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May 25, 2004

Mr. Francesco Moretti
Maliko Bay Trading Company, LLC
471 Alakapa Place
Paia, HI 96779

Dear Mr. Moretti:

Reinstatement of Well Construction and Pump Installation Permits
Maliko-Moretti Wells 1 & 2 (Well Nos. 5620-05 & 06)

We have received a copy of the Maui Department of Planning approval of your Special Management Area Permit (SMAP) for an 8-lot Agricultural Subdivision, TMK: 2-7-6:6 & 2-7-36:31, which will be served by the captioned wells.

This is your notice that, with the SMAP approval, the Well Completion Reports, Part 2 for these wells, already on file, can be accepted as complete, and you may consider your wells operational. Other than the continuing water use reporting requirement, the permitting requirements for these wells are now complete. Water Use Report forms are enclosed for your use.

If you have any questions, please call Charley Ice of the Commission staff at [phone number] or toll-free at [phone number] extension 70251.

Sincerely,

YVONNE Y. IZU
Deputy Director

Enclosure
Mr. Francesco Moretti, Director
Maliko Bay Trading Co., LLC
3125 Ua Noe Place
Haiku, Hawaii 96708

Dear Mr. Moretti:

RE: Request for a Special Management in Order to Construct an 8-Lot Agricultural Subdivision and Related Improvements for the Maliko Bay Subdivision at TMK: 2-7-006:006 and 2-7-036:031 (SM1 2003/0010)

At its regular meeting of May 11, 2004, the Maui Planning Commission reviewed the above request, after due deliberation, the Commission voted to approve the request subject to the following conditions:

1. That construction of the proposed project shall be initiated by March 31, 2006. Further, initiation of construction shall be determined as construction of offsite improvements, issuance of a foundation permit and initiation of construction of the foundation, or issuance of a building permit and initiation of building construction, whichever occurs first. Failure to comply within this two (2) year period will automatically terminate this Special Management Area Use Permit unless a timely extension is requested no later than ninety (90) days prior to the expiration of said two (2) year period. The Planning Director shall review and approve a time-extension request but may forward said request to the Planning Commission for review and approval.

2. The permit holder or any aggrieved person may appeal to the Planning Commission any action taken by the Planning Director on the subject permit no later than ten (10) days from the date the Director's action is reported to the Commission.

3. That the construction of the project shall be completed within five (5) years after the date of its initiation. Failure to complete construction
of this project will automatically terminate the subject Special Management Area Use Permit. A time extension shall be requested no later than ninety (90) days prior to the completion deadline. The Planning Director shall review and approve a time-extension request but may forward said request to the Planning Commission for review and approval. Failure to complete construction of this project will automatically terminate the subject Special Management Area Use Permit.

4. That final construction shall be in accordance with preliminary plans approved by the Planning Commission.

5. That appropriate measures shall be taken during construction to mitigate the short term impacts of the project relative to soil erosion from wind and water, ambient noise levels, and traffic disruptions.

6. That the subject Special Management Area Use Permit shall not be transferred without prior written approval in accordance with Section 12-202-17(d) of the Special Management Area Rules of the Maui Planning Commission. However, in the event that a contested case hearing preceded issuance of said Special Management Area Use Permit, a public hearing shall be held upon due published notice, including actual written notice to the last known addresses of parties to said contested case and their counsel.

7. That the applicant, its successors and permitted assigns shall exercise reasonable due care as to third parties with respect to all areas affected by subject Special Management Area Use Permit and shall procure at its own cost and expense, and shall maintain during the entire period of this Special Management Area Use Permit, a policy or policies of comprehensive liability insurance in the minimum amount of ONE MILLION AND NO/100 DOLLARS (1,000,000.00) naming the County of Maui as an additional named insured, insuring and defending the applicant and County of Maui against any and all claims or demands for property damage, personal injury and/or death arising out of this permit, including but not limited to: (1) claims from any accident in connection with the permitted use, or occasioned by any act or nuisance made or suffered in connection with the permitted use in the exercise by the applicant of said rights; and (2) all actions, suits, damages and claims by whomsoever brought or made by reason of the non-observance or non-performance of any of the terms and conditions of this permit. A copy of a certificate of insurance
naming County of Maui as an additional named insured shall be submitted to the Department within ninety (90) calendar days from the date of transmittal of the decision and order.

8. That full compliance with all applicable governmental requirements shall be rendered.

9. That the applicant shall submit plans regarding the location of any construction related structures such as, but not limited to trailers, sheds, equipment and storage areas and fencing to be used during the construction phase to the Maui Planning Department for review and approval.

10. That the applicant shall submit to the Planning Department five (5) copies of a detailed report addressing its compliance with the conditions established with the subject Special Management Area Use Permit. A preliminary report shall be reviewed and approved by the Planning Department prior to issuance of any construction permits. A final compliance report shall be submitted to the Planning Department for review and approval prior to issuance of final subdivision approval.

11. That the applicant shall develop the property in substantial compliance with the representations made to the Commission in obtaining the Special Management Area Use Permit. Failure to so develop the property may result in the revocation of the permit.

12. That should historic remains such as artifacts, burials, concentrations of shell or charcoal be encountered during construction activities, work shall cease immediately in the vicinity of the find, and the find shall be protected from further damage. The contractor and/or landowner shall immediately contact the State Historic Preservation Division (SHPD), which shall assess the significance of the find and recommend an appropriate mitigation measure, if necessary. Prior to any ground alteration or disturbance, the applicant and any landowner or lessee shall provide the plans to SHPD to determine areas were monitoring would be required. The level of monitoring could be dependent on the proposed depth of grading and construction.

13. That the applicant shall comply with the recommendations of the Department of Water Supply in their letter dated September 15, 2003 to convey water conservation measures to future
landowners/homeowners and lessees; comply with Section 14.21.20 of the Maui County Code, use of native and climate-adapted plants in landscaping and cultivation of the project site, and avoid the use of invasive alien plant species; and, adopt BMPs designed to minimize infiltration and runoff from daily construction activities in order to protect surface and groundwater resources, and coastal waters.

14. That the applicant shall report monthly pumpage to the Department of Water Supply and to the Commission on Water Resources Management.

15. That the applicant shall provide domestic, fire and irrigation services in accordance with County standards.

16. That the applicant shall ensure that the future landowners, homeowners, and lessees are aware that private systems serving more than 25 people over 60 days of the year are subject to the DOH regulations. This should be included in the CC&R’s.

17. That all landowners shall be members of a homeowners’ association which shall be responsible for the maintenance and operation of the water systems and maintenance of the drainage areas and any other common areas.

18. That prior to approvals of any construction permits, including but not limited to grading, subdivision, and building, the applicant shall acquire a boundary interpretation from the State Land Use Commission to avoid development and construction in the Conservation District. A copy of this boundary interpretation map, along with restrictions in building in this area shall be attached to the lots affected and filed with the Bureau of Conveyance. No structures shall overhang the gulch and all structures shall be set back a minimum 30 feet from the top of the gulch.

19. That prior to approvals of any construction permits, including but not limited to grading, subdivision, and building, a comprehensive drainage plan for the subdivision, including but not limited to identification of the 30-foot natural drainage way, retention basins to prevent runoff and sedimentation, a plan on the removal of animal waste products and other contaminants, as well as other drainage considerations should be included to prevent runoff and sediments into the gulch and ocean.
20. That the Ulua Place right-of-way, which is an extension of Apuwai Street, should be consistent with the right-of-way width of Apuwai Street of 50 feet.

21. That all utilities shall be underground. Street lights should be restricted to intersections only. All lights should meet “night sky” standards, including but not limited to full cutoff fixtures, fully shielded and directed down.

22. That prior to any construction permit approvals, the applicant shall submit a revised Project View Analysis map which include the following changes:

A. Topographic map, prepared by a licensed engineer or surveyor of the property identifying building areas which include an overlay, drawn to scale, which identifies the location of the wells and appurtenances, reservoirs for fire protection and water storage facilities, retention basins.

B. Building area and envelopes for Lot 6A restricting any structures from the area between Hana Highway and Lots 6G, 6F and 6B.

C. Building area and envelopes for all lots, which also include identification of the 51% lot area which will be used for farming on each lot as required by Chapter 19.30A, Maui County Code.

D. All buildings and structures located above the 170-foot contour line on Lot 6A shall be more than 450 feet away from the boundary of Hana Highway with the exception of one 15-foot high barn, which must be located a minimum of 200 feet from Hana Highway.

23. That the applicant’s subdivision plans shall be revised to reflect the conditions of the revised view analysis map for the project. All lots shall identify specific building areas where structures can and cannot be built and shall identify 51% of the lot area to be used for agricultural purposes.
24. That all structures shall be restricted to two-story or 25 feet for lots 6B, 6C, and 6H and two-story or 20 feet for lots 6A, 6D, 6E, 6F and 6G in height unless it can be shown that the topography of the site is lower than the existing grade of Hana Highway and the views will be not be obstructed. Further, that the second story floor area shall be limited to 40% of the first floor. There shall be no solid fences or walls higher than four feet in height.

25. That the conditions of this permit shall be filed with the Bureau of Conveyance and all landowners and lessees shall be given a copy of these conditions.

26. That all water system improvements shall be constructed to County Standards, except for the private wells.

27. That the applicant must provide a temporary construction access from Hana Highway, per the Department of Transportation standards.

The conditions of this Special Management Area Use Permit shall be enforced pursuant to sections 12-202-23 and 12-202-25 of the Special Management Area Rules for the Maui Planning Commission.

Enclosed for your use is a copy of the Departments Report and Recommendations Report prepared for the March 23, 2004 meeting and adopted as the Commission Findings of Facts and Conclusions of Law at the May 11, 2004 meeting.

Should you require further clarification, please contact Mr. Joseph Alueta, Staff Planner, of this office at [redacted].

Sincerely,

[Signature]

MICHAEL W. FOLEY
Planning Director
Mr. Francesco Moretti  
May 18, 2004  
Page 7

Enclosures
MWF:JWA:lar

c: Clayton I. Yoshida, AICP, Planning Program Administrator  
ZAED (2)  
Joseph W. Alueta, Staff Planner  
Will Spence  
Development Services Administration (2)  
Department of Transportation, Highways Division  
Department of Water Supply  
Commission on Water Resource Management  
Land Use Commission  
Project File  
General File  
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Please send copies to me in comp NH and on approval.

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COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: ERNIE
DATE: MAR 18 2004
SUSPENSE DATE: 

TO: ANAKALEA, P.
     BAUER, G.
     CHING, F.
     DANBARA, S.
     FUJII, N.
     GOODING, K.
     HARDY, R.
     HIGA, D.
     ICE, C.
     IMATA, R.
     KUNIMURA, I.
     MATHIAS, T.
     NAKAMA, L.
     NAKANO, D.
     OHYE, M.
     SAKODA, E.
     SUBIA, S.
     SWANSON, S.
     UYENO, D.
     YODA, K.
     YOSHINAGA, M.

INIT: LAU, E.
     INIT: 

FOR: Approval
     Signature
     Information

PLEASE: See Me
     Review & Comment
     Take Action
     Type Draft
     Type Final
     File
     Xerox copies

Maliko Bay at MPlenComm
Maliko, Merethi 5620-5 db

Stay tuned
Mr. Francesco Moretti  
3125 Ua Noe Place  
Haiku, Hawaii 96708  

Dear Mr. Moretti:

RE: Project Name: Maliko Bay Eight Lot Agricultural Subdivision  
TMK: 2-7-036: 031 and 2-7-004: 006  
I.D. No.: SM1 2003/0010

Enclosed for your information are the Planning Department's Report and Recommendation Report to the Maui Planning Commission. You or your representative should be present at the March 23, 2004, Maui Planning Commission meeting at 9:00 a.m. at the Planning Conference Room, Kalana Pakui Building, 1st Floor, 250 South High Street, Wailuku, Maui, Hawaii.

Should you have any questions, please contact Julie Higa, at [redacted] or Clayton Yoshida, at [redacted]

Sincerely,

Clayton Yoshida, AICP  
Planning Program Administrator  
For Julie Higa, Staff Planner

Enclosures
c: Clayton Yoshida, Planning Program Administrator
Anthony Ching, Executive Officer, State Land Use Commission (w/Enclosures)
Ernest Lau, Deputy Director, Commission on Water Resource Mgmt (w/Enclosures)
Herbert Matsubayashi, State Department of Health, Maui District, (w/Enclosures)
Gilbert Coloma-Agaran, Director of Public Works and Environmental Mgmt (w/Enclosures)
Peter Yee, Director, Office of Hawaiian Homes (w/Enclosures)
Neal Fujiwara, USDA, NRCS (w/Enclosures)
George Tengan, Department of Water Supply (w/Enclosures)
Greg Blue, Haiku Community Association (w/Enclosures)
Lloyd Fischel, Resident (w/Enclosures)
Daniel Grantham, Sierra Club (w/Enclosures)
Peter Munoz, Director, Citizens for Truth and Justice (w/Enclosures)
William Spence, Consultant (w/Enclosures)
Project File (original reports)
General File
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BEFORE THE MAUI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of

MALIKO BAY TRADING CO., LLC
FRANCESCO MORETTI, Director and Applicant

To Obtain a SPECIAL MANAGEMENT USE PERMIT for an Eight (8)-Lot Agricultural Subdivision and Related Improvements on 45 Acres of Land at Tax Map Key: 2-7-004: 006 And 2-7-036: 031, Hana Highway, Hamakoalaoa District, Haiku, Maui Hawaii

DOCKET NO. SM1 2003/0010
Maliko Bay Trading Co., LLC
Francesco Moretti, Director (jmh)

MAUI PLANNING DEPARTMENT’S RECOMMENDATION REPORT
TO THE MAUI PLANNING COMMISSION
March 23, 2004, MEETING

DEPARTMENT OF PLANNING
COUNTY OF MAUI
250 SOUTH HIGH STREET
WAILUKU, MAUI, HI. 96793

(Special Management Area Use Permit)
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BEFORE THE MAUI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of MALIKO BAY TRADING CO., LLC
FRANCESCO MORETTI, Director and Applicant

TO OBTAIN A SPECIAL MANAGEMENT USE PERMIT for an Eight (8)-Lot Agricultural Subdivision and Related Improvements on 45 Acres of Land at Tax Map Key: 2-7-004: 006 And 2-7-036: 031, Hana Highway, Hamakoaloa District, Haiku, Maui Hawaii

DOCKET NO. SM1 2003/0010
Maliko Bay Trading Co., LLC Francesco Moretti, Director
(jmh)

CONCLUSIONS OF LAW

Special Management Area

The application complies with the applicable standards for a Special Management Area Use Permit pursuant to Chapter 205A-26 and sections 12-202-10 and 12-202-11 of Chapter 202, Special Management Area (SMA) Rules of the Maui Planning Commission, provided that mitigative measures are incorporated in the design of the proposed development. The Maui Planning Department finds that based upon the requirements of Chapter 205A-26, Hawaii Revised Statutes, as amended, and Chapter 202 of the SMA Rules of the Maui Planning Commission:

(A) The proposed project will have “no adverse impact” and will not involve an irrevocable commitment to loss or destruction of any natural or cultural resources provided that mitigative measures are taken to ensure that the natural and cultural resources are not significantly impacted.

(B) The proposed project does not significantly curtail the range of beneficial uses of the environment provided that mitigative measures are taken to reduce the risk of environmental damage.

(C) The proposed project does not conflict with the County’s or the State’s long-term environmental policies or goals provided that mitigative measures are taken...
to lessen the impact of the proposed development.

(D) The proposed project will not adversely affect the economic welfare, social welfare and activities of the community, County or State. The proposed project in itself will not adversely affect the economic welfare, social welfare and activities of the community, County or State, however, the cumulative loss of the vistas and degradation of the natural environment could adversely affect the economic welfare, social welfare and activities of the community, County or State through the loss of visitors to this island.

(E) The proposed project does involve substantial secondary impacts, such as population changes and increased effects on public facilities, streets, drainage, sewage, and water systems, and pedestrian walkways, however, mitigative measures to prevent runoff and sediment from the project site and monitoring of the proposed private water systems could reduce secondary impacts on public facilities, drainage, sewage, and water systems.

(F) In itself the proposed project could have significant adverse effect and could have a cumulative effect upon the environment or involves a commitment for larger actions.

(G) The proposed project does not substantially affect a rare, threatened, or endangered species of animal or plant, or its habitat.

(H) The proposed project is not contrary to the state plan, county's general plan, appropriate community plans, zoning and subdivision ordinances;

(I) The proposed project will have minimal effect on air and water quality, or ambient noise levels provided mitigative measures are taken. During construction, the proposed project is expected to have short-term impacts on the air quality and ambient noise levels. These impacts will be temporary and localized. These impacts are not considered permanent and will be mitigated through appropriate construction practices. Water quality involves both coastal and drinking waters which could be affected unless mitigative measures are taken.

(J) The proposed project is located in an environmentally sensitive area, however, mitigative measures can be taken to reduce the impacts. The proposed project could adversely impact flood plains, shoreline, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh waters or coastal waters provided mitigative measures are taken.

(K) The proposed project could substantially alter natural land forms or impact existing public views to and along the shoreline provided mitigative measures are incorporated in the design of the development.
The proposed project is not contrary to the objectives and policies of HRS chapter 205A.

The Maui Planning Department further finds that the development should be approved because:

1. The development will not have any substantial adverse environmental or ecological effect, except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, or compelling public interest. Such adverse effects shall include, but not be 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;

2. The development is consistent with the objectives, policies, and special management area guidelines of this chapter and any guidelines enacted by the legislature provided that mitigative measures are incorporated in the design of the development; and

3. That the development is consistent with the county general plan, and zoning if mitigative measures are incorporated in the design of the development. Such a finding of consistency does not preclude concurrent processing when a general plan or zoning amendment may also be required.

RECOMMENDATIONS

In recommending approval of the proposed project, the Maui Planning Department used the guidelines as prescribed in Chapter 205A-26 of the Hawaii Revised Statutes, as amended, and recommends the following conditions:

STANDARD CONDITIONS

1. That construction of the proposed project shall be initiated by March 31, 2006. Further, initiation of construction shall be determined as construction of offsite improvements, issuance of a foundation permit and initiation of construction of the foundation, or issuance of a building permit and initiation of building construction, whichever occurs first. Failure to comply within this two (2) year period will automatically terminate this Special Management Area Use Permit unless a timely extension is requested no later than ninety (90) days prior to the expiration of said two (2) year period. The Planning Director shall review and approve a time-extension request but may forward said request to the Planning Commission for review and approval.

2. The permit holder or any aggrieved person may appeal to the Planning Commission any action taken by the Planning Director on the subject permit not later than ten
(10) days from the date the Director's action is reported to the Commission.

3. That the construction of the project shall be completed within five (5) years after the date of its initiation. Failure to complete construction of this project will automatically terminate the subject Special Management Area Use Permit. A time extension shall be requested no later than ninety (90) days prior to the completion deadline. The Planning Director shall review and approve a time-extension request but may forward said request to the Planning Commission for review and approval. Failure to complete construction of this project will automatically terminate the subject Special Management Area Use Permit.

4. That final construction shall be in accordance with preliminary architectural conceptual plans approved by the Planning Commission.

5. That appropriate measures shall be taken during construction to mitigate the short term impacts of the project relative to soil erosion from wind and water, ambient noise levels, and traffic disruptions.

6. That the subject Special Management Area Use Permit shall not be transferred without prior written approval in accordance with section 12-202-17(d) of the Special Management Area Rules of the Maui Planning Commission. However, in the event that a contested case hearing preceded issuance of said Special Management Area Use Permit, a public hearing shall be held upon due published notice, including actual written notice to the last known addresses of parties to said contested case and their counsel.

7. That the applicant, its successors and permitted assigns shall exercise reasonable due care as to third parties with respect to all areas affected by subject Special Management Area Use Permit and shall procure at its own cost and expense, and shall maintain during the entire period of this Special Management Area Use Permit, a policy or policies of comprehensive liability insurance in the minimum amount of ONE MILLION AND NO/100 DOLLARS (1,000,000.00) naming the County of Maui as an additional named insured, insuring and defending the applicant and County of Maui against any and all claims or demands for property damage, personal injury and/or death arising out of this permit, including but not limited to: (1) claims from any accident in connection with the permitted use, or occasioned by any act or nuisance made or suffered in connection with the permitted use in the exercise by the applicant of said rights; and (2) all actions, suits, damages and claims by whomsoever brought or made by reason of the non-observance or non-performance of any of the terms and conditions of this permit. A copy of a certificate of insurance naming County of Maui as an additional named insured shall be submitted to the Department within ninety (90) calendar days from the date of transmittal of the decision and order.

8. That full compliance with all applicable governmental requirements shall be rendered.
9. That the applicant shall submit plans regarding the location of any construction related structures such as, but not limited to trailers, sheds, equipment and storage areas and fencing to be used during the construction phase to the Maui Planning Department for review and approval.

10. That the applicant shall submit to the Planning Department five (5) copies of a detailed report addressing its compliance with the conditions established with the subject Special Management Area Use Permit. A preliminary report shall be reviewed and approved by the Planning Department prior to issuance of any construction permits. A final compliance report shall be submitted to the Planning Department for review and approval prior to issuance of final subdivision approval.

11. That the applicant shall develop the property in substantial compliance with the representations made to the Commission in obtaining the Special Management Area Use Permit. Failure to so develop the property may result in the revocation of the permit.

SPECIAL CONDITIONS

12. That should historic remains such as artifacts, burials, concentrations of shell or charcoal be encountered during construction activities, work shall cease immediately in the vicinity of the find, and the find shall be protected from further damage. The contractor and/or landowner shall immediately contact the State Historic Preservation Division (SHPD), which shall assess the significance of the find and recommend an appropriate mitigation measure, if necessary. Prior to any ground alteration or disturbance, the applicant and any landowner or lessee shall provide the plans to SHPD to determine areas were monitoring would be required. The level of monitoring could be dependent on the proposed depth of grading and construction.

13. That the applicant shall comply with the recommendations of the Department of Water Supply in their letter dated September 15, 2003 to convey water conservation measures to future landowners/homeowners and lessees; comply with Section 14.21.20 of the Maui County Code, use of native and climate-adapted plants in landscaping and cultivation of the project site, and avoid the use of invasive alien plant species; and, adopt BMPs designed to minimize infiltration and runoff from daily construction activities in order to protect surface and groundwater resources, and coastal waters.

14. That the applicant shall report monthly pumpage to the Department of Water Supply and to the Commission on Water Resources Management.

15. That the applicant shall provide domestic, fire and irrigation services in accordance with County standards.

16. That the applicant shall ensure that the future landowners, homeowners, and
lessees are aware that private systems serving more than 25 people over 60 days of the year are subject to the DOH regulations. This should be included in the CC&R's.

17. That all landowners shall be members of a homeowners' association which shall be responsible for the maintenance and operation of the water systems and maintenance of the drainage areas and any other common areas.

18. That prior to approvals of any construction permits, including but not limited to grading, subdivision, and building, the applicant shall acquire a boundary interpretation from the State Land Use Commission to avoid development and construction in the Conservation District. A copy of this boundary interpretation map, along with restrictions in building in this area shall be attached to the lots affected and filed with the Bureau of Conveyance. No structures shall overhang the gulch and all structures shall be set back a minimum 100 feet from the top of the gulch.

19. That prior to approvals of any construction permits, including but not limited to grading, subdivision, and building, a comprehensive drainage plan for the subdivision, including but not limited to identification of the 30-foot natural drainage way, retention basins to prevent runoff and sedimentation, a plan on the removal of animal waste products and other contaminants, as well as other drainage considerations should be included to prevent runoff and sediments into the gulch and ocean.

20. That the Ulua Place right-of-way, which is an extension of Apuwai Street, should be consistent with the right-of-way width of Apuwai Street of 50 feet.

21. That all utilities shall be underground. Street lights should be restricted to intersections only. All lights should meet “night sky” standards, including but not limited to full cutoff fixtures, fully shielded and directed down.

22. That prior to any construction permit approvals, the applicant shall submit a revised Project View Analysis map which include the following changes:

A. Topographic map, prepared by a licensed engineer or surveyor of the property identifying building areas which include an overlay, drawn to scale, which identifies the location of the wells and appurtenances, reservoirs for fire protection and water storage facilities, retention basins.

B. Building area and envelopes for Lot 6A restricting any structures from the area between Hana Highway and Lots 6G, 6F and 6B.

C. Building area and envelopes for all lots, which also include identification of the 51% lot area which will be used for farming on each lot as required by Chapter 19.30A, Maui County Code.
D. Buildings and structures shall be more than 550 feet away from Hana Highway as proposed.

23. That the applicant's subdivision plans shall be revised to reflect the conditions of the revised view analysis map for the project. All lots shall identify specific building areas where structures can and cannot be built and shall identify 51% of the lot area to be used for agricultural purposes.

24. That all structures shall be restricted to one-story or 15 feet in height unless it can be shown that the topography of the site is lower than the existing grade of Hana Highway and the views will be not be obstructed. Cuts and fills shall be restricted to one and one-half (1.5±) feet. There shall be no solid fences or walls higher than four feet in height.

25. That the applicant shall submit a document containing the design guidelines and standards which meet the intent of this SMA permit and the guidelines and standards shall include provisions and standards which protect the views and coastal waters. This design guidelines and standards document shall be reviewed and approved by the Planning Department in consultation with the Maui County Urban Design Review Board. Prior to the sale or lease of the property, all landowners or lessees shall be provided a copy of this design guidelines and standards and the conditions of this permit.

26. That the conditions of this permit shall be filed with the Bureau of Conveyance and all landowners and lessees shall be given a copy of these conditions.

The conditions of this Special Management Area Use Permit shall be enforced pursuant to sections 12-202-23 and 12-202-25 of the Special Management Area Rules for the Maui Planning Commission.

In consideration of the foregoing, the Planning Department recommends that the Maui Planning Commission adopt the Planning Department's Report and Recommendation prepared for the November 10, 2003, meeting and authorize the Director of Planning to transmit said Findings of Fact, Conclusions of Law, Decision and Order on behalf of the Planning Commission.

APPROVED:

Michael W. Foley
Director of Planning
BEFORE THE MAUI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of
MALIKO BAY TRADING CO., LLC
FRANCESCO MORETTI, Director and Applicant

To Obtain a SPECIAL MANAGEMENT USE PERMIT for an Eight (8)-Lot Agricultural Subdivision and Related Improvements on 45 Acres of Land at Tax Map Key: 2-7-004: 006 And 2-7-036: 031, Hana Highway, Hamakoaloa District, Haiku, Maui Hawaii

DOCKET NO. SM1 2003/0010
Maliko Bay Trading Co., LLC
Francesco Moretti, Director (jmh)

MAUI PLANNING DEPARTMENT'S REPORT TO THE MAUI PLANNING COMMISSION
March 23, 2004, MEETING

DEPARTMENT OF PLANNING
COUNTY OF MAUI
250 SOUTH HIGH STREET
WAILUKU, MAUI, HI. 96793

(Special Management Area Use Permit)
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THE APPLICATION

This matter arises from an application for a Special Management Area Use Permit filed on June 12, 2003, and certified as complete and ready for processing by the Department of Public Works and Environmental Management on June 16, 2003. The application was filed pursuant to Chapter 205A, Hawaii Revised Statutes (HRS); Title 19, Zoning, Maui County Code; Chapter 202, Special Management Area Rules of the Maui Planning Commission; by Francesco Moretti, Director of Maliko Bay Trading Company, LLC; on approximately 45 acres of land, situate at Hamakoaloa District, Haiku, Island of Maui, and County of Maui, Hawaii, identified as Maui Tax Map Key: 2-7-004: 006 and 2-7-036: Portion of 031 ("Property").

(Exhibit 1 - Application, Exhibits 2 and 2A - Location Maps)

PURPOSE OF THE APPLICATION

The applicant is requesting a Special Management Area Use Permit for an agricultural subdivision on a 45-acre site. The proposed action involves the subdivision of the property into eight lots for residential/agricultural use (Lots 6A to 6H) and two roadway lots (Lots 6J and 6H). The lots vary in size from two (2) acres to twenty (20) acres. (Exhibit 2B)

APPLICABLE REGULATIONS

SPECIAL MANAGEMENT AREA USE PERMIT

Standards for reviewing a Special Management Area (SMA) Use Permit application
is found under Hawaii Revised Statutes, as amended (HRS) 205A-26 and §§12-202-10 and 12-202-11 of Chapter 202, Special Management Area (SMA) Rules of the Maui Planning Commission.

In evaluating an action the following factors, but not limited to same, may constitute a significant adverse effect on the environment:

(A) Involves an irrevocable commitment to loss or destruction of any natural or cultural resources;

(B) Significantly curtails the range of beneficial uses of the environment;

(C) Conflicts with the County's or the State's long-term environmental policies or goals;

(D) Substantially affects the economic or social welfare and activities of the community, County or State;

(E) Involves substantial secondary impacts, such as population changes and increased effects on public facilities, streets, drainage, sewage, and water systems, and pedestrian walkways;

(F) In itself has no significant adverse effect but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

(G) Substantially affects a rare, threatened, or endangered species of animal or plant, or its habitat;

(H) Is contrary to the state plan, county's general plan, appropriate community plans, zoning and subdivision ordinances;

(I) Detrimentally affects air or water quality or ambient noise levels;

(J) Affects an environmentally sensitive area, such as flood plain, shoreline, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh waters or coastal waters;

(K) Substantially alters natural land forms and existing public views to and along the shoreline; or

(L) Is contrary to the objectives and policies of HRS chapter 205A.

The following guidelines shall be used by the Authority in reviewing developments within the Special Management Area:
a. All development in the Special Management Area shall be subject to reasonable terms and conditions set forth by the authority to ensure:

(1) 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;

(2) Adequate and properly located public recreation areas and wildlife preserves are reserved;

(3) Provisions are made for solid and liquid waste treatment, disposition, and management which will minimize adverse effects upon special management area resources; and

(4) 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.

b. No development shall be approved unless the Authority has first found that:

(1) The development will not have any substantial adverse environmental or ecological effect, except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, or compelling public interest. Such adverse effects shall include, but not be 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;

(2) The development is consistent with the objectives, policies, and special management area guidelines of this chapter and any guidelines enacted by the legislature; and

(3) That the development is consistent with the county general plan, and zoning. Such a finding of consistency does not preclude concurrent processing when a general plan or zoning amendment may also be required.

c. The Authority shall seek to minimize, where reasonable:

(1) Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough, or lagoon;

(2) Any development which would reduce the size of any beach or
other area usable for public recreation;

(3) Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the special management areas and the mean high tide line where there is no beach;

(4) 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

(5) Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.

PROCEDURAL MATTERS

1. On July 9, 2003, the applicant published a Notice of Application and location map in the Maui News notifying the public of the applicant's intent to file the application with the County of Maui for an eight-lot agricultural subdivision of varying sizes, along with supporting infrastructure. A copy of the "Notice of Application" and Affidavit of Publication is on file in the Maui Planning Department.

2. On February 6, 2004, 47 days prior to the hearing, the Maui Planning Department mailed a notice to the applicant and appropriate state and county agencies notifying them of the scheduled public hearing.

3. On February 19, 2004, the applicant mailed a letter of notification and location map to all owners and recorded lessees within 500 feet of the subject property describing the application and notifying them of the scheduled hearing date, time and place by either certified or registered mail receipt (Return receipt requested for land use amendments). Copies of the letter, location map, list of owners and recorded lessees, certified and registered mail receipts and return receipts are on file in the Planning Department.


GENERAL DESCRIPTION

Description of the Property

1. The Property is located in the Haiku ahupuaa in the Hamakoaloa District above
Maliko Gulch to the west of the subject property. The subject property is located approximately 800 feet north of the intersection of Hana Highway and Haiku Road.

The Property is bounded by Hana Highway along the north and east sides. Adjacent to the Property to the east is the Haiku Makai agricultural subdivision. Access to the property is from Hana Highway to Apuwahi Road which leads into the Haiku Makai agricultural subdivision road, Maui Tax Map Key 2-7-038: 031, and ends at the subject property.

The Property is an irregular shaped property that is currently vacant and includes a portion of Maliko Gulch. The Property was originally in pineapple cultivation and originally part of the larger parcel owned by A&B Properties. The subject property was subdivided out with the development of the Haiku Makai subdivision. *(Exhibits 2 and 2A)*

2. **Land Use Designations** –
   a. State Land Use District – Agricultural and Conservation *(Exhibit 2D)*
   b. Paia-Haiku Community Plan – Agricultural *(Exhibit 2E)*
   c. County Zoning – Agricultural
   d. Other – Special Management Area *(Exhibit 2F)* and Flood Insurance Rate Map Zone C.

3. **Surrounding Uses** – Hana Highway wraps around the outer boundaries of the property from the west, north, and east of the subject property. All of the surrounding uses are agricultural, however, adjacent to the property is the Haiku Makai Subdivision, a two-acre agricultural development with little, if any agriculture uses. The Haiku Makai subdivision is not located in the Special Management Area and was not subject to review by the Planning Commission.

   North – Hana Highway, Skye Lewis’ property, Kalawai’a Cemetery, ocean

   East -- Hana Highway, Clemence/Lewis subdivision, agricultural, pineapple fields

   South -- Haiku Makai two-acre subdivision, Haiku Road, agricultural lands

   West – Hana Highway, Maliko Bay, Maliko Gulch

4. **Topography, Climate, Soils, Flora and Fauna.** According to the applicant’s archeological report, the property is located on the lower northeastern slopes of Haleakala Volcano, on a plateau east of Maliko Gulch. The topography of the property is relatively level,
gently sloping to the west towards Maliko Gulch. Elevation ranges from 140 to 180 feet above mean sea level. Rainfall averages from 50 to 80 inches a year, predominantly occurring during the winter months between November and February.

Soil in the project area includes Haiku silty clay, 3-7% slopes. This soil occurs on upland areas developed from material derived from basic igneous rock. Runoff is slow, and the erosion hazard is slight. This soil is primarily used for pineapple.

Vegetation on the property includes California grass, koa haole, isolated stands of pine trees, and fallow pineapple. A linear row of pine trees, probable wind breaks to protect the pineapple fields, extends along the northern perimeter of the parcel between Hana Highway and the access road.

The U.S. Corps of Engineers Wetland Maps do not indicate the presence of wetlands in or around the subject property.

5. **Archaeological and Historical Resources.** Archaeological Services Hawaii conducted an archaeological inventory survey of 8 acres of the 43.6 acre site and submitted a report dated May 2002. The entire parcel was a former pineapple field and due to extensive previous disturbances from pineapple cultivation, subsurface testing by backhoe was conducted at eight trenches along the northern portion of the parcel. This approach was recommended by SHPD due to the presence of significant cultural remains across Hana Highway to the north on the Sky Lewis' property. *(Exhibit 2C)*

Further, the archaeological report states that previous archaeological field inspection and by letter dated June 7, 1994, to Mr. Glen Ueno of the Department of Public Works, by the SHPD archaeologist (Donham) found that several traditional Hawaiian artifacts, including an *ulumaika* stone, an adz fragment, a grounded tool, and a polished flake, were identified on the surface of Lot 1, the subject property. No intact cultural deposits were found associated with these isolated artifacts.

The Archaeological Inventory Survey was conducted on parcel 2-7-004: 006 by Lisa-Rotunno-Hazuka. The survey included a surface walk-through followed by selective placement of backhoe trenches. A total of eight (8) trenches were evaluated. No cultural remains were encountered during initial subsurface testing. In general, four stratigraphic layers were exposed in all of the trenches. Layer I was recent overburden. Underlying Layer I was Layer II, the till zone from pineapple cultivation. Underlying Layer II was a homogenous silty clay loam (Layer III) and compact, homogenous clay (Layer IV). Layer IV was not encountered in TR-6.

Due to the negative results in the 8-acre portion of the project area, together with the previous disturbances from pineapple cultivation, no further archaeological work including monitoring during construction-related activities was recommended by the applicant's archaeologist. For the remaining portion of the project area, since no subsurface testing was required by SHPD-DLNR, on-call monitoring during initial grubbing and grading activities was
recommended to ensure that any unanticipated subsurface cultural remains or deposits are properly documented. The level of monitoring would be dependent on the proposed depth of grading and construction.

6. **Flood and Tsunami.** According to data from the Flood Insurance Rate Map (FIRM), effective June 1, 1981, prepared by the Federal Emergency Management Agency, Federal Insurance Administration, the subject parcel is located in an area of minimal flooding: Flood zone hazard "C."

**Existing Services**

1. **Water** – The existing property is not served by a public water system. However, the adjacent subdivision is served by a public water system.

2. **Sewers** – There are no public sewer systems in the area.

3. **Drainage** – According to the applicant, the subject property is located on a knoll, and is in the same undeveloped state as when pineapple cultivation ceased a number of years ago. The applicant states that there is no offsite runoff flowing through the property. The onsite runoff sheets flow through the project site in an East to West direction. The only "drainage system" currently in place are those pineapple cultivation swales which prevent discharge to Maliko Bay. The onsite runoff sheets flow through the project site in an East to West direction, where most of it is absorbed. It then travels to Hana Highway in the direction of Maliko Gulch.

   According to the preliminary drainage report prepared by the applicant’s consultant, Wayne I. Arakaki Engineer, LLC., March 2002, and revised by July 2002, and May 2003, the site currently generates approximately 38.5 cubic feet per second (CFS) during a 50 year one hour event. Post-development conditions would generate 0.59 cfs in addition to existing drainage.

   According to the applicant, runoff from the site now only occurs with the larger rain events. During those times, Maliko Stream typically runs outside of its normal channel, and the water is brown with runoff and sediment from several thousand acres of sugar and pineapple fields around Haiku Town. It sometimes takes a number of days for the stream to return to "normal" conditions.

4. **Roadways, Curbs, Gutters and Sidewalks** – The project is located adjacent to Hana Highway on the eastern side of Maliko Gulch and is near the intersection of Haiku Road and Hana Highway. Access to the project site is from Haiku Road, through the Haiku Makai Subdivision via Apuwai Street, and to the subject property via Tax Map Key 2-7-36: 031. *(Exhibit 2A)*
Hana Highway is a State Highway that is the primary connection between the western part of Maui and the area towards Hana. The applicant provided data from the State Department of Transportation (DOT). On April 23-24, 2001, the DOT counted a total of 11,696 vehicles during a 24-hour traffic count just east of Hookipa Park.

