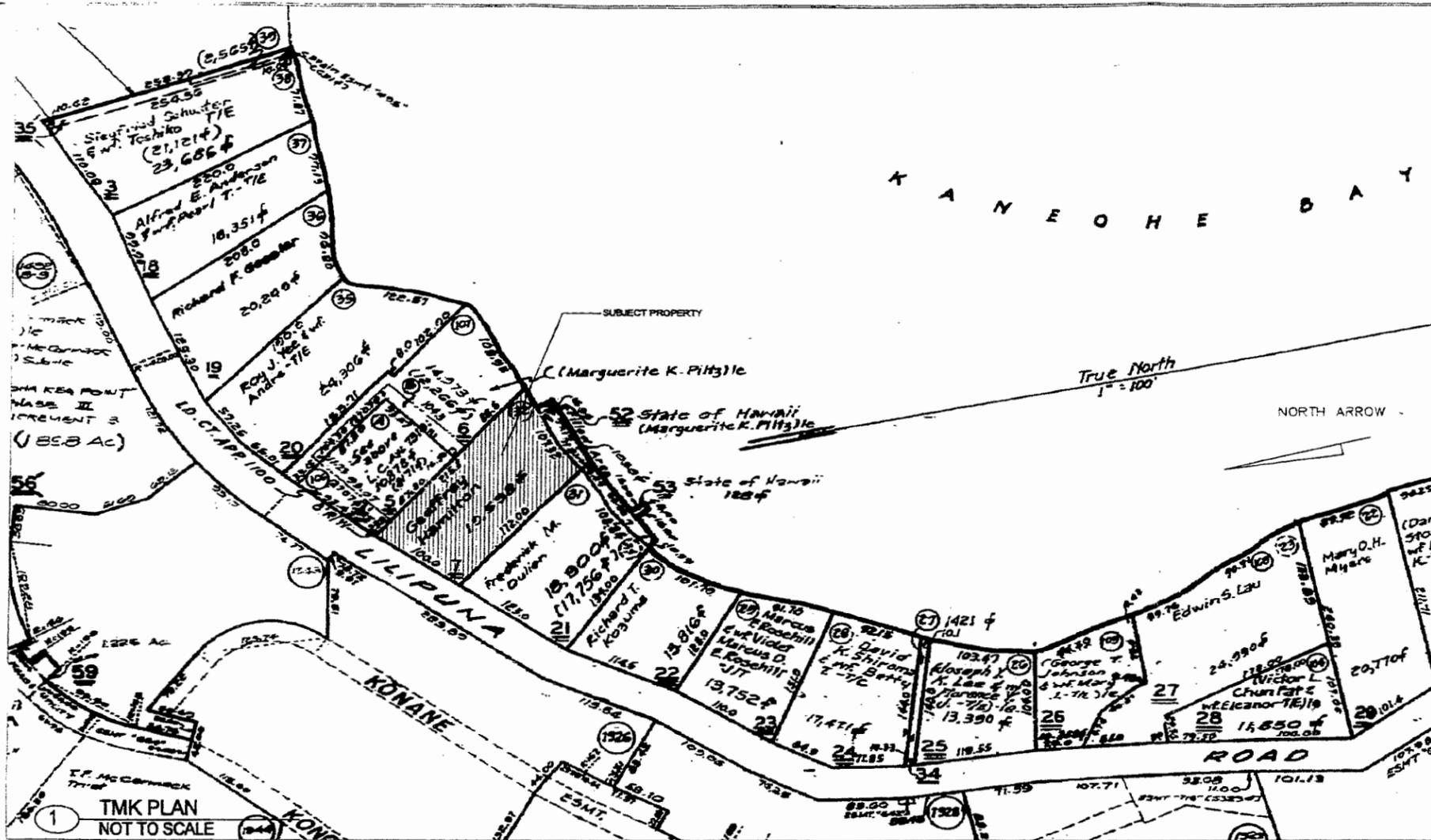
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For more information, go to www.callbeforeyoudig.org

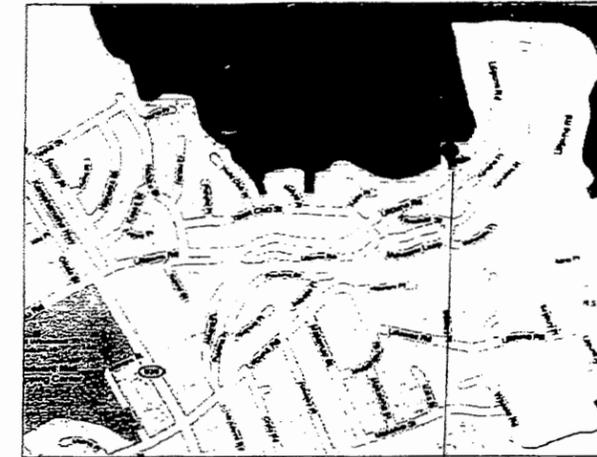
Be Aware of the Sign, Asbestos, Lead-based Paint, Noise, and OSH Regulations
Sign Regulations – Building Division 768-8220
Asbestos and Lead-Based Paint
Regulations – Department of Health 586-5800
Noise Regulations – Department of Health 586-4700
Occupational Safety & Health – DOSH 586-9100
Department of Labor

2. Owners will be responsible to notify the Federal Aviation Administration (FAA) for structures which exceed 200 feet in height above ground line and certain structures within 4 miles from the nearest point of the nearest runway of each airport. (Single-family dwellings exempted). FAA telephone is 541-1243.
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7. Plumbing and/or electrical work shall be inspected and approved prior to concealment.
8. **PROTECTION OF ADJOINING PROPERTY** - The owner and contractor doing the excavation or fill shall be responsible to implement safety measures to protect adjoining properties, streets or natural watercourses from falling rocks, boulders, soil, debris and other dangerous objects.
9. **EROSION AND SEDIMENT CONTROL** – Since it is unlawful to discharge pollutants from the construction site, the owner and the contractor shall check the criteria for handling drainage discharges and ensure compliance with all appropriate regulations including Best Management Practices (BMP) requirements for construction sites. Call 768-8218 or 768-8219, or go to www.honoluluudpp.org for more information.


Signature of Applicant
10/25/10
Date

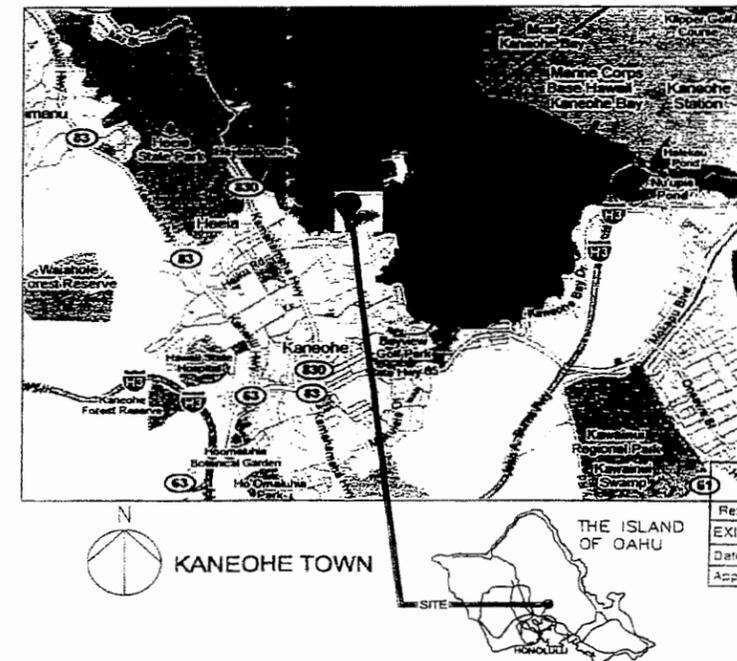


LOCATION MAP



46-107 Lilipuna rd. TMK: 4-6-001:007 SUBJECT PROPERTY

VICINITY MAP



45-449 Hoene Pl.
Kaneohe, HI 96744
808.741.6811 | 206.0422
www.innovativehabitat.com

This work was prepared by me or under my supervision and I am a duly licensed professional engineer in the State of Hawaii. I am not providing any services outside the scope of my license.
Signature: _____
License Expiration Date: 4-30-2012



New Addition for
Charles Wong
46-107 Lilipuna Rd.
Kaneohe, HI 96744
Tmk 4-6-001:007

APPLICABLE CODES

- A. 2003 International Building Code
- B. 2003 International Existing Building Code
- C. 2003 International Residential Code
- D. 2003 Int'l Fire Code
- E. 2003 Int'l Plumbing Code
- F. 2003 Int'l Mechanical Code
- G. Department of Health, State of Hawaii, Chapter 39 Air Conditioning & Ventilation 4.
- H. Department of Health, State of Hawaii, Chapter 11 Sanitation
- I. 2005 National Electrical Code
- J. 2002 BWS Water System Standards
- K. 1993 Design Standards of the Department of Wastewater Management, Volume 1
- L. 2000 Rules Related to Storm Drainage Standards
- M. Chapter 21 of the City and County of Honolulu Department of Planning and Permitting.
- N. 1999 Rules Related to Soil Erosion Standards and Guidelines
- O. 1994 and as amended Hawaii Standard Specifications for Road, Bridge, and Public Works Construction
- P. 1984 and as amended Standard Details for Public Works Construction
- Q. 1986 and as amended Standard Specifications for Public Works Construction
- R. HAR Chapter 11-55 Water Pollution Control, NPDES General Permit Coverage
- S. 1990 American with Disabilities Guide Lines
- T. 1996 American Society of Mechanical Engineers
- U. ASME A17.1-1996
- V. Hawaii Elevator Safety Standards (HESS) 1998
- W. ADAAG-NEC (Latest Edition)

INDEX OF DRAWINGS

- T-1.0 PROJECT DATA/EXISTING TMK PLAN
- A1.01 EXISTING SITE PLAN
- A1.01 PROPOSED SITE PLAN
- A1.02 PROPOSED SITE SECTION AND WALL SECTIONS

LEGAL DESCRIPTIONS

TMK: 4-6-001:007 Area (sq ft): 19598 Area (acres): Ohana: (None)
Description Council District Effective 20033 - Ikaika
Anderson Development Plan Areas Koolauapoko
Flood Zones X - Beyond 500 Year Flood Plain Height Limit 25' unless sloping
Historic Site Register: None
Lot Restriction: None
Neighborhood Boards: 30 - KANEOHE
MA / Shoreline Special Management Area
Not in Special District
State Land Use: Urban District
Street Setback: NONE
Zoning R-10 Residential Address List: 46-107 LILIPUNA RD

SCOPE OF WORK

1. REMOVE EXISTING CMU WALL AT WEST SIDE OF PROPERTY
2. REMOVE EXISTING WOOD DECK
3. NEW CMU WALL MAX. HT. 5'-4"
4. NEW ROCK WALL MAX. HT. 7'-5"
5. NEW ROCK WALL MAX. HT. 3'-0"
6. NEW ROCK FENCE WALL MAX. HT. 5'-5"

GRADING CALCULATIONS

Cut: 12.97 C.Y.
Fill: 12.7 C.Y.
FILL TO BE REMOVED AND DEPOSITED AT SEPERATE CONSTRUCTION SITE: 0.0 C.Y.

PROJECT CONTACTS

CLIENT/OWNER:
Mr. Charles Wong
46-107 LILIPUNA RD.
KANEKOE, HI 96744

STRUCTURAL ENGINEER:
JPB ENGINEERING
JONATHAN BRANDT S.E.
433 EHAKO PL
HONOLULU, HI 96817
808-341-5318

ARCHITECT/PLANS MAKER:
INNOVATIVE HABITAT LLC
45-449 HOENE PL
KANEKOE, HI 96744
808-741-6811

CITY AND COUNTY STAMPS

BUILDING FILE COPY

DEPARTMENT OF PLANNING AND PERMITTING
BUILDING DIVISION
CITY AND COUNTY OF HONOLULU

ACCEPTANCE: _____ DATE: 7/9/2010 (S)
PRINTING: R10
ELECTRICAL: _____
PLUMBING: _____
BUILDING: _____

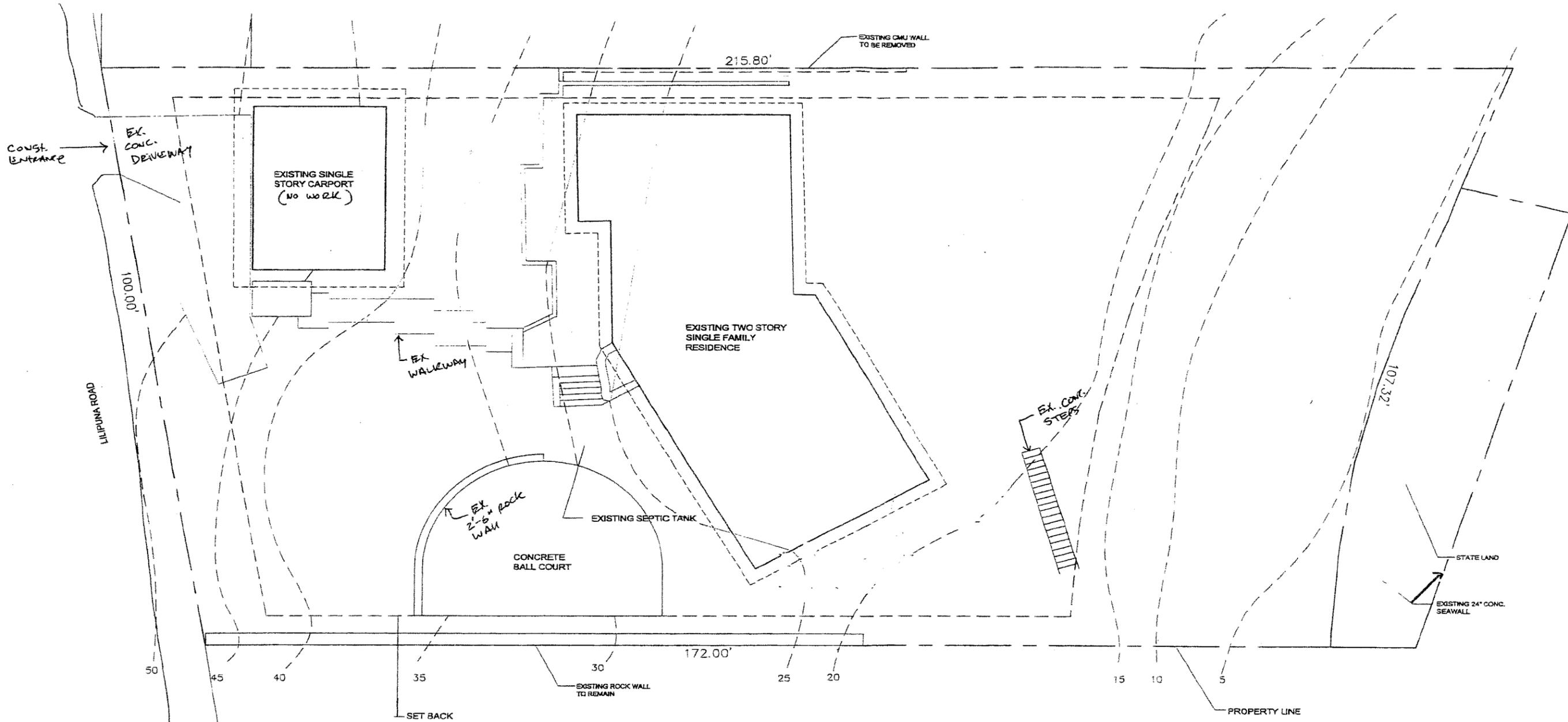
PROJECT: WONG
TMK: 4-6-001:007 PERMIT: #66297 (10/10/10)

DEPARTMENT OF HEALTH
Environmental Management Division
Wastewater Branch
Re: Individual Wastewater Systems (IWS)
EXISTING IWS APPROVED FOR USE
Date: 6-13-10
Approved by: _____

For permit 6-25-10
Verify all dimensions in field

Revised _____ Date _____

T-1



1 EXISTING SITE PLAN
SCALE 1/8" = 1'-0"

Innovative Habitat
 PLANNING • DESIGN
 45-449 hoene pl.
 Kaneohe, HI 96744
 808.741.8811 | 236.0422
 www.innovativehabitat.com

This work was prepared by me or under my direct supervision and construction of this project will be under my observation.
 Signature: _____ License #/Expiration Date: 4-30-2012



New Addition for
Charles Wong
 46-107 Lilipuna Rd.
 Kaneohe, HI 96744
 Trmk 4-6-001:007

For permit 8-25-10
 verify all dimensions in field

Revised _____ Date _____

A-1.00

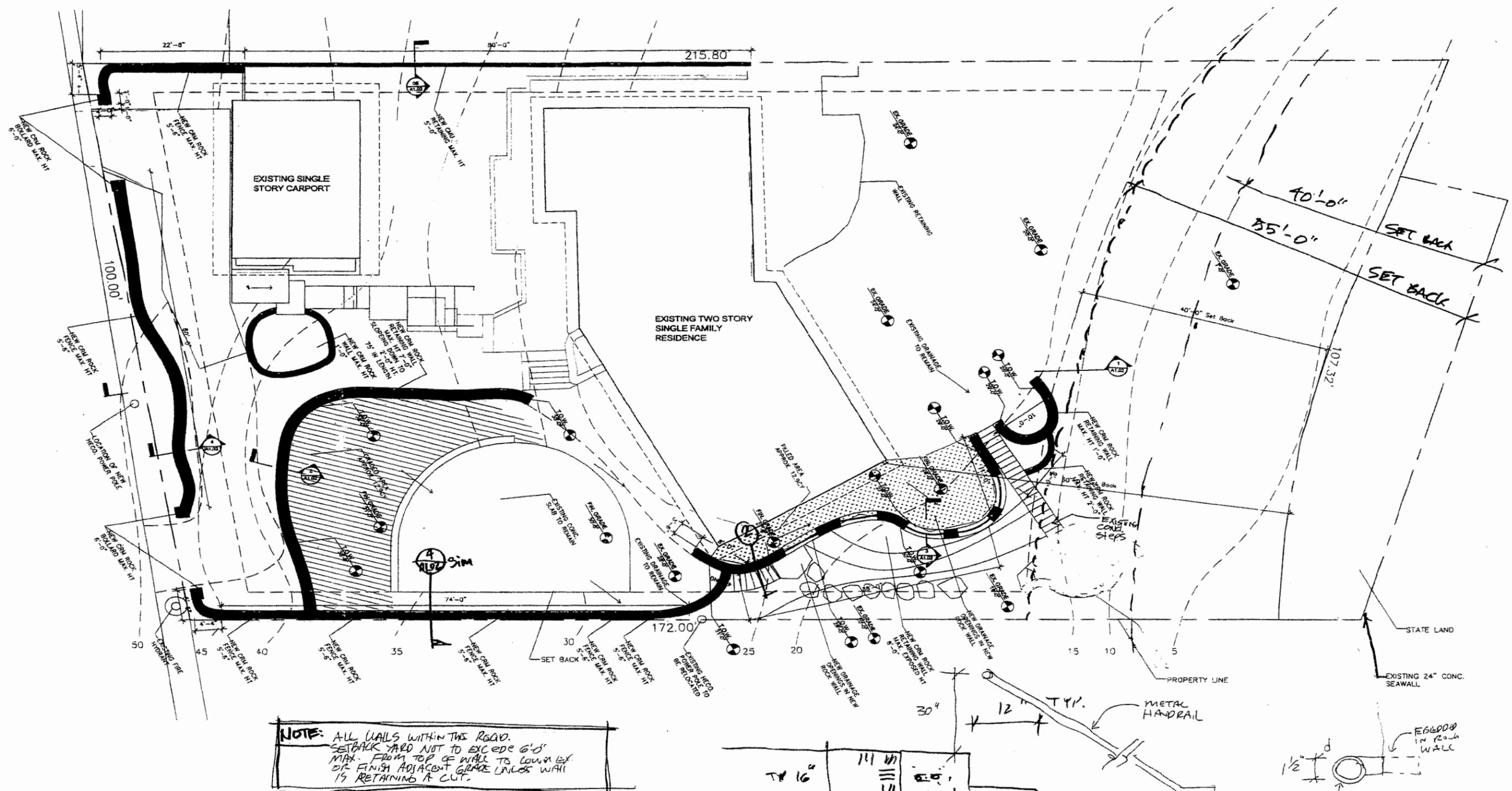


New Addition for
 Charles Wong
 46-107 Lilipuna Rd.
 Kaneohe, HI 96744
 Trmk 4-6-001:007

For permit 2-25-10
 verify all dimensions in field

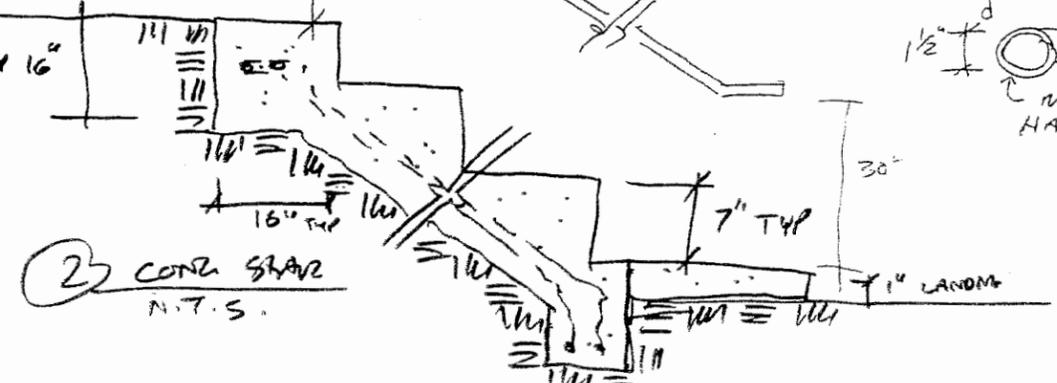
Revised _____ Date _____

A-1.01



NOTE: ALL WALLS WITHIN THIS ROAD. SETBACK YARD NOT TO EXCEED 6'-0" MAX. FROM TOP OF WALL TO LOWEST OR FINISH ADJACENT GRADE UNLESS WALL IS RETAINING A CUT.

1 PROPOSED SITE PLAN
 SCALE 1/8" = 1'-0"



2 CONCR STAIR
 N.T.S.

This work was prepared by me or under my supervision and I am a duly Licensed Professional Engineer in the State of Hawaii. My License No. is 11183-S.
 Signature: [Signature]
 License Expiration Date: 4-30-2012



New Addition for
 Charles Wong
 46-107 Lilipuna Rd.
 Kaneohe, HI 96744
 Tmk 4-6-001:007

For permit 9-25-10
 verify all dimensions in field

Revised Date
 10-21-10

A-1.02

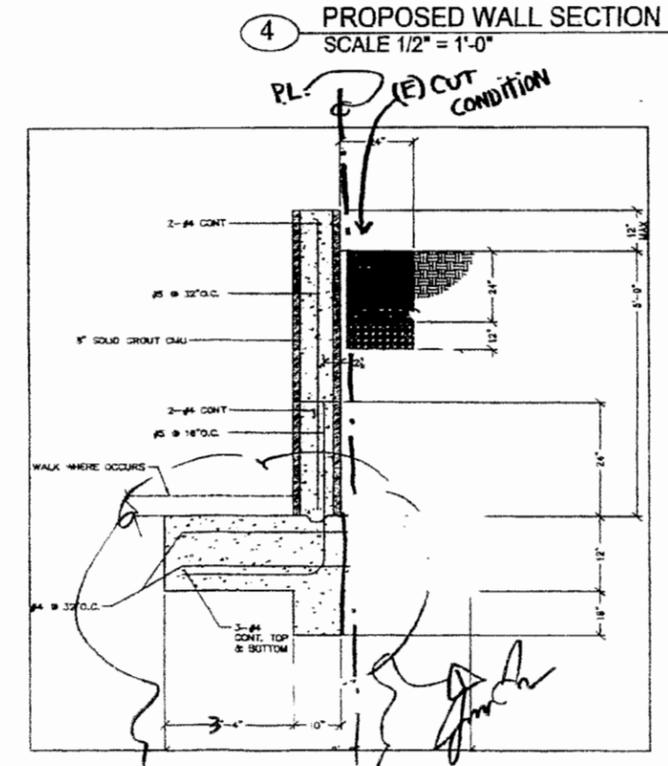
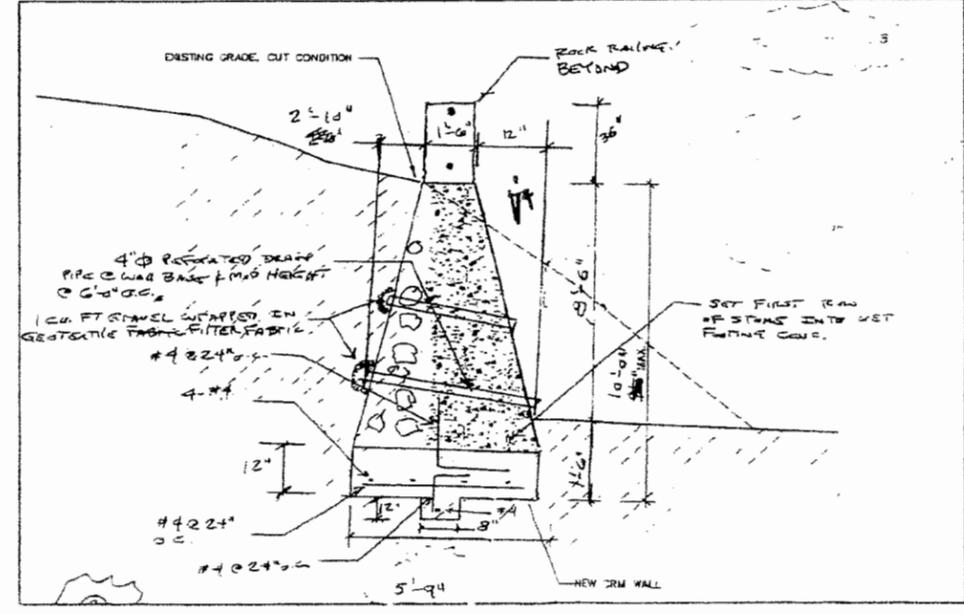
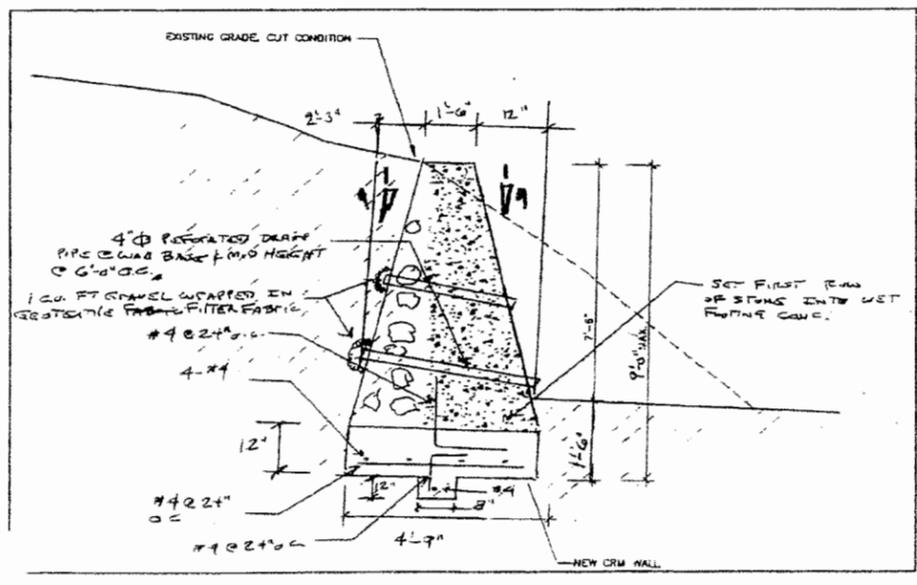
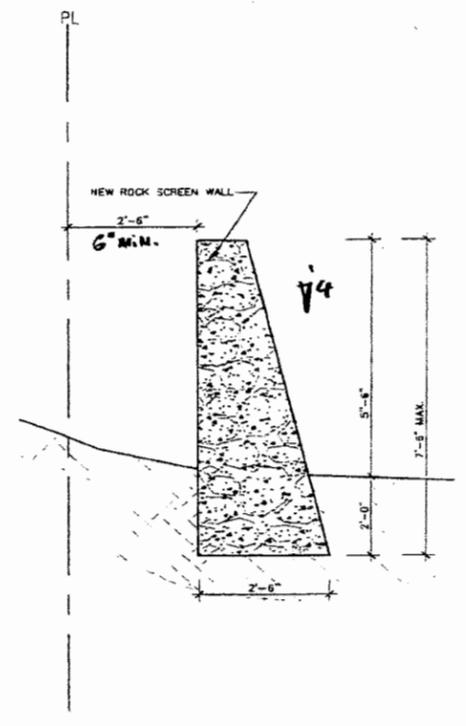
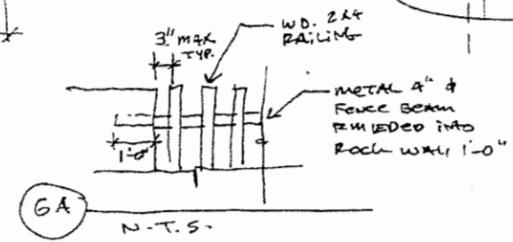
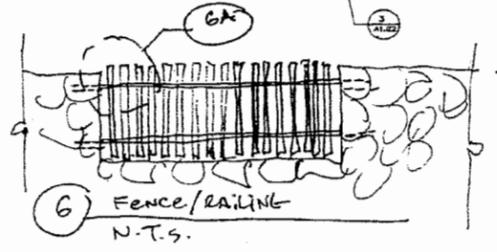
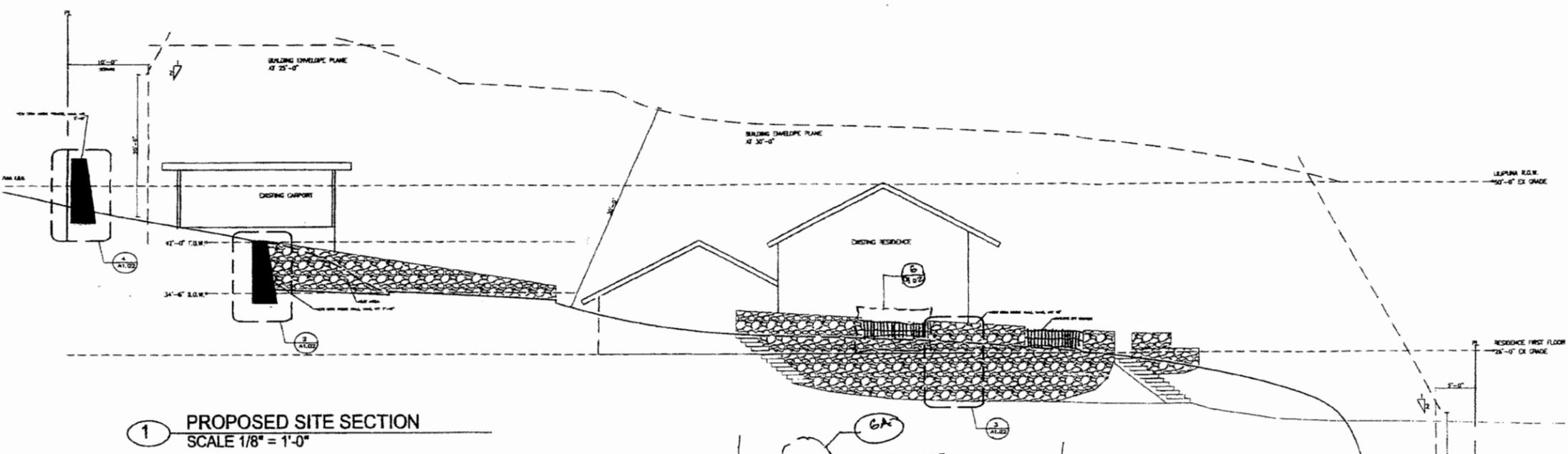
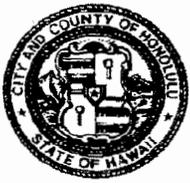


Exhibit 4

Building Permit No. 695224



DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET * HONOLULU, HAWAII 96813
 Phone: (808) 768-8220 * Fax: (808) 768-6111

BUILDING PERMIT

FOR THE PERFORMANCE OF WORK UNDER THE
 BUILDING ELECTRICAL, PLUMBING, AND SIDEWALK CODES
 CHAPTERS 16, 17, 19, AND 20, RESPECTIVELY, AND UNDER CHAPTER 18
 (FEES AND PERMITS) OF THE REVISED ORDINANCES OF
 THE CITY AND COUNTY OF HONOLULU

LOCATION

Zone	Section	Plat	Parcel
4	6	001	007

46-107 LILIPUNA RD

19,598 Sq. Ft.

\$1,040.00

PERMIT FEE

Type of Payment(s)

Cash

Check

Charge

Accepted Value of Work: **\$60,000**

Site Address (if other than primary):

PROJECT: (BP #695224) [TMK: 46001007] CHARLES WONG - New CRM fence walls 6'-0" maximum hgt at front of property, new CMU retaining walls 6'-0" maximum hgt some with new 3'-0" maximum hgt chainlink fence on top. Demolish existing driveway approach and construct two new driveway approaches to include new storage basement 2012/IBP01668

TYPE OF WORK

Fence Y

Retaining Wall Y

Other storage

RIGHT OF WAY WORK

Driveway: New: **X**

Existing:

Private:

Sidewalk Types:

Curbing Types:

Driveway Types: **Concrete**

Linear Ft. of Sidewalk:

Linear Ft. of Curbing:

Linear Ft. of Driveway: **13' + 12' = 25'**

Please notify the Building Inspector listed below at least 24 hours before starting work in the Right-Of-Way.

GENERAL CONTRACTOR

WONG, CHARLES

Contact Info: **(808) 450-0530**

Lic. No.:

NOTES

Fence Clauses

For the work under this building permit, the City shall not be responsible, or liable for any potential drainage problems resulting from the flow of surface waters, or the alteration or concentration of surface water run-off on any property. It is a civil matter between affected parties. All footings shall rest on firm, stable, undisturbed soil and built entirely within property. For the work under this building permit, the City shall not be responsible, or liable for any potential drainage problems resulting from the flow of surface waters, or the alteration or concentration of surface water run-off on any property. It is a civil matter between affected parties.

DATE ISSUED: 06/25/2012

Location Permit Issued: **FMB**

Location Application Created: **Kapolei**

Permission is hereby given to do above work according to conditions hereon and according to approved plans and specifications pertaining thereto, subject to compliance with ordinances and laws of the City and County of Honolulu and State of Hawaii.

FOR DIRECTOR OF DEPARTMENT OF PLANNING AND PERMITTING

THIS PERMIT MUST BE POSTED IN A CONSPICUOUS PLACE ON THE SITE DURING THE PROGRESS OF WORK. THIS PERMIT MAY BE REVOKED IF WORK IS NOT STARTED WITHIN 180 DAYS OF DATE OF ISSUANCE OR IF WORK IS SUSPENDED OR ABANDONED FOR 120 DAYS.

ELECTRICAL AND PLUMBING WORK TO BE DONE BY LICENSED PERSONS AS REQUIRED UNDER CHAPTER 448 E, HAWAII REVISED STATUTES.

NOTICE TO HOMEOWNERS: This is to inform all homeowners that improvements to your home may require approval by your Homeowners Association or authorized representative prior to the commencement of construction.

Approval by the Department of Planning and Permitting does not certify compliance with the Covenants, Conditions and Restrictions or other design restrictions administered and enforced by your Homeowners Association.

ALL CONSTRUCTION UNDER THIS BUILDING PERMIT IS SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL. IT SHALL BE THE DUTY OF THE PERSON DOING THE WORK AUTHORIZED BY THIS PERMIT TO NOTIFY THE BUILDING OFFICIAL THAT THE WORK IS READY FOR INSPECTION.

THE FOLLOWING ARE THE INSPECTORS ASSIGNED TO INSPECT THE CONSTRUCTION UNDER THIS PERMIT AND THEIR TELEPHONE NUMBERS:

Building Inspector
 Name: THOMAS AH SAM

Electrical Inspector
 LANCE PROCHNOW

Plumbing Inspector

APPLICATION NO.: **A2012-02-0402**

JobID: **44535542**
 ExternalID: **044530785-002**

PERMIT NO.: **695224**

PROPOSED NEW CONCRETE PARKING AND BASEMENT FOR:

MR. CHARLES WONG

46-107 LILIPUNA RD., KANEHOE 96744

TMK: 4-6-01-07



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND ORIGINALLY INTENDED FOR THIS PROJECT. IT WILL BE UNDER MY SUPERVISION.

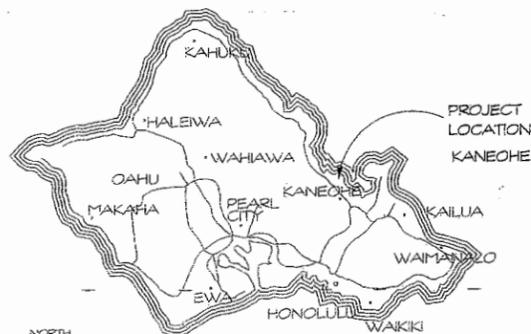
EXP. APR. 13, 2011



P.O.B. 471
HONOLULU, HI 96809

EMAIL: PERMITS@PEHAWAII.COM
PH: # 808 349-0721

LOCATION MAP



VICINITY MAP

STOP
DO NOT ALTER THESE PLANS
Revisions must be submitted separately

APPROVED
JFP

GENERAL NOTES:

1. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH I.B.C., STATE AND LOCAL BUILDING CODES.
2. CONTRACTOR SHALL VERIFY APPROVED JOB-SITE, COMMENCEMENT, CONTRACTOR SHALL NOTIFY ARCHITECT OR ENGINEER OF ANY CONFLICTS PRIOR.
3. THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACING AND SHORING FOR ALL STRUCTURAL MEMBERS DURING ALL PHASES OF CONSTRUCTION.
4. ANY CONDITIONS MATERIALS, DEVICES OR DETAILS NOT SPECIFICALLY SHOWN ON THE DRAWINGS OR SPECIFIED SHALL BE CLARIFIED WITH THE ARCHITECT OR ENGINEER BEFORE CONSTRUCTION, INSTALLATION AND COMPLETION.
5. GENERAL CONTRACTOR SHALL PROTECT ADJOINING LAND, BUILDING AND OTHER IMPROVEMENTS SITUATED THEREON. ANY DAMAGES OCCURRED SHALL BE REPAIRED AT NO COST TO THE OWNER OR ARCHITECT. THE CONTRACTOR SHALL INSTALL TEMPORARY DUST CONTROL SCREENS AS REQUIRED.
6. ALL FINISHED GRADE LEVELS AND/OR SPOT ELEVATIONS TO BE APPROXIMATE. CONTRACTORS SHALL VERIFY ALL CONDITIONS.
7. CONTRACTOR SHALL VERIFY THE SITE AND ALL INFORMATION INCLUDING DISTANCE, LOT DIMENSIONS AND EXACT PROPERTY LINES ACCURATELY LOCATE PROPOSED PROJECT WITHIN THE MINIMUM REQUIRED SETBACK AREA.
8. IF SOFT OR EXPANSIVE SOIL IS ENCOUNTERED WITH SOIL SHALL BE REMOVED AND REPLACED WITH NON-EXPANSIVE STRUCTURAL FILL COMPACTED TO 95% AS PER ASTM D-1557-78.
9. THE ARCHITECT/ENGINEER IS NOT RESPONSIBLE FOR CONTRACTOR'S METHODS, PROCEDURES, OR CONDITIONS ON JOBSITE THAT MAY DEVELOP.
10. THE DRAWINGS INTEND TO SHOW FINISHED CONCEPT ONLY. CHANGES TO THE DRAWINGS MAY BE REQUIRED DUE TO UNFORESEEN CONDITIONS.

JOB SITE COPY

DEPARTMENT OF PLANNING AND PERMITTING BUILDING DIVISION CITY AND COUNTY OF HONOLULU		DATE
ACCEPTANCE:		19 APR 2011
ZONING: R-10		
ZONING CODE:		
ELECTRICAL:		
PLUMBING:		
BUILDING:		
PROJECT: WONG		
TMK: 4-6-01-07	PERMIT: 695224	
APPLICATION #: A702-02-0402		

STOP
DO NOT ALTER THESE PLANS
Revisions must be submitted separately

PROPOSED NEW FOR: CONCRETE PARKING AND BASEMENT FOR:

MR. CHARLES WONG

46-107 LILIPUNA RD., KANEHOE 96744

TMK: 4-6-01-07

JOB NO#
2012-01-07

SHEET

T-1

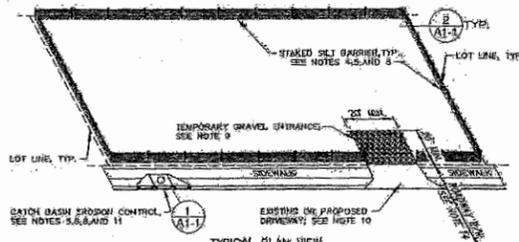
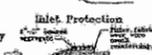
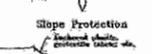
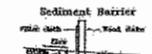
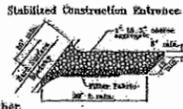
OF 6 SHEETS

695224

EROSION CONTROL GUIDELINES

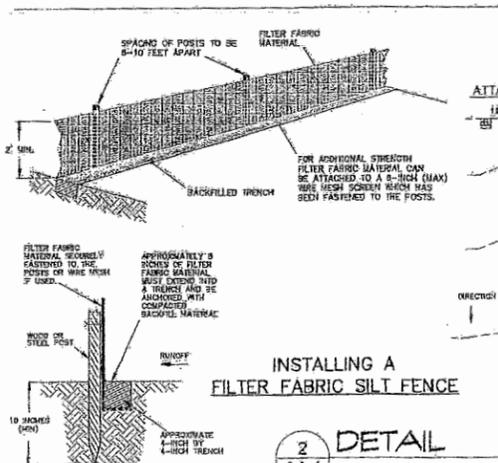
FIGURE 3
MINIMUM BMP CHECKLIST FOR SMALL PROJECTS

- STABILIZED CONSTRUCTION ENTRANCE**
All points of egress and ingress to a site shall be protected with a stabilized construction entrance.
- STOCKPILES**
Stockpiles shall not be located in drainage ways or other areas of concentrated flow. Sediment trapping devices such as fences, traps, basins or barriers shall be used around the base of all stockpiles.
- DUST CONTROL**
Dust control should be applied to reduce dust emissions. The Contractor, at his own expense, shall keep the project area and surrounding areas free from dust nuisance. The work shall be in accordance with the air pollution control standards contained in Hawaii Administrative Rules Chapter 11-60, "Air Pollution Control".
- SEDIMENT BARRIERS OR TRAPS**
Sediment trapping devices such as fences, traps, basins or barriers shall be used down slope of all disturbed areas and around the base of all material stockpiles.
- SLOPE PROTECTION**
Surface flow from above an exposed slope shall not be allowed to flow over the slope without protection. Slope protection shall be used on areas with slopes greater than 50% and on areas of moderate slopes that are prone to erosion.
- INLET PROTECTION**
All storm drain inlets on site, and those offsite which may receive runoff from the site shall use an inlet protection device.
- TEMPORARY STABILIZATION**
Is not required when the disturbed area will be worked within a 14 day period. Stabilization is required for disturbed areas at final grade and for those areas that will not be worked within a 14 day period.
- PERMANENT STABILIZATION**
All disturbed areas shall be permanently stabilized prior to removing erosion and sediment measures. All temporary erosion and sediment control measures shall be removed within 30 days after final site stabilization or after the temporary measures are no longer needed. Trapped sediment and areas of disturbed soil which result from the removal of the temporary measures shall be immediately permanently stabilized.

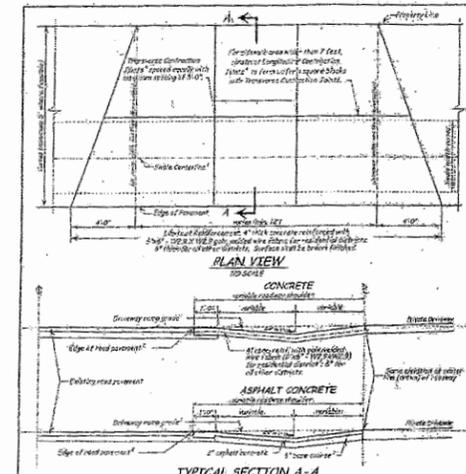


- NOTES**
- NON-COMPLIANCE WITH THE ITEMS LISTED OR SHOWN ON THIS DETAIL MAY RESULT IN A "STOP WORK" ORDER.
 - THE PURPOSE OF THIS DETAIL IS TO ASSIST THE DEVELOPER/BUILDER MEET THE APPLICABLE REQUIREMENTS.
 - THIS DETAIL IS FOR CONSTRUCTION SITES OF LESS THAN ONE ACRE.
 - THE SILT BARRIERS SHALL BE INSTALLED ONE FOOT INSIDE THE PROPERTY LINE OR TWO FEET FROM THE SIDEWALK AS SHOWN ABOVE FOR SILT BARRIERS REQUIREMENTS AND INSTALLATION REQUIREMENTS, SEE STANDARD DETAIL- STABILIZED SILT BARRIERS, DRAWING 100-100-00.
 - INSPECT AND MAINTAIN ALL EROSION CONTROL DEVICES DAILY AND/OR AFTER A RAINFALL.
 - FOR CLOSURE SILENT FILTER REQUIREMENTS, SEE STANDARD DETAIL- CLOSURE SILENT FILTER FOR EROSION CONTROL AT CATCH BASIN, DMS, DET TRAP.
 - EXISTING GRASS VEGETATION SHALL BE MAINTAINED AT A 10 INCH HEIGHT OR LESS AS PER CITY CODE.
 - ALL SOIL EROSION CONTROL DEVICES MUST REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED. ALL DISTURBED AREAS SHALL BE SOILED AFTER FINAL GRADING.
 - THE TEMPORARY GRAVEL ENTRANCES 8' HIGH MINIMUM OR 4' x 4' STONES COMPACTED.
 - IF THERE IS NO EXISTING DRIVEWAY OR AN ALTERNATE INGRESS/EGRESS IS TO BE USED DURING CONSTRUCTION THIS METHOD OF ACCESS SHALL CONFORM TO THE "TEMPORARY GRAVEL ENTRANCE" AS SHOWN ABOVE.
 - REGULARLY REMOVE COLLECTED DEBRIS AND DEBRIS FROM THE SILT BARRIERS AND OUTLET FLOW LINE.
 - FOR ALL SAND AND SOIL THROUGH THE SUSTAINMENT CONTROL MEASURES, SHALL BE PROVIDED.
 - KEEP CONSTRUCTION SITE LITTER-FREE, AND LEAKING CONTAINERS IN ORDERLY CONTAINMENT AREAS.
 - KEEP ENTRANCE AND ADJACENT ROADWAY CLEARLY TO KEEP FREE OF CONSTRUCTION DEBRIS.
 - SWEEP PAVED SURFACES ONLY. DO NOT WASH DOWN UNTIL SITE IS FINISHED.

A DETAIL
A1-1



2 DETAIL
A1-1

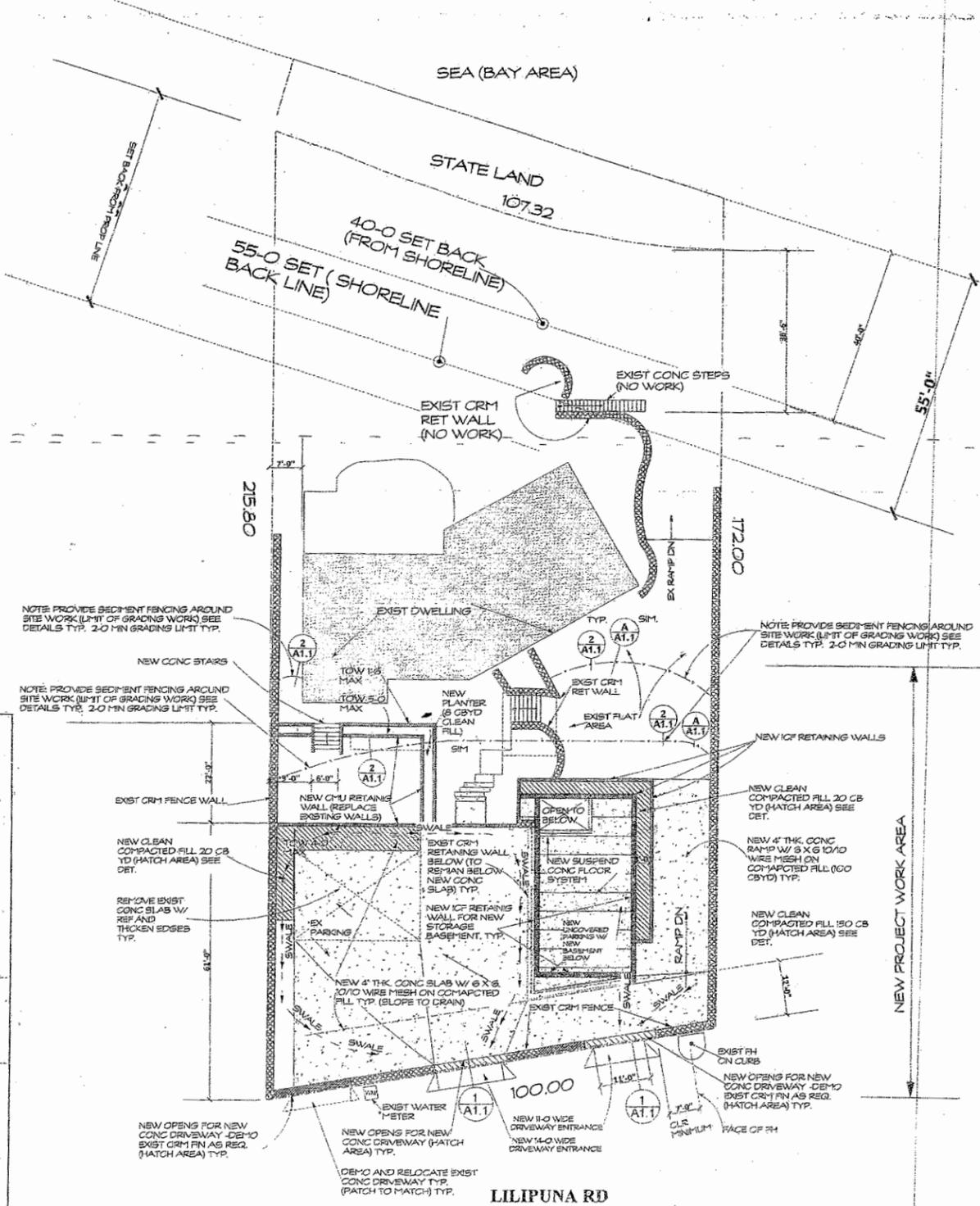


- NOTES**
- Directly into grade to match existing driveway apron.
 - Provide a minimum of 1/2 inch of compacted subgrade.
 - Where used rock or gravel in construction, the volume may be increased by a factor of 1.25 for compaction.
 - For details on Preparation and Construction Details, see current City of Honolulu Standard Details.
 - These design guidelines are for guidance only. A contractor shall design and construct to meet the requirements of the City of Honolulu.
 - For details on Preparation and Construction Details, see current City of Honolulu Standard Details.
 - These design guidelines are for guidance only. A contractor shall design and construct to meet the requirements of the City of Honolulu.

1 DRIVEWAY DET DG-1
A1.1

NOTE:
ALL GRADING WORK SHALL BE DONE IN ACCORDANCE WITH CHAPTER 14 ARTICLES 13, 14, 15 AND 16, AS RELATED TO GRADING, SOILS EROSION AND SEDIMENT CONTROL OF THE REVISED ORDINANCE OF HONOLULU, 1990, AS AMENDED.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND I WILL BE UNDER MY OBSERVATION



ERROSION CONTROL PLAN
SC 1"=15'-0"

APPROVED
DPP

INFO EROSION SHEET INFO ONLY

PROPOSED NEW FOR : CONCRETE PARKING AND BASEMENT FOR:
MR. CHARLES WONG
46-107 LILPUNA RD., KANEOHE 96744
TMK: 4-6-01-07

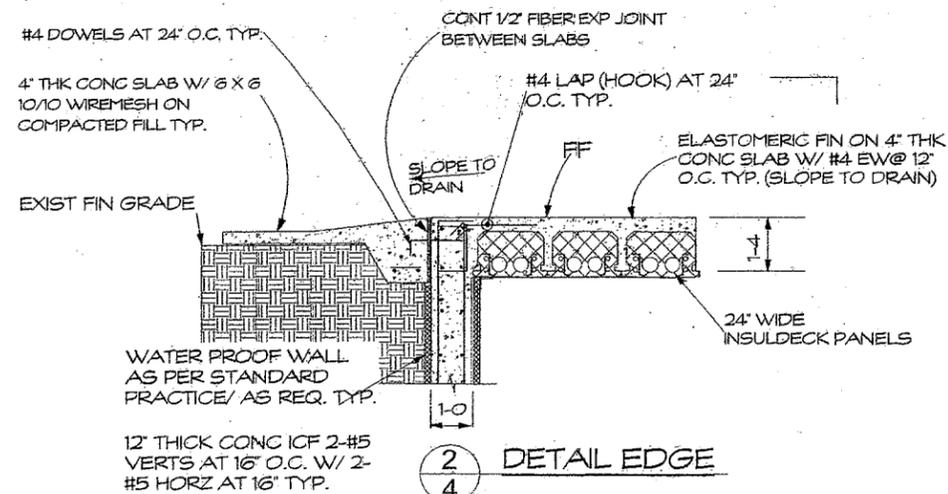
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JOB NOH
2012-01-07

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A1.1
OF SHEETS

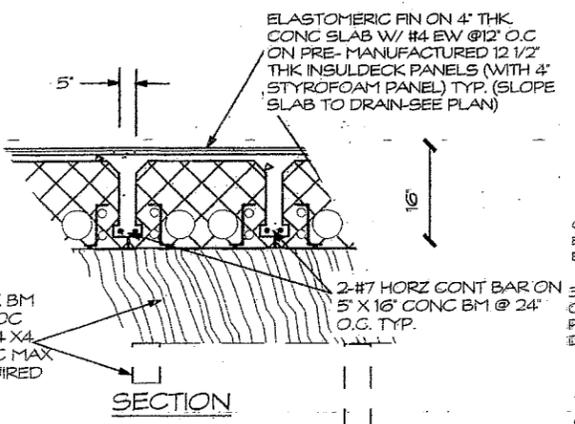


EMAIL: PERMITS@PEHAWAII.COM
PH. # 808 349-0721

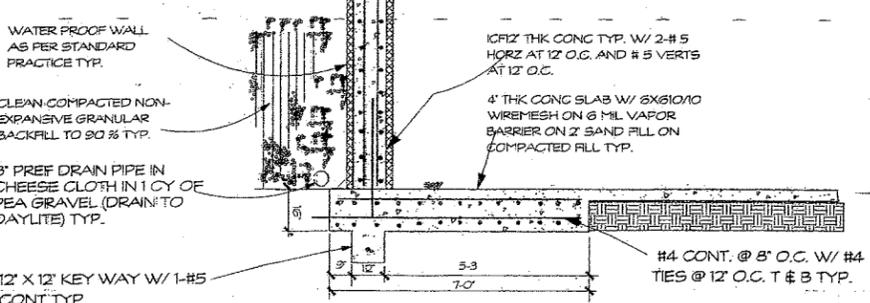
NOTE: ALL WALL SHALL BE INTREGRA SPEC ICF FORM WALLS AND CEILING FORM SHALL BE INSUL-DECK TYP. INSTALL AS PER MANUFACTURE SPECS TYP.



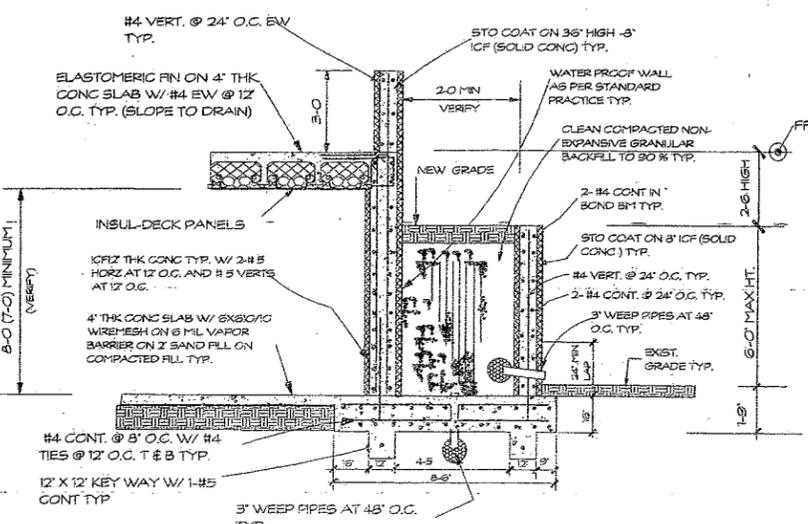
2 DETAIL EDGE
4 NTS



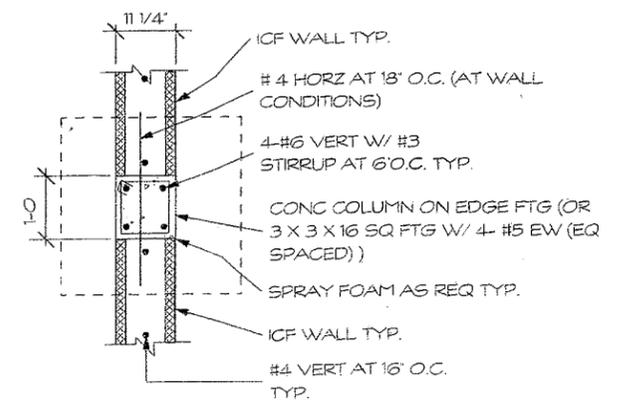
4 DETAIL
4 NTS



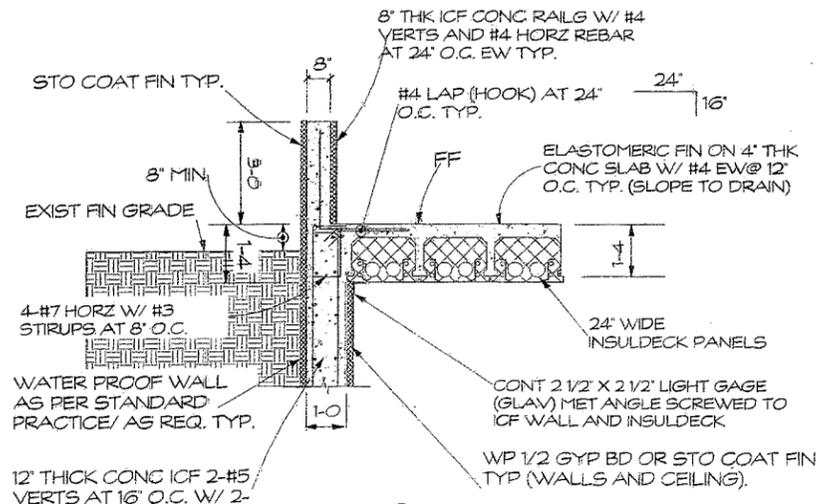
8 DETAIL
4 SCALE: NONE



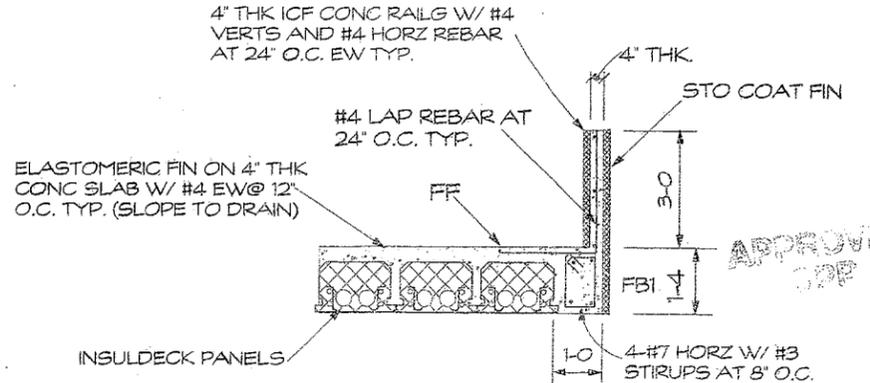
3 DETAIL SECTION
4 SCALE: NONE



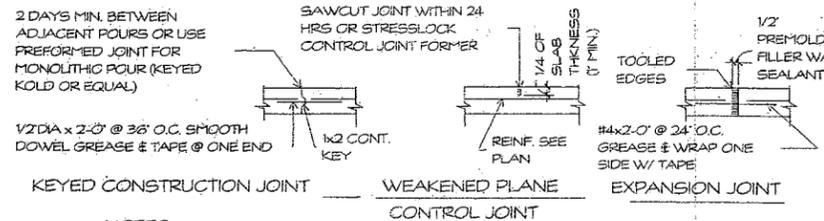
7 DETAIL
4 NTS



6 DETAIL EDGE
4 NTS



5 DETAIL EDGE
4



NOTES:
1. SPACING OF JOINTS SHALL NOT EXCEED 16'-0" O.C. IN EITHER DIRECTION NOR HAVE AN ASPECT RATIO OF GREATER THAN 2. SEE ARCH. DRAWINGS FOR LOCATION OF JOINTS. IF NOT SHOWN, CONTRACTOR SHALL SUBMIT A PROPOSED LAYOUT TO THE ARCHITECT FOR APPROVAL.
2. EXPANSION JOINTS ARE REQUIRED WHERE SHOWN ON PLAN.
3. CONTROL JOINTS MAY BE EITHER CONSTRUCTION OR WEAKENED PLANE JOINTS.