Apuwai Street is an agricultural road, built to County standards with a 50-foot right of way, and 20 feet of pavement located within the Haiku Makai subdivision. A traffic count was taken on May 19, 2003, at the intersection of Apuwai Street and Haiku Road. This is a three-way intersection with the only controls being the stop sign at Apuwai Street before drivers turn right or left out of the subdivision. The count during the peak period between 3:00 p.m and 6:00 p.m, considered the heaviest traffic period of the day. Cars were counted in the Haiku-bound direction, toward Hana Highway, and those that turned in and out of the Haiku Makai subdivision. During this time period, 691 cars drove by the Apuwai Street intersection; 407 drove toward Haiku town, and 284 drove toward Hana Highway. In addition, a total of 71 cars either entered or exited the Haiku Makai subdivision. The following chart summarizes the results.

<table>
<thead>
<tr>
<th>Time p.m.</th>
<th>Haiku Bound</th>
<th>Hana Highway Bound</th>
<th>In Haiku Makai</th>
<th>Out Haiku Makai</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00-3:15</td>
<td>34</td>
<td>25</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3:15-3:30</td>
<td>32</td>
<td>27</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>3:30-3:45</td>
<td>28</td>
<td>32</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3:45-4:00</td>
<td>35</td>
<td>34</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4:00-4:15</td>
<td>41</td>
<td>25</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>4:15-4:30</td>
<td>38</td>
<td>32</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>4:30-4:45</td>
<td>31</td>
<td>21</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4:45-5:00</td>
<td>33</td>
<td>20</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>5:00-5:15</td>
<td>31</td>
<td>18</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>5:15-5:30</td>
<td>34</td>
<td>16</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>5:30-5:45</td>
<td>34</td>
<td>18</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>5:45-6:00</td>
<td>36</td>
<td>16</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Totals</td>
<td>407</td>
<td>284</td>
<td>46</td>
<td>25</td>
</tr>
<tr>
<td>Percent of Total</td>
<td>53%</td>
<td>37%</td>
<td>6%</td>
<td>3%</td>
</tr>
</tbody>
</table>
5. **Electrical and Telephone** -- Overhead/underground electrical and telephone services are available from the Haiku Makai Subdivision.

6. **Parks and Recreational Facilities** -- Nearby public recreational facilities in the area include the Haiku Community Center and adjacent park, the Maliko boat launching ramp, Hookipa Beach Park, and various shoreline accesses.

7. **Schools** -- There are two public elementary schools in the Pa'ia-Ha'iku community: Haiku School and Paia School. There are also two private elementary schools in the area: Montessori School of Maui, Doris Todd Memorial Christian School. In addition to these, there is Horizons Academy of Maui, which provides special education for children with learning disabilities. According to the Department of Education, intermediate students living in the Pa'ia-Ha'iku community attend Kalama in Makawao, and high school students attend King Kekaulike High in Pukalani. Using the State of Hawaii Department of Education multipliers for standard housing types of school aged children, the student population of the affected schools is projected to be the following (approximations):

<table>
<thead>
<tr>
<th>Schools</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haiku School (K-5)</td>
<td>412</td>
<td>395</td>
<td>410</td>
<td>401</td>
<td>399</td>
<td>396</td>
</tr>
<tr>
<td>Kalama (6-9)</td>
<td>1175</td>
<td>1129</td>
<td>1060</td>
<td>1041</td>
<td>1010</td>
<td>995</td>
</tr>
<tr>
<td>King Kekaulike (10-12)</td>
<td>1425</td>
<td>1426</td>
<td>1454</td>
<td>1439</td>
<td>1431</td>
<td>1386</td>
</tr>
</tbody>
</table>

8. **Solid Waste** -- Only two landfills are currently operating on Maui, the Central Maui Sanitary Landfill in Puunene and the Hana Landfill. Residential solid waste collection is provided by the County and taken to the Central Maui Landfill which also accepts waste from private refuse collection companies. Also available to Paia-Haiku residents is the private refuse collection service of the Maui Recycling Service. In addition, a recycling center is located at the Haiku Community Center.

9. **Public Services** -- The Paia Fire Station serves the Haiku area, and is located approximately three (3) miles from the subject property. Patrol officers on assignment provide police services for the Haiku area from the substation at the Haiku Community Center, approximately one mile away. The nearest public library is located in Makawao town.

The nearest hospital is Maui Memorial Hospital located in Wailuku providing acute, general and emergency care services from its 195-bed facility. There are a few private, independent medical and dental offices located in Haiku, Paia and Makawao.

Page 10
DESCRIPTION OF THE PROJECT

Subdivision and Lot Sizes. The applicant, Maliko Bay Trading Company LLC, is proposing to develop an 8-lot agricultural subdivision on two lots, TMKs 2-7-004:006 (44.135 acres) and 2-7-036:031 (0.5 acres). Together they are the “subject property.” It will be developed in accordance with Maui County Code, Chapter 19.30A Agricultural District, which allows agricultural uses, two farm dwellings, and structures used in support of agricultural uses. The zoning allows for a minimum lot size of 2-acres, and is subject to the sliding scale” depending on the size of the original parcel. The smaller lot (TMK2-7-036: 031) is for roadway purposes only, and was created with the Haiku Makai subdivision.

<table>
<thead>
<tr>
<th>Project Parcel Size Breakdown 2-7-004:006</th>
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<tbody>
<tr>
<td>Lots</td>
</tr>
<tr>
<td>Largest Lot</td>
</tr>
<tr>
<td>4 acres or more</td>
</tr>
<tr>
<td>2 acres or more</td>
</tr>
<tr>
<td>Roadway</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

The 44.135-acre lot is proposed to be subdivided into eight (8) lots, and one roadway lot. The largest will be 20.347 acres; three (3) will be over four acres; and four (4) will be over two acres. As a result, 78.59 percent (approximately 34.7 acres) of the original property will remain in parcels of over 4 acres, and 20 percent will be lots of approximately two-acres. The use of the lots shall be restricted to agricultural and the permitted accessory uses only. No more than one residence shall be constructed on any lot unless it meets the requirements of the zoning, and an additional SMA assessment is filed.

Maliko Bay subdivision has been purposely designed with the largest lot closest to Hana Highway. This design will aid in maintaining the agricultural and open space character of the area. It is proposed for equestrian uses as the owner has been approached by two parties interested in leasing it on a long-term basis for either an equestrian center or polo field. Because it is premature to develop layouts or concepts plans, any equestrian facility will be covered under a separate SMA application. If a center is not built on the site, it will be made available to another owner who desires a large agricultural lot.

Agriculture. The two to five acre lots are suited for either commercial agricultural uses, or subsistence agricultural uses for the individual owners. One incentive for agricultural uses will be the provision of low-cost water through the private water system. The water will be suitable if an equestrian center is built, so the lots may be attractive to horse owners.
are several proposed restrictions that will restrict some agricultural uses such as hog farming, commercial poultry, roosters, and commercial dog breeding.

**View Corridors.** View corridors linking Hana Highway to the West Maui Mountains and Haleakala will be maintained throughout the property by incorporating a building envelope for each lot. By stipulating where owners may build, any impacts to the public view plane will be minimized. *(Exhibit 2G - 2l Project View Analysis)*

**Water Supply.** The source of water for the proposed project is by two private water systems, permitted by the State Water Commission (Permits No. 5620-06 and 5620-05), and the relative water analysis. The wells are drilled into the basal aquifer, and are cased entirely in concrete. One well will serve Lots 6A and 6G, the other will serve the remaining lots. There will be essentially two separate systems, though one well could back up the other in case of emergency.

The systems will be private and maintained by the homeowners association. The association will have the responsibility to monitor and maintain water quality and productivity to the necessary levels. Both systems are subject to Hawaii Administrative Rules, Title 11, Chapter 20, Rules Relating to Potable Water Systems. The association and all lot owners will comply with all legal requirements for a privately owned system, and nothing will be done to create a public system.

**Architecture.** The applicant is proposing to sell vacant lots. While individual owners are responsible for design and construction, the CC&Rs will dictate certain requirements for architecture and massing. For instance, house colors will be earth tones, and any second floors will be limited to 40 percent of the first floor square footage. These requirements are to ensure compatibility within the project, but also to reduce any visual impacts from the public rights of way.

**Access.** Access to the site will be provided from Apuwai Street (Haiku Makai subdivision road running off of Haiku Road) via Ulua Place (as approved by Street Name Commission). The road, Ulua Place, will be conveyed as a public road and is the designated road for Maliko Bay Subdivision.

Ulua Place will be 40-feet wide (20-feet paved), with two private driveways to service lots 6C, D, E and G.

**Site improvements.** Site improvements will consist of one asphalt paved public road, landscaped planting and grassing, and gravel driveways. Underground utility improvements will consist of electrical, telephone, and cable distribution systems along with private water delivery and fire protection systems.

**Construction.** Construction is anticipated to begin once all of the required State and
County permits have been issued. It is anticipated that this operation will require approximately 6-weeks to complete. There will be short-term construction related impacts to the surrounding environment. Mitigation will include best management practices.

**BRIEF HISTORY:**

1. On August 19, 2002, an SMA Exemption was issued for two, 200-square foot, post and pier tool sheds located on the edge of Maliko gulch.
2. On December 30, 2002, an SMA minor permit was issued for the subject 8-lot subdivision.
3. On January 28, 2002, the SMA Exemption issued on August 19, 2002, and the SMA minor permit issued on December 30, 2002 were rescinded. The Planning Director determined that the assessments and determination were made on the basis of inadequate and insufficient information. *(Exhibits 3 and 3A)*
4. February 13, 2003 was the last day for the applicant to file an appeal of the rescission of the subject subdivision. The applicant did not file an appeal.

**REVIEWING AGENCIES:**

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<tr>
<th>AGENCIES</th>
<th>DATE LETTER RECEIVED</th>
<th>COMMENTS</th>
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<tbody>
<tr>
<td>1. State Land Use Commission - DBEDT</td>
<td>7/24/03</td>
<td>Subject parcels primarily designated State Agricultural District; Steeper, western portion of TMK 2-7-04; 006 along Hana Highway is designated State Conservation District. Parcels consist of &quot;Prime&quot; agricultural lands. Certain agricultural uses will be prohibited due to noise impacts. SLUC concerned about proliferation of residential subdivisions in the Agricultural District with little or no connection to agriculture. These developments purport to be agricultural but include negligible information on specific agricultural activities. More detail on how agriculture will be promoted as an integral part of the project and the specific restrictions on agriculture activities. Time-frame for implementing any farm plan with relation to development of farm dwellings should be discussed. Additional information on capacity and cost for lot owners to access nonpotable water sources to support agricultural activities. Defers to judgement of County. <em>(Exhibit 4)</em></td>
</tr>
<tr>
<td>2. Office of Planning - DBEDT</td>
<td>No response.</td>
<td></td>
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<td>AGENCIES</td>
<td>DATE LETTER RECEIVED</td>
<td>COMMENTS</td>
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<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>3. Dept of Hawaiian Home Lands</td>
<td>No response</td>
<td>Archaeological: Notice pages 7 and 8 of archaeological report missing. These pages provide summary of Native Hawaiian prehistoric and historic sites on neighboring property which are considered to be significant. Withhold its opinion until missing pages received.</td>
</tr>
<tr>
<td>4. Office of Hawaiian Affairs</td>
<td>8/13/03</td>
<td>Compliance with the Maui Community Plan: OHA questions whether project truly conforms to the Community Plan. While project not marketed as affordable, it claims to conform to Community Plan by offering wide range of housing possibilities. Covenant restrictions suggest that affordable housing options will not be available. Also concerned that second homes on the lots allowed under Maui ordinance will become Bed and Breakfasts rather than long-term rentals. OHA suggests to ensure rural character of subdivision, transient accommodations be clearly banned in the subdivision.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compliance with Community Requests: Applicant promised Haiku Community Association that maximum roof-top building height to 20 feet. However the covenant of restrictions limits maximum roof-top height to 30 feet above the underlying preconstruction existing grade of the land. Water: Questions long term sustainability of the private wells. Note that a &quot;private well&quot; becomes public when it has at least 15 service connections or regularly serves an average of at least 25 individuals daily. Since the subdivision can support 16 homes and approximately 43 people (p. 16), the private systems will more than likely become a public system in the near future. This contradicts a statement on p. 9 which states that nothing will be done to create a public system. Issue should be clarified. Coastal waters: OHA received notice from resident about coastal waters. Note projected increase in runoff is 6% due to development on the property. Increase run-off will be directed into a grass swale which will eventually direct the runoff away from the property. Where is runoff being directed? This area already has runoff-problems during storms suggest effort be made to ensure that there be no runoff into the coastal waters. (Exhibit 5)</td>
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<td>5. NRCS, US Dept of Agriculture</td>
<td>7/15/03</td>
<td>Subdivision has a major drainage outlet or gulch located within. This outlet may be needed to adequately provide drainage for several lots within the subdivision. To accomplish this, an easement would be necessary. A culvert is necessary under field road adjacent to Lots 6B, 6C, 6E and 6F. (Exhibit 6)</td>
</tr>
<tr>
<td></td>
<td>8/1/03</td>
<td>Met with Francesco Moretti regarding comments on subject application and he gave assurances that comments will be addressed. (Exhibit 6A)</td>
</tr>
<tr>
<td></td>
<td>3/1/04</td>
<td>Applicant is cooperator and has agreement to be good steward and implement conservation plan for his farming activities. Following are major concerns and findings of subject parcel: 1. August 19, 2002 - Met NRCS approval regarding 30-foot drainage easement which is the natural drainage area. Existing vegetation is Calif grass and Koa Haole trees will prevent erosion and all runoff will flow naturally thru natural waterway. No buildings or structures allowed in natural drainage area. Approval granted for roadway construction and the drainage easement identified on construction plans. 2. Site visit 12/03, 1/04, 2/04 during torrential rainstorm. No runoff or erosion damage onsite or on highway. Appears new subdivision above subject property designed a drainage system which takes care of drainage/runoff in that area. The access roads on Moretti’s farm and subdivision area were not affected during the storms. Has perimeter vegetative buffers and grassed with Calif grass &amp; natural drainage system is intact which reduces all severe impacts of erosion &amp; runoff. 3. Working on agricultural plot which is plowed @1 acre and there are no rills, sheet or gully erosion before and after the storm. Maui Pine controlled erosion by implementing conservation practices, some of same practices planned for Moretti such as Conservation Cover, grassed waterway, nutrient management, pest management, and contour planting will prevent environmental degradation.</td>
</tr>
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<td>AGENCIES</td>
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<td>COMMENTS</td>
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<td>----------------------------------------------</td>
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<tr>
<td>5. NRCS, US Dept of Agriculture (cont)</td>
<td></td>
<td>4. NRCS major concerns is the need for plant windbreaks which will reduce damage to new crops. Appropriate wind protection will be implemented. Soils are very deep, well drained and annual rainfall is 50 to 80 inches. (Exhibit 6C-1)</td>
</tr>
<tr>
<td>6. DLNR - State Historic Preservation Division (SHPD)</td>
<td>7/30/03</td>
<td>An acceptable archaeological assessment or inventory survey found no historic properties. Thus, &quot;no historic properties will be affected&quot; by this undertaking. (Exhibit 7)</td>
</tr>
<tr>
<td>7. Department of Water Supply</td>
<td>8/1/03</td>
<td>The Haiku Agricultural Subdivision created two large lots in 1994. (One of the lots is the subject property and the other is the Haiku Makai subdivision.) The subdivider requested BWS to allow this subdivision to get final approval with construction of water system improvements deferred. The request approved and agreement entered into in 1996. Two of the important provisions of the agreement are: 1) the requirements for each lot of the subdivision are deferred until such time that each of the lots are developed, and 2) the subdivider shall not make any request for residential building permits or water service for lots 1 (subject property) and 2 until the shortage is terminated and water sources are available to serve the subdivision. Final approval was granted in 1998. One lot had been re-subdivided into 30 agricultural lots. The other lot created is the subject property currently owned by the applicant. In order to address the water source provision of the 1996 agreement, the subdivider (A&amp;B) provided additional water source to BWS from the Waiala Ditch. With the availability of water source capacity for this property, the applicant was recently offered a 5/8&quot; water meter. Since no response was received, the property was removed from the priority list. The application material states that the proposed project will be served by a private water system with two wells and an open in-ground reservoir with a capacity of 30,000 gallons for fire protection. DWS recommends that the applicant be required to provide domestic, fire and irrigation services in accordance with standards.</td>
</tr>
<tr>
<td>AGENCIES</td>
<td>DATE LETTER RECEIVED</td>
<td>COMMENTS</td>
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<tr>
<td>7. Department of Water Supply (cont)</td>
<td>9/15/03</td>
<td>Project is served by Haiku Aquifer. This aquifer has a sustainable yield of 31 MGD. According to the 1990 State Water Resources Protection Plan, a more conservative estimate is 15 MGD. The total known pumpage on this aquifer as of June 2003 is 3.31 MGD. The DWS has long published plans to use 10-15 MGD from the aquifer to meet municipal needs. Suggest applicant be required to report monthly pumpage to DWS as well as the Commission on Water Resource Management (CWRM). Owner proposes to sell vacant lots, recommend applicant be made aware that private systems serving more than 25 people over 60 days of the year are subject to the DOH regulations. Depending on intensity of use, consumption for an agricultural project of this acreage would be approximately 220,000 gpd by standards. Empirical use in the Haiku-Pauwela area tends to be lower. To protect surface and ground water resources encourage applicant to adopt BMPs. Pleased applicant intends to use plants appropriate to this area. Native plants adapted to the area, conserve water and protect the watershed from degradation due to invasive alien species. Conservation measures to future landowners/homeowners should be conveyed. (Exhibit 8) Supercedes comment letter of August 1, 2003. Only additional information noted: Anticipated consumption would range from 4,800 gpd for single family units to 73,000 gpd based on average use of agricultural meters in Haiku. (Exhibit 8A)</td>
</tr>
<tr>
<td>AGENCIES</td>
<td>DATE LETTER RECEIVED</td>
<td>COMMENTS</td>
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</tbody>
</table>
2. All roadway and drainage facilities shall be designed and constructed in compliance with applicable County standards and Maui County Code Title 18.  
3. The drainage system shall comply with the provisions of the drainage rules with additional runoff generated by the development contained on-site and the design engineer shall verify that there will be no additional adverse impacts to adjacent and downstream properties.  
4. The grading for the project shall comply with the provisions of the grading ordinance. BMPs shall be implemented.  
5. The subdivision shall comply with the provisions of the subdivision ordinance. DPWEM's preliminary approval letter of March 11, 2002, with April 9, 2002, and May 20, 2002 amendments are attached. (Exhibits 9, 9A, 9A-1, 9A-2) |
<p>| 9. Dept of Transportation, Maui Office        | 7/23/03              | Comments on Drainage Report and Soil Erosion Control Report: How can developer guarantee that project will maintain the existing conditions so that the natural drainage patterns will remain. What happens when lots are sold and developed? Calculations on Page 5 need to include driveways, roofs, sidewalks for individual lots. Will a retention basin be built and maintained on Lot 6H? No additional runoff will be allowed into Hana Highway. (Exhibit 10) |
| 10. Dept. Of Transportation, Honolulu Office  | 9/2/03               | The applicant should be advised that grading of the lots should not result in the diversion of surface water run-off onto Hana Highway. (Exhibit 10A)                                                                 |
| 11. Maui Electric Company                     | 8/5/03               | No objections. MECO has received a service request (M0009579) and is currently working with its electrical consultant. (Exhibit 11)                                                                                 |
| 12. Dept of Parks and Recreation              | 7/28/03              | No comments to offer at this time. (Exhibit 12)                                                                                                                                                           |
| 13. Dept of Education                         | 7/24/03              | No response.                                                                                                                                                                                             |
| 14. Police Department                         | 7/24/03              | 16 residents with 16 vehicle trips would be a 2.2% increase in traffic. This is not taking into consideration possible employees who will be leaving at that time as well. No major concerns. (Exhibits 13 and 13A) |</p>
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<th>AGENCIES</th>
<th>DATE LETTER RECEIVED</th>
<th>COMMENTS</th>
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</thead>
<tbody>
<tr>
<td>15. Fire Department</td>
<td>7/25/03</td>
<td>No response.</td>
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</table>
| 16. Department of Health - Maui | | 1. Protection of the potable water wells should be a major focus in the design and installation of all individual wastewater disposal systems in the subdivision. Plan review and approval of the individual wastewater disposal systems by the Wastewater Branch of the DOH is required.  
2. Two water systems will serve the subdivision. The DOH's authority over drinking water quality applies only to "public water system" as defined in Chapter 11-20, Hawaii Administrative Rules. A "public water system" is a system that provides water for at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of a year. By definition, the system serving this subdivision does not qualify as a public water system. However, it is recommended that the parameters for water quality and maximum contaminated levels of the HAR, Title 11, Chapter 20 be used to monitor the wells. DBCP has been detected in other water sources in the area. (Exhibit 14) |
| 17. Dept of Land and Natural Resources (DLNR), Land Division, Commission on Water Resource Management | 8/4/03 | Transmitting Engineering Division and CWRM comments. No other comments to offer. (Exhibit 15)  
Recommend coordination with the county government to incorporate this project into the county's Water Use and Development Plan. In response to the rescinding of an earlier approved SMA, the Commission staff withheld acceptance of well completion reports and issued a notice of potential violation to the applicant for wells that have been proceeding through CWRM regulatory procedures (see attached 2/10/03 letter). CWRM await the County's final disposition on the SMA permit before finalizing CWRM regulatory well construction and pump installation procedures which will allow the applicant to pump his ground water sources (Well No.5620-05 and 06). (Exhibits 15A, 15B, & 15B-1)  
Project site is located in Zones X (unshaded) and A. Zone X is an area determined to be outside the 500-year floodplain. The National Flood Insurance |
AGENCIES

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<th>DATE LETTER RECEIVED</th>
<th>COMMENTS</th>
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<tr>
<td>18. Dept of Land and Natural Resources (DLNR) (cont) Engineering Division Maui District Land Office Division of State Parks Office of Conservation and Coastal Lands</td>
<td>development within Zone A. All applicable regulations can be found in 44CFR 60. The project must comply with rules and regulations of the National Flood Insurance Program. (Exhibit 15C-1) No comments. (Exhibit 15D) No comments. (Exhibit 15E) No comments. (Exhibit 15F)</td>
</tr>
<tr>
<td>19. Department of the Army, U.S Army Engineer District</td>
<td>7/23/03 a. Based on information provided, a DA permit is not required. b. The flood hazard information proved on page 12 of the SMA application is correct. (Exhibit 16)</td>
</tr>
<tr>
<td>20. Dept. Of Accounting and General Services- Survey Division</td>
<td>7/30/03 No Stations or Benchmarks affected. No objections to project. (Exhibit 17)</td>
</tr>
</tbody>
</table>

ANALYSIS

LAND USE
State Land Use

1. The subject property is in the State Agricultural and Conservation Districts. (Exhibit 2D) The proposed action involves the subdivision and construction of eight (8) lots of varying sizes for agricultural and residential use and two roadway lots.

The proposed uses are consistent with the agricultural and conservation designation of the property and conforms to Chapter 205, Hawaii Revised Statutes.

2. The State Land Use Commission (SLUC) stated in their letter of July 18, 2003, that the property is located primarily in the State Agricultural District. The steeper, western portion of TMK 2-7-004: 006 along Hana Highway is designated within the State Land Use Conservation District. They further commented that they are concerned with the proliferation of residential subdivisions in the Agricultural District with little or no connection to agriculture.

These developments purport to be agricultural subdivisions but include negligible information with respect to the specific agricultural activities that would be conducted on the land and when such activities would commence relative to the construction of the farm dwellings.
They recommend more detailed discussion and analysis on how “agriculture will be promoted as an integral part of the project” and restrictions on agricultural activities. The time-frame for implanting any farm plan with relation to the development of farm dwellings also need to be discussed.

The applicant should also provide some additional information as to the capacity and cost for lot owners to access nonpotable water sources to support agricultural activities. Given the location, scope, and the nature of the proposed activity, the Commission defers to the judgment of the County of Maui regarding other matters in this application. (Exhibit 4)

The Planning Department received an undated letter on August 29, 2003, from the applicant to the Executive Officer of the State Land Use Commission (Mr. Ching). The applicant stated that they are pursuing an equestrian center on roughly half of the property. Several individuals have also indicated interest in boarding horses on the lots. The applicant also noted that the Planning Department requires farm plans be approved prior to issuance of a building permit for a house. The applicant further noted that according to the Maui County Code, a farm dwelling is accessory to a farm and the predominant use of the property (at least 51% of the area) must be for agricultural purposes. The applicant also noted that at the time the application was filed he had intended to restrict hogs, commercial poultry, roosters, and commercial dog breeding, but the legislature, overriding the Governor’s veto, passed Senate Bill No. 255 which prohibits restricting these uses. (Exhibit 4A)

The issue of water is discussed in the section relating to water in this report.

3. The Office of Planning and the Department of Hawaiian Home Lands did not respond.

Hawaii State Plan

The proposed project can be in conformance with a number of the goals, objectives and policies of the Hawaii State Plan. In particular, the project could meet the following objectives and policies of Section 226-7, “Objectives and policies for the economy—agriculture;” Section 226-11, “Objectives and policies for the physical environment—land based, shoreline, and marine resources;” Section 226-12, “Objectives and policies for the physical environment—scenic, natural beauty, and historic resources;” Section 226-13, “Objectives and policies for the physical environment—land, air, and water quality.”

Maui County General Plan

1. The Maui County General Plan, 1990 Update (Adopted September 27, 1991, Ordinance No. 2039) sets forth broad objectives and policies to help guide the long-range development of the County. As stated in the Maui County Charter:
"The purpose of the General Plan is to recognize and state major problems and opportunities concerning the needs and the development of the County and the social, economic and environmental effects of such development and set forth the desired sequence, patterns and characteristics of future development."

The General Plan identifies five major themes as follows:

1. Protect Maui County's agricultural lands and rural identity
2. Prepare a directed and managed growth plan
3. Protect Maui County's shoreline and limit visitor industry growth
4. Maintain a viable economy that offers diverse employment opportunities for residents
5. Provide for needed residential housing

2. Specific objectives and policies that are related to the proposed project are:

"I. POPULATION, LAND USE, THE ENVIRONMENT AND CULTURAL RESOURCES

A. POPULATION  Objective 1: To plan the growth of resident and visitor population through a directed and managed growth plan so as to avoid social, economic and environmental disruptions.

Policies
a. Manage population growth so that the County's economic growth will be stable and the development of public and private infrastructures will not expand beyond growth limits specified in the community plans or negatively impact our natural resources.

b. Balance population growth by achieving concurrency between the resident employee work force, the job inventory created by new industries, affordable resident/employee housing, constraints on the environment and its natural resources, public and private infrastructure, and essential social services such as schools, hospitals, etc.

d. Provide for population density and distribution patterns within the appropriate community plans which balance with the County's fiscal ability to provide necessary essential services.

B. LAND USE  Objective 1: To preserve for present and future generations existing geographic, cultural and traditional community lifestyles by limiting and managing growth through environmentally sensitive and effective use of land in accordance with the individual character of the various communities and regions of the County.

Policies
b. Provide and maintain a range of land use districts sufficient to meet the social, physical, environmental and economic needs of the community.

c. Identify and preserve significant historic and cultural sites.

e. The County will explore ways to develop a Maui County Open Space Program which will preserve important scenic, cultural, recreational, environmental and open space resources.

Objective 2: To use the land within the County for the social and economic benefit of all the County's residents.

Policies
a. Mitigate environmental conflicts and enhance scenic amenities, without having a negative impact on natural resources.

**Objective 3: To preserve lands that are well suited for agricultural pursuits.**

**Policies**

a. Protect prime agricultural lands from competing nonagricultural land uses.

b. Promote the use of agricultural lands for diversified agricultural pursuits by providing public incentives and encouraging private initiative.

c. Support the right to farm consistent with the identification of productive agricultural lands.

d. Discourage the conversion, through zoning or other means, of productive or potentially productive agricultural lands to nonagricultural uses, including but not limited to golf courses and residential subdivisions.

C. **ENVIRONMENT**

**Objective 1: To preserve and protect the county's unique and fragile environment.**

**Policies**

a. Preserve for present and future generations the opportunity to experience the natural beauty of the islands.

b. Preserve scenic vistas and natural features.

c. Support programs to reduce air, land and water pollution.

d. Support programs to protect rare and endangered species and programs which will enhance their habitat.

e. Discourage the introduction of noxious foreign species into Maui County's unique island ecosystems.

**Objective 2: To use the County's land-based physical and ocean-related coastal resources in a manner consistent with sound environmental planning practice.**

**Policies**

a. Preserve, enhance and establish traditional and new environmentally sensitive access opportunities for mountain and ocean resources.

b. Evaluate all land based development relative to its impact on the County's land and ocean ecological resources.

D. **CULTURAL RESOURCES**

**Objective 1: To preserve for present and future generations the opportunity to know and experience the arts, culture and history of Maui County.**

**Policies**

b. Encourage the recordation and preservation of all cultural resources, to include cultural significant natural resources.

c. Establish programs to restore, maintain and interpret significant cultural districts, sites and artifacts in both natural and museum settings.

e. Identify and maintain an inventory of significant and unique cultural resources for special protection.

B. **VISITOR INDUSTRY**

**Objective 2: To control the development of visitor facilities so that it does not infringe upon the traditional social, economic and environmental values of our community.**

**Policies**

a. Limit visitor industry development to those areas identified in the appropriate community plans, and to the development of projects within those areas which are in conformance with the goals and objectives of those plans.

d. Require that new developments contribute to their fair share to
infrastructural costs.

Objective 3: To ensure that visitor industry facilities shall not disrupt agricultural and social pursuits and will not be allowed to negatively impact the County's natural and cultural resources.

Policies
a. Restrict the transient rental use of single-family housing in residential zones.

C. AGRICULTURE

Objective 1: To foster growth and diversification of agriculture and aquaculture throughout Maui County.

Policies
a. Support programs to maintain the viability of the sugar pineapple industry.
b. Support and promote programs to maintain the viability of diversified agriculture, specialty crops, forestry and aquaculture.

c. Ensure the availability of land that is well suited for agricultural production.
d. Ensure the availability of adequate irrigation water for agricultural purposes during periods of limited rainfall.
e. Support “right-to-farm” provisions in the event potential conflicts arise from adjacent residential uses.
f. Discourage establishment of pseudo-agricultural subdivisions.

d. Improve catchment systems and transmission systems to reduce runoff.
e. Maximize use of existing water resources by expanding storage
capabilities.

f. Discourage the use of standpipes for fire protection purposes.
g. Promote water conservation practices to make the most efficient use of existing water sources.
h. Support the establishment of potable groundwater use priorities which prohibit the use of potable water for the irrigation of golf courses, golf driving ranges, parks and landscaped open space.
i. Develop a method of allocation of water based on community need.

C. LIQUID AND SOLID WASTE

Objective 1. To provide efficient, safe and environmentally sound systems for the disposal and reuse of liquid and solid wastes.

Policies

a. Explore new waste disposal methods that are safe, economical, environmentally sound, and aesthetically pleasing, and that minimize the disposal of wastes in landfills.
b. Establish programs for the development of waste disposal systems which anticipate planned growth.
c. Establish comprehensive environmental and public health standards for the treatment, disposal and/or reuse of liquid and solid waste.
d. Develop comprehensive and publicly acceptable methods of recycling solid and liquid waste.
e. Encourage and promote public awareness to reduce, reuse, recycle and compost waste materials.

E. PUBLIC UTILITIES AND FACILITIES

Objective 1: To anticipate and provide public utilities which will meet community needs in a timely manner.

V. SOCIAL INFRASTRUCTURE

B. RECREATION AND OPEN SPACE

Objective 1: To provide high-quality recreational facilities to meet the present and future needs of our residents of all ages and physical ability.

d. Develop facilities that will meet the different recreational needs of the various communities.
g. Expand, improve and create new beach rights-of-way, parks, campsites, and other facilities designated for family use.

Objective 2: To provide a wide range of recreational, cultural and traditional opportunities for all our people.

e. Encourage the identification, restoration, and preservation of important archaeological, historical and cultural sites.

D. EDUCATION

Objective 1: To provide Maui residents with continually improving quality educational opportunities which can help them better understand themselves and their surroundings and help them realize their ambitions.

b. Require that quality educational facilities and services be available to all residents.
c. Seek continual improvement in the quality of education at all levels for all residents.

Paia-Haiku Community Plan

Consistency with the Paia-Haiku Community Plan Goals, Objectives, and Policies.
LAND USE

Goal
A well-planned community that preserves the region's small town ambiance and rural character, coastal scenic vistas, and extensive agricultural land use, and accommodates the future needs of residents at a sustainable rate of growth and in harmony with the region's natural environment, marine resources, and traditional uses of the shoreline and mauka lands.

Objectives and Policies
1. Protect the marine environment and quality of offshore waters.
2. Preserve important scenic vistas and shoreline resources of the region.

Implementing Actions
3. Establish varying minimum lot sizes and subdivision standards to reflect different kinds of proposed uses and activities, thereby, preventing the improper use of agricultural and rural areas. Moreover, ensure that minimum two-acre lot subdivisions intended for "gentlemen estates" are limited to areas that (a) have adequate public services and infrastructure, and (b) would not significantly detract from the agricultural, rural, open space, scenic and environmental qualities of the region.
5. Improve standards and procedures to protect scenic vistas and shoreline resources of the region.

ENVIRONMENT

Goal
The preservation and protection of the natural environment, marine resources and scenic vistas to maintain the rural and natural ambiance and character of the region.

Objectives and Policies
1. Preserve and protect scenic vistas along Hana Highway.
6. Protect the quality of surface and groundwater resources.
7. Protect all wetland resources. Such resources provide open space and habitat for plant and animal life in the aquatic environment. Ensure that the development of new water sources does not adversely affect in-stream flows.
8. Protect and maintain the quality of the nearshore and offshore waters and marine environment. Ensure that storm water run-off and siltation from proposed development will not adversely affect the marine environment and nearshore and offshore water quality. Open culverts which empty directly into nearshore waters should be avoided.
9. Encourage the construction of natural grass-lined drainage channels, as opposed to concrete channels and the installation of siltation basins.
10. Effectively control agricultural run-off.

CULTURAL RESOURCES

Goal
Identification, protection, preservation, enhancement and appropriate use of cultural resources, cultural practices and historic sites that provide a sense of history and define a sense of place for the Pa`ia-Ha`iku region.

Objectives and Policies
1. Encourage and protect traditional mauka and makai accesses, cultural practices and rural lifestyles. Protect traditional hunting, fishing and gathering.

PHYSICAL INFRASTRUCTURE

Water

Goal
An adequate supply of potable and irrigation water to meet the needs of the region.

Objectives and Policies
3. Ensure that the development of new water sources does not adversely affect in-
stream flows.

Drainage
Goal
Improvements to the storm drainage system which provide for a high standard in preventing flooding and property damage while not adversely affecting the marine environment and nearshore and offshore water quality.
Objectives and Policies
1. Ensure that storm water run-off and siltation from proposed development will not adversely affect the marine environment and nearshore and offshore water quality. Open culverts which empty directly into nearshore waters should be avoided.
4. Effectively control storm water run-off in new urban, rural or agricultural subdivisions and developments, so as to avoid net increase in storm water run-off where practicable.

Energy
Goal
Greater self-sufficiency in the need for nonrenewable energy and more efficiency in use of energy resources.
4. Utilize renewable energy for water pumping and other energy services which can take advantage of intermittent energy resources.
6. Support energy-efficient building design and site development practices.
7. Promote energy conservation and awareness programs.
8. Limit requirements for street lighting in agricultural and rural communities.

C. Planning Standards
5. Subdivision
Environmental Design
Lot configurations, roadways and subdivision improvements shall be designed to respect existing landforms, coastal and aquatic resources, biological resources and cultural/historic resources to the greatest extent possible.
Socio-Economic Considerations
The direct and cumulative impacts on agriculture and the impacts on the community shall be assessed and considered.
Improvements
County urban subdivision standards shall not apply to the Pa`ia-Ha`iku region, except in areas where deemed appropriate, in regards to the following improvements:
Curbs, gutters, and sidewalks shall not be required;
Street lighting shall not be required; and
Pavement width shall not exceed twenty (20) feet.
6. Landscape Planting
b. Incorporate the principles of xeriscaping in future landscape planting.
7. Roadway standards
b. Roadways (excluding Hana Highway, Baldwin Avenue and Ha`iku/Kokomo Roads) shall have a maximum width of twenty (20) feet of pavement except in residential areas where on-street parking is desired, or around tight turns and blind corners.
c. County-standard curbs, gutters, and sidewalks shall not be required in the Pa`ia-Ha`iku district except in high density areas such as multi-family development. Grassed shoulders and swales shall be allowed without curbs. Where sidewalks are provided, they shall be separated from roadways by a minimum 2-foot-wide planting strip along residential streets, and a minimum 4-foot-wide planting strip along highways.
9. Environmental Aspects
c. Ensure that storm water run-off and soil erosion from proposed developments will not adversely affect the marine environment and nearshore water quality.

OHA, in their letter of July 15, 2003, questioned whether the project truly conforms to the Maui Community Plan. While the project is not marketed as “affordable,” it claims to conform to the Community Plan in that it offers the opportunity for a wide range of housing possibilities. However, the SMA application never states the price ranges of the lots. Furthermore, the covenant restrictions suggest that “affordable” housing options will not be available on these lots. OHA is also concerned that second homes on the lots (allowed under Maui ordinance) will become Bed and Breakfasts rather than long-term rentals. OHA suggests that to ensure the rural character of the subdivision, transient accommodations be clearly banned in the subdivision. (Exhibit 5)

The applicant responded to OHA, in his letter of September 8, 2003, that this project is contributing to generate housing and farmable lots in a variety of size and housing possibilities in several ways. Houses will be built by owners for their residential needs, and since zoning allows for “ohana” (dwellings) those, if built, will provide for a less expensive rental opportunity to help with the congested rental market. When using the term expensive, it was not intended to be affordable housing, rather, the intent is that since an “ohana” is limited in size, the cost of the rental being proportional to size will result in a less expensive housing solution for long term renters. (Exhibit 5A)

Coastal Zone Management Program

Compliance with the Coastal Zone Management Program pursuant to Chapter 205A, Hawaii Revised Statutes, as amended.

Section 205A-2(b)(4)(E):
“Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures;”

Section 205A-4:
“Implementation of objectives, policies, and guidelines. (a) In implementing the objectives of the coastal zone management program, the agencies shall give full consideration to ecological, cultural, historic, esthetic, recreational, scenic, and open space values, and coastal hazards, as well as to needs for economic development.

(b) The objectives and policies of this chapter and any guidelines enacted by the legislature shall be binding upon actions within the coastal zone management area by all agencies within the scope of their authority.”

Section 205A-26(1)(D):
“Alterations to existing land forms and vegetation, except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, wind damage, storm surge, landslides, erosion, siltation, or failure in
the event of earthquake.”

Further, Section 205A-26(2), states that no development shall be approved unless the authority has first found that:

“(A) That the development will not have any substantial adverse environmental or ecological effect, except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, or compelling public interests. Such adverse effects shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect, and the elimination of planning options;

(B) That the development is consistent with the objectives, policies, and special management area guidelines of this chapter and any guidelines enacted by the legislature; and

(C) That the development is consistent with the county general plan and zoning. Such a finding of consistency does not preclude concurrent processing where a general plan or zoning amendment may also be required.”

Section 205A-26(3) states that the authority shall minimize, where reasonable:

“(E) Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.”

The areas identified in the State’s and County’s goals, policies, objectives, and standards in relationship to the proposed development will be discussed in the Analysis section of this report.

ZONING

1. Effective December 31, 1998, the Maui County Council adopted Ordinance 2749, Bill No. 113, Draft 1, which amended the Maui County Code, and included a new chapter, 19.30A, Agricultural District, which zoned all lands “Agricultural” if it was designated “Agriculture” in the Maui County General Plan and Community Plans. In addition to providing the development standards for agricultural lands, Chapter 19.30A, and limiting the size of the lots to two (2) acres, the zoning provisions also established a formula which limited the number of lots that can be created by subdivision. Based upon this formula, the subject property is limited to eight (8) lots. The Department of Public Works and Environmental Management (DPWEM) stated in the preliminary approval of the subdivision on March 11, 2002, Condition 21 (page 7) that the subject parcel TMK2-7-004: 006 is limited to 8 and no additional lots may be created in the future. (Exhibit 9A)

AGRICULTURE

1. The proposed development is primarily located in the Agricultural District. The
property is currently fallow pineapple lands. As noted by the State Land Use Commission in their letter of July 18, 2003, the subject property is located primarily in the State Agricultural District. However, the steeper, western portion of the property along Hana Highway is designated within the State Conservation District. *(Exhibit 4)* Prior to any construction permits, the applicant should be required to acquire a boundary interpretation from the State Land Use Commission to avoid any development in the Conservation District.

The applicant is proposing to retain two parcels for himself. The applicant stated in his letter to the State Land Use Commission that he intends to use the large lot (Lot 6A) to build an equestrian center or to board horses. The applicant stated that he intends to use a four-acre lot for agricultural purposes (Lot 6G, now six-acres based on revised plans). He further stated that he has no control on the other six lots after they are sold. *(Exhibit 4A)*

2. In their letter of July 14, 2003, the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), commented on the proposed application that the subdivision has a major drainage outlet or gulch located within. This outlet may be needed to adequately provide drainage to several lots within the subdivision. To accomplish this, an easement would be necessary. A culvert is necessary under field road adjacent to Lots 6B, 6C, 6E and 6F. *(Exhibit 6)*

On July 30, 2003, the NRCS stated in their letter that they have met with the applicant and was assured that their comments will be addressed. *(Exhibit 6A)*

In his memorandums to NRCS of July 29, 2003 and August 14, 2002, the applicant states that his letter of August 14, 2002, addressed the conditions by providing the requested drainage culverts on the submitted set of plans to the Department of Public Works and Environmental Management, and a 30-foot drainage easement where no buildings or large landscaping will be allowed so that the normal flow of drainage water will not be obstructed. These conditions will be part of the deeds to the future buyers to ensure proper drainage. *(Exhibit 6B)*

The Planning Department is concerned that the major drainage outlet of the subdivision is into Maliko Gulch which leads into Maliko Bay. Agricultural lands have been a great source of nonpoint source pollution to the nearshore waters, especially during heavy rains. In addition to providing proper drainage, consideration should be given to prevention of runoff and sediments into the ocean. The method of drainage and the possibility of providing a retention basin for the entire subdivision to retain sediments and horse waste products prior to discharging runoff water into Maliko Gulch should be considered. This concern was expressed by residents of the area, particularly the group, "Citizens for Truth and Justice."

3. NRCS letter dated March 1, 2004, states that the applicant is a cooperator with this agency and has agreed to be a good steward of his land and implement a conservation plan for his farming activities. *(Exhibits 6-6C-1)*
The commercial farming activities will use the name "Malikobay Farm." The Total acreage will be 17.2 acres of farmed land and 7 acres of soil conservation, in addition to a 2,400 square feet horse barn and one acre of uncovered arena. According to the plan, the applicant intends to construct an equestrian center to include construction of a classic horse barn (10 horse) with dimensions of 40 feet by 60 feet and a low rise roof with a 13 foot maximum height. The barn will be made of clear wood and green painted metal to fit into the country setting. It is anticipated that the facility will be used primarily for horse boarding and an open arena (uncovered) at a cost of approximately $22,500. To preclude cars and people from entering the property through Hana Highway, the applicant proposes a five (5) foot fence (open), made of white poles and metal fencing, along Hana Highway. In preparation for farming, various activities such as plowing, cutting larger clumps of soil into growing soil, removal of Hale Koa trees will take place. There is an existing container on the property that is used for equipment and tools storage with dimensions of 20 feet by 8 feet (total 160 feet). A one-story wooden shed of 16 by 14 (total 200 square feet), will be necessary for the expanding farming activity and additional storage facility will be requested as they become necessary. (Exhibits 6C-2 to 6C-6)

The Department is concerned about the location of the horse arena and horse barn which is contrary to the view analysis results. Horses need to be in area that is not windy, and away from passing cars. The upper, northern portion of the property, identified as 1, 2, and 4, as well as the "pasture/conservation, identified on the farm plan, would be more appropriate for the horse arena and barn. The applicant verbally indicated that he would need to add a vegetation windbreaker and buffer that grows about thirty feet in height along Hana Highway. Coffee plants need areas that are not windy. The north shore area of Maui is known for its windy conditions and coffee plants, in spite of any wind breakers would seem to be not feasible. In light of the view study, any windbreaks, unless they are less than six (6) feet tall and grassy, immediately adjacent to Hana Highway should be discouraged.

ARCHAEOLOGICAL, HISTORIC AND CULTURAL RESOURCES

1. The Office of Hawaiian Affairs (OHA) noted in their letter of July 15, 2003, that no archaeological resources were discovered on the eight acres subject to the archaeological survey. The archaeologist theorizes that this is due to extensive disturbance during pineapple cultivation and concludes that it is unlikely that cultural deposits will be found during construction. OHA noted that pages 7 and 8 of the report, providing a summary of Native Hawaiian pre­historic and historic sites on neighboring property, which are considered significant, was missing. They will with hold their opinion until they receive the missing pages. OHA also commented on compliance to the Community Plan, Community Requests, Water, Coastal Waters. These comments will be addressed in the respective sections in this report. (Exhibit 5)

In their September 8, 2003, letter, the applicant transmitted the missing pages and responded to the comments made by OHA. These comments will be addressed in the respective sections in this report. (Exhibit 5A)
2. The State Historic Preservation Division stated in their letter of July 30, 2003, that they believe there are no historic properties present because an acceptable archaeological assessment or inventory survey found no historic properties, thus they believe that "no historic properties will be affected" by this undertaking. *(Exhibit 7)*

The Department notes that on Page 7 of the inventory report that on Lot 1, which is the subject property, the State archaeologist, Theresa Donham, in 1994, reported several traditional Hawaiian artifacts, including a ulumaika stone, an adz fragment, a grounded tool, and a polished flake, were identified on the surface of Lot 1. *(Exhibit 7A)* Given that these historic items were found, digging of wells, septic systems, underground utilities, storage tanks, and reservoirs proposed for the development, monitoring by an archaeologist should be required when ground altering activities are conducted on the property.

**INFRASTRUCTURE AND PUBLIC FACILITIES AND SERVICES**

1. **Water** – The applicant stated in his application that the source of water for the proposed project is by two private water systems permitted by the State Water Commission (Permits No. 5620-06 and 5620-05). The wells are drilled into the basal aquifer and are cased entirely in concrete. One well will serve Lots 6A and 6G, the other will serve the remaining six lots. There will be essentially two separate systems, though one well could back up the other in case of an emergency. Further, the well serving the six lots will provide fire protection for the entire subdivision. The systems will be private and maintained by the homeowners' association. Distribution to the individual lots will be through "cs900" (Hi grade PVC pipe that complies with County standards) 4 inch and 2 inch pipes. At the time that individual owners apply for building permits, each will have their own Polyethylene food grade storage tank of variable size (2000 gallons to 5000 gallons depending on farming plans) and a Pressure Booster System to ensure a pressure between 50 and 70 psi.

A single family residence uses approximately 600 gallons per day for all uses. Agricultural use can range from 500 to 1,000 gallons per day depending on the particular activity. An estimate of daily quantity of water to be pumped is at about 10,000 gallons, when full occupancy will be reached but accurate readings will be provided to the State CWRM following their well pumping rules and regulations.

The quality of the water was tested on November 20, 2002, by National Testing Laboratories, with excellent results. Salt contents are at 240 PPM, within County standards. There is no evidence of contamination from the pineapple cultivation.

Fire protection will be provided by an open in-ground reservoir of over 30,000 gallon capacity, filled from the private wells. A separate 6-inch line will distribute water to the individual lots, and hydrants will be installed within the required distances for fire protection. These will be installed as dwellings are constructed, and as required by the Fire Department. All will be designed and constructed in accordance with the requirements of the Department of Fire.
The applicant stated that during discussions with neighbors and community residents, several concerns were raised about water:

1. The first was in regards to neighboring springs in Maliko Gulch. Informational discussions with the State CWRM staff indicates that the springs in the gulch are of "perched" water. This water that percolates through the different rock layers until coming out of the ground via springs within the gulch. The applicant's wells are established in the basal aquifer, and will not affect perched sources.

2. The applicant stated that he has also received a letter from Mr. Gerald Hokoana, whose family owns the properties fed by the springs. He has no objections to the use of the projects wells.

3. Other concerns were raised with regard to the quality of water. As noted, the water was tested by a certified lab on November 20, 2002. The test results show that chlorides are at or below County standards, and that there is no evidence of contamination resulting from years of pineapple cultivation.

OHA stated in their letter of July 15, 2003, that the landowner has dug private wells to ensure adequate water supply for the subdivision. Since no analysis of estimated water use, or sustainable yield for the wells is provided in the main portion of the SMA application, OHA questions the long-term sustainability of the private wells. They note that the "private well" becomes public when it has at least 15 service connections or regularly serves an average of at least twenty-five (25) individuals daily. Since the subdivision can support 16 homes and approximately 43 people, the private systems will more than likely become a public system in the near future. This contradicts a statement made on page 9 of the SMA document that "nothing will be done to create a public system." OHA asks that this discrepancy be clarified prior to issuance of the SMA permit. (Exhibit 5)

The applicant stated in his letter of September 8, 2003, that the project has received two permits for separate water systems. One well will be the applicant's well since he will own two lots. The second well will serve six (6) lots and will be owned and administered by the owners association. Under these regulations, the two wells can serve up to 49 individuals or 28 houses. Their intention and commitment is to maintain two private wells. (Exhibit 5A)

The Department of Water Supply responded on August 1, 2003, and September 15, 2003. (Exhibits B and BA) Essentially both letters are the same. In 1994, the Haiku Agricultural Subdivision created two large lots. (One of the lots is the subject property and the other is the Haiku Makai subdivision.) The subdivider, A&B Properties, requested BWS to allow this large lot subdivision to get final approval with construction of water system improvements deferred. This large-lot subdivision request was approved and agreement entered into in 1996. Two of the important provisions of the agreement are: 1) the requirements for each lot of the subdivision are deferred until such time that each of the lots are developed, and 2) the subdivider shall not make any request for residential building permits or water service for lots 1 (subject property) and 2 until the shortage is terminated and water sources are available to
serve the subdivision. Final approval was granted in 1998. One lot had been re-subdivided into 30 agricultural lots (Haiku Makai subdivision). The other lot created is the subject property currently owned by the applicant. Instead of meeting the terms of the agreement, the applicant decided to construct his own wells and not connect to the public water system.

DWS notes that the project is served by Haiku Aquifer. This aquifer has a sustainable yield of 31 MGD. According to the 1990 State Water Resources Protection Plan, a more conservative estimate is 15 MGD. The total known pumpage on this aquifer as of June 2003 is 3.31 MGD. The DWS has long published plans to use 10-15 MGD from the aquifer to meet municipal needs.

DWS suggest that the applicant be required to report monthly pumpage to DWS, as well as, to the Commission on Water Resource Management CWRM). Also, since the applicant proposes to sell vacant lots, DWS recommends that the applicant be made aware that private systems serving more than 25 people over 60 days of the year are subject to the DOH regulations. Depending on intensity of use, consumption for an agricultural project of this acreage would be approximately 220,000 gpd by standards. Empirical use in the Haiku-Pauwela area tends to be lower. The September 15, 2003, letter clarifies that the anticipated consumption would range from 4,800 gpd for single family units to 73,000 gpd based on average use of agricultural meters in Haiku.

DWS notes that the application material states that the proposed project will be served by a private water system with two wells and an open in-ground reservoir with a capacity of 30,000 gallons for fire protection. DWS recommends that the applicant be required to provide domestic, fire and irrigation services in accordance with standards.

To protect surface and ground water resources, DWS encourage the applicant to adopt BMPs. DWS is pleased that the applicant intends to use plants appropriate to this area. Native plants adapted to the area, conserve water and protect the watershed from degradation due to invasive alien species. *Exhibits 8 and 8A*

The applicant responded to the DWS in his letter of August 11, 2003, requesting an explanation since he estimates that with the average use of water per dwelling is 1,000 gallons per day and to irrigate one acre is 1,000 gallons per day. *Exhibit 8B*

On October 22, 2003, the applicant wrote to the Director of DWS and was pleased to see the newly adjusted projected water usage from DWS's revised letter of September 15, 2003. The applicant noted that he thought the estimated water usage of 40,000 gallons per day was still high however the capacity according to his engineer’s calculations of the two private wells are calculated to be respectively 42,000 gallons per hour for one well and 20,000 gallons per hour for the second well. The owners of the wells are required by law to provide a quarterly report to the CWRM and will also provide report to DWS. They have also taken precautions to prevent pollution from the aerobic septic systems to the well as per DOH’s requirements. *Exhibit
In a telephone conversation with the applicant on March 6, 2004, the applicant stated that the larger well (6") will be managed by the Homeowners Association. This well will also provide an internal fire protection service for all eight lots. The applicant also stated that the cost of maintenance and distribution of the water will be pro-rated and shared by the Homeowners. Wailani Drilling Company, the company that constructed the wells, will be doing the monitoring of the wells for them and transmitting their report to the DOH on a quarterly basis. The applicant stated that the cost for this additional task will be billed to the Homeowners’ Association. The applicant stated that as a temporary measure, a generator has been running the wells. The applicant stated that the estimated cost is $1,150 per 1,000 gallons and he feels that the cost of the water will be comparable to the County water system service charges.

The State Commission on Water Resource Management recommends coordination with the county government to incorporate this project into the county’s Water Use and Development Plan. They further commented that “In response to the rescinding of an earlier approved SMA, the Commission staff withheld acceptance of well completion reports and issued a notice of potential violation to the applicant for wells that have proceeded through our regulatory procedures (see attached 2/10/03 letter). We await the County of Maui’s final disposition on the SMA permit before finalizing our regulatory well construction and pump installation procedures, which will allow the applicant to pump his ground water sources (Well No. 5620-05 & 06).” (Exhibits 15B & 15B-1)

The State CWRM letter of February 10, 2003, informed the applicant that his application for the well construction and pump installation permits indicated that no SMA permit was required. The State CWRM strongly suggest that the applicant do not pump the well until this SMA matter is clarified. (Exhibit 15B-1)

The State Department of Health (DOH) stated in their letter to the Planning Department on July 23, 2003, that two water systems will serve the subdivision. The DOH’s authority over drinking water quality applies only to “public water system” as defined in Chapter 11-20, Hawaii Administrative Rules. A “public water system” is a system that provides water for at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of a year. By definition, the system serving this subdivision does not qualify as a public water system. However, it is recommended that the parameters for water quality and maximum contaminated levels of the HAR, Title 11, Chapter 20 be used to monitor the wells. DBCP has been detected in other water sources in the area. (Exhibit 14)

The Planning Department received a letter dated August 5, 2003, from Daniel Grantham of the Sierra Club expressing his concerns about the lack of government oversight on private water systems. The Board of Water Supply was informed that the County had no jurisdiction over private water systems. The State Commission on Water Resources permits developers to provide separate water systems within one subdivision to avoid meeting the stricter water
quality requirements of the Environmental Protection Agency (EPA). Two county wells across the gulch in the same "basal aquifer" are under a court order to clean pineapple pesticide chemicals before use. The applicant’s water analysis shows potability is borderline for salinity (240 ppm chlorides) and the water is unusually hard, indicating dissolved minerals. (Exhibit 19)

The applicant responded to Mr. Grantham’s letter on August 11, 2003. He noted that the reason for the second well is for his own personal use for two lots that he will own. The wells will not be interconnected. The necessary water for fire protection will be stored in a pond and available for fire use only. Each owner will build a smaller water storage on their own lot ranging in size from 2,000 to 5,000 gallons for each lot in case of electrical shortage or maintenance of the pumps. A water truck can also be used to deliver water to fill the tanks. The owners are aware of the salinity levels and have the option to install reverse osmosis or other filtration system. (Exhibit 19A)

The applicant also noted that the water conditions can be compared to those of an individual water catchment system, whereby the owners are responsible for the upkeep necessary to maintain water quality for their own use.

2. **Wastewater** – Any lot in the planned subdivision containing one or more septic systems located within 1,000 feet of any well within the water system is limited to aerobic septic systems. The applicant stated that the CC&R’s for the planned development will require that individual property owners use only aerobic septic systems for their residences. These will be systems approved by the State Department of Health.

The Department of Health stated in their letter of July 23, 2003, that protection of the potable water wells should be a major focus in the design and installation of all individual wastewater disposal systems in the subdivision. Plan review and approval of the individual wastewater disposal systems by the Wastewater Branch of the DOH is required. (Exhibit 14)

3. **Drainage** – As noted by the applicant, the property is located on a knoll, where there is no major offsite runoff flowing through the property. The runoff sheet flows through the project site in an east to west direction. Runoff is detained on the project site because of the existing pineapple field furrows. It then travels along to Hana Highway where it eventually goes into the ocean. The NRCS letter of July 14, 2003, noted that a major drainage outlet or gulch is located within the subdivision. This outlet may be needed to adequately provide drainage for several lots within the subdivision. To accomplish this, an easement would be necessary. A culvert is necessary under filed road adjacent to Lots 6B, 6C, 6E, and 6F. In their letter of March 1, 2004, NRCS, indicates that the applicant is providing a 30-foot drainage easement which is the natural drainage area. The existing vegetation, California grass and Koa Haole trees will prevent erosion and all runoff will flow naturally through this natural waterway. Approval has been granted for roadway construction and the drainage easement is identified on construction plans. (Exhibits 5, 5C-1)
According to the applicant's engineer's Soil Erosion Control Report, Class A waters are located approximately one mile away from the project site. Although the report concludes that sedimentation hazard to coastal waters and downstream properties is minimal and erosion rate computed for this project site is well within the tolerable limits and additional control measures are not required, the Planning Department is concerned that the removal of the natural vegetation will not only increase the flow of water into the natural drainage way but there will be an increase in sedimentation, as well as, raw materials from the farm animals, fertilizer, pesticides and other contaminants will also flow into the coastal waters. No mention is made to retain or to prevent sediments or contaminants from flowing into the coastal waters.

The following erosion control measures were identified to control erosion during the site development period (estimated 12 months):

1. Minimize time of construction.
2. Retain existing ground cover until latest date to complete construction.
3. Early construction of drainage control features.
4. Use of temporary cutoff ditches and berms.
5. Install temporary area sprinklers in nonactive construction areas when ground cover is removed. Water to be obtained from county water main adjacent to sites.
6. Station water truck on site during construction period to provide for continuous sprinkling in active construction zones.
7. Contractor to follow the guidelines as stated in Chapter 20.08 Soil Erosion and Sedimentation Control.

In light of the Class A waters less than a mile from the site, extra steps to prevent any runoff and contaminants should be identified.

OHA also noted in their letter of July 15, 2003, that they received notice from a resident about their concerns regarding the coastal waters. They noted the projected increase in runoff of 6% due to development on the property. They also noted that the increase run-off will be directed into a grass swale which will eventually direct the runoff away from the property. Where is runoff being directed? This area already has runoff-problems during storms and they suggest efforts be made to ensure that there be no runoff into the coastal waters. (Exhibit 5)

The applicant responded to OHA's concerns stating that at the moment there is no run-off from this property. They indicated that there are lots of run-off dumped into the bottom of the gulch when the pineapple company opens the ditch by Haiku Hills and the Maliko Bay becomes brown. They noted that the topography of the subject property shows furrows all around the perimeter and the upper edge of Maliko Gulch. These furrows contain drainage onsite. The applicant further noted that the future development has been calculated to produce a slight increase in general drainage (6%) due to asphalt of public road and roofs. According to the applicant, this drainage will be contained onsite, as the rate of absorption of the 45 acres is greater than the additional 6% drainage generated by the roads and roofs. (Exhibit 5A)
If the furrows are retaining existing drainage onsite, once these furrows are removed all of the water now contained by these furrows, as well as removal of the hale koa and existing grasses will be released into the gulch. In addition, clarification needs to be provided on how the 6% drainage will be retained on site.

The DPWEM stated in their letter of August 6, 2003, that the drainage system shall comply with the provisions of the drainage rules with additional runoff generated by the development contained onsite and the design engineer shall verify that there will be no adverse impacts to adjacent and downstream properties. (Exhibit 9)

The DPWEM further noted that the grading for the project shall comply with the provisions of the grading ordinance. BMPs shall be implemented to the maximum extent practicable to prevent pollutants including dust and sediment from discharging off the project site.

The State Department of Transportation, Maui District office submitted their comments on July 23, 2003, on the applicant’s drainage report and soil erosion control report. The drainage report noted that the developer for this project will maintain the existing conditions so that the natural drainage patterns will remain. The DOT questioned how this can be guaranteed and what happens when the lots are sold and developed. They also questioned if the area of the drainage basin included driveways, roofs, sidewalks for individual lots. They also questioned if a retention basin will be built and maintained on Lot 6H. They also noted that additional runoff will not be allowed into Hana Highway. (Exhibit 10)

4. **Roadways, Curbs, Gutters and Sidewalks** – There are no curbs, gutters or sidewalks since the proposed development is in the agricultural district. The applicant stated that the proposed road into his subdivision connecting to Apuwai Street is named Ulua Road and was approved by the Street Naming Committee. This new road is connected to Apuwai Street and should have continued as Apuwai Street since the applicant states that this new road will be dedicated to the County. Apuwai Street is an agricultural road, built to County standards with a 50-foot right-of-way and 20 feet of pavement. The applicant’s road, proposed as “Ulua Place” which is on a portion of Tax Map Key 2-7-36: 031, into the project, will be built to the same 20 foot pavement width however with a 40-foot right-of-way. The applicant should be required to provide a consistent road right-of-way as Apuwai Street since the subdivision is connected by the same road. This will provide for future consistency and planning.

The applicant will be required to submit street tree planting and irrigation plans in conformance to Section 12.24A.070(D) of the Maui County Code relating to “Landscape Planting and Beautification” in the street rights-of-way.

According to the applicant the heaviest traffic period is between the hours of 3:00 p.m. and 6:00 p.m. The level of service for the intersection at Apuwai Street and Haiku Road was not provided. The applicant stated that the normal trip generation for a single-family residence during the afternoon peak is one trip per residence. No information was provided for the
morning peak hours. The applicant assumed that there is no difference in trip generation between the primary residences and ohanas, although they assumed that the ohanas would be less. In any case, their "worse case" is that there would be 16 trips generated during this time which represents a 2.2% increase to overall traffic on Haiku Road or about 5.3 trips per hour. They concluded that there will be no change in the existing level of service at any intersection, or change in any traffic movement as a result of the project-generated traffic.

The State Department of Transportation stated in their letter of August 20, 2003, that the proposed agricultural subdivision will not impact Hana Highway. The applicant should be advised that grading of the lots should not result in the diversion of surface water run-off onto Hana Highway. *(Exhibit 10A)*

5. **Electrical and Telephone** – The applicant has stated that they will be constructing underground utilities. Services are currently provided and available to the project site from the Haiku Hills Subdivision where Maui Electric Company (MECO) has left a stub for future connection. MECO stated in their letter of August 5, 2003, that they have no objections to the project. MECO has received a service request (M0009579) for this project and is currently working with its electrical consultant. *(Exhibit 11)*

6. **Parks and Recreational Facilities** – The applicant stated that the additional 16 homes and associated population increase is not expected to significantly burden recreational facilities in the area. The Department of Parks and Recreation stated in their July 28, 2003, letter that they have no comment to offer concerning the aforementioned action at this time. *(Exhibit 12)*

It should be noted that in their comments in the preliminary subdivision approval letter from the Department of Public Works and Environmental Management, dated March 11, 2002, *(Page 5)* the Department of Parks and Recreation commented that they are requiring a cash contribution in lieu of land for the subject project. *(Exhibit 9A)*

The Division of State Parks of DLNR, stated in their letter of July 8, 2003, that they had no comments. *(Exhibit 15E)*

7. **Schools** - The applicant stated that using State of Hawaii, Department of Education multipliers for standard housing types of school-aged children. The project, would be expected to be consistent with other developments in the area and generate approximately 8-12 school-age children from this subdivision. The Department of Planning notes that based upon 16 homes and an average of two school-aged children per household, there is a likelihood of a total of 32 children per household. However, the Department of Education, assesses a fee based upon developments of 50 or more housing units.

8. **Solid Waste** – The DPWEM stated in their letter of August 6, 2003, that the applicant should submit a solid waste management plan for the disposal and composting of
cleared and grubbed material and the recycling and disposal of construction waste. (Exhibit 9)

The applicant stated in their application that solid waste will be collected by the County of Maui for residential uses. Residents will be encouraged to recycle by either contracting Maui Recycling service, or by delivering their recycling waste to the recycling center located one mile from the subject site, next to the Haiku Community Center. Green waste from the site will either be mulched on site or deposited at the Central Maui Landfill’s green waste recycling facility.

9. **Public Services -- Police:** In their letter of December 3, 2002, the Police Department stated that based upon the applicants estimates, sixteen (16) residents with 16 vehicle trips would be a 2.2% increase in traffic. This is not taking into consideration possible employees who will be leaving at that time as well. The Police Department had no major concerns. (Exhibits 13 & 13A)

The Planning Department notes that the 16 vehicle trips is a conservative estimate in light of the number of vehicles per household is generally more than one and more than likely 32 vehicle trips is a realistic, and still a conservative figure.

**Fire:** The Fire Department did not respond to the Planning Department’s request for comments. However, in the DPWEM’s letter of March 11, 2002, for preliminary approval of the subject subdivision, the Fire Department commented (page 5) that:

"Water supply for fire protection shall be provided prior to the location and construction of buildings. Once construction of buildings are planned, there shall be at least one hydrant or standpipe within 300 feet of any building to be constructed. Water supply for fire protection shall have a minimum flow of 250 gallons per minute for a two hour duration." (Exhibit 9A)

The Planning Department notes that the General Plan discourages the use of standpipes for fire protection purposes.

**Medical Services:** Acute care is available in Wailuku through the Maui Memorial Hospital. The applicant concludes that the proposed project will not cause a significant increase in the area’s population; therefore, it is not expected to have an adverse impact on existing medical facilities.

**SOCIO-ECONOMIC IMPACTS**

On a short term basis, the project will support construction and construction related employment. An equestrian center as proposed by the applicant on the largest lot (20-acres) would provide some employment. Employment in agricultural activities may also provide some employment provided that property owners engage in agricultural activities.
ENVIRONMENTAL IMPACTS

Hawaii Revised Statutes (HRS), Chapter 343, Environmental Impact Statements. Chapter 343, requirements do not apply since the proposed use does not involve any of the eight (8) land uses or administrative acts such as but not limited to the use of government funds or lands, is not located in the shoreline setback area or historic districts, and is not an amendment to the county general plan.

There will be short term noise and air quality impacts during the construction phases of the project. Best management practices should be incorporated into the project in accordance with Federal, State and County standards. Additional precautions can be taken by providing retention basin on-site and retention of the natural vegetation.

The noise created during the construction phase may exceed the maximum allowable levels as set forth in the HAR, Chapter 11-46 “Community Noise Control.” A noise permit may be required and should be obtained from the Department of Health before the commencement of work.

View planes, Scenic and Open Space Resources: The major concern regarding the proposed subdivision is the impact of the development on the view planes, scenic and open space resources, according to letters submitted by one individual and two groups represented by the Haiku Community Association and the Sierra Club. (Exhibits 18, 19, and 20)

The General Plan and the Paia-Haiku Community Plan also have goals, policies and objectives that encourages and supports the protection of scenic vistas and natural features. In protecting the visitor industry, one of the policies of the General Plan is to locate buildings so as to retain scenic vistas. The Paia-Haiku Community Plan Land Use and Environmental Goal, Objectives and Policies also emphasize protection of the scenic vistas and in particular the preservation and protection of scenic vistas along Hana Highway.

Mr. Lloyd Fischel of Haiku, in his letter of August 1, 2003, voiced his concerns about the lost views and vistas along Hana Highway. He is concerned with the proposed equestrian center structures and the heights of landscaping. He questioned the use of the CC&Rs and enforcement of them. He noted that most of the restrictions fail in ag subdivision and that the county has no power to enforce them. Mr. Fischel states that the subject parcel borders one of the most important vistas on Hana Highway and the Community Plan calls for the protection of these views and vistas. (Exhibit 18)

The Sierra Club in its letter of August 5, 2003, notes that there are two places on Hana Highway where these extraordinary and striking views of West Maui are visible and this is one of them. The second place is from the other side of Maliko Gulch to Hookipa Park and Mama’s Fish House. (Exhibit 19)
Unfortunately, according to Mr. Fischel's letter, the Haiku Makai subdivision, as well as, the Skye Lewis property, slipped through without careful review and adherence to the General Plan and the Community Plan goals, objectives and policies. However, the opportunity is now available to adhere to the General Plan and Community Plan requirements. In adopting the federal Coastal Zone Management Act, the Hawaii State legislature also, in its wisdom, added a provision which requiring that the proposed developments within the SMA be consistent with the County's General Plans. In this way, the State's requirement for the coastal zone area added another layer of protection and recognized the uniqueness of each island.

To address the concerns of the Planning Department and the community, the applicant completed a view analysis and has made numerous adjustments to his plans. A map and photographs showing the views and proposed structures are shown in Exhibits 2G, 2H and 2I of this report. A complete and packaged view analysis and study is not available. However, the applicant in his letter to Daniel Grantham, of the Sierra Club describes the methodology used in developing the study and analysis. (Exhibit 19A) The applicant further describes the possibility of constructing two-story structures in his letter to Greg Blue of the Haiku Community Association. (Exhibit 20A)

The applicant identified two views. View No. 1 encompasses the entire property from its eastern border at the Haiku Makai subdivision across and to its makai boundary along Hana Highway. This is the highest point anywhere on Hana Highway that borders the property. In this approximately 90-degree representation, Molokai is visible in the right third of the image, as well as Iao Valley just over the house on Lot 6F (fourth from the right). View 2 is a narrower view but shows how the view over the subdivision would change as one travels closer to Maliko Gulch. With the exception of the possible residence of Lot 6G (at a lower elevation), all of the potential homes are visible from this view. Iao Valley is visible over Lot 6E (third residence from the right), and no views are impaired toward Haleakala. Again, while a residence could enter the viewplane of the West Maui Mountains, the view is more obscured by the Ironwood trees on HC&S land. The applicant stated that by considering the placement of the homes and locating them a considerable distance from the highway, any intrusion is significantly lessened over other areas where no thought was given. (Exhibit 19B)

In his letter to Greg Blue, Board Member of the Haiku Community Association, the applicant notes that the nearest residence will be no closer than 550 feet away from Hana Highway. Each lot will also have a "building envelope" or a specific area where a house could be built; and the second floors would be limited to 40% of the size of the first, thus reducing the massing of a residence. The applicant notes that the building envelopes, being somewhat distant from the highway, are at a lower elevation, further bringing down apparent building heights. (Exhibit 20A)

Please note that the applicant responded to the comments of Fischel, Grantham, and Blue. (Exhibits 18A, 19A, and 20A) However, the Department notes that the view analysis described in Exhibits 18A, 19A and 20A and as shown in on the Project View Analysis map in
Exhibit 2G did not include a building envelope for Lot 6A and no analysis was included for the equestrian center structures within the view plane of View 1 and 2. The equestrian center structures are described and identified in his farm plan to the USDA, NRSC in Exhibits 6C-2 to 6C-4. Here the applicant is proposing to build a shed and a classic horse barn with a 13 feet maximum height. These structures are located in the most critical point of View 2 as well as in View 1. A new Project View Analysis map, as shown in Exhibit 2G-1 of this report, was delivered to the Planning Department on March 9, 2004, identifying the barn structure on Lot 6A. However, there is no building envelope or discussion on the location of any houses on Lot 6A.

As previously noted, the Department recommends that the structures be relocated to the northern end of the property to replace the corn and vegetable area where the view is not impacted. Structures between Hana Highway and Lots 6G, 6F, and 6B on Lot 6A should be restricted and a building envelope and analysis of this envelope should also be made on Lot 6A.

The Department finds that a more accurate topographic map (completed by a licensed engineer or surveyor) along with the photographs and poles will enhance and provide more credence to the report. Without this additional information, the Department would recommend that the structures be limited to one-story structures with a maximum height of 15 feet. Further, the applicant should be required to include the map in the CC&Rs identifying the building areas and the areas where building, vegetation and any other obstruction of the view would be prohibited. The length of the structures should also be restricted based upon the topography of the property and the visual impact imposed by a “lengthy” structure. Cutting and filling of the building area should also be limited depending upon the effect on the view. The maximum heights of vegetation and solid fencing or walls should also be included in the restrictions. Consideration could also be given to dwarfed fruit trees for the farm.

On March 9, 2004, the Planning Department received a letter from the Citizens for Truth and Justice, Maui County. The letter dated March 5, 2004, states that most of the typical concerns of water, public services, crime, the free and unimpeded movement of people (traffic) are major problems for consideration in land use changes. The Citizens for Truth and Justice also believe that it is vitally important that serious consideration be given to any change in land use based upon native Hawaiian interests and that the Commission deny the application to prevent further destruction and insult to the Hawaiian lands and people. (Exhibit 21)

OTHER GOVERNMENTAL APPROVALS

Government Survey Triangulation Stations and Benchmarks:
The State Department of Accounting and General Services, Survey Division stated in their June 4, 2001, letter that no Government Survey Triangulation Stations and Benchmarks are affected. The Survey Division has no objections to the proposed project. (Exhibit 17)

Other permits:
The Department of Army stated in their letter of July 23, 2003, that based on the
information provided, a DA permit is not required. The flood hazard information provided on Page 12 of the SMA application is correct. (Flood Zone C)

The Office of Conservation and Coastal Lands and the Maui District Land Office of DLNR stated that they had no comments. (Exhibit 15D and F)

Other permits that may be required are: Construction related permits such as subdivision, grading, and building permits.

TESTIMONY

As of March 10, 2004, the Department did not received any additional comments for or against the project. As noted in this report, concerns raised by a number of community groups and residents in the area related to primarily related to water and views. (Exhibits 18, 19, 20, 21) Another issue raised is the development of land by non-Hawaiians. (Exhibit 21)

APPROVED:

MICHAEL W. FOLEY
Planning Director
MAUI PLANNING COMMISSION SPECIAL MANAGEMENT AREA PERMIT
APPLICATION

DATE: 6/10/2003

PERMIT TYPE: SMA MAJOR  PROJECT NAME: MALIKO BAY SUBDIVISION

PROPOSED DEVELOPMENT: 8 LOT OF VARIABLE SIZE ON 45 ACRES (2003)

TAX MAP KEY NO.: 2-7-006-006  CPR/HPR NO.: 2-7-036-031  LAND AREA: 45 ACRES

PROPERTY ADDRESS: HA'IKU - HAWAI'I  575-5223

OWNER (PRINT): FRANCESCO MORETTI  PHONE (B): 871-2870  (H): 871-2870

ADDRESS: 471 ACAKAPA PL  3125 Ulu Nae Pl

CITY: PA'IA  STATE: HAWAI'I  ZIP CODE: 96708

OWNER SIGNATURE:

APPLICANT (PRINT): MALIKO BAY TRADING CO LLC.

ADDRESS: 471 ACAKAPA PL

CITY: PA'IA  STATE: HAWAI'I  ZIP CODE: 96708

PHONE (B): 871-2870  (H): 871-2870  FAX: 871-2870

APPLICANT SIGNATURE:

CONTACT NAME: (PRINT) FRANCESCO MORETTI (DIRECTOR)

ADDRESS: SAME

CITY:  STATE:  ZIP CODE:

PHONE (B):  (H):  FAX:

EXISTING USE OF PROPERTY: FALLOW AGRICULTURAL FORMERLY PINEAPPLE FIELD

CURRENT STATE LAND USE DISTRICT BOUNDARY DESIGNATION: AG

COMMUNITY PLAN DESIGNATION: AG  MAUI COUNTY ZONING DESIGNATION: AG

OTHER SPECIAL DESIGNATIONS: SMA

BUILDING APPLICATION NO. LUCA 2.2702  PROJECT VALUATION: $160,000

EXHIBIT 1
Figure 1. Location of Project Area on U.S.G.S. Paia Quadrangle

EXHIBIT 2
Maliko Bay Subdivision, Plat Dated 9/22/03

Preferred House Site Locations and
Preserved View Corridors Plan
Figure 4. Archaeological Sites on SHPD-DLNR Paia Quadrangle (from Fredericksen et al. 2001)
Project Visual Analysis

View 2

View 1

Preferred House Site Locations and Preserved View Corridors Plan

Legend:

Maliko Bay Residences (conceptual locations within envelope)
Haiku Makai Residences (footprints not to scale)

KEY
1. Space reserved for main house and college
2. Landscape Height 10 feet max
3. Property Line Setbacks

EXHIBIT 2G
Project Visual Analysis

View 2

Legend:
- Maliko Bay Residences (conceptual locations within envelope)
- Haiku Makai Residences (footprints not to scale)
- Maliko Bay Stable

View 1

View 2
BOOK 1

Basic Techniques of Photography

JOHN P. SCHAEFER
Figure 3.9: Lenses and portraiture. (A) Lenses with longer-than-normal focal length produce portraits that have what most people consider a natural-looking perspective (35mm camera, 105mm lens). (B) Wide-angle lenses used close to the subject often create unpleasant exaggerations of facial features and include distracting background details within the image (35mm camera, 24mm lens). (Alan Ross, Jenna Ross, 1998)

Focal Length and Magnification  Photographers relate the focal length of a camera lens to its magnifying power: *the greater the focal length, the greater the magnifying power of the lens* (that is, a longer focal length will mean that objects will appear larger).