1 TYP. REBAR REINF. SLAB ON GRADE JOINTS
4

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
MR. CHARLES WONG
LICENSED PROFESSIONAL ARCHITECT
No. 6784

P.O.B. 471
HONOLULU, HI. 96809

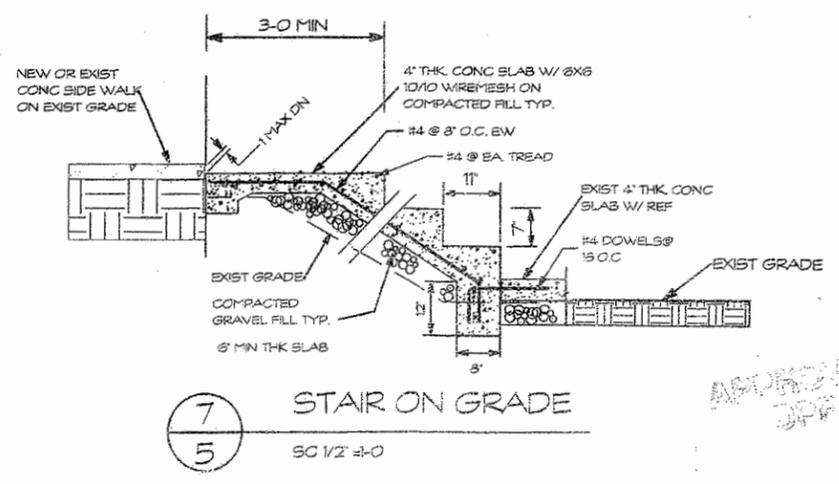
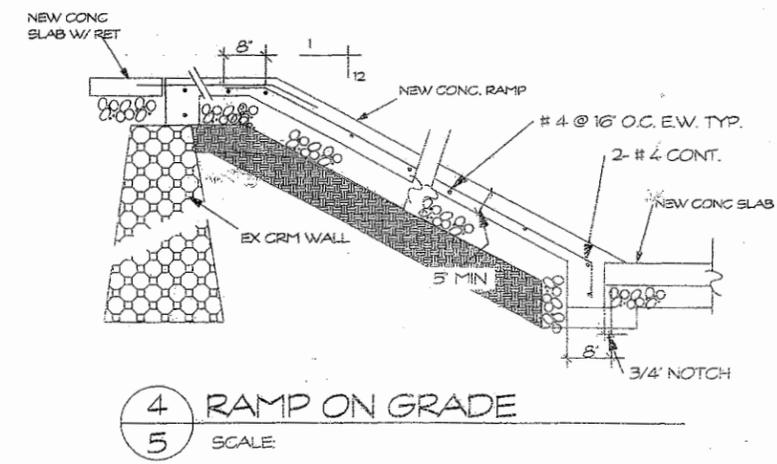
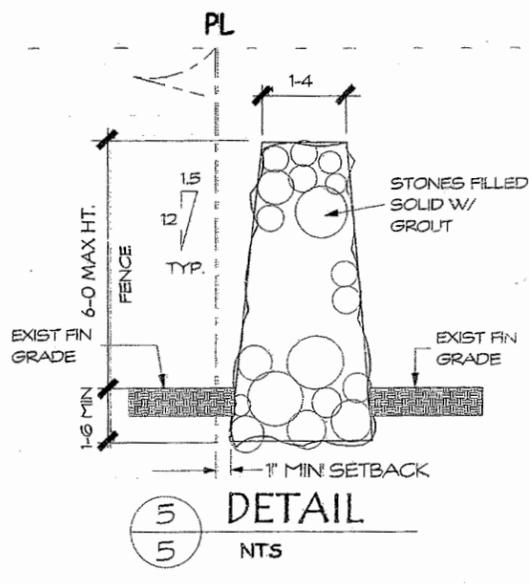
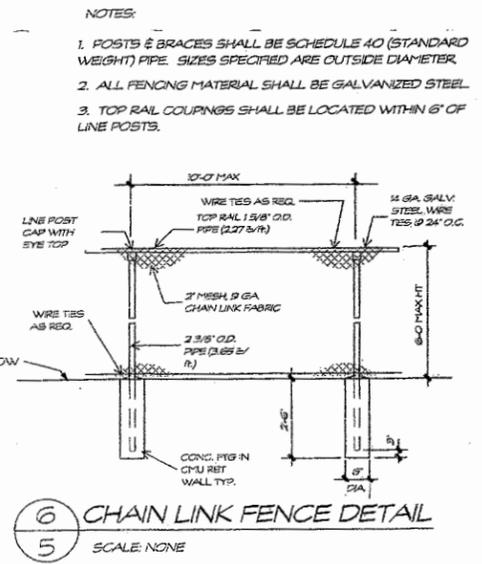
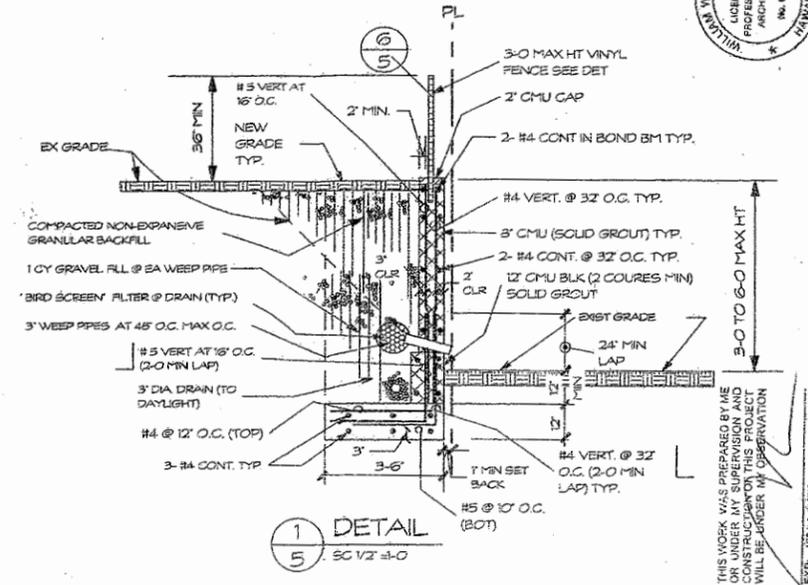
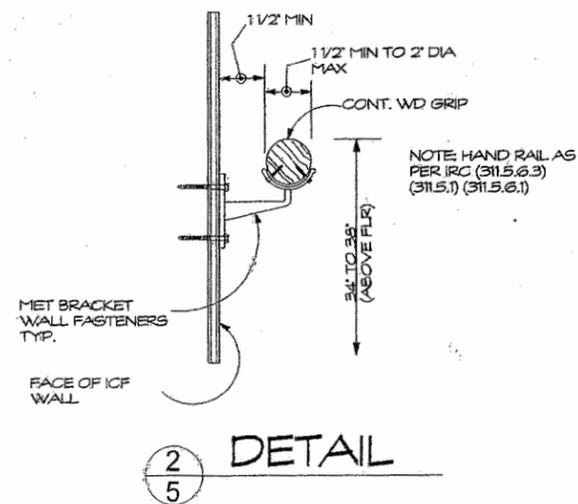
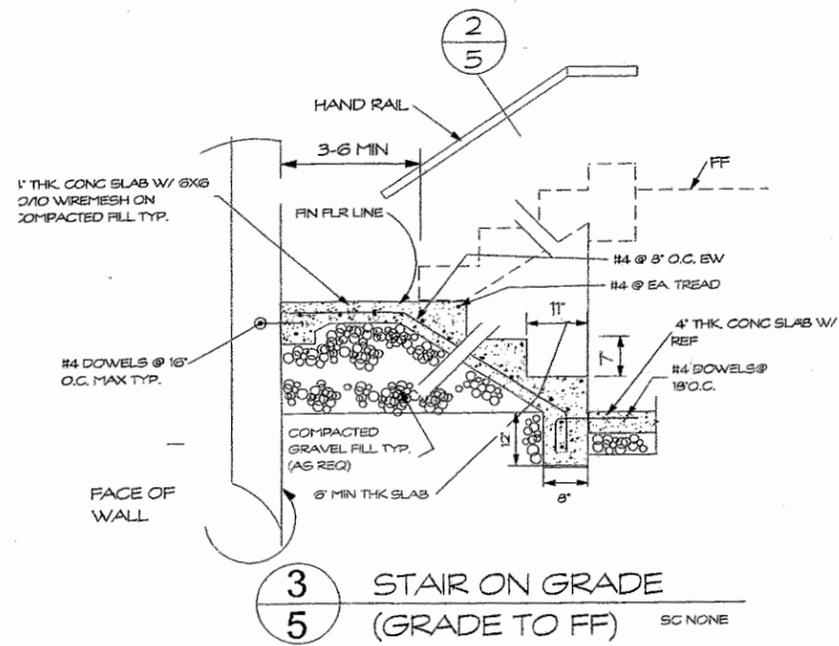
EMAIL: PERMITS@PEHAWAII.COM
PH. # 808 349-0721

PROPOSED NEW FOR: CONCRETE PARKING AND BASEMENT FOR:
MR. CHARLES WONG
46-107 LILPUNA RD., KANEHOE 96744
TMK: 4-6-01-07

JOB NOH
2012-01-07

SHEET
A-4
OF SHEETS

APPROVED
FBI



MR. CHARLES WONG
 46-107 LIH. PUNA RD., KANEHOE 96744
 TMK: 4-6-01-07
 EMAIL: PERMITS@PEHAWAII.COM
 PH. # 808 349-0721

PROPOSED NEW FOR: CONCRETE PARKING AND BASEMENT FOR:
MR. CHARLES WONG
 46-107 LIH. PUNA RD., KANEHOE 96744
 TMK: 4-6-01-07

JOB NO#
 2012-01-07
SHEET
A-5
 OF SHEETS

APPROVED
 JPP

Exhibit 5

Building Permit No. 716345



DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET * HONOLULU, HAWAII 96813
 Phone: (808) 768-8220 * Fax: (808) 768-6111

BUILDING PERMIT

FOR THE PERFORMANCE OF WORK UNDER THE
 BUILDING ELECTRICAL, PLUMBING, AND SIDEWALK CODES
 CHAPTERS 16, 17, 19, AND 20, RESPECTIVELY, AND UNDER CHAPTER 18
 (FEES AND PERMITS) OF THE REVISED ORDINANCES OF
 THE CITY AND COUNTY OF HONOLULU

LOCATION

Zone	Section	Plat	Parcel
4	6	001	007

46-107 LILIPUNA RD Kaneohe 96744
19,598 Sq. Ft.

\$8,090.00

PERMIT FEE
 Type of Payment(s)
 Cash
 Check **X**
 Charge

Accepted Value of Work: **\$1,150,000**

Site Address (if other than primary):

PROJECT:

(BP #716345) [TMK: 46001007] CHARLES WONG -- NEW TWO STORY SINGLE FAMILY DWELLING.

TYPE OF WORK

New Building **Y**
 Electrical Work **Y**
 Other **GATE**

Fence **Y**
 Plumbing Work **Y**

Retaining Wall **Y**
 Solar **Y**

RIGHT OF WAY WORK

Sidewalk Types:
 Linear Ft. of Sidewalk:

Driveway: New: Existing: **X**
 Curbing Types:
 Linear Ft. of Curbing:

Private:
 Driveway Types:
 Linear Ft. of Driveway:

Please notify the Building Inspector listed below at least 24 hours before starting work in the Right-Of-Way.

GENERAL CONTRACTOR

Wong, Charles T.
 Contact Info: 779-6189
 Lic. No.:

NOTES

DATE ISSUED: 02/11/2013

Location Permit Issued: **FMB**
 Location Application Created: **FMB**

Permission is hereby given to do above work according to conditions hereon and according to approved plans and specifications pertaining thereto, subject to compliance with ordinances and laws of the City and County of Honolulu and State of Hawaii.

FOR DIRECTOR OF DEPARTMENT OF PLANNING AND PERMITTING

THIS PERMIT MUST BE POSTED IN A CONSPICUOUS PLACE ON THE SITE DURING THE PROGRESS OF WORK. THIS PERMIT MAY BE REVOKED IF WORK IS NOT STARTED WITHIN 180 DAYS OF DATE OF ISSUANCE OR IF WORK IS SUSPENDED OR ABANDONED FOR 120 DAYS.

ELECTRICAL AND PLUMBING WORK TO BE DONE BY LICENSED PERSONS AS REQUIRED UNDER CHAPTER 448 E, HAWAII REVISED STATUTES.

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ALL CONSTRUCTION UNDER THIS BUILDING PERMIT IS SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL. IT SHALL BE THE DUTY OF THE PERSON DOING THE WORK AUTHORIZED BY THIS PERMIT TO NOTIFY THE BUILDING OFFICIAL THAT THE WORK IS READY FOR INSPECTION.

THE FOLLOWING ARE THE INSPECTORS ASSIGNED TO INSPECT THE CONSTRUCTION UNDER THIS PERMIT AND THEIR TELEPHONE NUMBERS:

	<u>Building Inspector</u>	<u>Electrical Inspector</u>	<u>Plumbing Inspector</u>
Name:	THOMAS AH SAM	LANCE PROCHNOW	REID OKAZAKI
Phone No.:	(808) 768-8132	(808) 768-8179	(808) 768-8186

APPLICATION NO.: **A2012-12-2890**

JobID: 48084492

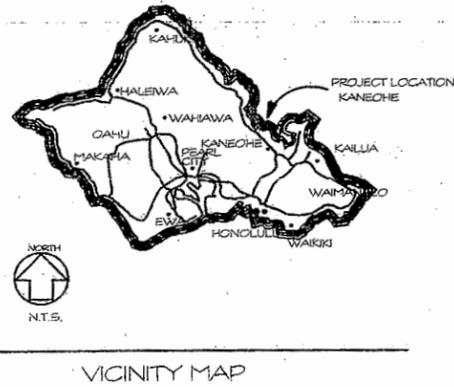
PERMIT NO.: **716345**

PROPOSED NEW DWELLING FOR: MR. CHARLES WONG

46-107 LILPUNA RD., KANEHOHE 96744
TMK: 4-6-01-07

STOP
DO NOT ALTER
THESE PLANS
Revisions must be
submitted separately

ISLAND LOCATION



FLOOR AREA

NEW 1ST FLOOR

1ST FLOOR LIVING AREA	2447.00
COVERED ENTRY	55.00
COVERED LANAI	876.00
TOTAL 1ST FLOOR AREA	3378.00 SF
2ND FLOOR LIVING AREA	2661.00
REC ROOM	854.00 SF
COVERD LANAI	718.00
TOTAL 2ND FLOOR AREA	4233.00 SF
TOTAL LIVING AREA	7,611.00 SF
(TWO) FULL SIZE CAR GARAGE	1,306.00 SF
GRAND TOTAL	8917.00 SF

LOT COVERAGE

LOT SIZE = 19,598.00 SF $19,598.00 / 2 = 9,799.00$ SF

TOTAL = 4,229.00 SF (TOTAL LOT COVERAGE) O.K.

8 PARKING REQUIRED - 8 CAR PARKING PROVIDED O.K.

DEPARTMENT OF HEALTH
Environmental Management Division
Wastewater Branch
Re: Individual Wastewater Systems (IWS)
**IWS APPROVAL FOR USE
LETTER REQUIRED**

Date: 2/21/13
Approved by: [Signature] AS REVISED ON 1/21/13

CITY AND COUNTY OF HONOLULU
REVISED ORDINANCE CHAPTER 21
HONOLULU COUNTY CODE 196, AS AMENDED

TO THE BEST OF MY KNOWLEDGE, THIS PROJECT DESIGN IS ESSENTIALLY
CONFORMS TO THE FOLLOWING REGULATORY REQUIREMENTS:

SEWERING COMPONENT SYSTEMS
ELECTRICAL COMPONENT SYSTEMS
MECHANICAL COMPONENT SYSTEMS

WILLIAM WONG ARCHITECT
DATE: 12/27/12
LICENSE NO. 674

APPROVED
DPP



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND I WILL BE AVAILABLE FOR OBSERVATION

PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
46-107 LILPUNA RD., KANEHOHE 96744
TMK: 4-6-01-07

JOB SITE COPY

GENERAL NOTES

- ALL WORK SHALL BE IN STRICT ACCORDANCE WITH I.R.C. 2003, STATE, AND LOCAL BUILDING CODES.
- CONTRACTOR SHALL VERIFY APPROVED JOBSITE BLUEPRINTS SITE AND DIMENSIONS BEFORE COMMENCEMENT. CONTRACTOR WILL NOTIFY ARCHITECT OR ENGINEER OF ANY CONFLICTS PRIOR TO STARTING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY THE SITE AND ALL INFORMATION INCLUDING DISTANCE, LOT DIMENSIONS AND EXACT PROPERTY LINES TO ACCURATELY LOCATE PROPOSED PROJECT WITHIN THE MINIMUM REQUIRED SETBACK AREA.
- GENERAL CONTRACTOR SHALL PROTECT ADJOINING LAND, BUILDING AND OTHER IMPROVEMENTS SITUATED THEREON. ANY DAMAGES OCCURRED SHALL BE REPAIRED AT NO COST TO THE OWNER OR ARCHITECT OR ENGINEER.
- ANY CONDITIONS, MATERIALS, DEVICES, OR DETAILS NOT SPECIFICALLY SHOWN ON THE DRAWINGS OR SPECIFIED SHALL BE CLARIFIED WITH THE ARCHITECT OR ENGINEER BEFORE BIDDING, CONSTRUCTION, INSTALLATION, AND COMPLETION.
- ALL FINISHED GRADE LEVELS AND/OR SPOT ELEVATIONS ARE ASSUMED TO BE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL CONDITIONS.
- IF SOFT OR EXPANSIVE SOIL IS ENCOUNTERED THE SOIL SHALL BE REMOVED AND REPLACED WITH NON-EXPANSIVE STRUCTURAL FILL COMPACTED TO 95% AS PER ASTM D-1557.
- FOUNDATION DESIGN IS FOR SOIL WITH BEARING PRESSURE OF 2000 P.S.F. (NON-ADOBES).
- ALL CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3000 P.S.I.
- ALL REINFORCED STEEL TO BE ASTM A615 GRADE 60. WELDED WIRE MESH TO BE A-185 OR EQUAL.
- ALL FOOTINGS SHALL REST ON FIRM UNDISTURBED SOIL.

- GROUND TO BE CHEMICALLY TREATED FOR TERMITES PER I.R.C. AS AMENDED, BY A QUALIFIED BONDED CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACINGS AND SHORING FOR ALL STRUCTURAL MEMBERS DURING ALL PHASES OF CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY FLASHING, CAULKING, AND WATERPROOFING ETC. TO ENSURE A WEATHER TIGHT FINISH AS PER STANDARD PRACTICE, AS PER I.R.C. SEC 703.
- ALL LUMBER SHALL BE DOUGLAS FIR #1 WCU-MANIZED PRESSURE TREATED OR BETTER, AS PER I.R.C. AS AMENDED.
- ALL FRAMING MEMBERS, RAFTERS, JOISTS, AND BEAMS SHALL BE FASTENED WITH SIMPSON METAL CONNECTORS (OR EQUAL) TO PROVIDE A CONTINUOUS LOAD PATH FROM ROOF TO FOUNDATION TO RESIST HIGH WIND FORCES.
- CONTRACTOR SHALL USE METAL HURRICANE CLIPS SIMPSON HIC AT EACH RAFTER OR TRUSS AS PER I.R.C.
- UNLESS OTHERWISE SHOWN, THE NAILING SHALL BE AS PER I.R.C. NAILING SCHEDULE B1-2.
- ALL HANDRAILS SHALL BE 34" IN HEIGHT AND SHALL BE INSTALLED AS PER I.R.C. 319.5.1.
- ALL WINDOWS AT BEDROOM'S SHALL HAVE A MINIMUM SILL HEIGHT OF 44" AND A MINIMUM NET CLEAR AND OPENABLE AREA OF 5.7 SQUARE FEET, 24" HEIGHT MINIMUM AND 20" WIDTH MINIMUM AS PER I.R.C. 310.1.
- WALL COVERINGS ON STUDWALLS NOTED AS SHEARWALLS SHALL BE CONTINUED UP TO ROOF DECKING.

- EXTERIOR SHEETING SHALL BE NAILED W/ 8d NAILS @ 4" O.C. AT EDGES W/ 8d @ 12" O.C. IN FIELD.
- GYPSUM BOARD SHEARWALLS SHALL BE NAILED W/ 5d COOLER NAILS @ 4" O.C.
- PAINT ALL NEW INTERIOR AND EXTERIOR SURFACES (COLOR SELECTION BY OWNER UNLESS OTHERWISE AGREED BETWEEN OWNER AND CONTRACTOR).
- ALL WALLS AND CEILINGS OR BATH AREAS OR EXTERIOR DRYWALL TO BE APPROVED WATERPROOF TYPE GYPSUM BOARD.
- GARAGE, STORAGE ROOMS, AND MECHANICAL WALLS & CEILINGS SHALL BE MINIMUM 5/8" TYPE X GYPSUM BOARD.
- ALL UTILITY AREAS CONTAINING LAUNDRY FACILITIES SHALL BE FINISHED ON WALLS WITH WATER PROOF GYPSUM BOARD OR OTHER APPROVED WATER RESISTANT MATERIAL. NAIL ALL SHEETROCK AS PER I.R.C.
- THE ARCHITECT OR ENGINEER IS NOT RESPONSIBLE FOR THE CONTRACTORS METHODS, PROCEDURES, OR CONDITIONS ON JOBSITE THAT MAY DEVELOP.
- THE DRAWINGS INTEND TO SHOW FINISHED CONCEPT ONLY CHANGES TO THE DRAWINGS MAY BE REQUIRED DUE TO UNFORSEEN CONDITIONS.
- WINDOW HEADERS SHALL BE 4X12 AND DOOR HEADERS SHALL BE 4X6 MINIMUM UNLESS OTHERWISE NOTED, OR AS PER I.R.C. TABLE 10.20.2.1/20.2.5.
- DOUBLE FLOOR JOIST UNDER PARTITIONS RUNNING PARALLEL WITH JOISTS.

- ALL BEDROOMS & HALLWAYS SHALL SMOKE ALARMS AS PER I.R.C. SEC 2013. (NEW AREAS) THE ALARM DEVICE SHALL BE INTERCONNECTED IN A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN EVERY BEDROOM AND HALL. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BED ROOMS OVER THE BACKGROUND NOISE WITH ALL INTERVENING DOORS CLOSED.
- CONTRACTOR SHALL NOTIFY DES OR ENGINEER 2 DAYS IN ADVANCE WHEN SHEAR WALLS AND JOISTS FOR CONTINUOUS LOAD PATHS CAN BE INSPECTED.
- OWNER OR CONTRACTOR MUST NOTIFY DES OR ENGINEER 48 HOURS PRIOR TO POURING CONCRETE AND CLOSING OF ALL WALLS FOR INSPECTION. IF ANY WALLS ARE CLOSED IN BEFORE AN INSPECTION IS MADE YOU MAY BE ASKED BY BUILDING INSPECTOR OR THE ENGINEER TO REOPEN THE WALLS AT YOUR OWN EXPENSE.
- ANY STRUCTURAL CHANGES BY THE CONTRACTOR SHALL BE APPROVED BY THE ENGINEER.
- INSTALL R-30 INSULATION IN CEILING AND R-13 IN EXTERIOR WALLS TYP.
- ALL WATER FIXTURES TO BE LOW FLOW
- THERE ARE NO FRESKINKLERS OF IRRIGATION CONNECTED TO THIS WATER METER

JOB SITE COPY

A 2011-12-2890 19,598 SF

DEPARTMENT OF PLANNING AND PERMITTING
BUILDING DIVISION
CITY AND COUNTY OF HONOLULU

ACCEPTANCE: [Signature] DATE: 12/21/12

ZONING: R-10

ZONING CODE:

ELECTRICAL:

PLUMBING:

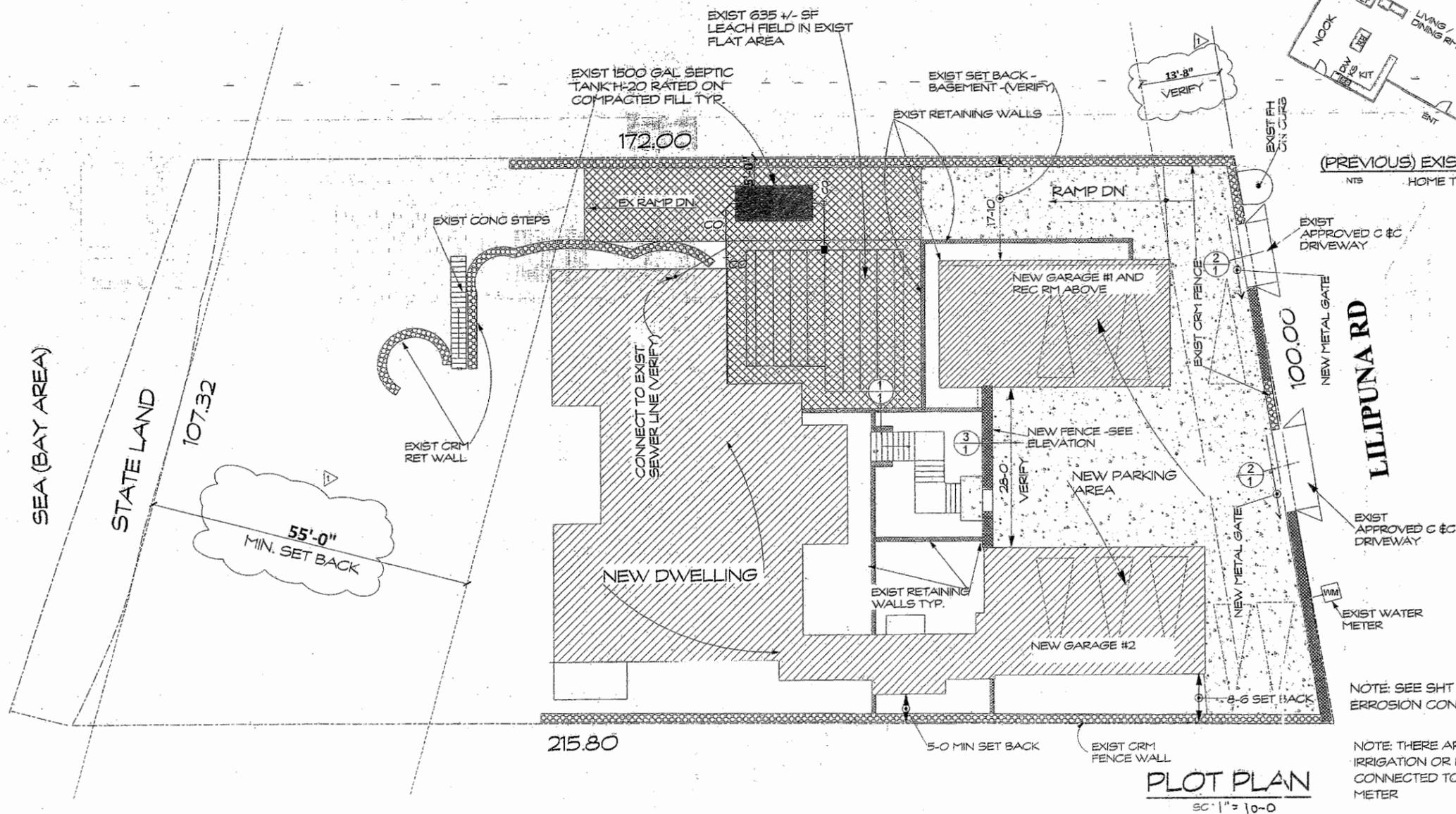
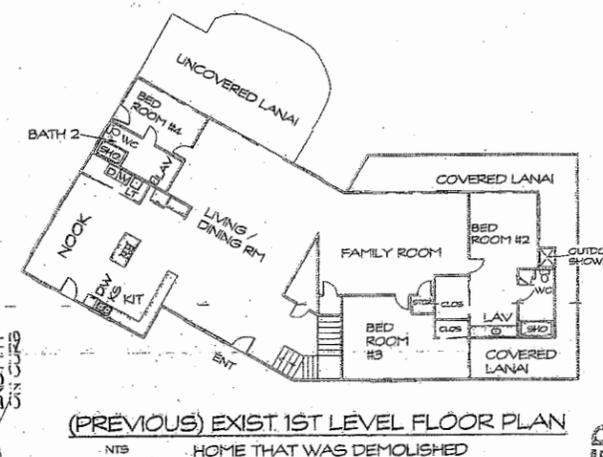
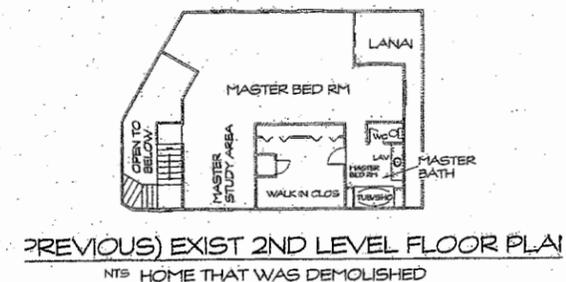
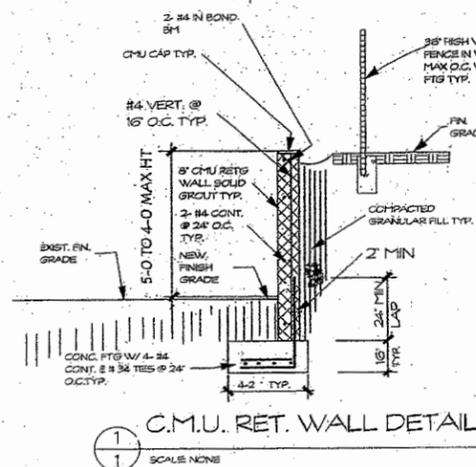
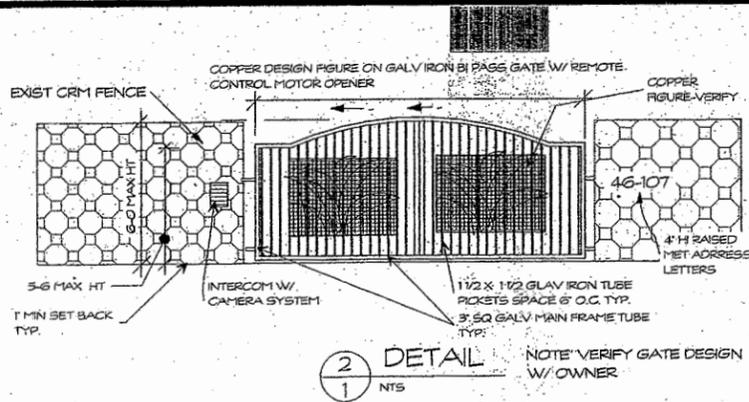
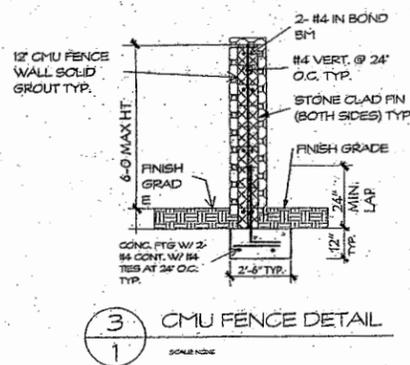
BUILDING:

PROJECT: WONG
TMK: 4-6-01-067 PERMIT: 1102115
APPLICATION #:

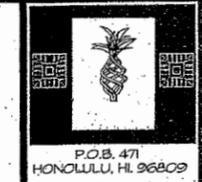
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JOB NO#
2012-07-23

SHEET
T-1

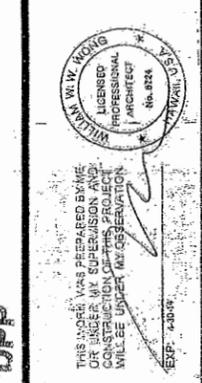
OF 16 SHEETS



APPROVED
DPP



P.O. B. 471
HONOLULU, HI 96809
EMAIL: PERMITS@PEHAWAII.COM
PH. # 808 349-0721

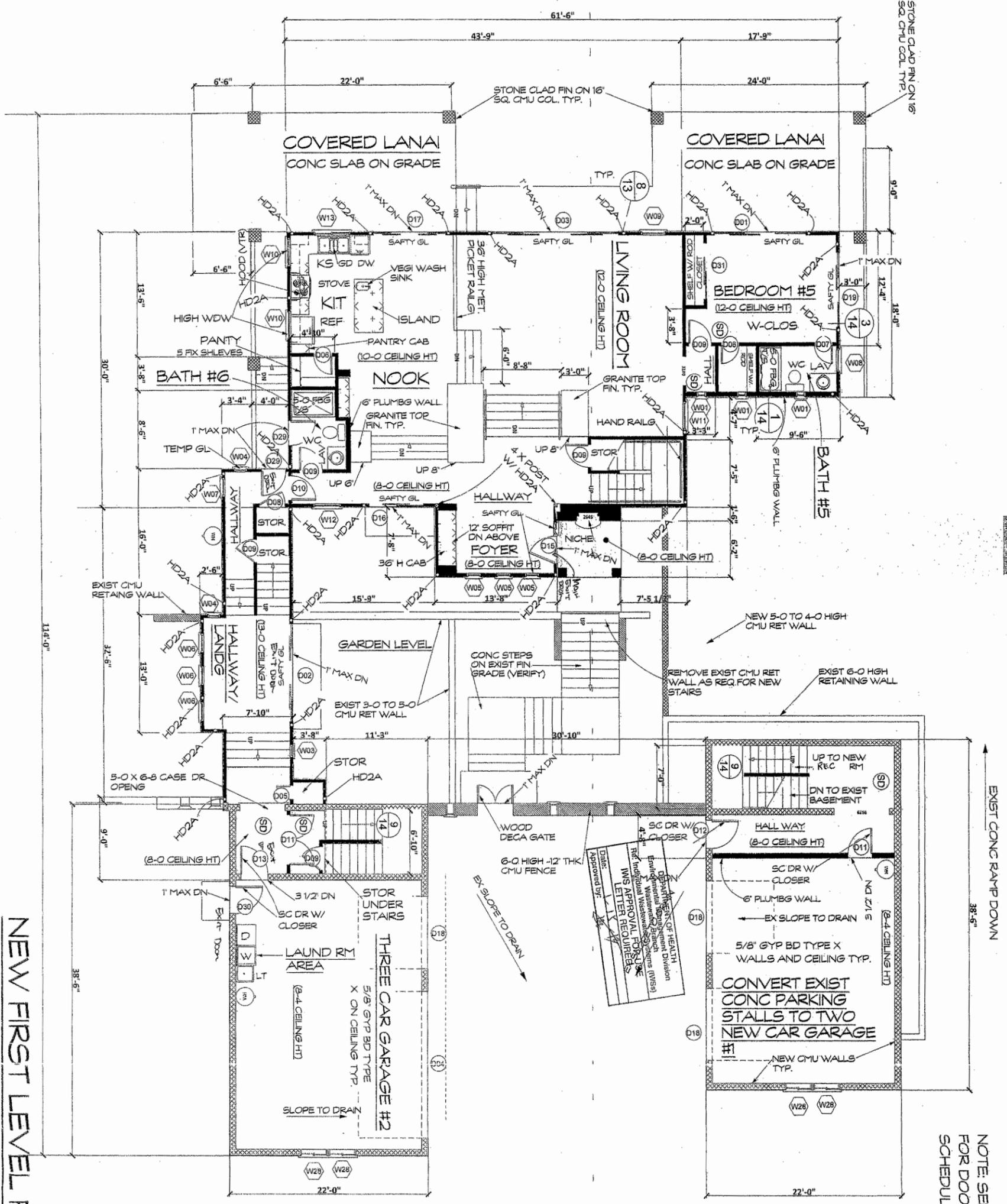


PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
46-107 LILIPUNA RD., KANEOHE 96744
TMK: 4-6-01-07

12-10-12
JOB NO#
2012-07-23

SHEET
A-1
OF 16 SHEETS

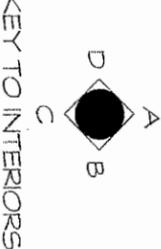
NOTE: SEE SHT 9 FOR
EROSION CONTROL DETAILS
NOTE: THERE ARE NO
IRRIGATION OR FIRESPRINKLERS
CONNECTED TO THE WATER
METER



NEW FIRST LEVEL FLOOR PLAN

NOTE: SEE SHEET A-4 AND A-5 FOR DOOR AND WDW SCHEDULE

NOTE: ALL BEDROOMS & HALLWAYS SHALL SMOKE ALARMS AS PER I.R.C. SEC R312.1 (NEW AREAS) THE ALARM DEVICE SHALL BE INTERCONNECTED IN A MANNER THAT THE ACTIVATION OF ONE ALARM SHALL ACTIVATE ALL OF THE ALARMS IN EVERY BEDROOM AND HALL. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BED ROOMS OVER THE BACKGROUND NOISE WITH ALL INTERVENING DOORS CLOSED.



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PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
46-107 LILPUNA RD., KANE OHE 96744
TMK: 4-6-01-07

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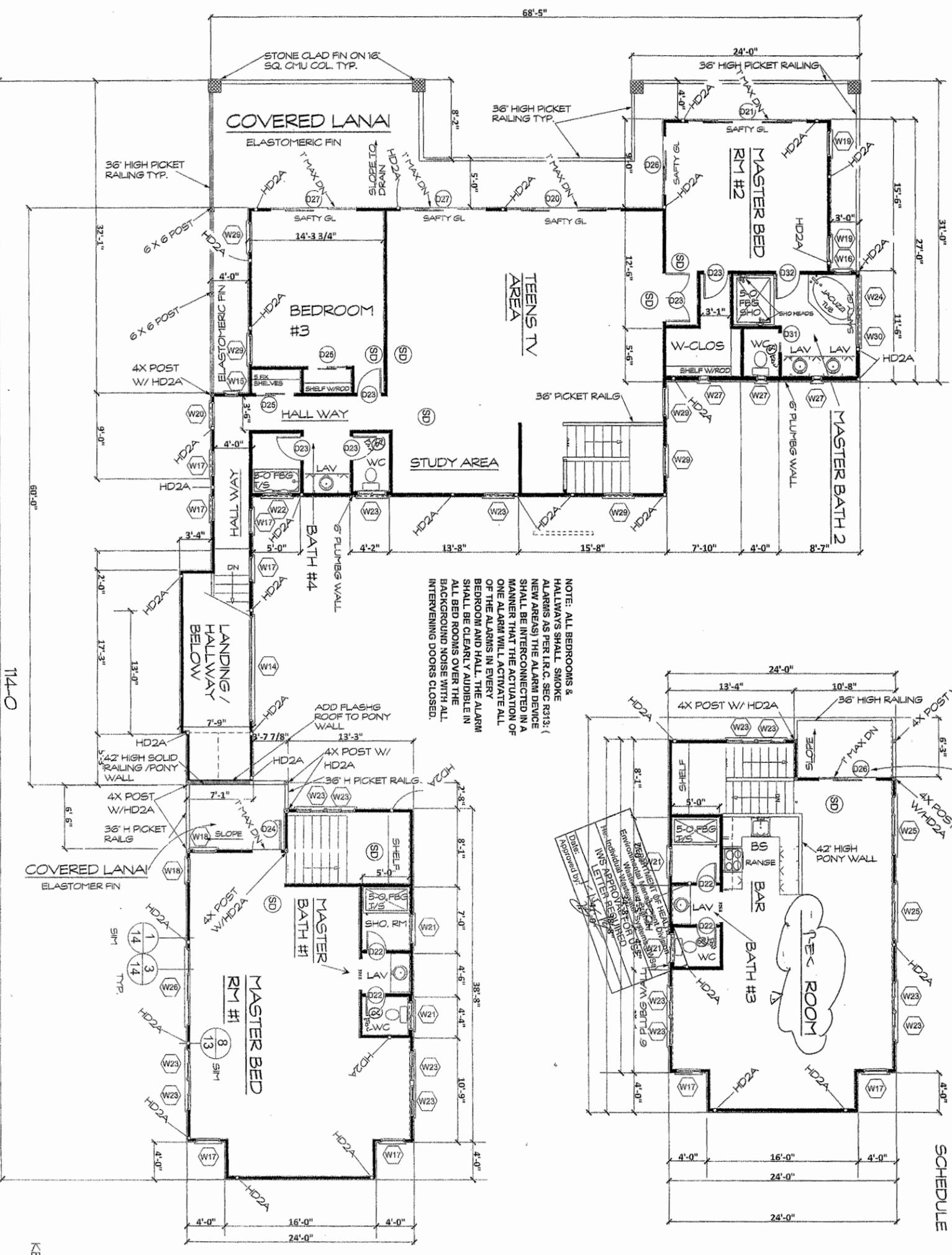


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12-10-12
JOB NO#
2012-07-23
SHEET
A-2
OF 16 SHEETS

NEW SECOND LEVEL FLOOR PLAN



NOTE: ALL BEDROOMS & HALLWAYS SHALL SMOKE ALARMS AS PER I.R.C. SEC R313. (NEW AREAS) THE ALARM DEVICE SHALL BE INTERCONNECTED IN A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN EVERY BEDROOM AND HALL. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BED ROOMS OVER THE BACKGROUND NOISE WITH ALL INTERVENING DOORS CLOSED.

NOTE: SEE SHEET A-4 AND A-5 FOR DOOR AND WINDOW SCHEDULE



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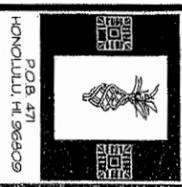
12-10-12
JOB NO#
2012-07-23
SHEET
A-3
OF 16 SHEETS

PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
46-107 LILPUNA RD., KANE OHE 96744
TMK: 4-6-01-07



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W
EXP. APR 30 2014

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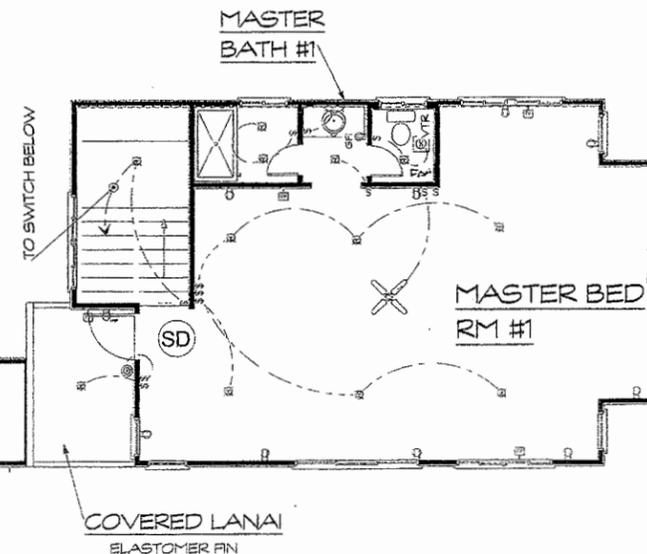
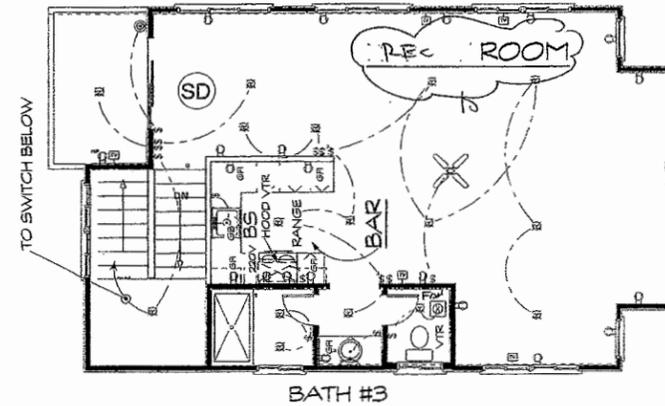
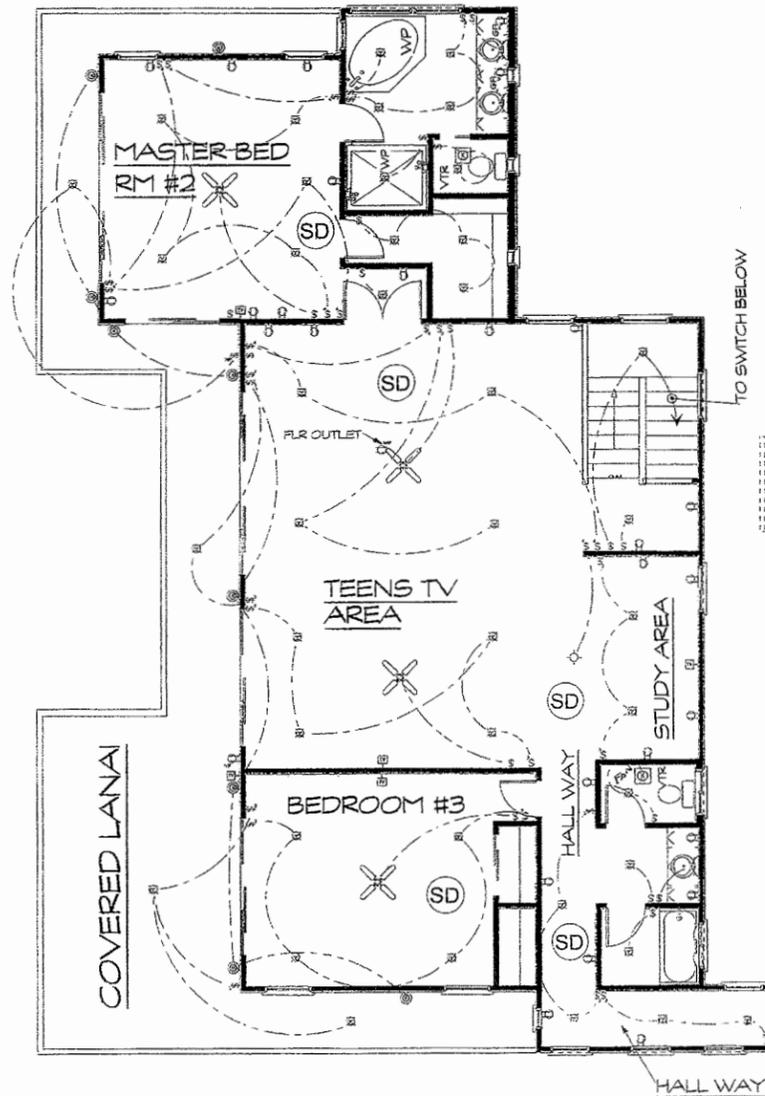


WINDOW SCHEDULE							
NUMBER	QTY	FLOOR	DIMENSIONS	WIDTH	HEIGHT	DESCRIPTION	COMMENTS
W01	3	1	12"x42"	12"	42"	FIXED GLASS	
W02	3	1	12"x48"	12"	48"	FIXED GLASS	
W03	1	1	16"x36"	16"	36"	FIXED GLASS	
W04	2	1	16"x72"	16"	72"	FIXED GLASS	
W05	3	1	18"x72"	18"	72"	FIXED GLASS	
W06	3	1	24"x24"	24"	24"	SNGL CASEMENT-HR	
W07	1	1	24"x72"	24"	72"	FIXED GLASS	
W08	1	1	30"x48"	30"	48"	SINGLE HUNG	
W09	1	1	32"x96"	32"	96"	FIXED GLASS	
W10	2	1	36"x16"	36"	16"	AWNING	
W11	1	1	36"x48"	36"	48"	SNGL CASEMENT-HR	
W12	1	1	36"x72"	36"	72"	FIXED GLASS	
W13	1	1	48"x42"	48"	42"	LEFT SLIDING	
W14	1	2	132"x32"	132"	32"	FIXED GLASS	
W15	1	2	16"x72"	16"	72"	FIXED GLASS	
W16	1	2	20"x48"	20"	48"	FIXED GLASS	
W17	8	2	30"x48"	30"	48"	SNGL CASEMENT-HR	
W18	2	2	30"x36"	30"	36"	SNGL CASEMENT-HR	
W19	2	2	30"x48"	30"	48"	SINGLE HUNG	
W20	1	2	30"x72"	30"	72"	FIXED GLASS	
W21	4	2	36"x18"	36"	18"	RIGHT SLIDING	
W22	1	2	36"x18"	36"	18"	LEFT SLIDING	
W23	14	2	36"x48"	36"	48"	RIGHT SLIDING	
W24	1	2	48"x48"	48"	48"	SNGL CASEMENT-HR	
W25	2	2	72"x52"	72"	52"	TRIPLE SLIDING	
W26	1	2	96"x52"	96"	52"	TRIPLE SLIDING	
W27	3	2	12"x42"	12"	42"	FIXED GLASS	
W28	4	1	36"x48"	36"	48"	RIGHT SLIDING	
W29	5	2	36"x48"	36"	48"	SINGLE HUNG	
W30	1	2	36"x48"	36"	48"	SNGL CASEMENT-HR	

NOTE: ALL WINDOWS AT BEDROOMS SHALL HAVE A MINIMUM SILL HEIGHT OF 44" AND A MINIMUM NET CLEAR AND OPENABLE AREA OF 5.7 SQUARE FEET, 24" HEIGHT MINIMUM AND 20" WIDTH MINIMUM AS PER I.R.C. 310.1

ALL WINDOWS SHALL BE VINYL TYPE

NOTE: SEE EXTERIOR ELEVS FOR MORE INFO



SC 1/4" = 1'-0" **NEW SECOND LEVEL FLOOR ELEC PLAN**



P.O.B. 471
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EMAIL: PERMITS@PEHAWAII.COM
PH. # 808 549-0721

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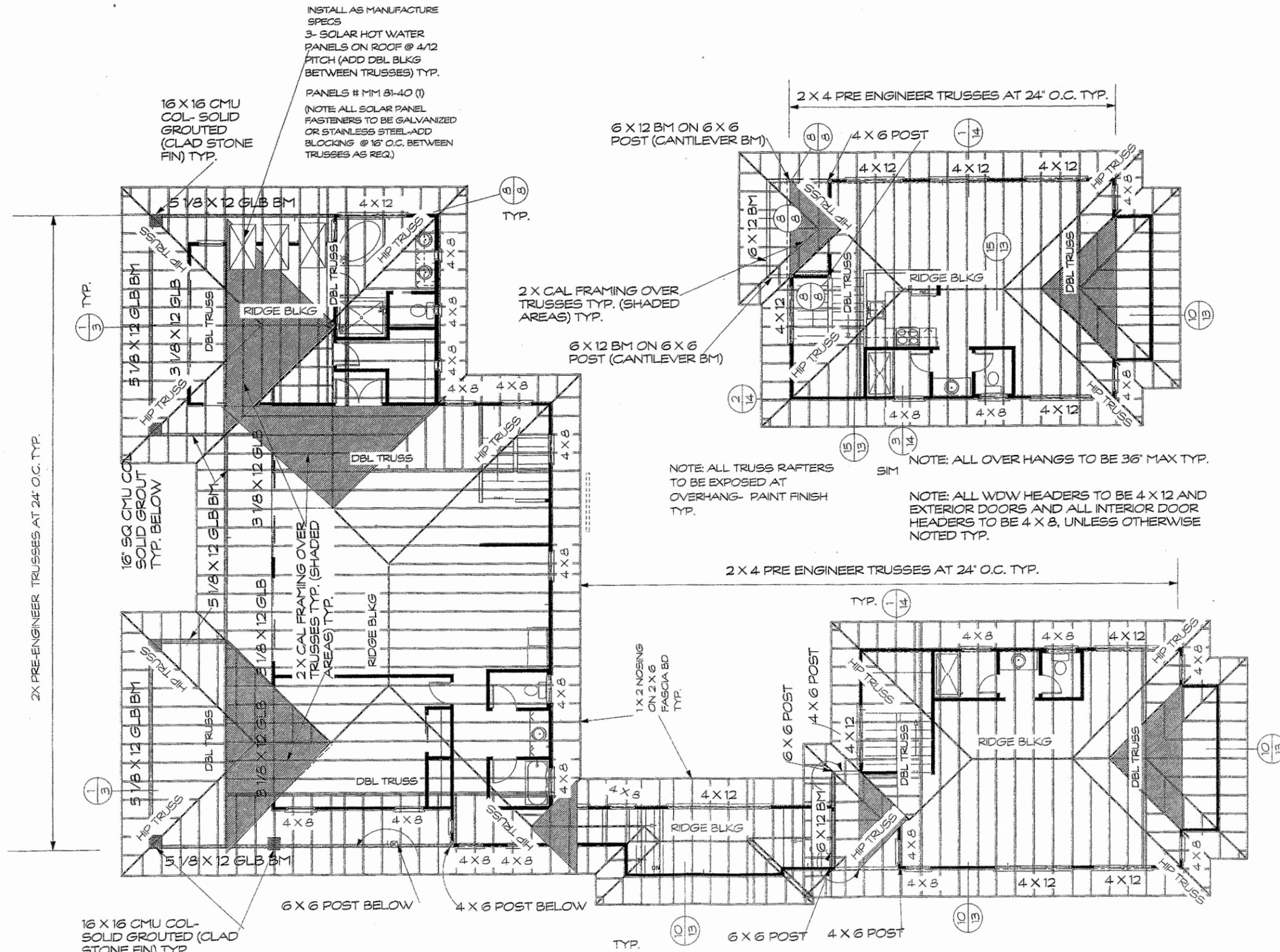


PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
46-107 LILPUNA RD., KAPOHAE 96744
TMK: 4-6-01-07

12-1-09 J-12
JOB NO#
2012-07-23

SHEET
A-5

OF 16 SHEETS



INSTALL AS MANUFACTURE SPECS
 3- SOLAR HOT WATER PANELS ON ROOF @ 4/12 PITCH (ADD DBL BLKG BETWEEN TRUSSES) TYP.
 PANELS # MM 81-40 (1)
 (NOTE ALL SOLAR PANEL FASTENERS TO BE GALVANIZED OR STAINLESS STEEL-ADD BLOCKING @ 16\"/>

16 X 16 CMU COL- SOLID GROUTED (CLAD STONE FIN) TYP.

2 X CAL FRAMING OVER TRUSSES TYP. (SHADED AREAS) TYP.

NOTE: ALL TRUSS RAFTERS TO BE EXPOSED AT OVERHANG- PAINT FINISH TYP.

NOTE: ALL WDW HEADERS TO BE 4 X 12 AND EXTERIOR DOORS AND ALL INTERIOR DOOR HEADERS TO BE 4 X 8, UNLESS OTHERWISE NOTED TYP.