The size of the image recorded on the film is directly proportional to the focal length of the lens. For example, if you photograph an apple with one lens, then change to another lens with twice the focal length of the first, the image of the apple will double in size.

The size of an object on the negative does not depend on the type of camera you use or on the size of your negative; rather, image size at a fixed distance from the camera is determined solely by the focal length of the lens. If an object is photographed twice from the same position, using a 300mm lens first on a 35mm and then on a 4 x 5 camera, it will be exactly the same size on both negatives. The two negatives, however, will show very different areas of the scene — if the object fills the entire frame of the 35mm negative (about 1 x 1½ inches), it will occupy only one-fourth the height of the 4 x 5 negative.

<table>
<thead>
<tr>
<th>Negative Size</th>
<th>Normal Lens</th>
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<tbody>
<tr>
<td>35mm</td>
<td>50mm</td>
</tr>
<tr>
<td>4.5 x 6 cm</td>
<td>75mm</td>
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<tr>
<td>6 x 6 cm</td>
<td>80mm</td>
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<tr>
<td>6 x 7 cm</td>
<td>90mm</td>
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<tr>
<td>6 x 9 cm</td>
<td>110mm</td>
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<tr>
<td>4 x 5 inches</td>
<td>150mm (6 inches)</td>
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<tr>
<td>5 x 7 inches</td>
<td>210mm (8 inches)</td>
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<tr>
<td>8 x 10 inches</td>
<td>300mm (12 inches)</td>
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</tbody>
</table>

Note: One inch equals 2.54 cm, or 25.4mm.

Lenses of “Normal” Focal Length  The lens of the human eye has an angle of view (that is, the angle of what you can see to the left and right of center as you look straight ahead) of about 50 to 55 degrees. When the focal length of a lens on any camera is approximately equal to the length of the diagonal of the film format, the angle of view through the lens corresponds closely to what your naked
eye sees as you look at a scene. A lens that meets this criterion is referred to as the normal lens for the camera.

"Normal" focal lengths differ greatly as a function of film format, but the angle of view for every normal lens is the same (approximately 50 to 55 degrees). Table 3.1 lists the "normal" focal length for each camera format.

Because the angle of view remains constant for all normal lenses, each film format will record the same scene. The normal lens for a 35mm camera is 50mm and the normal lens for a 4 x 5 is 150mm. Thus, you will see approximately the same subject area if you photograph a scene with two different cameras, a 35mm and a 4 x 5, fitted with their normal lenses (50mm and 150mm, respectively).

Normal lenses are used for "all-purpose" shooting. With 35mm cameras, the overwhelming majority of photographs are taken with lenses in the range of 40mm to 55mm. This is predominantly a consequence of the way we "see." As you expand your photographic horizons, you will begin to understand that "normal" does not always produce the most exciting images.

Lenses of Short Focal Length With any camera format, the greater the focal length of the lens, the smaller the angle of view — that is, when the focal length is increased, the field of view that you see through the lens is narrowed. If the focal length of the lens is decreased, the opposite happens. Lenses that produce a wider than normal viewing angle, usually 65 degrees or more, are classified as short-focal-length lenses. Most of those designed for small- and medium-format cameras are called wide-angle lenses.

Wide-angle and short-focal-length lenses often represent the only practical way of taking a photograph when you are unable to include all of the important elements in a scene using a normal lens — for example, in photographing building interiors (when space limitations restrict you) or landscapes (when you want to capture a wide panorama). Short-focal-length lenses create the visual effect of moving the scene away from the camera; with a wide-angle lens, an object will appear smaller than it would with a normal lens.

These lenses are also useful for achieving the deliberate creative effect of exaggerating the perspective of a scene by overemphasizing foreground objects, thereby adding to their visual impact.

Long-Focus Lenses Camera lenses that have an angle of view of 35 degrees or less are called long-focus lenses; they enlarge the image relative to that produced by a normal lens. Telephoto lenses are long-focus lenses designed to magnify the image to a far greater degree than the lens-to-film distance would normally dictate. Binoculars are a good example of a telephoto lens. Long-focal-length lenses for 35mm and roll-film cameras use a telephoto design.

Long-focal-length lenses come in handy for photographing distant objects or isolating small elements of complex scenes that you cannot get close to. For portraiture it is usually wise to select a lens that is approximately twice the normal focal length; this will create a pleasing perspective and avoid crowding the subject with a camera.

Lenses favored for conventional studio portraiture, known as portrait lenses, generally have a long focal length and produce a slightly "soft" image with diffuse definition of detail (spherical aberration is often designed into the lens).
Mr. Francesco Moretti  
Maliko Bay Trading Company LLC  
462 Laulea Place  
Paia, Hawaii 96779

Dear Mr. Moretti:

RE: Rescission of Special Management Area (SMA) Assessment Determination and SMA Minor Permit for the Eight-Lot Maliko Point Subdivision and an SMA Assessment Determination and Exemption for Two Tool Sheds for Aquaculture Purposes on Approximately 44 Acres at Apuwai Street, Tax Map Key 2-7-004: 006, Haiku, Maui, Hawaii (SMX 2002/0072, SM2 2002/0198, SM5 2002/037)

The purpose of this letter is to inform you that the Department of Planning's ("Department") Special Management Area ("SMA") assessment and determination for an exemption for the tool sheds dated August 19, 2002, and the assessment and approval of the SMA minor permit dated December 30, 2002, for the above-referenced subdivision were erroneously issued and are therefore, being rescinded. It is the Department's position that the prior assessment and determination was made on the basis of inadequate and insufficient information in your application(s). Your application did not adequately address the General Plan's and the Paia-Haiku Community Plan's goals, objectives, and policies and Chapter 205A, HRS, some of which are identified in the enclosed attachment. Specific information which is required before the Department can make a proper assessment and determination is detailed in this letter.

Cost of Project

Your application failed to include the costs for all components of the project. The valuation submitted on December 4, 2002, identifies the cost estimates for "SMA Area Only." A map showing the area of your project which you believe falls outside of the SMA must be provided, along with a separate cost estimate for that portion of the project.

Another issue pertaining to this matter is the inconsistent estimates submitted with regard to water improvements. Initially, your application submittal of February 20, 2002,
stated that water would be provided by a system of catchments and storage. The estimated cost was $15,000 for waterlines, and $10,000 for a water tank. There was no mention of two wells and well permits approved by the State Commission on Water Resources.

Thereafter, on September 30, 2002, you provided an amended estimate of $13,000 for waterlines, $20,300 for a water tank, and $23,000 for a water well. Then, on December 9, 2002, you provided another estimate for what you termed, "SMA Area only," of $16,000 for waterlines/hydrants, $24,300 for a water tank, and $14,000 for a water well.

The Department is uncertain whether the above-mentioned figures include two wells or one well. Further, do these figures include the development costs (i.e. drilling, labor, and materials) for the well(s)? Additionally, your estimate indicated that there would be standpipes and 6" and 4" waterlines. The standpipes are directly contrary to the requirements of the Community Plan.

Water Improvements/Fire Protection

Specific details concerning the adequacy of water and fire protection were not fully addressed in your application. Your application failed to include the purpose of the water tank. The administration and operation of the private water system to serve a potential of 16 farm dwelling units were also not described. The source of irrigation for the subdivision roadway landscaping (including responsibility for maintenance) was neither identified nor discussed in your application.

The application also did not contain a description or analysis of the proposed water system improvements, and instead, was merely identified on the cost list. The Department was not provided with any information evidencing that the Fire, Health, Water Department, and State Commission on Water Resources commented on or addressed any issues concerning the impact of the proposed water system on existing resources and infrastructure systems. In fact, in its May 2, 2002 letter, the Department of Health stated that it would not approve the subdivision with a private water system.

Your application also did not provide information or discussion identifying the existing public water systems in the area, including justification for why you were not going to utilize them. The location and size of existing waterlines in the area, as well as the adequacy and availability of public water were not identified.

The Department is also concerned about the status of the Department of Water Supply's "Large Lot" Agreement, wherein the previous subdivider was allowed to defer the
construction of the water system improvements. The previous subdivider agreed to
construct the improvements when the large lots are developed. This agreement included
the 44-acre lot you purchased from the previous subdivider. An agreement to defer
improvements was executed and recorded on January 15, 1997.

As you are aware, this agreement runs with the land. The agreement required
water system improvements to provide fire protection and water service. Among other
things, the improvements included construction of a 6-inch waterline along the subdivision
roads, standpipes/hydrants spaced at 500 feet intervals, and service laterals to each lot.
Depending on the proposed rule for issuance of meters in the upcountry areas, the
subdivision would need to be on a priority list.

You requested that the Board of Water Supply waive this condition of the
agreement since a private water system is being proposed. The Board deferred action on
this matter and requested an outside counsel for a legal opinion. This matter of County
central must be addressed prior to any development and issuance of construction
permits, including any SMA permits.

No maps were provided showing the location of the well(s) and water tank
in the subdivision. The Department has no SMA assessment and determination and no
SMA permits on file that were issued for the well(s). The well(s) are clearly considered a
development and are part of the subdivision application. Construction of these well(s)
should not occur until this matter has been evaluated and an assessment made on the
impact of the well(s) on the groundwater and surface water resources in the area. The well
permit should not have been issued until a full determination and an SMA permit had been
issued.

It should be noted that the information you provided, "Ground Water and Surface
Water in the Haiku Area, East Maui, Hawaii" by Stephen B. Gingerich, U.S. Geological
Survey, Water-Resources Investigations Report 98-4142, did not have information on the
impact of the withdrawal of water from your property on the springs in Maliko Gulch as you
verbally indicated. If you are submitting this report as reference to support your
development, you should provide a summary and conclusion of this report and relevant
data or information pertinent to your project. A technical analysis by a certified hydrologist
of your proposed well(s), and its impact on the spring(s) in Maliko Gulch should be
included.

The number of existing wells in the area and the effect of withdrawals from these
private wells should also be discussed and analyzed. The amount of water projected to
be withdrawn from the well(s) should also be identified. Residents are concerned that your
well(s) may impact the springs and water in Maliko Gulch which may affect their lifestyle and living.

The issue of potable water and the quality of the water in your well(s) were also not addressed, particularly since the area was originally under pineapple cultivation where tests have shown that water wells in these areas have a high pesticide content. Documentation was not provided that the water system would be free from pesticides and safe for drinking purposes.

Further, the impact and relationship of the well(s) to sewage disposal should also be identified and addressed.

Lastly, your inconsistent statements on whether there would be aquaculture development on the property need to be clarified.

Rainfall and Climate

No technical data on rainfall and climate in the area were provided. This information is necessary in order to determine whether the proposed catchment systems and drainage improvements would be adequate.

Drainage

A description of the topography of the site was not adequately provided. Your application stated that the property is gently sloping with good drainage (4% slope). Based on the subdivision plot plan, however, the slope appears to be directed toward Maliko Gulch and the stream below. More detailed topography information is needed in order to determine drainage and runoff concerns, as well as impact and mitigative measures, if necessary, to prevent runoff into the gulch and ocean.

According to the Department's December 30, 2002 Assessment, item 2(D), states that:

"The project will increase employment within the small agricultural business and construction industry, particularly during infrastructure and dwelling construction. Landscaping and agricultural industry, including fish farming, will benefit from this project (one of the future owners is planning to construct fish ponds for the purpose of farming.)"

Runoff from the property and drainage of the fish ponds or any spills into the
ocean were not addressed. The Department notes that there is inconsistency in the submittal with the above statement in Section 2(D) of the Assessment regarding fish ponds since your December 4, 2002, estimate noted that there would be no aquaculture. This issue needs to be clarified.

In Section 2(E) of the Department’s Assessment, it was noted that:

“According to the applicant’s engineer, an individual drywell system can be installed on each lot based on the size of the roof. The runoff from the roof will flow into this well and have the runoff percolate into the ground. This will be a benefit to the homeowner and would recharge the ground water. A drywell will be required for every 700 square feet of roof area.”

The Department needs to know a drywell system as opposed to another method of drainage is more appropriate in this area. Depending on rainfall and climate, a drywell system may not be appropriate. There may also be concerns regarding mosquitoes in this area. Further, although the drywells may address runoff from the roofs of structures, a larger issue is the runoff into Maliko Gulch from the use of the land for structures and human habitation, agricultural and aquacultural activities, the roadways, and for any other activities on the property. No information was provided on the amount of grading activities and its potential impacts.

Agricultural activities

No information from the State Land Study Bureau or the Agricultural Lands of Importance to the State of Hawaii (ALISH) on soil classification were included in your application. This information is necessary to determine agricultural feasibility, as well as drainage impacts. The feasibility of subdividing the property for agriculture purposes were not addressed.

In a separate SMA application (SM5 2002/0307), approved August 19, 2002, the Department permitted two one-story sheds of 200 square feet each for storage of aquaculture equipment. These two sheds were approved on the basis that they were accessory to an activity that is permitted in the Agricultural District.

Based on the cost estimates made for the SMA Assessment and Minor Permit approved for the subdivision, however, the aquaculture activities were withdrawn. If is not clear on whether this withdrawal means that you will no longer construct the two storage sheds for aquaculture purposes or that you will construct the two storage sheds and no longer use the storage sheds for aquaculture purposes. There was no written
communication or explanation on this withdrawal, other than to reduce the valuation of the project.

If no aquaculture activities are proposed, the Department needs to know what type of agricultural activities or uses are proposed. How much water will be required for these activities? Are the proposed well(s) and water tanks adequate for these uses?

No technical data or information was included in the SMA application on the amount of water to be used, and its impact on the groundwater and surface water resources on the existing farmers in Maliko Gulch.

The community is further concerned that a road is being planned to traverse from the top of the gulch to the bottom. Whether this road is related to the aquaculture activity and tool sheds located above the gulch is unclear. Clarification should be provided on why the tool sheds were placed on the ridge of the gulch. An analysis should also be provided on the effect of the location of the sheds from Hana Highway heading east towards Maliko Gulch.

**Access and Traffic**

Apuwai Street is the internal subdivision road. Your application did not include a description of the access through the existing subdivision and connection to Haiku Road and Hana Highway and its effect on the existing subdivision. Your letter of February 19, 2002, Exhibit B, “Proposed Action” states that a 40-foot wide paved road and private gravel driveways will be necessary to access the newly created lots.

On September 30, 2002, you submitted additional information relating to the roadway and access. You indicated that the proposed development will generate 21 additional cars which would not transit through the village of Haiku, and occasionally will access Haiku Road and Hana Highway, over the span of the daytime.

The County’s Agricultural zoning district permits two houses on the property. Considering that there is a potential that 16 houses may be constructed on the property, and the potential of about two cars (a low estimate on the number of cars per household) per lot, approximately 32 vehicles may be generated by this property. Your submitttal did not address the concern about the impact or effect of the additional vehicles on the intersections at Apuwai Street at Haiku Road, and Haiku Road and Hana Highway. The effect of the existing Haiku Hills Subdivision, which abuts your project and which lies outside the SMA, was not addressed at the time of subdivision. The cumulative impact of your development along with other developments in this area should be assessed and
mitigative measures, if necessary, proposed.

Views

In your letter of April 29, 2002, you indicated that you are proposing a five-foot berm and that the Haiku Community Association was happy with the berm. This was the first written indication that there will be a berm along Hana Highway, and therefore, the Department was unable to evaluate or assess the impact of the berm on views.

In your letter of May 13, 2002, you indicated that your Engineer's conclusions are that a one-story house with a total height of 20 feet in the proposed location will not interfere with the view of the West Maui Mountains. Based on the cross section that you provided, it would appear that the view from Hana Highway will be the berm. No elevations looking from a car on Hana Highway directly at the berm and at the houses to the mountains were provided to determine the impact of the berm and the houses on the view. This five-foot berm will totally obliterate the vista of the plain and West Maui Mountains from the average vehicle or person walking along Hana Highway.

The information you provided on July 1, 2002, included a written description and photographs showing a 20-foot high pole, noting that the pole with a yellow flag was held 120 feet into the lot away from Hana Highway. Lot 6A has a ground elevation of six (6) feet lower than the highway.

Lot 6G has a similar elevation dropping 14 to 18 feet if compared to elevation atop Lot 6A. You noted that a five-foot berm will drastically reduce the visible impact of buildings' walls, without interfering with the scenic view from the highway. You concluded that the two lots will have to be limited to a height of 20 feet (roof top) and the closest wall will be 120 feet from the edge of the highway pavement. There will be no fill imported for the proposed building pads. The entire area fronting Hana Highway with the same or low elevation than the lots should be considered part of the view plane. Based on this view, the house located on Lots 6A, 6F, 6G, and 6H should be moved to the higher elevation outside of the view plane.

The information you provided on August 6, 2002, indicated that your proposed plan is restricting the location of the houses on Lots 6A and 6G to the least impacted area, and a building height of 20 feet. You noted that building size is not final but used a main house of 40 by 50 feet for a total area of 2,000 square feet, and a cottage of 30 by 30 feet for a total area of 900 square feet. Based on this scenario, you noted that with the building location on lots 6A and 6G, there are 600 feet of unobstructed view but this is only true for the one point identified as the view cone. You stated that the houses on Lot 6H are 30 feet
below the observation point elevation and would not interfere in the yellow view cone corridor.

The Department, however, notes that the houses are located in the view plane. You did not provide an analysis on the effect, leaving the houses in the view plane with only 600 feet of unobstructed view, on the view for cars traveling on Hana Highway at the posted speed limit.

You stated that landscaping is limited to ten (10) feet in height to preserve the view. Landscaping, in itself, becomes a natural barrier or wall and would obstruct the view from the highway. The plan considers a five-foot berm on Lot 6G, and the berm with landscaping on Lot 6A, to minimize the view of the house walls. The berm is set at 90 feet from the observation point (car). The first house is 220 feet from the observation point due to the highway shoulders. Consideration was not given on the view from a moving car which would be obliterated by the berm, landscaping, and reduced view corridor of 600 feet. The point of the visual impact or view study is to protect or mitigate impacts on the existing vistas. It is not to mitigate impact of building walls.

Given the scenario you provided (if you can show that the houses will not obstruct the view), the minor permit did not require any covenants that would restrict the sizes of the houses to the 2,000 and the 900 square feet respectively and to a specific location on the lot. There were no indication that covenants will preserve the open space to protect the view plane.

The cross section analysis drawing that was provided for Lots 6G and 6A takes a cross section looking from Maliko Gulch. There should also be a view taken from Hana Highway fronting the property. Based on the scenario and information you provided, the view from Hana Highway would be the berm. The photographs with the 20-foot pole should have shown houses superimposed next to or with the pole in the rear or front of the houses.

In addition to the proposed subdivision, an alternative subdivision design may also reduce the impact of the development on the existing vista. This could be done by redesigning the lots so that the houses are located away from the highway where the elevation of the property is lower than the highway or away from the view of the highway.

In addition, consideration could have been made to cluster the housing so that the view plane as well as more efficient farming operations, could still be provided. The Department also notes that within the view cone, there are two dwelling units in Lot 6H which could be moved away from the view area. In addition, the two sheds that were
approved by the SM2 minor permit are located in the same area, and the view plane was not considered at the time of the SM2 permit approval. The drawings for these two sheds show them to be on pier-post and should be moved or included in the analysis.

In addition to the dwelling units, a description on whether or not the utility poles and lines would be above-ground or underground were not discussed or identified on any plans.

**Construction of Wells**

The construction of wells on the property did not receive any SMA review or permits prior to issuance of the well permits by the State Commission on Water Resources. The development of the wells are part of your proposed subdivision and should have been reviewed and included with your SMA application. Although the SMA exemption for the two storage sheds were issued on your representation that they were necessary for aquaculture activities, the subsequent cost estimates submitted for your proposed subdivision stated that there will be no aquaculture activities on the property. The Department questions where the State Commission on Water Resources was aware of the Department of Water Supply's "Large Lot" Agreement and of the Maliko Gulch residents' concerns regarding the impact water withdrawals from your wells would have on their water use.

As the foregoing demonstrates, the Department has many concerns regarding the project which were not adequately addressed in your application. Based on the foregoing, the SMA assessment and determination for an exemption dated August 19, 2002, (SM2 2002/037) for the tool sheds, and the assessment and approval of the SMA minor permit dated December 30, 2002, (SM2 2001/0198) are hereby rescinded.

You are advised that no construction permits, including but not limited to grading, subdivision, and building permits, may be approved. As noted above, and as specifically identified in this, there are several major points and issues that are unclear and must be addressed in your description of the project and in your analysis. All of the information should be complied into one packet. The packets can then be transmitted to other agencies for their review and comment.

The Department requests that you provide at least two complete sets (one original and one copy) of your application and its corresponding submittals. Additional copies will be required to send to agencies after the Department has reviewed your submittals to ensure that the information you provide is adequate. Copies of the SMA major permit application are enclosed for your use.
If you have any further questions, please contact Julie Higa, Staff Planner, at 270-7814.

Sincerely,

MICHAEL W. FOLEY
Director
GENERAL PLAN AND COMMUNITY PLAN

Consistency with General Plan and the Paia-Haiku Community Plan Goals, Objectives, and Policies.

GENERAL PLAN:

"B. LAND USE

Objective

2. To use the land within the County for the social and economic benefit of all the County's residents.

Policies

a. Mitigate environmental conflicts and enhance scenic amenities, without having a negative impact on natural resources.

Objective

3. To preserve lands that are well suited for agricultural pursuits.

Policies

a. Protect prime agricultural lands from competing nonagricultural land uses.

d. Discourage the conversion, through zoning or other means, of productive or potentially productive agricultural lands to nonagricultural uses, including but not limited to golf courses and residential subdivisions.

e. Provide adequate irrigation water and access to agricultural lands.

C. ENVIRONMENT

Objective

1. To preserve and protect the county's unique and fragile environmental resources.

Policies

a. Preserve for present and future generations the opportunity to experience the natural beauty of the islands.

b. Preserve scenic vistas and natural features.

c. Support programs to reduce air, land and water pollution.

Objective

a. Preserve, enhance and establish traditional and new environmentally sensitive access opportunities for mountain and ocean resources.

b. Evaluate all land based development relative to its impact on the County's land and ocean ecological resources.

C. AGRICULTURE

Objective

2. To maximize the use and yield of productive agricultural land throughout the County.

Policies

a. Ensure the availability of land that is well suited for agricultural production.

c. Ensure the availability of adequate irrigation water for agricultural purposes during periods of limited rainfall.

g. Discourage establishment of pseudo-agricultural subdivisions.
D. URBAN DESIGN
Objective
1. To see that all developments are well designed and are in harmony with their surroundings.

IV. TRANSPORTATION
A. TRANSPORTATION
Objective
1. To support an advanced and environmentally sensitive transportation system which will enable people and goods to move safely, efficiently and economically.

B. WATER
Objective
1. To provide an adequate supply of potable and irrigation water to meet the needs of Maui County's residents.

Policies
a. Support the improvement of water transmission systems to those areas which historically experience critical water supply problems provided the improvements are consistent with the water priorities and the County's Water Use Development Plan provisions for the applicable community plan area.

b. Meet or exceed Federal quality standards for the potable water supply.

c. Develop improved systems to provide better fire protection.

d. Monitor growth activities throughout Maui County in order that development of new water sources is concurrent with approval of new developments.

e. Support the Board of Water Supply in its determination of future water needs consistent with the General Plan, Community plans and the growth management strategy.

f. Maintain the right to manage the County's water sources and transmission systems at the County level.

Objective
2. To make more efficient use of our ground, surface and recycled water sources.

Policies

d. Improve catchment systems and transmission systems to reduce runoff.

f. Discourage the use of standpipes for fire protection purposes.

g. Promote water conservation practices to make the most efficient use of existing water sources.

PAIA-HA'IKU COMMUNITY PLAN

LAND USE
Goal
A well-planned community that preserves the region's small town ambiance and rural character, coastal scenic vistas, and extensive agricultural land use, and accommodates the future needs of residents at a sustainable rate of growth and in harmony with the region's natural environment, marine resources, and traditional uses of the shoreline and mauka lands.

Objectives and Policies
1. Protect the marine environment and quality of offshore waters.

2. Preserve important scenic vistas and shoreline resources of the region.

Implementing Actions
3. Establish varying minimum lot sizes and subdivision standards to reflect different
kinds of proposed uses and activities, thereby, preventing the improper use of agricultural and rural areas. Moreover, ensure that minimum two-acre lot subdivisions intended for "gentlemen estates" are limited to areas that (a) have adequate public services and infrastructure, and (b) would not significantly detract from the agricultural, rural, open space, scenic and environmental qualities of the region.

5. Improve standards and procedures to protect scenic vistas and shoreline resources of the region.

ENVIRONMENT
Goal
The preservation and protection of the natural environment, marine resources and scenic vistas to maintain the rural and natural ambiance and character of the region.

Objectives and Policies
1. Preserve and protect scenic vistas along Hana Highway.
6. Protect the quality of surface and groundwater resources.
7. Protect all wetland resources. Such resources provide open space and habitat for plant and animal life in the aquatic environment. Ensure that the development of new water sources does not adversely affect in-stream flows.
8. Protect and maintain the quality of the nearshore and offshore waters and marine environment. Ensure that storm water run-off and siltation from proposed development will not adversely affect the marine environment and nearshore and offshore water quality. Open culverts which empty directly into nearshore waters should be avoided.
9. Encourage the construction of natural grass-lined drainage channels, as opposed to concrete channels and the installation of siltation basins.
10. Effectively control agricultural run-off.

CULTURAL RESOURCES
Goal
Identification, protection, preservation, enhancement and appropriate use of cultural resources, cultural practices and historic sites that provide a sense of history and define a sense of place for the Pa‘ia-Ha‘iku region.

Objectives and Policies
1. Encourage and protect traditional mauka and makai accesses, cultural practices and rural lifestyles. Protect traditional hunting, fishing and gathering.

PHYSICAL INFRASTRUCTURE
Water
Goal
An adequate supply of potable and irrigation water to meet the needs of the region.

Objectives and Policies
3. Ensure that the development of new water sources does not adversely affect in-stream flows.

Drainage
Goal
Improvements to the storm drainage system which provide for a high standard in preventing flooding and property damage while not adversely affecting the marine environment and nearshore and offshore water quality.

Objectives and Policies
1. Ensure that storm water run-off and siltation from proposed development will not adversely affect the marine environment and nearshore and offshore water quality. Open culverts which empty directly into nearshore waters should be avoided.
4. Effectively control storm water run-off in new urban, rural or agricultural subdivisions and developments, so as to avoid net increase in storm water run-off.
where practicable.

Energy
Goal
Greater self-sufficiency in the need for nonrenewable energy and more efficiency in use of energy resources.

4. Utilize renewable energy for water pumping and other energy services which can take advantage of intermittent energy resources.

6. Support energy-efficient building design and site development practices.

7. Promote energy conservation and awareness programs.

8. Limit requirements for street lighting in agricultural and rural communities.

C. Planning Standards

5. Subdivision

Environmental Design
Lot configurations, roadways and subdivision improvements shall be designed to respect existing landforms, coastal and aquatic resources, biological resources and cultural/historic resources to the greatest extent possible.

Socio-Economic Considerations
The direct and cumulative impacts on agriculture and the impacts on the community shall be assessed and considered.

Improvements
County urban subdivision standards shall not apply to the Pa`ia-Ha`iku region, except in areas where deemed appropriate, in regards to the following improvements:
- Curbs, gutters, and sidewalks shall not be required;
- Street lighting shall not be required; and
- Pavement width shall not exceed twenty (20) feet.

6. Landscape Planting

b. Incorporate the principles of xeriscaping in future landscape planting.

7. Roadway standards

a. Roadways shall have minimum pavement width of sixteen (16) feet, and shoulder width of two (2) feet, to provide for the safe passage of two-way traffic, except in areas where natural landforms, historic structures and other environmental constraints preclude widening beyond existing roadway widths.

b. Roadways (excluding Hana Highway, Baldwin Avenue and Ha`iku/Kokomo Roads) shall have a maximum width of twenty (20) feet of pavement except in residential areas where on-street parking is desired, or around tight turns and blind corners.

c. County-standard curbs, gutters, and sidewalks shall not be required in the Pa`ia-Ha`iku district except in high density areas such as multi-family development. Graded shoulders and swales shall be allowed without curbs. Where sidewalks are provided, they shall be separated from roadways by a minimum 2-foot-wide planting strip along residential streets, and a minimum 4-foot-wide planting strip along highways.

9. Environmental Aspects

c. Ensure that storm water run-off and soil erosion from proposed developments will not adversely affect the marine environment and nearshore water quality.

COASTAL ZONE MANAGEMENT PROGRAM
Compliance with the Coastal Zone Management Program pursuant to Chapter 205A, Hawaii Revised Statutes, as amended.

**Section 205A-2(b)(4)(E):**
"Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures;"

**Section 205A-4:**
"Implementation of objectives, policies, and guidelines. (a) In implementing the objectives of the coastal zone management program, the agencies shall give full consideration to ecological, cultural, historic, esthetic, recreational, scenic, and open space values, and coastal hazards, as well as to needs for economic development.
(b) The objectives and policies of this chapter and any guidelines enacted by the legislature shall be binding upon actions within the coastal zone management area by all agencies within the scope of their authority."

**Section 205A-26(1)(D):**
"Alterations to existing land forms and vegetation, except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, wind damage, storm surge, landslides, erosion, siltation, or failure in the event of earthquake."

Further, Section 205A-26(2), states that no development shall be approved unless the authority has first found that:

"(A) That the development will not have any substantial adverse environmental or ecological effect, except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, or compelling public interests. Such adverse effects shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect, and the elimination of planning options;

(B) That the development is consistent with the objectives, policies, and special management area guidelines of this chapter and any guidelines enacted by the legislature; and

(C) That the development is consistent with the county general plan and zoning. Such a finding of consistency does not preclude concurrent processing where a general plan or zoning amendment may also be required."

Section 205A-26(3) states that the authority shall minimize, where reasonable:

"(E) Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land."
Mr. Michael W. Foley, Planning Director  
Department of Planning  
County of Maui  
250 South High Street  
Wailuku, Hawaii 96793

Dear Mr. Foley:

Subject: Special Management Area Permit Application (SM1 2003/0010)  
Maliko Bay Agricultural Subdivision  
Haiku, Maui, Hawaii  
Tax Map Key No: 2-7-36: 31 and 2-7-04: 6

We have reviewed the subject application forwarded by your transmittal dated July 2, 2003, and find that the subject parcels are primarily designated within the State Land Use Agricultural District. The steeper, western portion of TMK No: 2-7-04: 6 along Hana Highway is designated within the State Land Use Conservation District.

We understand that the proposed project involves the development of an 8-lot agricultural subdivision on the subject parcels. The subject parcels consist of “Prime” agricultural land and will be subdivided into lots of varying acreages. The largest lot will be 20.347 acres. Three lots will be over 4 acres and four lots will be over 2 acres. The largest lot is proposed for equestrian uses, while the other lots are suited for either commercial agricultural uses or subsistence agricultural uses for the individual owners. Certain agricultural uses will be prohibited (e.g. hog farming, commercial poultry, roosters, and commercial dog breeding) due to their potential noise impacts.

EXHIBIT 4
We have become increasingly concerned with the proliferation of residential subdivisions in the Agricultural District with little or no connection to agriculture. These developments purport to be agricultural subdivisions but include negligible information with respect to the specific agricultural activities that would be conducted on the land and when such activities would commence relative to the construction of the farm dwellings. Given the paucity of information in the subject application on these very issues, we suggest that there be a more detailed discussion and analysis on how "agriculture will be promoted as an integral part of the project" and specific restrictions on agricultural activities. The timeframe for implanting any farm plan with relation to the development of farm dwellings also need to be discussed. The applicant should also provide some additional information as to the capacity and cost for lot owners to access non-potable water sources to support agricultural activities.

Given the location, scope, and nature of the proposed activity, the Commission defers to the judgment of the County of Maui regarding other matters in the application. We have no further comments to offer at this time.

Thank you for the opportunity to comment on the subject application. Please feel free to contact Bert Saruwatari of my office at [redacted] should you require clarification or any further assistance.

Sincerely,

ANTHONY J. H. CHING
Executive Officer
Dear Mr. Ching,

Thank you for your comments concerning the Maliko Bay Subdivision. I understand that many of the subdivisions on agricultural lands have little to do with agriculture, and appreciate the Commission’s concerns.

**Agricultural Uses** You requested additional information regarding agriculture within my proposed subdivision. As stated in the application, we are pursuing an equestrian center on roughly half of the property. Two parties have expressed an interest because of the size and relative flatness, making it especially suitable for such a use. Several individuals have approached me who would like a place to board horses on the lots. I will retain ownership of one lot (besides the 20-acre parcel), and plan to —— Beyond that, I cannot predict what type of agriculture the future owners would like to do on their properties.

It should be noted, however, that the Maui Planning Department requires that “farm plans” be approved prior to the issuance of a building permit for a house. According to the Maui County Code, a farm dwelling is accessory to a farm, and the predominant use of the property (at least 51% of the area) must be for agricultural purposes.

In reviewing a farm plan, they require that a map be submitted, a description of the agricultural use, and that a unilateral agreement be signed. Once the department is satisfied that agriculture will be the primary use, the unilateral agreement is filed with the Bureau of Conveyances, thus encumbering the property for agricultural purposes.

So while I cannot predict all of the agricultural uses within the proposed subdivision, if owners wish to build a residence, the individual properties will have to be used for some permitted agricultural activity.

Finally, I note that at the time the application was filed, I had intended to restrict certain agricultural uses that some people might find offensive, mostly because of noise. As your letter notes, these would have included hogs, commercial poultry, roosters and commercial dog breeding. With the passage of SB 255, overriding the Governor’s veto, these restrictions are no longer applicable.

**Water Availability.** The proposed subdivision has two private wells on it. One is 4 inches, with an output of 30 gpm, and will be used for the larger lot, as well as the other that I will retain. The other well is 6 inches, with an output of 80 gallons per minute,
and will be used for the other properties. The chloride level is at 240 ppm, making it suitable for many agricultural uses.

I hope to have addressed all of your concerns, and I remain available if further clarification is requested.

Best regards.

[Signature]

Francesco Moretti

Malikobay Trading Co.

CC: Maui County Planning Department, Mike Foley, Julie Higa
July 15, 2003

Michael W. Foley
Planning Director
Dept. of Planning
County of Maui
250 South High Street
Wailuku, HI 96793

RE: Maliko Bay Estates TMK 2-7-036:031 and 2-7-004:006

Dear Mr. Foley,

OHA is in receipt of your July 2, 2003 request for comments on the above referenced project. We offer the following comments.

Archaeological Resources

We note that no archaeological resources were discovered on the eight acres subject to archaeological survey. The archaeologist theorizes that this is due to extensive disturbance during pineapple cultivation and concludes that it is unlikely that cultural deposits will be found during construction.

However, OHA notices that pages 7 and 8 of the archaeological report are missing. These pages provide a summary of Native Hawaiian pre-historic and historic sites on a neighboring property, which are considered to be significant. OHA will withhold its opinion of the archaeological survey until we receive the missing pages.

EXHIBIT 5
Compliance with the Maui Community Plan

OHA questions whether this project truly conforms to the Maui Community Plan. Maui County has obvious concerns about a suitable inventory of housing for its population. While this project is not marketed as “affordable,” it claims to conform to the Community Plan in that it offers the opportunity for a wide range of housing possibilities. However, the SMA never states the price ranges of the lots. Furthermore, the covenant restrictions suggest that “affordable” housing options will not be available on these lots.

OHA is also concerned that second homes on the lots (allowed under Maui ordinance) will become Bed and Breakfasts rather than long-term rentals. OHA suggests that to ensure the rural character of the subdivision, transient accommodations be clearly banned in the subdivision.

Compliance with Community Requests

In his June 6, 2002 letter to Mr. Moretti, Mr. Tim Wolfe, of the Haiku Community Association notes that Mr. Moretti had promised to restrict the maximum roof-top building height to 20 ft. However, the Covenant of restrictions limits maximum roof-top height to 30 ft directly above the underlying pre-construction existing grade of the land.

Water

The landowner has dug private wells to ensure adequate water supply for the subdivision. Since no analysis of estimated water use, or sustainable yield for the wells is provided in main portion of the SMA documents, OHA questions the long-term sustainability of the private wells.

We note that a "private well" becomes public when it” has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily. Since the subdivision can support 16 homes and approximately 43 people (p. 16), the private systems will more than likely become a public system in the near future. This contradicts a statement on p. 9 which states that “nothing will be done to create a public system.” OHA asks that this discrepancy be clarified prior to issuance of the SMA.

Coastal Waters

OHA has received indication from a Mr. Pestana-Torres that there is concern about the coastal waters in the area. We note that the projected increase in runoff will be approximately 6% due to development of the property. The SMA states that increase run-off will be directed into a grass swale, which will eventually direct the run-off away from the property. OHA is not clear on where the run-off is being directed. Since this area already has runoff-problems during storms, we suggest that every effort be made to ensure there is no run-off into the coast waters prior to the issuance of the SMA.
Thank you for this opportunity to comment on the above referenced project. If you have further questions, please contact Pua Aiu at [REDACTED] or e-mail her at paiu@oha.org.

Sincerely,

Peter L. Yee
Director
Nationhood and Native Rights

C: Francesco Moretti,
Chelsea Hill Consulting
471 Alakapa Pl.
Paia, HI 96779
Dear Mr. Yee,

Thank you for your comments on the SM1 2003/0010, we apologize for the missing of pages 7 and 8 of the Archaeological report, and we attach them to this letter for your revision (we have experienced printing complications beyond our control).