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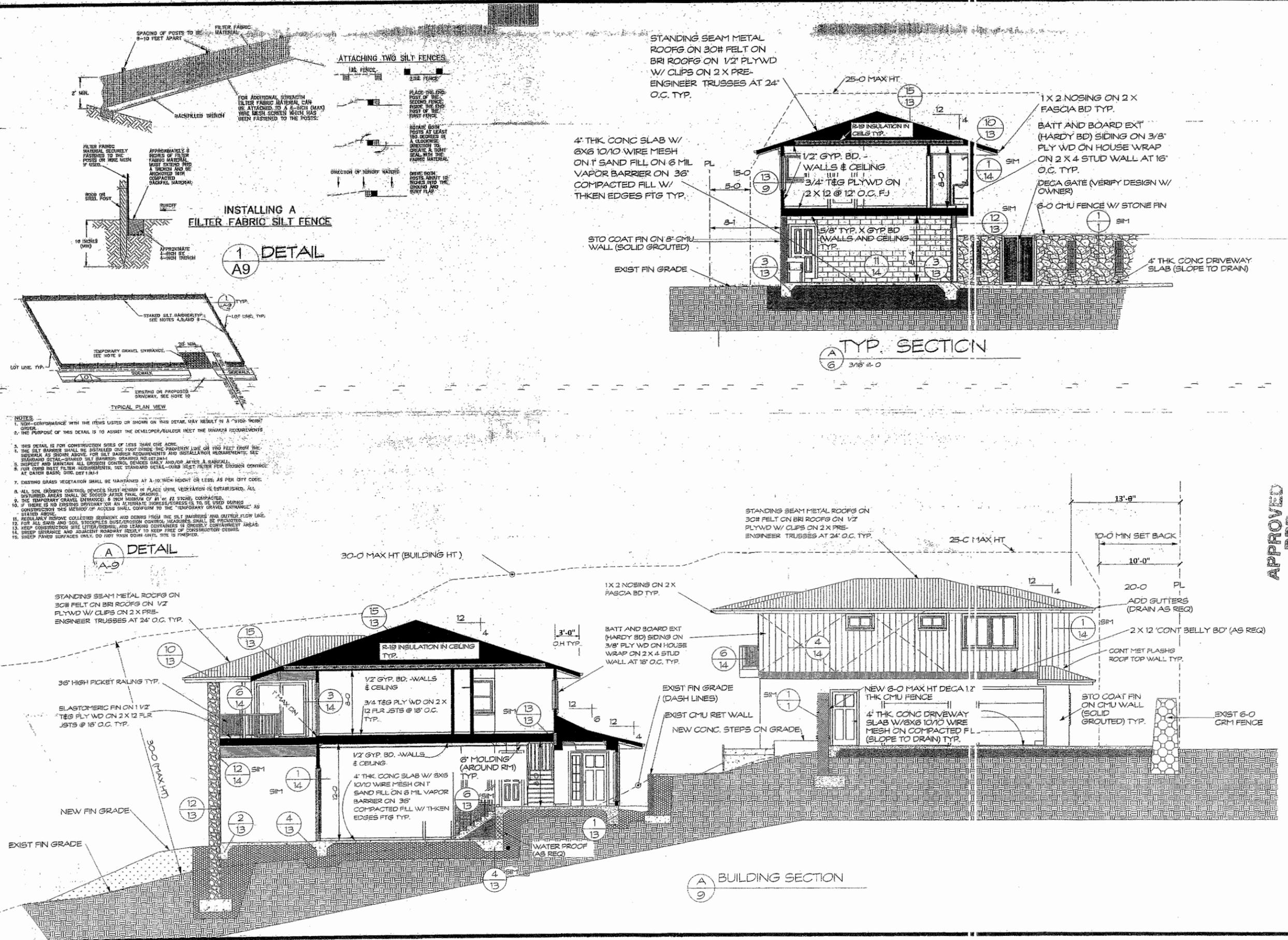
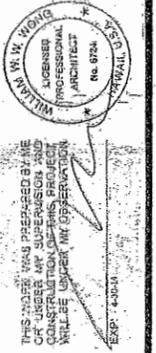
PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
 46-107 LILPUNA RD., KANEHOE 96744
 TMK: 4-6-01-07

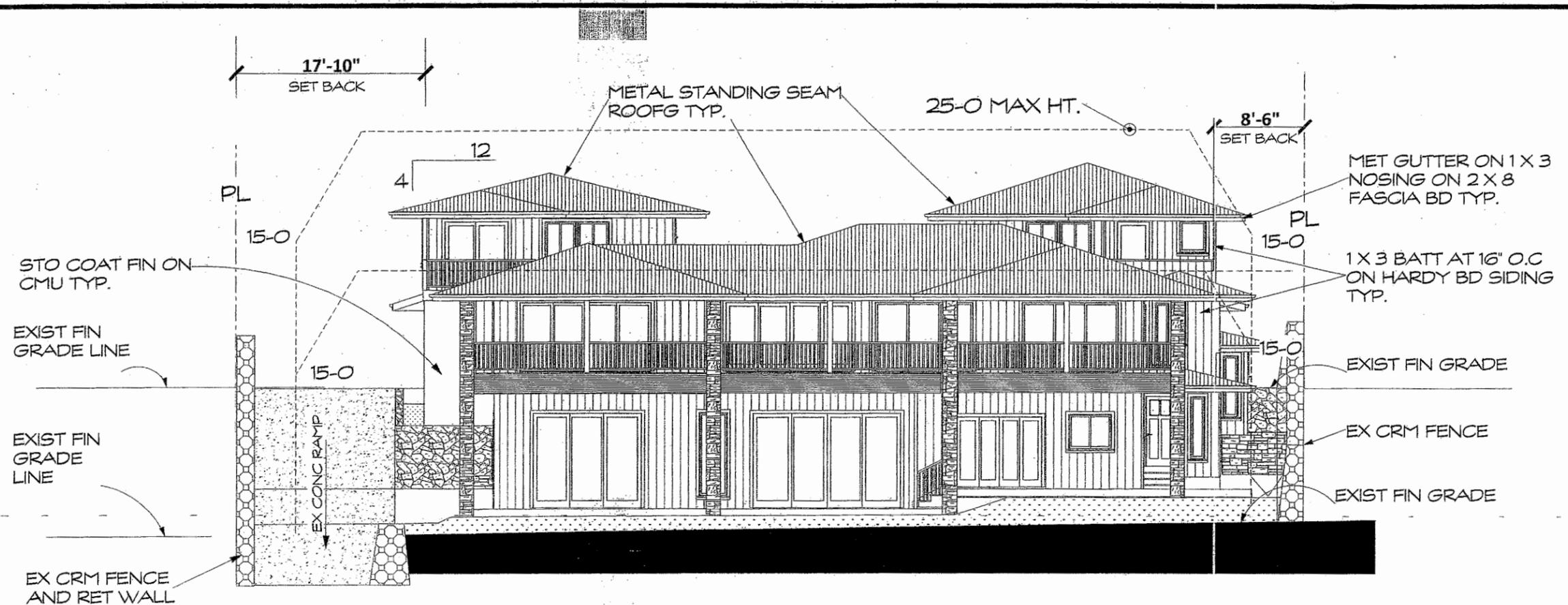
ROOF FRAMING PLAN
 SC 1/4" = 1-0

12-10-12
 JOB NO#
 2012-07-23

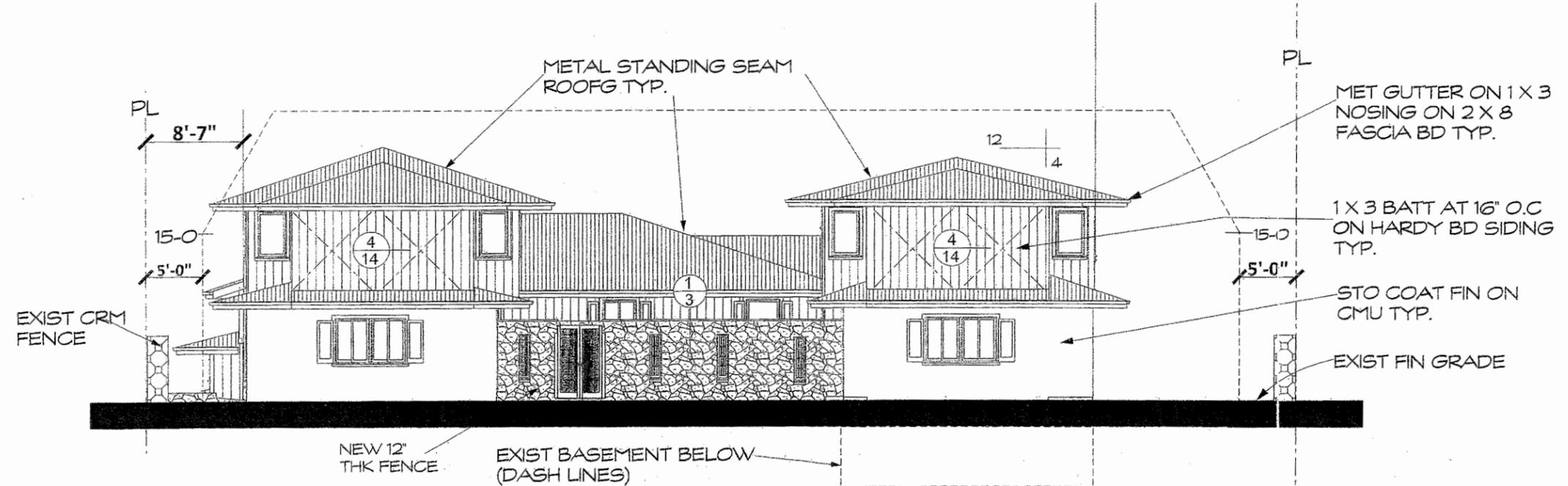
SHEET
A-8

OF 16 SHEETS





REAR ELEVATION



FRONT ELEVATION

SC 3/16" = 1-0

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PH. # 808 349-0721

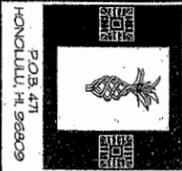
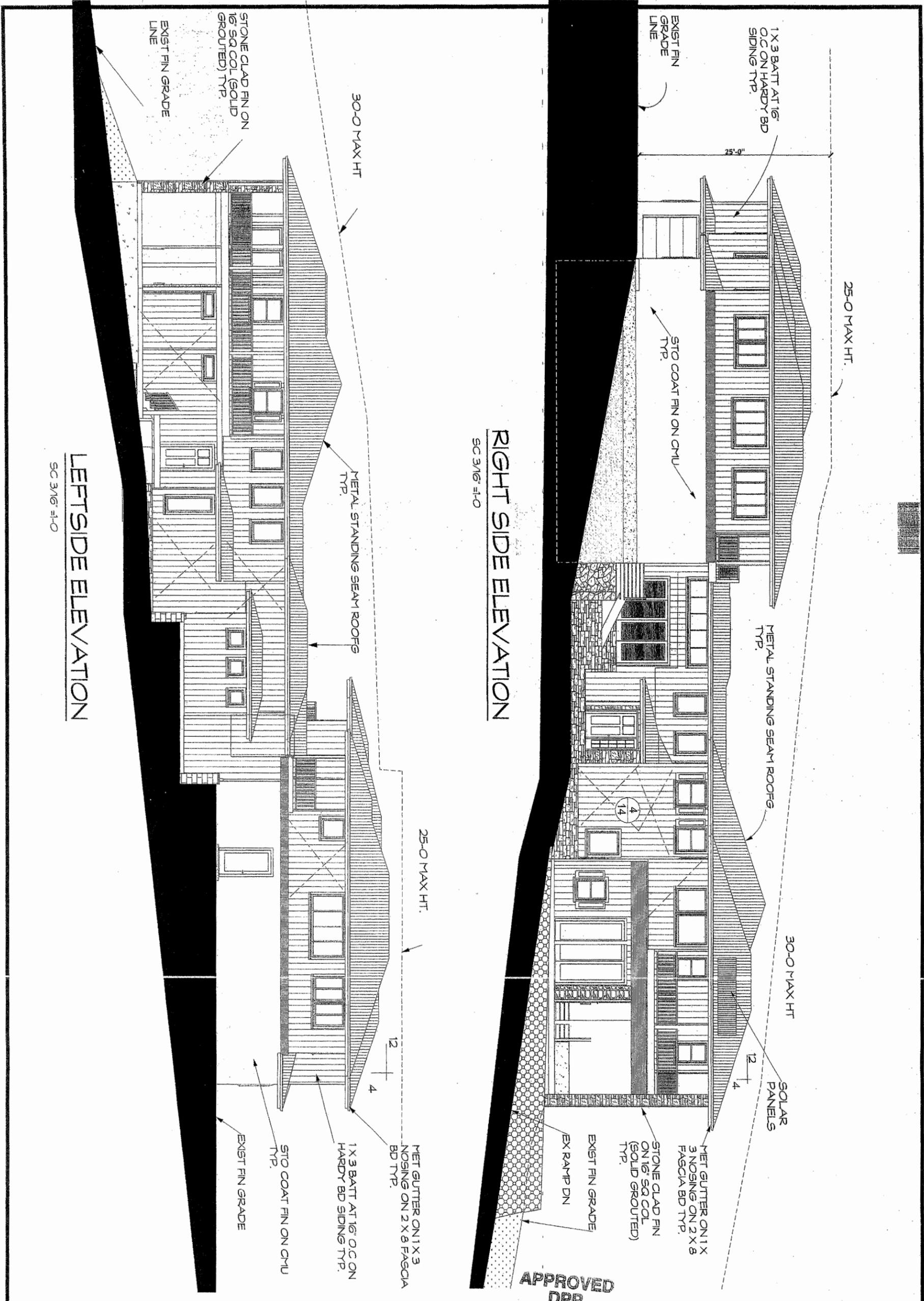


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EXP. 12/31/12

PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
46-107 LILPUNA RD., KANEHOHE 96744
TMK: 4-6-01-07

12-10-12
JOB NO#
2012-07-23

SHEET
A-10
OF 16 SHEETS



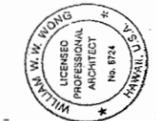
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EXP. APR 30 2014

PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
46-107 LILPUNA RD., KANEOHE 96744
TMK: 4-6-01-07

12-10-12
JOB NO: 2012-07-23

SHEET
A-11
OF 16 SHEETS



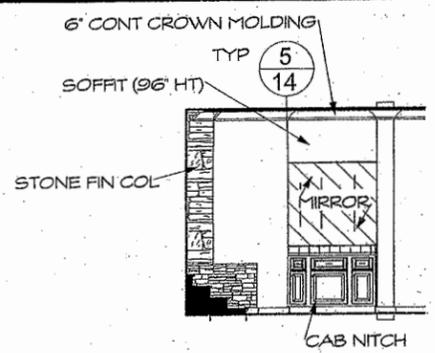
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EXP. 11/1/18

APPROVED
DPP

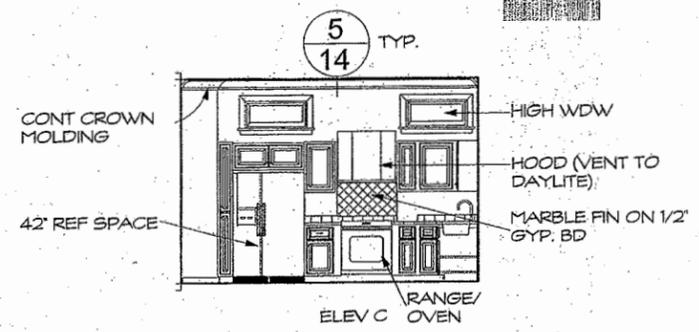
PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
46-107 LILPUNA RD., KANEOHE 96744
TMK: 4-6-01-07

12-10-12
JOB NO#
2012-07-23

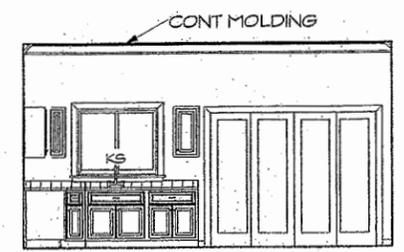
SHEET
A-12
OF 16 SHEETS



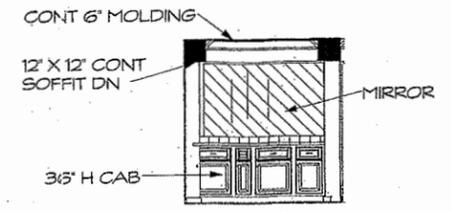
NITCH AT KIT/
NOOK LEVEL



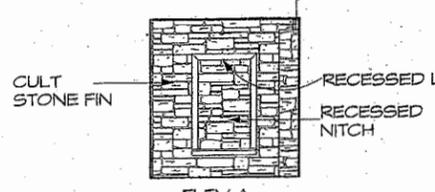
KITCHEN



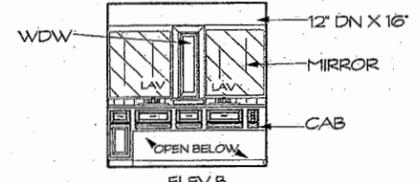
ELEV D
KITCHEN



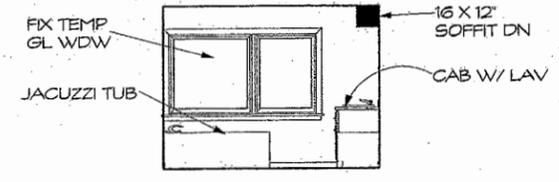
ELEV C
FOYER NITCH



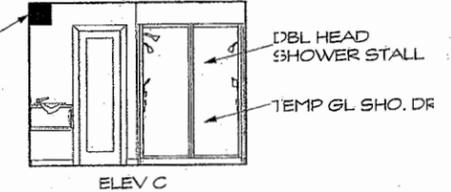
ELEV A
FOYER ENT



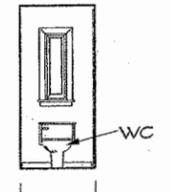
ELEV B
MASTER BATH #2



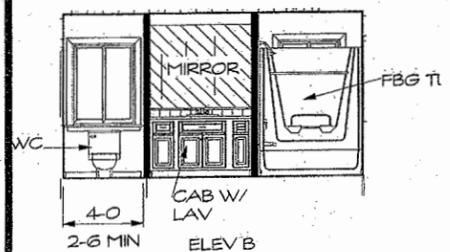
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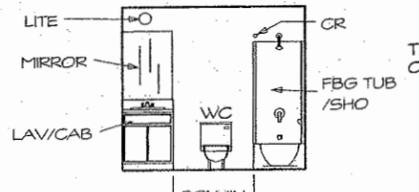
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MASTER BATH #2



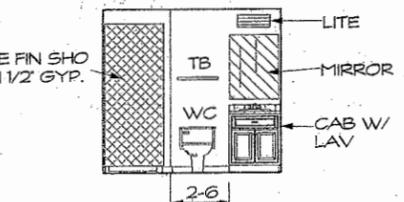
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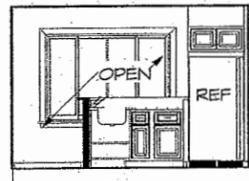
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BATH #4



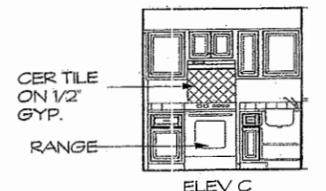
BATH ELEV #5



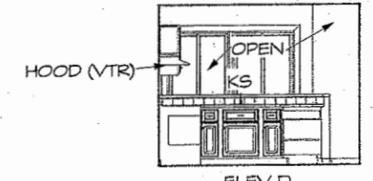
ELEV A
BATH #6



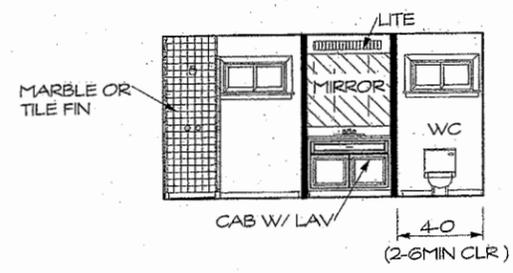
ELEV A
REC RM BAR



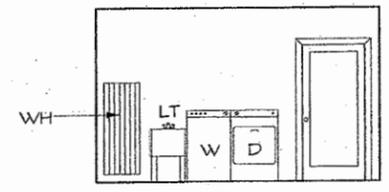
ELEV C
REC RM BAR



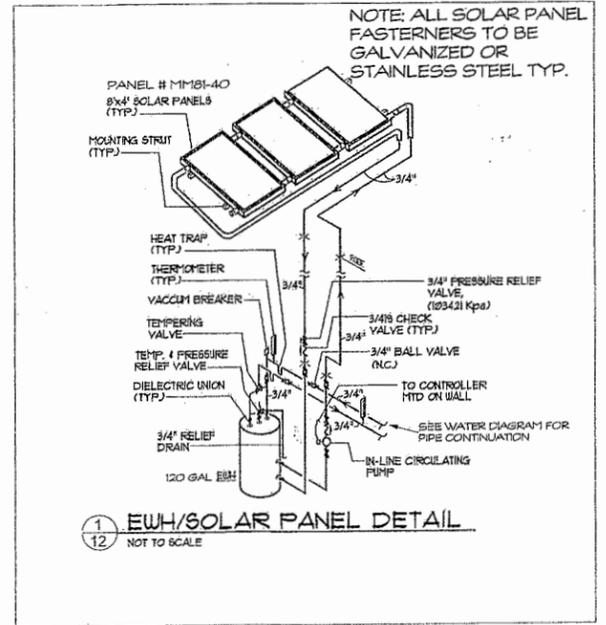
ELEV D
REC RM BAR



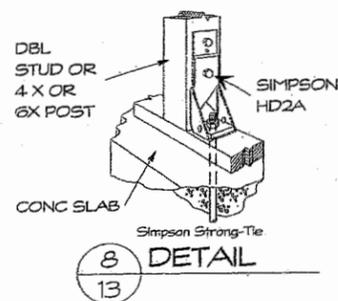
MASTER BATH #1 (REC RM
BATH #3 SIM)



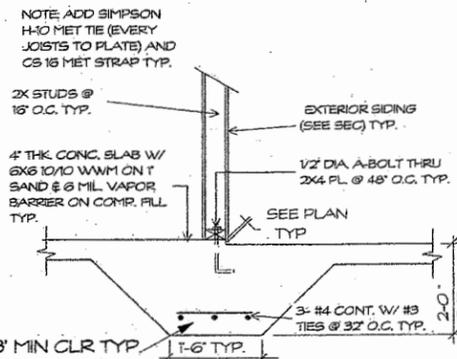
ELEV C
LAUNDRY AREA
IN GARAGE 2



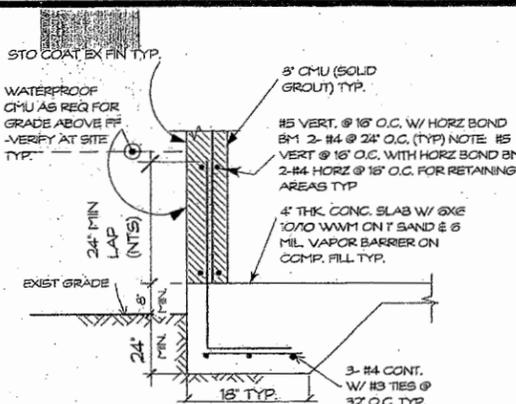
EW/SOLAR PANEL DETAIL
NOT TO SCALE



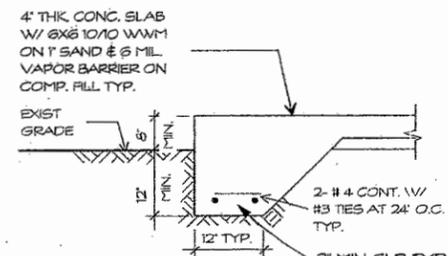
8
13
DETAIL



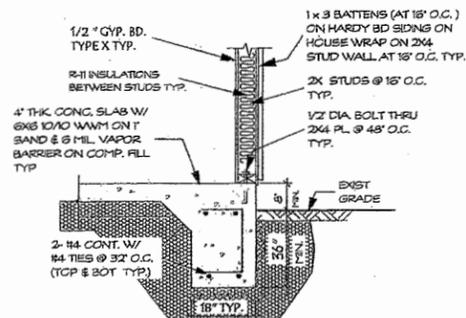
4
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DETAIL



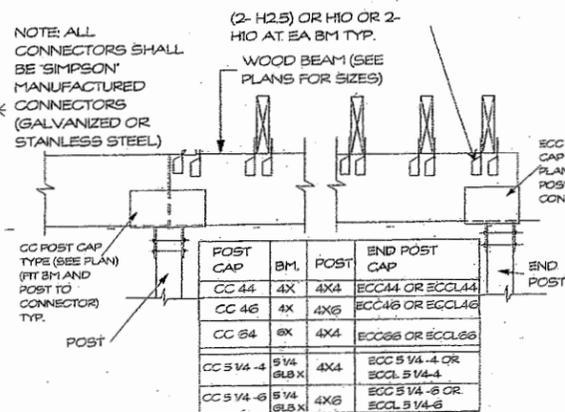
3
13
DETAIL



2
13
DETAIL

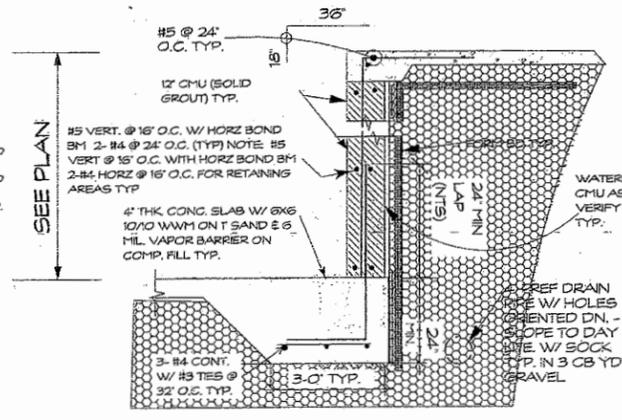


1
13
DETAIL

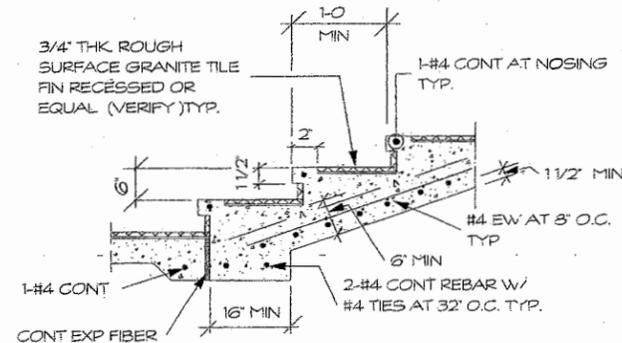


9
13
WD. BM TO POST DETAIL

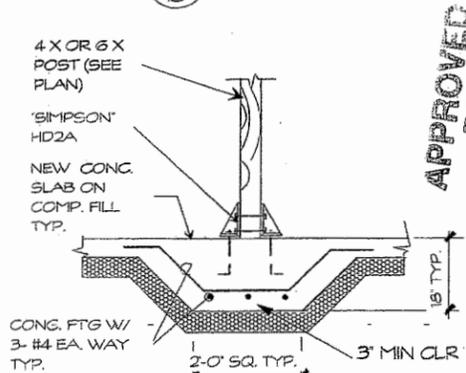
POST CAP	BM	POST	END POST CAP
CC 44	4X	4X4	ECC44 OR ECCL44
CC 46	4X	4X6	ECC46 OR ECCL46
CC 64	6X	4X4	ECC66 OR ECCL66
CC 5 1/4-4	5 1/4 GLB X	4X4	ECC 5 1/4-4 OR ECCL 5 1/4-4
CC 5 1/4-6	5 1/4 GLB X	4X6	ECC 5 1/4-6 OR ECCL 5 1/4-6



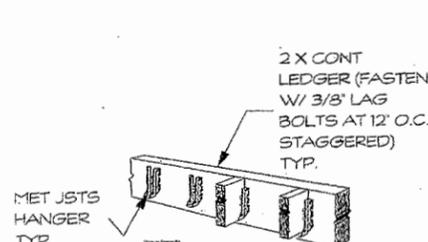
7
13
DETAIL



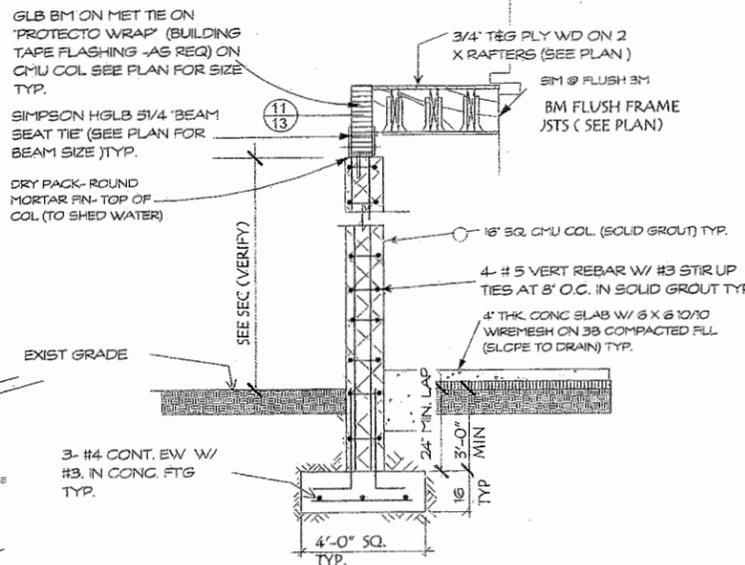
6
13
DETAIL (CONC STEPS)



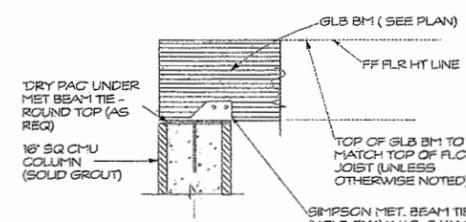
5
13
DETAIL



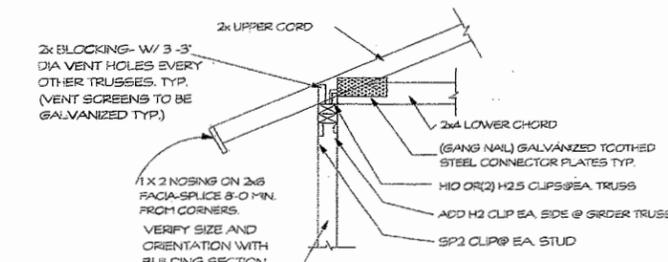
13
13
DETAIL



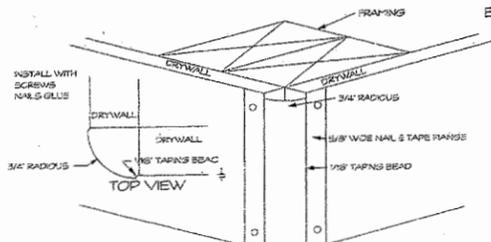
12
13
DETAIL



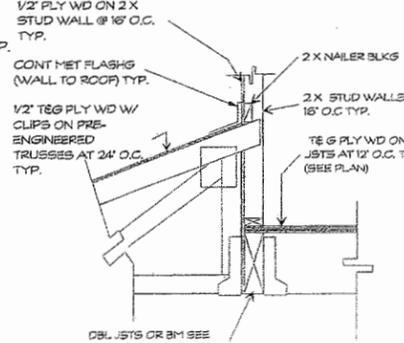
11
13
DETAIL



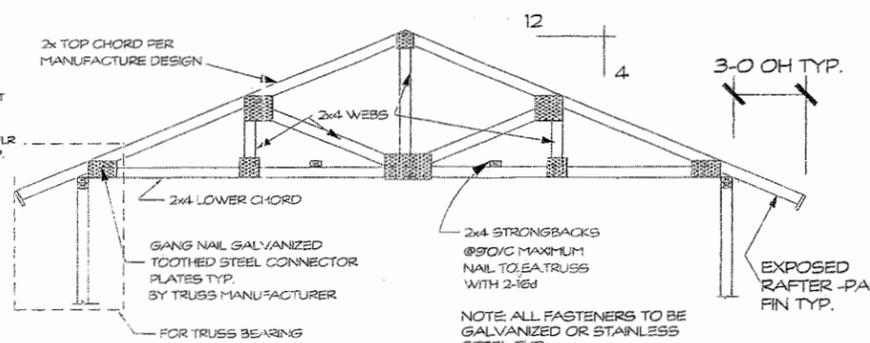
10
13
DETAIL



14
13
DRYWALL BULLNOSE CORNER



11
9
DETAIL

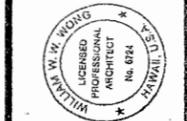


15
13
TYP. ROOF TRUSS DETAIL

APPROVED
DPP



PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
46-107 LILPUNA RD., KANEHOE 96744
TMK: 4-6-01-07



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
MR. J. J. JIN
EXP. 11/11/11

PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
46-107 LILPUNA RD., KANEHOE 96744
TMK: 4-6-01-07

12-10-12
JOB NO#
2012-07-23

SHEET
A-13

OF 16 SHEETS



P.O.B. 471
HONOLULU, HI 96809

EMAIL: PERMITS@PEHAWAII.COM
PH. # 808 349-0721



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
46-107 LILUNA RD., KANEHOE 96744
TMK: 4-6-01-07

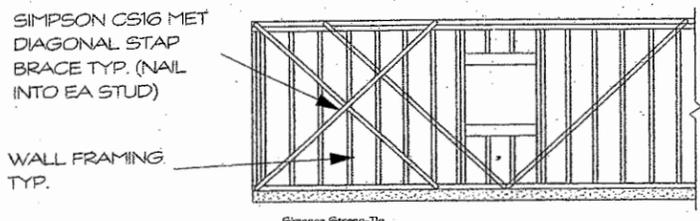
12-10-12
JOB NO#
2012-07-23

SHEET

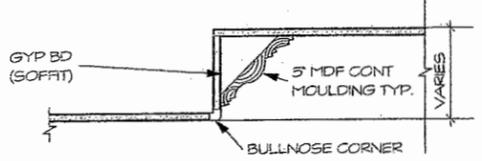
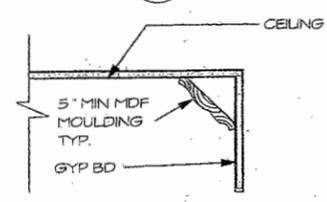
A-14

OF 16 SHEETS

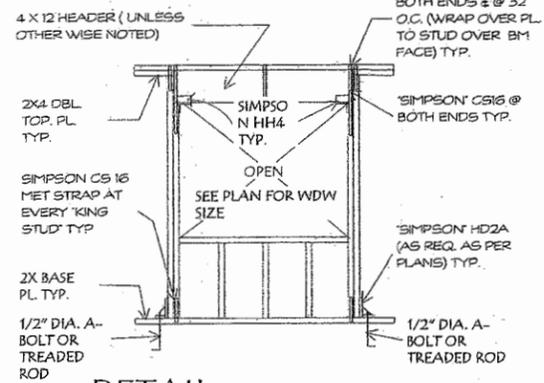
APPROVED
DRB



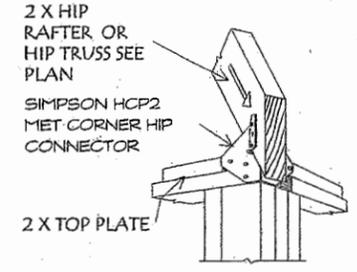
4
14
DETAIL



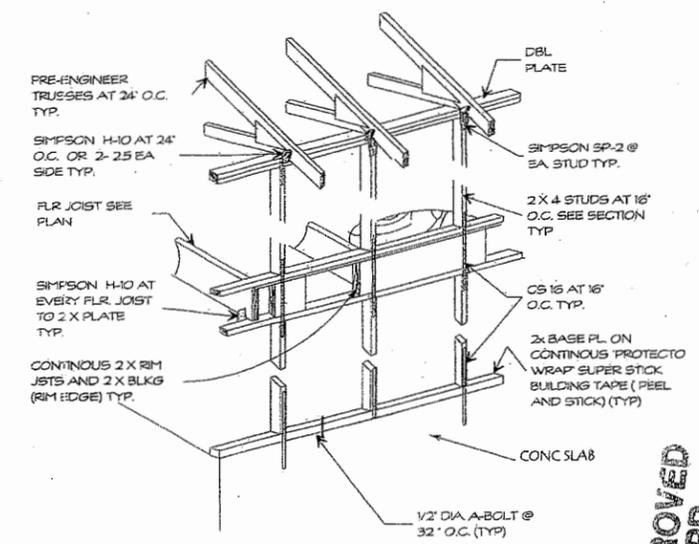
5
14
MOULDING DETAIL



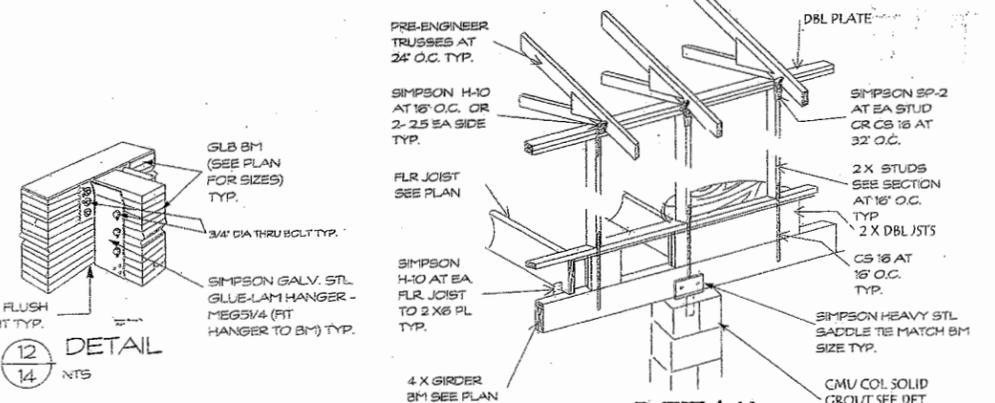
3
14
DETAIL
SCALE: NTS



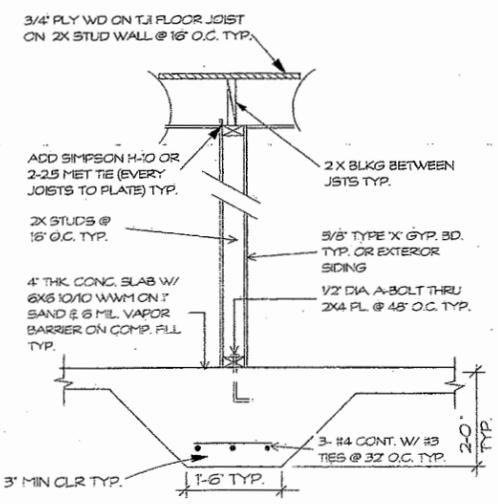
2
14
DETAIL



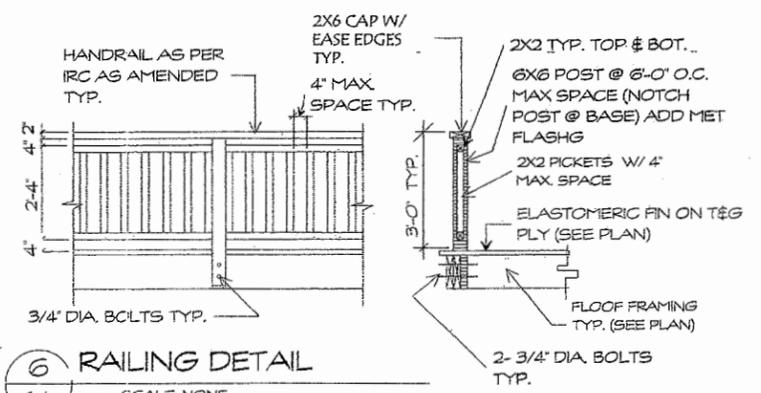
1
14
DETAIL
SCALE: NTS



8
14
DETAIL
NTS



7
14
DETAIL
SCALE: NONE

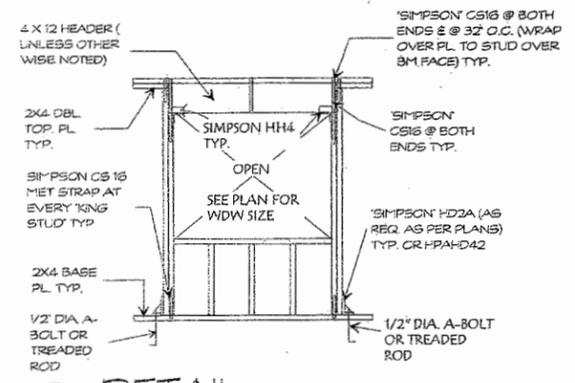


6
14
RAILING DETAIL
SCALE: NONE

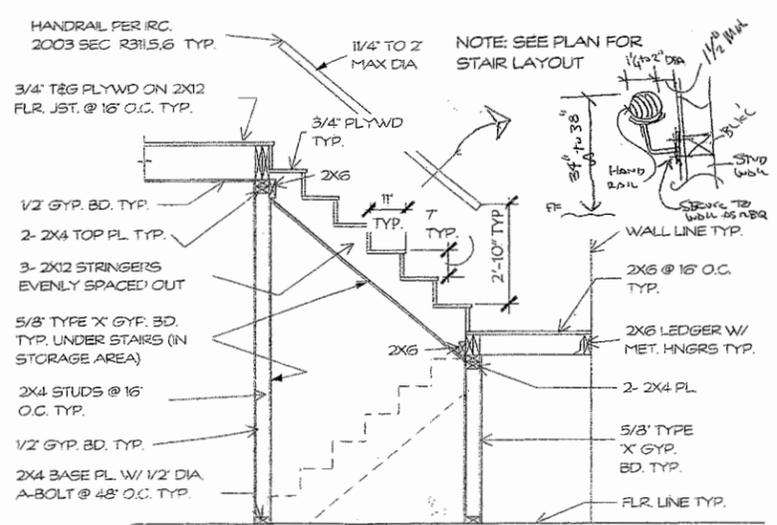
CONCRETE BLOCK LINTEL SCHEDULE					
SPAN L.F.T. LESS THAN	NUMBER COURSES SOLIDLY GROUTED	BOTTOM REINF. SEE NOTE #1	TOP REINF.	VERT. REINF.	TYPE
4	1	2 #4	2 #4	#4 @ 16"	A
5	2	2 #4	2 #4	#4 @ 16"	B
6	2	2 #4	2 #4	#4 @ 16"	B
7	2	2 #4	2 #4	#4 @ 16"	B
8	2	2 #5	2 #4	#4 @ 16"	D
9	3	2 #5	2 #4	#4 @ 16"	C
10	3	2 #5	2 #4	#4 @ 16"	C
11	4	2 #5	2 #4	#4 @ 16"	C

NOTE: EXTEND LINTEL REINF. AND GROUTING 2'-6" BEYOND OPENING WHERE 2'-6" CANNOT BE OBTAINED EXTEND BARS AS FAR AS POSSIBLE AND HOOK OR BEND UP 90 DEGREES.

11
14
CONCRETE BLOCK LINTEL SCHED. & DETAILS
SCALE: NTS



10
14
DETAIL
SCALE: NTS



9
14

INTERIOR STAIR DETAIL-SIM

SCALE: NONE



P.O. Box 471
Honolulu, HI 96809

EMAIL: PERMITS@PEHAWAII.COM
PH: # 808 549-0721



THIS WORK WAS PREPARED BY ME
UNDER MY SUPERVISION AND
CONTROL AND I AM AWARE THAT
IT WILL BE UNDER MY OBSERVATION
DATE: MAR 30 2012

PROPOSED NEW DWELLING FOR:
MR. CHARLES WONG
46-107 LIHUPUNA RD., KANEHOE 96744
TMK: 4-6-01-07

12-10-12
JOB NO#
2012-07-23

SHEET
A-15
OF 16 SHEETS

APPROVED
DPP

FOUNDATION:

- FOUNDATION DESIGN IS BASED ON THE ASSUMED EXPANSIVE MATERIALS.
- ALL FOOTINGS SHALL BEAR ON PROPERLY COMPACTED STRUCTURAL FILL OR FIRM UNDISTURBED SOIL.
- REMOVE ALL LOOSE MATERIAL IN FOOTING EXCAVATION. ALL FOOTING EXCAVATIONS SHALL BE INSPECTED BY THE ENGINEER OR ARCHITECT BEFORE PLACING REINFORCING STEEL AND CONCRETE.
- ALL BACKFILL BELOW AND AROUND STRUCTURAL WORK SHALL BE PLACED IN LIFTS OF NO MORE THAN 8" LOOSE THICKNESS, AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95% BASED ON ASTM TEST PROCEDURE D-1557. UNLESS OTHERWISE PERMITTED BACKFILL SHALL BE GRAVEL MATERIAL, FREE OF ORGANIC OR OTHER DEBRIS AND WITHOUT EXPANSIVE SOIL. SOIL CONDITION SHOULD BE AT OPTIMUM MOISTURE CONTENT BEFORE PLACING.

GYPSUM DRYWALL:

- TYPICAL DRYWALL: COMPLY WITH ASTM C36, 4 FT. WIDE BY LONGEST PRACTICAL LENGTHS, BASED EDGES, STANDARD PAPER FINISH. PROVIDE FIRE-RATED (TYPE X) DRYWALL, 5/8" THICK, UNLESS OTHERWISE NOTED, U.S.G. SHEETROCK FIRE CODE BOARD, DORTAR NULL-A-FIRE, GOLD BOND FIRE-SHIELD, OR APPROVED EQUAL.
- DRYWALL IN WET AREAS, WATER RESISTANT BOARD COMPLYING WITH ASTM C850 C850 U.S.G. SHEETROCK W.R. DORTAR MOISTURE-GUARD, GOLD BOND W.R. BOARD, OR APPROVED EQUAL.
- TRIM, CORNER TRIM & EDGE TO BE OF PVC PLASTIC AS MANUFACTURED BY PLASTIC COMPONENTS, OR APPROVED EQUAL FINISH ALL CORNERS AND EDGES WITH TRIMS UNLESS TRIMMED WITH WOOD. FINISH GYPSUM WALL BACK TO THE FLOOR WHERE NO BASE IS INDICATED. METAL TRIMS ARE NOT ACCEPTABLE WITHOUT PRIOR APPROVAL.
- JOINT TREATMENT: ASTM C475, ASBESTOS-FREE, QUICK DRYING NON-SHRINKING TYPE POWERED COMPOUND AND PERFORATED FIBER TAPE WITH BEVELED EDGES, AS STANDARD WITH THE DRYWALL MANUFACTURER USE WATER-RESISTANT COMPOUND AT WATER RESISTANT BOARD. FINISH SHALL BE SMOOTH UNLESS OTHERWISE NOTED.

CONCRETE:

- ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
- ALL INSERTS, ANCHOR BOLTS, PLATES, ETC. EMBEDDED IN CONCRETE SHALL BE HOT-DIPPED GALVANIZED UNLESS OTHERWISE NOTED.
- NO PIPES OR DUCTS SHALL BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED ON STRUCTURAL DRAWINGS.
- THE LOCATION OF ALL CONSTRUCTION JOINTS SHALL BE COORDINATED WITH AND APPROVED BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.
- NOTIFY ENGINEER FOUR (4) WORKING DAYS PRIOR TO ANY CONCRETE POUR. NO CONCRETE SHALL BE POURED PRIOR TO OBSERVATION BY THE ARCHITECT OR HIS REPRESENTATIVE.

REINFORCING STEEL:

- ALL REINFORCING STEEL SHALL DEFORMED BARS CONFORMING TO ASTM A65, GRADE 60, EXCEPT TIES AND STIRRUPS WHICH MAY BE GRADE 40.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185, GALVANIZED.
- INSTALL REINFORCING BARS WITH CLEAR COVER AS FOLLOWS, UNLESS OTHERWISE NOTED.

A. CONCRETE CAST AGAINST EARTH:	3" FROM EARTH
B. WALL FACES WITH FORMED FACES EXPOSED TO EARTH OR WEATHER:	1 1/2" (3/8" OR LESS) 2" (1/2" AND LARGER)
INTERIOR FACES:	3/4" STIRRUPS AND TIES AND BOTTOM
C. BEAMS AND COLUMNS NOT EXPOSED TO EARTH OR WEATHER:	1 1/2" CLEAR TO AND BOTTOM
D. STRUCTURAL SLABS:	3/4" CLEAR AT TOP
E. SLAB ON GRADE:	1" CLEAR AT TOP
- LAP BARS 36" UNLESS NOTED OTHERWISE. LAP WELDED WIRE FABRIC 12" MINIMUM UNLESS OTHERWISE NOTED.
- PLACING TOLERANCES AND BAR SUPPORTS SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION BY THE CRSI.

SMOKE DETECTORS:

- ALL SMOKE DETECTORS SHALL CONFORM TO THE STANDARDS IN THE 2003 IRC SEC R310

PLUMBING NOTES:

- DRAIN PIPING: HUBLESS CL PIPE PER C.I.P.I. 301-76. USE CAST IRON COUPLINGS BELOW GRADE. MAY USE SCHEDULE 40 ABS INSTEAD OF CAST IRON PIPE.
- VENT PIPING: SCHEDULE 40 ABS WITH SOLVENT WELDED FITTINGS TYP.
- WATER SUPPLY PIPING: ABOVE GRADE: TYPE 'L' HARD OR SOFT TEMPER COPPER TUBING WITH WROUGHT BRONZE OR COPPER FITTINGS. BELOW GRADE: TYPE 'K' HARD OR SOFT TEMPER COPPER TUBING WITH ABOVE FITTINGS. USE WATER SOLUBLE FLUX. WRAP ALL BURIED TUBING WITH 1/2" THIRL-COAT POLYETHYLENE.
- ROOF DRAIN PIPING: ABS OR PVC SCHEDULE 40 PIPING WITH SOLVENT WELDED FITTINGS, IN WALL OR IN HIDDEN SPACES, OTHERWISE COPPER, DRAIN PIPES-1/4 GA. MET. ROOF GUTTERS SHALL BE 1/4 GA COPPER MET-WHITE FINISH.
- PROVIDE 0.5 GPM LOW LIMITERS AT FIXTURES ON ALL HOT WATER LINES.
- ALL WATER CLOSETS SHALL BE WATER SAVER TYPE LIMITED TO 1.6 GALS. PER FLUSH.
- PROVIDE THRUST AND SUPPORT BLOCKS AND SUPPORT BRACKETS AS REQUIRED BY THE UNIFORM BUILDING CODE (LATEST EDITION AS AMENDED BY THE CITY AND COUNTY OF HONOLULU)
- HYDROSTATICALLY TEST ALL WATER PIPING TO 100 PSI BEFORE BURYING OR CONCEALING. THOROUGHLY FLUSH AND DISINFECT WATER SYSTEM AT THE END OF WORK.
- CONTRACTOR SHALL REMOVE AND CAP OFF ALL UNUSED EXISTING PLUMBING.
- CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE BY THE ENGINEER, ARCHITECT OR OWNER.

ELECTRICAL:

- THE ENTIRE ELECTRICAL INSTALLATION SHALL COMPLY WITH THE N.E.C. AND THE RULES/REGULATIONS AND ORDINANCE OF THE GOVERNING AUTHORITY.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO EXECUTE THE WORK AND SHALL OBTAIN AND PAY FOR ALL PERMITS, INSPECTIONS AND ASSOCIATED FEES.
- THIS WORK INCLUDES BUT IS NOT LIMITED TO: ELECTRICAL WIRING AND SERVICE EQUIPMENT AND DISTRIBUTION SYSTEM, PANELBOARDS, LIGHTING FIXTURES, POWER WIRING, AND FINAL CONNECTIONS TO ALL EQUIPMENT, TELEPHONE RACEWAYS AND MISCELLANEOUS MATERIALS AND EQUIPMENT FOR COMPLETE SYSTEM.
- DETERMINE ALL CODE AND LEGAL REQUIREMENTS BEFORE COMMENCING WORK. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE LAWS REGULATIONS AND ORDINANCES. ALL MODIFICATIONS REQUIRED BY THE INSPECTING AUTHORITY SHALL BE MADE BY THE ELECTRICAL CONTRACTOR WITHOUT ADDITIONAL COST TO THE OWNER.
- MATERIALS SHALL BE U.L. APPROVED UNLESS OTHERWISE REQUIRED AND SHALL CONFORM TO APPLICABLE N.E.M.A. AND N.E.C. STANDARDS.
- CONDUIT RACEWAYS SHALL BE EITHER RIGID STEEL OR ELECTRICAL METALLIC TUBING PER N.E.M.A. OR LOCAL CODE REQUIREMENTS.
- OUTLET BOXES SHALL BE STANDARD, STAMPED GALVANIZED STEEL BOXES. JUNCTION WORK BOXES AND OUTLET BOXES USED AS A PULL BOX SHALL BE PROVIDED WITH SUITABLE COVER OF THE SAME MATERIAL AS BOX. EXPOSED BOXES SHALL BE GALVANIZED CAST IRON OR PVC WITH THREADED HUBS FOR CONDUIT CONNECTIONS.
- WIRING DEVICES SHALL BE SPECIFICATION GRADE AND EQUAL TO HUBBELL, BRYANT, ARROW HART OR AS NOTED.
- SWITCHES SHALL BE FLUSH TOGGLE AC QUIET TYPE, 120/227 VOLT, 20 AMP, OR AS REQUIRED, WHITE COLOR.
- RECEPTACLES SHALL BE FLUSH 3-WIRE GROUNDING TYPE, 125 VOLT, 20 AMP, WHITE COLOR, 250 VOLT, 30-50 AMPS, AS REQUIRED, WHITE COLOR.
- ALL DEVICE PLATES SHALL BE WHITE COLOR PLASTIC. TELEPHONE AND P.A. OUTLETS SHALL HAVE PLATES WITH 3/8" DIAMETER GROUNDED HOLE.
- PANELBOARDS SHALL BE SQUARE D CATALOG QO, 120/240 VOLTS, 1 PHASE, 3 WIRE OR APPROVED EQUAL. PROVIDE COMPLETE PANEL BOARD DIRECTORIES, PROVIDE 200 AMP, MIN SERVICE.
- BOXES SHALL BE AT EACH CURRENT CONSUMING OR SWITCHING OUTLET, PROVIDE AN APPROVED OUTLET BOX OF NOT LESS THAN 1/2 GAUGE STEEL. GAND BOXES SHALL BE PROVIDED FOR BANKS OF MORE THAN ONE SWITCH. ALL BOXES AT OUTLETS INTENDED FOR FIXTURES SHALL BE PROVIDED WITH FIXTURE WITH FIXTURE STUDS FASTENED TO THE BOXES.
- CONDUCTORS SHALL BE #12 MINIMUM SIZE, CONDUCTORS 1/8" AND LARGER SHALL BE STRANDED. INSULATION SHALL BE TYPE TW, OR THW AND SHALL CONFORM WITH N.E.C. FOR THE PARTICULAR APPLICATION. ALL CONDUCTORS SHALL BE COPPER. TYPE NM AND NMC CABLES ARE PERMITTED.
- COORDINATE WITH H.T. CO. FOR WIRING OF TELEPHONE SYSTEM. COMPLY WITH ALL H.T. CO. REQUIREMENTS.
- THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES WITH THE DRAWINGS I SPECIFICATIONS OF HIS WORK AND THE WORK OF OTHERS TO THE ARCHITECT AND SHALL OBTAIN WRITTEN INSTRUCTIONS.
- THE CONTRACTOR SHALL COORDINATE THE SCHEDULING, PATCHING, INSTALLATION, HOOKUPS AND MISC. PROCEDURES WITH ANY AND ALL OTHER CONTRACTORS THAT WILL BE INVOLVED IN THE COMPLETION OF THE CONTRACT.
- EXPOSED EQUIPMENT SHALL BE INSTALLED AS PER DRAWINGS AND IS SUBJECT TO ARCHITECTURAL INSPECTION FOR AESTHETIC APPEARANCE.
- CONTRACTOR SHALL DO ALL CUTTING AND PATCHING OF HIS WORK WHICH MAY BE REQUIRED TO RECEIVE THE WORK OF OTHER CONTRACTORS.
- CONTRACTOR SHALL TEST ALL PHASE-TO-PHASE AND PHASE-TO-GROUND INSTALLATION TO BE FREE FROM GROUNDS AND SHORTS. TEST EACH LAMP.
- CONTRACTOR SHALL BALANCE THE LOAD ON EACH LEG OF THE SERVICE SERVED FROM THE PANELBOARD. WHEN ALL LOADS ARE TURNED ON AND THE SYSTEM IS OPERATING AT 100% DEMAND, THE INITIAL UNBALANCE SHALL NOT EXCEED 10%.
- THE ENTIRE SITE SHALL BE CLEANED OF MATERIALS, DEBRIS, TOOLS, ETC. PROTECT COVER ALL ELECTRICAL EQUIPMENT KEPT AT THE JOB SITE.
- CONTRACTOR SHALL FURNISH ALL NECESSARY INSPECTION CERTIFICATES FROM THE LOCAL INSPECTION AUTHORITIES FOR FINAL COMPLETION.
- WARRANTY: UNLESS OTHERWISE STATED, THE CONTRACTOR SHALL GUARANTEE HIS INSTALLATION, PARTS AND MATERIALS FOR NOT LESS THAN ONE (1) YEAR. ANY DEFECTS SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER. THE WARRANTY STARTS ON THE DATE WRITTEN NOTICE FROM THE CONTRACTOR IS GIVEN AND IS ACCEPTED BY THE OWNER STATING THE PROJECT IS COMPLETED AND ALL REPAIRED CORRECTIONS MADE.

LUMBER:

- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH THE REQUIREMENTS OF THE LATEST NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND ITS FASTENINGS BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
- ALL LUMBER SHALL BE PRESERVATIVE TREATED DOUGLAS FIR (S4S) CONFORMING WITH THE STANDARD GRADING AND DRESSING RULES OF THE WEST COAST INSPECTION BUREAU.
- UNLESS OTHERWISE INDICATED, STRUCTURAL MEMBERS SHALL MEET OR EXCEED THE MINIMUM GRADE INDICATED BELOW.

A. STRUCTURAL LIGHT FRAMING (S4S)	GRADE NO. 1
2" TO 4" THICK, 2" TO 4" WIDE	
B. STRUCTURAL JOISTS AND PLANKS (S4S)	GRADE NO. 2
C. STRUCTURAL BEAM AND STRANGERS (S4S)	
5" AND THICKER, AND MORE THAN 2" WIDER THAN THICKNESS.	
D. STRUCTURAL POST AND TIMBERS (S4S)	
5" AND THICKER, AND NOT MORE THAN 2" WIDER THAN THICKNESS.	
- ALL PLYWOOD SHALL BE IDENTIFIED WITH THE APPROPRIATE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION, AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE U.S. PRODUCT STANDARD PS 1 OR ONE OF APA'S PERFORMANCE STANDARDS.

A. PLYWOOD SHALL BE GROUP 1 W/CLIMANIZED DOUGLAS FIR CK.
3/4" THICK
1/2" THICK
B. PLYWOOD EDGES SHALL HAVE TONGUE AND GROOVE JOINTS OR SHALL BE SUPPORTED WITH BLOCKING OR SIMPSON PSC CLIPS.
- MINIMUM PLYWOOD NAILING TO BE 6" O.C. AT ALL SUPPORTED EDGES AND 12" O.C. AT INTERIOR SUPPORTS. NAILS TO BE 8D COMMON FOR ALL PLYWOOD SHEATHINGS.

- UNLESS NOTED OTHERWISE, SILLS ON CONCRETE OR MASONRY WALLS SHALL BE 2" NOMINAL THICKNESS, WITH 1/2" DIAMETER X 12" LONG ANCHOR BOLTS AT 48" O.C. AND LESS THAN 7" FROM ENDS OF SILL MEMBERS. ONLY SILLS FOR INTERIOR, NON-BEARING PARTITIONS THAT ARE NOT "SHEAR WALLS" MAY BE ANCHORED TO CONCRETE SLAB WITH LOW VELOCITY POWER DRIVEN SHOT PINS AT 32" O.C. IN LIEU OF BOLTS. PINS SHALL HAVE A MINIMUM SHANK DIAMETER OF 0.2" AND SHALL BE SHOT THROUGH 7/8" X 1/4" GAUGE WASHERS. MINIMUM PIN PENETRATION ON CONCRETE = 1.625"

- BOLTS IN WOOD SHALL BE ASTM A 307 MACHINE BOLTS UNLESS OTHERWISE NOTED. BOLTS HOLES IN WOOD TO BE 1/32" TO 1/16" GREATER THAN BOLT. PROVIDE STANDARD WASHERS UNDER HEAD AND NUT AGAINST WOOD. WASHERS NOT REQUIRED UNDER THE HEAD OF CARRIAGE BOLTS. ALL NUTS SHALL BE TIGHTENED WHEN PLACED AND RETIGHTENED AT COMPLETION OF THE JOB OR IMMEDIATELY BEFORE CLOSING WITH FINISH CONSTRUCTION. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT DIPPED GALVANIZED.

- FRAMING HARDWARE SHALL BE SIMPSON 'STRONG TIE' GALVANIZED OR STAINLESS STEEL OR APPROVED EQUAL AND INSTALLED WITH NAILS OR BOLTS PER MANUFACTURER'S RECOMMENDATIONS. WHERE NAIL AND BOLT HOLES HAVE BEEN PROVIDED, ALL FRAMING HARDWARE, INCLUDING FASTENERS SHALL BE GALVANIZED OR STAINLESS STEEL.

- UNLESS OTHERWISE INDICATED IN THE DRAWINGS OR DETAILS, ALL NAILING SHALL CONFORM TO TABLE 25-0 OF THE 1997 BUILDING CODE USING GALVANIZED COMMON NAILS, EXCEPT AS NOTED. RAFTERS SHALL BE TIED TO THE EXTERIOR PLATE WITH AN APPROVED GALVANIZED STEEL CONNECTOR HAVING A MINIMUM THICKNESS OF 0.0047 INCH AND SHALL BE TIE NAILED TO THE PLATE WITH THREE 8D COMMON OR BOX NAILS. EACH CONNECTOR SHALL BE NAILED WITH FOUR 8D FACE NAILS TO EACH MEMBER.

- PROVIDE 1 LAYER 30# ROOFING FELT BETWEEN ALL WOOD MEMBERS (PLATES, POST BASES, ETC.) AND CONCRETE OR MASONRY SURFACES.

- PRESERVATIVE TREATMENT: ALL LUMBER SHALL BE PRESERVATIVE TREATED FOR TERMITES AND ROT. PROVIDE ARCHITECT WITH CERTIFICATE AND/OR WARRANTY.

- CONCEALED FRAMING: W/CLIMANIZED, OSB/OSB OR APPROVED EQUAL.

- EXPOSED FRAMING: SAME AS CONCEALED FRAMING UNLESS OTHERWISE SPECIFIED.

- INSTALL PER MANUFACTURER RECOMMENDATIONS, TREATING ALL CUTS, NOTCHES AND HOLES WITH PRESERVATIVE BY SOAKING, BRUSHING OR SPRAYING.

- GRADE LUMBER AND FASTENERS BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.

WATER PROOFG

WATER PROOF ALL AREAS AS PER STANDARD BUILDING PRACTICE

ALL CAULKING TO BE POLYURETHANE OR SILICON OR AS PER MANUFACTURE SPECS.

HOUSE WRAP TO BE TYVEK INSTALL AS PRE MANUFACTURE SPECS

WINDOW AND DOOR FLASHING TO BE PROTECTO WRAP SUPER STICK BUILDING TAPE (PEEL AND STICK) INSTALL AS PER MANUFACTURE SPECS.

Exhibit 6

Revised Plans

PROPOSED ADDITION / ALTERATION FOR:

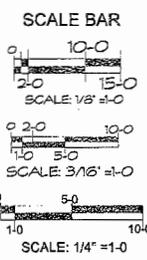
MR. CHARLES WONG

46-107 LILPUNA RD., KANE OHE 96744

TMK: 4-6-01-07



THIS WORK WAS PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND I AM A LICENSED PROFESSIONAL ARCHITECT IN THE STATE OF HAWAII.



FLOOR AREA CALCULATION

FLOOR AREA

NEW 1ST FLOOR LIVING AREA 2334.00
 NEW COVERED 1ST FLR COVERED LANAI 736.00
 TOTAL 1ST FLOOR AREA (3270.00 SF)
 NEW 2ND FLOOR LIVING AREA 272.00
 NEW COVERED 2ND FLR COVERED LANAI 728.00
 TOTAL 2ND FLOOR AREA (2448.00 SF)
 NEW BASEMENT/STOR 288.00 SF
 NEW TOTAL LIVING AREA 7,606.00 SF
 EXIST MASTER BED ROOM (RENOVATED) 1032 SF
 EXIST BKG ROOM (RENOVATED) 2,364 SF
 NEW GRAND TOTAL LIVING AREA 9592.00 SF
 EXIST (TWO) FULL SIZE CAR GARAGE 1306.00 SF
 GRAND TOTAL FLOOR AREA 10,898.00 SF

LOT COVERAGE

LOT SIZE: 19,598.00 SF 19,598.00/2 = 9,799.00 SF
 TOTAL = 6012.00 SF (TOTAL LOT COVERAGE) **OK**
 8 PARKING REQUIRED - 10 CAR PARKING PROVIDED **OK**
 (8 CAR PARKING IN EXISTING GARAGE AND 4 UNCOVERED PARKING = 10 PARKING TOTAL)

TAX OFFICE

19 5984
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 CITY AND COUNTY OF HONOLULU
 RECEIVED: 12/10/19
 PROJECT: 19000
 TMK: 4-6-01-07-7

SPECIAL INSPECTION
 IBC, INC CODES 2006, AS AMENDED
 CHECKED LOADS AND ALL LIFE LINES
 CHECKED INSTALLATION
 WILLIAM WAI WONG
 ARCHITECT
 LICENSE NO. 6724
 DATE: 12/10/19

CITY AND COUNTY OF HONOLULU
 REVISED ORDINANCE CHAPTER 21,
 HONOLULU COUNTY CODE 199, AS AMENDED
 TO THE EFFECT OF AN AMENDMENT, THIS PROJECT DESIGN SUBSTANTIALLY
 CONFORMS TO THE BUILDING EXISTING CONSERVATION CODEBOOK
 MECHANICAL COMPONENT SYSTEMS
 MECHANICAL ENGINEER
 WILLIAM WAI WONG
 ARCHITECT
 LICENSE NO. 6724
 DATE: 12/10/19

GENERAL NOTES

1. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH I.R.C. 2203, STATE AND LOCAL BUILDING CODES.
2. CONTRACTOR SHALL VERIFY APPROVED, LEGIBLE BLUEPRINTS 5 TO AND DIMENSIONS BEFORE COMMENCEMENT. CONTRACTOR SHALL NOTIFY ARCHITECT OR ENGINEER OF ANY DISCREPANCY PRIOR TO STARTING CONSTRUCTION.
3. CONTRACTOR SHALL VERIFY THE SITE AND ALL INFORMATION INCLUDING DISTANCE, LOT DIMENSIONS AND EXISTING PROPERTY LINES TO ACCURATELY LOCATE PROPOSED PROJECT WITHIN THE MINIMUM REQUIRED SETBACK AREA.
4. GENERAL CONTRACTOR SHALL PROTECT ADJACENT LAND, BUILDINGS AND OTHER IMPROVEMENTS INSTALLED THEREON. ANY DAMAGES OCCURRED SHALL BE REPAIRED AT NO COST TO THE OWNER OR ARCHITECT OR ENGINEER.
5. ANY CONDITIONAL MATERIALS, DEVICES, OR ITEMS NOT SPECIFICALLY SHOWN ON THE DRAWINGS OR SPECIFIED SHALL BE CLARIFIED WITH THE ARCHITECT OR ENGINEER BEFORE BEGINNING CONSTRUCTION, INSTALLATION AND COMPLETION.
6. ALL FINISHED GRADE LEVELS AND/OR SPOT ELEVATIONS ARE ASSUMED TO BE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL CONDITIONS.
7. IF SOFT OR SWAMPY SOIL IS ENCOUNTERED THE SOIL SHALL BE REMOVED AND REPLACED WITH NON-COMPRESSIVE STRUCTURAL FILL COMPACTED TO 95% AS PER ASTM D1557.
8. FOUNDATION DESIGN IS FOR SOIL WITH BEARING CAPACITY OF 2000 P.S.F. (NON-COARSE).
9. ALL CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3000 P.S.I.
10. ALL REINFORCED STEEL TO BE WITH A500 GRADE 60. WELDED WARE MESH TO BE A-36 OR EQUAL.
11. ALL ROOFING SHALL REST ON FIRM UNDISTURBED SOIL.

12. GROUND TO BE CHEMICALLY TREATED FOR TERMITES PER I.R.C. AS AMENDED BY A QUALIFIED SOLEID CONTRACTOR.
13. THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACINGS AND SHORING FOR ALL STRUCTURAL MEMBERS DURING ALL PHASES OF CONSTRUCTION.
14. CONTRACTOR SHALL PROVIDE ALL NECESSARY FLASHING, CALLINGS, AND WATERPROOFING ETC. TO ENSURE A WEATHER TIGHT FINISH AS PER STANDBY PRACTICE AS PER I.R.C. 2203.702.
15. ALL LUMBERS SHALL BE DOUGLASS FIR 12 IN NOMINATED PRESSURE TREATED OR BETTER, AS PER I.R.C. AS AMENDED.
16. ALL FRAMING MEMBERS, RAFTERS, JOIST'S, AND BEAMS SHALL BE FINISHED WITH "EMPIRON" METAL CONNECTORS (OR EQUAL) TO PROVIDE A CONTINUOUS LOAD PATH FROM ROOF TO FOUNDATION TO RESIST HIGH WIND FORCES.
17. CONTRACTOR SHALL USE METAL HURDLES (LIPS "EMPIRON" HD A" EACH RAFTER OR TRUSS AS PER I.R.C.
18. UNLESS OTHERWISE SHOWN, THE NAILS SHALL BE AS PER I.R.C. NAILING SCHEDULE 171-12.
19. ALL WOODS SHALL BE 2" IN HEIGHT AND SHALL BE INSTALLED AS PER I.R.C. 216.5.01.
20. ALL WINDOWS AT BEDROOMS SHALL HAVE A MINIMUM GILL HEIGHT OF 40" AND A MINIMUM NET CLEAR AND OPENABLE AREA OF 57 SQUARE FEET, 34" HEIGHT MINIMUM AND 20" WIDTH MINIMUM AS PER I.R.C. 301.
21. WALL COVERINGS ON STUCCO SHALL NOT BE SHEARWALLS NOR BE CONTINUED UP TO ROOF DECKING.

22. INTERIOR SHEETINGS SHALL BE NAIL TO WOOD FRAMING AT 16" O.C. AT EDGES AND 24" O.C. IN FIELD.
23. GYPSUM BOARD SHEARWALLS SHALL BE NAILED TO BEAM OR STUDS AT 16" O.C.
24. PAINT ALL NEW INTERIOR AND EXTERIOR SURFACES (COLOR SELECTION BY OWNER) UNLESS OTHERWISE AGREED BETWEEN OWNER AND CONTRACTOR.
25. ALL WALLS AND CEILING OR PART THEREOF OR EXTERIOR DRYWALL TO BE ANHYGROUS WATERPROOF TYPE SYSTEM BOARD.
26. GARAGE STORAGE ROOMS, AND MECHANICAL WALLS & CEILING SHALL BE MINIMUM 1/2" TYPE X GYPSUM BOARD.
27. ALL UTILITY AREAS CONTAINING LAUNDRY FACILITIES SHALL BE FINISHED ON WALLS WITH WATERPROOF GYPSUM BOARD OR OTHER APPROVED WATER RESISTANT MATERIAL. MIN. ALL SHEETROCK AS PER I.R.C.
28. THE ARCHITECT OR ENGINEER IS NOT RESPONSIBLE FOR THE CONTRACTOR'S METHODS, PROCEDURES, OR CONDITIONS ON JOBSITE THAT MAY DEVELOP.
29. THE DRAWINGS INTEND TO SHOW FINISHED CONCEPT ONLY. CHANGES TO THE DRAWINGS MAY BE REQUIRED DUE TO UNEXPECTED CONDITIONS.
30. WINDOW HEADERS SHALL BE 4X12 AND DOOR HEADERS SHALL BE 4X8 MINIMUM UNLESS OTHERWISE NOTED, OR AS PER I.R.C. TABLE 10.02.3.1.2023.
31. DOUBLE FLOOR JOIST UNDER PARTITIONS RUNNING PARALLEL WITH JOISTS.

32. ALL BEDROOMS & HALLWAYS SHALL SMOKE ALARMS AS PER I.R.C. 2203.033. (NEW AREAS); THE ALARM DEVICE SHALL BE INTERCONNECTED IN A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN EACH BEDROOM AND HALL. THE ALARMS SHALL BE CLEARLY ALIGNED IN ALL BED ROOMS OVER THE BACKGROUND NOISE WITH ALL INTERVENING ROOMS CLOSED.
33. CONTRACTOR SHALL NOTIFY 911 OR ENGINEER 3 DAYS IN ADVANCE WHEN 2 CAR WALLS AND THE DOWNING FOR CONTINUOUS LOW WATER CAN BE INSPECTED.
34. OWNER OR CONTRACTOR MUST NOTIFY 911 OR ENGINEER AS HOURS FEED TO POURING CONCRETE AND CURING OF ALL WALLS FOR INSPECTION. IF ANY WALLS ARE CLOSED IN BEFORE AN INSPECTION IS MADE YOU MAY BE ASSESSED BY BUILDING INSPECTOR OR THE ENGINEER TO REOPEN THE WALLS AT YOUR OWN EXPENSE.
35. ANY STRUCTURAL CHANGES BY THE CONTRACTOR SHALL BE APPROVED BY THE ENGINEER.
36. INSTALL R-30 INSULATION IN CEILING AND RAIS IN EXTERIOR WALLS TYPE.
37. ALL WATER FIXTURES TO BE LOW FLOW.
38. THERE ARE NO PRESINKLERS OF IRRIGATION CONNECTED TO THIS WATER METER.

DEMOLITION NOTES (IF REQUIRED)

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL HIDDEN PLUMBING AND ELECTRICAL ELEMENTS PRIOR TO ANY DEMOLITION OR MODIFICATION TO EXISTING CONSTRUCTION.
2. CONTRACTOR SHALL VERIFY ALL EXISTING PLUMBING AND ELECTRICAL WORK AND NEW WALLS AS REQUIRED AS PER SHOWN ON DRAWINGS.
3. CONTRACTOR TO VERIFY WITH OWNER ANY PAST OR PRESENT PLUMBING OR EQUIPMENT TO BE REMOVED FROM EXISTING CONSTRUCTION. ANY UNREMOVABLE ITEMS REMOVED SHALL BE STOCKPILED AS PER OWNER'S INSTRUCTIONS.

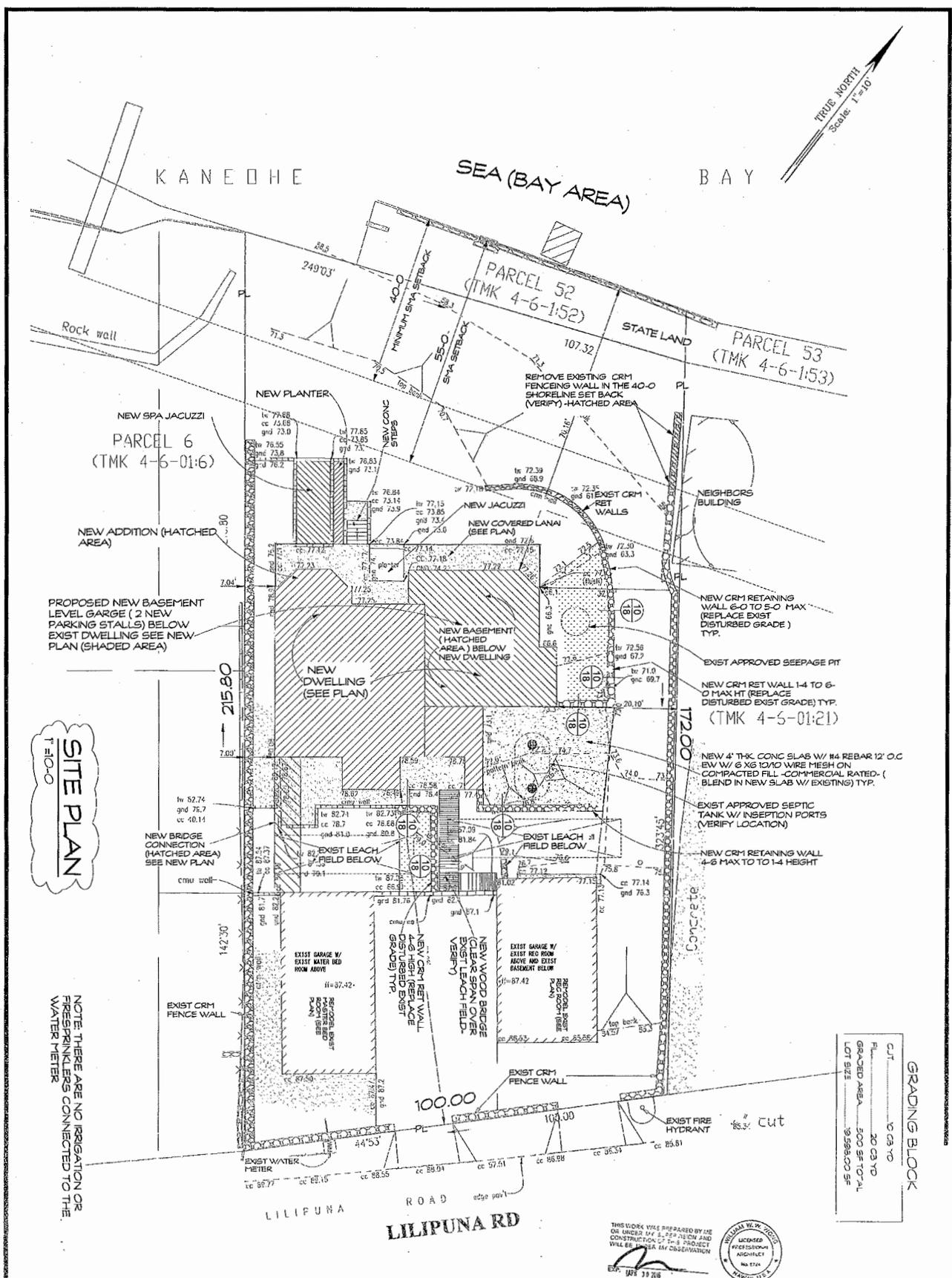
CITY AND COUNTY OF HONOLULU
 REVISED ORDINANCE CHAPTER 21,
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 TO THE EFFECT OF AN AMENDMENT, THIS PROJECT DESIGN SUBSTANTIALLY
 CONFORMS TO THE BUILDING EXISTING CONSERVATION CODEBOOK
 MECHANICAL COMPONENT SYSTEMS
 MECHANICAL ENGINEER
 WILLIAM WAI WONG
 ARCHITECT
 LICENSE NO. 6724
 DATE: 12/10/19

PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
 46-107 LILPUNA RD., KANE OHE 96744
TMK: 4-6-01-07

JOB NO: 2019-01-29
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 OF SHEETS

TAX OFFICE

TAX OFFICE



SITE PLAN
T-100

NOTE: THERE ARE NO IRRIGATION OR FERTILIZERS CONNECTED TO THE WATER METER

GRADING BLOCK

CUT	0.03 YD
FILL	20.03 YD
GRAZED AREA	500 SF TO 24'
LOT SIZE	9,586.00 SF

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY CLOSE SUPERVISION

DATE: 10/20/15

WILLIAM W. WONG
LICENSED PROFESSIONAL ARCHITECT
NO. 10114
HAWAII, U.S.A.

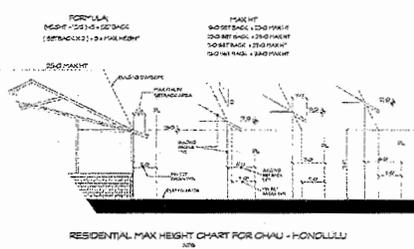
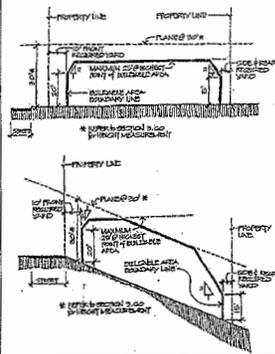
PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
46-107 LILIPUNA RD., KANEOHE 96744
TMK: 4-6-01-07

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OF SHEETS

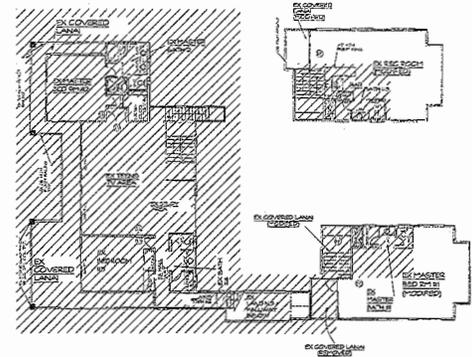
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2015-01-29

SCALE BAR
SCALE 1/8" = 1'-0"
SCALE 3/16" = 1'-0"
SCALE 1/4" = 1'-0"

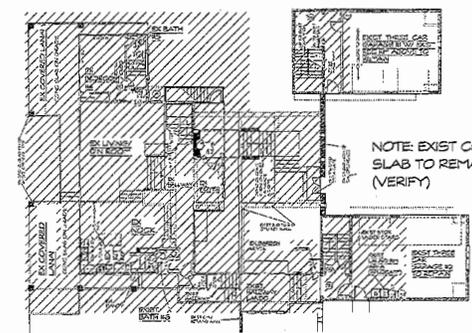
Figure 21-3.10
HEIGHT MEASUREMENT IN
RESIDENTIAL DISTRICTS



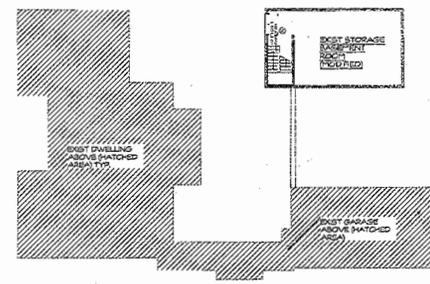
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2
DETAIL



EXIST AND DEMO UPPER FLOOR PLAN

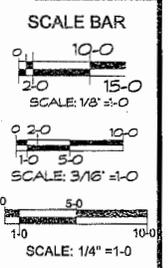
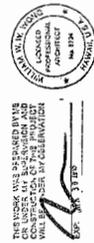


EXIST AND DEMO MAIN FLOOR PLAN



EXIST AND DEMO BASEMENT FLOOR PLAN

EXIST DEMO/ PLANS NTS



PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
 46-107 LILIPUNA RD., KANEHOE 96744
 TMK: 4-6-01-07

JOB NO#
 2015-01-29

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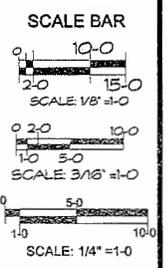
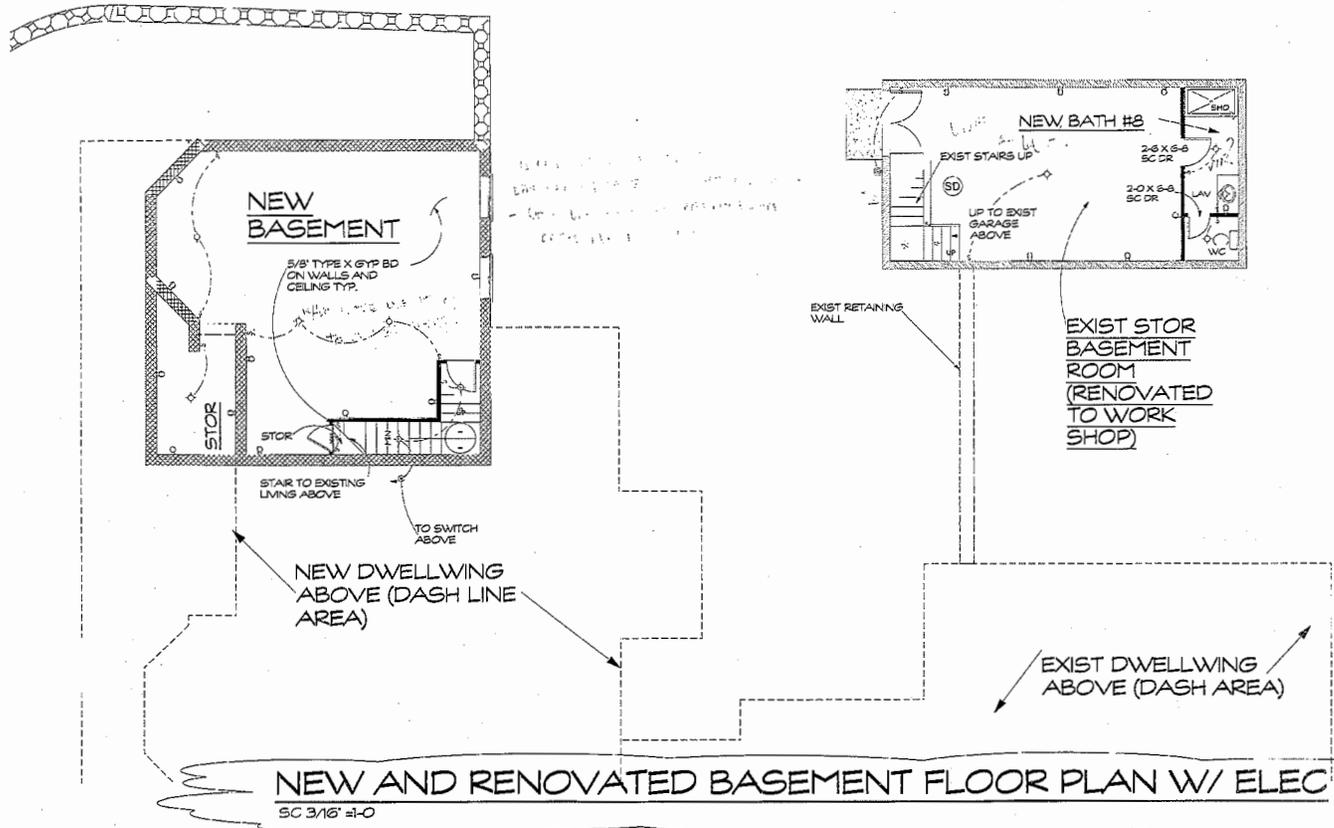
WINDOW SCHEDULE							
NUMBER	QTY	FLOOR	DIMENSIONS	WIDTH	HEIGHT	DESCRIPTION	COMMENTS
W01	1	2	16'x30"	16"	30"	FIXED GLASS	
W02	1	2	48'x48"	48"	48"	LEFT SLIDING	
W03	1	3	20'x48"	20"	48"	LEFT SLIDING	
W04	4	3	36'x48"	36"	48"	SINGL CASEMENT-HR	
W05	3	3	16'x48"	16"	48"	TRIPLE SLIDING	
W06	3	3	18'x48"	18"	48"	SINGLE HUNG	
W07	1	2	24'x30"	24"	30"	FIXED GLASS	
W08	2	2	30'x44"	30"	44"	RIGHT SLIDING	
W09	1	3	48'x48"	48"	48"	SINGLE HUNG	
W10	1	3	30'x48"	30"	48"	LEFT SLIDING	
W11	1	3	72'x48"	72"	48"	RIGHT SLIDING	
W12	2	3	48'x12"	48"	12"	LEFT SLIDING	
W13	2	3	48'x48"	48"	48"	RIGHT SLIDING	
W14	1	3	72'x48"	72"	48"	FIXED GLASS	
W15	2	3	48'x48"	48"	48"	LEFT SLIDING	
W16	1	2	32'x24"	32"	24"	RIGHT SLIDING	
W17	1	3	72'x48"	72"	48"	LEFT SLIDING	
W18	1	3	28'x48"	28"	48"	RIGHT SLIDING	
W19	3	3	96'x48"	96"	48"	RIGHT SLIDING	
W20	5	3	36'x24"	36"	24"	TRIPLE SLIDING	
W21	1	3	80'x48"	80"	48"	RIGHT SLIDING	
W22	2	3	48'x48"	48"	48"	SINGL CASEMENT-HR	
W23	5	3	60'x48"	60"	48"	RIGHT SLIDING	
W24	1	3	72'x48"	72"	48"	RIGHT SLIDING	
W25	2	3	28'x48"	28"	48"	SINGL CASEMENT-HR	
W26	4	3	24'x48"	24"	48"	SINGLE HUNG	
W27	3	1	48'x24"	48"	24"	RIGHT SLIDING	
W28	4	2	24'x48"	24"	48"	SINGLE HUNG	
W29	4	2	48'x48"	48"	48"	RIGHT SLIDING	
W30	2	2	14'x20"	14"	20"	FIXED GLASS	
W31	3	2	12'x30"	12"	30"	FIXED GLASS	
W32	2	2	96'x36"	96"	36"	RIGHT SLIDING	
W33	1	2	36'x36"	36"	36"	RIGHT SLIDING	

NOTE: AS PER IBC CODE - ALL WINDOWS AT BEDROOMS SHALL HAVE A MINIMUM CLEAR HEIGHT OF 4' AND A MINIMUM NET CLEAR AND OPENABLE AREA OF 5.7 SQUARE FEET, 24" HEIGHT MINIMUM AND 20" WIDTH MINIMUM AS PER I.A.C. 303

ALL WINDOWS SHALL BE VINYL TYPE

NOTE: SEE EXTERIOR ELEV FOR MORE INFO

DOOR SCHEDULE						
NUMBER	QTY	FLOOR	DIMENSIONS	DESCRIPTION	COMMENTS	
D01	1	2	24'x30"	EXT. GLAZD SLIDER-GLASS		
D02	1	2	24'x30"x1 3/8"	4-PANEL		
D03	1	2	24'x36"x1 3/8"	4-PANEL		
D04	2	2	30'x30"x1 3/8"	4-PANEL		
D05	2	2	36'x30"x1 3/4"	EXT. 2 PANEL 2 GLASS		
D06	1	2	24'x76"x1 3/4"	EXT. FRAMED		
D07	1	2	33'x32"x1 3/4"	EXT. 2 PANEL 2 GLASS		
D08	1	3	28'x48"	EXT. GLAZD SLIDER-GLASS		
D09	7	3	30'x30"x1 3/8"	4-PANEL		
D10	2	2	72'x36"	EXT. SLIDER-GLASS		
D11	1	3	24'x30"x1 3/8"	4-PANEL		
D12	1	3	28'x30"x1 3/8"	4-PANEL		
D13	3	3	80'x30"	SLIDER		
D14	1	3	76'x30"	EXT. SLIDER-GLASS		
D15	1	3	60'x30"	EXT. SLIDER-GLASS		
D16	1	3	82'x30"	SLIDER		
D17	1	3	57'x42'x30"	SLIDER		
D18	1	3	66'x30"	SLIDER		
D19	1	3	80'x30"	SLIDER		
D20	1	3	36'x30"x1 3/4"	EXT. HINGED GLASS		
D21	1	3	36'x30"x1 3/4"	2 PANEL 2 GLASS		
D22	1	3	96'x30"	TRIPLE SLIDER		
D23	1	3	92'x30"	TRIPLE SLIDER		
D24	1	3	36'x30"x1 3/4"	EXT. 2 PANEL 2 GLASS		
D25	1	3	88'x30"	SLIDER		
D26	1	1	28'x30"x1 3/8"	4-PANEL		
D27	2	1	30'x30"x1 3/8"	4-PANEL		
D28	2	2	32'x30"x1 3/8"	4-PANEL		
D29	1	2	32'x30"x1 3/4"	EXT. HINGED-PANEL		



PROPOSED ADDITION / ALTERATIONS FOR:

MR. CHARLES WONG

46-107 LILIPUNA RD., KANEHOE 96744

TMK: 4-6-01-07

JOB NO# 2015-01-29

SHEET

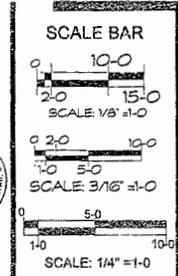
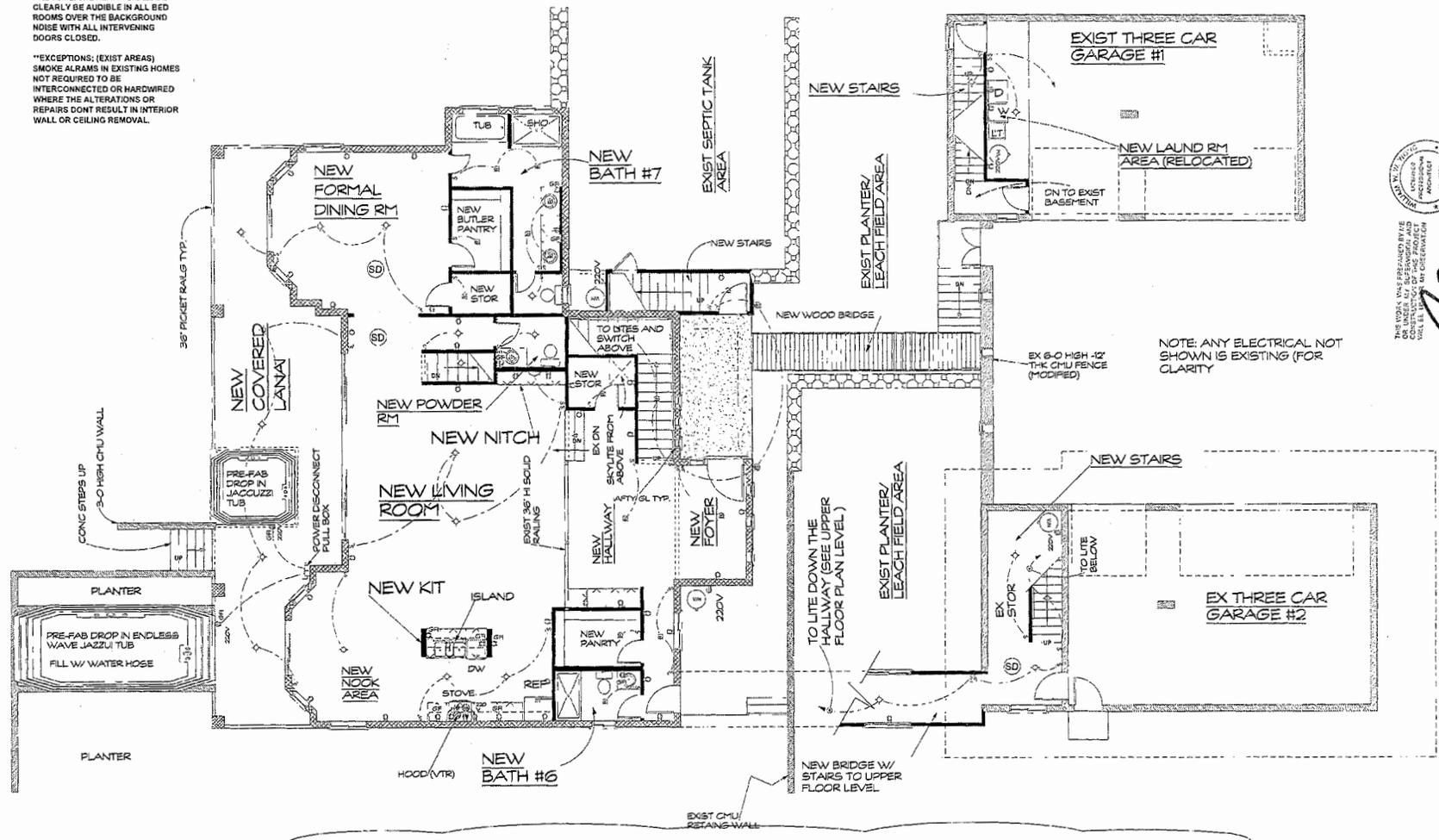
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SMOKE DETECTOR NOTE

NOTE: ALL BEDROOMS & HALLWAYS SHALL SMOKE ALARMS AS PER I.R.C. SEC R313; (NEW AREAS) THE ALARM DEVICE SHALL BE INTERCONNECTED IN A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN EVERY BEDROOM AND HALL. THE ALARM SHALL BE CLEARLY BE AUDIBLE IN ALL BED ROOMS OVER THE BACKGROUND NOISE WITH ALL INTERVENING DOORS CLOSED.

*EXCEPTIONS; (EXIST AREAS) SMOKE ALARMS IN EXISTING HOMES NOT REQUIRED TO BE INTERCONNECTED OR HARDWIRED WHERE THE ALTERATIONS OR REPAIRS DONT RESULT IN INTERIOR WALL OR CEILING REMOVAL.



PROPOSED ADDITION / ALTERATIONS FOR:

MR. CHARLES WONG

46-107 LILIPUNA RD., KANEHOE 96744

TMK: 4-6-01-07

JOB NOH
2015-01-29

SHEET
A006
OF SHEETS

NEW HOME AND EXIST ELECTRICAL MAIN FLOOR PLAN

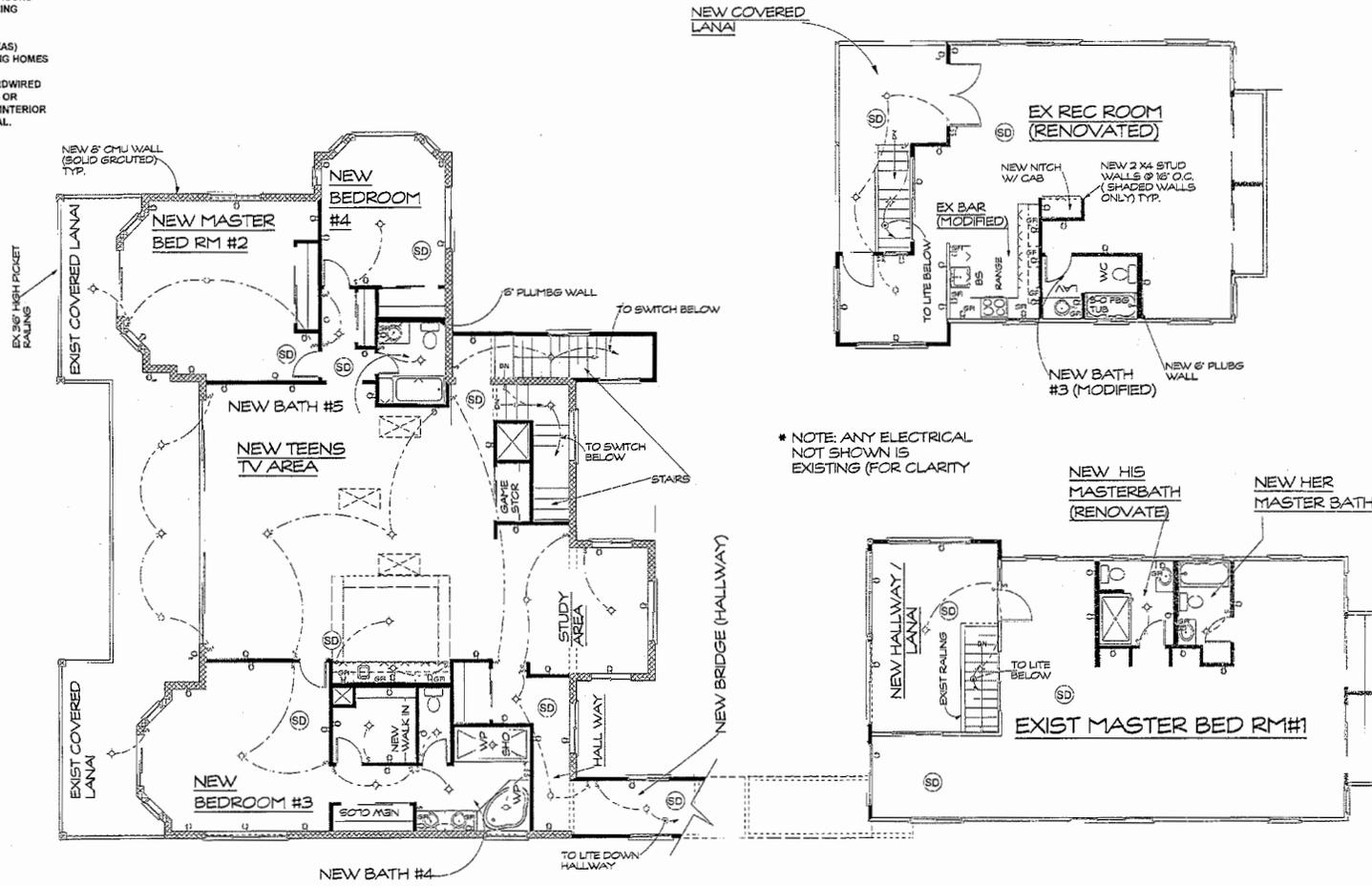
SC 3/16" = 1'-0"



SMOKE DETECTOR NOTE

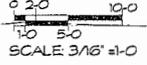
NOTE: ALL BEDROOMS & HALLWAYS SHALL SMOKE ALARMS AS PER I.R.C. SEC R313; (NEW AREAS) THE ALARM DEVICE SHALL BE INTERCONNECTED IN A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATED ALL OF THE ALARMS IN EVERY BEDROOM AND HALL. THE ALARM SHALL BE CLEARLY BE AUDIBLE IN ALL BED ROOMS OVER THE BACKGROUND NOISE WITH ALL INTERVENING DOORS CLOSED.

**EXCEPTIONS: (EXIST AREAS) SMOKE ALARMS IN EXISTING HOMES NOT REQUIRED TO BE INTERCONNECTED OR HARDWIRED WHERE THE ALTERATIONS OR REPAIRS DONT RESULT IN INTERIOR WALL OR CEILING REMOVAL.

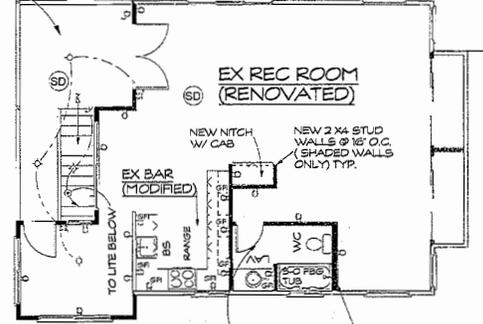


* NOTE: ANY ELECTRICAL NOT SHOWN IS EXISTING (FOR CLARITY)

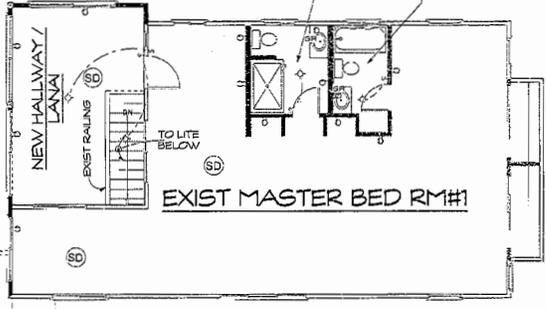
NEW HOME FLOOR AND EXIST ELECTRICAL UPPER PLAN
 SC 3/16" = 1'-0"



NEW COVERED LANAI

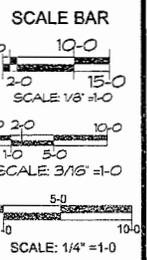
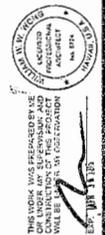


NEW BATH #3 (MODIFIED)



NEW HIS MASTER BATH (RENOVATE)

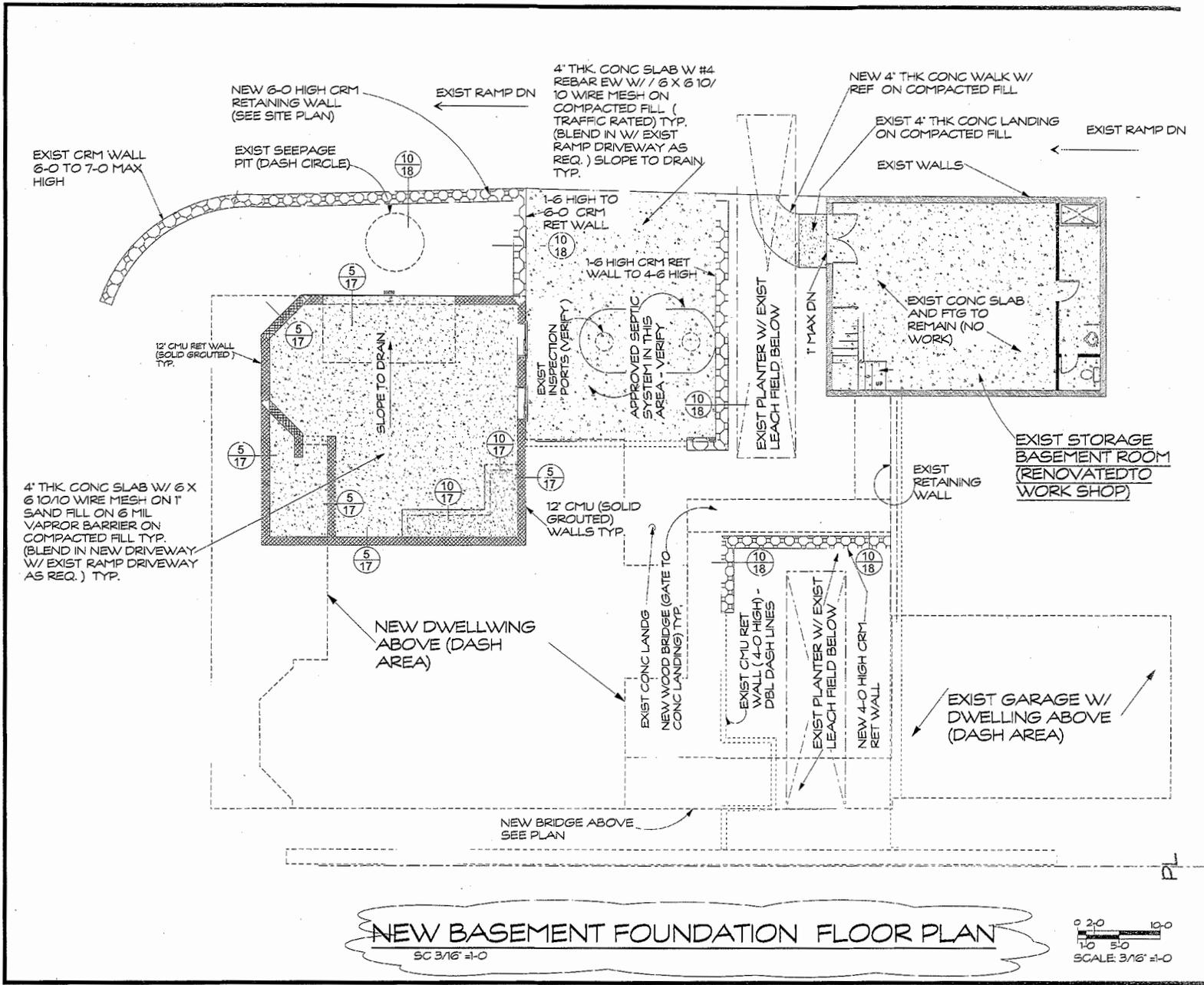
NEW HER MASTER BATH



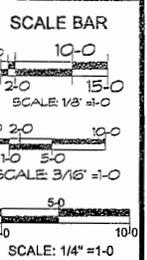
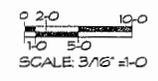
PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
 46-197 LILIPUNA RD., KANEHOHE 96744
 TMK: 4-6-01-07

JOB NO#
 2015-01-29

SHEET
A007
 OF SHEETS



NEW BASEMENT FOUNDATION FLOOR PLAN
 SC 3/16" = 1'-0"



PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
 46-107 LILIPUNA RD., KANEHOE 96744
 TMK: 4-6-01-07

JOB NO:
 2015-01-23

SHEET
A008
 OF SHEETS

4-0 HIGH CMU RET WALL

END CMU WALL AT EXIST CRM FENCE/RET WALL TYP.

NEW CONC. SLAB W/ 6X6 10/10 WIREMESH ON 1" SAND FILL ON 6 MIL VAPOR BARRIER ON 3B COMPACTED FILL TYP.

CONC STEPS ON COMPACTED FILL TYP.

NEW CONC. SLAB W/ 6X6 10/10 WIREMESH ON 1" SAND FILL ON 6 MIL VAPOR BARRIER ON 3B COMPACTED FILL ON CMU (SOLID GROUTED) FTG TYP.

#4 DOWELS AT 16' O.C. (DRILL AND EPOXY INTO EXIST FTG) TYP.

3/4" T&G PLY WD TYP

LEVEL CONC FLOOR FIN. W/ WOOD FIN FLOOR HT.

DBL FRAME AROUND STAIR OPENING

EXIST CONC SLAB W/ REF ON COMPACTED FILL TYP.

EXIST CONC STEPS DN

NEW CONC. SLAB W/ 6X6 10/10 WIREMESH ON 1" SAND FILL ON 6 MIL VAPOR BARRIER ON 3B COMPACTED FILL TYP.

NEW CONC. SLAB W/ 6X6 10/10 WIREMESH ON 1" SAND FILL ON 6 MIL VAPOR BARRIER ON 3B COMPACTED FILL TYP.

4 X 4 POST ON EXIST CMU RETAINING WALL W/ HD2A AT BASE (BRIDGE HALLWAY SUPPORT)

2 X 8 FLR JSTS @ 16' O.C. TYP.

BRIDGE GLB BMT 5 1/8 X 15 SUPPORT FROM EXIST GARAGE FLR FIN TO NEW UPPER FLOOR DWELLING

0 20 40 60 80 100
SCALE 3/8" = 1'-0"

NEW MAIN FLOOR FRAMING/ FOUNDATION PLAN

SC 3/16/10

EXIST CMU RET WALL
2X TREX DECKING SPACED 1/4" ON 2 X 6 FLR JSTS @ 16' O.C. TYP.
4-2 X 12 STEPS STRINGERS
SEE SITE PLAN FOR MORE INFO

BLEND IN FIN FLR HT TYP.
5 1/8 X 15 BM
NEW BRIDGE BALANCE STEPS DOWN BETWEEN BOTH FLOOR FINISHES AS REQ (TYP.)
DBL JSTS
LANDG ON 4 X 4 POST ON PRE CA FTG ON COMPACTED FILL W/ MET TYP. (AT BASE)

EDGE OF EXIST SLAB / FACE OF RET WALL TYP.
3-0 MIN LANDD ON 2 X PONY WALL (FRAME TO EX FLR LEVEL) -1" MAX DN

EXIST GARAGE SLAB AND FTG (NOT SHOWN FOR CLARITY)
BLEND IN FLOOR HEIGHT TYP BS

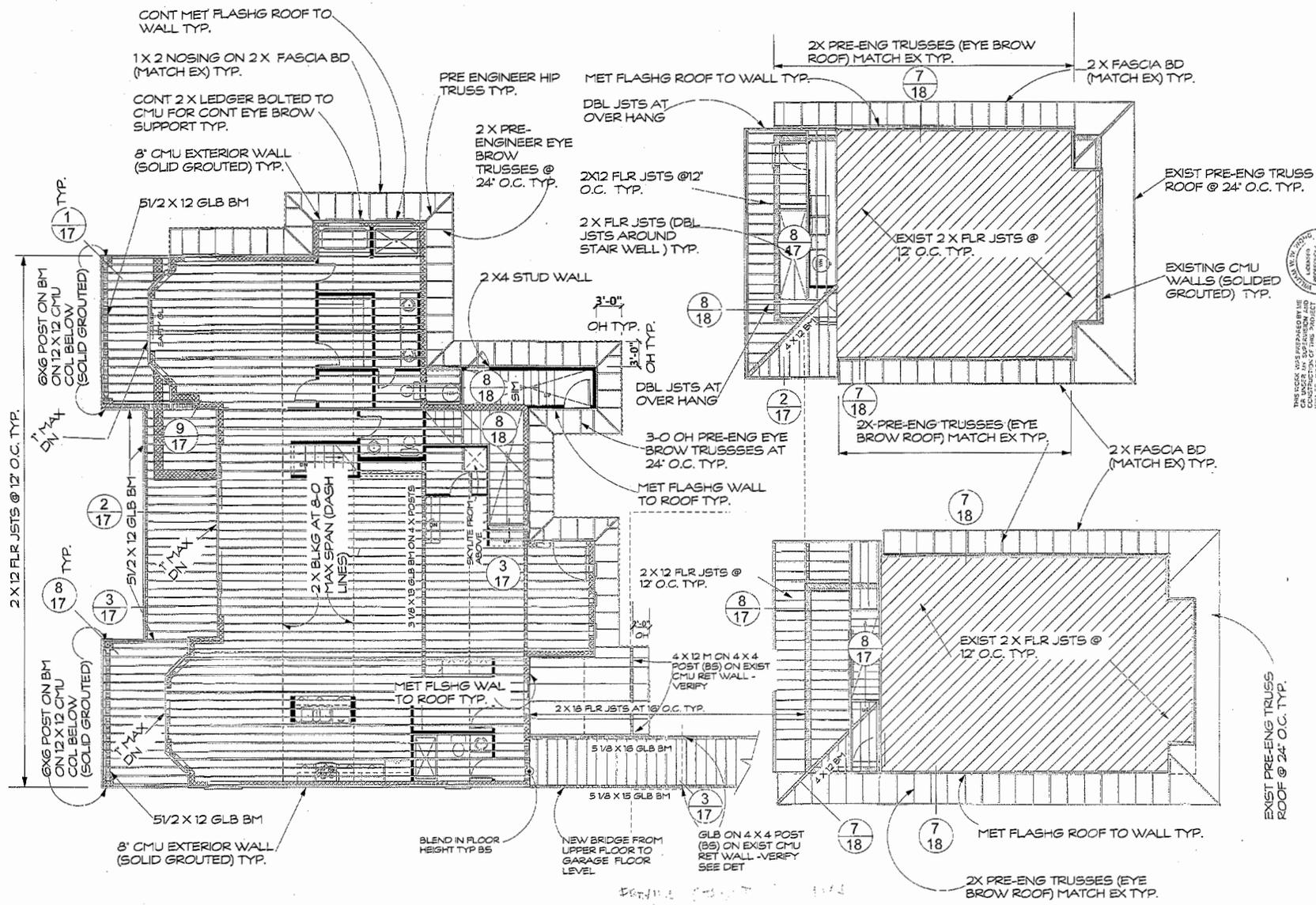
EXIST GARAGE SLAB AND FTG (NOT SHOWN FOR CLARITY)

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION
WALTER W. WOOD
REGISTERED PROFESSIONAL ARCHITECT
NO. 6112
EXPIRES 12/31/15

0 20 40 60 80 100
SCALE 3/8" = 1'-0"
SHEET
A009
OF SHEETS

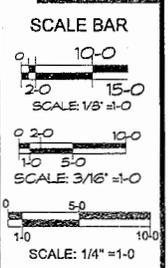
PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
46-107 LILIPUNA RD., KANEOHE 96744
TMK: 4-6-01-07

0 20 40 60 80 100
SCALE 1/4" = 1'-0"
SCALE BAR



EXIST AND NEW MAIN FLOOR FRAMING/ FOUNDATION PLAN

56 346 1-0

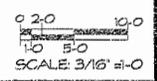


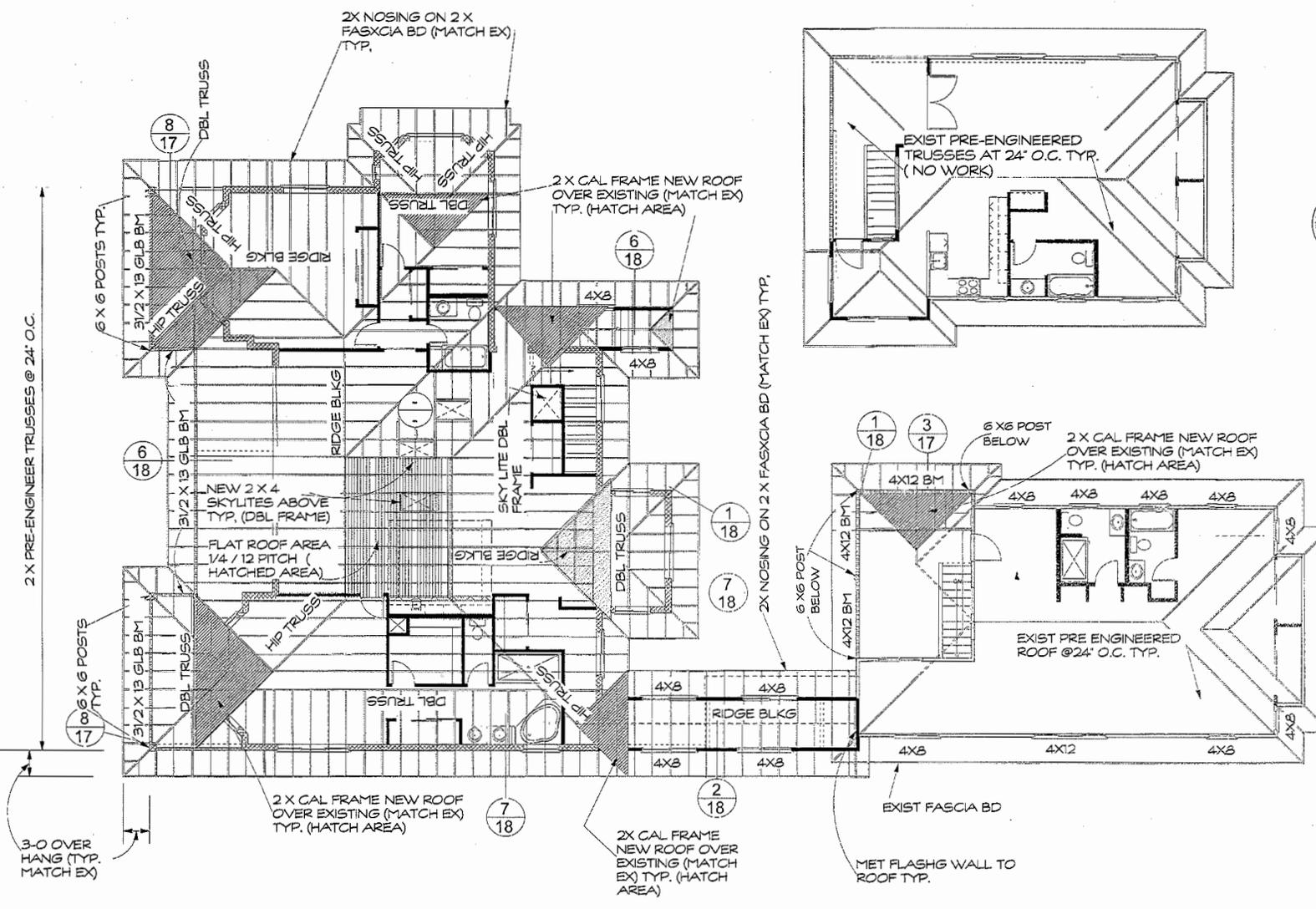
REGISTERED PROFESSIONAL ARCHITECT
 STATE OF CALIFORNIA
 No. 1114
 EXP. 08/31/2018

PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
 46-107 LILIPUNA RD., KANEHOE 96744
 TMK: 4-6-01-07

JOB NO#
 2015-01-29

SHEET
A010
 OF SHEETS



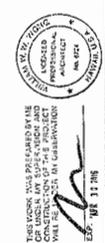
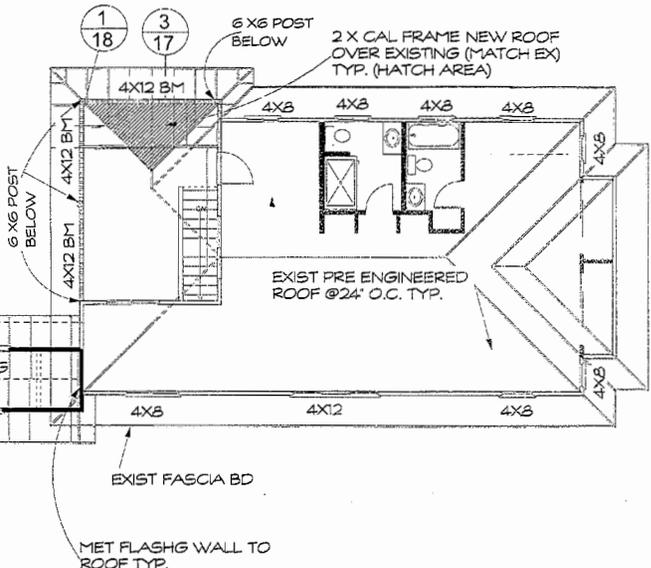
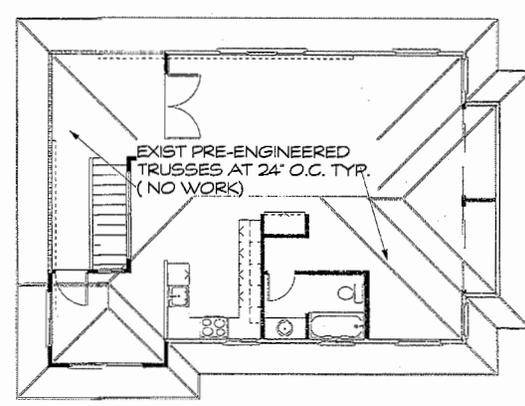


NOTE:
ROOF OVER HANG
TO BE 3-0 TYP.
(MATCH EX)

EXIST AND NEW MAIN AND UPPER ROOF FRAMING PLAN

SC 3/16" = 1-0

0 20 100
10 50
SCALE 3/16" = 1-0

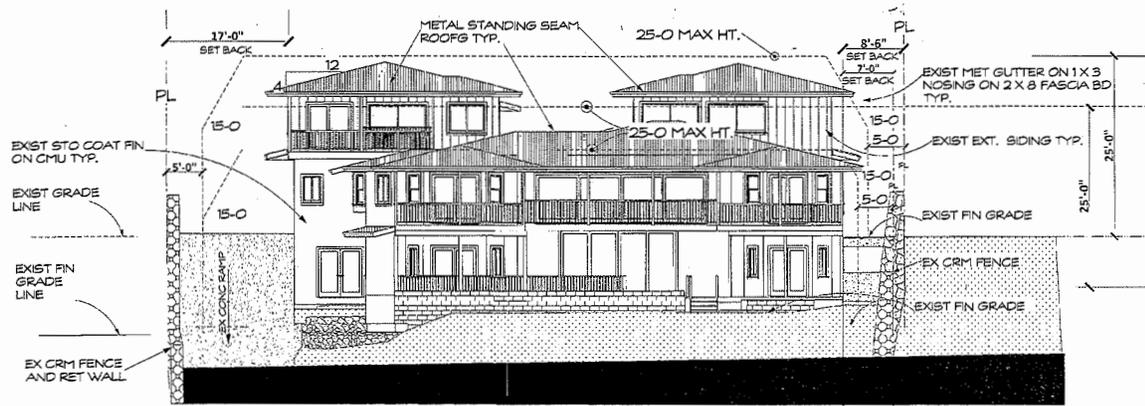


SCALE BAR
0 10-0
2-0 15-0
SCALE 1/8" = 1-0
0 20 100
10 50
SCALE 3/16" = 1-0
0 5-0
1-0 10-0
SCALE 1/4" = 1-0

PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
46-107 LILIPUNA RD., KANEHOE 96744
TMK: 4-6-01-07

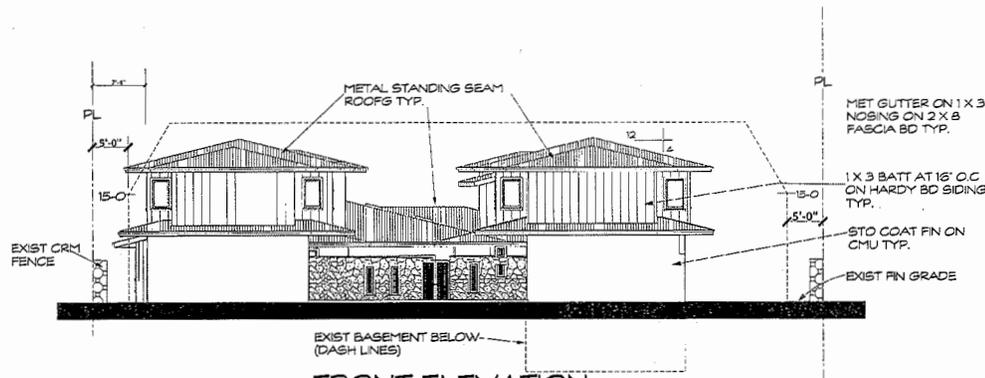
JOB NO.
205-01-29

SHEET
A011
OF SHEETS



REAR ELEVATION

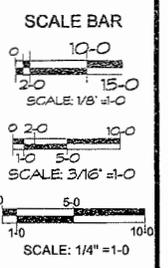
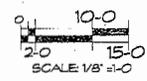
SC 1/8" = 1'-0"



FRONT ELEVATION

SC 1/8" = 1'-0"

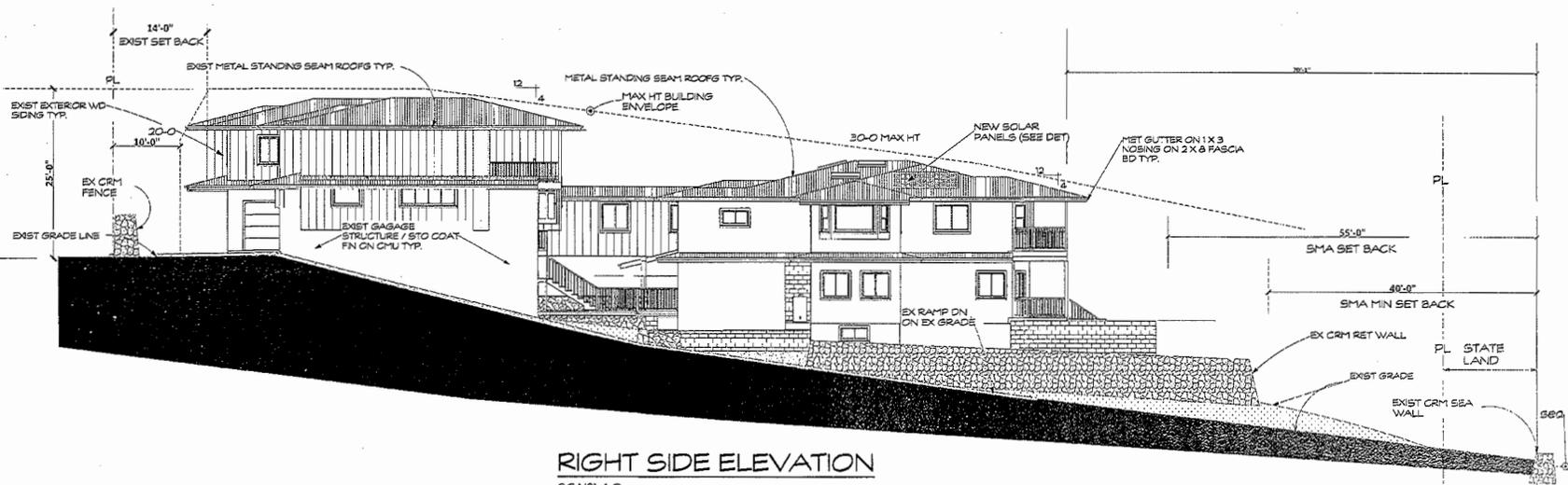
EXTERIOR ELEVATIONS



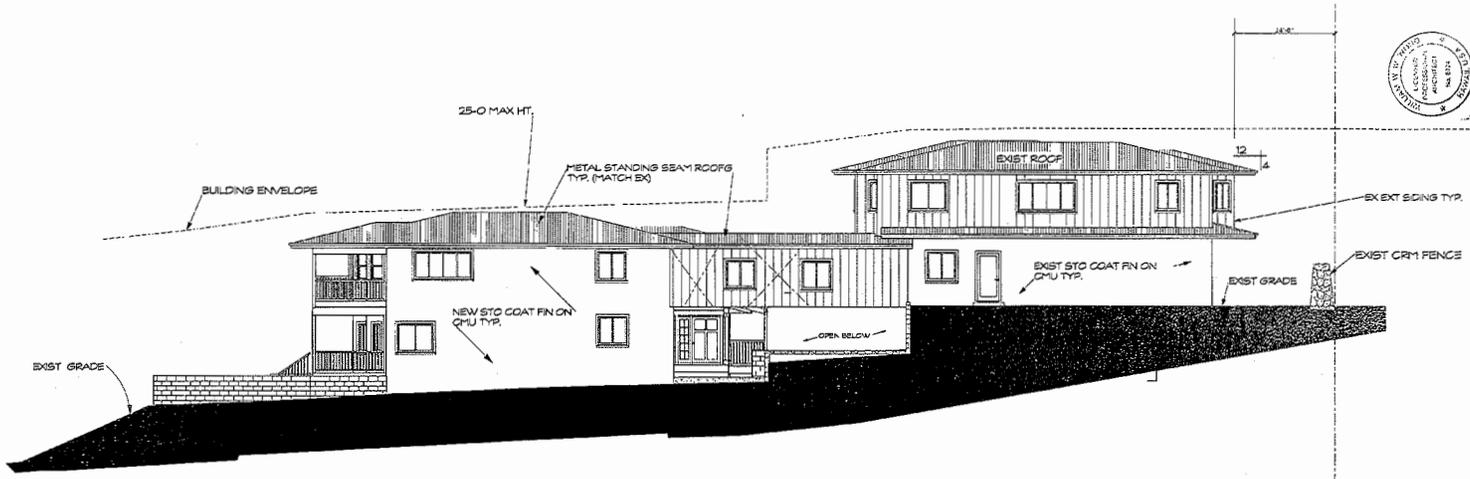
PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
 46-107 LILIPUNA RD., KANEHOE 96744
 TMK: 4-6-01-07

JOB NO: 2015-01-29

SHEET
A012
 OF SHEETS



RIGHT SIDE ELEVATION
SC 1/8" = 1'-0"



LEFTSIDE ELEVATION
SC 1/8" = 1'-0"

EXTERIOR ELEVATIONS

MR. CHARLES WONG ARCHITECT
 46-107 LILIPUNA RD., KANEHOE 96744
 TMK: 4-6-01-07

SCALE BAR

0 10'-0"
 2'-0" 15'-0"
 SCALE: 1/8" = 1'-0"

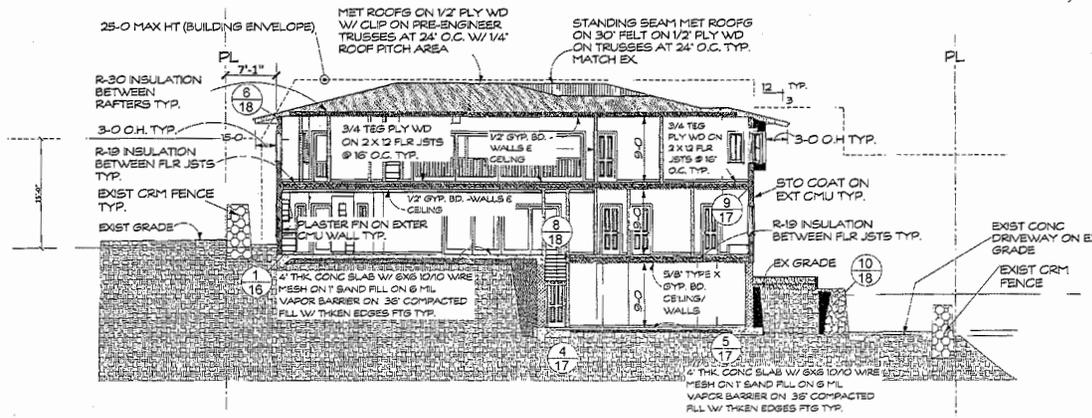
0 2'-0" 10'-0"
 1'-0" 5'-0"
 SCALE: 3/16" = 1'-0"

0 5'-0"
 1'-0" 10'-0"
 SCALE: 1/4" = 1'-0"

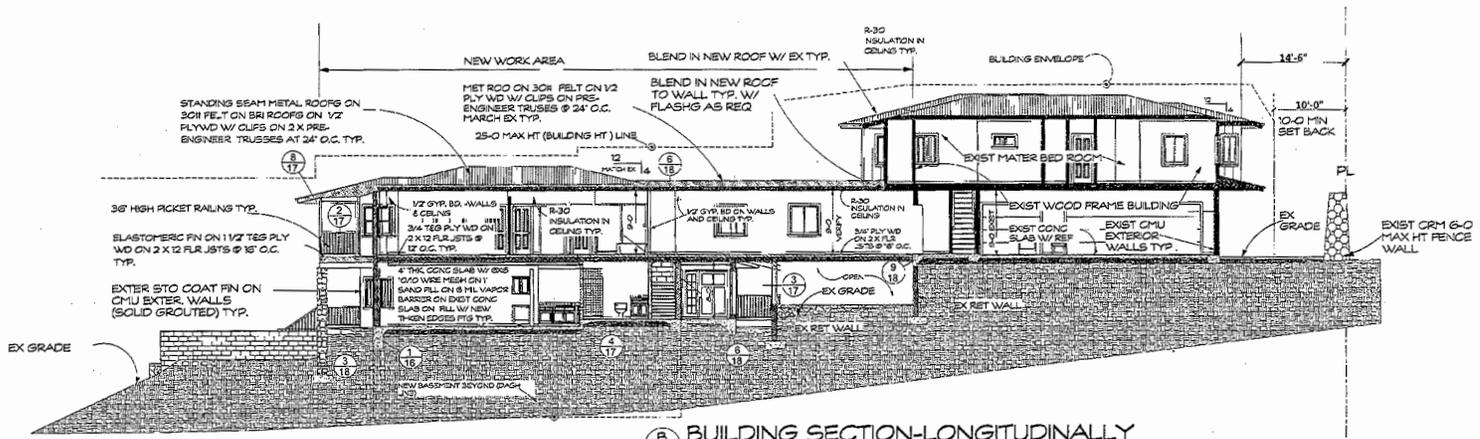
PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
 46-107 LILIPUNA RD., KANEHOE 96744
 TMK: 4-6-01-07

JOB NO#
 2015-01-29

SHEET
A013
 OF SHEETS

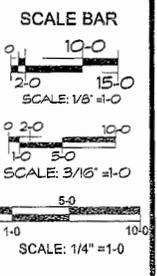
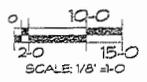


A BUILDING SECTION (CROSS SECTION)
SC 1/8" = 1'-0"



B BUILDING SECTION-LONGITUDINALLY
SC 1/8" = 1'-0"

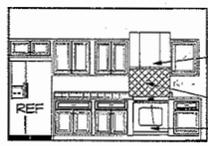
BUILDING SECTIONS



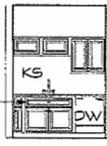
PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
46-107 LILIPUNA RD., KANEHOE 96744
TMK: 4-6-01-07

JOB NO:
2015-01-29

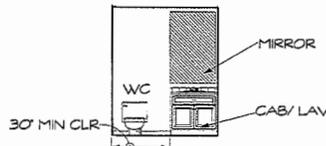
SHEET
A014
OF SHEETS



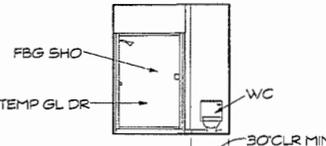
KITCHEN



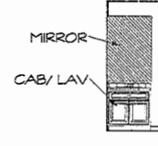
KITCHEN



NEW POWDER RM



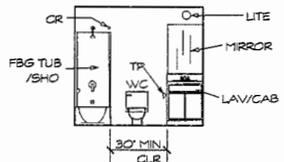
EXIST MASTER HIS BATH RENOVATED



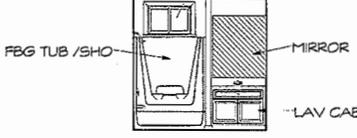
HIS MASTER BATH (RENOVATED)



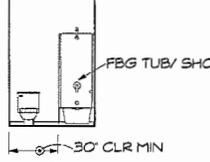
THIS WORK WAS PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND I AM A LICENSED MECHANICAL CONTRACTOR IN THE STATE OF HAWAII.