Compliance with Community Plan: What was intended in our application is to explain that this project is contributing to generate housing and farmable lots in a variety of size and housing possibilities in several ways.

Houses will be built by owners for their residential needs, and since the zoning allows for "Ohana", those, if built, will provide for a less expensive rental opportunity to help with the congested rental market.

When we say less expensive, we don’t intend “affordable housing”, we intend that since an Ohana is limited in size, the cost of the rental being proportional to size will result in a less expensive housing solution for long term renters.

Compliance with Community requests: In June 2002 we had a different lot layout, with two smaller lots bordering Hana Hwy.

The letter was referred and limited only to those buildings.

In October 2002 a new lot plan was submitted, and those lots moved to the other side of the access road, towards Maliko gaulch.

Now there are 550 ft between the highway and the first possible building location, and we have assessed with the Photographic survey that a 30 ft tall house has an extremely minimal impact.

Water: The project has received two permits for separate water systems.

One will be serving the 20 acre lot and the 4 acre lot, that will remain in my ownership, as the well is also.

The other well will serve 6 lots, and will be owned and administrated by the Owners Association.

Under these regulation we can serve privately up to 49 individuals or 28 houses, and our intention and commitment is to maintain the wells private.

Coastal Waters: At the moment there is no Run-off from this property, under normal circumstances, although lots of run-off is dumped into the bottom of the gaulch when the pineapple co. opens the ditch up by Haiku Hill, and the Maliko Bay becomes brown.

The topography of the subject property shows furrows all around the perimeter and the upper edge of Maliko gaulch.

These furrows contain drainage on site.

Future development has been calculated to produce a slight increase in general drainage (6%) due to asphalt of public road and roofs.

This drainage will be contained on-site, as the rate of absorption of the 45 acres is greater than the additional 6% drainage that will be generated.

EXHIBIT 5A
Further, the public road and the majority of homes are in the back portion of the property, allowing the water to be absorbed over an even longer run (about half a mile).

We hope to have responded clearly to your comments. We remain available for further questions.

Best regards

Francesco Moretti
(Malikobay Trading Co)

CC: Maui County Planning Department, Mike Foley, Julie Higa
Mr. Michael W. Foley, Director
County of Maui
Department of Planning
250 S. High Street
Wailuku, Hawaii 96793

Dear Mr. Foley,

SUBJECT: Maliko Bay Ag Subdivision; TMK: 2-7-036: 031, 2-7-004: 006
   I.D.: SM1 2003/0010

The subdivision has a major drainage outlet or gulch located within. This outlet may be needed to
adequately provide drainage for several lots within the subdivision. To accomplish this, an
easement would be necessary. A culvert is necessary under field road adjacent to Lots 6B, 6C, 6E
and 6F.

Thank you for the opportunity to comment.

Sincerely,

Neal S. Fujiwara
District Conservationist

Date: July 14, 2003
Dear Mr. Foley,

SUBJECT: Maliko Bay Subdivision
I.D.: SM1 2003/0010

We have met with Mr. Francesco Moretti regarding my comments to you on the subject application. He has assured me that all of my comments will be addressed.

Thank you.

Sincerely,

Neal S. Fujiwara
District Conservationist
TO: Neil Fujiwara, USDA / NARCS

RE: Maliko Bay Subdivision
Luca file n 2.2702

FROM: Francesco Moretti (Owner)

Maui 7-29-2003

Dear Mr. Fujiwara,

Following our conversation, I am forwarding you a copy of last year's letter, where conditions remain the same, as far as drainage, and easements. Further, the requested drainage culvert pipe is on the submitted set of plans at Public Works, and will be installed as requested.

Please notify Planning Department asap.

Best regards.

Francesco Moretti

---

TO: Neil Fujiwara, USDA / NARCS

RE: Maliko Bay Subdivision
Luca file n 2.2702

FROM: Francesco Moretti (Owner)

Maui 8/14/2002

Dear Mr. Fujiwara,

As per our conversation at your office, I have given dispositions to add to the newly submitted checkset of plans, a 30 foot drainage easement, where it will not be allowed to place buildings or large landscaping, so that the normal flow of drainage water will not be obstructed.

These conditions will be part of the deeds to future buyers to ensure a proper drainage to the property in subject.

EXHIBIT 6B
Please notify LUCA if this solution is satisfying

Best regards.

Francesco Moretti

Tel 8712870
TRANSMITTAL

Re: Malikobay Subdivision  SM1 2003/0010

We are transmitting the following to Planning Department, attn. Julie Higa.

- Find attached letter from NRCS-USDA, dated march 1 2004, to help better understand the drainage conditions and the conservation plan that is being implemented on the subject property.

Please call Francesco Moretti for any question in regard.
March 1, 2004

To Whom This May Concern,

SUBJECT: Maliko Bay Trading Company
TMK 2-7-4-6

Mr. Moretti is a cooperator of the United States Department of Agriculture, Natural Resources Conservation Service (NRCS). He has an agreement with the Central Maui Soil and Water Conservation District to be a good steward of his land and implement a conservation plan for his farming activities.

Mr. Moretti and I are cooperatively working together and have looked at all the resource concerns on his property which are soil, water, air, plants, animals and humans for the conservation plan. The following are the major concerns and findings of this parcel.

1) August 19, 2002
   Francesco Moretti met NRCS approval regarding the 30 foot drainage easement which is the natural drainage area. The existing vegetation, California grass and Koa Haole trees will prevent erosion and all runoff will flow naturally through this natural waterway. No buildings or structure will be allowed in this natural drainage area. Approval has been granted for roadway construction and the drainage easement is identified on the construction plans.

2) I visited the farm and subdivision December 2003, January and February 2004 during the torrential rainstorms. There was no runoff or erosion damage on site or on the highway. It appears the new subdivision above Moretti's designed a drainage system which takes care of the drainage/runoff in that area. The access roads on Moretti's farm and subdivision area were not even affected during the storms. Moretti's parcel has perimeter vegetative buffers and is grassed with California grass and the natural drainage system is intact which reduces all severe impacts of erosion and runoff.

3) Currently Moretti is working on an agricultural plot that is plowed which is approximately 1 acre and there are no rills, sheet or gully erosion before and after the storms. Maui Pineapple Company grew pineapple on these

The Natural Resources Conservation Service works in partnership with the American people to conserve and sustain natural resources on private lands.
fields for many years and controlled erosion by implementing conservation practices, some of the same conservation practices that we have planned for Moretti such as Conservation Cover, Grassed Waterway, Nutrient Management, Pest Management, and Contour Planting which will prevent environmental degradation of the land on and off site.

4) One of NRCS major concerns is the need to plant windbreaks which will reduce damage to his new crops. Depending upon the crops that are farmed an appropriate wind protection will be implemented. The soils are very deep, well drained and annual rainfall is 50 to 80 inches.

Should you have any questions, please do not hesitate to call Ranae @ 244-3100 EXT 110.

Sincerely,

Ranae F. Ganske – Cerizo
Maui County Resource Conservationist
Applicant and Property description. Francesco Moretti ("applicant") is the owner of the subject property, and desire to use his property predominantly for agricultural uses.

By way of clarification, the subject property has been into a subdivision process for the past two years, such subdivision will create 8 lots of variable size, and the applicant will remain owner of the majority of the property, in particularly, all of the area being farmed, as per this application. As of today, the property is still considered in one lot.

The commercial farming activities will use the name of "Malikobay Farm".

Acreage Available for Agriculture. The subject property is 44.5 acres in size, all of which is in SMA area, and is classified as "prime agricultural". At the moment the property is "vacant" and a recent brushfire just burned 12 years worth of weeds that accumulated on the property.

The applicant is requesting with this Farm Plan to develop, over the span of 6 years, 17.2 acres of farmed land, and 7 acres of soil conservation, in addition to the 2400 sf horse barn and one acre of arena.

Water source. Currently, two wells are existing on the property and they are being evaluated in the subdivision process for a SMA permit. The intention is to use one of the wells for the subdivided lots that will not remain under the ownership of the applicant, and one for the two lots that will remain with the applicant (one of 21.5 acres and one of 6.1 acres).

At the moment, the State Water Commission has requested that the wells are not used till the SMA application has been evaluated for the Subdivision.

Being the property evaluated as one lot under this application, the applicant requests that the use of one of the two wells is released for agriculture only, until the SMA evaluation is completed for the subdivision.

Agricultural methodologies. The applicant desires to pursue a widely varied agricultural practice that will encompass produce, fruits, trees and a horse riding academy (As in permitted uses in agricultural land), the resulting manure also provides a source of organic fertilizer.

Commercial. Though overlapping with subsistence uses, the aforementioned intercrop plantings will be predominantly for market. Though the applicant chooses not to center efforts on any one particular crop, there will be ample plantings for consistent supply to farmers markets and various outlets such as the nearby restaurants of Haiku town center, Kuau, Makawao and Paia.

EXHIBIT 6C-2
Equestrian center. The applicant is submitting plans to build a classic horse barn (100 horse) with dimensions of 40 by 60 ft, and a low rise roof with a 13 ft max height. The barn will be made of clear wood and green painted metal to well fit in the country setting.

It is anticipated that the facility will be used primarily for horse boarding and an open arena (uncovered) will be completing the project. (location for all of this is represented on exhibit 2).

The applicant has a building cost estimate from Castlebrock barns for the above mentioned barn for a total of $22,500 including engineering.

Fence. In order to prelude cars and people from entering the property trough Hana Highway, the applicant requests permission to build a 5 foot fence (open), made of white poles and metal fencing, along the boundary between the Highway and the property.

Existing activities. It is anticipated that various activities will take place on the property in preparation for the farming, such as but not limited to: Plowing (turning of the soil), Harrowing (cutting larger clumps of soil into growing soil), and removing of Kiawe and Haole Koa trees (invasive species).

These activities have taken place over the past Two years and will be repeated when necessary, as essential part of the farming activity.

The applicant will not request individual permits for the above-mentioned activities.

Equipment and tools storage. There is an existing Container on the property that is used for equipment and tools storage; the size of it is 20 by 8 (total 160 sf), a wooden shed of 16 by 14 ft (total 200 sf), one story, will be necessary for the expanding farming activity, and additional storage facility will be requested as they become necessary.

The shed will be built in December, as soon as we receive permission under SMA rules, since the shed does not require a building permit.

The applicant hopes for a fast and efficient evaluation of this Farm Plan, in order to start the projects in time for the coming season.

Best regards

Francesco Moretti (Malikobay Farm)
Summary of plantings:

<table>
<thead>
<tr>
<th>Crops</th>
<th>Approximate Square footages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Plantings (vegetables and other fruits)</td>
<td>3.1 acres</td>
</tr>
<tr>
<td>Trees</td>
<td>2.6 acres</td>
</tr>
<tr>
<td>Tropical flowers (use and sale)</td>
<td>0.50 acres</td>
</tr>
<tr>
<td>Horse pasture/arena</td>
<td>11.0 acres</td>
</tr>
<tr>
<td>Total sq/ft in active cultivation</td>
<td>17.2 acres</td>
</tr>
<tr>
<td>Soil conservation</td>
<td>7 acres</td>
</tr>
<tr>
<td>Barn structure</td>
<td>2400 sf.</td>
</tr>
</tbody>
</table>

Exhibits: Exhibit 1 outlines the intended plantings and approximate coverages where particular crops will be concentrated together. Most of the plantings are to be intermixed, so exact square footages per crop are not applicable.

Exhibit 2 is a plot plan showing the various areas to be planted, or used for pasture.
## Exhibit 1. Cultivars and Approximate Coverages

<table>
<thead>
<tr>
<th>Trees</th>
<th>Avocados</th>
<th><strong>Persea edulis.</strong></th>
<th>Approx. 30 trees of different varieties.</th>
<th>0.25 acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bananas</td>
<td><strong>Musa acuminata</strong></td>
<td>Approx. 50 trees, depending on growth, clearing after harvest, etc.</td>
<td>0.50 acre at different locations</td>
<td></td>
</tr>
<tr>
<td>Coconuts</td>
<td><strong>Cocos nucifera</strong></td>
<td>Approx. 50 trees</td>
<td>0.50, acre</td>
<td></td>
</tr>
<tr>
<td>Lemons</td>
<td><strong>Citrus limon</strong> and <strong>tangerines</strong></td>
<td>30 trees</td>
<td>0.25 acre</td>
<td></td>
</tr>
<tr>
<td>Mangoes</td>
<td><strong>Mangifera indica</strong></td>
<td>20 trees</td>
<td>0.50 acres</td>
<td></td>
</tr>
<tr>
<td>Macadamia Nuts</td>
<td><strong>Macadamia integrifolia</strong></td>
<td>Four trees</td>
<td>0.10 acres</td>
<td></td>
</tr>
<tr>
<td>Papayas</td>
<td><strong>Carica papaya</strong></td>
<td>Approx. 30 trees</td>
<td>0.25 acres</td>
<td></td>
</tr>
<tr>
<td>Perennial Peanut</td>
<td><strong>Arachis pintoi</strong></td>
<td>Interplanted as a nitrogen source</td>
<td>0.25 ac</td>
<td></td>
</tr>
<tr>
<td>Vegetables and other fruits</td>
<td><strong>Asparagus officinalis</strong></td>
<td>10 plants</td>
<td>0.25 acres</td>
<td></td>
</tr>
<tr>
<td>Dryland Taro</td>
<td><strong>Colocasia esculenta</strong></td>
<td>Approx. 100 plants, depending on harvest, future plantings</td>
<td>0.50 acres</td>
<td></td>
</tr>
<tr>
<td>Edible ginger</td>
<td><strong>Alpinia Sanderae</strong></td>
<td>Approx. 30 plants</td>
<td>0.25 acres</td>
<td></td>
</tr>
<tr>
<td>Lilikoi</td>
<td><strong>Passiflora edulis var. flavidarca</strong></td>
<td>Approx. 15 plants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Garden</td>
<td></td>
<td>Various vegetables &amp; herbs (inside the mixed plantings area)</td>
<td>5,000 sq. ft.</td>
<td></td>
</tr>
<tr>
<td>Personal garden</td>
<td></td>
<td>Various vegetables &amp; herbs</td>
<td>2 acres</td>
<td></td>
</tr>
<tr>
<td>Tropical flowers for use &amp; sale: 0.5 acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Various Heliconias</td>
<td></td>
<td>10 plants</td>
<td>0.25 ac</td>
<td></td>
</tr>
<tr>
<td>Various Gingers</td>
<td></td>
<td>10 plants</td>
<td>0.25 ac</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Horse Pasture</td>
<td><strong>Asph/Asph</strong></td>
<td>10 acres</td>
<td></td>
</tr>
<tr>
<td>Horse arena</td>
<td></td>
<td></td>
<td>1 acre</td>
<td></td>
</tr>
<tr>
<td>Barn</td>
<td></td>
<td></td>
<td>2400 sf</td>
<td></td>
</tr>
</tbody>
</table>

**EXHIBIT 6C-5**
Maliko Bay Trading Company

LETTER OF INTENT

Francesco Moretti, Director of the newly established “Malikobay Farm”, recorded with USDA, NRCS, is starting a new farm that will concentrate particularly on two activities, various produce, fruits and trees on one hand and a horse riding academy, with horse boarding facility.

The above-mentioned activities will start on November 1 2003, on the property located above Maliko Gulch, TMK n° 2-4-7-6 in Haiku.

As essential part of this project is water, this farm owns two wells on the property that are approved and inspected by the State Clean Water Branch. Since the property is in SMA district, an application is under review for the use of the wells for household use.

With this letter of intent, Francesco Moretti intends to use water from these wells for agricultural use only, until the SMA application is finalized.

The projected water consumption is expected to be 4000 gal per day in the first year, and it is considered to be an irrelevant quantity for the subject aquifer.

Best regards

Francesco Moretti
Malikobay Trading Co. LLC (Director)
HAWAI'I HISTORIC PRESERVATION
DIVISION REVIEW

Log #: 2003.1423
Doc #: 037CD68

Applicant/Agency: Mr. Michael Foley, Planning Director
County of Maui
Department of Planning
250 South High Street
Wailuku, Hawaii 96793

SUBJECT: Chapter 6E-42 Historic Preservation Review Special Management Area (SMA)
Permit for Maliko Bay
Ahupua'a: Ha'iku
District, Island: Makawao, Maui
TMK: (2) 2-7-004:006 and 2-7-036:031

1. We believe there are no historic properties present, because:

  a) intensive cultivation has altered the land
  b) residential development/urbanization has altered the land
  c) previous grubbing/grading has altered the land
  d) an acceptable archaeological assessment or inventory survey found no historic properties
       (See SHPD DOC NO.: 0208MK06/LOG NO.: 30591)
  e) other:

2. This project has already gone through the historic preservation review process, and mitigation
   has been completed __.

  ✔ Thus, we believe that “no historic properties will be affected” by this undertaking

Staff: Cathleen A. Dagher
Assistant Maui/Lana'i Island Archaeologist

Date: 30 July 2003

EXHIBIT 7
In 1948, the Maui Agricultural Company and HC&S merged to form one sugar company under HC&S. In 1962, HC&S became a division of Alexander and Baldwin, and East Maui Irrigation Company became a subsidiary of Alexander and Baldwin.

**PREVIOUS ARCHAEOLOGY**

Previous archaeological work in the current project area was limited to a field inspection by SHPD-DLNR (Donham 1994). Pertinent studies conducted in the vicinity included Fredericksen et al. (2001) and Masterson et al. (1995).

Four sites are shown in the vicinity of the current project area on the State Historic Preservation Division Paia Quadrangle (Fig. 4). Site 4833 is Kalawai’a Cemetery. Site 4979 is a fish spotting observation point on the *makai* side of Old Hana Belt Road. Site 5025 is a habitation and burial site located at the mouth of Maliko Stream. Site 5026 is a historic retaining wall on the *makai* side of Old Hana Belt Road.

Donham (1994) of SHPD-DLNR conducted a field inspection of Haiku Agricultural Subdivision Lot 1, the subject project area. In a letter dated June 7, 1994, to Mr. Glen Ueno of the Department of Public Works, Division of Land Use and Codes, several traditional Hawaiian artifacts, including an *ulumaika* stone, an adz fragment, a grounded tool, and a polished flake, were identified on the surface of Lot 1. No intact cultural deposits were found associated with these isolated artifacts.

Cultural Surveys Hawaii (Masterson et al. 1985) conducted an archaeological inventory survey on a 64.27-acre parcel of land, known as Lot 2 of the Haiku Agricultural Subdivision, in Haiku ahupua’a, island of Maui (TMK 2-7-04:6). The entire project area was surveyed; however, due to poor ground visibility, the perimeter and portions of the interior sections were plowed to assess the potential for subsurface cultural remains. No surface or subsurface cultural remains were identified during this investigation.

Xamanek Researches (Fredericksen et al. 2001) conducted an archaeological inventory survey of Maliko Point Parcel 12-A in Haiku ahupua’a, Hamakualoa *moku*, Makawao District, Maui Island (TMK 2-7-04:28). Twenty-two backhoe trenches were excavated throughout the project area. A total of 54 subsurface features, including 10 burial features and 8 burial pits, were identified during testing and designated as Site 50-50-05-4969. The Kalawai’a Cemetery was previously identified as Site 4833.
August 1, 2003

Ms. Julie Higa, Staff Planner
Planning Department
County of Maui
250 S High Street
Wailuku, Hawaii 96793

Dear Ms. Higa:

SUBJECT: Project Name: Maliko Bay Ag Subdivision - subdivision of 45 acre lot into 8 ag lots, roadway, and landscaping
TMK: 2-7-036:031, 2-7-004:006
ID: SM1 2003/0010

Thank you for the opportunity to comment on this project proposal. The Department of Water Supply provides the following information:

The Haiku Agricultural Subdivision created two large lots in 1994. The subdivider requested BWS to allow this subdivision to get final approval with construction of water system improvements deferred rationalizing that there are plans to further subdivide one of the lots. The request was approved and an agreement entitled “Deferral of Subdivision Requirements Agreement” was entered into in 1996. Two of the important provisions of the agreement are: 1) the requirements for each lot of the subdivision are deferred until such time that each of the lots are developed, and 2) the subdivider shall not make any request for residential building permits or water service for lots 1 and 2 until the shortage is terminated and water sources are available to serve the subdivision. Final approval was granted in 1998. One lot had been re-subdivided into 30 agricultural lots. The other lot created is the subject property which is currently owned by the applicant.

In order to address the water source provision of the 1996 agreement, the subdivider (was A & B) provided additional water source to BWS from the Wailoa Ditch. In order to document the conveyance of source and approval of the subdivision, “Modification of Subdivision Requirements Agreement” was entered into by both parties and to date is still in effect.

With the availability of water source capacity for this property, the applicant was recently offered a 5/8” water meter. Since no response was received to date, the property has been removed from the priority list. Should the applicant decide to utilize/request county water in the future, a new request must be submitted in order to be placed back on the priority list.

The application material states that the proposed project will be served by a private water system, 2 wells and an open in-ground reservoir with a capacity of over 30,000 gallons for fire protection. We recommend that the applicant be required to provide domestic, fire and irrigation services in accordance with standards.

The project is served by Haiku Aquifer. This aquifer has a sustainable yield of 31 MGD. The 31 MGD estimate is based on initial hydrological according conditions before the capture of perched water by the ditch.
system. Therefore, according to the 1990 State Water Resources Protection Plan, a more conservative estimate is 15 MGD. The total known pumpage on this aquifer as of June 2003 is 3.31 MGD. The Department has long-published plans to use 10-15 MGD from this aquifer to meet municipal needs. We suggest that the applicant be required to report monthly pumpage to DWS as well as the Commission on Water Resource Management (CWRM). Although the owner proposes to sell vacant lots, we recommend that the applicant be made aware that private systems serving more than 25 people over 60 days of the year are subject to the Department of Health regulations. Depending on intensity of use, consumption for an agricultural project of this acreage would be approximately 220,000 gpd by standards. Empirical use in the Haiku-Pauwela area tends to be lower.

The Haiku aquifer is an important drinking water source. In order to protect surface and ground water resources, we encourage the applicant to adopt Best Management Practices (BMPs) designed to minimize infiltration and run off from daily activities.

We are pleased to note that the applicant intends to use plants appropriate for the area. Native plants adapted to the area, conserve water and protect the watershed from degradation due to invasive alien species. The project site is located in the “Maui County Planting Plan” - Plant Zones 1 & 5. Attached is a list of appropriate plants for the zones as well as potentially invasive plants to avoid.

To further conserve our limited water resources, we encourage the applicant to convey the following water conservation measures to future landowners/homeowners:

- **Utilize Low-Flow Fixtures and Devices**: Maui County Code Subsection 16.20A.680 requires the use of low-flow water fixtures and devices in faucets, showerheads, urinals, water closets and hose bibs. Water conserving washing machines, ice makers, and other units are also available.

- **Maintain Fixtures to Prevent Leaks**: A simple, regular program of repair and maintenance can prevent the loss of hundreds or even thousands of gallons a day. Refer to the attached handout, “The Costly Drip.”

- **Look for Opportunities to Conserve Water**: A few examples of these are as follows: When clearing driveways, etc. of debris, use a broom instead of a hose. When washing cars, use a hand-operated spray nozzle instead of an open hose. Additionally, check for leaks in faucets and toilet tanks.

Should you have any questions, please call our Water Resources and Planning Division at: (808) .

Sincerely,

George Y. Tendar
Director

cc: engineering division
applicant, with attachments:

The Costly Drip
Maui County Planting Plan - Plant Zones 1 & 5 - Saving Water in the Yard: What & How to Plant in your Area
Ordinance 2108- A Bill for an Ordinance Amending Chapter 16.20 of the Maui County Code Pertaining to the Plumbing Code

By Water All Things Find Life
September 15, 2003

Ms. Julie Higa, Staff Planner
Planning Department
County of Maui
250 S High Street
Wailuku, Hawaii 96793

Dear Ms. Higa:

SUBJECT: Project Name: Maliko Bay Ag Subdivision - subdivision of 45 acre lot into 8 ag lots, roadway, and landscaping
TMK: 2-7-036:031, 2-7-004:006
ID: SM1 2003/0010

This letter supercedes our comment letter of August 1, 2003.

Source Availability and Consumption
The project is served by Haiku Aquifer. This aquifer has a sustainable yield of 31 MGD. The 31 MGD estimate is based on initial hydrological according conditions before the capture of perched water by the ditch system. According to the 1990 State Water Resources Protection Plan, a more conservative estimate is 15 MGD. The total known pumpage on this aquifer as of June 2003 was 3.31 MGD. At least one additional well application is under consideration.

DWS has concerns about the proliferation of private systems within the DWS service area. We suggest that the applicant be required to report monthly pumpage to DWS as well as the Commission on Water Resource Management (CWRM).

Consumption for an agricultural project of this acreage would be approximately 220,000 gpd by standards. However, empirical usage in the Haiku-Pauwela area is considerably lower. Anticipated consumption would range from 4,800 gpd for single family units to 73,000 gpd based on average use of agricultural meters in Haiku.

Water Quality Monitoring
The applicant should be aware that private systems serving more than 25 people over 60 days of the year are subject to the Department of Health regulations including rigorous testing and monitoring.

System Infrastructure
The application material states that the proposed project will be served by a private water system, 2 wells and an open in-ground reservoir with a capacity of over 30,000 gallons for fire protection. We recommend that the applicant be required to provide domestic, fire and irrigation services in accordance with standards.

The Haiku Agricultural Subdivision created two large lots in 1994. The subdivider requested BWS to allow this subdivision to get final approval with construction of water system improvements deferred rationalizing

By Water All Things Find Life

EXHIBIT 8A
that there are plans to further subdivide one of the lots. The request was approved and an agreement entitled “Deferral of Subdivision Requirements Agreement” was entered into in 1996. Two of the important provisions of the agreement are 1) the requirements for each lot of the subdivision are deferred until such time that each of the lots are developed, and 2) the subdivider shall not make any request for residential building permits or water service for lots 1 and 2 until the shortage is terminated and water sources are available to serve the subdivision. Final approval was granted in 1998. One lot had been re-subdivided into 30 agricultural lots. The other lot created is the subject property which is currently owned by the applicant.

With the availability of water source capacity for this property, the applicant was recently offered a 5/8" water meter. Since no response was received to date, the property has been removed from the priority list. Should the applicant decide to utilize/request county water in the future, a new request must be submitted in order to be placed back on the priority list.

Pollution Prevention
The Haiku aquifer is an important drinking water source. In order to protect surface and ground water resources, we encourage the applicant to adopt Best Management Practices (BMPs) designed to minimize infiltration and run off from daily activities.

Conservation
We are pleased to note that the applicant intends to use plants appropriate for the area. Native plants adapted to the area, conserve water and protect the watershed from degradation due to invasive alien species. The project site is located in the “Maui County Planting Plan” - Plant Zones 1 & 5. Please refer to list of appropriate plants for the zones as well as potentially invasive plants to avoid.

To further conserve our limited water resources, we encourage the applicant to convey the following water conservation measures to future landowners/homeowners:

- **Utilize Low-Flow Fixtures and Devices:** Maui County Code Subsection 16.20A.680 requires the use of low-flow water fixtures and devices in faucets, showerheads, urinals, water closets and hose bibs. Water conserving washing machines, ice makers, and other units are also available.
- **Maintain Fixtures to Prevent Leaks:** A simple, regular program of repair and maintenance can prevent the loss of hundreds or even thousands of gallons a day. Refer to the attached handout, "The Costly Drip."
- **Look for Opportunities to Conserve Water:** A few examples of these are as follows: When clearing driveways, etc. of debris, use a broom instead of a hose. When washing cars, use a hand-operated spray nozzle instead of an open hose. Additionally, check for leaks in faucets and toilet tanks.

Should you have any questions, please call our Water Resources and Planning Division at: (808) [redacted]

Sincerely,

[Signature]
George Y. Fagan
Director

cc: engineering division
applicants.

By Water All Things Find Life
Dear Mr. Tengan,

Thank you for your comments on the SM1 2003/0010, RECEIVED We are pleased to see in your letter a confirm to the issues on jurisdiction over private water system and on water availability in the subject aquifer.

We are unsure of your estimate of daily water consumption for the 8 lots; in your letter is mentioned to be over 220,000 gallon per day. This number sounds enormous to us, when the average use of one dwelling is 1000 gal per day, and to irrigate one acre it might also require 1000 gal per day, assuming that it is not raining. (Haiku is renowned for its rain). We would appreciate a specification of estimated daily water consumption.

Best regards

Francesco Moretti

(Malikobay Trading Co)

CC: Maui County Planning Department, Mike Foley, Julie Higa

EXHIBIT 8B
Dear Mr. Tengan,

Thank you for your revised comments to this application, we are pleased to see the newly adjusted projected water usage for the 8 lots. (\textit{Sept 15, 03})

The estimated water usage of about 40,000 gal per day for the subdivision is still high for my Engineer's projections, however the capacity of the 2 private water systems is calculated to be respectively 42,000 gal per hour for one well, and 20,000 gal per hour for the second.

Given these data, a few hours of pumping per day will satisfy the 8 future owners.

The owners of the wells are required by law to submit quarterly a pumping chart for the wells, to the State Commission on Water Resource Management, and will be more than happy to make a copy for your use.

I want to reassure you that all the necessary precautions have been taken to prevent pollution, from the use of a solid grout for the well, to the use of aerobic septic systems, as per Dep. Of Health requirements.

Best regards

Francesco Moretti

Malikobay Trading Co. LLC (Director)
MEMO TO: MICHAEL W. FOLEY, PLANNING DIRECTOR

FROM: GILBERT S. COLOMA-AGARAN, DIRECTOR OF PUBLIC WORKS AND ENVIRONMENTAL MANAGEMENT

SUBJECT: SPECIAL MANAGEMENT AREA PERMIT APPLICATION
MALIKO BAY AG SUBDIVISION
TMK: (2) 2-7-036:031, 2-7-004:006
SM1 2003/0010

We reviewed the subject application and have the following comments:

1. Submit a solid waste management plan for the disposal and composting of cleared and grubbed material and the recycling and disposal of construction waste.

2. All roadway and drainage facilities shall be designed and constructed in compliance with applicable County standards and with Maui County Code, Title 18.

3. The drainage system shall comply with the provisions of the drainage rules with additional runoff generated by the development contained on-site and the design engineer shall verify that there will be no additional adverse impacts to adjacent and downstream properties.

4. The grading for the project shall comply with the provisions of the grading ordinance. Best management practices shall be implemented to the maximum extent practicable to prevent pollutants including dust and sediment from discharging off the project site.
5. The subdivision shall comply with the provisions of the subdivision ordinance. Our March 11, 2002 preliminary approval letter with April 9, 2002 and May 20, 2002 amendments are attached.

If you have any questions regarding this memorandum, please call Milton Arakawa at Ext. 7845.
March 11, 2002

Mr. Francesco Moretti
471 Alakapa Place
Paia, Hawaii 96779

SUBJECT: MALIKO BAY SUBDIVISION
TMK: (2) 2-7-004:006
LUCA FILE NO. 2.2702

Dear Mr. Moretti:

Preliminary approval was granted to the subject subdivision on March 11, 2002. Final approval shall be contingent upon compliance with the following conditions:

1. Requirements/comments from Maui Electric Company:

   a. Electricity is available from nearby existing facilities (overhead and/or underground).

   b. Requires line extension (overhead and/or underground) within existing County or State road right-of-way.

   c. Requires line extension (overhead and/or underground) within private road or property.

   d. Requires easement(s) from owner/subdivider/developer within subdivision for new or existing MECO facilities.

Comments: Easements are required by our Land Agent, Ralph Kubota. He can be contacted at

If you have any questions, please contact Mr. Alan Miyazaki at

EXHIBIT 9A
Requirements/comments from the State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division (SHPD):

Our review is based on reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was conducted of the subject parcel.

Based on the submitted plans, we understand the proposed undertaking consists of the subdivision of the subject property into six lots (2.015 - 5.963 acres) and two roadways.

We have previously responded to an information request pertaining to the proposed undertaking (SHPD DOC NO.: 0110CD17/LOG NO.: 29398). Based on the documentation submitted at the time, we understand that the subject property has been in commercial agriculture (pineapple) for the past 50 years, or more.

A search of our records indicates the subject property has not undergone an archaeological inventory survey. An archaeological inventory survey was recently conducted of the adjacent property (immediately to the north of the subject property, across Hana Highway) during which two significant historic sites were identified (4969, a fishing shrine, and 4833, the Kalawai’a Cemetery).

Given the history of the area and the close proximity and significance of the above-mentioned historic sites, we recommend that an archaeological inventory survey, in the form of subsurface testing, be conducted of the northern portion of the subject property in order to determine whether the above-mentioned sites extend into this property and to determine whether additional significant historic sites are present. An acceptable report documenting the findings of the survey will need to be submitted to this office for review. If significant historic sites are identified, a mitigation plan may need to be developed, in consultation with this office, and executed.

If you have any questions, please contact Ms. Cathleen Dagher at (808) 692-8023.
3. Requirements/comments from the State of Hawaii, Department of Transportation, Highways Division (SDOT):
   
a. All access to subdivision via Lot 6K.
   
b. Submit construction plans and drainage report.
   
c. Dedicate access restrictions along Hana Highway.

For further information, please contact Paul Chung at [Redacted]

4. Requirements/comments from the State of Hawaii, Department of Health:
   
a. The subdivision is located in a critical wastewater disposal area where no new cesspools will be allowed. 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 the rules. Questions regarding this matter should be directed to Mr. Roland Tejano at 984-8232.

   b. Catchment water systems will be providing water to the subdivision. The Department of Health does not recommend approval of this subdivision unless it is served by a public water system as defined in the Hawaii Administrative Rules Chapter 11-20, “Rules relating to Potable Water Systems.”

   The Department of Health’s authority over drinking water quality applies to “public water systems” as defined in Chapter 11-20, Hawaii Administrative Rules (HAR). A “public water system” is a system that provides water for human consumption through pipe or other constructed conveyance and has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year. All public water systems are regulated by the Department of Health and shall be in compliance with HAR, Chapter 11-20.

   Should you have any questions, please call Mr. Herbert S. Matsubayashi at 984-8230.
5. Requirements/comments from the Department of Public Works and Waste Management, Engineering Division:

a. Construct drainage crossing on Lot 6J. Submit details in construction plans.

b. 20 foot pavement required on existing Lot 31.

If you have any questions, please contact Lloyd Lee at 270-7745.

6. Requirements/comments from the Department of Planning:

a. A Special Management Area (SMA) major permit is required. The SMA application SMX 2002/0072 is currently under review.

b. The project is located within Flood Zone C. A flood development permit may be required if any work is done within the existing drainageways. Designate the 100 year flood inundation limits for any existing drainageway.

c. Provide an assessment on the direct and cumulative impacts the proposed subdivision will have on agriculture and the socio-economic impacts on the community.

If you have any questions, please contact Mr. Francis Cerizo at

Requirements/comments from the Department of Water Supply:

a. The subdivider should be required to declare to the department on how the subdivision will be provided water service and fire protection. The subdivision requirements will be determined subsequent to this declaration.

b. Comply with the conditions of the “Deferral of Subdivision Requirements Agreement” dated October 10, 1996, recorded on January 15, 1997 as recordation number 97-007136.

If you have any questions, please contact the Department of Water Supply at
8. Requirements/comments from the Department of Parks and Recreation:

We are requiring a cash contribution in lieu of land for the subject project. At the time of final subdivision approval, the subdivider shall submit a certified appraisal of the completed subdivision of lots to the Director of Parks and Recreation. Upon concurrence with the appraisal by the Director of Parks and Recreation, the cash contribution shall be based on the square foot appraisal times the number of residential lots minus three times 500.

If you have any questions, please contact Mr. Patrick Matsui at [Redacted].

9. Requirements/comments from the Department of Fire Control:

Water supply for fire protection shall be provided prior to the location and construction of buildings. Once construction of building are planned, there shall be at least one hydrant or standpipe within 300 feet of any building to be constructed. Water supply for fire protection shall have a minimum flow of 250 gallons per minute for a two hour duration.

If you have any questions, please contact Lt. Scott English at [Redacted].

Requirements from the Department of Finance, Real Property Tax Division:

In accordance with Section 18.12.030(E)(13.a.) of the Maui County Code (MCC), lands located in the agricultural district and assessed by the Real Property Tax Division, according to their agricultural use value, may be subject to deferred taxes and penalties if the land is subdivided. This matter shall be discussed with the tax assessor at the Real Property Tax Division. Return the completed and signed original of the enclosed tax information notice to the Land Use and Codes Administration.

In accordance with Section 18.12.030(E)(13.a.) of the Maui County Code (MCC), submit a letter from all governmental agencies with an easement, lease or license affecting the land subdivided consenting to the preparation and recording of the final plat. If there are none, please indicate this in writing.

In accordance with Section 18.12.040(B) MCC, submit a copy of any deed restrictions or covenants applicable to the subdivision. If there are none, please indicate this in writing.
13. In accordance with Section 18.12.040(C) MCC, submit a tax clearance certificate (issued by Department of Finance, Real Property Tax Division) to show written proof that all taxes and assessments on the tract are paid to date. An "Application for Tax Clearance" form is enclosed for your use. **NOTE:** The tax clearance certificate shall be valid at the time of final subdivision approval.

14. Submit the original of the Subdivision Agreement (Agricultural Use) executed by the owners and extended to their heirs and executors or assigns. A blank form is enclosed for your use.

15. In accordance with Section 18.20.030 (Pavement of streets), improve the proposed subdivision roads to the provisions of the subdivision ordinance for roadways within the agricultural district.

16. Comply with or show compliance with Section 18.20.040(3.a.) MCC which requires the pavement on existing streets providing access to the subdivision to be a minimum width of twenty feet in areas zoned residential, rural or agricultural.

17. Design and construct the drainage facilities to the requirements of the Department of Public Works and Waste Management. A detailed final drainage report and site specific erosion control plan shall be submitted with the construction plans for review and approval. The drainage report shall include, but not be limited to, hydrologic and hydraulic calculations, and the schemes for disposal of runoff waters. The site specific erosion control plan shall show the location and details of structural and non-structural best management measures. The drainage and erosion control plans shall provide verification that the grading and all runoff water generated by the project will not have an adverse effect on the adjacent and downstream properties.