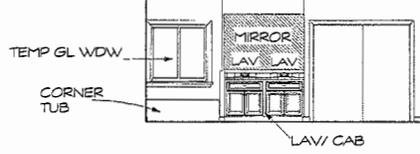
TYP. BATH #7 ELEV HER BATH-1M



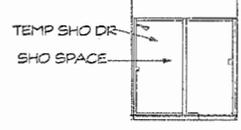
EXIST REC RM BATH (RENOVATED)



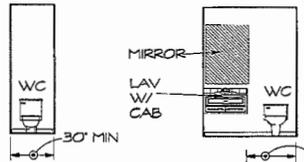
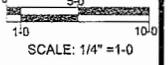
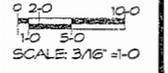
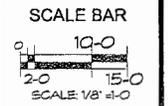
EXIST REC RM BATH (RENOVATED)



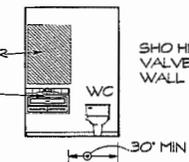
NEW BATH #4



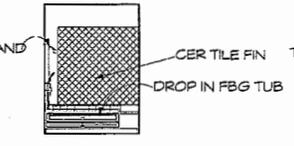
BATH #4



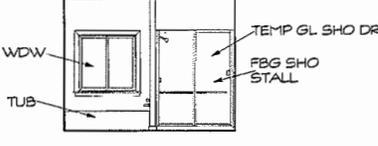
NEW BATH #4



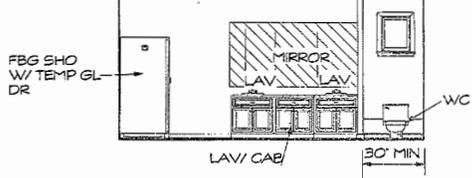
NEW BATH #5



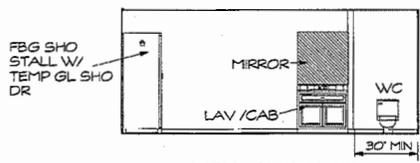
NEW BATH #5



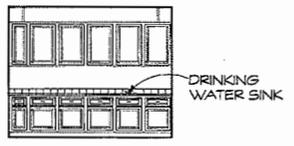
BATH #6



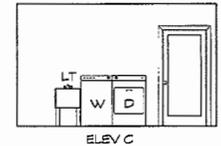
NEW BATH #6



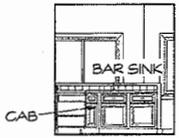
NEW BATH #8



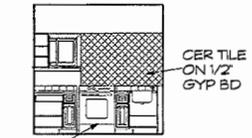
TEEN ROOM



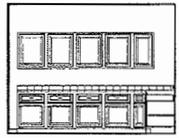
NEW RELOCATED LAUNDRY AREA INTO GARAGE 1



EXIST REC RM BAR (RENOVATED)

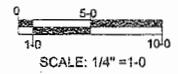


EXIST REC RM BAR (RENOVATED)



EXIST REC RM BAR (RENOVATED)

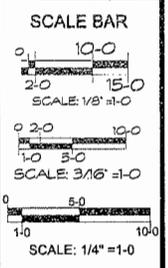
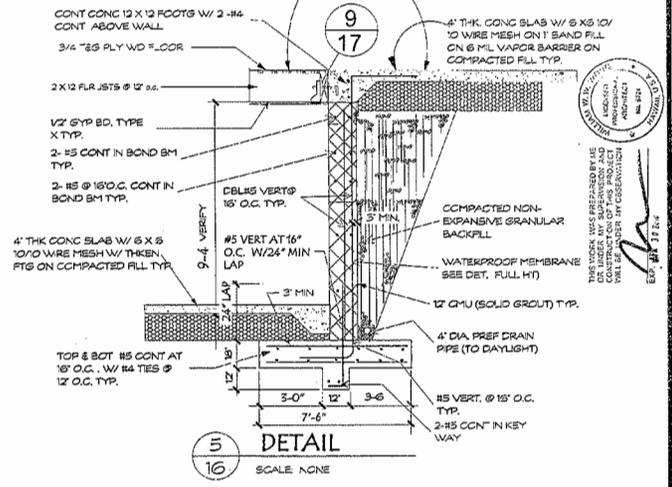
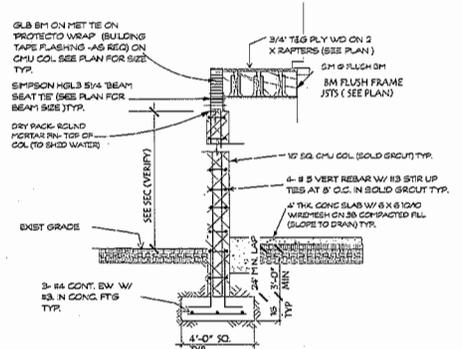
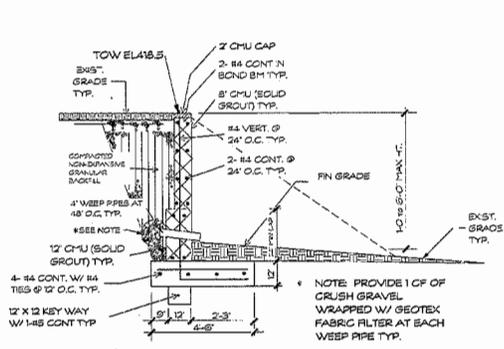
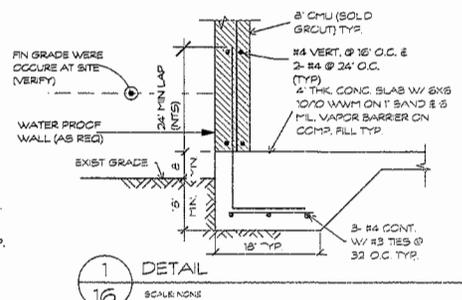
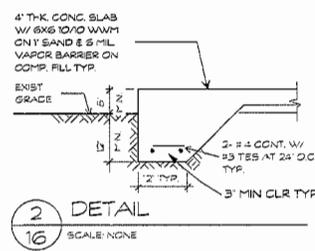
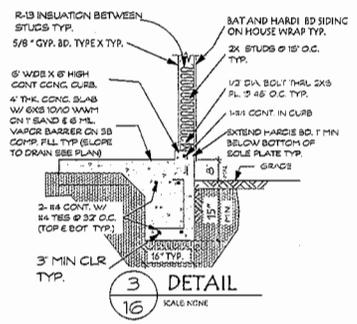
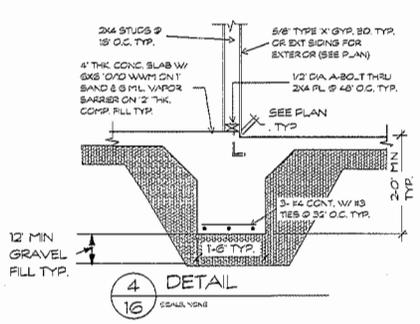
INTERIOR ELEVATIONS



PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
 46-107 LILIPUNA RD., KANEHOE 96744
 TMK: 4-6-01-07

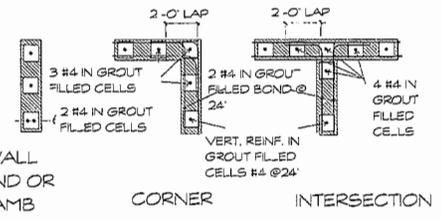
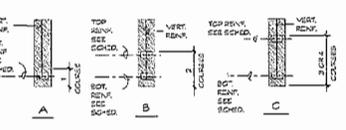
JOB NO# 2015-01-29

SHEET
A015
 OF SHEETS

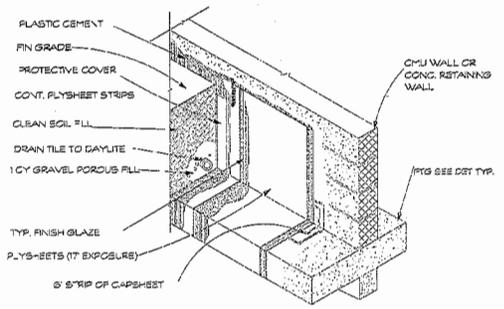


PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
46-107 LILIPUNA RD., KANEHOE 96744
TMK: 4-6-01-07

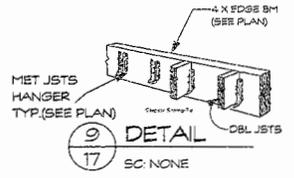
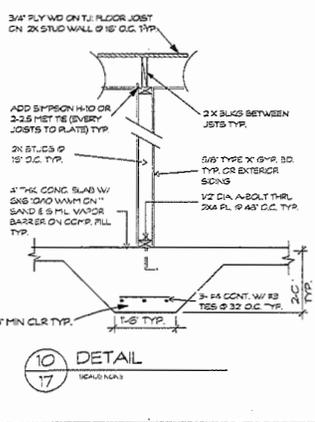
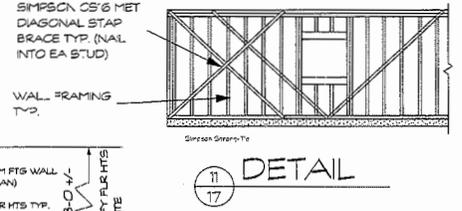
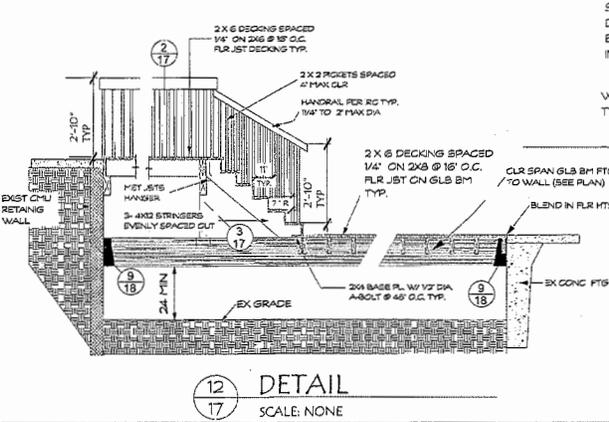
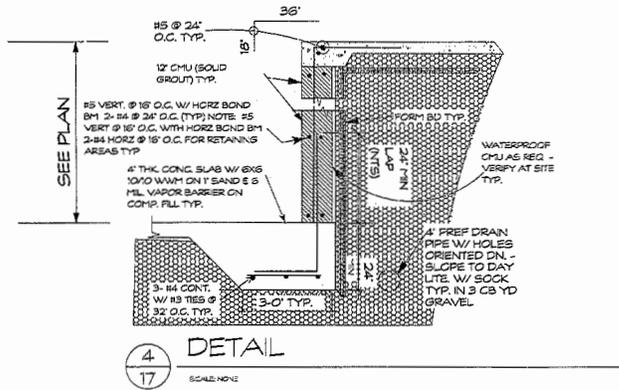
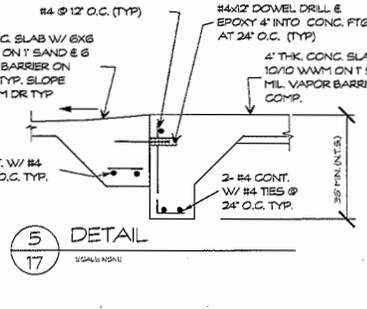
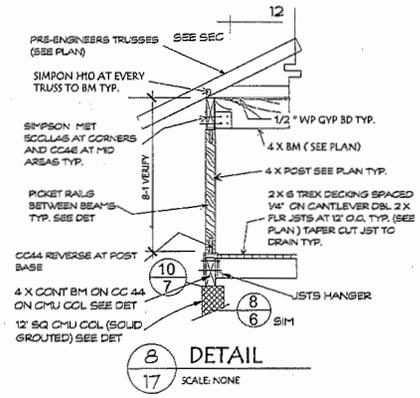
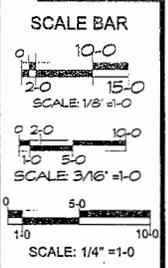
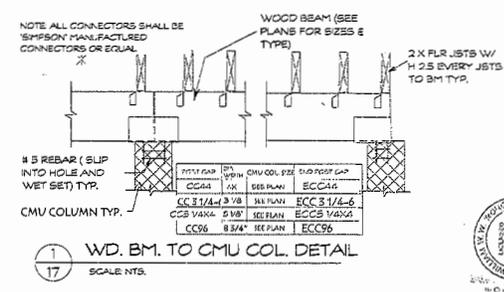
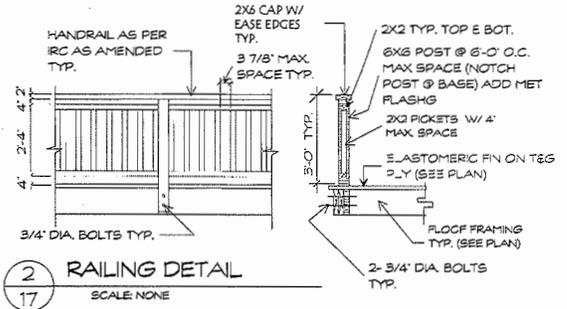
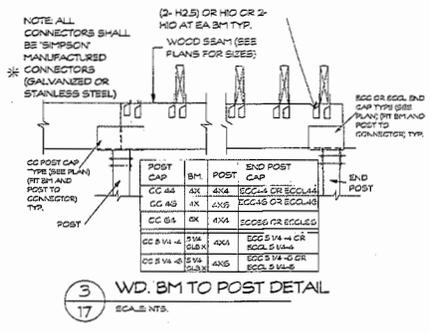
CONCRETE BLOCK LINTEL SCHEDULE						
SPAN, VERT. CLEARANCE LESS THAN	NUMBER OF COURSES	BOTTOM REIN. SEE NOTE 1	TOP REIN. SEE NOTE 2	VERT. REIN. SEE SCHED.	TYPE	
4	1	2 #4	---	## @ 16"	A	
5	2	2 #4	2 #4	## @ 16"	B	
6	2	2 #4	2 #4	## @ 16"	B	
7	2	2 #4	2 #4	## @ 16"	B	
8	2	2 #4	2 #4	## @ 16"	B	
9	3	2 #4	2 #4	## @ 16"	C	
10	3	2 #4	2 #4	## @ 16"	C	
11	4	2 #4	2 #4	## @ 16"	C	



9 DETAIL
SCALE: NTS



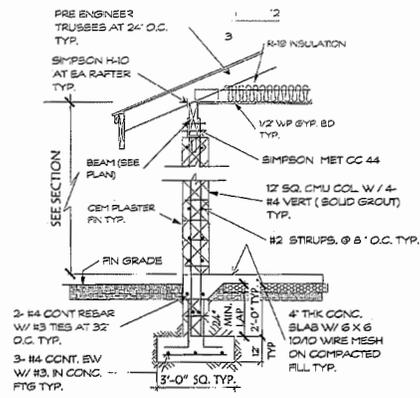
10 CONCRETE BLOCK LINTEL SCHED. & DETAILS
SCALE: NONE



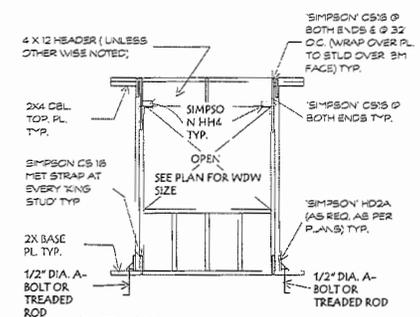
PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
 46-107 LILIPUNA RD., KANEHOE 96744
 TMK: 4-6-01-07

JOB NO: 2015-01-29

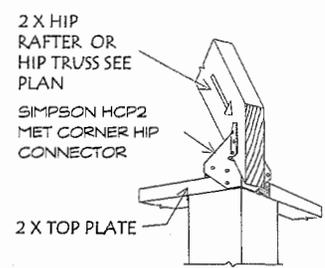
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 OF SHEETS



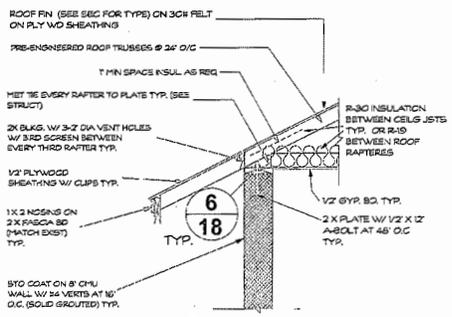
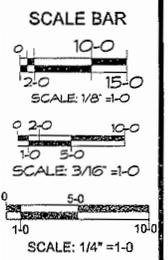
3
18
SCALE: NONE



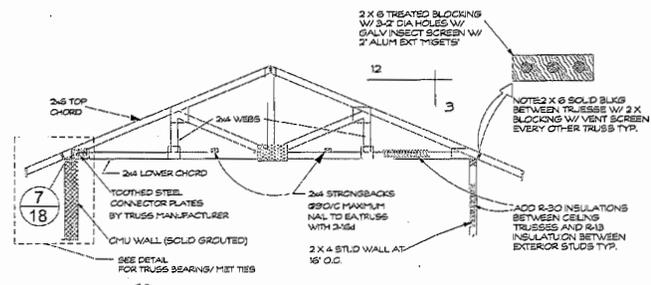
2
18
SCALE: NTS



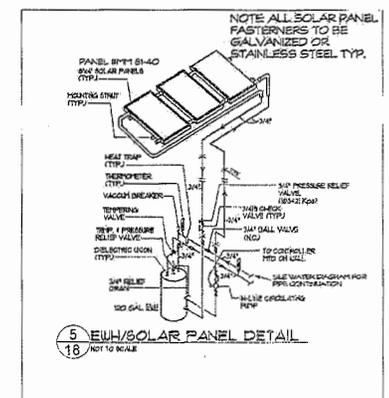
1
18
NTS



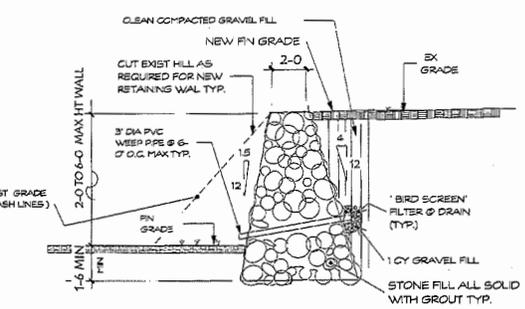
6
18
SCALE: NONE



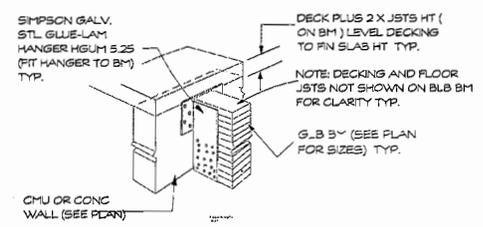
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18
WOOD ROOF TRUSS



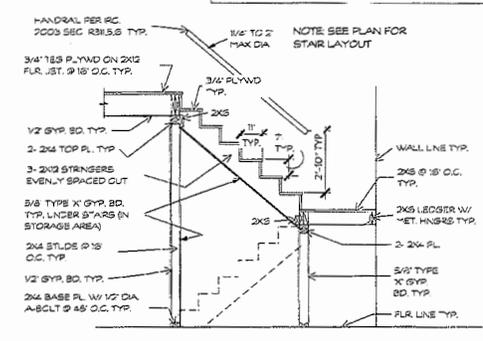
5
18
NOT TO SCALE



10
18
NTS



9
18
NTS



8
18
SCALE: NONE

PROPOSED ADDITION / ALTERATIONS FOR:
MR. CHARLES WONG
 46-107 LILIPUNA RD., KANEHOE 96744
 TMK: 4-6-01-07

JOB NO: 2015-01-29
SHEET AO18
 OF SHEETS

Exhibit 7

Notices of Violation



DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET * HONOLULU, HAWAII 96813
 Fax: (808) 768-4400

Notice of Violation

Violation No.: **2014/NOV-05-080 (BV)**

Date: **May 12, 2014**

Owner(s)

WONG, CHARLES
 46-107 LILIPUNA ROAD
 KANEOHE, HI 96744

Contractor(s)

Tenant/Violator

Architect/Plan Maker

Lessee

Agent

Engineer

TMK: **4-6-001:007 46-107 LILIPUNA RD Kaneohe 96744**

Permit No.: **716345**

I have inspected the above-described premises and have found the following violations of City and County of Honolulu's laws and regulations governing same:

Codes and/or Ordinance(s) and Section(s)	Violation(s)
ROH 1990, as amended, Chapter 18 Section 18-7.5	STOP WORK IS HEREBY ORDERED. VIOLATION OF THIS ORDER WILL RESULT IN THE IMMEDIATE REFERRAL FOR CIVIL FINES.
ROH 1990, as amended, Chapter 18 Section 18-5.1(b)	THE ADDED BASEMENT, THE NEW DECK AND ALTERATIONS TO THE STRUCTURE AT THE FRONT OF THE PROPERTY ARE BEING DONE NOT IN ACCORDANCE WITH THE APPROVED PLAN.

STOP WORK! You are hereby ordered to stop illegal work immediately.

You are hereby ordered to take immediate measures to stabilize the site and protect abutting properties.

You are hereby ordered to obtain permit(s) and/or correct violation by June 30, 2014.

Restore the area immediately and complete all work within 30 days from the date of this notice.

Please call the undersigned after the corrections have been made.

If work is not completed within 30 calendar days, the work will be done by the City and the cost thereof shall be charged to the owner.

You are reminded that if no action is taken within the specified time:

1. A Notice of Order will be issued by the Department of Planning and Permitting imposing CIVIL FINES for the specified violations; and/or
2. This matter may be referred to the Prosecuting Attorney and/or Corporation Counsel for appropriate action.

Special Instructions:

OBTAIN THE BUILDING PERMIT(S) FOR THE ADDED WORK BEING DONE.
 IF THE PERMIT IS UNOBTAINABLE, THE ADDED WORK MUST BE REMOVED AND STRUCTURE RESTORED BACK TO ITS ORIGINAL APPROVED STATUS WITHIN THE TIME SPECIFIED HEREIN.

Inspector:

Thomas Ah Sam Phone: 768-8132
 for the Director Department of Planning and Permitting



DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

850 SOUTH KING STREET * HONOLULU, HAWAII 96813
 Fax: (808) 768-4400

Notice of Violation

Violation No.: **2014/NOV-11-045 (BV)**

Date: **November 10, 2014**

Owner(s)

WONG, CHARLES
 46-107 LILIPUNA ROAD
 KANEHOE, HI 96744

Contractor(s)

Tenant/Violator

Architect/Plan Maker

Lessee

Agent

Engineer

TMK: **4-6-001:007 46-107 LILIPUNA RD Kaneohe 96744**

Specific Address of Violation: **46-107 LILIPUNA ROAD**

I have inspected the above-described premises and have found the following violations of City and County of Honolulu's laws and regulations governing same:

Codes and/or Ordinance(s) and Section(s)	Violation(s)
ROH 1990, as amended, Chapter 14 Section 14-18.10	Your driveway must meet the standard and specifications for driveways of the City And County Of Honolulu.
ROH 1990, as amended, Chapter 18 Section 18-3.1	OBTAIN THE REQUIRED BUILDING PERMITS FOR THE NEW WORK FOR THE NEW DRIVEWAY BEING INSTALLED.
ROH 1990, as amended, Chapter 18 Section 18-6.2(d)	A DOUBLE FEE PENALTY SHALL BE ASSESSED FOR THE NEW DRIVEWAY BEING INSTALLED, WITHOUT FIRST OBTAINING THE REQUIRED BUILDING PERMITS.
ROH 1990, as amended, Chapter 18 Section 18-7.5	STOP WORK IS HEREBY ORDERED. VIOLATION OF THIS ORDER WILL RESULT IN THE IMMEDIATE REFERRAL FOR CIVIL FINES.

STOP WORK! You are hereby ordered to stop illegal work immediately.

You are hereby ordered to take immediate measures to stabilize the site and protect abutting properties.

You are hereby ordered to obtain permit(s) and/or correct violation by November 10, 2014.

Restore the area immediately and complete all work within 0 days from the date of this notice.

IMMEDIATE REFERRAL: Recurring Violation

You are reminded that if no action is taken within the specified time:

1. A Notice of Order will be issued by the Department of Planning and Permitting imposing CIVIL FINES for the specified violations; and/or
2. This matter may be referred to the Prosecuting Attorney and/or Corporation Counsel for appropriate action.

Special Instructions: OBTAIN THE REQUIRED BUILDING PERMITS FOR THE NEW DRIVEWAY THATS BEING INSTALLED.

Inspector:

Thomas Ah Sam Phone: 768-8132
 for the Director Department of Planning and Permitting

Job Edit

Notice of Violation

Job 053831445-001 (2014/NOV-11-045)

Bv 46-107 LILIPUNA ROAD [tmk:46001007]NEW DRIVEWAY INSTALLED WITHOUT THE REQUIRED BUILDING PERMIT.

Status: NOV File Closed Created By: TAHSAM Date Created: Nov 10, 2014
Date Completed: Nov 13, 2014

Parent Job:

Specific Location: 46-107 LILIPUNA RD

Report Details

City Charges For Worked Performed N
Enforcement Action Y
Immediate Referral Recurring Violation
Notified when corrected N
Number Days To Complete 0
Obtain Permit and/or Correct By Nov 10, 2014
Special Instructions OBTAIN THE REQUIRED BUILDING PERMITS FOR THE NEW DRIVEWAY THATS BEING INSTALLED.
StabilizeProtect Y
Stop Work Immediately Y

Details

City Charges For Worked Performed N
Enforcement Action Y
Immediate Referral Recurring Violation
Notified when corrected N
Number Days To Complete 0
Obtain Permit and/or Correct By Nov 10, 2014
Referral Permit No.:
Special Instructions OBTAIN THE REQUIRED BUILDING PERMITS FOR THE NEW DRIVEWAY THATS BEING INSTALLED.
StabilizeProtect Y
Stop Work Immediately Y
Date NOV Issued Nov 10, 2014
Date Violation Corrected Nov 12, 2014
DPP Inspectors Thomas Ah Sam
House Number 107
Inspection Branch BV
Inspector's Phone Number 7688132
Inspector's Report
RelatedDetail STOP WORK IS HEREBY ORDERED. VIOLATION OF THIS ORDER WILL RESULT IN THE IMMEDIATE REFERRAL FOR CIVIL FINES.,A DOUBLE FEE PENALTY SHALL BE ASSESSED FOR THE NEW DRIVEWAY BEING INSTALLED, WITHOUT FIRST OBTAINING THE REQUIRED BUILDING PERMITS.,Your driveway must meet the standard and specifications for driveways of the City And County Of Honolulu.,OBTAIN THE REQUIRED BUILDING PERMITS FOR THE NEW WORK FOR THE NEW DRIVEWAY BEING INSTALLED.
Street Name LILIPUNA RD
Violation Address (Multiple Addresses) 46-107 LILIPUNA ROAD
Violation Type: Driveways



Code Section: Chapter 18, Section 18-3.1 [IBC 2003]
Permits Required

Correction Remarks

Violation Description

OBTAIN THE REQUIRED BUILDING PERMITS FOR THE NEW WORK FOR THE NEW DRIV



Code Section: Chapter 18, Section 18-7.5
Stop work order

Correction Remarks

Violation Description

STOP WORK IS HEREBY ORDERED. VIOLATION OF THIS ORDER WILL RESULT IN THE



Code Section: Chapter 18, Section 18-6.2(d)
Double Fee Penalty

Correction Remarks

Violation Description

A DOUBLE FEE PENALTY SHALL BE ASSESSED FOR THE NEW DRIVEWAY BEING INST



Code Section: Chapter 14, Section 14-18.10
Standards and specifications for driveways

Correction Remarks

Violation Description

Your driveway must meet the standard and specifications for driveways of the City And County

TMKs

TMKLookup

46001007-

TMKs



associated with TMK 4-6-001:007 [19598 sq ft.] 0.45 ac. POID= 33399
46-107 LILIPUNA RD Kaneohe 96744 01/01/1800 to Current TAXPIN = 33399

Customers

Relationship: Owner:

Additional Customer Info (printed on NOV)

Display Format

WONG, CHARLES 46-107 LILIPUNA ROAD / State Lic: / ID: 39984541 / PH: (808) 450-0530

Other Contact Info (not printed on NOV)

Processes

Assigned To	Status	Outcome	Scheduled		Actual	
			Start	Completed	Start	Completed
Issue Advisory						
THOMAS AH SAM	Complete	Advisory created				Nov 10, 2014 09:02:07
46-107 LILIPUNA RD NEW DRIVEWAY INSTALLED WITHOUT THE REQUIRED BUILDING PERMITS.						
Draft and Review NOV						
DOUGLAS OSHIRO	Complete	Approved by supervisor				Nov 10, 2014 10:25:56
Update Advisory						
THOMAS AH SAM	Complete	Advisory created				Nov 10, 2014 09:01:18
Determine Type of Inspection						
DOUGLAS OSHIRO	Complete	Requires building inspectio				Nov 10, 2014 10:26:03
Perform building inspection						
THOMAS AH SAM	Complete	Performed				Nov 12, 2014 14:46:25
BV 46-107 LILIPUNA ROAD [tmk:46001007]NEW DRIVEWAY INSTALLED WITHOUT THE REQUIRED BUILDING PERMIT.						
Close Advisory subjob						
THOMAS AH SAM	Complete	Advisory removed				Nov 13, 2014 06:36:51
Close NOV File						
THOMAS AH SAM	Complete	Closed				Nov 13, 2014 06:36:51

Warnings

- associated with Advisory 2014/ADV-274 (Advisory created) Created: 2014-05-12 08:18:49 DOUBLE FEE PENALTY. BV 46-107 LILIPUNA RD WONG RESIDENCE Building code compliance
- associated with Advisory 2014/ADV-679 (Advisory created) Created: 2014-11-18 10:24:16 DOUBLE FEE PENALTY. BV BV BV 46-107 LILIPUNA ROAD, FAIL TO COMPLY WITH THE STOP WORK ORDER.

Docs



is related to NOV report: No.1193331 r 1 - 2014-11-10 10:24:46 - DOUGLAS OSHIRO [POSSE Reports (Letters)] Notice of Violation

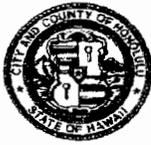
Notes

Note Type	Last Updated By	On	Locked
Inspector Notes CONTRACTOR WAS WORKING OFF OF THE WRONG SET OF PLANS, THE CORRECT DRAWING WAS BROUGHT TO THE SITE FOR VERIFICATION. VIOLATION IS CLOSED.	THOMAS AH SAM	Nov 13, 2014 06:36:51	
Inspector Notes CONTRACTOR WAS WORKING OFF OF THE WRONG SET OF PLANS, THE CORRECT DRAWING WAS BROUGHT TO THE SITE FOR VERIFICATION. VIOLATION IS CLOSED.	THOMAS AH SAM	Nov 13, 2014 06:36:51	

Job	Type	Created	Issued	Completed	Status
053831445-001	Notice of Violation	Nov 10, 2014		Nov 13, 2014	NOV File Closed
BV 46-107 LILIPUNA ROAD [tmk:46001007]NEW DRIVEWAY INSTALLED WITHOUT THE REQUIRED BUILDING PERMIT.					
053831445-002	Advisory	Nov 10, 2014		Nov 13, 2014	Advisory - removed
DOUBLE FEE PENALTY. 46-107 LILIPUNA ROAD NEW DRIVEWAY INSTALLED WITH OUT THE REQUIRED BUILDING PERMIT.					

**Code Vio.
(Grid-Style)**

Relationship:	Code Section:	
Chapter		18
Correction Remarks		
Section		18-3.1
Violation Description		OBTAIN THE REQUIRED BUILDING PERMITS FOR THE NEW WORK FOR THE NEW DRIVEW
Relationship:	Code Section:	
Chapter		18
Correction Remarks		
Section		18-7.5
Violation Description		STOP WORK IS HEREBY ORDERED. VIOLATION OF THIS ORDER WILL RESULT IN THE IMM
Relationship:	Code Section:	
Chapter		18
Correction Remarks		
Section		18-6.2(d)
Violation Description		A DOUBLE FEE PENALTY SHALL BE ASSESSED FOR THE NEW DRIVEWAY BEING INSTALL
Relationship:	Code Section:	
Chapter		14
Correction Remarks		
Section		14-18.10
Violation Description		Your driveway must meet the standard and specifications for driveways of the City And County Of I



DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET * HONOLULU, HAWAII 96813
 Fax: (808) 768-4400

Notice of Violation

Violation No.: 2014/NOV-11-114 (BV)

Date: November 18, 2014

Owner(s)

WONG, CHARLES
 46-107 LILIPUNA ROAD
 KANEEOHE, HI 96744

Contractor(s)

Tenant/Violator

Architect/Plan Maker

Lessee

Agent

Engineer

TMK: 4-6-001:007 46-107 LILIPUNA RD Kaneohe 96744

Permit No.: 716345

Specific Address of Violation: 46-107 LILIPUNA ROAD

I have inspected the above-described premises and have found the following violations of City and County of Honolulu's laws and regulations governing same:

Codes and/or Ordinance(s) and Section(s)	Violation(s)
ROH 1990, as amended, Chapter 18 Section 18-3.1	NEW (CRM) CONCRETE ROCK MASONRY WALLS ALONG THE RIGHT OF THE PROPERTY AND ALTERATIONS TO THE NEW DWELLING BEING BUILT UNDER PERMITS 662974, 673470, 695224 AND 716345, IS NOT FOLLOWING THE APPROVED PLANS. OBTAIN THE REQUIRED BUILDING PERMITS FOR THE WORK THAT IS NOT FOLLOWING THE APPROVED PLANS.
ROH 1990, as amended, Chapter 16 Section 16-1.1, IBC Sec. 109.1	A SURVEY OF THE PROPERTY IS REQUIRED TO VERIFY THE CORRECT LOCATION OF NEW (CRM) CONCRETE ROCK MASONRY WALLS, HEIGHTS & SETBACKS FOR FRONT, SIDE YARD SPACING ALONG WITH 55' FEET SHORELINE SET BACK. THE SURVEY MUST ALSO SHOW GRADE CHANGES, ALONG WITH NEW ENVELOPE HEIGHTS FOR THE DWELLING STRUCTURE.
ROH 1990, as amended, Chapter 18 Section 18-7.5	STOP WORK IMMEDIATELY!
ROH 1990, as amended, Chapter 18 Section 18-6.2(d)	A DOUBLE FEE PENALTY SHALL BE ASSESSED FOR THE WORK BEING DONE, NOT SHOWN ON THE APPROVED PERMITS.

STOP WORK! You are hereby ordered to stop illegal work immediately.

You are hereby ordered to take immediate measures to stabilize the site and protect abutting properties.

Please call the undersigned after the corrections have been made.

IMMEDIATE REFERRAL: Recurring Violation

You are reminded that if no action is taken within the specified time:

1. A Notice of Order will be issued by the Department of Planning and Permitting imposing CIVIL FINES for the specified violations; and/or
2. This matter may be referred to the Prosecuting Attorney and/or Corporation Counsel for appropriate action.

Special Instructions:

STOP ALL WORK ON THIS PROJECT!
 OBTAIN THE BUILDING PERMITS FOR THE CRM WALLS AND THE INTERIOR ALTERATIONS NOT SHOWN ON THE APPROVED PLANS.
 IFA BUILDING PERMIT CANNOT BE OBTAINED THE WALLS AND THE ALTERATIONS MUST BE REMOVED AND RESTORED TO IT'S APPROVED STATE.

Inspector:

Thomas Ah Sam Phone: 768-8132
 for the Director Department of Planning and Permitting

Exhibit 8

Septic System and DOH approvals

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



LINDA ROSEN, M.D., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to
File

November 21, 2014

Rosecoe O Ford
469 Ena Road Apt. 2604
Honolulu, HI 96815-1713

Dear Sir/Madam:

Subject: Individual Wastewater System (IWS) for
Owner/Lessee: Charles Tsu Yew Wong
Project Site: 46-107 Lilipuna Road, Kaneohe, HI
TMK: 146001007
IWS File No.: 52028 (Septic Tank) E-Filed
Old File No.: N/A

We have received your IWS final inspection report, Certification of Construction and As Built Plans for the above IWS. Information submitted to us indicates that the installed IWS meets applicable provisions of Hawaii Administrative Rules, Title 11, Chapter 62, entitled Wastewater Systems.

The subject IWS is hereby approved for use.

As the professional engineer responsible for the Certification of Construction, please inform your client that the above IWS is approved for use. You are also responsible for seeing that your client receives a copy of this Approval for Use letter together with the IWS as-built plans. We strongly recommend that you discuss the necessary operation and maintenance of the individual wastewater system with your client. Emphasis should be placed on periodic inspections of scum and sludge accumulation as well as informing them not to dispose of materials that could affect the operation of the wastewater system.

If the IWS is an aerobic system, please inform your client that an active service contract must be maintained. Furthermore, the Department of Health may perform an annual inspection of the subject wastewater system for compliance with our Chapter 11-62 rules.

Should you have any questions, please feel free to contact Johnny Ong at 586-4294.

Sincerely,

A handwritten signature in black ink, appearing to read "Sina Pruder".

SINA PRUDER, P.E.
Chief, Wastewater Branch

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



LINDA ROSEN, M.D., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to
File:

July 24, 2014

Roscoe O Ford
469 Ena Road Apt. 2604
Honolulu, HI 96815-1713

Dear Sir/Madam:

Subject: Individual Wastewater System (IWS) for
Owner/Lessee: Charles Tsu Yew Wong
Project Site: 46-107 Lilipuna Road, Kaneohe, HI
TMK: 146001007
IWS File No.: 52028 (Septic Tank) E-Filed
Old File No.: N/A

The subject wastewater plans have been reviewed by the Wastewater Branch for conformance to applicable provisions of Hawaii Administrative Rules, Title 11, Chapter 62, entitled Wastewater Systems. The IWS plan conforms to applicable provisions of Chapter 11-62.

The Department of Health will sign an applicable county building permit application provided that all information submitted as part of the IWS plan and county building permit application are consistent with each other and meet applicable provisions of Chapter 11-62 at the time of permit signature.

As the professional engineer responsible for the design of the above wastewater plan, it is your responsibility to inform the owner/lessee of the property that:

- A) The IWS plans must be attached to each set of permit construction plans, or provided to the contractors.
- B) The IWS can only be installed by a licensed contractor holding an A, C9, C-37, C-37a or C-43 license, and
- C) The IWS must be inspected by the engineer, and authorized in writing by the Department before use.

Should you have any questions, please feel free to contact Johnny Ong at 586-4294.

Sincerely,

SINA PRUDER, P.E.
Chief, Wastewater Branch

INLAND DESIGNS, LLC

Richard Cervino * Design-Drafting

2575 Kuhio Avenue, #1602

Honolulu, HI 96815

(808) 924-1980

(808) 221-8008

Proposal for Design and Engineering of IWS

Client: Charles Tsu Yew Wong

46-107 Lilipuna Road

Kaneohe, HI 96744

TMK # 4-6-001: 007

Scope of Work: Individual Wastewater System design for a single family dwelling including:

- 1) Site investigation and percolation test
- 2) Drafting of the necessary drawings for the project
- 3) Civil Engineer's stamp
- 4) Submittal to the State of Hawaii Health Department for approval
- 5) Final Inspection report with "As Built" plans and pictures

Engineering Fee:

\$1,500.00 (including 4.712 % tax) + \$100.00 (State review fee) = **\$1,600.00**

(One thousand six hundred &.....00/100 dollars)

Payment Schedule:

50% of design fee + State fee with signed contract.....\$850.00

50% due when approved by the State of Hawaii Health Department.....\$750.00

Agreement:

This agreement shall be accepted and entered into when it is signed by the client and returned to Richard Cervino, along with appropriate payment

Designer: Richard Cervino

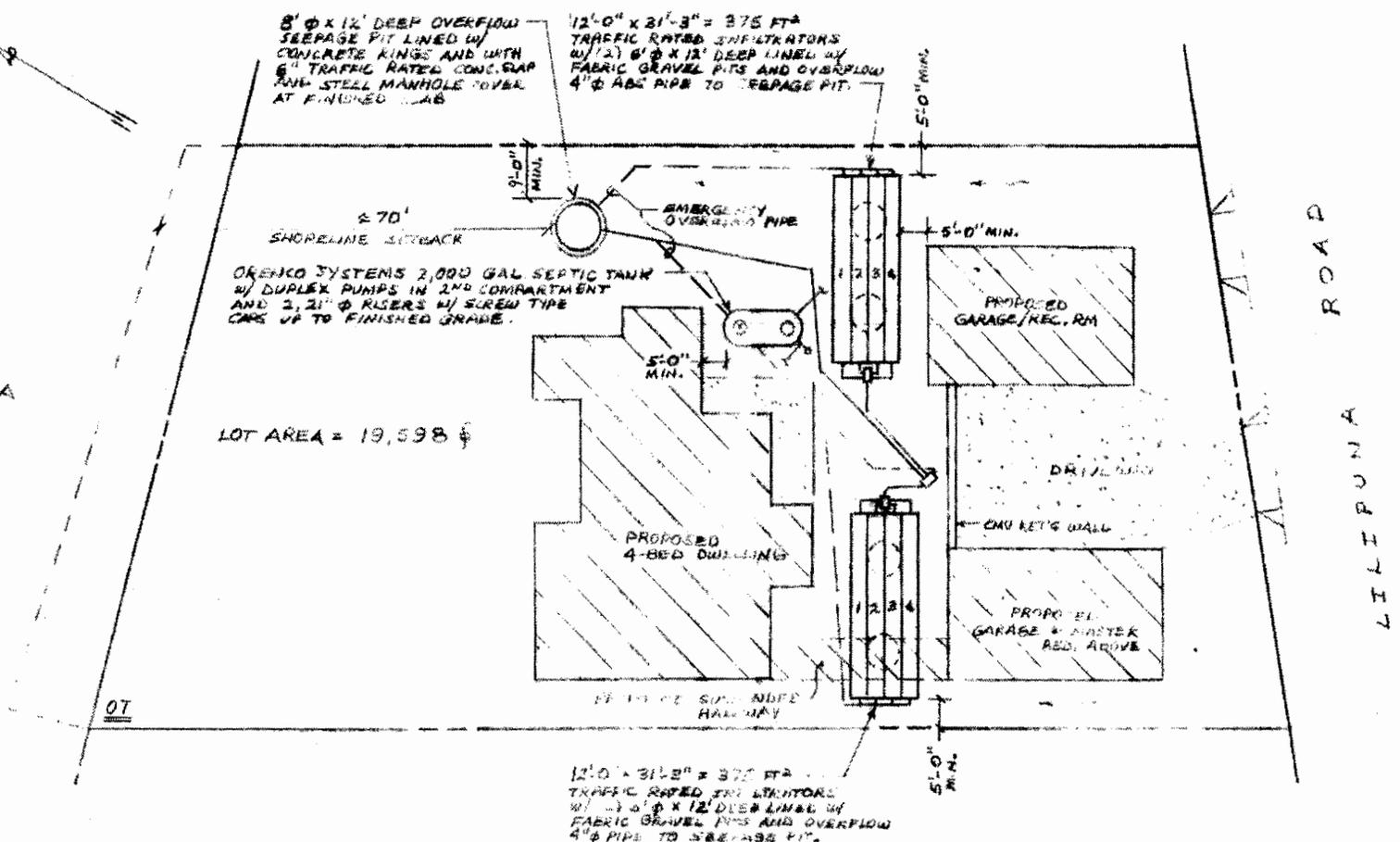
Client:

Richard Cervino 6/3/14
Signature Date

Charles Tsu Yew Wong 6/3/14
Signature Date



SEA



8" Ø X 12' DEEP OVERFLOW SEEPAGE PIT LINED W/ CONCRETE RINGS AND WITH TRAFFIC RATED CONC. SLAB AND STEEL MANHOLE COVER AT FINISHED GRADE

12'-0" X 31'-3" = 375 FT² TRAFFIC RATED INFILTRATORS W/ (2) 6" Ø X 12' DEEP LINED W/ FABRIC GRAVEL PITS AND OVERFLOW 4" Ø ABS PIPE TO SEEPAGE PIT.

ORENKO SYSTEMS 2,000 GAL SEPTIC TANK W/ DUPLEX PUMPS IN 2ND COMPARTMENT AND 2, 2" Ø RISERS W/ SCREW TYPE CAPS UP TO FINISHED GRADE.

LOT AREA = 19,598 sq ft

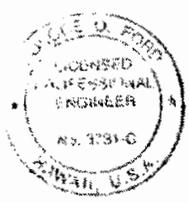
12'-0" X 31'-3" = 375 FT² TRAFFIC RATED INFILTRATORS W/ (2) 6" Ø X 12' DEEP LINED W/ FABRIC GRAVEL PITS AND OVERFLOW 4" Ø PIPE TO SEEPAGE PIT.

INDIVIDUAL WASTEWATER SYSTEM FOR:

CHARLES TSU YEW WONG
46-107 LILIPUNA ROAD
KANEHOE, HI 96744

TMK # 4-6-001:007

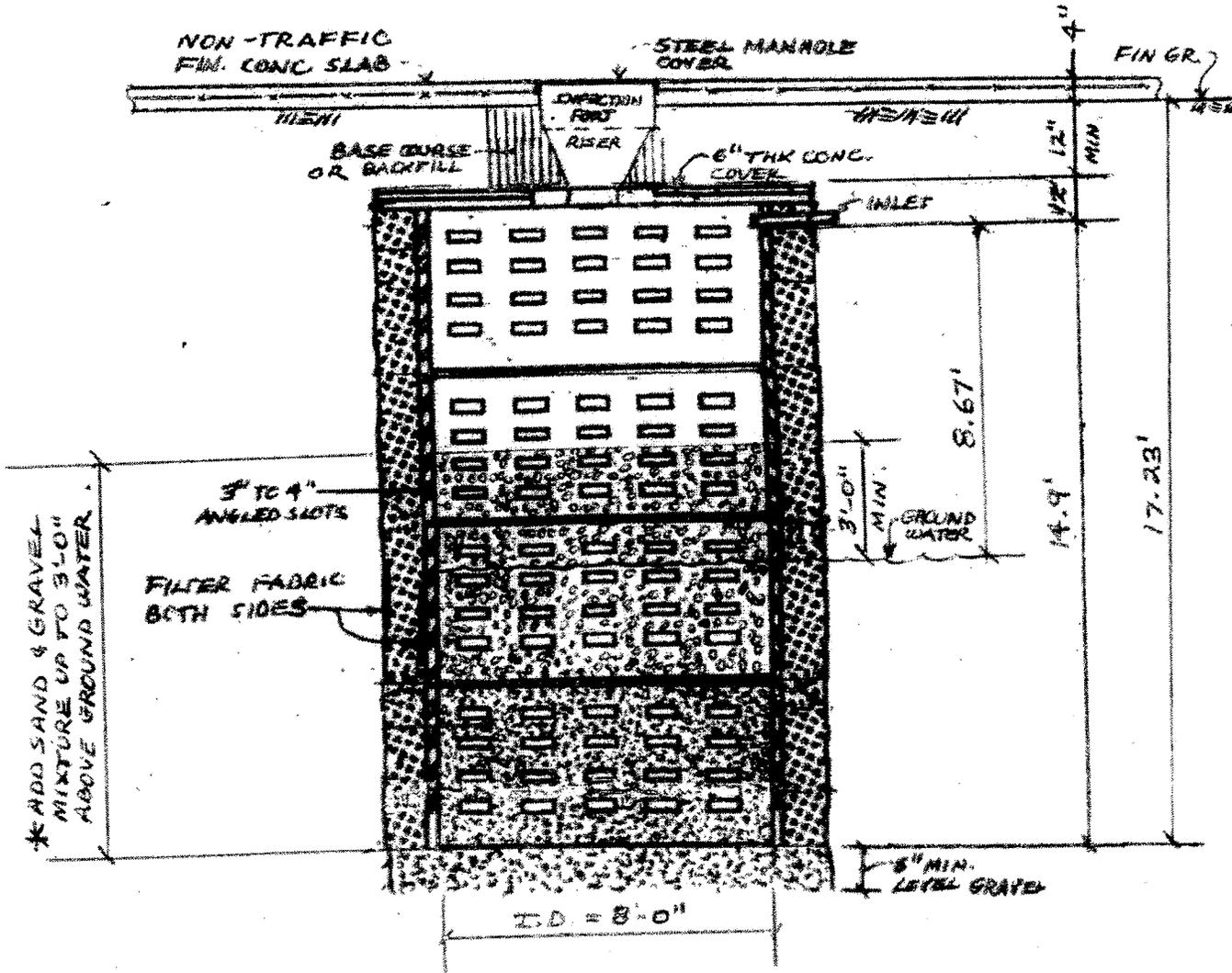
DATE: 7-2-14
DRAWN BY: RICHARD CERVINO
INLAND DESIGNS, LLC



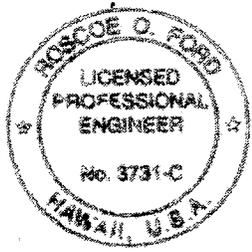
Richard Cervino
This work was prepared by me or under my supervision and construction of this project will be under my observation.
Expires: 4/30/16

SEEPAGE PIT DETAIL - "NON TRAFFIC RATED"

N.T.S.



* ADD SAND & GRAVEL MIXTURE UP TO 3'-0" ABOVE GROUND WATER.



Roscoe O. Ford

This work was prepared by me or under my supervision and construction of this project will be under my observation.
 Engineer: 473475



FIRST QUALITY BUILDING & DESIGN, INC
 dbaFIRST QUALITY ENVIRONMENTAL
 41-717 KAKAINA ST.
 WAIMANALO HI 96795-1104

CONTRACT INVOICE

License # BC-17384

808.259.0100 / fax: 808.356.0970 / email: info@firstqualityhawaii.com

Invoice#: 14176
 Invoice Date: 06/13/2014
 Due Date: 06/13/2014
RENTAL INVOICE 1058

TO:
CHARLES WONG
26 GARTLEY PLACE
HONOLULU HI 96817

PROJECT: 14063 PO#
WONG PERC TEST
46-107 LILIPUNA RD
KANEOHE HI 96744

Description	Amount
MOBILIZATION: 6/6/2014	300.00
EXCAVATION FOR PERC TEST: 3 HRS 6/6/2014	375.00
DEMO ROCK WALL: 2 HRS 6/9/2014	250.00
TAX: 4.712%	43.59

Notes:

Please Pay This Amount

\$968.59

TERMS: This invoice is due upon receipt or as per Contract.
 A service charge of 18.00 % per annum will be charged on all amounts overdue on regular statement dates.
Please make check payable to: FIRST QUALITY BUILDING & DESIGN, INC.
 Thank you for your prompt payment!

IRST QUALITY BUILDING & DESIGN, INC.

PH. (808) 259-0100
FAX (808) 356-0970

RENTAL INVOICE 1058

41-717 KAKAINA ST.
WAIMANALO HI 96795

ACTORS LIC. NO. BC-17384
E: www.firstqualityhawaii.com

CHARGE TO		CHARLES WONG			DATE	6/6/11	
ADDRESS		46-107 LELEPUNA RD.					
FROM		BASEYARDS			TO KANEONE		
JOB NAME		JOB NO.		TRUCK NO.		Inv. 141	
1406.3							
UNITS	DESCRIPTION	TICKET NUMBER	WEIGHT/MEAS.	RATE	AMT		
	USED MENE EXCAVATOR						
	TO DIG ² HOLES FOR PERC						
	TEST AND ALSO EXCAVATED						
	FOR ROUGH WALL. USED						
	BUSTER TO DEMO ^{EXISTING} BLOCK						
	WALL.						
	- MOBILEZE 3.75 HRS						
	- EXCAVATE 3						
	- DEMO 2						
START TIME		END TIME		DRIVER:		TOTAL →	
7:00 AM		3:45 PM		JOHN BOURQUE			
TERMS: NET 30 DAYS. A SERVICE CHARGE at the ANNUAL PERCENTAGE RATE OF 18% per annum (MONTHLY RATE IS 1½%) will be applied on all past due accounts. Customer shall pay all applicable court costs and/or reasonable attorneys fees, if permitted, and to the extent permitted by law for collection of payments and other charges due under this agreement.				BY:			
				RECEIVED IN GOOD ORDER EXCEPT AS N			

~~ROLLOFF RENTAL~~

N# _____
ZE: 30 YD 40 YD
DELIVERY DATE:
CK-UP DATE:

~~HAULING~~

EAGE
ART
EAGE
D

NCH
DM

OFFICE COPY



International Wastewater Technologies

94-009 Waipahu Depot Street
Waipahu, HI 96797

Phone: 808-677-7715 Fax: 808-677-7719

www.internationalwastewater.com

Quote

Date	Quote #
8/11/2014	002042

Charles Wong
46-107 Lilipuna Road
Kaneohe, HI 96744

Item	Description	Qty	Unit	Price	Amount
					JKM
T2000 Septic Tank	T2000 Septic Tank: 1500G tank with 2000G insert and 2000G baffle wall, 21"Dx12"H PVC risers, inlet tee, fiberglass lids.	1	ea	8,140.00	8,140.00T
Infiltrator HC H2O Cha...	Infiltrator High Capacity H-20 Chamber with 18" of compacted cover when installed per installaton requirements, 110 gal Storage Capacity or 14.3 cu ft., W-34" x L-75" x H-16"	40	ea	105.00	4,200.00T
Infiltrator HC H2O End...	Infiltrator H2O High Capacity End Cap. Fits both the High Capacity H10 and the High Capcity H20 Chamber.	16	ea	23.00	368.00T
Orenco PVU68-2425	Universal Biotube Pump Vault, 24" cartridge	1	ea	486.50	486.50T
Orenco PF100511-20	Orenco PF100511-20. Effluent Pump; 1/2Hp, 115V, 60Hz, 20' Lead	2	ea	830.00	1,660.00T
MVP-DAX1ROPRL	MVP Duplex Panel, 115V W/PRL, Nema 4X, Commercial Grade	1	ea	890.00	890.00T
SJE Sensor Float Min...	Mercury-activated, narrow-angle float switch designed to activate pump control panels and alarms. Switch is Normally Open, 20-ft Cord, No Plug	4	ea	45.00	180.00T

This quote valid for 30 days. Items are subject to prior sale. Prices does not include installation or any professional services - unless otherwise stated. Order will porceed only when quote is signed, dated and returned to IWT. Accounts not paid within terms are subject to a 1.5% monthly service charge. Any discrepancies must be reported within 7 days of receiving materials. Any returns must have prior approval. Returns may be subject to a restocking fee. ALL SALES FINAL on Special orders. There will be a \$25.00 fee for returned checks. Make checks payable to: International Wastewater Technologies. A storage fee may be incurred with items not picked up within 2-weeks.

Subtotal

Sales Tax (4.712%)

Total

* QUOTE IS AUTHORIZED AND APPROVED BY:

Signature Charles T. Y. Wong Date 8/13/14



International Wastewater Technologies

94-009 Waipahu Depot Street
Waipahu, HI 96797

Phone: 808-677-7715 Fax: 808-677-7719
www.internationalwastewater.com

Quote

8/11/2014	002042
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Charles Wong
46-107 Lilipuna Road
Kaneohe, HI 96744

Part No.	Description	Qty	Unit	Price	Amount
					JKM
6HD2 Distribution Box	6-HOLE DISTRIBUTION BOX BY TUF TITE. YELLOW & ORANGE FITTINGS W/ BOXES	2	ea	65.00	130.00T
4HD2 Distribution Box	4-HOLE DISTRIBUTION BOX WITH ADAPTERS BY TUF TITE	1	ea	65.00	65.00T
Delivery	DELIVERY CHARGES; CONTRACTOR TO OFFLOAD AT JOBSITE. If tank will be off-loaded by hand from trailer contractor must notify IWT prior to delivery and provide minimum 4 men to offload. Failure to do so will result in a rescheduled delivery date and an added delivery fee. Maximum 30 minute off-load time. Time over 30 minutes will be charged at \$75/hour or fraction thereof.	1	ea	175.00	175.00T
SDR35 4" 90 EL HXH...	SDR35 4" 90 EL Hub X Hub LONG RADIUS	12	ea	9.60	115.20T
SDR35 4" SANITEE ...	SDR35 4" SANI TEE HubXHubXHub	4	ea	11.49	45.96T
SDR35 4" PIPE SOLI...	SDR35 4" PIPE 20-FT LENGTH, SOLID, NO HOLES	100	ft	1.98	198.00T

This quote valid for 30 days. Items are subject to prior sale. Prices does not include installation or any professional services - unless otherwise stated. Order will proceed only when quote is signed, dated and returned to IWT. Accounts not paid within terms are subject to a 1.5% monthly service charge. Any discrepancies must be reported within 7 days of receiving materials. Any returns must have prior approval. Returns may be subject to a restocking fee. ALL SALES FINAL on Special orders. There will be a \$25.00 fee for returned checks. Make checks payable to: International Wastewater Technologies. A storage fee may be incurred with items not picked up within 2-weeks

Subtotal

Sales Tax (4.712%)

Total

* QUOTE IS AUTHORIZED AND APPROVED BY:

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International Wastewater Technologies

94-009 Waipahu Depot Street
Waipahu, HI 96797

Phone 808-677-7715 Fax: 808-677-7719

www.internationalwastewater.com

Quote

Date	Quote #
8/11/2014	002042

Name / Address
Charles Wong 46-107 Lilipuna Road Kaneohe, HI 96744

Ship To

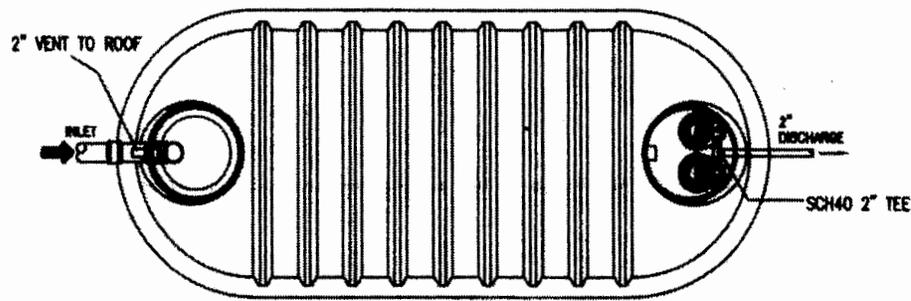
Part No.	JOB	SHIP VIA	FEE		QUOTE BY
					JKM
Part No.	Description	Qty	Unit	Price	Total
ADS 3201 Typar Fabric	ADS 3201 Typar Cloth, 1.8 oz per sq. yd, 12.58 ft W x 300-ft L for a total of 419 sq. yds and 3771 sq. feet per roll. For use in Subsurface drains, Recreational facilities, waste handling systems, landscaping, and other applications. **Quote does nto include shipping costs for pumps and pump vault unit which are non-stock items. **Current lead time is approximately 4-5 weeks plus transit time.	1,000	ft	0.15	150.00T

This quote valid for 30 days. Items are subject to prior sale. Prices does not include installation or any professional services - unless otherwise stated. Order will porceed only when quote is signed, dated and returned to IWT. Accounts not paid within terms are subject to a 1.5% monthly service charge. Any discrepancies must be reported within 7 days of receiving materials. Any returns must have prior approval. Returns may be subject to a restocking fee. ALL SALES FINAL on Special orders. There will be a \$25.00 fee for returned checks. Make checks payable to: International Wastewater Technologies. A storage fee may be incurred with items not picked up within 2-weeks.

Subtotal	\$16,803.66
Sales Tax (4.712%)	\$791.79
Total	\$17,595.45

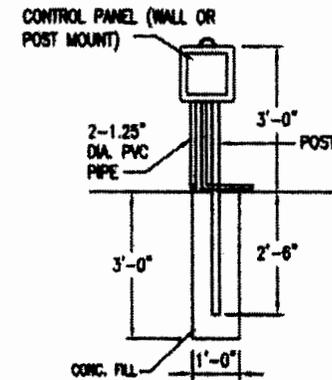
* QUOTE IS AUTHORIZED AND APPROVED BY:

Signature Charles T. Y. Wong Date: 8/13/14

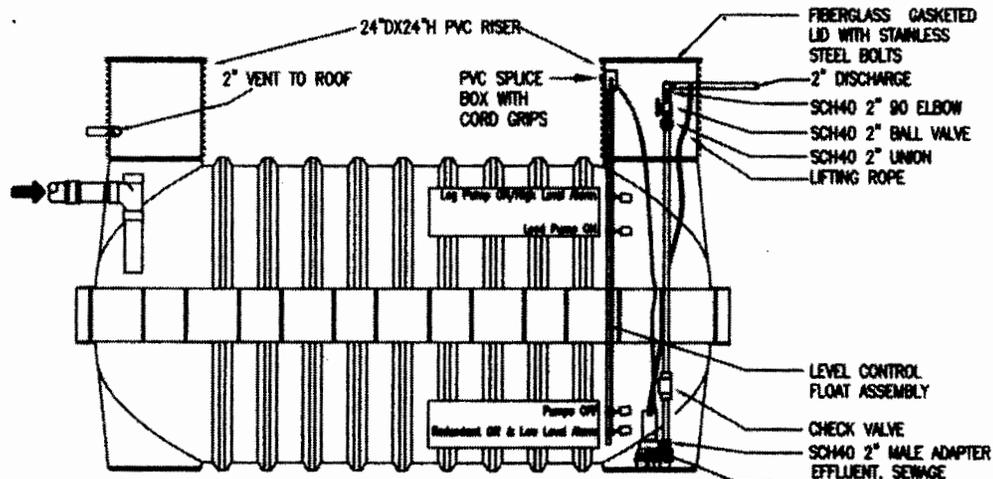


HOLDING TANK TOP VIEW

1
W-1
SCALE: 1/4"=1'-0"

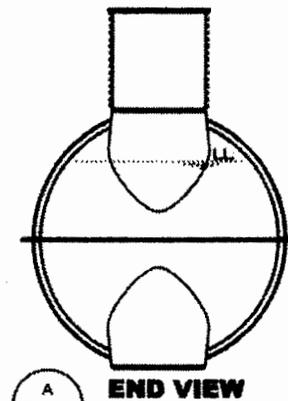


3
W-1
SCALE: 1/4"=1'-0"

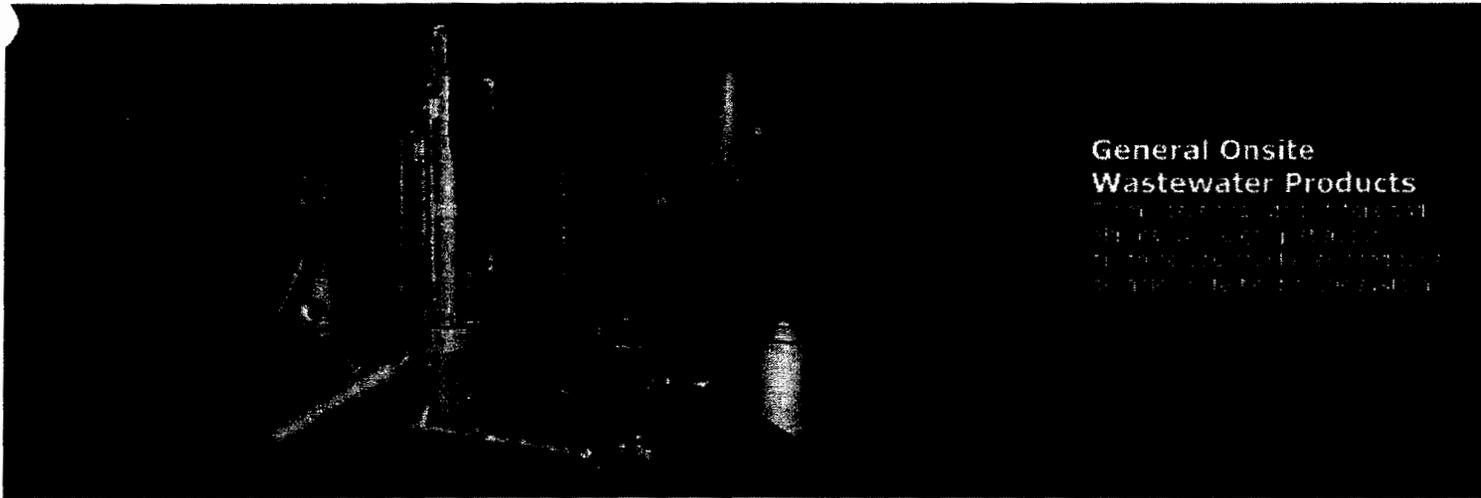


HOLDING TANK SIDE VIEW

2
W-1
SCALE: 1/4"=1'-0"



A
W-1
SCALE: 1/4"=1'-0"



General Onsite Wastewater Products

For more information on our onsite wastewater products, visit our website at www.orenco.com or call 1-800-828-7281.

[Corporate Home](#) | [About Orenco](#) | [Markets](#) | [Product Catalogs](#) | [Technical Resources](#) | [Regulatory Resources](#) | [Orenco Literature](#)

[Home](#) | [Product Catalogs](#) | [General Onsite Products](#) | [Fiberglass Tanks](#)

1500-Gallon (5678-L) Fiberglass Tanks (T15)

Orenco's 1500-gallon (5678-L) fiberglass tanks are designed for underground use in onsite residential and commercial wastewater collection and treatment systems, community-wide effluent sewer systems, grease tanks, and non-potable rainwater collection. When used as a septic tank or interceptor tank, primary treatment occurs in the tank as organic matter is collected and digested, reducing wastewater contaminants by 65-70%.

- Durable, lightweight FRP construction
- Injection-molded for part consistency and quality
- 100% watertight — factory-tested before shipping
- 1800 gallons (6813 L) total tank volume
- Ribbed design and baffle wall for use as a two-compartment tank in various volumes
- Transportable by light truck
- Installable by small backhoe or excavator
- 48-inch (1219-mm) burial depth, empty
- Direct-fit for 24-inch (600-mm) Orenco access risers
- Adapter available for 30-inch (750-mm) access risers
- IAPMO approved for septic tanks and grease tanks
- Not approved for use with potable water

Sample Product Codes*

- T1500-23-20/22-11 — 1500-gallon (5678-L) fiberglass tank, two-compartment tank with baffle at third rib, 20-inch and 22-inch (508-mm and 559-mm) access riser openings, 11-inch (279-mm) inlet
- T1500-23-19/19-11/13 — 1500-gallon (5678-L) fiberglass tank, two-compartment tank with baffle at third rib, 19-inch (483-mm) access riser openings, 11-inch (279-mm) inlet, 13-inch (330-mm) outlet

* For the full range of available product options, contact your local _____ or _____.

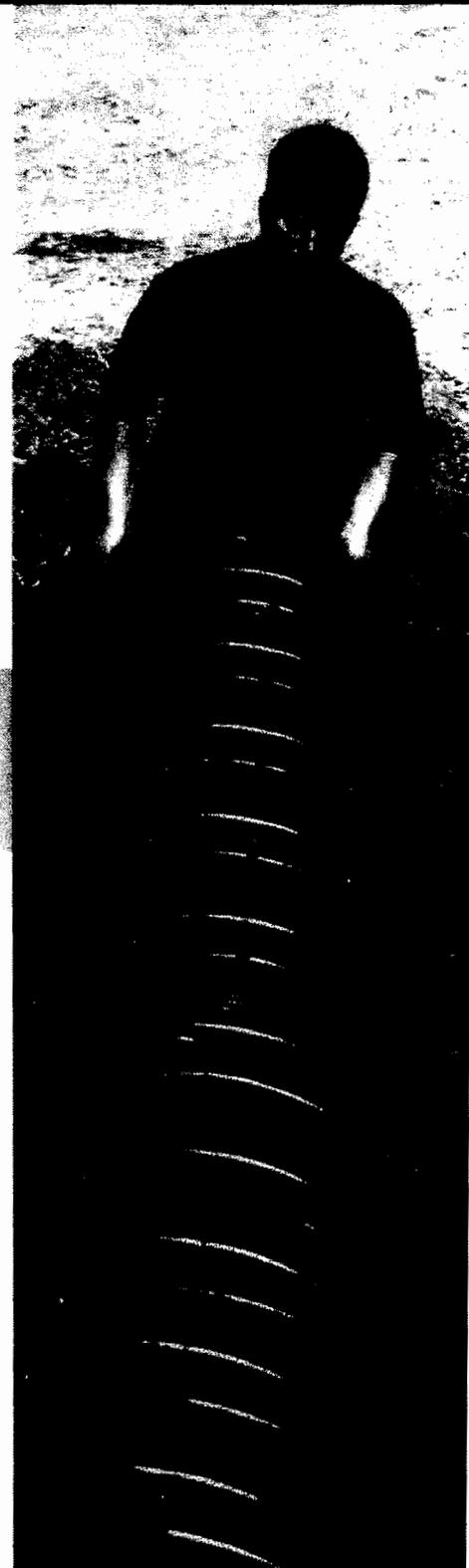
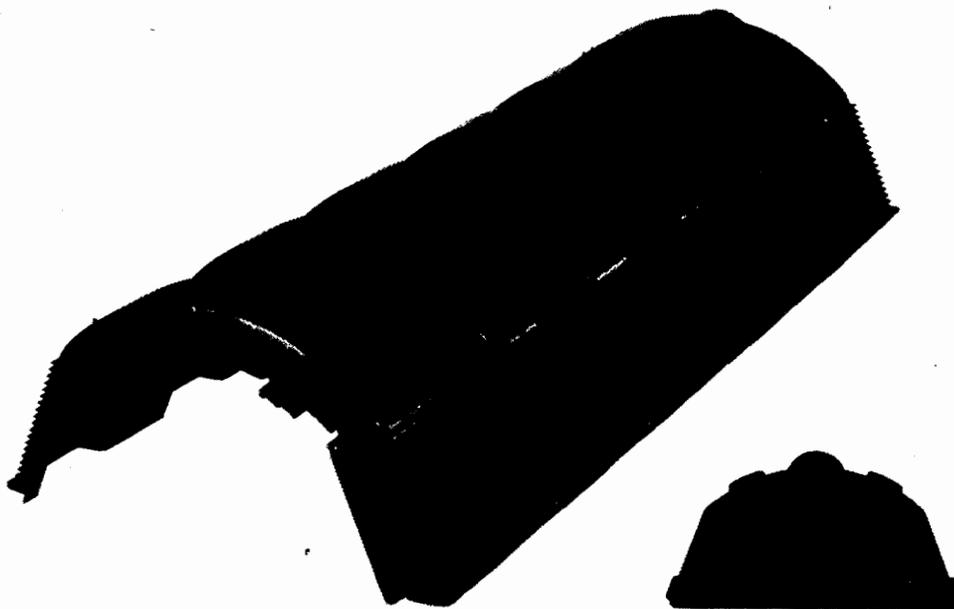


1500-Gallon (5678-L) Fiberglass Tank

The High Capacity **Infiltrator**[®] Chamber H-20



INFILTRATOR[®]
systems inc.



The High Capacity Infiltrator Chamber H-20 offers maximum internal volume per linear foot for extra temporary storage capacity. The 10" louvered sidewalls facilitate infiltration and evapotranspiration, while reducing fines in the system. The High Capacity H-20 chamber gets an H-20 load rating with 18" of compacted cover when installed per installation requirements.

The High Capacity Infiltrator Chamber H-20 System Offers These Unique Benefits:

- More temporary storage capacity
- Maximum internal volume per linear foot
- Easy assembly and installation with as few as two people, a back-hoe and a pickup truck
- Inspection port option for easy access to leachfield with no site disruption
- **OVERALL REDUCED COST**

Tested and Proven with More than One Million Installed

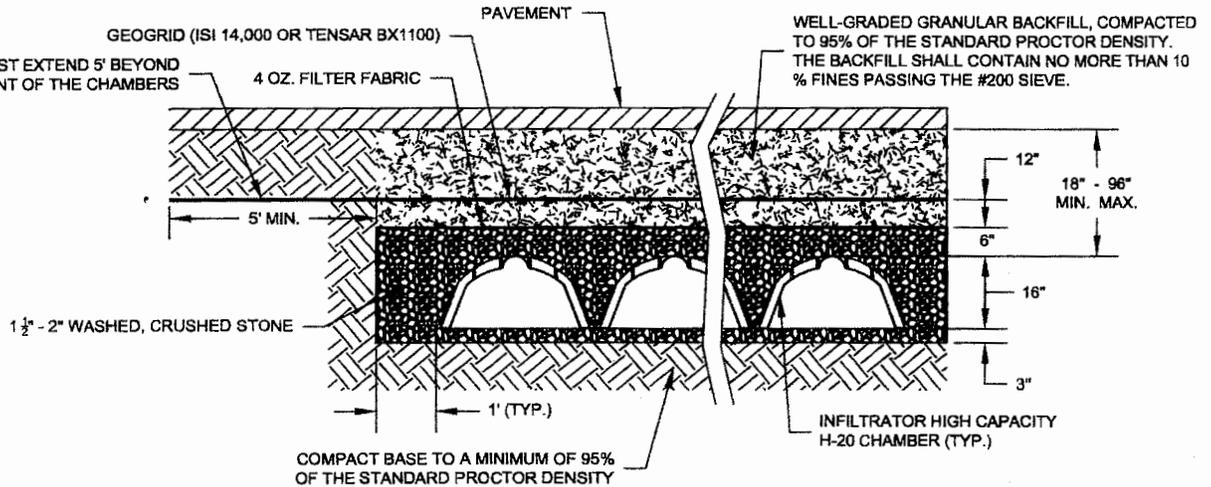
- Infiltrator is the number-one septic leachfield chamber system in the onsite industry.
- More than one million systems installed, with over 27 million units in-ground in all 50 states and 24 countries.
- Infiltrator's established history of performance and reliability began in 1987.
- Field surveys show that Infiltrator chambers systems are more resistant to hydraulic failure than stone and pipe systems.
- Infiltrator is ISO 9001:2000 certified and is IAPMO and UPC approved.

Approved in _____

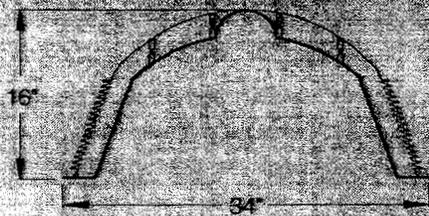
The High Capacity Infiltrator® Chamber H-20

HIGH CAPACITY INFILTRATOR H-20 CHAMBER TYPICAL CROSS SECTION

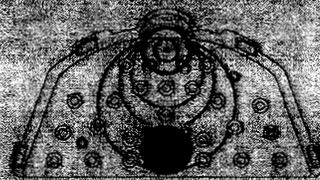
(Not to scale)



Chamber End View



PostLock™ End Plate



Specifications

Size (W x L x H) 34" x 75" x 16"

Storage Capacity 110 gal/14.3 ft³

Weight 38 lbs

Louvered Sidewall Height 10"

Note: For traffic loading applications please contact Infiltrator Systems Technical Services Department for current design, and installation specifications.

INFILTRATOR SYSTEMS, INC. STANDARD LIMITED WARRANTY

INFILTRATOR SYSTEMS, INC., ("Infiltrator") STANDARD LIMITED WARRANTY FOR SEPTIC PRODUCTS

(a) The structural integrity of each chamber and end plate manufactured by Infiltrator (collectively referred to as "Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's installation instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one (1) year from the date upon which a septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required for the septic system by applicable law, the one (1) year warranty period will begin upon the date that installation of the septic system commences. In order to exercise warranty rights, Holder must notify Infiltrator in writing at its corporate headquarters in Old Saybrook, Connecticut, within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for those Units determined by Infiltrator to be defective and covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

(c) The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage is damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting, improper sizing, excessive water usage, improper grease disposal or improper operation or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty.

Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes, all other applicable laws and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change this Limited Warranty in any manner whatsoever, or to extend this Limited Warranty. No warranty applies to any party other than the original Holder.

The above represents the standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's corporate headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty and should carefully read that warranty prior to the purchase of Units.

Infiltrator Systems does not recommend installing onsite systems under pavement. Chambers must be installed according to manufacturer's instructions. Failure to install according to manufacturer's instructions will void warranty. Infiltrator Systems recommends the use of septic tank filters and laundry filters with all onsite septic systems.



INFILTRATOR®
systems inc.

6 Business Park Road • P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • FAX 860-577-7001

www.infiltratorsystems.com

1-800-221-4436

For technical assistance, installation instructions or customer service, call Infiltrator Systems at 1-800-221-4436.

TYPAR®

Uniform Performance That Lasts - Meets AASHTO Specifications

PAVED ROADS AND PARKING LOTS	Typar® Geotextiles improve performance by providing a separation layer which prevents intermixing of base and subgrade, and promotes stabilization.
UNPAVED ROADS	Typar® Geotextiles increase the load-bearing capacity, and permits better drainage, which allows for reduced base course thickness and better performance.
INDUSTRIAL YARDS AND AREAS	Typar® Geotextiles increase the life of the yard, reducing maintenance by preserving superior load-supporting capabilities.
SUBSURFACE DRAINS	Typar® Geotextiles replace expensive and difficult to install graded aggregate filters, minimizing soil piping, preventing clogging of drains to maintain good drainage.
EROSION CONTROL	Typar® Geotextiles offer a fast, easy and long-lasting method to prevent soil erosion while allowing water to pass freely through rip rap.
LANDFILLS	Typar® Geotextiles protect impermeable membranes from damage, drainage layers from contamination, and controls the working face.
RECREATIONAL AREAS	Typar® Geotextiles make surface and subsurface drain systems possible, providing quick drainage for optimum use.
WASTE HANDLING SYSTEMS	Typar® Geotextiles prolong the life of various waste treatment and handling systems by preventing the passage of fine grain soil while permitting effluent to pass through.
LANDSCAPING	Typar® Geotextiles provide excellent soil retention and weed control in landscape applications while freely passing water, air and nutrients.
OTHER APPLICATIONS	Typar® Geotextiles maintain separation and preserve drainage systems while freely passing water and air. They also provide an excellent reinforcement inclusion for walls. And Typar is easy to handle, fabricate and install in a variety of applications including many geocomposites.



TYPAR® - The ideal geotextile

A nonwoven permeable separator for roads, drainage systems, erosion control and landfills



Tough, durable, continuous filament, thermally bonded polypropylene fabric separates subgrade soil from aggregate base, and lets water pass through.

No matter what your needs, Typar geotextiles offer a fast, economical and proven alternative to more expensive construction materials and methods. Tough, durable Typar offers a number of benefits:

- Prevents aggregate from intermixing with soil
- Prevents base deterioration under roads, parking lots and industrial areas
- Prevents clogging of drainage systems
- Prevents soil movement in erosion control applications
- Protects geomembranes and drainage layers in landfills
- Makes composite drain systems easier to fabricate and more effective in performance
- Provides reinforcement to weak soils and for use in walls and soil slopes
- Handles and installs with ease

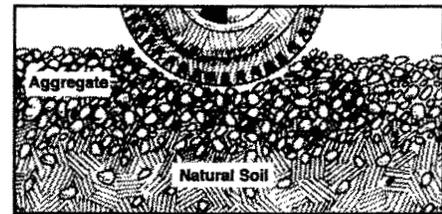
Typar Geotextiles - the permeable separator that lasts!

APPLICATIONS

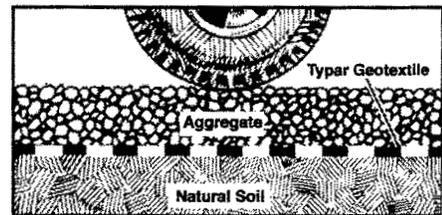
Unpaved and Paved Roads, Parking Lots and Industrial Yards & Areas

Typar geotextiles provide a rugged separation or stabilization layer between aggregate and subgrade in roads, parking lots, industrial yards, etc. Without this geotextile layer, aggregate and soil will intermix, leading to progressive deterioration and eventual failure of the structure. In addition to paved roads and parking lots, Typar can be used for access roads; mining, quarry and logging haul roads; temporary construction roads for

residential and commercial areas; low-volume rural roads; railroad and truck freight yards; and log and ore storage areas. Typar geotextiles save time and money during construction by reducing the required site preparation and aggregate base thickness as well as labor and equipment costs. And by solving the problem of base deterioration, Typar improves performance, increases the service life of the road or yard, and reduces long-term maintenance costs.



Without Typar, subgrade soil contaminates and weakens aggregate base, resulting in failure of road or other surfaces.



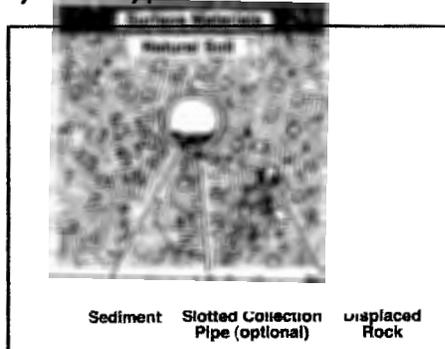
With Typar, aggregate won't sink into and intermix with subgrade soil.

Drainage and Waste Handling Systems

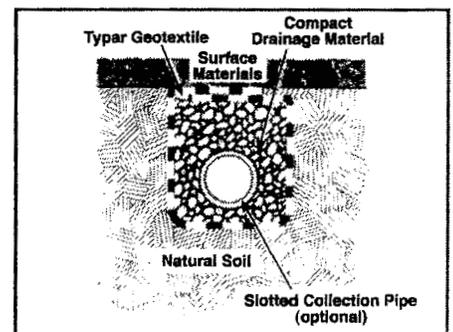
Subsurface drains require a properly designed protective layer that prevents the movement of native soil into a drain and clogging of the drainage system. Septic systems disperse liquids by percolation into the subsurface drainage fields, a function which requires a permeable separation layer. Typar geotextiles offer a proven alternative to graded aggregate or sand filters, which are difficult to install properly and are more expensive than Typar. Because of their permeability, strength and chemical resistance, Typar geotextiles permit faster, simpler construction;

eliminates the need for drain pipes in some cases; prevents soil migration and the potential for clogging; and prolongs the life of septic drain fields and other waste handling systems. Typar's track record as a

separator and stabilizing layer in thousands of subsurface drainage projects (edge-of-pavement, interceptor, subsurface structure and blanket drains) and waste handling systems means that you can specify them with confidence.



Without Typar, soil infiltrates the slotted pipe or aggregate trench, they reduce the capacity of the drainage system.

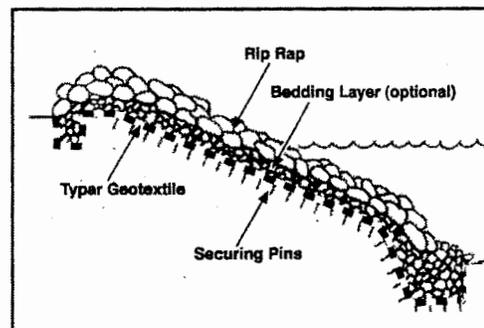


Typar separates soil from the drainage system while passing water and air.

Erosion Control

Typar geotextiles offer a proven alternative to graded aggregate or sand filters for use in erosion control structures for protection of stream banks, shorelines, slopes, submerged foundations, retaining walls and bulkheads and revetments. Erosion protection structures dissipate the hydraulic forces that cause erosion and contain the natural or fill soil behind them, preventing displacement and erosion of natural soil.

Installation of Typar with a layer of heavy stone, broken rock (rip rap), gabions or precast blocks is fast, easy and cost-effective, saving construction time and money over traditional methods. Typar is ideally suited to erosion control applications due to its strength, permeability (allowing efficient drainage), durability, ease of installation, conformability and resistance to rot, mildew and chemicals.

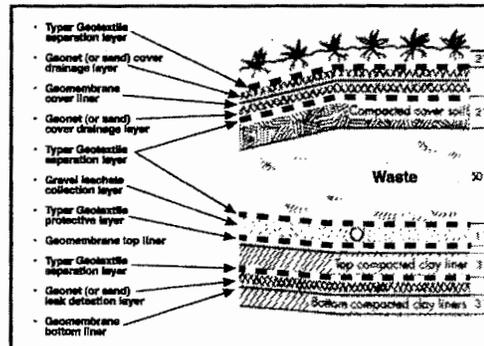


Shoreline erosion control with Typar.

Landfills

Typar geotextiles serve important functions in all types of landfill and waste management applications, from municipal landfills to sophisticated hazardous waste landfills. They can be used in municipal waste landfills as a protective layer to prevent geomembrane liner damage; as a permeable separation layer to preserve drainage layers; to prevent clay from intruding into geonet drainage layers; and in cover systems at municipal waste landfills as separa-

tion and protective layers. Because Typar resists a wide range of chemicals, it is frequently used in hazardous waste landfills which must meet stringent EPA regulations. Typar is economical to use; permits fast and simple construction; meets stringent FHWA drainage criteria for most applications; has high tensile strength and puncture resistance; resists attack by most leachates; and is very permeable, tough, durable and very uniform in its manufactured consistency.

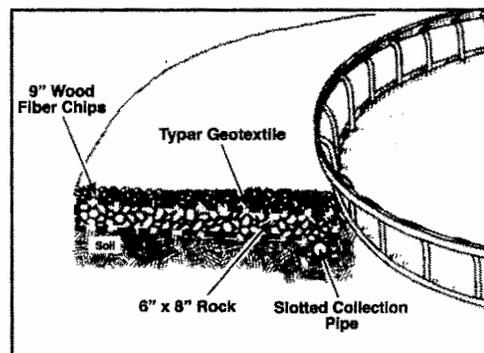


Typical landfill using Typar.

Recreational Facilities

Facilities such as football fields, baseball diamonds, tennis courts, soccer fields, swimming pools, horse & dog tracks, walking trails and golf course sand traps and greens require both subgrade drainage systems and a separation layer to prevent surface contamination and provide fast, efficient drainage. Blanket and trench drain systems for recreational facilities often use Typar as a permeable

separator. Typar geotextiles are economical; permit faster, simpler construction; eliminate the need for a drain pipe in some cases; minimize soil piping and the potential for drain clogging; preserve the integrity of specialized surface materials; significantly reduce on-going maintenance; and eliminate the need for sacrificial material when required in the various layers of the structure. Typar is very uniform in its manufactured consistency.



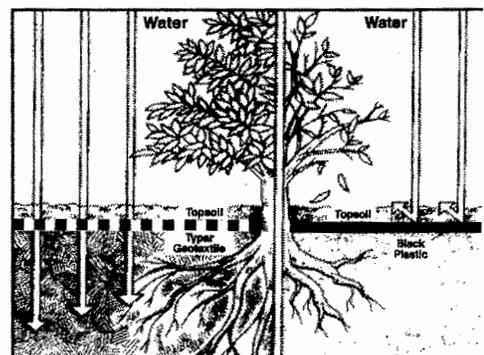
Blanket drain application for recreational facilities (race track).

Landscaping

Typar is ideally suited for landscape applications. Its permeability allows for quick drainage; it prevents piping or erosion of subgrade soils; it is tough, strong, conformable and durable; and most vegetation cannot penetrate through the surface of Typar. Generally, Typar is placed between the natural soil and either stone chips, timber, brick or concrete block and in landscaped beds. Typar geotextiles can be used for weed control in landscaped beds or under decks; for

soil retention behind timber retaining walls, blind drains, planters and pots; and as a support to prevent cracking or uneven settling in brick or block patios and walks.

* If roots are a potential problem, inquire about Biobarrier® Root Control System. For weed control, ask about Biobarrier II, our weed control system. Both utilize Typar as the carrier, thereby, providing the drainage fabric which stop roots while passing water and air. For complete details, visit our website at: www.biobarrier.com.



Compared to plastic film on the right, Typar's porous structure allows water, air and nutrients to pass through to plant roots.

TYPAR® GEOTEXTILES

Typar Nonwoven Geotextiles Properties And Applications (Minimum Average Roll Values).

CLASSIFICATION CLASS	TEST METHOD	TYPAR								
		3151	3201	3301	3341	3401	3501	3631	3801	3601
Unit Weight (oz/yd ²)	ASTM D-5261	1.5	1.8	2.9	3.3	3.9	4.8	6.0	7.8	5.1
Grab Tensile (lbs.)	ASTM D-4632	35	60	120	120	130	160	250	325	24
Elongation at Break (%)	ASTM D-4632	60	60	60	60	60	60	60	60	60
Trap Tear (lbs.)	ASTM D-4533	15	25	35	40	60	60	90	95	90
Puncture Strength (lbs.)	ASTM D-4833	10	18	25	30	40	56	80	90	60
A.O.S. (Equivalent Sieve)	ASTM D-4751	20/30	30	50	60	70	70	140	170	14
(mm)		0.84	0.59	0.30	0.25	0.21	0.20	0.10	0.09	0.1
Flux (gal/ft ² /min)-Typical value	ASTM D-4491	235	190	95	85	60	50	20	8	15
Permittivity (sec ⁻¹)	ASTM D-4491	1.5	1.0	0.8	0.7	0.7	0.5	0.2	0.1	0.
Accelerated Weathering										
-Strength Retained after 500 hrs (%)	ASTM D-4355	-	-	-	>70	>70	>70	>70	>70	>7
Packaging										
Roll Width (in.)		151	151	151	151	151	151	151	151	15
		-	-	-	-	187	187	187	187	18
Roll Length (lin. yd.)		100	100	100	100	100	100	100	100	10
Roll Diameter (in.)		7	7	8	8	9	10	10	12	10
Gross Weight/Roll (lbs.)		50	58	87	97	113	138	173	218	16
		-	-	-	-	142	175	219	275	20
Square Yards/Roll		419	419	419	419	419	419	419	419	41
		-	-	-	-	519	519	519	519	51
PAVED ROADS AND PARKING LOTS										
UNPAVED ROADS										
INDUSTRIAL YARDS AND AREAS										
SUBSURFACE DRAINS										
EROSION CONTROL										
LANDFILLS										
RECREATIONAL FACILITIES										
WASTE HANDLING SYSTEMS										
LANDSCAPING										
OTHER APPLICATIONS										

*The facts stated and the recommendations made herein, based on our research and the research of others, are offered free of charge and are believed to be accurate. No guarantee of their accuracy is made; however, and the products discussed are distributed without warranty, expressed or implied, and upon condition that the recipient shall make their own tests to determine the suitability of such products for their particular purposes. Likewise, statements concerning possible uses of our product are not intended as a recommendation to use it in the infringement of any patent, whether owned by Reemay, Inc. or others.



Float Arrangement Diagram



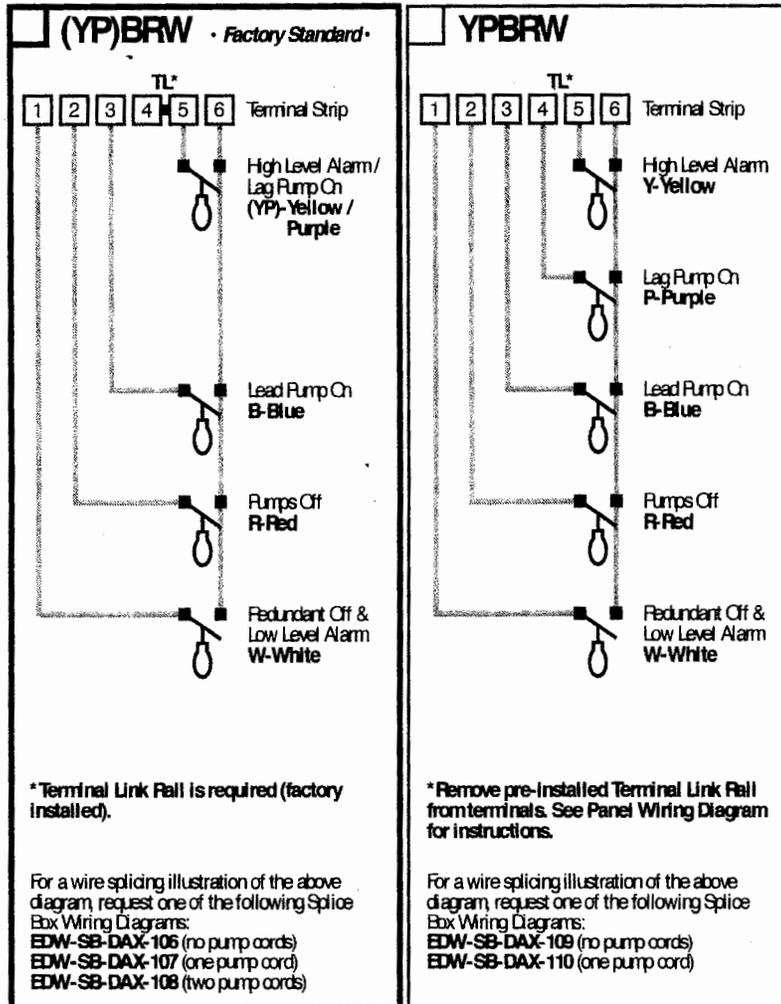
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Check the appropriate box for the float function (color code) used in your system.



Float Types

- Typical OSI float model: A
- Specs: contact - normally open
- differential - no minimum
- power rating - signal
- Possible substitutions: B,C,D

Control Panel Series

MVP-DAX RO

Drawing No.

EDW-FA-DAX-15

EDW-FA-DAX-15
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Splice Box Wiring Diagram



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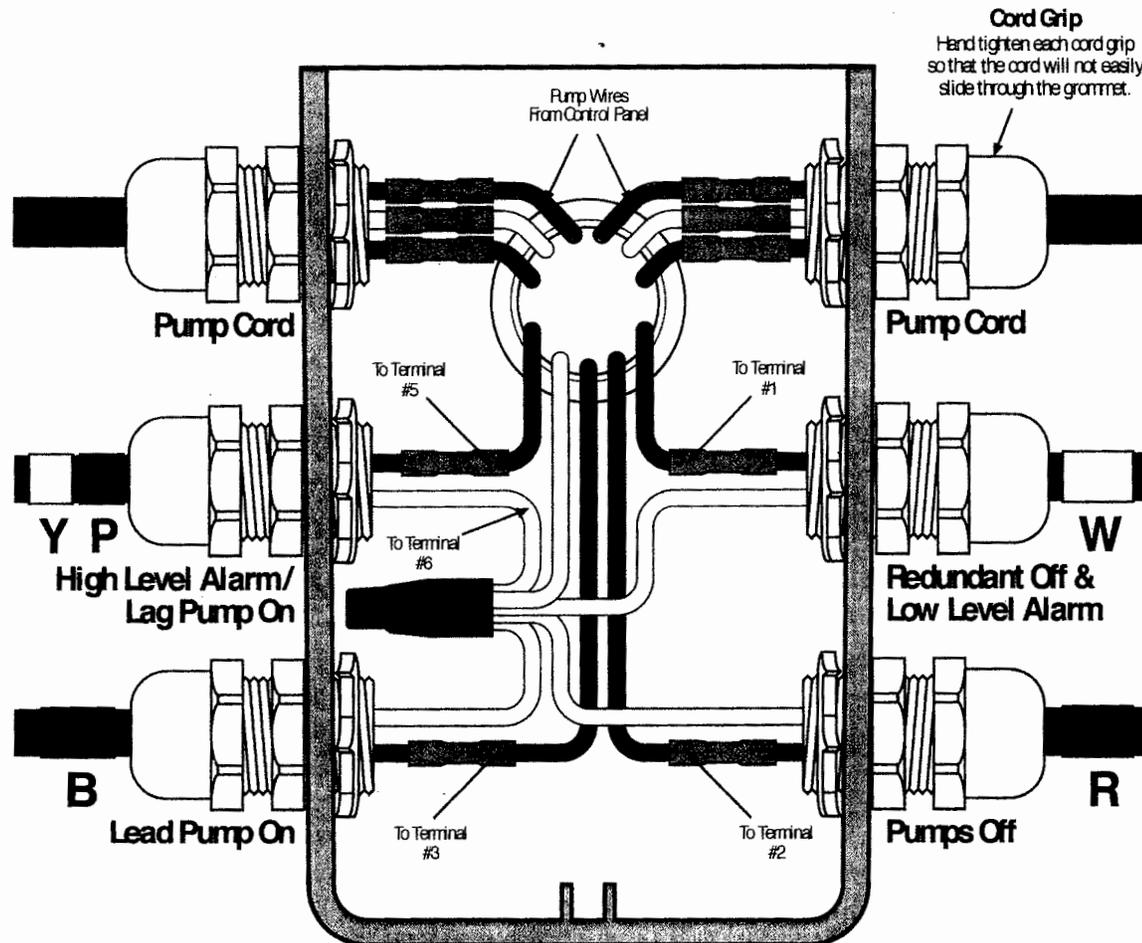
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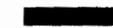
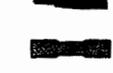
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Key

-  Black Wire
-  White Wire
-  Green Wire
-  Waterproof Wire Nut
-  Heat Shrink & Butt Connector *

* Refer to drawing EIN-SB-SB-1 for splicing instructions.

Float Tag Colors

- Y** - Yellow
- P** - Purple
- B** - Blue
- G** - Green
- R** - Red
- O** - Orange
- E** - Grey
- W** - White

Note: Multi-function floats will have more than one marker

Attention: Failure to follow splicing instructions will void warranty

Control Panel Series

MVP-DAX RO

Float Function Color Code

(YP)BRW

Splice Box Model

SB6

Drawing No.

EDW-SB-DAX-108

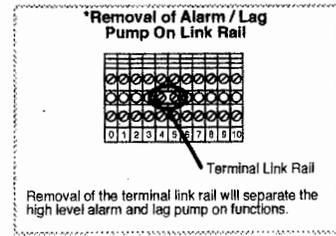
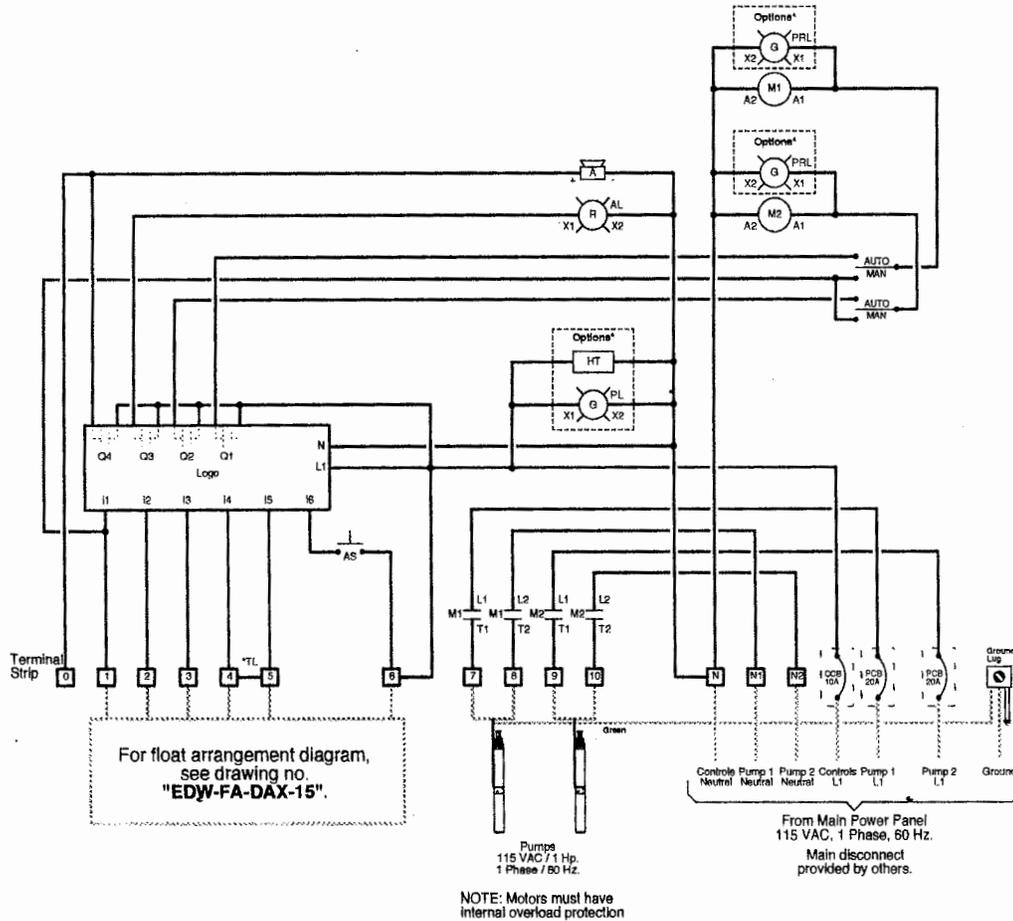
EDW-SB-DAX-108
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Panel Wiring Diagram Model MVP-DAX1 RO

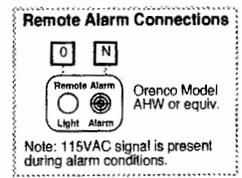
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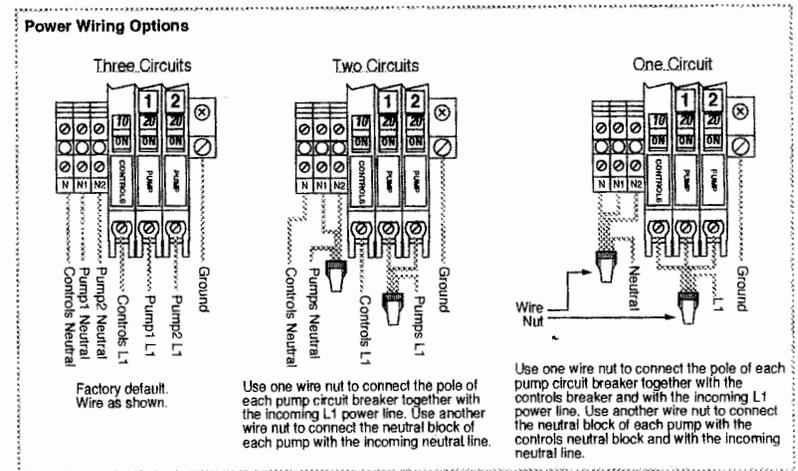
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- Key**
- = Factory Wire
 - - - = Field Wire
 - · - · - = Alternate Field Wire
 - A = Audio Alarm, 115 VAC
 - AL = Alarm Light
 - AS = Audio Silence Switch
 - CCB = Controls Circuit Breaker
 - Logic = Logic Module
 - M = Motor Contactor
 - PCB = Pump Circuit Breaker
 - TL = Terminal Link
- *Options**
- HT = Heater
 - PL = Power Light
 - PRL = Pump Run Light



For MVP-DAX RO operation description, see drawing no. "EIN-CP-0P-85".



Installation Manual



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Most Versatile Panel MVP-DAX1 RO Manual# EIN-CP-DAX-547

This Manual Contains:

Description

1. Installation Instructions
2. Panel Wiring Diagram
3. Float Arrangement Diagram
4. MVP-DAX RO Operation
5. MVP-DAX RO Setting Instructions
6. MVP-Time & Date Setting Instructions

Document Number

EIN-CP-GEN-1
EDW-WD-DAX-95
EDW-FA-DAX-15
EIN-CP-OP-85
EIN-CP-SET-138
EIN-CP-SET-111

Panel Installation



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Before Installing Panel

1. *Read all instructions before proceeding with the installation. Improper installation may void warranties.*
2. Inspect your order for completeness and inspect each component for shipment damage. If something is missing or damaged, you will need to contact your supplier to obtain replacements.
3. Check to be sure the instructions and items supplied comply with state and local regulations.
4. A qualified electrician must be employed to install and service the panel and ancillary wiring. The equipment must be installed in compliance with the National Electric Code, as well as state and local codes.

Placement of the Control Panel

5. Install the electrical control or alarm panel within view of the tank. The panel should be attached to a post or an exterior wall. Panels that contain motor contactors make a thumping sound, each time a pump is started or stopped. Therefore, these panels should not be mounted to an exterior wall unless it is in a location away from living areas, such as on a garage wall. If possible, position the panel in the shade to protect it from weather. Extreme temperatures can cause inconsistent performance of the electrical components. Locate the panel at a convenient height (usually about five feet above the ground) and where it will be accessible for maintenance.

Install Floats and Pumps

6. Install the electrical splice box(es) for the floats and pump(s) before installing the actual floats and pumping equipment. The splice box(es) are installed in the grommet(s) provided near the top of the riser.
7. Install the floats. Thread the float and pump cords through the cord grips into the PVC splice box, leaving adequate lengths of electrical cord coiled inside the riser to allow easy removal of the pump and float assembly. Do not remove the colored markers or the paper tags from the float cords, and do not try to thread the markers and tag through the cord grip. These should be left on the float cord, outside the splice box. Tighten the cord grips, using hand pressure or a wrench if necessary, until the cord will no longer move in the cord grip. If the cord grips are not tight enough, the seal will not be watertight, but overtightening may damage the cord or the cord grip, so use only as much force as necessary. Adequate lengths of cord should be left within the splice box to allow for easy removal for future disconnecting and re-splicing.
8. Run the wires from the control panel to the splice box. The wires can be brought through a conduit, or can be buried using suitable direct-burial wire. Conduit that enters the splice box must be sealed, even if the wires are direct-buried, to prevent the infiltration of water into the splice box. Use an electrically approved sealant to plug the wires coming in through the conduit hub. The number of wires required depends on the control panel and the number of floats and pumps used. This can be determined by consulting the Float Arrangement diagram appropriate for the control panel and float arrangement being used.

Wire should be sized at 14 AWG for the floats. Refer to Figure 1 to determine the proper size for the pump wires. When calculating wire size, the length and size of the branch circuit wires from the service entrance panel to the pump control panel must also be taken into account. Wire that's too small can cause an excessive voltage drop and poor pump performance.

Wires should be color coded or otherwise marked to aid in wiring the control panel. Drawing EIN-SB-SB-1 lists recommended colors for each of the wires. Colors may refer to either the color of the wire's insulation, the color of a tag, or the color of an electrical tape marker.

9. All splices made in the splice box should use waterproof wire nuts or butt connectors and heat shrink tubing. The splices must be waterproof! Splices that are not waterproof may cause a malfunction of the pump controls if water should leak into the splice box. Refer to Drawing EIN-SB-SB-1 for instructions on making waterproof splices. Refer to the appropriate Float Arrangement diagram for instructions on how to connect the floats together.

Connect Control Panel

10. Connect the wires coming from floats to the terminals in the control panel. Refer to the appropriate Float Arrangement diagram for the correct terminal connections.

11. Connect the wires coming from the pump(s) to the pump terminals. Refer to the panel wiring diagram for the correct terminal connections.

12. Connect the incoming power to the panel. Power to the panel must be appropriate to the control panel and pump motor (i.e. 120VAC, single phase for a 120 VAC motor, 240 VAC single phase for a 240 VAC motor, etc.) Insure that the panel is properly grounded and that the fuse or breaker and wire size, from the main power panel and to the pump, are sized correctly. Separate circuits for the pump controls and each of the pump motors is recommended. Note: Voltage for the controls in the panel is always 120VAC, although the pump voltage may be 120VAC or 240 VAC.

13. Use 60° minimum CU conductors only. Torque the terminal blocks to 15 LB-IN and the ground lugs to 45 LB-IN. Torque the circuit breakers to 20 LB-IN for 14-10 AWG wire, 25 LB-IN for 8 AWG wire, and 27 LB-IN for 6-4 AWG wire.

14. When power is applied to the control panel, the wires to the pump may be energized. Do not service the pump or any electrical wiring in the pump vault without disconnecting the power at the circuit breaker and the fuse. The pump vault area is a hazardous area, and may contain explosive gases. Take appropriate precautions before working in the pump vault.

15. If you have any questions please contact Orenco Systems, Inc.

Figure 1. Recommended Breaker & Wire Size

<u>Pump Motor Size</u>	<u>Breaker size</u>	<u>Wire Size</u>	<u>Max Distance*</u>
120 VAC 1/2 hp	20 amp	10 AWG	105 ft
240 VAC 1/2 hp	15 amp	14 AWG	161 ft
3/4 hp	20 amp	14 AWG	130 ft
1 hp	20 amp	12 AWG	172 ft
1 1/2 hp	20 amp	12 AWG	126 ft

* This is the maximum distance from this subpanel to the pump motor for the recommended wire size. Distance is based on 3% maximum voltage drop from subpanel to load at maximum recognized pump motor amps at 75° C.

MVP-DAX RO Operation



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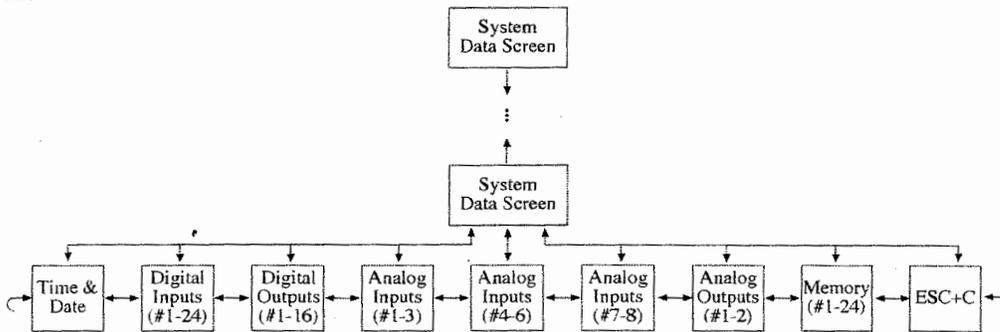
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Oreco's Most Versatile Panel (MVP) line of control panels includes an easy-to-use programmable logic unit that incorporates many timing and logic functions. The units have built in screens which show the time and date, digital input status, digital output status, analog input status (3 screens), analog output status, memory flag status and an ESC + Cursor key status. (The analog input status, analog output status, memory flag status and ESC + Cursor key status screens are not used in this application.) Additionally, the following system data screens have been included in your panel:

System Data Screens:	Description:
1. Pump 1 CT & ETM	Pump 1 cycle counter at top of screen and pump run time in minutes beneath
2. Pump 2 CT & ETM	Pump 2 cycle counter at top of screen and pump run time in minutes beneath
3. Lag 1 CT & Lag 2 CT	Lag pump #1 cycle counter at top of screen and lag pump #2 beneath
4. High Lvl CT & Low Level CT	High level alarm counter at top of screen and low level counter beneath
5. Power Faults & Operating Hr	Power fault counter at top of screen and operating hours beneath

To move between screens, use the four arrow keys. The screens are accessed as shown below:



Input and Output Screens: The unit will activate various inputs and outputs as it operates (please refer to the Liquid Crystal Display screens shown below). Knowing what conditions cause the inputs and outputs to activate can be a helpful installation and troubleshooting tool. The following inputs and outputs have been used with your control panel:

Input Functions:

1. Redundant Off & Low Level Alarm Float
2. Pumps Off Float
3. Lead Pump On Float
4. Lag Pump On Float
5. High Level Alarm Float
6. Push To Silence

Activation Conditions:

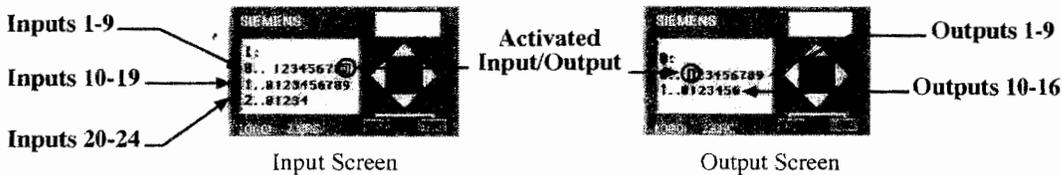
- Float in up position
- Pushbutton is pressed

Output Functions:

1. Pump #1
2. Pump #2
3. Level Alarm Light
4. Audible Alarm

Activation Conditions:

- Pump #1 is activated
- Pump #2 is activated
- Level Alarm Light is activated
- Audible Alarm is activated



Your control panel can perform the float functions listed below. Depending on the number of floats for your application, some functions may be omitted or combined.

High Level Alarm: This float activates the alarm light (steady) and audible alarm when lifted for longer than the high level alarm delay (factory set for 5 seconds). The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The alarm light (steady) will remain on until the float is lowered, and the audible alarm will reactivate in 12 hours if condition is not corrected.

Lag Pump On: This float will activate the lag pump when lifted (both pumps will be on). Both pumps will continue to run together until the Pumps Off float lowers.

Lead Pump On: This float will activate the lead pump when lifted. The pump will run for the duration of the dose time as a minimum or until the Pumps Off float (if used) is lowered.

Pumps Off: This float will deactivate the pumps when lowered if the dose time has elapsed.

Redundant Off & Low Level Alarm: This float turns off the pumps when lowered for more than two seconds. This float is a secondary off float which will operate if the Pumps Off float fails. Pumping will be disabled in both the automatic and manual modes. This float also activates the alarm light (flashing) and audible alarm. The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The alarm light will remain flashing until the float is lifted, and the audible alarm will reactivate in 12 hours if the alarm condition is not corrected.

This panel supports four different modes of operation relating to the pump alternation which are based on selected parameter settings. See the setting page for this panel for information on how to adjust these parameters.

Alternating (default): Parameters "Pmp1Lead" and "Pmp2Lead" set to "Off"
The lead and lag pumps will alternate and for each cycle. This mode provides equal wear on each pump and is recommended for most applications.

Pump 1 Lead: Parameter "Pmp1Lead" set to "On" and parameter "Pmp2Lead" set to "Off"
The lead pump is locked to pump #1 and the lag pump is locked to pump #2. No alternation will occur. Pump #1 will be the primary pump for the system. Pump #2 will only be used during high flow conditions.

Pump 2 Lead: Parameter "Pmp1Lead" set to "Off" and parameter "Pmp2Lead" set to "On"
The lead pump is locked to pump #2 and the lag pump is locked to pump #1. No alternation will occur. Pump #2 will be the primary pump for the system. Pump #1 will only be used during high flow conditions.

Both Pumps: Parameters "Pmp1Lead" and "Pmp2Lead" set to "On"
Both pumps will run together for every cycle.

MVP-DAX RO Reference Chart

Program Code: DA101-50

Input Functions:

- RO & Low Level Alarm Float
- Pump(s) Off Float
- Lead Pump On Float
- Lag Pump On Float
- High Level Alarm Float
- Push To Silence

Output Functions:

- Pump #1
- Pump #2
- Level Alarm Light
- Audible Alarm

Activation Conditions:

- Float in up position
- Pushbutton is pressed

Activation Conditions:

- Pump #1 is activated
- Pump #2 is activated
- Level alarm condition exists
- Audible Alarm is activated

Built In Screens:

Built in screens are time & date, digital inputs, digital outputs, analog inputs, analog outputs, memory flag, and ESC+cursor key status. To view these screens, press the down arrow repeatedly until a built in screen appears, then use the left and right arrow keys to change between screens.

System Data Screens:

To change between screens, press the up and down arrow keys. The following screens have been used with your panel:

Screens:

- Pump 1 CT & ETM
- Pump 2 CT & ETM
- Lag 1 CT & Lag 2 CT
- High Lvl CT & Low Level CT
- Power Faults & Operating Hr

Description:

- Pump #1 cycle counter on top and pump run time in minutes below
- Pump #2 cycle counter on top and pump run time in minutes below
- Lag pump #1 cycle counter on top and lag pump #2 below
- High level alarm counter on top and low level alarm counter below
- Power fault counter on top and operating hours below

Selecting Blocks for Viewing or Adjusting:

To begin to adjust parameters, press 'ESC'.

Block Names:	Description:	Time Range:
HLA Diy	High Level Alarm Delay	MM:SS
MinRunT	Minimum Run Time	MM:SS
Pmp1Lead	Pump 1 Lead Select	
Pmp2Lead	Pump 2 Lead Select	

EIN-CP-REF-22
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MVP-DAX RO Reference Chart

Program Code: DA101-50

Input Functions:

- RO & Low Level Alarm Float
- Pump(s) Off Float
- Lead Pump On Float
- Lag Pump On Float
- High Level Alarm Float
- Push To Silence

Output Functions:

- Pump #1
- Pump #2
- Level Alarm Light
- Audible Alarm

Activation Conditions:

- Float in up position
- Pushbutton is pressed

Activation Conditions:

- Pump #1 is activated
- Pump #2 is activated
- Level alarm condition exists
- Audible Alarm is activated

Built In Screens:

Built in screens are time & date, digital inputs, digital outputs, analog inputs, analog outputs, memory flag, and ESC+cursor key status. To view these screens, press the down arrow repeatedly until a built in screen appears, then use the left and right arrow keys to change between screens.

System Data Screens:

To change between screens, press the up and down arrow keys. The following screens have been used with your panel:

Screens:

- Pump 1 CT & ETM
- Pump 2 CT & ETM
- Lag 1 CT & Lag 2 CT
- High Lvl CT & Low Level CT
- Power Faults & Operating Hr

Description:

- Pump #1 cycle counter on top and pump run time in minutes below
- Pump #2 cycle counter on top and pump run time in minutes below
- Lag pump #1 cycle counter on top and lag pump #2 below
- High level alarm counter on top and low level alarm counter below
- Power fault counter on top and operating hours below

Selecting Blocks for Viewing or Adjusting:

To begin to adjust parameters, press 'ESC'.

Block Names:	Description:	Time Range:
HLA Diy	High Level Alarm Delay	MM:SS
MinRunT	Minimum Run Time	MM:SS
Pmp1Lead	Pump 1 Lead Select	
Pmp2Lead	Pump 2 Lead Select	

EIN-CP-REF-22
Rev 6.0 © 08/11/05

MVP-DAX RO Reference Chart

Program Code: DA101-50

Input Functions:

- RO & Low Level Alarm Float
- Pump(s) Off Float
- Lead Pump On Float
- Lag Pump On Float
- High Level Alarm Float
- Push To Silence

Activation Conditions:

- Float in up position
- Pushbutton is pressed

Output Functions:

- Pump #1
- Pump #2
- Level Alarm Light
- Audible Alarm

Activation Conditions:

- Pump #1 is activated
- Pump #2 is activated
- Level alarm condition exists
- Audible Alarm is activated

Built In Screens:

Built in screens are time & date, digital inputs, digital outputs, analog inputs, analog outputs, memory flag, and ESC+cursor key status. To view these screens, press the down arrow repeatedly until a built in screen appears, then use the left and right arrow keys to change between screens.