18. Provide verification that legal access has been provided to the proposed subdivision over Apuwai Street.

19. Obtain street name approval from the Commission On Naming Streets, Parks and Facilities, and show street names on the construction plans and final plat.

20. In accordance with Section 12.24A.070(D) MCC, submit street tree planting and irrigation plans and a completed "Maui County Arborist Committee Plans Review Form" for review and approval.
21. In accordance with Chapter 19.30A (Agricultural District) MCC, the maximum number of permitted lots for TMK:(2) 2-7-004:006 with a gross area of 44.135 acres (as certified by the Real Property Tax Division on March 1998) is 8.

In accordance with Section 19.30A.040 MCC, the subdivider shall allocate the maximum number of lots that can be created between the original lot and any new lot created as a result of the subdivision. This allocation of lots shall be recorded with the Bureau of Conveyance. Submit this document for our review and approval prior to the recordation with the Bureau of Conveyances. Since a maximum of 8 lots are permitted from TMK:(2) 2-7-004:006 and 8 lots are being created with this subdivision, no additional lots may be created in the future.

22. Submit ten (10) sets of the construction plans and three (3) sets of a drainage and soil erosion control report or drainage verification, whichever is applicable, for review and approval by the applicable agencies. In accordance with Section 18.24.010(D) MCC, a construction plan review fee ($50/lot) shall be paid upon submission of the construction plans.

When the construction plans are approved, post construction requirements will be noted on the construction plan approval letter. The post construction requirements will need to be completed prior to final subdivision approval.

23. Submit fifteen (15) prints of the final plat in accordance with Chapter 18.12 (Final Plat) MCC. The final plat shall include all revisions addressing the comments noted on the enclosed preliminary plat. The final plats shall be folded into 8 ½" x 11" sized sheets.

24. Submit a digital copy (either on 3¼" floppy disk or compact disc) of the final plat. The digital map shall either be in Arcview GIS file format or be an AutoCAD drawing with NAD83 State Plane Meters, Zone 2 coordinates, and shall include only the lot line drawing.

Within one (1) year from the date of preliminary approval of the subdivision, all requirements shall be completed, unless an extension of time is granted.
Please be forewarned that applications for an extension of time shall be made in writing to the Department of Public Works and Waste Management at least fifteen days before the expiration date. Therefore, an application for an extension of time must be submitted no later than February 24, 2003. In addition, a "good cause" reason shall be stated in your application. Applications for an extension of time which are not in compliance with these two requirements, will result in the subdivision being deemed null and void.

If you have any questions regarding this letter, please call Mr. Lance Nakamura of our Land Use and Codes Administration at [redacted]

Very truly yours,

[Signature]

DAVID C. GOODE
Director of Public Works
And Waste Management

Enclosures: Preliminary Plat
Application For Tax Clearance
Deferred Tax Information Notice
Subdivision Agreement (Agricultural Use)
Agreement For Allocation Of Future Subdivision Potential

xc: Dept. of Finance, Real Property Tax Div. (unmarked preliminary plat only)
Dept. of Finance, Tax Map Div. (unmarked preliminary plat only)
Engineering Division w/preliminary plat
Dept. of Water Supply, SD 02-11
Dept. of Fire Control
Dept. of Planning
DOT, Highways Division
State Dept. of Health
Maui Electric Company
April 9, 2002

Mr. Francesco Moretti
471 Alakapa Place
Paia, Hawaii 96779

SUBJECT: MALIKO BAY SUBDIVISION
TMK: (2) 2-7-004:006
LUCA FILE NO. 2.2702

Dear Mr. Moretti:

The State of Hawaii, Department of Land and Natural Resources, State Historic Preservation Division, has amended condition no. 2 of our March 11, 2002 preliminary approval letter with the following:

2. Requirements/comments from the State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division:

   Our previous comments recommended that an archaeological inventory survey, in the form of subsurface testing, be conducted of the northern portion of the subject property (SHPD DOC NO.: 0202CD12/LOG NO.: 29142).

   We have recently received a post field summary in the form of a letter report (from Lisa Rotunno-Hazuka, Archaeological Services Hawaii to Mr. Francesco Moretti, landowner dated March 31, 2002) indicating that the archaeological inventory survey has been conducted. No significant historic properties were identified during the inventory survey.

   Given the above information, we believe the proposed subdivision will have “no effect” on significant historic sites. However, we request the opportunity to review all permitted actions involving ground altering of the subject property. At present, we recommend that no ground-altering occur on the subject property until an archaeological report documenting the negative findings has been reviewed and accepted, in writing, by this office.
If you have any questions regarding this letter, please call Cathleen Dagher of the Department of Land and Natural Resources, State Historic Preservation Division at [redacted].

Very truly yours,

[Signature]

DAVID C. GOODE
Director of Public Works
and Waste Management

x:
DLNR, State Historic Preservation Division
S:LUCAWALL\SUBDIV\LUCASUBDIVREG\2\2702-1.ftr
May 20, 2002

Mr. Francesco Moretti
471 Alakapa Place
Paia, Hawaii 96779

SUBJECT: MALIKO BAY SUBDIVISION
TMK: (2) 2-7-004:006
LUCA FILE NO. 2.2702

Dear Mr. Moretti:

The State of Hawaii, Department of Health have amended condition no. 4 of our preliminary approval letter dated March 11, 2002 with the following:

4. Requirements/comments from the Department of Health:
   a. The subdivision is located in a critical wastewater disposal area where no new cesspools will be allowed. Pre-construction plan approval for all new wastewater disposal systems is required. All wastewater plans must conform to applicable provisions of the Department of Health’s Administrative Rules, Chapter 11-62, “Wastewater Systems”.
   
   b. The Department of Health’s authority over drinking water quality applies to “public water systems” as defined in Chapter 11-20, Hawaii Administrative Rules (HAR). A “public water system” is a system that provides water for human consumption through pipe or other constructed conveyance and has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year. All public water systems are regulated by the Department of Health and shall be in compliance with HAR, Chapter 11-20.

The subdivision is not serviced by a “public water system”, therefore, the Department of Health has no jurisdiction over the water system. Water quality is the sole responsibility of the owner/operator of the water system.
Mr. Francesco Moretti  
SUBJECT: MALIKO BAY SUBDIVISION  
LUCA FILE NO. 2.2702  
May 20, 2002  
Page 2 of 2  

If you have any questions regarding this letter, please call Mr. Herbert Matsubayashi at [redacted].  

Very truly yours,  

[Signature]  
DAVID C. GOODE  
Director of Public Works  
and Waste Management  

S:\LUCA\ALL\SUBD\LUCASUB\REGZ\2\2702-2.txt  
xcls: Dept. of Health
Transmittal Memorandum

TO: COM - Department of Planning

Attn: Ms. Julie Higa

DEPT OF PLANNING:
COUNTY OF MAUI

SUBJECT: Maliko Bay Agricultural Subdivision
TMK: 2-7-036:031 & 2-7-004:006
Haiku, Maui, Hawaii
I.D. No. ME-03-60

We are forwarding the following:
☐ attached  ☐ under separate cover
☐ shop drawing  ☐ print/sketches  ☐ mix design
☐ calculations  ☐ change order  ☐ plans
☐ Special Management Area Permit

These are transmitted as checked below:
☐ for approval  ☐ approved as submitted
☐ for review and comments  ☐ approved as noted
☐ for your information and file  ☐ returned for corrections
☐ appropriate attention and action  ☐ resubmit ___ copies for approval
☐ as requested

REMARKS:

Copies sent to:

650 Palapala Drive, Kahului, Hawaii 96732

Signed

EXHIBIT 10
DRAINAGE REPORT
and
SOIL EROSION CONTROL REPORT

FOR
Maliko Bay Subdivision

TMK: (2) 2-7-004: 006

PREPARED FOR:
Mr. Francesco Moretti
471 Alakapa Place
Paia, Maui, Hawaii 96779

PREPARED BY:
WAYNE I. ARAKAKI ENGINEER, LLC
P.O. BOX 884
WAILUKU, HAWAII 96793

MARCH 2002
JULY 2002 (REVISED)
MAY 2003 (REVISED)
INTRODUCTION

This report has been prepared to evaluate the onsite runoff for the subject parcel and proposed development. The project site is located on a knoll where there is no major offsite runoff that flows through the property. Hana Highway is between the project site and Maliko Gulch.

PROPOSED PROJECT

A. Location

The subject parcel is location along the West side of Hana Highway. Approximately 800 feet North of the intersection of Hana Highway and Haiku Road. Please see the attached location map. It is also located across Maliko Gulch.

B. Project Description

This is a 8 lot subdivision with a minimum area of two acres the largest lot at 19 +/- acres. There will be a subdivision road extending from Haiku Makai subdivision. The improvements will include a storage pond for fire protection and the subdivision roads, with electrical, telephone utilities.

EXISTING CONDITIONS

A. Drainage

The property is located on a knoll, where there is no major offsite runoff flowing through the property. The runoff sheets flows through the project site in a East to West direction. Runoff is detained on the project site because of the existing pineapple field furrows. A large portion of the runoff is detain by the project site. The developer for this project will maintain the existing conditions so that the natural drainage patterns will remain. The parcel is currently vacant and covered with grass. The improvements to the subdivision and future dwellings will not create any significant of increase of runoff.
Area of Drainage Basin

<table>
<thead>
<tr>
<th>Area</th>
<th>0.67 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>335 feet</td>
</tr>
<tr>
<td>Slope</td>
<td>3.1% = 0.031</td>
</tr>
</tbody>
</table>

Rainfall Intensity (in./hr.)

50 year 1 hour = 2.6 inches

'I' = 6.8 in./hr.

\[ Q = CIA \]
\[ Q = (0.67 \times 6.8 \times 0.67) \]
\[ Q = 3.0 \text{ cfs} - 0.59 \text{ cfs} = 2.41 \text{ cfs} \]

Increase of runoff due to road development.

The total increase of runoff is approximately 6% due to development.

Runoff that is generated by future new dwellings has been computed within the coefficient 'C' for agricultural properties. As an example, there is a higher 'C' for business or commercial use.

CONCLUSION

The improvements for the project will have an increase of runoff to the area. We are proposing to construction two roads for the subdivision. The private or smaller road will be gravel, which will absorb any future runoff. The main subdivision road will direct the increase of run onto a grass swale, which flows down the driveway of Lot 6H and will be dispersed off this property. There is no offsite runoff that flows onto the project site. The property as stated earlier is on a knoll. There will be no adverse effects on downstream and adjacent properties due to development.
Mr. Michael W. Foley  
Director  
County of Maui  
Planning Department  
250 South High Street  
Wailuku, Hawaii 96793  

Dear Mr. Foley:  

Subject: Special Management Area, SM1 2003/001, Maliko Bay Agriculture Subdivision, Haiku, Maui, TMK: 2-7-36: 31; 2-7-04: 06  

The proposed agriculture subdivision will not impact Hana Highway, our State facility.  

The applicant should be advised that grading of the lots should not result in the diversion of surface water run-off onto Hana Highway.  

If you have any questions, please contact Ronald F. Tsuzuki, Head Planning Engineer, Highways Division, at [redacted]. Please reference file review number: 03-195 in all contacts and correspondence regarding these comments.  

Very truly yours,  

RODNEY K. HARAGA  
Director of Transportation  

RI: mt  
bc: STP, HWY-M, -PS  

EXHIBIT 10A
August 4, 2003

Ms. Julie Higa
Staff Planner
County of Maui
Maui Planning Department
250 So. High Street
Wailuku, HI 96793

Dear Ms. Higa:

Subject: Maliko Bay Ag Subdivision
SM1 2003/0010
TMK: 2-7-036: 031, 2-7-004:006

Thank you for allowing us to comment on the subject project.

In reviewing the information transmitted and our records, Maui Electric Company (MECO) at this time has no objections to the proposed project.

MECO has received a service request (M0009579) for this project and is currently working with its electrical consultant.

If you have any questions or concerns, please call Fred Oshiro at [redacted].

Sincerely,

Neal Shinyama
Manager, Energy Delivery

NS/fo:lkh

EXHIBIT II
MEMORANDUM

July 28, 2003

TO: Michael W. Foley, Planning Director

FROM: Glenn T. Correa, Director

SUBJECT: Maliko Bay Ag Subdivision
SM1 2003/0010
TMK (2) 2-7-036:031 and (2) 2-7-004:006

Thank you for the opportunity to review and comment on the Special Management Area Permit Application for the Maliko Bay Ag Subdivision.

After review of the application, we have no comment to offer concerning the aforementioned action, at this time.

Should you have any questions or need of additional information, please call me or Patrick Matsui, Chief of Parks Planning & Development at extension 7387.

c: Patrick Matsui, Chief of Parks Planning & Development
MEMORANDUM

TO: MICHAEL W. FOLEY, PLANNING DIRECTOR
FROM: THOMAS M. PHILLIPS, CHIEF OF POLICE
SUBJECT: SM1 2003/0010

I.D.: 2-7-036: 031, 2-7-004:006
Project Name: Maliko Bay Ag Subdivision
Applicant: Francesco Moretti

No further recommendation or comment is necessary or desired.

Refer to enclosed comments and/or recommendations.

Thank you for giving us the opportunity to comment on this project. We are returning the application which was submitted for our review.

Acting Assistant Chief Charles Hirata
For: THOMAS M. PHILLIPS
Chief of Police

Enclosures
I was assigned on Thursday, 07-11-03, by Sergeant H. Santos to comment and/or input suggestions on this Special Management Area Permit Request for the Department of Planning to be submitted by 08-05-03.

This Maliko Bay project is located along Hana Highway, bordering the east side of Maliko Gulch, near the bottom of Haiku Road. It is a 44.135 acre lot that is proposed to be divided into eight (8) lots, and one roadway lot. Access to this lot will be through the Haiku Makai Subdivision via Apuwai Street leading to the applicant’s road, proposed as “Ulua Place” and into the project.

As researched and mentioned by the applicant and consultant, for the purposes of assessing impacts, it is assumed that all of the property owners will file for and obtain SMA minor permits for the construction of the permitted second dwelling, the project would build out to a maximum of 16 residential units. Taking into consideration “worst case scenario” during afternoon peak traffic, there would be 16 vehicle trips on Haiku Road which would represent a 2.2% increase in overall traffic, but this is not taking into consideration possible employees who will be leaving at that time as well. Regardless however, it does not appear that this would cause a significant impact on existing traffic in the area and on Hana Highway. Refer to page 21 of applicants report for details on their research.

It appears this project may also increase business to the Haiku merchants instead of having any adverse impact on them.

Respectfully submitted for your perusal.

Lisa Ann Rodrigues / e2158
07-16-03 / 1200 hours
Mr. Michael W. Foley  
Director  
Department of Planning  
County of Maui  
250 South High Street  
Wailuku, Hawaii 96793  

Attention: Julie Higa  

Dear Mr. Foley:  

Subject: Maliko Bay Ag Subdivision  
TMK: (2) 2-7-036: 031, 2-7-004:006  
SM1 2003/0010  

Thank you for the opportunity to comment on the Special Management Area Permit Application. The following comments are offered:  

1. The protection of the potable water wells should be a major focus in the design and installation of all individual wastewater disposal systems in the subdivision. Plan review and approval of all individual wastewater disposal systems by the Wastewater Branch of the Department of Health is required.  

2. Two water systems will serve the subdivision. The Department of Health's authority over drinking water quality applies only to "public water systems" as defined in Chapter 11-20, Hawaii Administrative Rules. A "public water system" is a system that provides water for human consumption through pipe or other constructed conveyance and has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year. By definition, the water systems serving this subdivision do not qualify as a public water system.  

However, it is recommended that the parameters for water quality and maximum contaminated levels of the Hawaii Administrative Rules, Title 11, Chapter 20 be used to monitor the wells. Dibromochloropropane (DBCP) has been detected in other water sources in the area. The detection level requirements of Chapter 20 are considerably lower than those of the water analysis results shown in Appendix J.
Should you have any questions, please call me at [redacted]

Sincerely,

Herbert S. Matsubayashi
District Environmental Health Program Chief

c:  SDWB
    Roland Tejano
    Gordon Muraoka
Dear Mr. Matsubayashi,

Thank you for your comments on the SM1 2003/0010.

We confirm the intention to use a “aerobic septic system” for the dwellings within 1000 ft from the water wells, as per our submitted plans. These septic systems are qualified for use in the vicinity of potable water wells and permit requests will be evaluated by your office when a building permit is requested.

For water quality, we believe that the level of contamination in the wells containing DBCP mentioned in your letter was higher than the minimum parameters used in our test. However for our own peace of mind, a more accurate testing will be done, even if we understand from the jurisdiction over the private water system, such test will not be mandatory.

Best regards

Francesco Moretti
Maliko Bay Trading Co.

CC: Maui County Planning Department, Mike Foley, Julie Higa
July 31, 2003

Honorable Michael W. Foley
Planning Director
County of Maui
Planning Department
250 S. High Street
Wailuku, Hawaii 96793

Dear Mr. Foley:

Subject: Special Management Area Permit Application
I.D. No.: SM1 2003/0010
Project: Maliko Bay Ag Subdivision
Authority: County of Maui Department of Planning

Thank you for the opportunity to review and comment on the subject matter.

The Department of Land and Natural Resources' (DLNR) Land Division made available or distributed a copy of the document pertaining to the subject matter to the following DLNR Divisions for their review and comment:

- Division of Aquatic Resources
- Division of Forestry and Wildlife
- Division of State Parks
- Engineering Division
- Commission on Water Resource Management
- Office of Conservation and Coastal Lands
- Land-Maui District Land Office

Attached is a copy of the Engineering Division and Commission on Water Resource Management comments.

Based on the attached responses, the Department of Land and Natural Resources has no other comment to offer on the subject matter.

If you have any questions, please feel free to contact Nicholas A. Vaccaro of the Land Division Support Services Branch at [contact information redacted].

Very truly yours,

DIERDRE S. MAMIYA
Administrator

C: MDLO
July 8, 2003
LD/NAV
Ref.: SM12003-0010.CMT
Suspense Date: 7/29/03

MEMORANDUM:

TO: XXX Division of Aquatic Resources
   XXX Division of Forestry & Wildlife
   XXX Engineering Division
   XXX Division of State Parks
   Division of Boating and Ocean Recreation
   ✔ XXX Commission on Water Resource Management
   XXX Office of Conservation and Coastal Lands
   XXX Land-Maui District Land Office (DD)

FROM: Dierdre S. Mamiya, Administrator
       Land Division

SUBJECT: Application: Special Management Area Permit
I.D. No.: SM1 2003/0010
TMK: 2nd/ 2-7-036: 031 and 2-7-004: 006
Project: Maliko Bay Ag Subdivision
Authority: County of Maui Department of Planning

Please review the document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date. Should you need more time to review the subject matter, please contact Nick Vaccaro at ext.: 7-0384.

Note: One (1) copy of the document is available for your review in the Land Division Office, Room 220.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

( ) We have no comments.
( ) Comments attached.

Division: Cwem

Signed: W. Roy Hardy

Date: 7/14/03

Name: Roy Hardy

EXHIBIT 15A
Mr. Michael Foley, Director
County of Maui
Department of Planning
250 South High Street
Wailuku, HI  96793

Attention: Julie Higa

Dear Mr. Foley:

SUBJECT: SMA for Maliko Bay, 2-7-036:031, 2-7-004:006

FILE NO.: SM12003-0010.cmt

Thank you for the opportunity to review the subject document. Our comments related to water resources are marked below.

In general, the CWRM strongly promotes the efficient use of our water resources through conservation measures and use of alternative non-potable water resources whenever available, feasible, and there are no harmful effects to the ecosystem. Also, the CWRM encourages the protection of water recharge areas, which are important for the maintenance of streams and the replenishment of aquifers.

[X] We recommend coordination with the county government to incorporate this project into the county’s Water Use and Development Plan.

[ ] We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.

[ ] We are concerned about the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer’s acceptance of any resulting requirements related to water quality.

[ ] A Well Construction Permit and/or a Pump Installation Permit from the Commission would be required before ground water is developed as a source of supply for the project.

[ ] The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit from the Commission would be required prior to use of this source.

[ ] Groundwater withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
We are concerned about the potential for degradation of instream uses from development on highly erodible slopes adjacent to streams within or near the project. We recommend that approvals for this project be conditioned upon a review by the corresponding county's Building Department and the developer's acceptance of any resulting requirements related to erosion control.

If the proposed project includes construction of a stream diversion, the project may require a stream diversion works permit and amend the instream flow standard for the affected stream(s).

If the proposed project alters the bed and banks of a stream channel, the project may require a stream channel alteration permit.

X OTHER:

In response to the rescinding of an earlier approved SMA, the Commission staff withheld acceptance of well completion reports and issued a notice of potential violation to the applicant for wells that having been proceeding through our regulatory procedures (see attached 2/10/03 letter). We await the County of Maui's final disposition on the SMA permit before finalizing our regulatory well construction and pump installation procedures, which will allow the applicant to pump his ground water sources (Well Nos. 5620-05 & 06).

If there are any questions, please contact Roy Hardy at [REDACTED]

Sincerely,

[Signature]

ERNEST Y.W. LAG
Deputy Director

Cl:ss
Attachment

c: DLNR, Land Division
February 10, 2003

Mr. Francesco Moretti
Maliko Trading Company, LLC
471 Alakapa Place
Paia, HI 96779

Dear Mr. Moretti:

Well Completion Report Part II
Notice of Potential Violation of Water Code
Maliko-Moretti Wells 1 & 2 (Well No. 5620-05 & 06)

Well Completion Reports, Part II

We have received your Well Completion Reports Part II for the Maliko-Moretti Wells 1 & 2 (Well Nos. 5620-05 & 06). However, matters which must be addressed before we accept your report as complete are as follows:

1. The rescinding of your Special Management Area (SMA) Permit must be resolved.

Notice of Potential Violation of Water Code

Your application for the well construction and pump installation permits indicated that no SMA permit was required. We strongly suggest you do not pump the well until this SMA matter is clarified. Misrepresentations in an application for a permit are grounds for revocation and a potential violation of the Water Code under HRS Chapter 174C, Part VII, Section 84(g)(1), subject to fines of up to $1000 per day. Future action by the Commission will depend upon resolution of the SMA permit matters with the County.

If you have any questions, please contact Charley Ice of the Commission staff at [redacted] or toll-free at [redacted] extension 70251.

Sincerely,

 DEAN A. NAKANO
Acting Deputy Director

Cl:ss

C: Wailani Drilling, Inc.
County of Maui, Department of Planning

EXHIBIT 15B-1
MEMORANDUM:

TO: XXX Division of Aquatic Resources
XXX Division of Forestry & Wildlife
✓ XXX Engineering Division
XXX Division of State Parks
Division of Boating and Ocean Recreation
XXX Commission on Water Resource Management
XXX Office of Conservation and Coastal Lands
XXX Land-Maui District Land Office (DD)

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Application: Special Management Area Permit
I.D. No.: SM1 2003/0010
TMK: 2nd/ 2-7-036: 031 and 2-7-004: 006
Project: Maliko Bay Ag Subdivision
Authority: County of Maui Department of Planning

Please review the document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date. Should you need more time to review the subject matter, please contact Nick Vaccaro at ext.: 7-0384.

Note: One (1) copy of the document is available for your review in the Land Division Office, Room 220.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

( ) We have no comments. ✓ Comments attached.

Division: 
Date: JUL 28 2003

Signed: Eric T. Aku
Name: Eric T. Aku

EXHIBIT 15C
LD/NAV
Re.: SM12003-0010.CMT

COMMENTS

For your information, the project site is located in Zones X (unshaded) and A. Zone X is an area determined to be outside the 500-year floodplain. The National Flood Insurance Program (SFHA) does not have specific design requirements for Zone X. Zone A is an area with no base flood elevations determined. NFIP regulates development within Zone A. All applicable regulations can be found in 44CFR 60.

The project must comply with rules and regulations of the National Flood Insurance Program (NFIP). If there are questions regarding the NFIP, please contact the State Coordinator, Mr. Sterling Yong, of the Department of Land and Natural Resources at [contact information]. If there are questions regarding flood ordinances, please contact Mr. Francis Cerizo at [contact information] of the County of Maui, Department of Planning.

Should you have any questions, please call Mr. Andrew Monden of the Planning Branch at [contact information].

Signed: ERIC T. HIRANO, CHIEF ENGINEER

Date: 7/28/03

EXHIBIT 156-1
July 8, 2003
LD/NAV
Ref.: SM12003-0010.CMT

MEMORANDUM:

TO: XXX Division of Aquatic Resources
    XXX Division of Forestry & Wildlife
    XXX Engineering Division
    XXX Division of State Parks
    Division of Boating and Ocean Recreation
    XXX Commission on Water Resource Management
    XXX Office of Conservation and Coastal Lands
    XXX Land-Maui District Land Office (DD)

FROM: Dierdre S. Mamiya, Administrator
      Land Division

SUBJECT: Application: Special Management Area Permit

I.D. No.: SM1 2003/0010
TMK: 2nd/2-7-036: 031 and 2-7-004: 006
Project: Maliko Bay Ag Subdivision
Authority: County of Maui Department of Planning

Please review the document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date. Should you need more time to review the subject matter, please contact Nick Vaccaro at ext.: 7-0384.

Note: One (1) copy of the document is available for your review in the Land Division Office, Room 220.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

(✓) We have no comments.  ( ) Comments attached.
Division: MDLO
Date: 7-23-03

Signed: Jason K. Koga
Name: Jason K. Koga

EXHIBIT 15D
July 8, 2003
LD/NAV
Ref.: SM12003-0010.CMT

MEMORANDUM:

TO: XXX Division of Aquatic Resources
    XXX Division of Forestry & Wildlife
    XXX Engineering Division
    XXX Division of State Parks
    Division of Boating and Ocean Recreation
    XXX Commission on Water Resource Management
    XXX Office of Conservation and Coastal Lands
    XXX Land-Maui District Land Office (DD)

FROM: Dierdre S. Mamiya, Administrator
      Land Division

SUBJECT: Application: Special Management Area Permit

I.D. No.: SM1 2003/0010
TMK: 2nd/2-7-036: 031 and 2-7-004: 006
Project: Maliko Bay-Ag Subdivision
Authority: County of Maui Department of Planning

Please review the document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date. Should you need more time to review the subject matter, please contact Nick Vaccaro at ext.: 7-0384.

Note: One (1) copy of the document is available for your review in the Land Division Office, Room 220.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

(✓) We have no comments. ( ) Comments attached.

Division: State Parks
Date: 7/29/03

Signed: [Signature]
Name: Daniel S. O'Connell

EXHIBIT 15E
July 8, 2003
LD/NAV
Ref.: SM12003-0010.CMT

MEMORANDUM:

TO: XXX Division of Aquatic Resources
     XXX Division of Forestry & Wildlife
     XXX Engineering Division
     XXX Division of State Parks
     Division of Boating and Ocean Recreation
     XXX Commission on Water Resource Management
     XXX Office of Conservation and Coastal Lands
     XXX Land-Maui District Land Office (DD)

FROM: Dierdre S. Mamiya, Administrator
       Land Division

SUBJECT: Application: Special Management Area Permit
I.D. No.: SM1 2003/0010
TMK: 2nd/ 2-7-036: 031 and 2-7-004: 006
Project: Maliko Bay Ag Subdivision
Authority: County of Maui Department of Planning

Please review the document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date. Should you need more time to review the subject matter, please contact Nick Vaccaro at ext.: 7-0384.

Note: One (1) copy of the document is available for your review in the Land Division Office, Room 220.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

( ) We have no comments. ( ) Comments attached.

Division: ___________________ Signed: ___________________
Date: ________________ Name: ________________

EXHIBIT 15F
July 23, 2003

Civil Works Technical Branch

Ms. Julie Higa, Staff Planner  
County of Maui  
Department of Planning  
250 South High Street  
Wailuku, Maui, Hawaii 96793

Dear Ms. Higa:

Thank you for the opportunity to review and comment on the Special Management Area (SMA) Application for the Maliko Bay Agricultural Subdivision Project, Paia, Maui (TMKs 2-7-36: 31 and 2-7-4: 6). The following comments are provided in accordance with Corps of Engineers authorities to provide flood hazard information and to issue Department of the Army (DA) permits.

a. Based on the information provided, a DA permit is not required for the project.

b. The flood hazard information provided on page 12 of the SMA is correct.

For further information, please contact Ms. Jessie Dobinchick of my staff at (808) 438-8876 and refer to file number 200300490.

Sincerely,

James Pennaz, P.E.  
Chief, Civil Works  
Technical Branch

EXHIBIT 16
MEMORANDUM

TO: Michael W. Foley, Planning Director
    Maui County Planning Department

ATTN: Julie Higa, Staff Planner

FROM: Randall M. Hashimoto, State Land Surveyor
      DAGS, Survey Division

SUBJECT: I.D.: SM1 2003/0010
         TMK: 2-7-036:031, 2-7-004:006
         Project Name: Maliko Bay Ag Subdivision
         Applicant: Francesco Moretti

The subject proposal has been reviewed and confirmed that no Government Survey Triangulation Stations or Benchmarks are affected. Survey has no objections to the proposed project.
August 1, 2003

Julie Higa  
Maui Planning Dept.

Re: Maliko Gulch sub-division proposal

Dear Julie Higa:

My family has the very good fortune to live in Haiku, and we travel the Hana highway often. Personally, I am so proud to be an American living in such a naturally rich and peaceful part of the world. Because I am a responsible citizen, I get involved in all matters where I believe that my involvement might be of service to the community in which I live. Please don’t think that I’m blowing my horn, because I am not. I am an active member of the Farm Bureau, the Maui Orchid Society, Maui Flower Growers Association, Maui Tomorrow, Maui Land Trust, and I sit on the board of two other local organizations. Therefore, I took great interest when I was asked to read the SMA plan requesting permission to develop a sub-division on the collar of Muliko Gulch.

I have reviewed the document regarding the proposed Maliko Bay subdivision SMA by Francesco Moretti, and below are a list of issues that come to light within the body of the proposal. There are important considerations to me given the history of development in Maui County; a history replete with developer’s promises and incomplete documentation that from time to time has gone against the community plan, public trust and sometime even legal frameworks.

Before you read these, please consider that I am not against development. What I am against is irresponsible development. The island of Maui can become an island like New York City, or Hong Kong. We too can have eight or ten or fifteen million people living in a concrete and asphalt jungle in the Center of our isle. But, only a very selfish person with distorted values would support such a conclusion. Why?

The reason is that there are very few cosmopolitan places in our world, where natural beauty stirs the heart while inspiring the soul to be the best that it can be. Isn’t this why Maui has become a place for weddings, for refreshing respites of the “real world,” for artistic expression in the midst of agriculture and truly stirring rugged natural beauty?

The coastal views on the Hana Highway have become a mere fragment already. Isn’t it time that we put an end to development that really is only for the benefit of a very few? The Pa’ia-Ha’iku Community Plan clearly defines the parameters upon which decisions must be made concerning this development request. We cannot, we must not, let the past be our guide. The leaders of the past who had a mandate to protect Maui’s ocean vistas were quite remiss when they approved one home opposite the parcel in question today on the makai side of the Highway. To many of us, this is abominable. And, now we hear the land adjacent to this house is in the planning stages of yet another house!

EXHIBIT 18
The particular issues mentioned above are in the order they appeared in the SMA proposal without regard to importance.

1. Page 14: The Proposal mentions planting trees “compatible” with the region. What constitutes “compatible”? This needs definition or it becomes a matter of the developer’s tastes and cost factors.

2. The document states there may be a tenant that will create an equestrian center on the proposed 20 acre parcel, and says that such an enterprise would fit into the General Plan and the Community Plan. This would be a commercial venture and require a Special Use Permit. Also, on Page 15 the proposal states that the 20-acre lot has not been analyzed for equestrian usage. Is this special piece of land that offers unobstructed views and vistas going to have horse barns and stable?

3. There is vague and misleading language in many portions of the SMA. For example:

   On Page 16 the proposal states the developer anticipates “that average landscaping will be at least in the proportions” of 6’ uncut grass. What does “anticipate mean”?

   Similarly, on Page 18, the proposal reads, “Residents will be encouraged to recycle…” Who will do the encouraging? What if the encouragement does not work?

   Page 29 states “agriculture will be promoted.” Who will do this promotion? How much will be invested for this?

   Page 25, the following statement about “varying housing types” seems to be without any mechanism for enforcement. “Through design considerations and layouts, the project will provide for a small portion of varying housing types….”

   Page 36 states that the developers will “encourage homeowners to use wind-energy or photovoltaic systems…”

   How and by whom will all these CC&R’s be “encouraged and promoted”? Most of these restrictions fail in ag subdivisions, and then the county has no way or power to enforce them. Legal action is costly and the homeowners would have to all agree to unknown court fees.

   On Page 21, the discussion on swails ends with out a finish or understanding. Perhaps, this single omission of information betrays blatant contempt by the developers for the land we all need to protect.
4. Page 23, the discussion on first time homeowners is irrelevant as there is nothing in this document that specifies that the developers will sell parcels at below market rates to help new homeowners. Without a written commitment and the listing prices, the reasoning on this point is simply irrational. This is not going to be "affordable housing".

5. Page 28 indicates 14 homes will be built in the subdivision. Elsewhere there are discussions of 8 homes on 8 lots each with the potential to contain one other living structure (ohana) per lot; this adds up to 16. What is the real plan here?

The biggest impact of this development is the blocking of coastal and mountain views. The parcel in question borders one of the most important vistas on the Hana Highway. Our Community Plan calls for us to protect coastal views and vistas. The views around Maliko Gulch are a treasure that has already been greatly compromised. Let us work together to protect what little is left.

Thank you in advance for sharing this letter with all executives in the Planning Department and County Government who actively participate in the approval process.

Sincerely yours,

Lloyd Fischel
20 N. Lanikai Place
Haiku, HI 96708

[Signature]
Dear Mr. Fischel,

Thank you for your comments on the SM1 2003/0010, Maliko Bay Subdivision. Although there are specific comments about the project, many of the concerns seem to center around the use of certain words or phrases, and that they are vague or misleading.

Though some explanation is provided below, I note that virtually every aspect of the application document could be interpreted as such. Overall, the purpose of an application for a Special Management Area Use Permit ("SMA") is to examine the environmental impacts of a specific project, its compliance with various State and County planning documents, and SMA policies. That is my intent with this document, and I apologize if certain words or phrases lead you to believe otherwise. I would encourage you to visit the Planning Department and review other applications or the Paia-Haiku Community Plan, and you will note the verbiage is very similar.

Responses to your comments:

1. "Compatible trees" is only a reference to trees that would grow easily in this area without extensive watering or fertilizing. The context in which "compatible trees" is used is in regard to preserving viewsheds. Accordingly, when I plant the subdivision trees (as required by law), I will be selecting varieties that grow well in the area, but also that will not grow too tall.

You may also wish to note the second part of the sentence from which "compatible trees" is extracted, "and included in the Arborist Committee approved list of trees." The County's Arborist Committee has devised a "Planting Plan" that specifies what trees are compatible for different areas of the island and for different purposes. This is the approved list that I will use.

2. "Riding academies" and "animal board facilities" are permitted by 19.30A.050, of the County Code for Agricultural land (as well as many others) and do no need a Special Permit. While such a center is permitted, and could be similar to the other commercial stables around the island, one difference is that permitting it would require review through the SMA process. As such, there will be ample opportunity for public review.

3. Specific Language. I could go point by point with the meaning of every word, but mostly they must be read in the context in which they are used. I assure you that none are intended to be vague or misleading.

   a. In this particular context, "anticipate" is referring to what I "expect" the future conditions to be like. Right now, the grass along the highway is six-feet high in some places and views are not blocked by it. When landscaping or agriculture takes its place, I expect it to be no higher than it is now.
b. Agriculture will be promoted to through the equestrian community. Several interested buyers have expressed interest in keeping horses on their future property) as well as fruits and vegetable and hay will be promoted to all residents (personally I will own the 20 acre lot and will farm Alfalfa hay and vegetables, while living on the 4 acre lot).

Also, the Planning Department is now requiring “farm plans” if someone wants to build a home on agricultural land. This requires that an owner file a Unilateral Agreement with the Bureau of Conveyances, thus encumbering the property. So if buyers want to build a house, they must do some kind of agriculture on the property.

c. “Varying house types” is used in the context to respond to a number of General Plan policies listed prior. Individual owners will build their own homes to suit, meaning that there will be a variety in architectural styles, sizes, and expenses. There is no need for enforcement.

d. Overall for the comments on “encourage” or “promoted:” For items like recycling or use of photovoltaic panels, all that can be done is to try to get owners to implement such provisions. For instance, each owner could be provided with recycling containers, but there is little to be done if they choose not to use them.

e. Overall for the comments on CC&Rs: Just as in most other subdivisions in Maui, enforcement of CC&Rs will be the responsibility of the homeowner’s association. This is very common.

4. The application specifically states that this is not an “affordable housing” project, however, the construction of a smaller second dwelling (cottage) will place additional housing on the rental market, particularly in the segment most requested of a 2 bedroom 1 bath house for an average price.

5. An eight-lot subdivision had the potential for 16 total homes, meaning eight main residences, and eight cottages. However, it is unlikely that the 20-acre lot will have a main residence or a cottage, as this is planned for the equestrian facility. So while there is a potential for 18 homes, I expect only 14.

6. Finally, in regard to the coastal and mountain views, there is a study in the document that addresses this issue. The photographs show that there is very little of the coastline visible from the public right of way on Hana Highway. What is more of my concern are the views toward the West Maui Mountains.

When the original subdivision was submitted to the County, there were three lots proposed next to the highway, and there were no proposed controls of where any structures would be built. What could have resulted was similar to other projects along the highway where homes are built right to the permitted setback.

The project was significantly revised after public, Haiku Community Association, and agency input, and mostly with public views in mind. I believe the result is a very significant improvement over the previous, and what is allowed by the zoning. Now, rather than having homes immediately next to the highway, the nearest residence will be no closer than 550 feet away. Each lot will also have a “building envelope” or a
second floors will be limited to 40% of the size of the first, thus reducing the massing of a residence. It should be noted that the building envelopes, being somewhat distant from the highway, are at a lower elevation, further bringing down apparent building heights.

The view study shows what views could be affected by the project. It shows that most of the homes will be plainly visible from Hana Highway, and that some might enter the viewplane of the West Maui Mountains. By considering the placement of the homes and locating them a considerable distance from the highway, any intrusion is significantly lessened over other areas where no thought was given.

I remain available if you have further questions.

Best regards

Francesco Moretti
Malikobay Trading Co.