System Data Screens:

To change between screens, press the up and down arrow keys. The following screens have been used with your panel:

Screens:

- Pump 1 CT & ETM
- Pump 2 CT & ETM
- Lag 1 CT & Lag 2 CT
- High Lvl CT & Low Level CT
- Power Faults & Operating Hr

Description:

- Pump #1 cycle counter on top and pump run time in minutes below
- Pump #2 cycle counter on top and pump run time in minutes below
- Lag pump #1 cycle counter on top and lag pump #2 below
- High level alarm counter on top and low level alarm counter below
- Power fault counter on top and operating hours below

Selecting Blocks for Viewing or Adjusting:

To begin to adjust parameters, press 'ESC'.

Block Names:

- HLA Diy
- MinRunT
- Pmp1Lead
- Pmp2Lead

Time Range:

- MM:SS
- MM:SS

EIN-CP-REF-22
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MVP - Control Panel Instructions

Contrast Adjustment and Time & Date Settings



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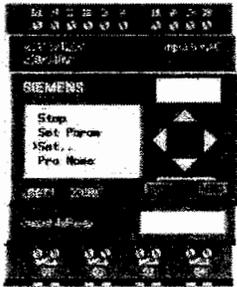
Orengo's Most Versatile Panel (MVP) line of control panels includes an easy-to-use programmable logic unit that incorporates many timing and logic functions. The readability of the display may vary with temperature and ambient light. If the screen is difficult to read, adjusting the contrast is recommended. Instructions for adjusting the contrast are shown below. Setting the date and time is typically not necessary. However, if required, the time and date can be set by following instructions shown below.

To adjust the settings, use the four arrow keys located on the face of the unit (up, down, left, and right), along with the "ESC" key and the "OK" key. Follow the steps, below:

Changing Settings:



Step 1: Press \blacktriangledown repeatedly until the display does not change. To begin the configuration process, press the "ESC" key.

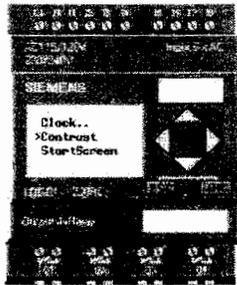


Step 2: Select "Set..." (Press \blacktriangle or \blacktriangledown), and then press the "OK" key.

Warning: Do not select "Stop". Doing so may erase the panel programming, which can not be restored without the use of an EEPROM card, which is not included with the panel. If this is selected by accident, a confirmation screen will come up. Select "No" and press the "OK" key immediately.

If adjusting contrast, continue with the steps below. If adjusting time & date, skip to "Setting Time and Date:" on next page.

Adjusting Contrast:



Step 3: Select "Contrast" (Press \blacktriangle or \blacktriangledown), and then press the "OK" key.

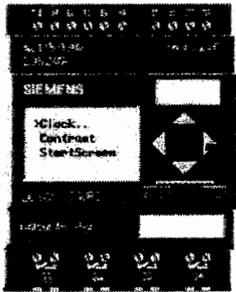


Step 4: Select the desired contrast (Press \blacktriangleleft or \blacktriangleright), and then press the "OK" key.



Step 5: To exit, press the “ESC” key once.

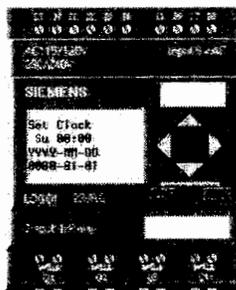
Setting Time and Date:



Step 3: Select “Clock...” (Press ▲ or ▼), and then press the “OK” key.



Step 4: Select “Set Clock” (Press ▲ or ▼), and then press the “OK” key.



Step 5: Move the cursor to the desired position by pressing ◀ or ▶.

Step 6: Change the value by pressing ▲ or ▼.



Step 7: To confirm your entries press the “OK” key once. Then, press the “ESC” key twice.

MVP-DAX RO Setting Instructions



Oreco Systems[®]
Incorporated

814 AIRWAY AVENUE
SUTHERLIN, OREGON
97479-9012

TELEPHONE:
(541) 459-4449

FACSIMILE:
(541) 459-2884

Oreco's Most Versatile Panel (MVP) line of control panels includes an easy-to-use programmable logic unit that incorporates many timing and logic functions. The unit has been programmed at the factory for the control functions required. The unit includes adjustable operational parameters and viewable monitoring information. Some operational parameters may need changing for your particular application.

The unit uses block names to identify the various parameters (please refer to the Liquid Crystal Display screen shown in Step #3). The following block types have been used with your control panel:

Block Names	Description	Factory Default	Time Range	Block Type
HLA Dly	High Level Alarm Delay	5 seconds	MM:SS	Timer
MinRunT	Minimum Run Time	30 seconds	MM:SS	Timer
Pmp1Lead	Pump 1 Lead Select	Off		Softkey
Pmp2Lead	Pump 2 Lead Select	Off		Softkey

Timer blocks have three timebase units that can be used; s = seconds, m = minutes, h = hours. If an **h** appears after the timer setting then the time will be HH:MM (e.g. 01:55h = 1 hour and 55 minutes). If an **m** appears after the timer setting then the time will be MM:SS (e.g. 05:00m = 5 minutes and 0 seconds). If an **s** appears after the timer setting then the time will be SS.ss (e.g. 25:13s = 25.13 seconds).

All adjustable parameters **DO NOT** use the same type of blocks, check the block types above to determine which steps apply to your application.



Changing Adjustable Parameter Blocks:

Step 1: Press **▼** repeatedly until the display does not change. To begin the configuration process, press the "ESC" key.

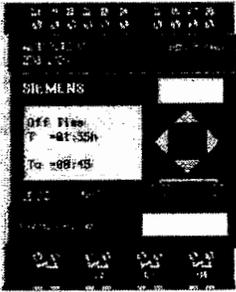


Step 2: Press **▼** on the unit to select "Set Param." Then press the "OK" key.

Warning: Do not select "Stop." Doing so may erase the panel programming, which can not be restored without the use of an EEPROM card, which is not included with the panel. If this is selected by accident, a confirmation screen will come up. Select "No" and press the "OK" key immediately.

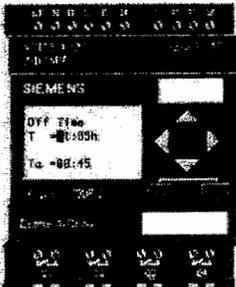
Changing Adjustable Parameter Timer Blocks:

Step 3: Press \blacktriangle or \blacktriangledown to view the parameter values. In this example, "Off Time" is being viewed.

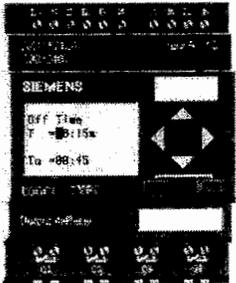


Step 4: The first line indicates the set value for the parameter. In this example, the set time is 1 hour and 55 minutes, "T=01:55h." To change the set value for the parameter, press the "OK" key.

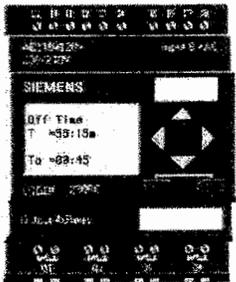
The second line indicates, in real time, how much time has elapsed for the cycle that is currently in process. The current value of the parameter is 45 minutes, "Ta=00:45."



Step 5: The cursor will appear in the set value. To select the digit to be changed, press \blacktriangleleft or \blacktriangleright . To change the value of a digit, press \blacktriangle or \blacktriangledown . In this example, the set value has been changed from 1 hour and 55 minutes to 58 minutes and 15 seconds. (The timebase can be changed from hours = h to minutes = m or seconds = s by moving the cursor to the far right and pressing \blacktriangle or \blacktriangledown).



Step 6: When the desired time value has been entered, press the "OK" key. The new time value will now be in effect.



Step 7: To exit parameter mode, press the "ESC" key twice.

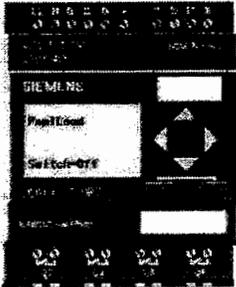


Changing Adjustable Parameter Softkey Blocks:

Step 3: Press \blacktriangle or \blacktriangledown to view the parameter values. In this example, "Pmp1Lead" is being viewed.



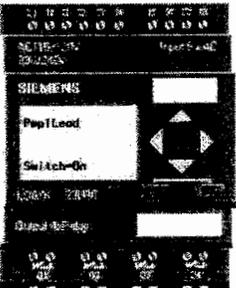
Step 4: The bottom line indicates the current state of the softkey switch. In this example, the softkey is set to "Off." To change the set value for the parameter, press the "OK" key.



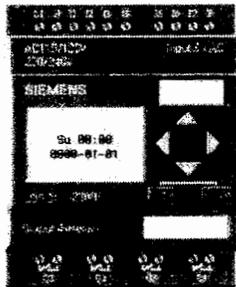
Step 5: The cursor will appear on the switch parameter. To change the value of the softkey switch, press \blacktriangle or \blacktriangledown . In this example, the set value has been changed from "Off" to "On."

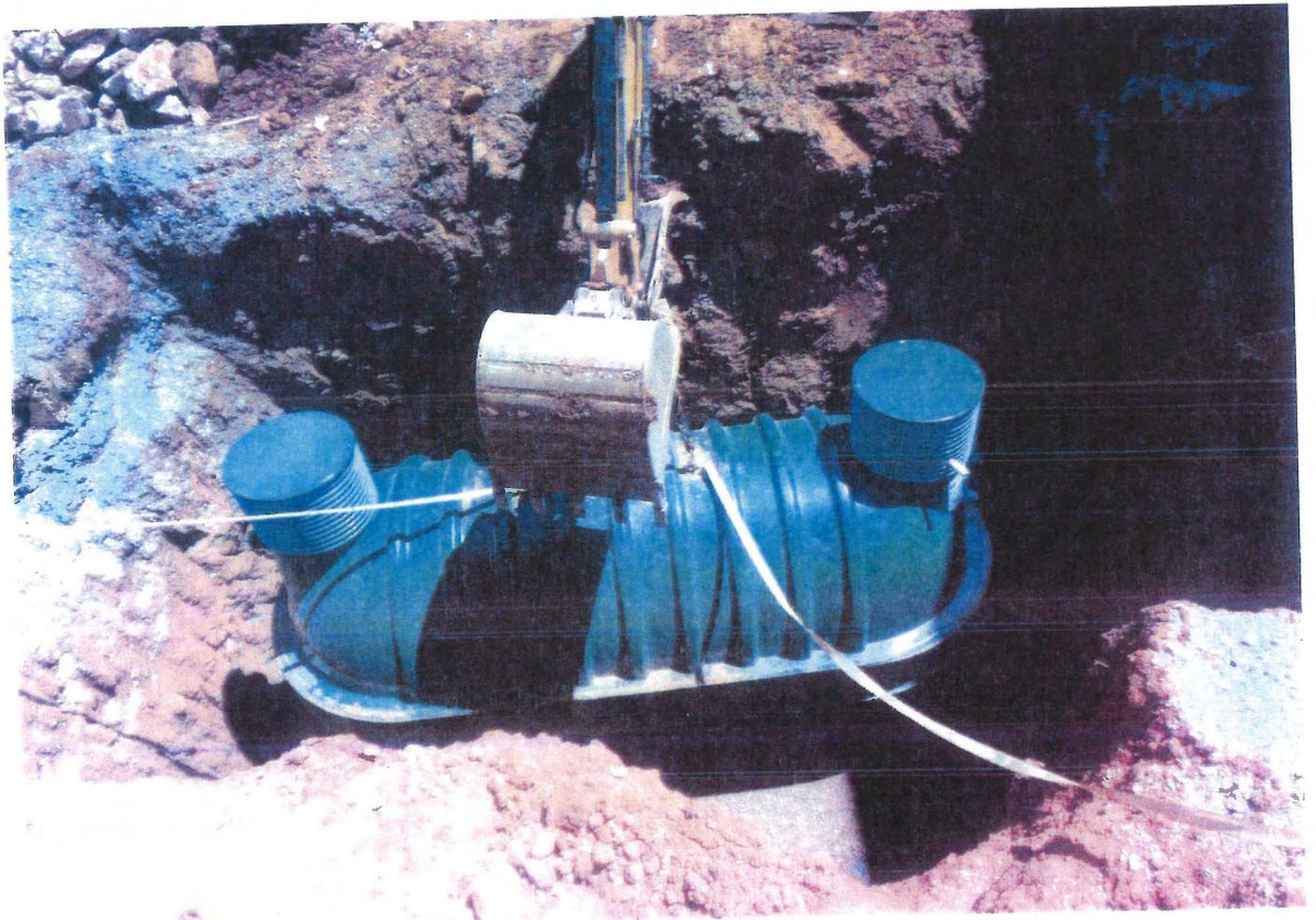


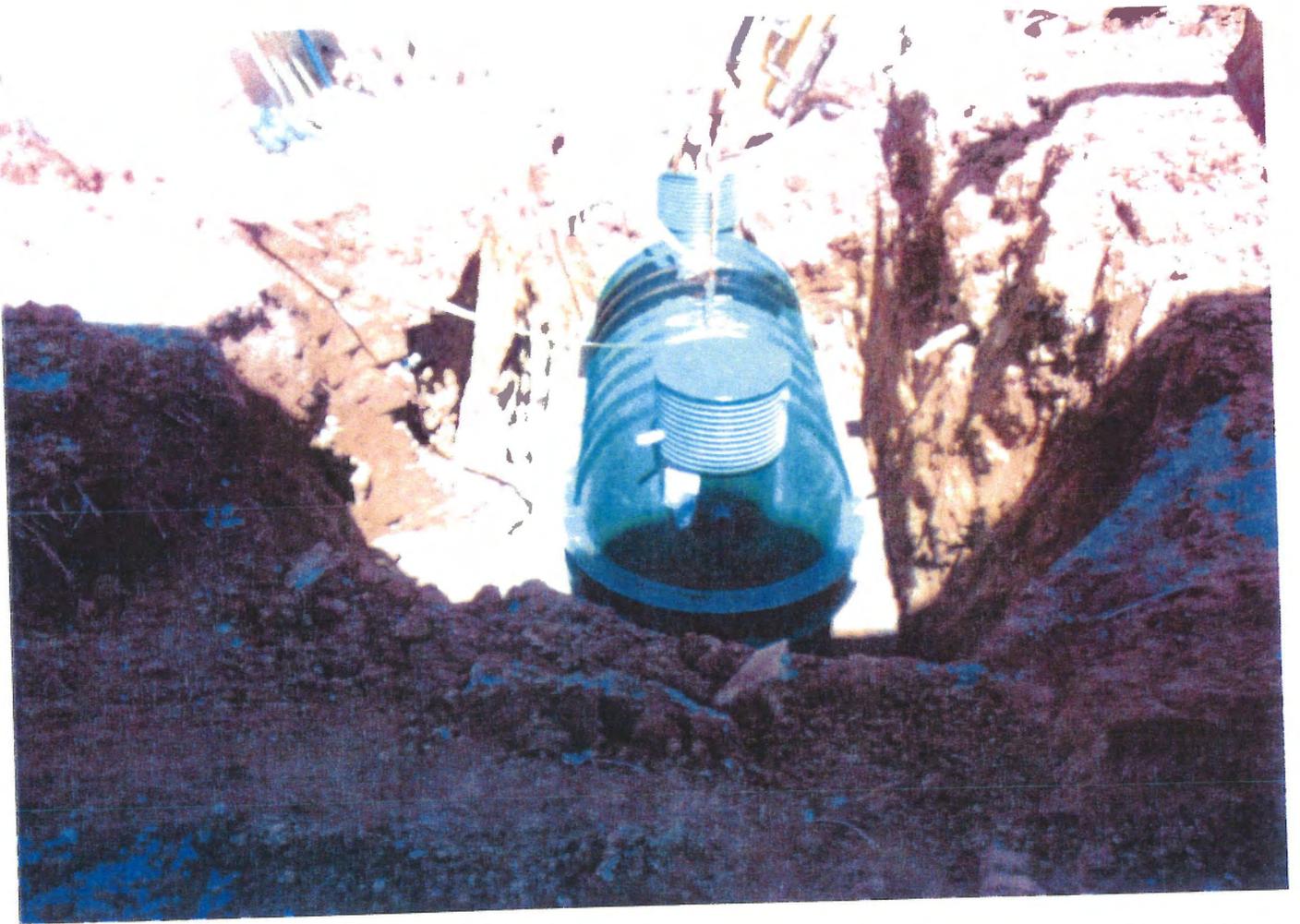
Step 6: When the desired value has been entered, press the "OK" key. The new value will now be in effect.



Step 7: To exit parameter mode, press the "ESC" key twice.

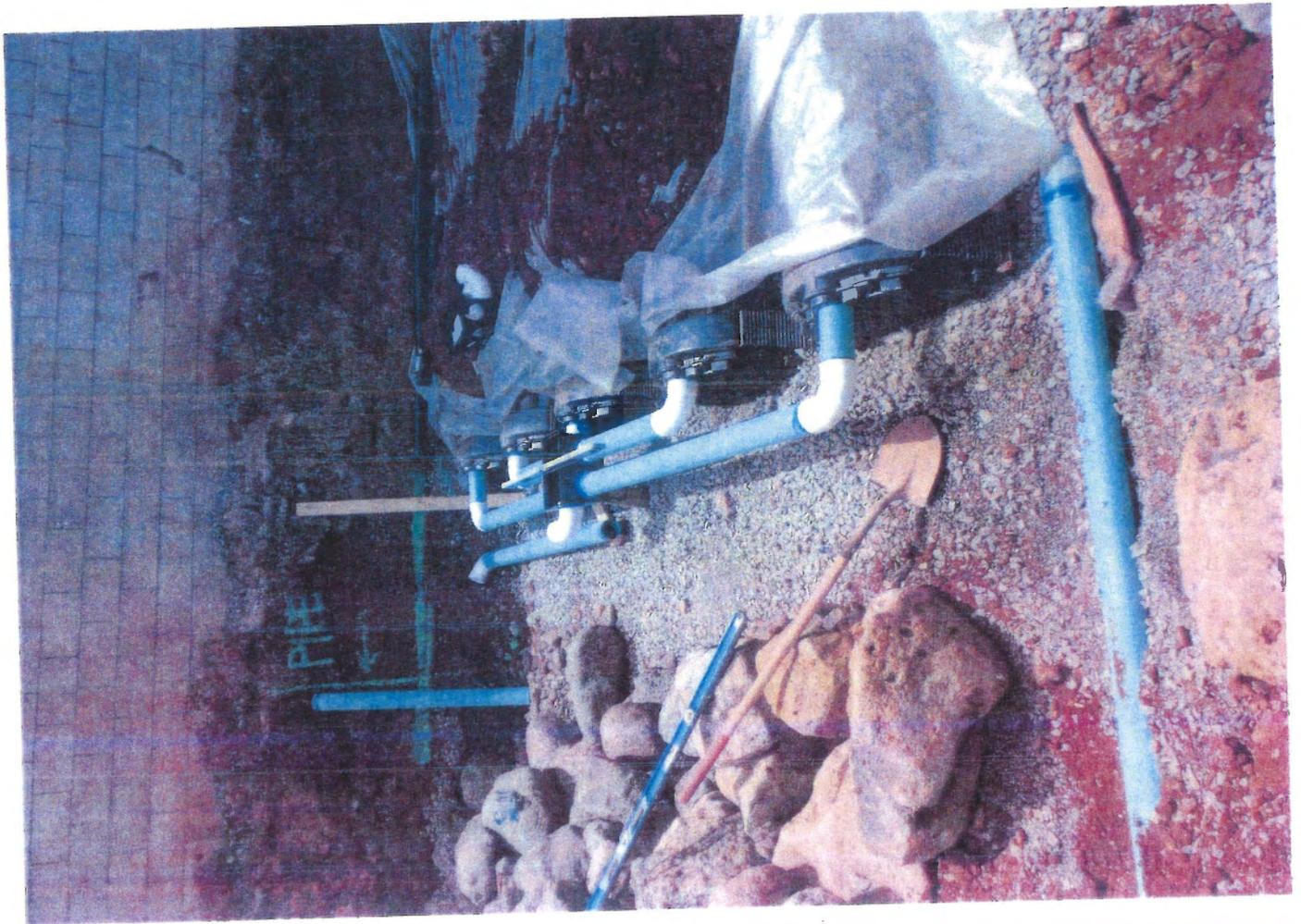






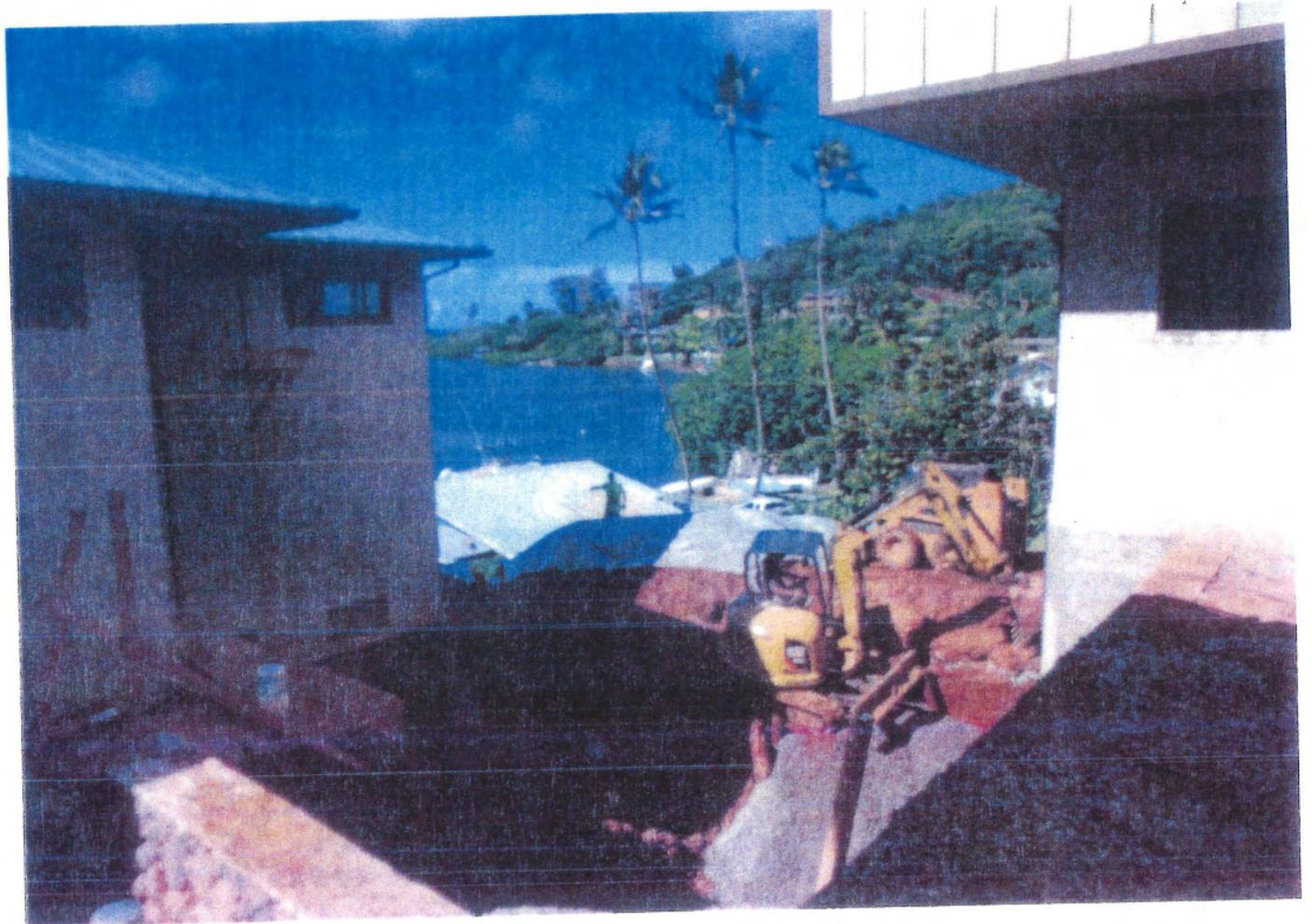






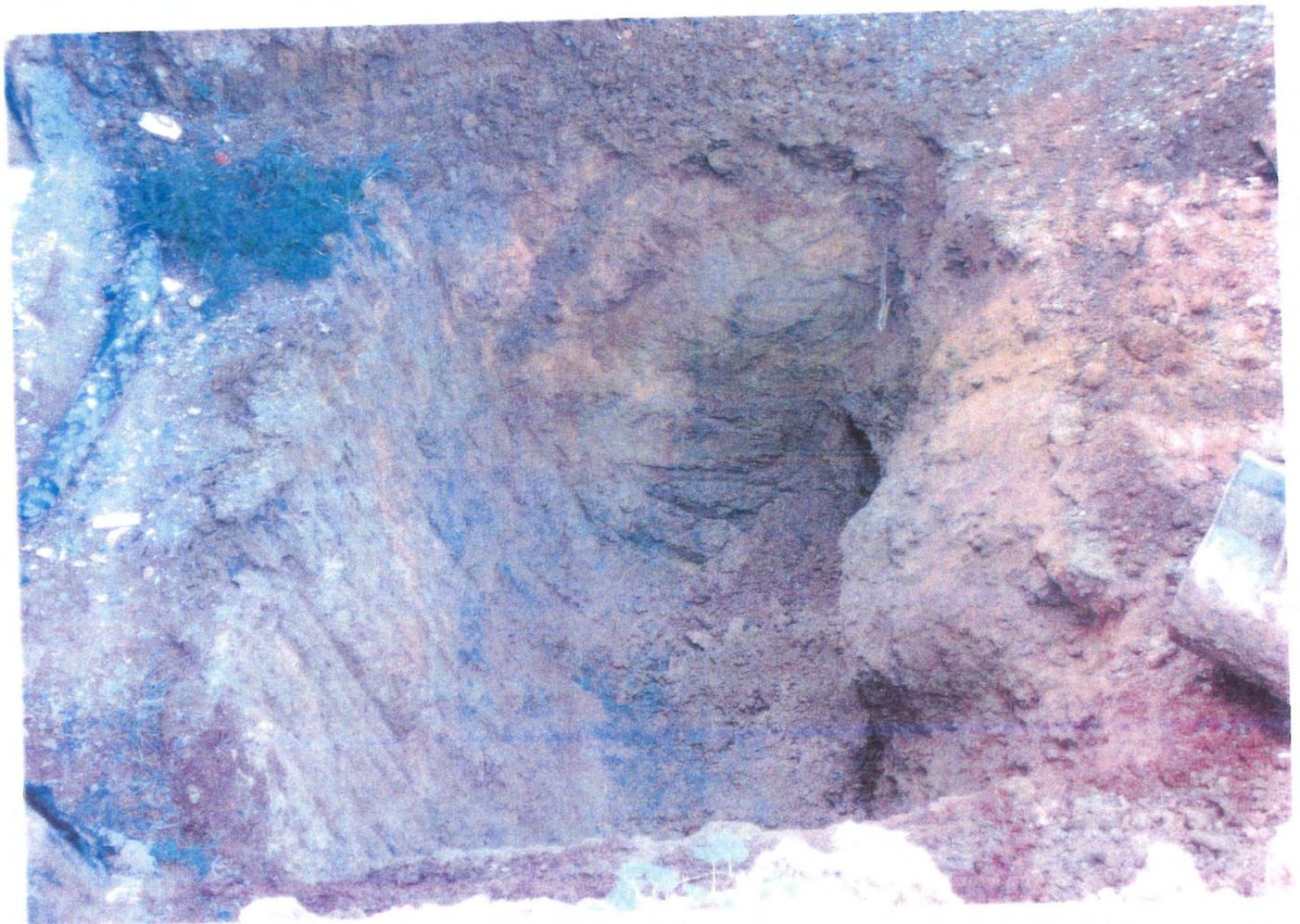














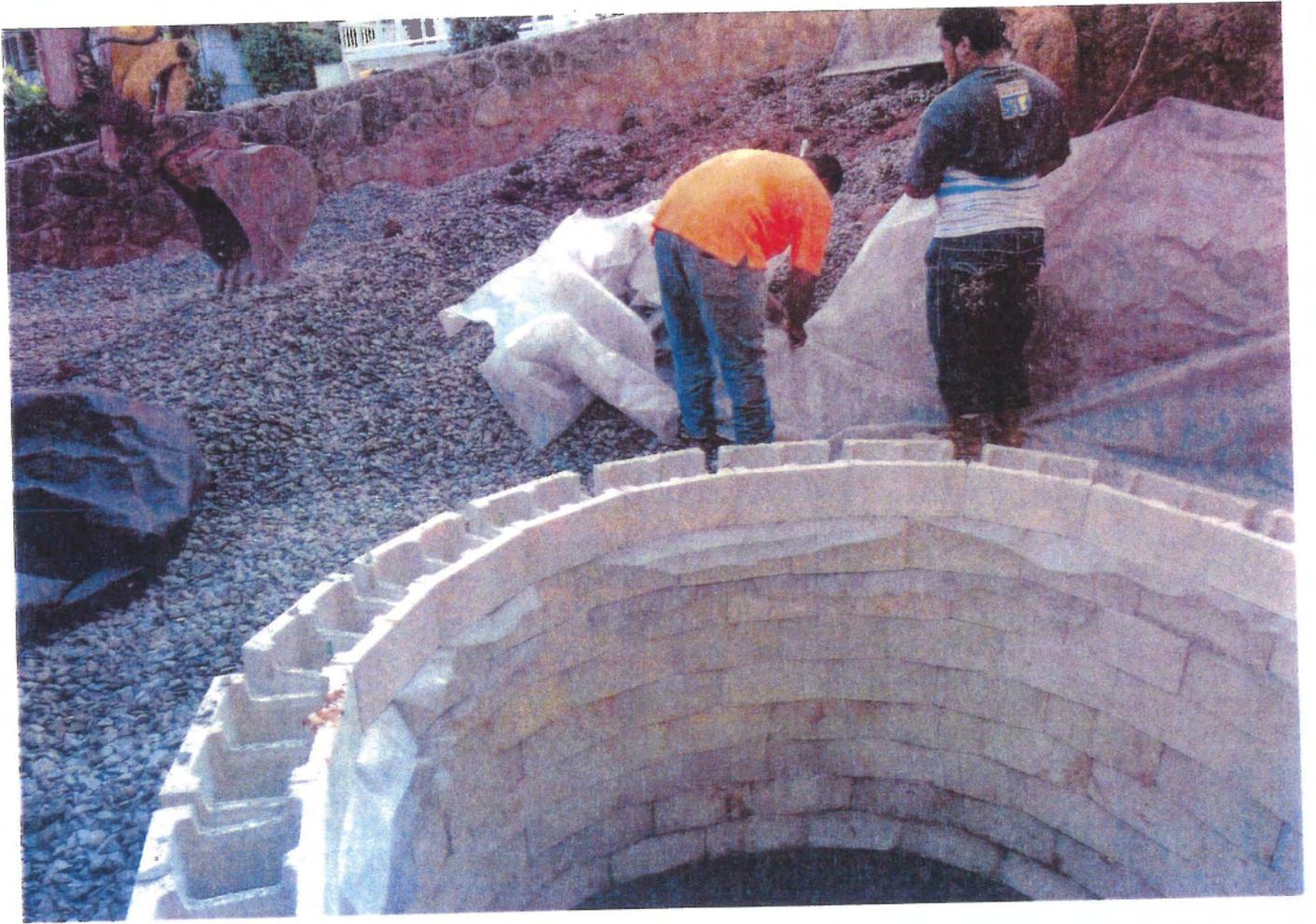






Exhibit 9

Grading Permits



CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET * HONOLULU, HAWAII 96813

PHONE: (808) 768-8218/8219 * FAX: (808) 768-6743

DEPT. WEB SITE: www.honolulu.gov * CITY WEB SITE: www.honolulu.gov

PAID RECEIPT

BUSINESS ACTUAL TIME

2/04/2013 2/01/2013 13:06:29

REG DTO2 WALKIN JT JT

RECEIPT # 407795 2/01/2013

Dept 9034 6244 GRADING EXCAVATION

Help protect our waters...for life.



692-5656

GRADING PERMIT

PERMIT NUMBER

GP2013-02-0049

Recpt Tot \$45.00 \$45.00 CK \$0.00

Permission is hereby given to do grading work in conformity with Chapter 14, R.O.H. 1990, As Amended, as follows:

Table with columns: TAX MAP KEY (Zone, Section, Plat, Parcel(s)), LAND USE, EST. QUANTITY (Excavation, Fill), PERMIT FEE

Project Name: CHARLES WONG RESIDENCE
Located at: 46-107 LILIPUNA RD Kaneohe 96744
Category: 2

Related Job: A2012-12-2890

BORROW (Source of Material)

DISPOSAL

Surety: N/A

Site: Kapaa Quarry

n/a

Material: gravel

n/a

Est. Starting Date: February 6, 2013

Total Lot Area: 19,598 s.f. (0.45 ac.)

Est. Compl. Date: February 5, 2014

Disturbed Area: 85 s.f. (0.00 ac.)

Graded Area: 85 s.f. (0.00 ac.)

To be inspected by: Building Division (Call 768-8259 for inspection)

Scope of Work: CONST. CMU RET. 5'-0" HT. MAX WALL @ MIDDLE OF PROPERTY

OWNER

ENGINEER/PLAN MAKER

CONTRACTOR

Wong, Charles T.
46-107 Lilipuna Road
Kaneohe, HI 96744
(808) 779-6189

WONG, William W.
P.O. BOX 19232
HONOLULU, HAWAII 96817
(808) 778-5988

RAMSARRAN, BISHNU
434 & 436 KALAMA ST
KAILUA, HI 96734
(808) 386-3333

Contractor shall notify this office two working days before commencing any work and arrange for necessary inspectional services. Grading work which involves contaminated and/or hazardous materials shall be done in conformance with applicable State and Federal requirements.

Authorization from Permittee to act for Owner on file?: Yes

Permittee: MURO GILDA
AGENT, (808) 349-0721

Signature of Owner/Developer/Authorized Rep. Date 2/1/13

Permission is hereby given to do the above work according to the conditions hereon and according to the approved plans and specifications pertaining thereto, subject to compliance with Chapter 14, R.O.H. 1990, As Amended.

Remarks: EROSION / RUNOFF CONTROL - CAUTION REQUIRED - BEST MANAGEMENT PRACTICES WILL BE ENFORCED

Signature of Director, DPP Date February 01, 2013

THIS PERMIT WILL EXPIRE UNLESS WORK IS STARTED WITHIN 90 DAYS FROM DATE OF ISSUE; OR IF WORK IS SUSPENDED OR ABANDONED FOR 60 DAYS OR MORE AFTER WORK IS BEGUN; OR ONE YEAR FROM DATE OF ISSUE. REPORT AFTER GRADING IS REQUIRED FOR PERMIT CLOSURE UNLESS OTHERWISE NOTIFIED.

I hereby certify that all work as requested above has been completed in conformity with Chapter 14, R.O.H. 1990, As Amended, and in accordance with the approved plans and specifications.

Permittee: PRINT NAME/TITLE

Approved By:

Signature of Owner/Developer/Authorized Rep.

Date

Authorized Signature

Date

Report After Grading required for permit closure?: No

Date Report Filed:

48366863 048082137



DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET * HONOLULU, HAWAII 96813
PHONE: (808) 768-8218/8219 * FAX: (808) 768-6743
DEPT. WEB SITE: www.honolulu.gov * CITY WEB SITE: www.honolulu.gov

PAID RECEIPT

BUSINESS ACTUAL TIME
6/20/2012 6/19/2012 14:55:00
REG DT01 WALKIN PA PA
RECEIPT # 377693 6/19/2012
Dep: 9034 6244 GRADING EXCAVATION

Help protect our waters...for life.



GRADING PERMIT

PERMIT NUMBER

GP2012-06-0301

Recpt Tot \$90.00
\$90.00 CK \$0.00

Permission is hereby given to do grading work in conformity with Chapter 14, R.O.H. 1990, As Amended, as follows:

Table with columns: TAX MAP KEY (Zone, Section, Plat, Parcel(s)), LAND USE (R-10 RESIDENTIAL DISTRICT), EST. QUANTITY (Excavation: 0, Fill: 148), PERMIT FEE (\$90.00)

Project Name: CHARLES WONG
Located at: 46-107 LILIPUNA RD
Category: 3

Related Job: A2012-02-0402

BORROW (Source of Material)

DISPOSAL

Surety: N/A

Site: Kapaa Quarry
Material: Soil

n/a
n/a

Est. Starting Date: June 20, 2012
Est. Compl. Date: June 1, 2013

Total Lot Area: 19,598 s.f. (0.45 ac.)
Disturbed Area: 918 s.f. (0.02 ac.)
Graded Area: 918 s.f. (0.02 ac.)

To be inspected by: Building Division
(Call 768-8259 for inspection)

Scope of Work: New CMU retaining walls 6'-0" maximum

OWNER

ENGINEER/PLAN MAKER

CONTRACTOR

WONG, CHARLES
46-107 LILIPUNA ROAD
KANE OHE, HI 96744
(808) 450-0530

Wong, William W.W.
P. O. Box 19232
HONOLULU, HI 96817
(808) 778-5988

WONG, CHARLES
46-107 LILIPUNA ROAD
KANE OHE, HI 96744
(808) 450-0530

Contractor shall notify this office two working days before commencing any work and arrange for necessary inspectional services. Grading work which involves contaminated and/or hazardous materials shall be done in conformance with applicable State and Federal requirements. Contact the Solid & Hazardous Waste Branch, State Department of Health for more information at 586-4226.

Authorization from Permittee to act for Owner on file?: Yes

Permittee: MURO GILDA
Agent, (808) 349-0721

Signature of Owner/Developer/Authorized Rep.

Date

6/19/12

Permission is hereby given to do the above work according to the conditions hereon and according to the approved plans and specifications pertaining thereto, subject to compliance with Chapter 14, R.O.H. 1990, As Amended.

Remarks: EROSION / RUNOFF CONTROL - CAUTION REQUIRED - BEST MANAGEMENT PRACTICES WILL BE ENFORCED

Signature of Director, DPP

June 19, 2012

Date

THIS PERMIT WILL EXPIRE UNLESS WORK IS STARTED WITHIN 90 DAYS FROM DATE OF ISSUE; OR IF WORK IS SUSPENDED OR ABANDONED FOR 60 DAYS OR MORE AFTER WORK IS BEGUN; OR ONE YEAR FROM DATE OF ISSUE. REPORT AFTER GRADING IS REQUIRED FOR PERMIT CLOSURE UNLESS OTHERWISE NOTIFIED.

I hereby certify that all work as requested above has been completed in conformity with Chapter 14, R.O.H. 1990, As Amended, and in accordance with the approved plans and specifications.

Permittee: PRINT NAME/TITLE

Approved By:

Signature of Owner/Developer/Authorized Rep.

Date

Authorized Signature

Date

Report After Grading required for permit closure?: No

Date Report Filed:

45603368 044530785



DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET * HONOLULU, HAWAII 96813
PHONE: (808) 768-8218/8219 * FAX: (808) 768-6743
DEPT. WEB SITE: www.honolulu.gov * CITY WEB SITE: www.honolulu.gov

PAID RECEIPT

BUSINESS ACTUAL TIME
8/24/2010 8/23/2010 13:20:53
REG DTO2 WALKIN IV IV
RECEIPT # 315710 8/23/2010
Dep: 9034 6244 GRADING EXCAVATION

Help protect our waters...for life.



GRADING PERMIT

PERMIT NUMBER
GP2010-08-0464

Recpt Tot \$90.00
\$.00 CK \$90.00

Permission is hereby given to do grading work in conformity with Chapter 14, R.O.H. 1990, As Amended, as follows:

Table with columns: TAX MAP KEY (Zone, Section, Plat, Parcel(s)), LAND USE (R-10 Residential District), EST. QUANTITY (Excavation 0, Fill 130), PERMIT FEE (\$90.00)

Project Name: CHARLES WONG
Located at: 46-107 LILIPUNA RD
Category: 3

Related Job: A2010-08-0435

BORROW (Source of Material)
Site: KAHALUU TOP SOIL COMPANY

DISPOSAL

NONE

Surety: N/A

Material: DIRT
Est. Starting Date: August 30, 2010
Est. Compl. Date: September 30, 2010

Disturbed Area: 1,000 s.f. (0.02 ac.)

To be inspected by: Building Division
(Call 768-8259 for inspection)

Graded Area: 1,000 s.f. (0.02 ac.)

Purpose of Work: RETAINING WALLS

OWNER
WONG, CHARLES
46-107 LILIPUNA ROAD
KANEHOE, HI 96744
(808) 450-0530

ENGINEER/PLAN MAKER
Resh, Edward A.
283 Awakea Road
Kailua, HI 96734-3448
(808) 261-5130

CONTRACTOR
WONG, CHARLES
46-107 LILIPUNA ROAD
KANEHOE, HI 96744
(808) 450-0530

Contractor shall notify this office two working days before commencing any work and arrange for necessary inspectional services. Grading work which involves contaminated and/or hazardous materials shall be done in conformance with applicable State and Federal requirements. Contact the Solid & Hazardous Waste Branch, State Department of Health for more information at 586-4226.

Authorization from Permittee to act for Owner on file?: Yes
Permittee: KETUU KULI agent, (808) 848-2010

Signature of Owner/Developer/Authorized Rep. (Handwritten Signature) Date: 8/23/10

Permission is hereby given to do the above work according to the conditions hereon and according to the approved plans and specifications pertaining thereto, subject to compliance with Chapter 14, R.O.H. 1990, As Amended.

Remarks: EROSION / RUNOFF CONTROL - CAUTION REQUIRED - BEST MANAGEMENT PRACTICES WILL BE ENFORCED

Signature of Director, DPP (Handwritten Signature) Date: August 23, 2010

THIS PERMIT WILL EXPIRE UNLESS WORK IS STARTED WITHIN 90 DAYS FROM DATE OF ISSUE; OR IF WORK IS SUSPENDED OR ABANDONED FOR 60 DAYS OR MORE AFTER WORK IS BEGUN; OR ONE YEAR FROM DATE OF ISSUE. REPORT AFTER GRADING IS REQUIRED FOR PERMIT CLOSURE UNLESS OTHERWISE NOTIFIED.

I hereby certify that all work as requested above has been completed in conformity with Chapter 14, R.O.H. 1990, As Amended, and in accordance with the approved plans and specifications.

Permittee: PRINT NAME/TITLE Approved By:

Signature of Owner/Developer/Authorized Rep. Date Report After Grading required for permit closure?: No Date Report Filed: 40046336 03998407

Exhibit 10

USDA NRCS Soils Map

Island of Oahu, Hawaii (HI990)

Map Unit Symbol	Map Unit Name	Acres In AOI	Percent of AOI
AeE	Aiaeloa silty clay, older substrate, 15 to 35 percent slopes, MLRA 167	1.2	91.2%
Subtotals for Soil Survey Area		1.2	91.2%
Totals for Area of Interest		1.4	100.0%

Scale (not to scale)



Warning: Soil Map may not be valid at this scale.

You have zoomed in beyond the scale at which the soil map for this area is intended to be used. Mapping soil surveys that comprise your AOI were mapped at 1:24,000. The design of map units and the level of detail are dependent on that map scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping. Maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Established Series

Rev. CWS/SN/HI

2003

ALAELOA SERIES

The Alaeloa series consists of deep and very deep, well drained soils that formed in material weathered from basic igneous rock. Alaeloa soils are on uplands and have slopes of 3 to 70 percent. The mean annual rainfall is about 48 inches, and the mean annual temperature is about 72 degrees F.

TAXONOMIC CLASS: Fine, parasquic, isohyperthermic Ustic Palehumults

TYPICAL PEDON: Alaeloa silty clay--pasture. (Colors are for moist soil unless otherwise noted. All textures are apparent field textures.)

Ap--0 to 10 inches; dark reddish brown (5YR 3/3) silty clay, reddish brown (5YR 4/3) dry; strong very fine and fine subangular blocky structure; hard, firm, sticky and plastic; many very fine, fine, and medium roots; many very fine and fine irregular and tubular pores; common worm holes and casts; some dark red material from B horizon mixed by cultivation; slightly effervescent with hydrogen peroxide; strongly acid (pH 5.4); abrupt wavy boundary. (9 to 10 inches thick)

Pt1--10 to 18 inches; dark red (2.5YR 3/6) silty clay, red (2.5YR 4/6) dry; strong very fine subangular blocky structure; hard, friable, sticky and plastic; many roots; common very fine, fine, and medium tubular pores; few worm holes and casts; thin continuous clay films on peds; very strongly acid (pH 5.0); clear wavy boundary. (6 to 8 inches thick)

Bt2--18 to 29 inches; dark red (2.5YR 3/6) silty clay, red (2.5YR 4/6) dry; strong very fine subangular blocky structure; hard, friable, sticky and plastic; many very fine roots, few fine tubular pores; thin continuous dark red and dark brown clay films on peds; very strongly acid (pH 4.8); gradual wavy boundary. (9 to 13 inches thick)

Bt3--29 to 48 inches; coarse pattern of red (10R 4/6), dark red (2.5YR 3/6), and dark reddish brown (2.5YR 3/4) silty clay, red (10R 5/6; 2.5YR 4/6, 4/8) dry; strong very fine and fine subangular blocky structure; hard, friable, sticky and plastic; few fine roots; many very fine and common fine tubular pores; thick continuous dark red clay films in vertical cracks; continuous films on peds; some granular material on peds; few soft rock fragments; very strongly acid (pH 4.9); clear wavy boundary. (18 to 26 inches thick)

Bt4--48 to 58 inches; red (2.5YR 4/6) silty clay, red (2.5YR 4/6) dry; strong very fine and medium subangular blocky structure; hard, friable, sticky and plastic; few fine roots; many very fine and fine tubular pores; thick continuous clay films on peds; weak slickensides; many black specks; many highly weathered soft rock fragments; very strongly acid (pH 4.8).

BC--58 to 70 inches; red (2.5YR 4/6) stony silty clay.

TPE LOCATION: Island of Oahu, Honolulu County, Hawaii; from the junction of Kailua Road and Kalaniana'ole Highway near Olomanā, 2.1 miles southeast toward Waimanalo along the old highway to the entrance of a pasture on the west side of the highway; 100 feet west of the old highway. Koko Head

Quadrangle - 21 degrees 21 minutes 50 seconds north latitude and 157 degrees 44 minutes 27 seconds west longitude (Old Hawaiian Datum).

RANGE IN CHARACTERISTICS: Depth to the soft highly weathered rock ranges from 40 inches to more than 160 inches.

The A horizon has hue of 5YR or 2.5YR, and moist value and chroma of 2 or 3.

The Bt horizon has hue of 2.5YR or 10R, value of 2 through 5 moist or dry and chroma of 6 through 8 dry, and 4 through 6 moist. Texture ranges from silty clay to silty clay loam. There are few to many slickensides and organic stains.

COMPETING SERIES: There are no competing series.

The Hamakuapoko, Ioleau, and Paumalu series are similar. Hamakuapoko soils have 10YR hue in the A horizon and 7.5YR or 10YR hue in the B horizon. Ioleau soils have an ochric epipedon and have a very compact upper Bt horizon. Paumalu soils have 5YR hue throughout, and moderate structure and thin clay films in the argillic horizon.

GEOGRAPHIC SETTING: Alaeloa soils formed in material weathered from basic igneous rock on uplands at elevations from 100 to 1,500 feet. Slopes range from 3 to 70 percent. Median annual rainfall is 35 to 60 inches. Average January temperature is about 70 degrees F., average July temperature is about 75 degrees F., and average annual temperature is about 72 degrees F. Annual PAN is 60 to 70 inches.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Honolua, Kahana, Kaneohe, Lolekaa, and Papaa soils. Honolua soils have 5YR or 7.5YR hue in the Bt horizon. Kahana soils do not have an argillic horizon. Kaneohe soils have weak structure in the upper part of the argillic horizon and thin patchy clay films throughout the B horizon. Lolekaa soils have 10YR hue throughout the solum and thick continuous clay films in the upper part of the argillic horizon. Papaa soils have clay texture in the control section and distinct slickensides in the C horizon.

DRAINAGE AND PERMEABILITY: Well drained; slow to very rapid runoff depending on slope; moderately rapid permeability.

USE AND VEGETATION: Used mainly for pasture. A small acreage is used for growing truck crops and orchards. Vegetation is guava (*Psidium guajava*), Java plum (*Eugenia cumini*), christmasberry (*Schinus terebinthifolius*), Japanese tea (*Cassia leschenaultiana*), sensitive plant (*Mimosa pudica*), hilograss (*Paspalum conjugatum*), and honohono (*Commelina diffusa*).

DISTRIBUTION AND EXTENT: Islands of Oahu, Maui, and Molokai. The series is of small extent, comprising about 8,700 acres.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California.

SERIES ESTABLISHED: Soil Survey, Territory of Hawaii, 1949.

REMARKS: Diagnostic horizons and features recognized in this pedon are:

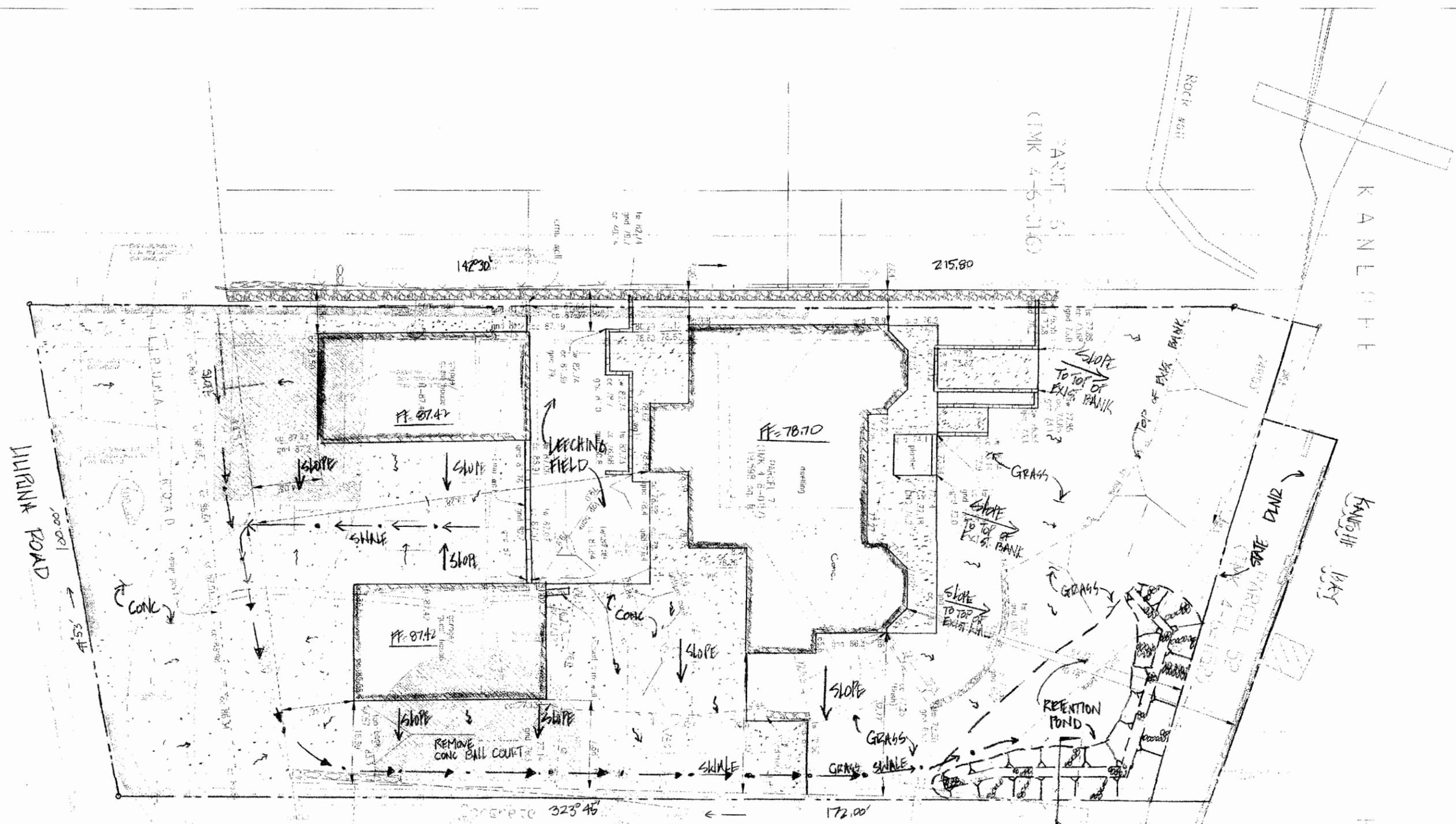
Umbric epipedon- the zone from the surface to 10 inches (Ap)

Argillic horizon- the zone from 10 to 58 inches (Bt1, Bt2, Bt3, Bt4)

Data for pedon S89HI-003-007 suggests <50% kaolinite plus mica (46% est.) Need more mineralogy (DTA) data. Elevations between 100 and 1500 feet may be isothermic. Bulk density data needed.

Exhibit 11

Proposed Storm Runoff Drainage Plan



BEST MANAGEMENT PRACTICES
 1) GRASS ALL EXPOSED AREAS W/ EL TORO ZOTISHA
 2) CONSTRUCT RETENTION BASIN

LEGEND

EXIST	NEW	DESCRIPTION
4.00	→	CONTOUR SKALE
→	→	SLOPE GROUND
→	→	DIRECTION OF RUNOFF

PROPOSED STORM DRAINAGE RUNOFF PLAN
 SCALE = 1"=10'

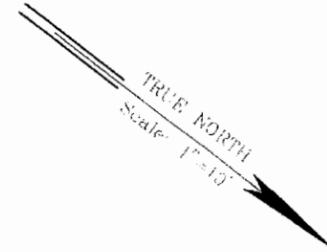
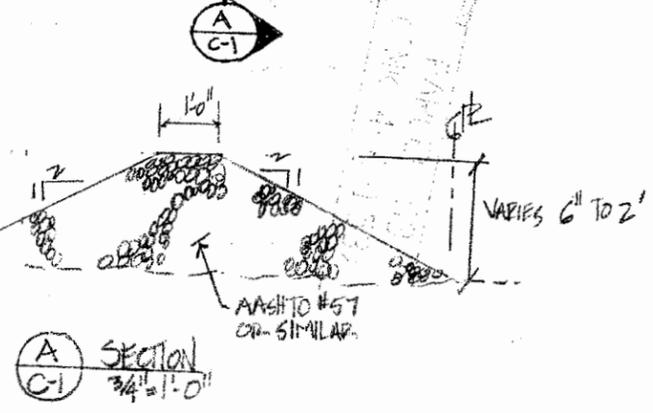


Exhibit 12

FEMA and FIRM Map-Flood Zone X



Flood Hazard Assessment Report

www.hawaiiinfip.org

Charles Wong Property

Property Information

COUNTY: HONOLULU
 TMK NO: (1) 4-6-001:007
 WATERSHED: HEEIA
 PARCEL ADDRESS: 46-107 LILIPUNA RD
 KANEHOE, HI 96744

Notes:

Property located in Flood Zone X.

Flood Hazard Information

FIRM INDEX DATE: JANUARY 19, 2011
 LETTER OF MAP CHANGE(S): NONE
 FEMA FIRM PANEL: 15003C0270J
 PANEL EFFECTIVE DATE: NOVEMBER 05, 2014

THIS PROPERTY IS WITHIN A TSUNAMI EVACUATION ZONE: YES
 FOR MORE INFO, VISIT: <http://www.scd.hawaii.gov/>

THIS PROPERTY IS WITHIN A DAM EVACUATION ZONE: NO
 FOR MORE INFO, VISIT: <http://dlnreng.hawaii.gov/dam/>



Disclaimer: The Hawaii Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use, accuracy, completeness, and timeliness of any information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR, its officers, and employees from any liability which may arise from its use of its data or information.

If this map has been identified as 'PRELIMINARY', please note that it is being provided for informational purposes and is not to be used for flood insurance rating. Contact your county floodplain manager for flood zone determinations to be used for compliance with local floodplain management regulations.

FLOOD HAZARD ASSESSMENT TOOL LAYER LEGEND

(Note: legend does not correspond with NFHL)

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD - The 1% annual chance flood (100-year), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. SFHAs include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

	Zone A: No BFE determined.
	Zone AE: BFE determined.
	Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
	Zone AO: Flood depths of 1 to 3 feet (usually sheet flow or sloping terrain); average depths determined.
	Zone V: Coastal flood zone with velocity hazard (wave action) no BFE determined.
	Zone VE: Coastal flood zone with velocity hazard (wave action) BFE determined.
	Zone AEF: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA - An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

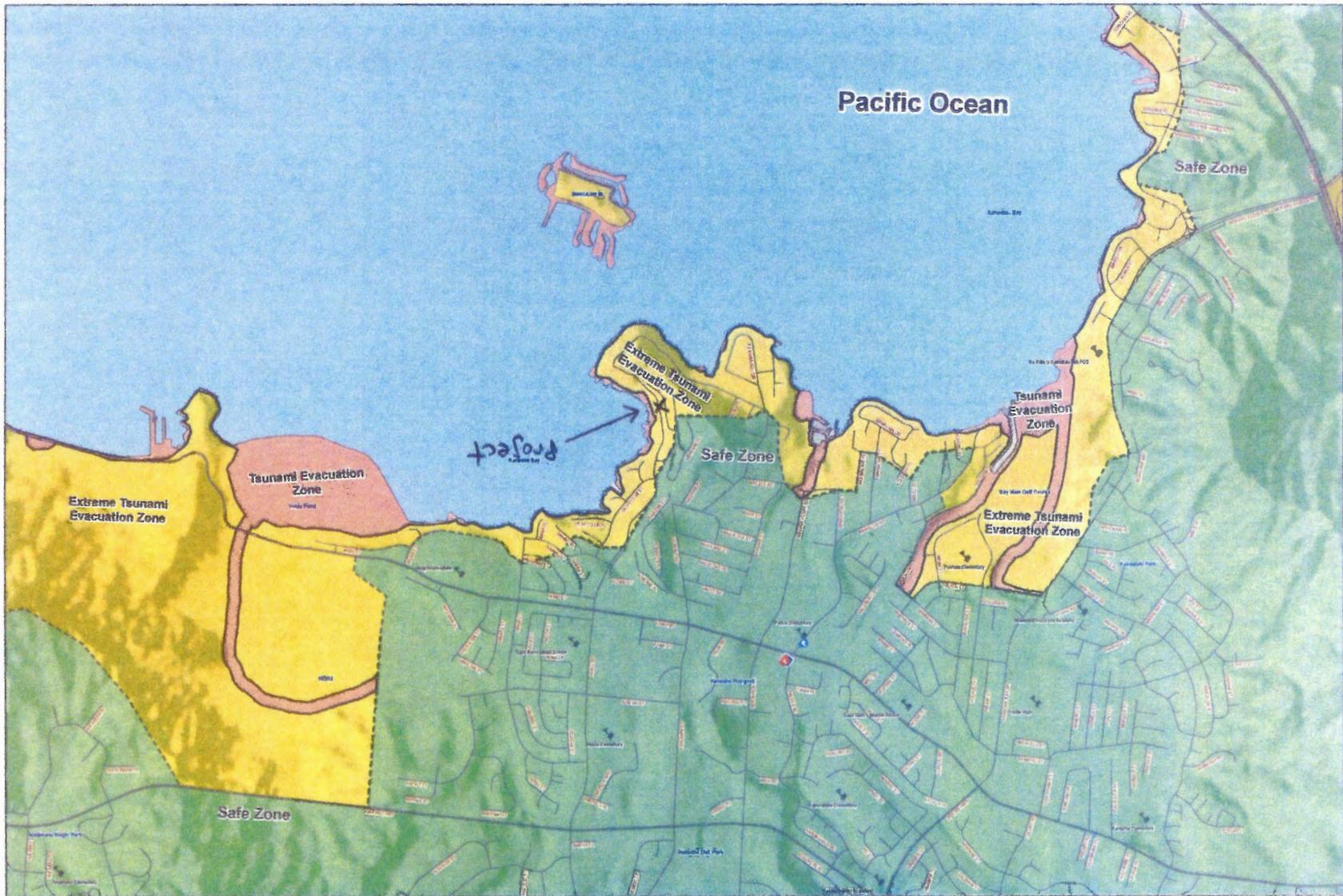
	Zone XS (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and area protected by levees from 1% annual chance flood.
	Zone X: Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

	Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase apply, but coverage is available in participating communities.
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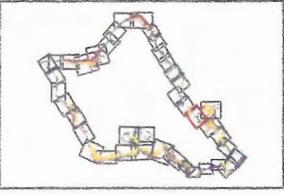
Exhibit 13

Tsunami Evacuation Map 21 inset 1



**Kaneohe Bay to Koolau Bay
Map 21 Inset 1**

Note: Data represented on this map is not intended to replace site survey.
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Date Prepared: April 2015



For most Tsunami Warnings, evacuate out of the red zone. In the unlikely case of an "Extreme Tsunami Warning", evacuate out of the red and yellow zones.

*Remain at least 100 feet away from inland waterways and marinas connected to the ocean due to wave surge and possible flooding.

*Seekers should move up to at least 60 feet (200 ft) deep and 2 miles away from harbor entrances, follow all directions from the Captains of the Port.

*Structural steel or reinforced concrete buildings of ten or more stories provide increased protection on or above the fourth floor, if you are caught near the shoreline consider using vertical evacuation.

*These maps do not consider the destructive effects of a locally generated tsunami. If you feel shaking, move inland immediately, well inland from the red tsunami evacuation zone.