CC: Maui County Planning Department, Mike Foley, Julie Higa
To: Julie Higa, Planning Dept.

Comments on SM1 2003/0010; TMK 2-7-036:031, 2-7-004:006
Maliko Bay Ag Subdivision for Francesco Moretti

There is a loophole in our water regulation rules that prevents public safety oversight of drinking water in this situation.

Francesco Moretti’s Maliko Bay application for subdivision proposes to provide water from a private water system. Even though a prior agreement with the Water Board recorded on Moretti’s land deed stated development infrastructure would meet County water standards, the County Water Board was told by their Corp. Counsel (Ed Kushi) that they have no jurisdiction over private water systems. Consequently, they were unable to set standards for Moretti’s water system. Moretti’s water system is supplied by two wells on the property.

If a well serves fewer than 15 hookups, the State Health Department also has no jurisdiction over it. Concerns have been raised for some time on all islands that developers will simply add more wells to their system to keep the hookups per well below 15, thereby avoiding regulation.

In Moretti’s case, County Water Board minutes (July 24, 2002) show the board was concerned about precisely this question, asking why Moretti drilled two wells right next to each other, if one gave a good supply. The board voted to seek a second legal opinion beyond their Corp. Counsel’s, but never followed through.

Phone calls to the State Commission on Water Resource Management and the Safe Drinking Water branch show they are fully aware of the problem of developers adding more wells to escape meeting public water standards that would be triggered by 15 or more hookups. The feeling was expressed that common sense indicates it is all the same system serving the same development whether there are one or several wells, particularly when they are grouped together.

Drinking Water Department head Bill Wong says the law allows two wells at the same project to be considered separate systems as long as there is no pipe connecting them. However, he asks, “What happens when one well goes down?” The other well is likely to be connected. Other concerns he expressed were:

* Does a system have a standby generator for use in power outage?

* What about the pollution on site? The Moretti wells are located at the upper end of a gulch (see topo map) that drains the southern part of the property down to Maliko Bay. Probably much of any runoff would flow past the wells.

In reference to these particular wells, Wong points out the area has a history of well water contamination with pineapple pesticide chemicals - DBCP, for example. Two county wells across the gulch in the same “basal aquifer” are under court order to be cleaned of these contaminants before use. Wong wondered if the analysis done meets the same levels of detection that the state requires.

Moretti’s water analysis (for only one well?) shows potability is borderline for salinity (240 ppm chlorides) and the water is unusually hard, indicating dissolved minerals. The analysis ends with a disclaimer, that it is for “informational” purposes only, and not for “regulatory” uses.

The water analysis company used by Moretti appears to have a reputation among professionals as providing very inexpensive testing, where “you get what you pay for”.

* Salinity. Wong notes that the well saltiness is just below EPA limits, and wonders if wells this close to the ocean are not likely to increase in salinity with use.

In general, Wong recommends that any potable water system should meet state HRS Chapter 20 standards. In cases where a subdivision is able to slip through a loophole for state regulation, he thinks it is up to the County Planning
Department to provide for public protection. When private water systems are not able to meet needs, the County is usually asked to step in and assume responsibility.

The CC&R summary for this subdivision puts full responsibility for the water with an association that will be formed by the lot owners. If a problem is found with the water supply, or if one develops over time, this agreement assigns the responsibility to the water users.

In a case like this, says Wong, the buyer needs to beware, and not assume that subdivision approval indicates an adequate water system- even if it is legal.

Regarding the view study:

The application’s documentation of visual resources is incorrect and incomplete. There are only two places on Hana Highway where these extraordinary and striking views of West Maui are visible, and this is one of them. The second place is from the other side of Maliko Gulch to Ho'okipa Park and Mama’s Fish House.

The reality at risk is far more than “distant views of the West Maui Mountains”. The stretched out and flattened panoramic photos in the application give little sense of the majestic sweep from Ma'alaea, Waikapu, Wailuku, Kahului Bay, Waiehu, Wailhe, Kahakuloa, even to Molokai and the northern ocean beyond. The cloud-crowned crags and deep valleys stand high above the foothills, sweeping northwestward to the sea cliffs and coasts that rise from the sea, visible over the northern part of Maliko Point as it drops in elevation. I challenge anyone to even make out Kahakuloa in the application photos- something very easy to do from the highway on an ordinary day, let alone the clear sunny one shown. Where is Iao Valley? These pictures show only a little dark rise with clouds in the background- like looking at the Big Island from Maui.

I will substantiate what I am saying with photos taken the next time I can get there with a camera on a clear sunny morning.

Having said this, I will add in fairness that the conceptual residences shown are far better sited than the nearest Haiku Makai house, visible on the left in “View 1”. The planned houses still have some impact on the views, particularly the ones in 6H and 6B (and perhaps 6A, although it is behind a tree in View 2). The application states any home built on the large lot (6A) will be at or below the 160 ft. elevation line. This may be a good thing, but since elevations are not provided it is hard to tell. Neither is it clear whether the house itself, or only the site level would be at 160 ft.

Some mitigation could be to keep the tops trimmed on ironwood trees on the edge of the gulch to prevent view obstruction (as mentioned in the application), and to avoid landscaping close to the highway that could grow up into views. Landscaping to hide the view of the houses will inevitably block more scenic views.

Since this is, after all, an agricultural subdivision, it would be helpful to encourage farmers to grow lower bearing fruit trees, like dwarf varieties that are just as productive as taller ones.

This kind of mitigation might make single story houses satisfactory to buyers, who would still have a great view- better than the one from the highway. Such a solution could be a good win all around.

The project as submitted appears to have some conflicts with the Paia-Haiku Community Plan and HRS Chapter 205-A guidelines. Please note the following sections in the Paia-Haiku Community Plan:

page 15, items 2, 4, 5
page 16, items 8,10,11 a,b,c
page 17, item 3
page 18, items 5, 7, & under Environment Objectives: 1, 3
page 23, under Objectives and Policies: item 1
page 24, item 7
page 25, item 5, 2
Thanks for the opportunity to comment,

Daniel Grantham  
Sierra Club Maui Group Chair  
Aug. 5, 2003

Enclosed: Photo of West Maui Mountain backdrop to Haiku Makai house. Taken from side of Hana Highway.
Dear Mr. Grantham,

Thank you for your comments to the SM1 2003/0010.

I would like to use this opportunity to address the concerns you expressed in the project, starting with the water situation and relative regulation.

The rules on "Private Water System" were amended by the Board of Water Supply a few years ago, and since then the rule of the 15-service hook-up has been in place. The project is planning to have 8 lots, and the 15 hook-ups would be sufficient for all residences and cottages, with the exception of one cottage (8 main dwellings and 8 cottages = 16 hook-ups).

The reason for the second well is not for the use of the sixteenth cottage, but is for separate use from the two larger lots that will remain under my ownership (6G and 6A). The rest of the lots will be serviced by the larger capacity well, owned and administrated by the Owners Association. The wells will not be interconnected, and will have separate ownership and administration.

Regarding pollution on the site, the drainage is addressed in the Drainage Report, and no run-off is expected to affect the wells. In addition, the well heads are sealed, and all other equipment is protected from the elements. No pollution on-site is expected in any way.

Liability: as far as Fire Protection, the necessary water will be stored in a pond and available for fire use only.

Regarding a standby generator, the design of this system is to have each owner build a smaller water storage on their own lot. The individual storage will be between 2000 and 5000 gallons for each lot, and will be sufficient for several days in case of electrical shortage, or maintenance to the pumps. If for any unexpected reason water will not be available, a water truck can be delivering water to fill the tanks.

Under no circumstance would the County Of Maui will be held responsible for water supply to this Subdivision.

Specific to water quality and salinity, owners are aware of salinity levels and have the option to install a Reverse Osmosis or other filtration system.

The laboratory used for the water analysis is licensed to do such studies and this analysis does comply with US Environmental Protection Agency requirements. Though there are statements regarding "informational purposes" or not for "regulatory compliance", this is not a reflection on the accuracy or inaccuracy of the analysis, or the quality of the water. Rather, these statements are made to clarify that this analysis is conforming with private water system usage requirements (including drinking water), and is not meant for Public Water
Systems in the State of Hawaii because Public Water Systems testing in the State of Hawaii exceed EPA standards. By its own definition, these private water systems are not required to conform with the same public standards, yet do conform with national EPA testing. The future owners of these parcels will be made aware of these conditions.

These conditions can be compared to those of an individual water catchment system, whereby the owners are responsible for the upkeep necessary to maintain water quality for their own use.

**View study:** I appreciate your concerns for the views throughout the area, and perhaps some clarification is needed. First, I apologize for the quality of the prints. Though many of the sites you mention are quite visible on the digital files, after printing and then copying, the detail has gone down considerably. In this response, I'd like to clarify the methodology, and what can actually be seen from the two vantage points. This should keep in mind that the purpose of the view study is to look at the impact of this project on public views. Accordingly, the only place where public views could be impaired is from Hana Highway, and particularly looking west. Both panoramas were taken from the highway, looking across the property, and from no other vantage point.

With regard to the methodology, the day that the photographs were taken, May 4, 2003, the conditions were typical for the site. They were taken about 10-11:00 a.m., the temperature was approximately 80 degrees, and the tradewinds were at about 15-20 mph. Sometimes these conditions can create a haze that makes the details of distant objects somewhat difficult to see clearly. Of course this adds to the difficulties in printing and copying. Admittedly, there are clearer days, as there are hazier days. Again, this day was not unusual. While not the clearest of days, conditions were still such that Molokai is visible in View No. 1, approximately 25 miles away.

It was noted in the application that the images are a compilation of individual photos taken in overlapping succession. The originals were taken with a lens set at 50mm, considered "normal" for a 35mm camera, and in effort to avoid the distortion that is associated with either wide-angle or with telephoto lenses. Wide-angle lenses make near subjects appear larger than reality, and also makes distant objects smaller. Telephoto lenses make distant objects appear closer, but they also "compress" distance, thus distorting depth perception (see enclosed documentation from "The Ansel Adams Guide, Book 1, Basic Techniques of Photography").

By using a lens at 50mm, the effort was to eliminate the distortion problems associated with other focal lengths and make them as representational as possible. While panorama photos are by nature wider angle than what the human eye can see, they do simulate what views are available if a person would stop along the highway and turn their head. So while they are wider, they are not stretched or flattened.

View No. 1, encompasses the entire property from its eastern border at the Haiku Makai subdivision across and to its makai boundary along Hana Highway. This is the highest point anywhere on Hana Highway that borders the property. In this approximately 90-degree representation, Molokai is visible in the right third of the image, as well as Iao Valley just over the house on Lot 6F (fourth from the right). The ridge going down to Kahakula is somewhat obscured, but this more by the conditions of that particular day and from the Ironwood trees than by the residence. These particular Ironwoods are located on HC&S land on the west side of Makiko Gulch.
View No. 2 is a somewhat narrower view, but shows how the view over the subdivision would change as one travels closer to Maliko Gulch. In addition, it "looks" back toward Haleakala and over the existing Haiku Makai subdivision. With the exception of the possible residence on Lot 6G (at a lower elevation), all of the potential homes are visible from this view. I ao Valley is visible over Lot 6E (third residence from the right), and no views are impaired toward Haleakala. Again, while a residence could enter the viewplane of the West Maui Mountains, the view is more obscured by the ironwood trees on HC&S land.

From either vantage point, and actually anywhere along this stretch of highway, Maalaea, Waikapu, or Kahului are not visible. This is because the elevation of lands beyond the subject property is higher and blocks any view of or any part of the central valley floor.

I would also agree that trimming the ironwood trees would improve the views. As noted, the trees that impair the views of West Maui are on the west side of Maliko Gulch, and on HC&S land. I have no control of how tall they grow or of trimming them. The only ironwoods on my property are a small patch where Hana Highway descends toward Maliko Point and into the gulch. These can be seen on the very far right of View No. 1. These do not impede views of Kahakuloa or Molokai, nor is any part of the shoreline visible. They do stand, however, against the horizon of the open ocean. As such, I'm willing to trim them if found desirable.

In all, the purpose of the view study is to show what views could be affected by the project. It shows that most of the homes will be plainly visible from Hana Highway, and that some might enter the viewplane of the West Maui Mountains. By considering the placement of the homes and locating them a considerable distance from the highway, any intrusion is significantly lessened over other areas where no thought was given.

**Conflict with Community Plans** Many of the identified sections from the Paia-Haiku Community Plan are addressed in the application. These are noted below, as well as responses to the other sections:

1. Pg 15, items 2, 4, and 5. These are individually addressed in the application.

2. Pg 16, items 8, 10, 11:
   a. 8. Defining Urban and Rural growth limits would seem to be more of a government function on a program or project scale than what could be addressed, or is the responsibility of, individual applicants.
   b. 10. This item specifically addresses Special Permits within the State Agricultural District, and is not applicable to this particular application for a SMA permit.
   c. 11, a, b, c. Similarly, this item and the associated points specifically address any expansion of the Urban or Rural State boundary classifications, and is therefore not applicable to this application for a SMA permit.

3. Pg 17, item 3. This is specifically addressed in the application, but it is noted that Maui County has already established varying minimum lot sizes for subdivisions in agricultural land. This was done with the passage of Ordinance 2749 in 1998, establishing Title 19.30A. The proposed subdivision meets the requirements of that ordinance.

4. Pg 18, items 5, 7, Environmental Objectives 1, 3:
a. 5. This is addressed in the application.

b. 7. The responsibility to “Develop and implement a directed and managed growth plan...” would also seem to be more of a government function, and is beyond the scope and responsibility of individual applicants.

c. Environmental Objectives 1. This is addressed in the application through both direct reference and in the view study.

d. Environmental Objectives 3. It is the applicant’s responsibility to comply with the County Planting Plan as part of the subdivision approval, and many native Hawaiian trees are listed in that document. The exact species of trees for the subdivision has yet to be selected, but the application will give close consideration to native plantings.

5. Pg 23, Objectives and Policies, No. 1. This is addressed in the application.

6. Pg. 24, item 7. This item more addresses urban residential developments, but to the extent that it is applicable, the applicant will be constructing the subdivision to County standards, and will be paying required parks and other assessments as required.

7. Pg 25, items 5, 2:

   a. 5. Similar to what is noted above, to “Propose and define growth limits around existing urbanized areas....” would seem to be a function of government on a program or project scale, and beyond the scope of an individual applicant.

   b. 2. This policy address a “neotraditional village form of development.” This type of development is associated with sometimes small but urban towns, such as Haiku or Paia. These normally include a mix of business, various densities of residential uses (including multi-family), and public services. As such, the policy is not applicable to the proposed subdivision.

Thank you again for your on-going interest in this project and the protection of Maui’s future.

Aloha,

Francesco Moretti

CC: Mike Foley and Julie Higa, Maui County Department of Planning
To: Department of Planning  
Attn: Julie Higa, Staff Planner  
For: Michael W. Foley, Planning Director  
Subject: SM1 2003/0010  
Maliko Bay Ag Subdivision  
Francesco Moretti

Mahalo for allowing the HCA and its Board of Directors the opportunity to review and comment on the Moretti Maliko Bay Subdivision. Our major concern is adherence to the Pa'ia-Ha’iku Community Plan. Simply put we are about to lose another beautiful view plane of the West Maui Mountains and North Shore coastal views.

Another serious concern is the ability of the Homeowners Association to enforce the CC&R’s. Most of these groups lose all interest and power after the first violations occur and are not enforced. As soon as one owner breaks the rules, the others feel they don’t have to follow them either. Unless all the homeowners agree to costly legal action, the CC&R’s mentioned are basically unenforceable. The impact of up to 16 homes and cottages cannot be underestimated. As for a proposed equestrian center on the 20-acre parcel, it would be a commercial venture and require a special use and/or a conditional use permit. This center is irrelevant to the proposal, as no binding agreements have been made. Agricultural restrictions of any kind should not be allowed, as the lands are for ag use.

Most of the “proposed uses” would be left to the discretion of the owners and therefore have no bearing on the subdivision’s actual use.” Encouragement” given to the owners (by whom?) to do everything from recycling, using alternative energy, to building one-story homes are exactly that, only suggestions. This sounds good on paper but in fact no one is required to do any of them. There is even a clause as to the minimum size of the main dwelling, which is 1750 square feet. There can be no county enforcement of any of these guidelines. Enforcement of all the “proposed” CC&R’s should not be left to the homeowners. There are often disagreements and dysfunction in such groups, and this proposal is no guarantee that they can or will be enforced. We would ask that the county subject a design review consistent with the home location and heights before any permits are issued. That way we know the views will be protected.

The issue here is how far the county will go in protecting those views and vistas. Assuming that the requirements for the SMA major are met, what can be done to give the Landowner his rights, and the community it’s respect?

If the blocking of views and vistas is to be minimized, the height and also the number and placement of homes must be restricted by the county. The proposal on page 8 states a maximum of 1 residence on any lot, unless approved by the county. What is to stop the county from permitting an ohana? The 30-foot home heights shown in the proposal are substantial. If the height of any and all structures were limited to 20 feet and a maximum of 1 story, the overall impact would be greatly reduced.

EXHIBIT 20
The “before and after” photos of views 1 and 2 shows how the 30 foot home height impacts the views. A 10-foot drop in height of those homes would significantly improve the views and vistas we are trying to preserve. We would also ask for county enforcement of setbacks from the Hana Highway. By doing this we can be assured the new homes are not like the ones in the adjoining Ha‘iku Makai subdivision, which many community residents consider to be an eyesore.

The CC&R’s also place the responsibility for the water quality with those buyers purchasing lots in the subdivision. What will happen if, in the future, a problem is found with the quality of the water supply?

The parcel in question borders one of the most unique and important vistas left on the Hana Highway. West Maui and Molokai views have already been lost to a large home on Maliko Point, and the adjoining makai parcel is also asking for subdivision approval as we speak. What happens when they want to build homes on the Makai side of Maui’s designated “Big Sur” like highway?

In closing we would like to thank Mr. Moretti for his continual willingness to work with the HCA to find an adequate integration of his development with the residents of Ha‘iku. He has chosen to build in a very fragile SMA location, and thus his ability to build and develop as he sees fit will, by definition, be somewhat limited due to community guidelines.

It’s time the buyers and sellers of these unique properties start to take notice of our community plans. We are not saying “no more subdivisions” and applaud the county’s new policy of agricultural farm plans. We are trying to protect the rural character of our communities and keep whatever visual treasures we have left intact.

Gregg Blue, for the Board Members

President of Ha‘iku Community Association
P. O. BOX 1036
HAIKU, HI 96708

Website: http://www.haikumauai.org
e-mail: info@haikumauai.org
Dear Mr. Blue,

Thank you for your comments on the SM1 2003/0010.

I would like to take this opportunity to address the Association concerns expressed in your letter.

1. Viewsheds. When the original subdivision was submitted to the County, there were three lots proposed next to the highway, and there were no proposed controls of where any structures would be built. What could have resulted was similar to other projects along the highway where homes are built right to the permitted setback.

The project was significantly revised after public, HCA, and agency input, and mostly with public views in mind. I believe the result is a very significant improvement over the previous, and what is allowed by the zoning. Now, rather than having homes immediately next to the highway, the nearest residence will be no closer than 550 feet away. Each lot will also have a “building envelope” or a specific area where a house could be built; and second floors will be limited to 40% of the size of the first, thus reducing the massing of a residence. It should be noted that the building envelopes, being somewhat distant from the highway, are at a lower elevation, further bringing down apparent building heights.

The view study shows what views could be affected by the project. It shows that most of the homes will be plainly visible from Hana Highway, and that some might enter the viewplane of the West Maui Mountains. By considering the placement of the homes and locating them a considerable distance from the highway, any intrusion is significantly lessened over other areas where no thought was given.

2. Regarding building Ohanas. The agricultural zoning allows two farm dwellings per lot, one of which cannot exceed 1,000 square feet. The current practice of the Planning Department is to require that a “farm plan” be filed with the Bureau of Conveyances before a building permit is issued. If an owner then wishes to build the second, the County will check on the owner to see if the farm plan is being implemented. So while permitted, there are controls and two residences is not automatic.

4. Equestrian Center. These types of uses are permitted in the Agricultural District as “riding academies” and “boarding facilities” and no Special Permit is necessary. While such a center is permitted, and could be similar to the other commercial or noncommercial stables around the island, one difference is that permitting it would require review through a separate SMA process. As such, there will be ample opportunity for public review.

5. CC&Rs. These are internal and private restrictions that all of the owners will have to agree to. Enforcement becomes the responsibility of the homeowners association, and is not a County matter.
Certain items will become County matters as conditions are placed on the SMA permit. One instance is that I expect the "building envelopes" to be a condition of the permit. As owners want to build, the Planning Department will review the project with this and other conditions in mind.

Best regards

Francesco Moretti
Malikobay Trading Co.

CC: Maui County Planning Department, Mike Foley, Julie Higa

19.30A.050 Permitted uses.

The following uses and structures shall be permitted in the agricultural district provided they also comply with all other applicable laws:
A. Principal Uses.
1. Agriculture;
2. Agricultural land conservation;
3. Agricultural parks, pursuant to chapter 171, Hawai'i Revised Statutes;
4. Animal and livestock raising, including animal feed lots and sales yards;
5. Private agricultural parks as defined herein;
6. Minor utility facilities as defined in section 19.04.040, Maui County Code; and
7. Retention, restoration, rehabilitation, or improvement of buildings, sites or cultural landscapes of historical or archaeological significance.
B. Accessory Uses. Uses which are incidental or subordinate to, or customarily used in conjunction with a permitted principal use, as follows:
1. Two farm dwellings per lot, one of which shall not exceed one thousand square feet of developable area;
2. One farm labor dwelling per five acres of lot area. On the island of Maui, the owner or lessee of the lot shall meet two of the following three criteria:
a. Provide proof of at least $35,000 of gross sales of agricultural product(s) per year, for the preceding two consecutive years, for each farm labor dwelling on the lot, as shown by State general excise tax forms and federal Schedule F forms;
b. Provide certification by the Maui board of water supply that agricultural water rates are being paid if the subject lot is served by the County water system; or
c. Provide a farm plan that demonstrates the feasibility of commercial agricultural production.
On the islands of Moloka'i and Lana'i, the owner or lessee of the lot shall meet both of the criteria provided by subsections 19.30A.050.B.2.a and 19.30A.050.B.2.b;
3. One agricultural products stand per lot, for the purpose of displaying and selling agricultural products grown and processed on the premises or grown in the County,
provided that said stand shall not exceed three hundred square feet, shall be set back at least fifteen feet from roadways, shall have a wall area which is at least fifty percent open, and shall meet the off-street parking requirements for roadside stands provided by section 19.36.010, Maui County Code, except that paved parking shall not be required; stands which display or sell agricultural products which are not grown on the premises shall be required to obtain a special permit pursuant to chapter 205, Hawai'i Revised Statutes; 4. Farmer's markets, for the growers and producers of agricultural products to display and sell agricultural products grown and processed in the County; structures shall have a wall area which is at least fifty percent open; markets shall operate only during daylight hours and shall not operate on parcels less than ten acres; the director of public works and waste management may impose additional requirements if a building permit is required for any structures; markets which display or sell agricultural products which are not grown on the premises shall be required to obtain a special permit pursuant to chapter 205, Hawai'i Revised Statutes; 5. Storage, wholesale and distribution, including barns; greenhouses; storage facilities for agricultural supplies, products and irrigation water; farmer's cooperatives; and similar structures that are customarily associated with one or more of the permitted principal uses or, for the purpose of this section, are associated with agriculture in the County; 6. Processing of agricultural products, the majority of which are grown in the County; this includes the burning of bagasse as part of an agricultural operation; 7. Energy systems, small-scale; 8. Small-scale animal-keeping; 9. Animal hospitals and animal board facilities; if conducted on the island of Moloka'i, such uses shall have been approved by the Moloka'i planning commission as conforming to the intent of this chapter; 10. Riding academies; if conducted on the island of Moloka'i, such uses shall have been approved by the Moloka'i planning commission as conforming to the intent of this chapter; 11. Open land recreation as follows: hiking; noncommercial camping; fishing; hunting; equestrian activities; rodeo arenas; arboretums; greenways; botanical gardens; guided tours which are accessory to principal uses, such as farm or plantation tours, petting zoos, and garden tours; hang gliding; paragliding; mountain biking; and accessory restroom facilities. If hiking, fishing, hunting, equestrian activities, rodeo arenas, hang gliding, paragliding or mountain biking and conducted for commercial purposes on the island of Moloka'i, such uses shall have been approved by the Moloka'i planning commission as conforming to the intent of this chapter. Open land recreation uses or structures not specifically permitted by this subsection or by subsection 19.30A.060.H shall be prohibited; certain open land recreation uses or structures may also be required to obtain a special permit pursuant to chapter 205, Hawai'i Revised Statutes; 12. Parks for public use, not including golf courses and not including commercial uses except when under the supervision of a government agency in charge of parks and playgrounds; and 13. Other uses which primarily support a permitted principal use; however, such uses shall be approved by the appropriate planning commission as conforming to the intent of this chapter. (Ord. 2749 § 3 (part), 1998)
5 March 2004

Maui Planning Commission
County of Maui
250 South High Street
Wailuku, Maui 96793

Re: Maliko Bay Subdivision, TMK 2-7-006:006 and 2-7-036:031
I. D. No.: SM1 2003/0010

Greetings Members of the Planning Commission:

Most of the typical concerns of water, public services, crime, the free and unimpeded movement of people (traffic) are major problems for consideration in land use changes.

We also believe that it is vitally important that you folks who are here to represent the best interests of the people will give serious consideration to any change in land use, anywhere in these islands, based on the following:

1. Hawai‘i was conquered by a foreign power in 1893.
2. Public Law 103-150 is an apology (confession) by the United States government of its complicity and responsibility for that illegal act.
3. Under penal law, a person or persons knowingly in possession of stolen property would be as guilty of the act of theft as the perpetrator. Under past and present law when you take something at gunpoint it is robbery. (1893 act of armed aggression by the military forces of the United States).
4. It has been estimated that over 90% of the land area of Maui is Crown and government land of the Kingdom of Hawai‘i.
5. The land presently owned by this “developer”, has it been properly determined as to who has legal ownership, under international law, over a sovereign nation that was overthrown? (The law does not allow valid title to arise from an invalid act).

* A Non-Profit Citizens Advocacy Group *

EXHIBIT 21
6. Upper most in the minds of everyone who resides in a conquered country should be the respect and care for the indigenous people's life style and culture. The continued desecration of the Hawaiian lands is wrong and should cease altogether. Case in point, and in close proximity to Mr. Moretti's proposed subdivision, is land speculator, Sky Lewis, who built a house next to a Hawaiian grave-site. This man, letting his greed, money and disrespect of the indigenous people and their culture overpower just plain courtesy to the people of these islands.

7. Mr. Moretti should be reminded that his country (Italy) still has adequate land resources left for him to build his subdivisions.

We hope and trust that this commission will deny the Application and Acceptance to this applicant to prevent the further destruction and insult to the Hawaiian lands and people.

Sincerely,

Pete Muñoz, Director

Sam Miguel, Executive Director-Citizen Affairs
Aloha Mr. Ice,

I am writing you to update the situation with the SMA permit for Malikobay Subdivision, that is serviced by the two wells installed and completed by Wailani Drilling in 2002, n.5620-06 and n.5620-05. The Maui Planning Commission has met 3 times (One site visit), and finally agreed to grant SMA Approval to the project, including the wells, as Private Water System (last week tuesday 11).

I have agreed with the Planning Commission to build the distribution line for water to County Standards, so that in the future the owners can install a water meter, when became available. I will send you a copy of the Approval letter, and start filing Pupmage reports.

Thank you for your help.

Kindly

Francesco Moretti

Mlikobay Trading Co.
Mr. Francesco Moretti, Director  
Maliko Bay Trading Co., LLC  
3125 Ua Noe Place  
Haiku, Hawaii 96708

Mr. Moretti:

RE: Notice of Application Completeness and Acceptance; Meeting Date with the Maui Planning Commission; and Applicable Notice Requirements

Project Name: Maliko Bay Subdivision  
TMK: 2-7-006: 006 and 2-7-036: 031  
I. D. No.: SM1 2003/0010

Please be advised that the above referenced application is complete, and has been scheduled for review with the following:

Maui Planning Commission  
Date: March 23, 2004  
Time: 9:00 am  
Place: Planning Conference Room, First Floor,  
Kalana Pakui Building, 250 South High Street,  
Wailuku, Maui, Hawaii 96793

You or your authorized representative(s) are hereby requested to attend the scheduled meeting.

Further, please be advised that you are responsible for the notification of all owners and recorded lessees located within 500 feet of the subject property boundaries of the scheduled Planning Commission hearing. Also, please change your address and phone number on the Public Hearing Notice form.

The enclosed letter of notice of public hearing, along with a site location map
(preferably 8 ½ inches by 11 inches) provided by the applicant, shall be mailed by certified or registered mail, at least thirty (30) days prior to the scheduled hearing date. Upon completion, please transmit the following to this office ten (10) business days prior to the scheduled meeting:

1. A copy of the letter of public hearing notice and location map;
2. The mail receipts as proof of mailing; and
3. An affidavit certifying that said notice, as required, has been provided.

Please note that the letter of public hearing notice should have your new address and phone number.

Thank you for your cooperation. If additional clarification is required, please contact Julie Higa, Staff Planner, of this office at [contact information redacted]

Sincerely,

JULIE HIGA, Staff Planner
For MICHAEL W. FOLEY, Planning Director
MAUI PLANNING COMMISSION

DATE: __________________

TO:

Please be informed that the undersigned has applied to the Maui Planning Commission of the County of Maui for a Special Management Area Permit pursuant to the Special Management Area Rules of the Maui Planning Commission for the following parcel:

1. Tax Map Key: 2-7-4-6 2-7 086031 Acreage: 45

2. Street Address: NEAR MALIKO GULCH AND HANA HWY - HAIKU - MAUI

3. State Land Use Designation: AGRICULTURAL Community Plan: AGRICULTURAL

4. Zoning: AGRICULTURAL

5. Proposed Development: 8 LOTS AGRICULTURAL SUBDIVISION WITH LOTS OF VARIABLE SIZES

THIS SECTION TO BE COMPLETED BY THE PLANNING DEPARTMENT:

Public Hearing Date: MARCH 23, 2004

Time: 9:00 a.m.

Place: 250 South High St., 1st Fl., Kalana Pakui Planning Conference Room, Wailuku, Maui, HI

The hearing is held under the authority of Chapters 205A and 91, Hawaii Revised Statutes (HRS), and the Maui Planning Commission Rules. The particular sections of the Statute and Rules involved are Sections 205A-26, 205A-27, 205A-28, and 205A-29, HRS and Chapter 201 and 202, Maui Planning Commission Rules.

Petitions to intervene shall be in conformity with §12-201-40, AND 12-201-43 of the Rules of Practice and Procedure for the Maui Planning Commission and shall be filed with the Commission and served upon the applicant no less than ten (10) days before the first public hearing date. Filing of all documents of the Commission is c/o the Maui Planning Department, 250 S. High Street, Wailuku, Maui, Hawaii 96793.

The computation of time begins with the day following the act, event, or default, and includes the last day of the period unless it is a Saturday, Sunday or legal State holiday in which event the period runs until the end of the next day which is not a Saturday, Sunday or State holiday. When the prescribed period of time is ten (10) days or less, Saturdays, Sundays, or State holidays within the designated period shall be excluded in the computation.

Any party may be represented by Counsel or other representative. Testimony relative to this request may be submitted in writing to the Maui Planning Commission, 250 S. High Street, Wailuku, Maui, Hawaii, 96793 or presented in person at the time of the public hearing. Information relative to the application is available for review at the Planning Department, 250 S. High Street, Wailuku, Hawaii, 96793, Telephone toll free from Molokai (Rev. 7/16/02) Extension 7735; and toll free from Lanai Extension 7735.

M ALI KO S AY TRADING CO LLC

Name of Applicant

Signature

FRANCESCO MORETTI (DIRECTOR)

3125 Ua Noe Place, Haiku, HI 96708

Applicant's Agent, if applicable

Signature

Address

Phone:

(Row 7/10/02)
NOTARIZED AFFIDAVIT OF MAILING

being first duly sworn on oath, deposes and says that:

1. Affiant is the applicant for a Subdivision Permit for land situated at MALIGA GACCA AND HANA MLEY.
   TMD: 2-7-4-6 AND 2-7-36-031

2. Affiant did on ____________, 20__, deposit in the United States mail, post paid, by certified or registered mail and delivery to addressee, a copy of a Notice of Hearing, a copy of which is attached hereto as "Exhibit A" and made a part hereof, addressed to each of the persons identified on "Exhibit B", attached hereto and made a part hereof.

3. Thereafter, there was returned to the Office of Affiant the United States Post Office Certified or Registered Mail Receipts, which are attached hereto as "Exhibit C" and made a part hereof.

Further Affiant sayeth naught:

__________________________________________
Mr. Michael Foley, Director
County of Maui
Department of Planning
250 South High Street
Wailuku, HI 96793

Attention: Julie Higa

Dear Mr. Foley:

SUBJECT: SMA for Maliko Bay, 2-7-036:031, 2-7-004:006

FILE NO.: SM12003-0010.cmt

Thank you for the opportunity to review the subject document. Our comments related to water resources are marked below.

In general, the CWRM strongly promotes the efficient use of our water resources through conservation measures and use of alternative non-potable water resources whenever available, feasible, and there are no harmful effects to the ecosystem. Also, the CWRM encourages the protection of water recharge areas, which are important for the maintenance of streams and the replenishment of aquifers.

[X] We recommend coordination with the county government to incorporate this project into the county's Water Use and Development Plan.

[ ] We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.

[ ] We are concerned about the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

[ ] A Well Construction Permit and/or a Pump Installation Permit from the Commission would be required before ground water is developed as a source of supply for the project.

[ ] The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit from the Commission would be required prior to use of this source.

[ ] Groundwater withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
We are concerned about the potential for degradation of instream uses from development on highly erodible slopes adjacent to streams within or near the project. We recommend that approvals for this project be conditioned upon a review by the corresponding county's Building Department and the developer's acceptance of any resulting requirements related to erosion control.

If the proposed project includes construction of a stream diversion, the project may require a stream diversion works permit and amend the instream flow standard for the affected stream(s).

If the proposed project alters the bed and banks of a stream channel, the project may require a stream channel alteration permit.

OTHER:

In response to the rescinding of an earlier approved SMA, the Commission staff withheld acceptance of well completion reports and issued a notice of potential violation to the applicant for wells that having been proceeding through our regulatory procedures (see attached 2/10/03 letter). We await the County of Maui's final disposition on the SMA permit before finalizing our regulatory well construction and pump installation procedures, which will allow the applicant to pump his ground water sources (Well Nos. 5620-05 & 06).

If there are any questions, please contact Roy Hardy at [redacted].

Sincerely,

[Signature]

ERNEST Y. LAG
Deputy Director

Cc: DLNR, Land Division
**SECTION 1: WELL LOCATION INFORMATION**

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<td>Proposed Withdrawal</td>
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<td>Aquifer Sector</td>
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**SECTION 2: WELL SECTION DATA  (enter data in grey cells only)**

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<table>
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<th>Cement Grout</th>
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<th>Hole Diameter</th>
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<td>12 1/8 in.</td>
<td>0.25 in.</td>
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<tr>
<th>Total Depth</th>
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<tr>
<td>225 ft.</td>
<td>102.5 ft.</td>
</tr>
</tbody>
</table>

| Estimated Head | 2.5 ft., m.s.l. |
| Calculated Aquifer Thickness | 102.5 ft. |

| County Water Supply (Y/N ?) | NO |

| SECTION 3: CHECKLIST  (values to check are shaded) |
| Well Depth |
| Theoretical Thickness of Aquifer | 102.5 ft. |
| 1/4 Aquifer Thickness | 25.63 ft. |
| Depth of Well below Sea Level | 25 ft. |

| Well Casing |
| Minimum Wall Thickness |
| Material | PVC |
| County or Non-County | non-county |
| Minimum Thickness per standards | 0.260 in. |
| Wall Thickness Provided | 0.250 in. |

| Minimum Length of Solid Casing |
| 90% of ground to top of aquifer | 177.8 ft. |
| Length of solid casing Provided | 205 ft. |

| Casing Material | Sch 40 |
| Open Hole |
| Length | 0 ft. |
| Diameter | 6 in. |

| Annular Space |
| Calculated Depth of Grouting | 138.3 ft. |
| Depth of Grouting provided | 160 ft. |
| Thickness of Annular Space | 3.125 in. |

Page 1
Dear Mr. Grantham and Mr. Pestana-Torres:

RE: Special Management Area (SMA) Assessment Determination and Rescission of Approval of an SMA Minor Permit for Maliko Point Subdivision for Eight-Lots on Approximately 44 Acres and SMA Exemption for Two Sheds at Apuwai Street, Tax Map Key 2-7-004: 006, Haiku, Maui, Hawaii (SMX2002/0072, SM2 2002/0198, SM5 2002/0307)

The Maui Planning Department (Department) received your request to appeal the SMA permit issued to Mr. Francesco Moretti for the above subject property.

On January 31, 2003, Mr. Moretti, received this Department's letter of January 28, 2003, rescinding the SMA Minor Permit and Exemption for Two Sheds at the above subject property. The last day for Mr. Moretti to appeal the Director's decision was February 14, 2003. Therefore, the SMA Minor Permit and Exemption are no longer valid and your appeal is moot.

Should you have any questions, please call Ms. Julie Higa, Staff Planner, at [Redacted]

Sincerely,

MICHAEL W. FOLEY
Director of Planning
Mr. Daniel Grantham, Chair
Mr. Riki Pestana-Torres
February 24, 2003
Page 2

MWF:JMH:tlm
c: Clayton Yoshida, Planning Program Administrator
Gilbert S. Coloma-Agaran, Director of Public Works and Environmental Management
Chair, Commission on Water Resource Management, Attn. Charley Ice
John Nakagawa, CZM Coordinator
Mac Aquinde, ZAED
Julie Higa, Planner
Ralph Nagamine, DSA Administrator
Howard Hanzawa
Francesco Moretti, Applicant
DSA (2)
03/SM5 File
03/CZM File
SM5 2002/0307
SM2 2002/0198
TMK File
General File
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<th>Tnr</th>
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<th>Baths</th>
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<td>Haiku</td>
<td>F</td>
<td>ALEXANDER &amp; BALDWIN INC</td>
<td>44.14 ac</td>
<td></td>
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This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is, therefore, not guaranteed.
Maliko Bay Trading Company

Mr. Charley Ice  
Staff State Water Commission  
D.L.N.R.  
P.O.Box 621  
Honolulu, Hawaii 96809

Subject: Request for Assistance: Well N. 5620-05 and 5620-06, TMK 2-7-004-006 Haiku, Hawaii

Dear Mr. Ice;

I apologize for the inconvenience that my application might have caused due to the unchecked “SMA” box on my application.