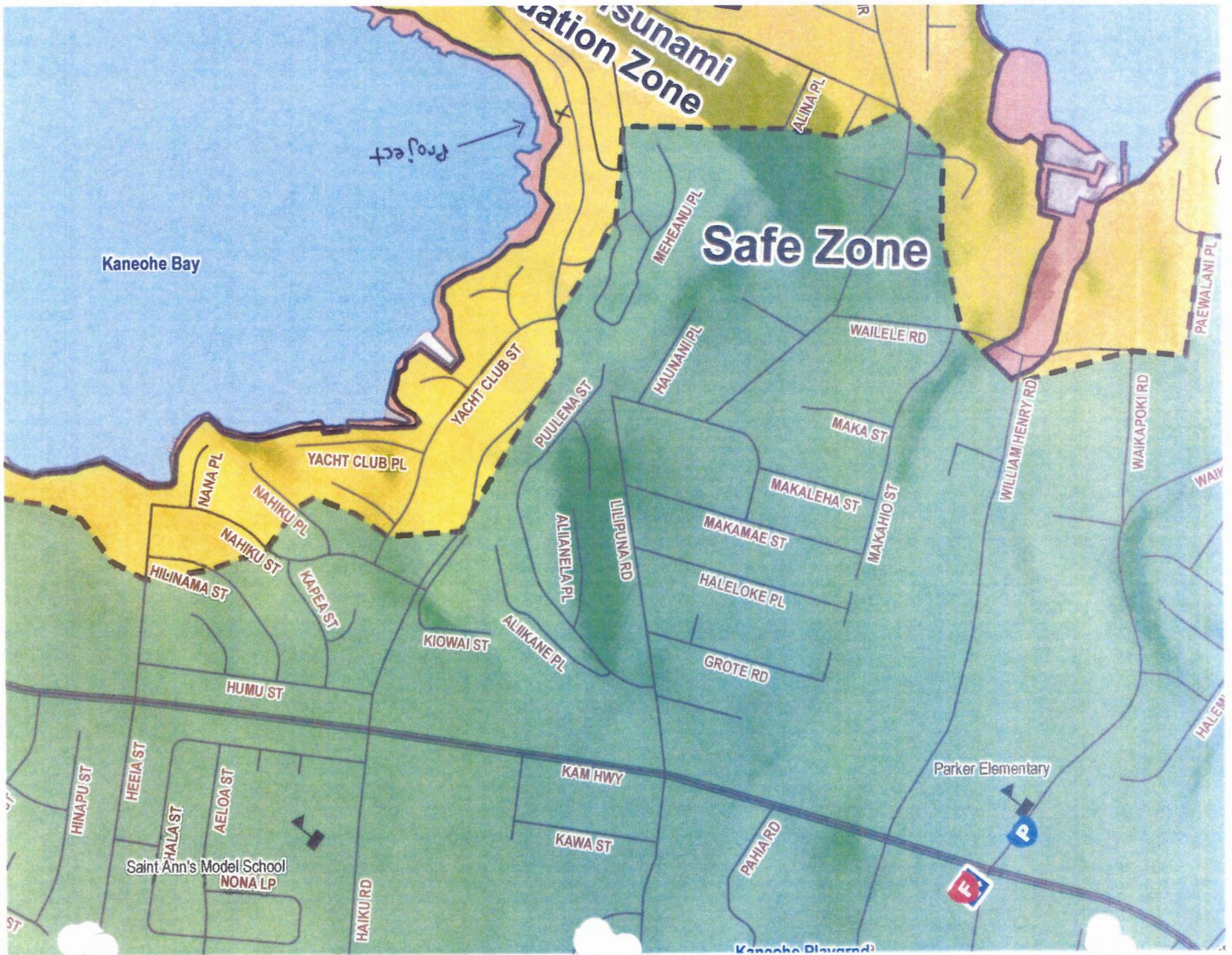
*The evacuation zone is a guideline and should be considered the minimum safe evacuation distance.

1. *Tsunami Warning: Evacuate when there is a tsunami wave forecast or observed tsunami event.
2. *Extreme Tsunami Warning: In the event, even if a tsunami warning does not exist, evacuate when there is a tsunami wave forecast or observed tsunami event.



Legend

	Safe Zone
	Extreme Tsunami Evacuation Zone
	Tsunami Evacuation Zone
	Major Street
	Street
	Fire Station
	Hospital
	EMS
	Police
	Public/Private School



INFORMATION UPDATES AND FREQUENTLY ASKED QUESTIONS

Terminology:

Extreme Tsunami (XT): Very large (Magnitude 9+) earthquake and tsunami.

Inundation Zone: Inland areas where the tsunami is expected to go beyond just the immediate shoreline.

Run Up: The vertical extent (from mean sea-level) of tsunami inundation.

Evacuation Zone: Inundation zone plus an additional buffer area for safety and evacuation.

Great Aleutian Tsunami (GAT): An Extreme Tsunami produced by a very large subduction zone earthquake located in the Aleutian Islands.

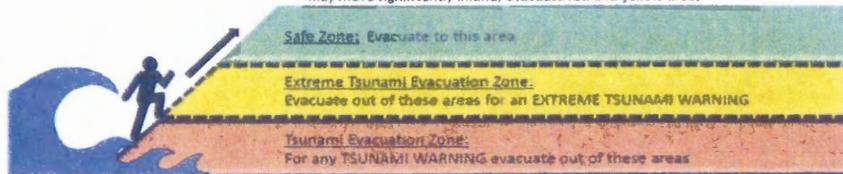
Extreme Tsunami Evacuation Zone (XTEZ): New secondary evacuation zone for Extreme Tsunami events only.

Tsunami Refuge Area: Safe congregation zones identified outside of evacuation zones; these areas will be identified based on location, capacity and proximity but will not be shelters and may not have support staff.

Important New Information

- A new set of tsunami evacuation zones called XTEZ, refuge areas and routes have been developed to complement the current tsunami evacuation maps.

1. TSUNAMI WARNING: Destructive waves from a tsunami may inundate all coastlines; evacuate red areas
2. EXTREME TSUNAMI WARNING: In the unlikely event of an extreme tsunami, waves may move significantly inland; evacuate red and yellow areas



- The XTEZ does not replace the current tsunami evacuation zone; it adds a *second* zone for a potential XT event.
- Existing tsunami evacuation maps were developed in 1991 and updated in 2010; since the 2011 Tohoku (Japan) tsunami, there is a newly recognized risk of tsunami from a very large Aleutian event.
- The Extreme Tsunami Evacuation Zone (XTEZ) is for events with low probability, but having high impact “worst-case” inundations.
- Vertical Tsunami Evacuation - Evacuate to the FOURTH floor or above in a reinforced concrete or structural steel building of TEN stories or more. All others, evacuate inland to higher ground.

How will I know which zone to evacuate to?

- A new warning procedure is currently under development for an Extreme Tsunami event; it would be announced via traditional emergency communication means including radio, television, email, text messages, etc.

If you feel an earthquake, a tsunami may be coming...

WHAT TO DO:

- **DROP, COVER, HOLD** until the earthquake is over; protect yourself
- **MOVE IMMEDIATELY INLAND** to high ground and away from low-lying coastal areas
- **DO NOT WAIT** for an official warning
- **GO ON FOOT** if at all possible
- **DO NOT PACK** or delay
- **DO NOT RETURN** to the beach – large waves may continue to come onshore for several hours
- **WAIT** for an “all clear” from local emergency officials before returning to low-lying areas

What has not changed?

- **Our Message** - Evacuate during a Tsunami Warning if you are in the evacuation zones.
- **Stay Put** - If you are NOT in the evacuation zone, stay off the roads to minimize traffic.
- **Go To Higher Ground** - If you are near the shoreline and feel an earthquake, immediately head to higher ground outside of the evacuation zone.
- Tsunami evacuation maps are for public safety and do not change FEMA Flood Insurance Rate Maps.

What was the process to develop the new maps?

- The project was a collaboration with the Tsunami Inundation Mapping Project at the University of Hawaii, Manoa.
- The XTEZ maps use the same computer model as the current evacuation zones.
- The City Department of Emergency Management conducted a series of island wide outreach workshops to inform coastal communities of the new XTEZ.

What else should we be considering?

- Know ahead of time where the regular Tsunami Evacuation Zone and XTEZ are located; a tsunami warning can occur any time of day or night.
- Take the time to learn more about tsunami hazards, have a friend or family that you can move inland to, and a route for you and your loved ones.
- Anticipate that the phone lines may be out of service during a tsunami emergency and make a plan to meet your family members at pre-arranged safe areas or refuges.
- Getting gas and supplies during an evacuation brings traffic to a stop and puts everyone at risk. Have a kit in advance, and go to higher ground immediately.
- Know that shelters will only be opened after a destructive tsunami has impacted Oahu and the danger to our shorelines has passed; otherwise refuge areas are only for staging in a safe location.
- Sign up for emergency text messages and emails from the Department of Emergency Management by logging into **www.NIXLE.com**

How can the public find out if they are in a tsunami evacuation zone?

- Download pdf files from the Department of Emergency Management website at **www.oahuDEM.org**
- Oahu telephone books will display the new maps in the near future

ADDITIONAL INFORMATION:

**Department of Emergency Management
City and County of Honolulu**

Phone: (808) 723-8960 email: **dem@honolulu.gov**



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Text Description of the Tsunami Evacuation Maps

The following is a brief text description of each map panel, including minimum guidelines to be safe from wave action.

Brief summary of the Oahu map:

This is a map of the island of Oahu with a series of sub-maps that go around the coastline. The sub-maps are numbered from one through twenty-one. These are the standard twenty-one maps in the telephone directory. Most of the twenty-one maps are further divided into two or three insets for the online version. This is to provide greater details. Map number one starts on the south central coast of Oahu at Waikiki, and the maps increase numerically as you go clockwise around Oahu. The exceptions are map number twenty-one, which goes between map numbers seven and eight on Kaneohe Bay, and map number twenty, which covers the interior shores of Pearl Harbor. These two maps are new and are added for 2010 due to the increased threat of harbor surges.

Overview of map number one:

Map number one is the shoreline between Ala Moana Beach Park and Diamond Head. It includes the Hawaii Convention Center, Waikiki, the Honolulu Zoo, and Kapiolani Park. All areas inland of Kapiolani Boulevard on this map are safe except for the area between Kalakaua Avenue and McCully Streets. Between Kalakaua Avenue and McCully Streets the minimum safe zone begins one block inland from Kapiolani Boulevard. Minimum safe distance begins inland of Date Street, and inland of Paki Avenue.

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Overview of map number two, inset one:

Map number two, inset one is the shoreline from Kahala to Aina Haina Shopping Center. It includes Kahala, Waialae Country Club, Wailupe, and Aina Haina Shopping Center. In Kahala from Ulili Street, the safe zone begins inland at least two thousand feet from the shoreline. All areas inland of Waialae Country Club are safe. Beyond the end of the H-1 Interstate Freeway, the safe zone begins inland at least 800 feet up to Aina Haina Shopping Center. At the Shopping Center, the minimum safe zone begins two blocks inland.

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Overview of map number two, inset two:

Map number two, inset two is the shoreline between Waikiki and Kahala. It includes the Honolulu Zoo, Kapiolani Park, Diamond Head, Black Point, and Kahala. Safe zone begins inland of Paki Avenue and Diamond Head road. All areas inland of Kahala Avenue are safe from Diamond Head Road until Ulili Street.

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Overview of map number three, inset one:

Map number three, inset one is the shoreline between Aina Haina Shopping Center and Maunaloa Bay. It includes Aina Haina, Niu Valley, Paiko Peninsula, Kuliouou Valley, and Hawaii Kai up to Keahole Street. Minimum safe zone begins at least one thousand five hundred feet from the shoreline in each of the valleys. Safe zone begins at least one hundred feet away from the immediate shorelines of all inland marinas.

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Overview of map number eight, inset one:

Map number eight, inset one is the shoreline from Kahaluu to Kualoa. It includes Kualoa Regional Park and Kualoa Ranch. The safe zone begins inland of Kamehameha Highway from Kahaluu to Kualoa Regional Park. From the park to the next valley the safe zone is at least one thousand feet inland of the shoreline.

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Overview of map number eight, inset two:

Map number eight, inset two is the shoreline from Kaaawa to Kahana Bay. The minimum safe distance in Kaaawa Valley is two thousand feet from the shoreline. Throughout Kaaawa to the beginning of Kahana Bay the minimum safe distance is one thousand feet from the shoreline. The minimum safe zone within Kahana Bay and Kahana Valley is three thousand five hundred feet.

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Overview of map number nine, inset one:

Map number nine, inset one is the shoreline from Kahana Bay to Punaluu. The minimum safe distance is two thousand feet from the shoreline.

[\[back to top\]](#)

Overview of map number nine, inset two:

Map number nine, inset two is the shoreline from Punaluu to Hauula. This includes Sacred Falls. The minimum safe distance is three thousand feet from the shoreline from Haleaha Road until just before Hauula Elementary School. Within Hauula the safe zone is at least one thousand feet from the shoreline.

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Overview of map number ten, inset one:

Map number ten, inset one is the shoreline from Hauula to Laie. It includes Hauula Beach Park, Kokololio Beach Park, Laie Beach Park, the Polynesian Cultural Center, and Brigham Young University Hawaii. The minimum safe distance is two thousand feet from the shoreline for the entire map, except for the area in front of BYUH. There, the minimum safe zone is on the BYUH campus, or two thousand feet from the shoreline.

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Overview of map number ten, inset two:

Map number ten, inset two is the shoreline from Laie to Kahuku. It includes Malaekahana State Recreation Area. The safe zone for this area is a minimum of two thousand feet inland of Kamehameha Highway. In Laie the minimum safe zone is the BYUH Campus.

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Overview of map number eleven, inset one:

Map number eleven, inset one is the shoreline from Turtle Bay to Sunset Beach. It includes the Turtle Bay Resort, Kawela Bay, and Sunset Beach Park. The minimum safe distance fronting the Turtle Bay Golf Course is at least one hundred feet inland from Kamehameha Highway. In the vicinity fronting Kawela Bay, the minimum safe distance begins one thousand five hundred feet inland from Kamehameha Highway. For the rest of this map the minimum safe distance begins five hundred feet inland from Kamehameha Highway.

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Overview of map number eleven, inset two:

Map number eleven, inset two is the shoreline from Kahuku to Turtle Bay. It includes Kahuku Point. The minimum safe zone for this area is inland of Kamehameha Highway, except for the area fronting Turtle Bay Golf Course; there the minimum safe distance is one hundred feet inland of Kamehameha Highway.

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Overview of map number twelve, inset one:

Map number twelve, inset one is the shoreline from Pupukea to Laniakea Beach Park. It includes Waimea Bay. For the area around Pupukea, the minimum safe distance begins eight hundred feet inland from Kamehameha Highway. At Waimea Bay, the minimum safe distance is two thousand feet into Waimea Valley from Kamehameha Highway. Alternatively, the high

ground on the highway on either side of the bay is safe. For the rest of the map, the minimum safe distance inland is one thousand six hundred feet from the highway.

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Overview of map number twelve, inset two:

Map number twelve, inset two is the shoreline from Sunset Point to Waimea Bay. It includes Sunset Beach Elementary School and Pupukea Beach Park. For this map, with the exception of Waimea Bay, the minimum safe distance is eight hundred feet inland from Kamehameha Highway. At Waimea Bay, the minimum safe distance is two thousand feet into Waimea Valley from Kamehameha Highway. Alternatively, the high ground on the highway on either side of the bay is safe.

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Overview of map number thirteen, inset one:

Map number thirteen, inset one is the shoreline from Kaiaka Bay to Dillingham Airfield. It includes Waialua. In Waialua the minimum safe distance is inland of Kaukonahua Road and inland of Farrington Highway. Inland of Farrington Highway is safe until the intersection with Mahinaai Street. From there, minimum safe distance is three thousand feet inland of Farrington Highway.

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Overview of map number thirteen, inset two:

Map number thirteen, inset two is the shoreline between Chun's Reef on the North Shore and Waialua. Between Chun's Reef and the Anahulu Bridge Highway crossing, the minimum safe distance is at least three thousand feet inland from Kamehameha Highway and the Joseph P. Leong Highway. In Haleiwa, past the Anahulu Highway Bridge, the minimum safe distance is to be inland of the Joseph P. Leong Highway. In Waialua the minimum safe distance is inland of Kaukonahua Road and inland of Farrington Highway.

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Overview of map number fourteen, inset one:

Map number fourteen, inset one is the Mokuleia shoreline. It includes Mokuleia Beach Park and Dillingham Airfield. The minimum safe distance on this map is inland at least three thousand feet from Farrington Highway.

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Overview of map number fourteen, inset two:

Map number fourteen, inset two is the shoreline between the end of Farrington Highway in Mokuleia to about half a mile from Kaena Point. The minimum safe distance on this map is one thousand five hundred feet from the shoreline.

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Overview of map number fourteen, inset three:

Map number fourteen, inset three is the shoreline between Mokuleia and Yokohama Bay. It includes Kaena Point and the end of both the North Shore at Mokuleia, and the end of Farrington Highway past Makaha. For this map, the minimum safe distance is one hundred feet inland of the hiking/jeep trail, except at Kaena Point. At Kaena Point, the minimum safe distance is three hundred feet inland from the hiking/jeep trail.

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Overview of map number fifteen, inset one:

Map number fifteen, inset one is the shoreline between Pokai Bay and Makaha. It includes Lualualei, Waianae, Lahilahi Point, and Makaha town. For this map, the minimum safe distance is one thousand two hundred feet inland of Farrington Highway.

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Overview of map number fifteen, inset two:

Map number fifteen, inset two is the shoreline between Makaha and Keaau. For this map, the minimum safe distance is one thousand five hundred feet inland of Farrington Highway.

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Overview of map number fifteen, inset three:

Map number fifteen, inset three is the shoreline between Keaau and Yokohama Beach. It includes Makua Valley. At Makua Valley the minimum safe distance is eight hundred feet

inland of Farrington Highway. At Yokohama Beach past the Satellite Tracking Station Road the minimum safe distance is one thousand two hundred feet inland of Farrington Highway. At all other areas on this map the minimum safe distance is three hundred feet inland of Farrington Highway.

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Overview of map number sixteen, inset one:

Map number sixteen, inset one is the Maili shoreline. For this map, the minimum safe distance is three thousand feet inland of Farrington Highway.

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Overview of map number sixteen, inset two:

Map number sixteen, inset two is the shoreline between Kahe Point and Nanakuli. For this map, the minimum safe distance is two thousand feet inland of Farrington Highway.

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Overview of map number seventeen, inset one:

Map number seventeen, inset one is the shoreline between Barber's Point and Ocean Pointe. It includes Campbell Industrial Park, Kalaeloa Airfield, and new developments off Ocean Pointe. For this map, the minimum safe distance is two thousand feet inland of the shoreline.

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Overview of map number seventeen, inset two:

Map number seventeen, inset two is the shoreline between Kahe Point and Barber's Point. It includes Ko Olina, and Kalaeloa Harbor. For this map, the minimum safe distance is two thousand feet inland of the shoreline. Within Kalaeloa Harbor, the minimum safe distance is one hundred feet inland from all shorelines.

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Overview of map number eighteen, inset one:

Map number eighteen, inset one is the shoreline between Ewa Beach and the Reef Runway. It includes the entrance of Pearl Harbor, Hickam Air Force Base, and the Honolulu International Airport. On the Ewa side of the Pearl Harbor entrance, the minimum safe distance is one thousand five hundred feet from the shoreline. On the Hickam side of the Pearl Harbor entrance, the minimum safe distance is three thousand feet from the shoreline. At the Honolulu International Airport, the minimum safe distance is one thousand five hundred feet from the shoreline, including the inland shoreline behind the reef runway.

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Overview of map number eighteen, inset two:

Map number eighteen, inset two is the Ewa Beach shoreline. It includes Oneula Beach and the new Ocean Pointe housing. For this map, minimum safe distance is two thousand feet inland from the shoreline.

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Overview of map number nineteen, inset one:

Map number nineteen, inset one is the shoreline between Iwilei and Waikiki. It includes Sand Island, Downtown Honolulu, and Ala Moana Beach Park. Remain off Sand Island entirely. In Iwilei to Downtown Honolulu, minimum safe distance is two thousand feet inland of the shoreline, including the shoreline inside Honolulu Harbor. In the urban core of Honolulu, the minimum safe zone is inland of Kapiolani Boulevard up to Kalakaua Avenue.

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Overview of map number nineteen, inset two:

Map number nineteen, inset two is the shoreline between the Honolulu Airport Reef Runway and Iwilei. It includes Keehi Lagoon and Kalihi Kai. The entire Reef Runway is to be avoided. On Lagoon Drive the minimum safe zone is one hundred feet inland of Lagoon Drive. Within all shoreline areas of Keehi Lagoon the minimum safe distance is two thousand feet inland of the shoreline.

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Overview of map number twenty, inset one:

Map number twenty, inset one is the shorelines inside Pearl Harbor, excluding West Loch and Middle Loch. It includes Ford Island. The minimum safe zone is eight hundred feet inland of

all shores within Pearl Harbor. On Ford Island, the minimum safe zone is twenty feet inland of all shores.

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Overview of map number twenty, inset two:

Map number twenty, inset two is the shoreline of West Loch and Middle Loch. Within West Loch, the minimum safe distance is inland of any improved road or street surrounding the Loch. Within Middle Loch, the minimum safe distance is eight hundred feet inland of the shoreline.

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Overview of map number twenty one, inset one:

Map number twenty one, inset one is the shoreline within Kaneohe Bay between Kaneohe and Heeia. For this map, the minimum safe distance is inland of any improved street or road.

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Overview of map number twenty one, inset two:

Map number twenty one, inset two is the shoreline within Kaneohe Bay in Kahaluu. For this map, the minimum safe distance is three hundred feet inland of Kamehameha Highway.

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Overview of map number twenty one, inset three:

Map number twenty one, inset three is the shoreline within Kaneohe Bay in the vicinity of Waiahole. For this map, the minimum safe distance is six hundred feet inland of Kamehameha Highway.

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Last Reviewed: November 06, 2014

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Text Description of the Tsunami Evacuation Maps

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[\[back to top\]](#)

Overview of map number two, inset one:

Map number two, inset one is the shoreline from Kahala to Aina Haina Shopping Center. It includes Kahala, Waialae Country Club, Wailupe, and Aina Haina Shopping Center. In Kahala from Ulili Street, the safe zone begins inland at least two thousand feet from the shoreline. All areas inland of Waialae Country Club are safe. Beyond the end of the H-1 Interstate Freeway, the safe zone begins inland at least 800 feet up to Aina Haina Shopping Center. At the Shopping Center, the minimum safe zone begins two blocks inland.

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Overview of map number two, inset two:

Map number two, inset two is the shoreline between Waikiki and Kahala. It includes the Honolulu Zoo, Kapiolani Park, Diamond Head, Black Point, and Kahala. Safe zone begins inland of Paki Avenue and Diamond Head road. All areas inland of Kahala Avenue are safe from Diamond Head Road until Ulili Street.

[\[back to top\]](#)

Overview of map number three, inset one:

Map number three, inset one is the shoreline between Aina Haina Shopping Center and Maunalua Bay. It includes Aina Haina, Niu Valley, Paiko Peninsula, Kuliouou Valley, and Hawaii Kai up to Keahole Street. Minimum safe zone begins at least one thousand five hundred feet from the shoreline in each of the valleys. Safe zone begins at least one hundred feet away from the immediate shorelines of all inland marinas.

[\[back to top\]](#)

Overview of map number eight, inset one:

Map number eight, inset one is the shoreline from Kahaluu to Kualoa. It includes Kualoa Regional Park and Kualoa Ranch. The safe zone begins inland of Kamehameha Highway from Kahaluu to Kualoa Regional Park. From the park to the next valley the safe zone is at least one thousand feet inland of the shoreline.

[\[back to top\]](#)

Overview of map number eight, inset two:

Map number eight, inset two is the shoreline from Kaaawa to Kahana Bay. The minimum safe distance in Kaaawa Valley is two thousand feet from the shoreline. Throughout Kaaawa to the beginning of Kahana Bay the minimum safe distance is one thousand feet from the shoreline. The minimum safe zone within Kahana Bay and Kahana Valley is three thousand five hundred feet.

[\[back to top\]](#)

Overview of map number nine, inset one:

Map number nine, inset one is the shoreline from Kahana Bay to Punaluu. The minimum safe distance is two thousand feet from the shoreline.

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Overview of map number nine, inset two:

Map number nine, inset two is the shoreline from Punaluu to Hauula. This includes Sacred Falls. The minimum safe distance is three thousand feet from the shoreline from Haleaha Road until just before Hauula Elementary School. Within Hauula the safe zone is at least one thousand feet from the shoreline.

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Overview of map number ten, inset one:

Map number ten, inset one is the shoreline from Hauula to Laie. It includes Hauula Beach Park, Kokololio Beach Park, Laie Beach Park, the Polynesian Cultural Center, and Brigham Young University Hawaii. The minimum safe distance is two thousand feet from the shoreline for the entire map, except for the area in front of BYUH. There, the minimum safe zone is on the BYUH campus, or two thousand feet from the shoreline.

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Overview of map number ten, inset two:

Map number ten, inset two is the shoreline from Laie to Kahuku. It includes Malaekahana State Recreation Area. The safe zone for this area is a minimum of two thousand feet inland of Kamehameha Highway. In Laie the minimum safe zone is the BYUH Campus.

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Overview of map number eleven, inset one:

Map number eleven, inset one is the shoreline from Turtle Bay to Sunset Beach. It includes the Turtle Bay Resort, Kawela Bay, and Sunset Beach Park. The minimum safe distance fronting the Turtle Bay Golf Course is at least one hundred feet inland from Kamehameha Highway. In the vicinity fronting Kawela Bay, the minimum safe distance begins one thousand five hundred feet inland from Kamehameha Highway. For the rest of this map the minimum safe distance begins five hundred feet inland from Kamehameha Highway.

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Overview of map number eleven, inset two:

Map number eleven, inset two is the shoreline from Kahuku to Turtle Bay. It includes Kahuku Point. The minimum safe zone for this area is inland of Kamehameha Highway, except for the area fronting Turtle Bay Golf Course; there the minimum safe distance is one hundred feet inland of Kamehameha Highway.

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Overview of map number twelve, inset one:

Map number twelve, inset one is the shoreline from Pupukea to Laniakea Beach Park. It includes Waimea Bay. For the area around Pupukea, the minimum safe distance begins eight hundred feet inland from Kamehameha Highway. At Waimea Bay, the minimum safe distance is two thousand feet into Waimea Valley from Kamehameha Highway. Alternatively, the high

ground on the highway on either side of the bay is safe. For the rest of the map, the minimum safe distance inland is one thousand six hundred feet from the highway.

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Overview of map number twelve, inset two:

Map number twelve, inset two is the shoreline from Sunset Point to Waimea Bay. It includes Sunset Beach Elementary School and Pupukea Beach Park. For this map, with the exception of Waimea Bay, the minimum safe distance is eight hundred feet inland from Kamehameha Highway. At Waimea Bay, the minimum safe distance is two thousand feet into Waimea Valley from Kamehameha Highway. Alternatively, the high ground on the highway on either side of the bay is safe.

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Overview of map number thirteen, inset one:

Map number thirteen, inset one is the shoreline from Kaiaka Bay to Dillingham Airfield. It includes Waialua. In Waialua the minimum safe distance is inland of Kaukonahua Road and inland of Farrington Highway. Inland of Farrington Highway is safe until the intersection with Mahinaai Street. From there, minimum safe distance is three thousand feet inland of Farrington Highway.

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Overview of map number thirteen, inset two:

Map number thirteen, inset two is the shoreline between Chun's Reef on the North Shore and Waialua. Between Chun's Reef and the Anahulu Bridge Highway crossing, the minimum safe distance is at least three thousand feet inland from Kamehameha Highway and the Joseph P. Leong Highway. In Haleiwa, past the Anahulu Highway Bridge, the minimum safe distance is to be inland of the Joseph P. Leong Highway. In Waialua the minimum safe distance is inland of Kaukonahua Road and inland of Farrington Highway.

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Overview of map number fourteen, inset one:

Map number fourteen, inset one is the Mokuleia shoreline. It includes Mokuleia Beach Park and Dillingham Airfield. The minimum safe distance on this map is inland at least three thousand feet from Farrington Highway.

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Overview of map number fourteen, inset two:

Map number fourteen, inset two is the shoreline between the end of Farrington Highway in Mokuleia to about half a mile from Kaena Point. The minimum safe distance on this map is one thousand five hundred feet from the shoreline.

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Overview of map number fourteen, inset three:

Map number fourteen, inset three is the shoreline between Mokuleia and Yokohama Bay. It includes Kaena Point and the end of both the North Shore at Mokuleia, and the end of Farrington Highway past Makaha. For this map, the minimum safe distance is one hundred feet inland of the hiking/jeep trail, except at Kaena Point, the minimum safe distance is three hundred feet inland from the hiking/jeep trail.

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Overview of map number fifteen, inset one:

Map number fifteen, inset one is the shoreline between Pokai Bay and Makaha. It includes Lualualei, Waianae, Lahilahi Point, and Makaha town. For this map, the minimum safe distance is one thousand two hundred feet inland of Farrington Highway.

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Overview of map number fifteen, inset two:

Map number fifteen, inset two is the shoreline between Makaha and Keaau. For this map, the minimum safe distance is one thousand five hundred feet inland of Farrington Highway.

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Overview of map number fifteen, inset three:

Map number fifteen, inset three is the shoreline between Keaau and Yokohama Beach. It includes Makua Valley. At Makua Valley the minimum safe distance is eight hundred feet

inland of Farrington Highway. At Yokohama Beach past the Satellite Tracking Station Road the minimum safe distance is one thousand two hundred feet inland of Farrington Highway. At all other areas on this map the minimum safe distance is three hundred feet inland of Farrington Highway.

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Overview of map number sixteen, inset one:

Map number sixteen, inset one is the Mailli shoreline. For this map, the minimum safe distance is three thousand feet inland of Farrington Highway.

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Overview of map number sixteen, inset two:

Map number sixteen, inset two is the shoreline between Kahe Point and Nanakuli. For this map, the minimum safe distance is two thousand feet inland of Farrington Highway.

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Overview of map number seventeen, inset one:

Map number seventeen, inset one is the shoreline between Barber's Point and Ocean Pointe. It includes Campbell Industrial Park, Kalaeloa Airfield, and new developments off Ocean Pointe. For this map, the minimum safe distance is two thousand feet inland of the shoreline.

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Overview of map number seventeen, inset two:

Map number seventeen, inset two is the shoreline between Kahe Point and Barber's Point. It includes Ko Olina, and Kalaeloa Harbor. For this map, the minimum safe distance is two thousand feet inland of the shoreline. Within Kalaeloa Harbor, the minimum safe distance is one hundred feet inland from all shorelines.

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Overview of map number eighteen, inset one:

Map number eighteen, inset one is the shoreline between Ewa Beach and the Reef Runway. It includes the entrance of Pearl Harbor, Hickam Air Force Base, and the Honolulu International Airport. On the Ewa side of the Pearl Harbor entrance, the minimum safe distance is one thousand five hundred feet from the shoreline. On the Hickam side of the Pearl Harbor entrance, the minimum safe distance is three thousand feet from the shoreline. At the Honolulu International Airport, the minimum safe distance is one thousand five hundred feet from the shoreline, including the inland shoreline behind the reef runway.

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Overview of map number eighteen, inset two:

Map number eighteen, inset two is the Ewa Beach shoreline. It includes Oneula Beach and the new Ocean Pointe housing. For this map, minimum safe distance is two thousand feet inland from the shoreline.

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Overview of map number nineteen, inset one:

Map number nineteen, inset one is the shoreline between Iwilei and Waikiki. It includes Sand Island, Downtown Honolulu, and Ala Moana Beach Park. Remain off Sand Island entirely. In Iwilei to Downtown Honolulu, minimum safe distance is two thousand feet inland of the shoreline, including the shoreline inside Honolulu Harbor. In the urban core of Honolulu, the minimum safe zone is inland of Kapiolani Boulevard up to Kalakaua Avenue.

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Overview of map number nineteen, inset two:

Map number nineteen, inset two is the shoreline between the Honolulu Airport Reef Runway and Iwilei. It includes Keehi Lagoon and Kalihi Kai. The entire Reef Runway is to be avoided. On Lagoon Drive the minimum safe zone is one hundred feet inland of Lagoon Drive. Within all shoreline areas of Keehi Lagoon the minimum safe distance is two thousand feet inland of the shoreline.

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Overview of map number twenty, inset one:

Map number twenty, inset one is the shorelines inside Pearl Harbor, excluding West Loch and Middle Loch. It includes Ford Island. The minimum safe zone is eight hundred feet inland of

all shores within Pearl Harbor. On Ford Island, the minimum safe zone is twenty feet inland of all shores.

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Overview of map number twenty, inset two:

Map number twenty, inset two is the shoreline of West Loch and Middle Loch. Within West Loch, the minimum safe distance is inland of any improved road or street surrounding the Loch. Within Middle Loch, the minimum safe distance is eight hundred feet inland of the shoreline.

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Overview of map number twenty one, inset one:

Map number twenty one, inset one is the shoreline within Kaneohe Bay between Kaneohe and Heeia. For this map, the minimum safe distance is inland of any improved street or road.

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Overview of map number twenty one, inset two:

Map number twenty one, inset two is the shoreline within Kaneohe Bay in Kahaluu. For this map, the minimum safe distance is three hundred feet inland of Kamehameha Highway.

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Overview of map number twenty one, inset three:

Map number twenty one, inset three is the shoreline within Kaneohe Bay in the vicinity of Waiahole. For this map, the minimum safe distance is six hundred feet inland of Kamehameha Highway.

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Last Reviewed: November 06, 2014

[Privacy Statement](#)
[Policy](#)
[Accessibility](#)

[City Services](#)
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[Customer Service](#)

[Office of the Mayor](#)
[City Council](#)
[Departments and Agencies](#)

Exhibit 14

DOH Community Noise Permit

PERMIT No. 0 14-183

STATE OF HAWAII
DEPARTMENT OF HEALTH
INDOOR AND RADIOLOGICAL HEALTH BRANCH

COMMUNITY NOISE PERMIT FOR CONSTRUCTION ACTIVITIES

PURSUANT TO THE PROVISIONS OF CHAPTER 342F, HAWAII REVISED STATUTES, AND CHAPTER 11-46, HAWAII ADMINISTRATIVE RULES,
THIS PERMIT IS HEREBY GRANTED TO:

CHARLES T.Y. WONG / OWNER

SAME

AT

46-107 LILIPUNA ROAD

DURING THE HOURS OF 7:00 A.M. TO 6:00 P.M., MONDAY THROUGH FRIDAY AND 9:00 A.M. TO 6:00 P.M., SATURDAY
(EXCEPT SUNDAYS AND HOLIDAYS)

MAY 23, 2014

SEPTEMBER 30, 2014

THIS PERMIT IS GRANTED UPON THE EXPRESSED PROVISION THAT THE HOLDER WILL COMPLY WITH ALL RULES, REGULATIONS AND
ORDERS OF THE DEPARTMENT AND THE CONDITIONS PRECEDENT TO THE GRANTING OF THIS PERMIT.

DIRECTOR OF HEALTH



James E. Toma

NOISE SECTION SUPERVISOR

SPECIAL RESTRICTIONS AND CONDITIONS

Use of the concrete buster and hammer drill shall be limited to 9:00 a.m. to 5:30 p.m.,
Monday through Friday.

SEE CONDITIONS PRECEDENT TO THIS PERMIT AND CONDITIONS PRECEDENT TO THIS PERMIT

PERMIT No. 0 15-456

STATE OF HAWAII
DEPARTMENT OF HEALTH
INDOOR AND RADIOLOGICAL HEALTH BRANCH

COMMUNITY NOISE PERMIT FOR CONSTRUCTION ACTIVITIES

PURSUANT TO THE PROVISIONS OF CHAPTER 342F, HAWAII REVISED STATUTES, AND CHAPTER 11-46, HAWAII ADMINISTRATIVE RULES,
THIS PERMIT IS HEREBY GRANTED TO:

CHARLES TSU WONG

(COMPANY OR INDIVIDUAL)

BISHNU RAMSARRAN - BUSINESS PARTNER

(NAME OF AUTHORIZED INDIVIDUAL)

AT

46-107 LILIPUNA ROAD

(LOCATION OF ACTIVITIES)

DURING THE HOURS OF 7:00 A.M. TO 6:00 P.M., MONDAY THROUGH FRIDAY AND 9:00 A.M. TO 6:00 P.M., SATURDAY
(EXCEPT SUNDAYS AND HOLIDAYS)

OCTOBER 27, 2015

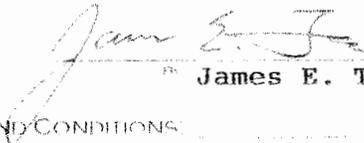
(START DATE)

MARCH 30, 2016

(EXPIRATION DATE)

THIS PERMIT IS GRANTED UPON THE EXPRESSED PROVISION THAT THE HOLDER WILL COMPLY WITH ALL RULES, REGULATIONS AND
ORDERS OF THE DEPARTMENT AND THE CONDITIONS PRECEDENT TO THE GRANTING OF THIS PERMIT.

DIRECTOR OF HEALTH


By James E. Toma

NOISE SECTION SUPERVISOR

(TITLE)

SPECIAL RESTRICTIONS AND CONDITIONS:

Use of the Concrete saw, Concrete coring drill, Hammer-drill, Concrete buster, Chain-saw
and Power-washer shall be limited to 9:00 a.m. to 5:30 p.m., Monday through Friday.

SEE GENERAL ORDER, TERMS AND CONDITIONS ON BACK

DAVID Y. IGE
GOVERNOR OF HAWAII



COPY

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to
File:

March 30, 2016

Charles Tsu Wong
639 Maluniu Avenue
Kailua, Hawaii 96734

Dear Mr. Wong:

This is in reference to your request for an extension of the **Community Noise Permit No. O 15-456; Construction of a new single family dwelling at 46-107 Lilipuna Road, Kaneohe.**

The Community Noise Permit expiration date has been amended to October 26, 2016.

Should the duration of the project continue beyond the expiration date, the applicant shall submit a request for extension **prior to October 26, 2016.**

If there are any questions, please contact Mr. Kevin Nakamura of our office at 586-4700 or kevin.nakamura@doh.hawaii.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Toma", written over a horizontal line.

for James E. Toma
Noise Section Supervisor
Indoor and Radiological Health Branch

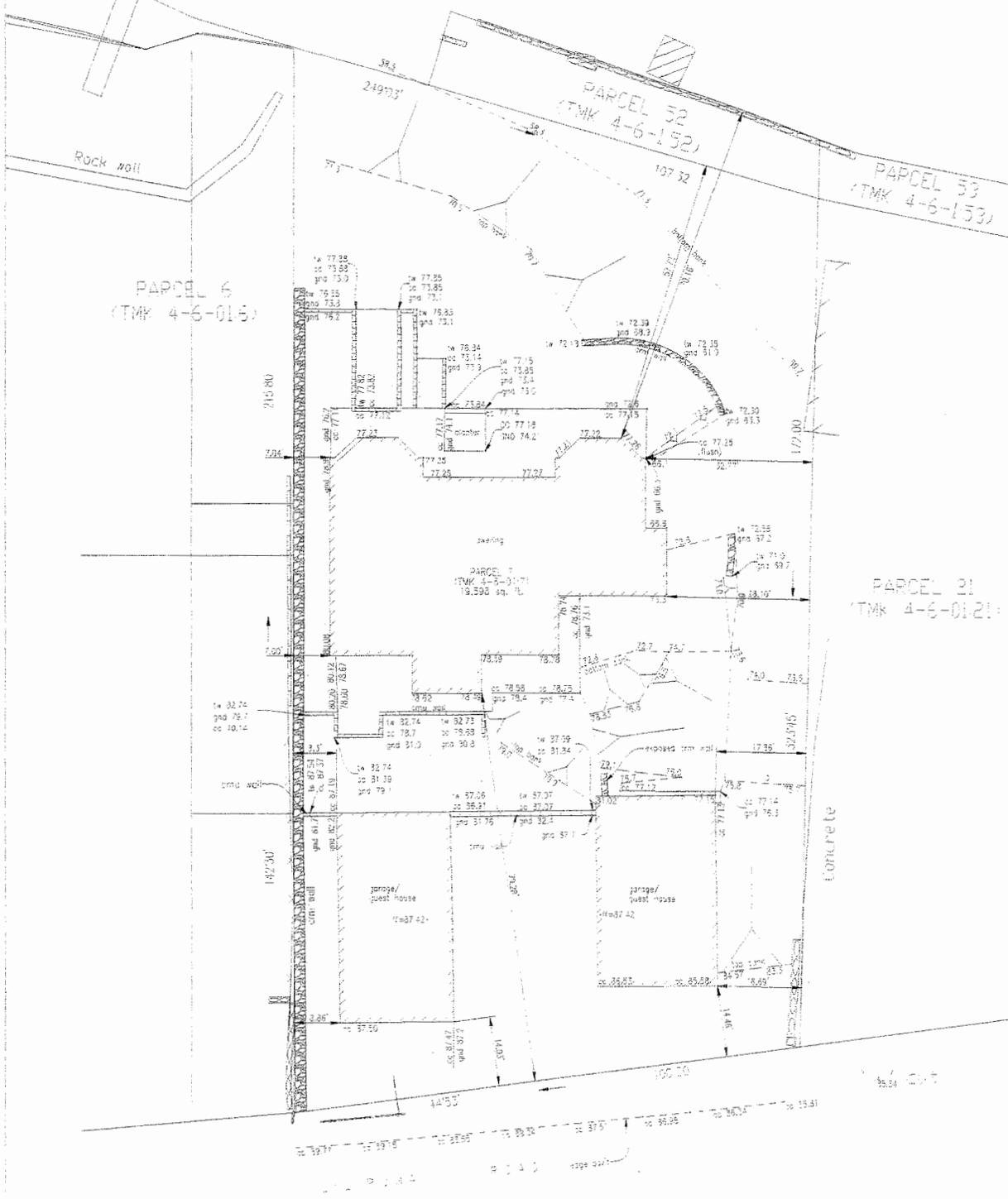
Exhibit 15

Survey by Wesley Tengan, Licensed Professional Surveyor

TWICE NORTH
Scale: 1" = 10'

KANEDHE

BAY



TRUE NORTH
Scale: 1" = 10'

KANE OHE

BAY

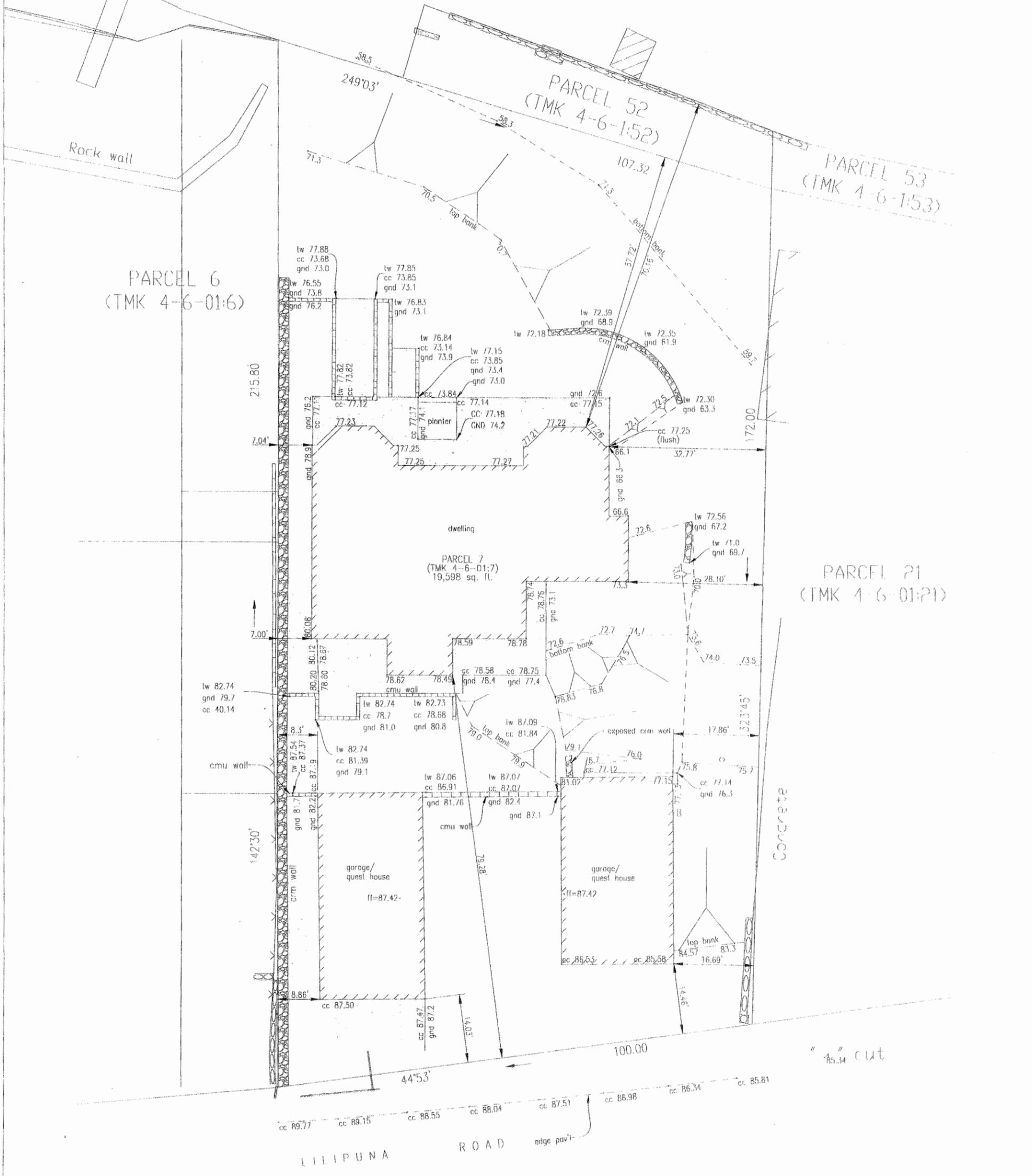
PARCEL 6
(TMK 4-6-01:6)

PARCEL 52
(TMK 4-6-1:52)

PARCEL 53
(TMK 4-6-1:53)

PARCEL 7
(TMK 4-6-01:7)
19,598 sq. ft.

PARCEL 21
(TMK 4-6-01:21)



LILIPUNA ROAD

85.34 cut

Exhibit 16

DLNR Historic Preservation approval

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAHUHIHEWA BUILDING
601 KAMOKILA BLVD, KAPOLEI HI 96707

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY H. KAULUKUKUI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

DATE: August 25, 2011

TO: Department of Planning and Permitting
City and County of Honolulu
650 South King Street
Honolulu, HI 96813

SUBJECT: **Section 6E-42 Historic Preservation Review**
Project: Remodel
Permit # (None)
Owner: Charles Wong
Location: 46-107 Lilipuna Road, Kaneohe
Tax Map Key: (1) 4-6-001:007

LOG: 2011.2293
DOC: 1108RS42

This letter is in response to materials emailed to SHPD on August 21, 2011 regarding a proposed remodel of a dwelling located at 46-107 Lilipuna Road. The project would deconstruct portions of the building, including removing walls in certain sections down to the concrete slab. The area of potential effect would be the parcel.

Honolulu City and County online records show that the house was initially constructed in 1954, with modifications occurring in 1984. Due to the previous modifications, the house is not eligible for the Hawaii Register of Historic Places.

The owner has provided photographs of the interior and exterior, architectural alteration plans, and a historic resource inventory form.

Based upon the information presented, the project will not affect historic property.

Any questions should be addressed to Ross W. Stephenson, SHPD Historian, at (808) 692-8028 (office), (808) 497-2233 (cell) or ross.w.stephenson@hawaii.gov.

Mahalo for the opportunity to comment.

A handwritten signature in black ink that reads "Angie Westfall".

Angie Westfall
Architecture Branch Chief, Hawaii Historic Preservation Division

In the event that historic resources, including human skeletal remains, lava tubes, and lava blisters/bubbles are identified during construction activities, all work should cease in the immediate vicinity of the find, the find should be protected from additional disturbance, and the State Historic Preservation Division should be contacted immediately at (808) 692-8015.

Exhibit 17

Public Shoreline Access

Exhibit 18

Department of Health Clean Air Branch Standard Comments

Clean Air Branch Standard Comments

August 24, 2015

1. Construction/Demolition Involving Asbestos:

If the proposed project includes renovation/demolition activities which may involve asbestos, the applicant should contact the Asbestos Abatement Office in the Noise, Radiation and Indoor Air Quality Branch at 586-4700.

2. Control of Fugitive Dust:

A significant potential for fugitive dust emissions exists during all phases of construction and operations. Proposed activities that occur in proximity to existing residences, businesses, public areas or thoroughfares, exacerbate potential dust problems. It is recommended that a dust control management plan be developed which identifies and addresses all activities that have a potential to generate fugitive dust. The plan, which does *not* require DOH approval, would help with recognizing and minimizing the dust problems from the proposed project.

Activities must comply with the provisions of Hawaii Administrative Rules, §11-60.1-33 on Fugitive Dust. In addition, for cases involving mixed land use, we strongly recommend that buffer zones be established, wherever possible, in order to alleviate potential nuisance problems.

The contractor should provide adequate measures to control the fugitive dust from the road areas and during the various phases of construction. Examples of measures that can be implemented to control dust include, but are not limited to, the following:

- a. Planning the different phases of construction, focusing on minimizing the amount of dust-generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact;
- b. Providing an adequate water source at the site prior to start-up of construction activities;
- c. Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;
- d. Minimizing dust from shoulders and access roads;
- e. Providing adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
- f. Controlling dust from debris being hauled away from the project site.

If you have any questions, please contact the Clean Air Branch at 586-4200.

Exhibit 19

Department of Health Clean Water Branch Standard Comments

Clean Water Branch Standard Comments

December 19, 2014

Clean Water Branch

The Clean Water Branch (CWB) protects the public health of residents and tourists who enjoy playing in and around Hawaii's coastal and inland water resources. The CWB also protects and restores inland and coastal waters for marine life and wildlife. This is accomplished through statewide coastal water surveillance and watershed-based environmental management through a combination of permit issuance, monitoring, enforcement, administering polluted runoff control projects, and public education.

Permit Issuance

- Any project and its potential impacts to State waters must meet the State's:
 - 1) Antidegradation policy, which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected;
 - 2) Designated uses, as determined by the classification of the receiving State waters; and
 - 3) Water quality criteria [Hawaii Administrative Rules (HAR), Chapter 11-54].

- A Section 401 Water Quality Certification (WQC) is required if your project/activity:
 - Requires a federal permit, license, certificate, approval, registration, or statutory exemption; and
 - May result in a discharge into State waters. The term "discharge" is defined in Clean Water Act, Subsections 502(16), 502(12), and 502(6). Examples of "discharge" include, but are not limited to, allowing the following pollutants to enter State waters from the surface or in-water: solid waste, rock/sand/dirt, heat, sewage, construction debris, any underwater work, chemicals, fugitive dust/spray paint, agricultural wastes, biological materials, industrial wastes, concrete/sealant/epoxy, and washing/cleaning effluent.

Determine if your project/activity requires a federal permit, license, certificate, approval, registration, or statutory exemption by contacting the appropriate federal agencies (e.g. Department of the Army (DA), U.S. Army Corps of Engineers (COE), Pacific Ocean Division Honolulu District Office (POH) Tel: 808-835-4303; U.S. Environmental Protection Agency Tel: 415-947-8021; Federal Energy Regulatory Commission Tel: 866-208-3372; U.S. Coast Guard Office of Bridge Programs Tel: 202-372-1511).

To request a Section 401 WQC, you must complete and submit the Section 401 WQC application. This application is available on the e-Permitting Portal website located at: <https://eha-cloud.doh.hawaii.gov/epermit/>.

Please see HAR, Chapter 11-54 for the State's Water Quality Standards and for more information on the Section 401 WQC. HAR, Chapter 11-54 is available on the CWB website at: <http://health.hawaii.gov/cwb/>.

- National Pollutant Discharge Elimination System (NPDES) permit coverage is required for:
 - Storm water associated with construction activities for land disturbances of one (1) acre or more. Land disturbance includes, but is not limited to, clearing, grading, grubbing, excavation, demolition, uprooting of vegetation, equipment staging, and storage areas.
 - Storm water associated with industrial activities for facilities with Standard Industrial Classification Codes regulated in 40 CFR 122.26(b)(14)(i) through (ix) and (xi).
 - Storm water and certain non-storm water from a small Municipal Separate Storm Sewer System.
 - Discharges of water pollutants into State surface waters. Examples of these discharges include, but are not limited to, cooling water, hydrotesting waters, dewatering effluent, and process wastewater.
 - Discharges from the application of pesticides (including insecticides, herbicides, fungicides, rodenticides, and various other substances to control pest) to State waters.

An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge or start of construction activities. To request an NPDES individual permit, you must complete and submit the NPDES individual permit application. This application is available on the e-Permitting Portal website located at: <https://eha-cloud.doh.hawaii.gov/epermit/>.

A Notice of Intent (NOI) for coverage under a specific NPDES general permit must be submitted at least 30 calendar days before the commencement of the discharge or start of construction activities. To request NPDES general permit coverage, you must complete and submit the NOI. The NOI is available on the e-Permitting Portal website located at: <https://eha-cloud.doh.hawaii.gov/epermit/>.

Please see HAR, Chapter 11-55 for more information on the NPDES individual permit and NPDES general permits. The specific NPDES general permits are

located in HAR, Chapter 11-55, Appendices B through M. HAR, Chapter 11-55 and HAR, Chapter 11-55, Appendices B through M are available on the CWB website at: <http://health.hawaii.gov/cwb/>.

- According to State law, all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards.

Monitoring

- Effluent discharge and/or receiving water monitoring may be required as conditions of Section 401 Water Quality Certifications and NPDES General and Individual permits.

Enforcement

- Noncompliance with water quality requirements contained in HAR, Chapter 11-54 and/or permitting requirements specified in HAR, Chapter 11-55 may be subject to penalties of \$25,000 per day per violation.
- Violations of Hawaii Revised Statutes 342D and 342E may elicit administrative, civil and criminal penalties for such violations.

Polluted Runoff Control

- Manage projects identified in watershed-based plans that reduce polluted runoff and educate the public about nonpoint source pollution. Projects are selected through an annual request for proposals. Funding is provided by the EPA through the Clean Water Act. For more information on projects and funding opportunities, please visit: www.hawaii.gov/doh/pollutedrunoffcontrol.

Exhibit 20

Department of Health Waste Water Branch Standard Comments

Wastewater Branch Standard Comments

August 24, 2015

1. Oahu:

- The subject project is located in the Critical Wastewater Disposal Area (CWDA) as determined by the Oahu Wastewater Advisory Committee where no new cesspools will be allowed. It is also located in the Pass Zone.
- The subject project is located in the Critical Wastewater Disposal Area (CWDA) as determined by the Oahu Wastewater Advisory Committee where no new cesspools will be allowed. It is also located in the No Pass Zone where subdivisions are not approved unless connection to the County sewer system is possible.

2. Maui:

- The subject project is located in the Critical Wastewater Disposal Area (CWDA) as determined by the Maui County Wastewater Advisory Committee where no new cesspools will be allowed.
- The subject project is located in the Non-Critical Wastewater Disposal Area (CWDA) as determined by the Maui County Wastewater Advisory Committee where new cesspools may be allowed with specific criteria.
- The subject project is located in the One – Acre Lot Exception Critical Wastewater Disposal Area (CWDA) as determined by the Maui County Wastewater Advisory Committee where new cesspools may be allowed, provided there is at least one-acre of land.

3. Kauai:

- The subject project is located in the Critical Wastewater Disposal Area (CWDA) as determined by the Kauai County Wastewater Advisory Committee where no new cesspools will be allowed.

4. Hawaii:

- The subject project is located in the Non-Critical Wastewater Disposal Area (CWDA) as determined by the Hawaii County Wastewater Advisory Committee where new cesspools may be allowed with specific criteria.
- The subject project is located in the One – Acre Lot Exception Critical Wastewater Disposal Area (CWDA) as determined by the Hawaii County Wastewater Advisory Committee where new cesspools may be allowed, provided there is at least one-acre of land.
- The subject project is located in the Five – Acre Lot Exception Critical Wastewater Disposal Area (CWDA) as determined by the Hawaii County Wastewater Advisory Committee where new cesspools may be allowed, provided there is at least five-acres of land.
- The subject project is located in the Critical Wastewater Disposal Area (CWDA) as determined by the Hawaii County Wastewater Advisory Committee where no new cesspools will be allowed.

5. Statewide:

- As the project will be served by the City & County of Honolulu/ County/ Private sewer system, we have no objections to the development. If available, we highly encourage the developer to work with the City/ County/ Private Wastewater Reuse Facility to utilize recycled water for irrigation and other non-potable water purposes. The use of recycled wastewater should be encouraged and utilized in major common areas such as parks, golf courses and other open spaces or landscaping areas.
- Wastewater treatment and disposal have not been adequately addressed in the subject document; therefore, we can not offer any substantial comments. If a City/County/Private sewer connection is not available, domestic wastewater generated by the project shall be handled by wastewater systems that comply with our chapter 11-62, Hawaii Administrative Rules.
- As connection to a City/County/Private sewer system may not possible, we highly recommend the construction and use of individual wastewater treatment systems (IWSs) for each unit/lot serving no more than five (5) bedrooms or bedroom like rooms.
- At this time, the use of an onsite wastewater system is allowable on this property. However, it should be located outside of 1,000 feet radius from a potable public drinking water well before we shall concur with the subdivision request.
- Based on the information provided in the subject document, a wastewater treatment plant (WWTP) will be provided for the proposed development. We have no objections to the proposal as long as the WWTP is designed and constructed in accordance with applicable provisions of our chapter 11-62, Hawaii Administrative Rules (HAR), "Wastewater Systems".

- We have a cesspool survey card for the subject project and have attached a copy. The existing cesspool is considered to be "grandfathered" and approved for use. Should a significant modification to the existing dwelling be proposed in the future, the existing cesspool will be required to be upgraded to an individual wastewater system (IWS) such as a septic tank system.
- We have a cesspool survey card for the subject project and have attached a copy. The existing cesspool is considered to be "grandfathered-in". The Department currently does not have any complaints or enforcement case that involves the subject cesspool.
- The use of individual wastewater systems is allowed. The type and number of individual wastewater systems to be used on each lot will be determined by the wastewater rules in effect at the time of building permit application.
- Domestic wastewater will not be generated by the subject project; therefore, we have no comments to provide at this time.
- We do not have any records of a treatment system for the subject property; therefore, we cannot offer any substantial comments at this time.

6. Subdivision Requests:

- The Wastewater Branch does not concur with the subdivision request because a minimum lot size of 10,000 square feet is required in order to utilize individual wastewater systems.
- The properties to be subdivided are less than 10,000 square feet; therefore, we will have to deny this subdivision request.
- The subdivision consists of 50 lots/dwelling units or more with lot sizes that are greater than an acre. The use of individual wastewater systems are allowed under the provisions of Hawaii Administrative Rules (HAR), Chapter 11-62.
- The subdivision is located within 1000' radius of a public drinking water source. The WWB cannot concur with the proposed subdivision unless connection to a public sewer system is available.
- The source of potable water is not shown. Please provide this office with the source of potable water such that we can further review the subdivision request.
- The subdivision consists of less than 50 lots/dwelling units. The use of individual wastewater systems are allowed under the provisions of Hawaii Administrative Rule Chapter 11-62. The type and number of individual wastewater treatment systems to be used on each lot will be determined by the wastewater rules in effect at the time of the building permit.
- The subdivision consists of 50 lots/dwelling units or more. The use of individual wastewater systems are not allowed under the provisions of Hawaii Administrative Rule Chapter 11-62. Please have your engineer submit plans for a wastewater treatment works to the Wastewater Branch.
- Show all proposed existing structures and wastewater disposal systems on the final plot map including setback distances to the newly adjusted property lines and buildings.
- In accordance with Hawaii Revised Statutes 343, an environmental assessment is required for any proposed wastewater treatment unit except for individual wastewater systems or a wastewater treatment system unit serving fewer than fifty single-family dwellings or the equivalent.

7. Other:

- The installation of individual wastewater systems will not be allowed if the design flow for the project exceeds 15,000 gallons per day. Hawaii Administrative Rules (HAR), Chapter 11-62, Wastewater Systems, section 11-62-31.1(2)(B) states that for developments involving buildings other than dwellings, the total wastewater flow of the development shall not exceed 15,000 gallons per day. A wastewater treatment plant will be required to be designed and constructed in accordance with our chapter 11-62, HAR if design flows for the project exceeds 15,000 gallons per day.
- The Wastewater Branch has records for the existing wastewater system(s) that are located on the subject property. Please have your engineer or contractor submit completed cesspool information card(s) identifying the location of all wastewater system(s) and their locations to the existing and proposed adjusted property lines.
- In 1999, EPA promulgated regulations under the Safe Drinking Water Act's Underground Injection Control (UIC) Program required closure of all existing large capacity cesspools (LCC) by April 5, 2005. Under federal regulations, a large capacity cesspool is a cesspool which serves multiple dwellings, or for nonresidential facilities has the capacity to serve 20 or more persons per day. Operation of a large capacity cesspool after this date is a violation of federal regulations and subject to enforcement and fines. If you have any questions about LCC, please contact Kate Rao of EPA at (415) 972-3538, or by email at kate.rao@epa.gov.
- All wastewater plans must conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems." We do reserve the right to review the detailed wastewater plans for conformance to applicable rules. Should you have any questions, please contact the Planning & Design Section of the Wastewater Branch at telephone 586-4294.