At that time I was convinced that all underground structures would not have a visual impact and would therefore be exempted from SMA processing. Also, I was requesting a simple permit to drill a well for the use of the one lot. Subsequently, during the course of the application, I submitted a request for subdivision to the County of Maui. I am aware now that the well, and the possible impact on the neighbors’ wells and spring sources, has to be evaluated.

My SMA application, approved in December 2002, has been rescinded apparently for the reason of being incomplete, especially in regards of the water situation, and possible impacts on the neighboring wells (in particular Mr. Hokoana at bottom of Maliko Gulch).

It is my responsibility to provide the Planning Department with the necessary information, and since I recognize in the State Water Commission as the highest capability and jurisdiction in this matter, I kindly request your assistance to help me provide the Planning Department with this information.

Many thanks and best regards,

Francesco Moretti
Mr. Francesco Moretti  
Maliko Bay Trading Company  
462 Laulea Place  
Paia, Hawaii 96779  

Dear Mr. Moretti:  

RE: Close File - Special Management Area (SMA) Assessment Determination and Rescission of Approval of an SMA Minor Permit for Maliko Point Subdivision for Eight-Lots on Approximately 44 Acres and SMA Exemption for Two Sheds at Apuwai Street, Tax Map Key 2-7-004: 006, Haiku, Maui, Hawaii (SMX2002/0072, SM2 2002/0198, SM5 2002/0307)  

On January 31, 2003, you received this Department’s letter of January 28, 2003, rescinding the SMA Minor Permit and Exemption for Two Sheds at the above subject property. The last day for appeal of the Director’s decision was February 14, 2003. The Maui Planning Department (Department) did not receive your request for an appeal of the SMA permit and SM5 Exemption for the above subject property. Therefore, the SMA Minor Permit and Exemption are no longer valid.  

Should you have any questions, please call Ms. Julie Higa, Staff Planner, at  

Sincerely,  

MICHAEL W. FOLEY  
Director of Planning
Mr. Francesco Moretti  
February 24, 2003  
Page 2

MWF:JMH:tlm

c: Clayton Yoshida, Planning Program Administrator  
   Gilbert S. Coloma-Agaran, Director of Public Works and Environmental Management  
   Chair, Commission on Water Resource Management, Attn. Charley Ice  
   John Nakagawa, CZM Coordinator  
   Haiku Community Association, PO Box 1036, Haiku 96708  
   Mac Aquinde, ZAED  
   Julie Higa, Planner  
   Ralph Nagamine, DSA Administrator  
   Howard Hanzawa  
   Francesco Moretti, Applicant  
DSC (2)  
03/SM5 File  
03/CZM File  
SM5 2002/0307  
SM2 2002/0198  
TMK File  
General File  
S:\ALL\Julie\Moretti\MorettiClose.wpd
The Moretti case is being handled by Juli Higa from our office. When the permit is rescinded it means the applicant no longer has a valid SMA Permit. It is my understanding that the applicant is or has filed an Appeal of the Director's Decision. The Appeal is reviewed by the Maui Planning Commission who will either sustain the decision of the Director or overturn that decision. The Commission can also decide to review the SMA Permit Application and render a decision. If the Commission sustains the Decision of the Director, the applicant once the Decision and Order is adopted and served can also appeal the decision to the Circuit Courts.

I'm not sure who is handling the Serle case. I'll let that planner give you a call.

>>> <Charley.F.Ice@hawaii.gov> 02/07/03 06:18PM >>>

Thanks, Colleen.

Are you familiar with the Moretti case? Can someone tell us what it means to rescind the SMA Permit there? Did Moretti have a timely SMA permit for his wells?

In the Opana Point (Ron Serle) case, what does it mean that he had an SMA Permit for the wells approved on September 16, 2002 (signed by John Min); then a letter from Michael Foley dated January 15 states that the "Serle Partners Well application" cannot be reviewed at the present time?

Per your message to the Planning Department I did see two projects that I worked on previously. In both cases the property is located within the SMA area, however, I did not process any SMA applications for the wells.

TMK 2-9-002:021 Well No. 5514-06 Hoolawa Kahui Pono ?-- we issued a SMA Minor permit to do grading, a gravel road, and underground utilities for telephone and electrical. The well permit was not included in the application.

TMK 2-9-011:018 Well No. 5412-01 Hanawana-Douglas ?-- we issued a SMA Minor Permit for a bridge crossing and portions of a new road to the subject property. The well permit was not included in the application.

I did not find any other SMA Permits or an exemption for the wells in both cases.
February 5, 2003

MEMORANDUM FOR THE RECORD

FROM: Glenn Bauer

SUBJECT: Maui Dept. of Planning Letter to Francesco Moretti, January 28, 2003

Reference is made to the Maliko Springs and the affect of Moretti’s wells (5620-05, 06) on Maliko Springs. Attached are data presented in Gingerich’s WRI report 98-4142. The data show that Maliko Springs discharged less than 0.01 mgd, and that upstream of the measurement the streambed was dry. Gingerich’s data also show that Maliko Spring is at an altitude of 50 ft., msl, which indicates the spring is perched within the post-shield lava comprising the Kula Volcanics. Outcropping at sea level are lavas of the Honomanu Basalt, the shield-building lava flows of Haleakala.

On the map showing the location of Gingerich’s measuring points, I plotted the approximate location Moretti’s wells. The wells are roughly adjacent to Gingerich’s measuring point no. 2.1. Moretti’s pumping well (5620-05) has a static water level of 3.6± ft., msl and a chloride concentration of 240 mg/L, indicating that the well is producing basal water that is floating on seawater. In addition, Well 5620-05 is cased –8 ft., msl. If anything, pumping these wells would affect ground-water discharge emanating from the Honomanu Basalt as diffuse basal springs along the coast. However, there is no way to effectively (and physically) measure the loss of this discharge, other than to assume that there is a loss of 0.122 mgd (85 gpm pump running 24 hrs./day) over the linear length of coastline adjacent to the well.
Figure 9. Surface-water gaging stations; springs; and dry, losing, and gaining sections of selected streams, Haiku study area, east Maui, Hawaii.
Table 3. Results of measurements in selected streams, Haiku study area, east Maui, Hawaii

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<th>Station number</th>
<th>Stream name</th>
<th>Altitude (ft)</th>
<th>Date</th>
<th>Flow (Mgal/d)</th>
<th>Type of streamflow upstream of site</th>
<th>Water temperature (°C)</th>
<th>Water specific conductance (µS/cm)</th>
<th>Chloride concentration (mg/L)</th>
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[ft, feet; Mgal/d, million gallons per day; °C, degrees Celsius; µS/cm, microsiemens per centimeter; mg/L, milligrams per liter; --, not available, not applicable, or no sample; altitudes estimated from 1983 USGS 1:24,000-scale topographic maps (Haiku and Paia quadrangles); datum is mean sea level; <, less than]
February 10, 2003

Mr. Francesco Moretti
Maliko Trading Company, LLC
471 Alakapa Place
Paia, HI 96779

Dear Mr. Moretti:

Well Completion Report Part II
Notice of Potential Violation of Water Code
Maliko-Moretti Wells 1 & 2 (Well Nos. 5620-05 & 06)

Well Completion Reports, Part II

We have received your Well Completion Reports Part II for the Maliko-Moretti Wells 1 & 2 (Well Nos. 5620-05 & 06). However, matters which must be addressed before we accept your report as complete are as follows:

1. The rescinding of your Special Management Area (SMA) Permit must be resolved.

Notice of Potential Violation of Water Code

Your application for the well construction and pump installation permits indicated that no SMA permit was required. We strongly suggest you do not pump the well until this SMA matter is clarified. Misrepresentations in an application for a permit are grounds for revocation and a potential violation of the Water Code under HRS Chapter 174C, Part VII, Section 84(g)(1), subject to fines of up to $1000 per day. Future action by the Commission will depend upon resolution of the SMA permit matters with the County.

If you have any questions, please contact Charley Ice of the Commission staff at [redacted] or toll-free at [redacted] extension 70251.

Sincerely,

DEAN A. NAKANO
Acting Deputy Director

Class

C: Wailani Drilling, Inc.
County of Maui, Department of Planning
FROM: ERNIE

TO: ANAKALEA, P.
    BAUER, G.
    CHING, F.
    DANBARA, S.
    FUJII, N.
    GOODING, K.
    HARDY, R.
    HIGA, D.
    ICE, C.
    IMATA, R.
    KUNIMURA, I.

TO: LAU, E.
    MATHIAS, T.
    NAKAMA, L.
    NAKANO, D.
    OHYE, M.
    SAKODA, E.
    SUBIA, S.
    SWANSON, S.
    UYENO, D.
    YODA, K.
    YOSHINAGA, M.

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FOR: Approval
     Signature
     Information

PLEASE: See Me
       Review & Comment
       Take Action
       Type Draft
       Type Final
       File
       Xerox ___ copies

SUSPENSE DATE: ____________

COMMISSION ON WATER RESOURCE MANAGEMENT

FEB 13

(03/03)
FROM: DEAN N.  
DATE:  
SUSPENSE DATE:  

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Pls now comments on pages 3 and Mahiko Springs and page 9 (we will construct them later (not sure if we need to respond, pls. advise)). Thanks.

See my "Mark to the record."
Mr. Francesco Moretti  
Maliko Bay Trading Company LLC  
462 Laulea Place  
Paia, Hawaii 96779  

Dear Mr. Moretti:

RE: Rescission of Special Management Area (SMA) Assessment Determination and SMA Minor Permit for the Eight-Lot Maliko Point Subdivision and an SMA Assessment Determination and Exemption for Two Tool Sheds for Aquaculture Purposes on Approximately 44 Acres at Apuwai Street, Tax Map Key 2-7-004: 006, Haiku, Maui, Hawaii (SMX2002/0072, SM2 2002/0198, SM5 2002/037)

The purpose of this letter is to inform you that the Department of Planning's ("Department") Special Management Area ("SMA") assessment and determination for an exemption for the tool sheds dated August 19, 2002, and the assessment and approval of the SMA minor permit dated December 30, 2002, for the above-referenced subdivision were erroneously issued and are therefore, being rescinded. It is the Department's position that the prior assessment and determination was made on the basis of inadequate and insufficient information in your application(s). Your application did not adequately address the General Plan's and the Paia-Haiku Community Plan’s goals, objectives, and policies and Chapter 205A, HRS, some of which are identified in the enclosed attachment. Specific information which is required before the Department can make a proper assessment and determination is detailed in this letter.

Cost of Project

Your application failed to include the costs for all components of the project. The valuation submitted on December 4, 2002, identifies the cost estimates for "SMA Area Only." A map showing the area of your project which you believe falls outside of the SMA must be provided, along with a separate cost estimate for that portion of the project.

Another issue pertaining to this matter is the inconsistent estimates submitted with regard to water improvements. Initially, your application submittal of February 20, 2002,
stated that water would be provided by a system of catchments and storage. The estimated cost was $15,000 for waterlines, and $10,000 for a water tank. There was no mention of two wells and well permits approved by the State Commission on Water Resources.

Thereafter, on September 30, 2002, you provided an amended estimate of $13,000 for waterlines, $20,300 for a water tank, and $23,000 for a water well. Then, on December 9, 2002, you provided another estimate for what you termed, "SMA Area only," of $16,000 for waterlines/hydrants, $24,300 for a water tank, and $14,000 for a water well.

The Department is uncertain whether the above-mentioned figures include two wells or one well. Further, do these figures include the development costs (*i.e.* drilling, labor, and materials) for the well(s)? Additionally, your estimate indicated that there would be standpipes and 6" and 4" waterlines. The standpipes are directly contrary to the requirements of the Community Plan.

**Water Improvements/Fire Protection**

Specific details concerning the adequacy of water and fire protection were not fully addressed in your application. Your application failed to include the purpose of the water tank. The administration and operation of the private water system to serve a potential of 16 farm dwelling units were also not described. The source of irrigation for the subdivision roadway landscaping (including responsibility for maintenance) was neither identified nor discussed in your application.

The application also did not contain a description or analysis of the proposed water system improvements, and instead, was merely identified on the cost list. The Department was not provided with any information evidencing that the Fire, Health, Water Department, and State Commission on Water Resources commented on or addressed any issues concerning the impact of the proposed water system on existing resources and infrastructure systems. In fact, in its May 2, 2002 letter, the Department of Health stated that it would not approve the subdivision with a private water system.

Your application also did not provide information or discussion identifying the existing public water systems in the area, including justification for why you were not going to utilize them. The location and size of existing waterlines in the area, as well as the adequacy and availability of public water were not identified.

The Department is also concerned about the status of the Department of Water Supply's "Large Lot" Agreement, wherein the previous subdivider was allowed to defer the
construction of the water system improvements. The previous subdivider agreed to construct the improvements when the large lots are developed. This agreement included the 44-acre lot you purchased from the previous subdivider. An agreement to defer improvements was executed and recorded on January 15, 1997.

As you are aware, this agreement runs with the land. The agreement required water system improvements to provide fire protection and water service. Among other things, the improvements included construction of a 6-inch waterline along the subdivision roads, standpipes/hydrants spaced at 500 feet intervals, and service laterals to each lot. Depending on the proposed rule for issuance of meters in the upcountry areas, the subdivision would need to be on a priority list.

You requested that the Board of Water Supply waive this condition of the agreement since a private water system is being proposed. The Board deferred action on this matter and requested an outside counsel for a legal opinion. This matter of County concern must be addressed prior to any development and issuance of construction permits, including any SMA permits.

No maps were provided showing the location of the well(s) and water tank in the subdivision. The Department has no SMA assessment and determination and no SMA permits on file that were issued for the well(s). The well(s) are clearly considered a development and are part of the subdivision application. Construction of these well(s) should not occur until this matter has been evaluated and an assessment made on the impact of the well(s) on the groundwater and surface water resources in the area. The well permit should not have been issued until a full determination and an SMA permit had been issued.

It should be noted that the information you provided, “Ground Water and Surface Water in the Haiku Area, East Maui, Hawaii” by Stephen B. Gingerich, U.S. Geological Survey, Water-Resources Investigations Report 98-4142, did not have information on the impact of the withdrawal of water from your property on the springs in Maliko Gulch as you verbally indicated. If you are submitting this report as reference to support your development, you should provide a summary and conclusion of this report and relevant data or information pertinent to your project. A technical analysis by a certified hydrologist of your proposed well(s), and its impact on the spring(s) in Maliko Gulch should be included.

The number of existing wells in the area and the effect of withdrawals from these private wells should also be discussed and analyzed. The amount of water projected to be withdrawn from the well(s) should also be identified. Residents are concerned that your
well(s) may impact the springs and water in Maliyo Gulch which may affect their lifestyle and living.

The issue of potable water and the quality of the water in your well(s) were also not addressed, particularly since the area was originally under pineapple cultivation where tests have shown that water wells in these areas have a high pesticide content. Documentation was not provided that the water system would be free from pesticides and safe for drinking purposes.

Further, the impact and relationship of the well(s) to sewage disposal should also be identified and addressed.

Lastly, your inconsistent statements on whether there would be aquaculture development on the property need to be clarified.

Rainfall and Climate

No technical data on rainfall and climate in the area were provided. This information is necessary in order to determine whether the proposed catchment systems and drainage improvements would be adequate.

Drainage

A description of the topography of the site was not adequately provided. Your application stated that the property is gently sloping with good drainage (4% slope). Based on the subdivision plot plan, however, the slope appears to be directed toward Maliyo Gulch and the stream below. More detailed topography information is needed in order to determine drainage and runoff concerns, as well as impact and mitigative measures, if necessary, to prevent runoff into the gulch and ocean.

According to the Department's December 30, 2002 Assessment, item 2(D), states that:

"The project will increase employment within the small agricultural business and construction industry, particularly during infrastructure and dwelling construction. Landscaping and agricultural industry, including fish farming, will benefit from this project (one of the future owners is planning to construct fish ponds for the purpose of farming.)"

Runoff from the property and drainage of the fish ponds or any spills into the
ocean were not addressed. The Department notes that there is inconsistency in the submittal with the above statement in Section 2(D) of the Assessment regarding fish ponds since your December 4, 2002, estimate noted that there would be no aquaculture. This issue needs to be clarified.

In Section 2(E) of the Department’s Assessment, it was noted that:

“According to the applicant’s engineer, an individual drywell system can be installed on each lot based on the size of the roof. The runoff from the roof will flow into this well and have the runoff percolate into the ground. This will be a benefit to the homeowner and would recharge the ground water. A drywell will be required for every 700 square feet of roof area.”

The Department needs to know a drywell system as opposed to another method of drainage is more appropriate in this area. Depending on rainfall and climate, a drywell system may not be appropriate. There may also be concerns regarding mosquitoes in this area. Further, although the drywells may address runoff from the roofs of structures, a larger issue is the runoff into Maliko Gulch from the use of the land for structures and human habitation, agricultural and aquacultural activities, the roadways, and for any other activities on the property. No information was provided on the amount of grading activities and its potential impacts.

**Agricultural activities**

No information from the State Land Study Bureau or the Agricultural Lands of Importance to the State of Hawaii (ALISH) on soil classification were included in your application. This information is necessary to determine agricultural feasibility, as well as, drainage impacts. The feasibility of subdividing the property for agriculture purposes were not addressed.

In a separate SMA application (SM5 2002/0307), approved August 19, 2002, the Department permitted two one-story sheds of 200 square feet each for storage of aquaculture equipment. These two sheds were approved on the basis that they were accessory to an activity that is permitted in the Agricultural District.

Based on the cost estimates made for the SMA Assessment and Minor Permit approved for the subdivision, however, the aquaculture activities were **withdrawn**. It is not clear on whether this withdrawal means that you will no longer construct the two storage sheds for aquaculture purposes or that you will construct the two storage sheds and no longer use the storage sheds for aquaculture purposes. There was no written
communication or explanation on this withdrawal, other than to reduce the valuation of the project.

If no aquaculture activities are proposed, the Department needs to know what type of agricultural activities or uses are proposed. How much water will be required for these activities? Are the proposed well(s) and water tanks adequate for these uses?

No technical data or information was included in the SMA application on the amount of water to be used, and its impact on the groundwater and surface water resources on the existing farmers in Maliko Gulch.

The community is further concerned that a road is being planned to traverse from the top of the gulch to the bottom. Whether this road is related to the aquaculture activity and tool sheds located above the gulch is unclear. Clarification should be provided on why the tool sheds were placed on the ridge of the gulch. An analysis should also be provided on the effect of the location of the sheds from Hana Highway heading east towards Maliko Gulch.

**Access and Traffic**

Apuwai Street is the internal subdivision road. Your application did not include a description of the access through the existing subdivision and connection to Haiku Road and Hana Highway and its effect on the existing subdivision. Your letter of February 19, 2002, Exhibit B, "Proposed Action" states that a 40-foot wide paved road and private gravel driveways will be necessary to access the newly created lots.

On September 30, 2002, you submitted additional information relating to the roadway and access. You indicated that the proposed development will generate 21 additional cars which would not transit through the village of Haiku, and occasionally will access Haiku Road and Hana Highway, over the span of the daytime.

The County's Agricultural zoning district permits two houses on the property. Considering that there is a potential that 16 houses may be constructed on the property, and the potential of about two cars (a low estimate on the number of cars per household) per lot, approximately 32 vehicles may be generated by this property. Your submitttal did not address the concern about the impact or effect of the additional vehicles on the intersections at Apuwai Street at Haiku Road, and Haiku Road and Hana Highway. The effect of the existing Haiku Hills Subdivision, which abuts your project and which lies outside the SMA, was not addressed at the time of subdivision. The cumulative impact of your development along with other developments in this area should be assessed and
mitigative measures, if necessary, proposed.

**Views**

In your letter of April 29, 2002, you indicated that you are proposing a five-foot berm and that the Haiku Community Association was happy with the berm. This was the first written indication that there will be a berm along Hana Highway, and therefore, the Department was unable to evaluate or assess the impact of the berm on views.

In your letter of May 13, 2002, you indicated that your Engineer’s conclusions are that a one-story house with a total height of 20 feet in the proposed location will not interfere with the view of the West Maui Mountains. Based on the cross section that you provided, it would appear that the view from Hana Highway will be the berm. No elevations looking from a car on Hana Highway directly at the berm and at the houses to the mountains were provided to determine the impact of the berm and the houses on the view. This five-foot berm will totally obliterate the vista of the plain and West Maui Mountains from the average vehicle or person walking along Hana Highway.

The information you provided on July 1, 2002, included a written description and photographs showing a 20-foot high pole, noting that the pole with a yellow flag was held 120 feet into the lot away from Hana Highway. Lot 6A has a ground elevation of six (6) feet lower than the highway.

Lot 6G has a similar elevation dropping 14 to 18 feet if compared to elevation atop Lot 6A. You noted that a five-foot berm will drastically reduce the visible impact of buildings’ walls, without interfering with the scenic view from the highway. You concluded that the two lots will have to be limited to a height of 20 feet (roof top) and the closest wall will be 120 feet from the edge of the highway pavement. There will be no fill imported for the proposed building pads. The entire area fronting Hana Highway with the same or low elevation than the lots should be considered part of the view plane. Based on this view, the house located on Lots 6A, 6F, 6G, and 6H should be moved to the higher elevation outside of the view plane.

The information you provided on August 6, 2002, indicated that your proposed plan is restricting the location of the houses on Lots 6A and 6G to the least impacted area, and a building height of 20 feet. You noted that building size is not final but used a main house of 40 by 50 feet for a total area of 2,000 square feet, and a cottage of 30 by 30 feet for a total area of 900 square feet. Based on this scenario, you noted that with the building location on lots 6A and 6G, there are 600 feet of unobstructed view but this is only true for the one point identified as the view cone. You stated that the houses on Lot 6H are 30 feet
below the observation point elevation and would not interfere in the yellow view cone corridor.

The Department, however, notes that the houses are located in the view plane. You did not provide an analysis on the effect, leaving the houses in the view plane with only 600 feet of unobstructed view, on the view for cars traveling on Hana Highway at the posted speed limit.

You stated that landscaping is limited to ten (10) feet in height to preserve the view. Landscaping, in itself, becomes a natural barrier or wall and would obstruct the view from the highway. The plan considers a five-foot berm on Lot 6G, and the berm with landscaping on Lot 6A, to minimize the view of the house walls. The berm is set at 90 feet from the observation point (car). The first house is 220 feet from the observation point due to the highway shoulders. Consideration was not given on the view from a moving car which would be obliterated by the berm, landscaping, and reduced view corridor of 600 feet. The point of the visual impact or view study is to protect or mitigate impacts on the existing vistas. It is not to mitigate impact of building walls.

Given the scenario you provided (if you can show that the houses will not obstruct the view), the minor permit did not require any covenants that would restrict the sizes of the houses to the 2,000 and the 900 square feet respectively and to a specific location on the lot. There were no indication that covenants will preserve the open space to protect the view plane.

The cross section analysis drawing that was provided for Lots 6G and 6A takes a cross section looking from Maliko Gulch. There should also be a view taken from Hana Highway fronting the property. Based on the scenario and information you provided, the view from Hana Highway would be the berm. The photographs with the 20-foot pole should have shown houses superimposed next to or with the pole in the rear or front of the houses.

In addition to the proposed subdivision, an alternative subdivision design may also reduce the impact of the development on the existing vista. This could be done by redesigning the lots so that the houses are located away from the highway where the elevation of the property is lower than the highway or away from the view of the highway.

In addition, consideration could have been made to cluster the housing so that the view plane as well as more efficient farming operations, could still be provided. The Department also notes that within the view cone, there are two dwelling units in Lot 6H which could be moved away from the view area. In addition, the two sheds that were
approved by the SM2 minor permit are located in the same area, and the view plane was not considered at the time of the SM2 permit approval. The drawings for these two sheds show them to be on pier-post and should be moved or included in the analysis.

In addition to the dwelling units, a description on whether or not the utility poles and lines would be above-ground or underground were not discussed or identified on any plans.

Construction of Wells

The construction of wells on the property did not receive any SMA review or permits prior to issuance of the well permits by the State Commission on Water Resources. The development of the wells are part of your proposed subdivision and should have been reviewed and included with your SMA application. Although the SMA exemption for the two storage sheds were issued on your representation that they were necessary for aquaculture activities, the subsequent cost estimates submitted for your proposed subdivision stated that there will be no aquaculture activities on the property. The Department questions where the State Commission on Water Resources was aware of the Department of Water Supply's "Large Lot" Agreement and of the Maliko Gulch residents' concerns regarding the impact water withdrawals from your wells would have on their water use.

As the foregoing demonstrates, the Department has many concerns regarding the project which were not adequately addressed in your application. Based on the foregoing, the SMA assessment and determination for an exemption dated August 19, 2002, (SM5 2002/037) for the tool sheds, and the assessment and approval of the SMA minor permit dated December 30, 2002, (SM2 2001/0198) are hereby rescinded.

You are advised that no construction permits, including but not limited to grading, subdivision, and building permits, may be approved. As noted above, and as specifically identified in this, there are several major points and issues that are unclear and must be addressed in your description of the project and in your analysis. All of the information should be complied into one packet. The packets can then be transmitted to other agencies for their review and comment.

The Department requests that you provide at least two complete sets (one original and one copy) of your application and its corresponding submittals. Additional copies will be required to send to agencies after the Department has reviewed your submittals to ensure that the information you provide is adequate. Copies of the SMA major permit application are enclosed for your use.
If you have any further questions, please contact Julie Higa, Staff Planner, at 270-7814.

Sincerely,

MICHAEL W. FOLEY
Director

MWF:JMH:
Attachment

Wayne Boteilho, Deputy Planning Director
Brian Moto, Corporation Counsel
Gilbert Coloma-Agaran, Director, Department of Public Works and Environmental Management (w/Attachment)
State Water Commission, Department of Land and Natural Resources (w/Attachment)
Blaine Kobayashi, Deputy Corporation Counsel (w/Attachment)
Aaron Shinmoto, Planning Program Administrator
John Nakagawa, Office of Planning, CZM Program (w/Attachment)
Herbert Matsumoto, Maui District Health Office (w/Attachment)
David M. Jorgensen, Esq. (w/Attachment)
Ralph Nagamine, DSA Administrator (w/Attachment)
Howard Hanzawa, DSA (w/Attachment)
Julie Higa, Staff Planner
03/CZM File (w/Attachment)
02/SM2 Minor Permit File (SM2 2002/0198) (w/Attachment)
02/SM5 Exempt File (SM5 2002/037) (w/Attachment)
TMK Project File (w/Attachment)
General File
K:\WP_DOCS\PLANNING\JULIE\SM2\MorettiMalikoPoint\CorpMoretti.wpd
GENERAL PLAN AND COMMUNITY PLAN

Consistency with General Plan and the Paia-Haiku Community Plan Goals, Objectives, and Policies.

GENERAL PLAN:

"B. LAND USE"

Objective
2. To use the land within the County for the social and economic benefit of all the County's residents.

Policies
a. Mitigate environmental conflicts and enhance scenic amenities, without having a negative impact on natural resources.

Objective
3. To preserve lands that are well suited for agricultural pursuits.

Policies
a. Protect prime agricultural lands from competing nonagricultural land uses.

C. ENVIRONMENT

Objective
1. To preserve and protect the county's unique and fragile environmental resources.

Policies
a. Preserve for present and future generations the opportunity to experience the natural beauty of the islands.
b. Preserve scenic vistas and natural features.
c. Support programs to reduce air, land and water pollution.

Objective
a. Preserve, enhance and establish traditional and new environmentally sensitive access opportunities for mountain and ocean resources.
b. Evaluate all land based development relative to its impact on the County's land and ocean ecological resources.

C. AGRICULTURE

Objective
2. To maximize the use and yield of productive agricultural land throughout the County.

Policies
a. Ensure the availability of land that is well suited for agricultural production.
c. Ensure the availability of adequate irrigation water for agricultural purposes during periods of limited rainfall.
g. Discourage establishment of pseudo-agricultural subdivisions.
D. URBAN DESIGN
Objective
1. To see that all developments are well designed and are in harmony with their surroundings.

IV. TRANSPORTATION
A. TRANSPORTATION
Objective
1. To support an advanced and environmentally sensitive transportation system which will enable people and goods to move safely, efficiently and economically.

B. WATER
Objective
1. To provide an adequate supply of potable and irrigation water to meet the needs of Maui County’s residents.

Policies
a. Support the improvement of water transmission systems to those areas which historically experience critical water supply problems provided the improvements are consistent with the water priorities and the County’s Water Use Development Plan provisions for the applicable community plan area.
b. Meet or exceed Federal quality standards for the potable water supply.
c. Develop improved systems to provide better fire protection.
d. Monitor growth activities throughout Maui County in order that development of new water sources is concurrent with approval of new developments.
e. Support the Board of Water Supply in its determination of future water needs consistent with the General Plan, Community plans and the growth management strategy.
h. Maintain the right to manage the County’s water sources and transmission systems at the County level.

Objective
2. To make more efficient use of our ground, surface and recycled water sources.

Policies
d. Improve catchment systems and transmission systems to reduce runoff.
f. Discourage the use of standpipes for fire protection purposes.
g. Promote water conservation practices to make the most efficient use of existing water sources.

PAIA-HAIKU COMMUNITY PLAN
LAND USE
Goal
A well-planned community that preserves the region’s small town ambiance and rural character, coastal scenic vistas, and extensive agricultural land use, and accommodates the future needs of residents at a sustainable rate of growth and in harmony with the region’s natural environment, marine resources, and traditional uses of the shoreline and mauka lands.

Objectives and Policies
1. Protect the marine environment and quality of offshore waters.
2. Preserve important scenic vistas and shoreline resources of the region.
Implementing Actions
3. Establish varying minimum lot sizes and subdivision standards to reflect different
kinds of proposed uses and activities, thereby, preventing the improper use of agricultural and rural areas. Moreover, ensure that minimum two-acre lot subdivisions intended for “gentlemen estates” are limited to areas that (a) have adequate public services and infrastructure, and (b) would not significantly detract from the agricultural, rural, open space, scenic and environmental qualities of the region.

5. Improve standards and procedures to protect scenic vistas and shoreline resources of the region.

ENVIRONMENT
Goal
The preservation and protection of the natural environment, marine resources and scenic vistas to maintain the rural and natural ambiance and character of the region.

Objectives and Policies
1. Preserve and protect scenic vistas along Hana Highway.
6. Protect the quality of surface and groundwater resources.
7. Protect all wetland resources. Such resources provide open space and habitat for plant and animal life in the aquatic environment. Ensure that the development of new water sources does not adversely affect in-stream flows.
8. Protect and maintain the quality of the nearshore and offshore waters and marine environment. Ensure that storm water run-off and siltation from proposed development will not adversely affect the marine environment and nearshore and offshore water quality. Open culverts which empty directly into nearshore waters should be avoided.
9. Encourage the construction of natural grass-lined drainage channels, as opposed to concrete channels and the installation of siltation basins.
10. Effectively control agricultural run-off.

CULTURAL RESOURCES
Goal
Identification, protection, preservation, enhancement and appropriate use of cultural resources, cultural practices and historic sites that provide a sense of history and define a sense of place for the Pa‘ia-Ha‘iku region.

Objectives and Policies
1. Encourage and protect traditional mauka and makai accesses, cultural practices and rural lifestyles. Protect traditional hunting, fishing and gathering.

PHYSICAL INFRASTRUCTURE
Water
Goal
An adequate supply of potable and irrigation water to meet the needs of the region.

Objectives and Policies
3. Ensure that the development of new water sources does not adversely affect in-stream flows.

Drainage
Goal
Improvements to the storm drainage system which provide for a high standard in preventing flooding and property damage while not adversely affecting the marine environment and nearshore and offshore water quality.

Objectives and Policies
1. Ensure that storm water run-off and siltation from proposed development will not adversely affect the marine environment and nearshore and offshore water quality. Open culverts which empty directly into nearshore waters should be avoided.
4. Effectively control storm water run-off in new urban, rural or agricultural subdivisions and developments, so as to avoid net increase in storm water run-off.
Goal
Greater self-sufficiency in the need for nonrenewable energy and more efficiency in use of energy resources.

4. Utilize renewable energy for water pumping and other energy services which can take advantage of intermittent energy resources.
6. Support energy-efficient building design and site development practices.
7. Promote energy conservation and awareness programs.
8. Limit requirements for street lighting in agricultural and rural communities.

C. Planning Standards
5. Subdivision

Environmental Design
Lot configurations, roadways and subdivision improvements shall be designed to respect existing landforms, coastal and aquatic resources, biological resources and cultural/historic resources to the greatest extent possible.

Socio-Economic Considerations
The direct and cumulative impacts on agriculture and the impacts on the community shall be assessed and considered.

Improvements
County urban subdivision standards shall not apply to the Pa`ia-Ha`iku region, except in areas where deemed appropriate, in regards to the following improvements:
- Curbs, gutters, and sidewalks shall not be required;
- Street lighting shall not be required; and
- Pavement width shall not exceed twenty (20) feet.

6. Landscape Planting
b. Incorporate the principles of xeriscaping in future landscape planting.

7. Roadway standards
a. Roadways shall have minimum pavement width of sixteen (16) feet, and shoulder width of two (2) feet, to provide for the safe passage of two-way traffic, except in areas where natural landforms, historic structures and other environmental constraints preclude widening beyond existing roadway widths.
b. Roadways (excluding Hana Highway, Baldwin Avenue and Ha`iku/Kokomo Roads) shall have a maximum width of twenty (20) feet of pavement except in residential areas where on-street parking is desired, or around tight turns and blind corners.
c. County-standard curbs, gutters, and sidewalks shall not be required in the Pa`ia-Ha`iku district except in high density areas such as multi-family development. Grassed shoulders and swales shall be allowed without curbs. Where sidewalks are provided, they shall be separated from roadways by a minimum 2-foot-wide planting strip along residential streets, and a minimum 4-foot-wide planting strip along highways.

9. Environmental Aspects
c. Ensure that storm water run-off and soil erosion from proposed developments will not adversely affect the marine environment and nearshore water quality.

COASTAL ZONE MANAGEMENT PROGRAM
Compliance with the Coastal Zone Management Program pursuant to Chapter 205A, Hawaii Revised Statutes, as amended.

Section 205A-2(b)(4)(E):
"Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures;"

Section 205A-4:
"Implementation of objectives, policies, and guidelines. (a) In implementing the objectives of the coastal zone management program, the agencies shall give full consideration to ecological, cultural, historic, esthetic, recreational, scenic, and open space values, and coastal hazards, as well as to needs for economic development. (b) The objectives and policies of this chapter and any guidelines enacted by the legislature shall be binding upon actions within the coastal zone management area by all agencies within the scope of their authority."

Section 205A-26(1)(D):
"Alterations to existing land forms and vegetation, except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, wind damage, storm surge, landslides, erosion, siltation, or failure in the event of earthquake."

Further, Section 205A-26(2), states that no development shall be approved unless the authority has first found that:

"(A) That the development will not have any substantial adverse environmental or ecological effect, except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, or compelling public interests. Such adverse effects shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect, and the elimination of planning options;

(B) That the development is consistent with the objectives, policies, and special management area guidelines of this chapter and any guidelines enacted by the legislature; and

(C) That the development is consistent with the county general plan and zoning. Such a finding of consistency does not preclude concurrent processing where a general plan or zoning amendment may also be required."

Section 205A-26(3) states that the authority shall minimize, where reasonable:

"(E) Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land."
January 27, 2003

Ref:5620-05.pip

Mr. Francesco Moretti  
Maliko Trading Company, LLC  
471 Alakapa Place  
Paia, HI 96779  

Dear Mr. Moretti:

Pump Installation Permit  
Maliko-Moretti #1 (Well No. 5620-05)

Enclosed are two (2) originals of your approved Pump Installation Permit for the captioned well(s) that authorize permanent pump installation work for your well(s). As part of the Chairperson’s approval, the following special conditions were added and are part of your permit under Permit Condition 11:

Special Conditions

1. If the elevation benchmark needs to be altered, the permittee, well operator, and/or well owner shall ensure that the benchmark is transferred (or the well resurveyed) and documentation of the new benchmark shall be submitted to the Commission within sixty (60) days after the pump is installed.

The permittee, well operator, and/or well owner are responsible for all conditions of the permit. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign and have the contractor sign both permit originals and return one for our files. A copy of your water use report form is enclosed for your use.

Except for the monthly water use report form, please provide copies of all the information in this packet to your pump installation contractor.

Finally, this letter is notice that we have accepted your Well Completion Report – Part I as complete.

If you have any questions, please call Charley Ice of the Commission staff at [redacted] or toll-free at extension 70251.

Sincerely,

Peter T. Young  
Chairperson

Enclosure  
c: Wailani Drilling, Inc.
PUMP INSTALLATION PERMIT
Maliko-Moretti #1, Well No. 5620-0.

Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Maliko-Moretti #1 (Well No. 5620-05) near Maliko Gulch at 172 ft. e.l., Maui. TMK 2-7-4:6, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission). P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The pump installation permit shall be for installation of a 85 gpm rated capacity at 385 ft. of head, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on an annual basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

6. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

10. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

11. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: January 10, 2003
Expiration Date: January 10, 2005

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: ________________________________ Date: ______________
Printed Name: ________________________________ Firm or Title: ________________________________

Installer's Signature: ________________________________ C-57, C-57a, or A License #: ________ Date: ______________
Printed Name: ________________________________ Firm or Title: ________________________________

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachments
USGS
Department of Health's Safe Drinking Water & Wastewater Branch
Maui Department of Water Supply
Wailani Drilling, Inc.
### COMMISSION ON WATER RESOURCE MANAGEMENT

**DATE:**

<table>
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<td>UYENO, D.</td>
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<td>YODA, K.</td>
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**PLEASE:**

- See Me
- Review & Comment
- Take Action
- Type Draft
- Type Final
- File
- Xerox ___ copies
- Last person - trash

---

1. Letter to County after telecon clashing receded.
2. We accept the letter from Mayor.
3. Let's discuss issues.
4. SMA - we were supposed to approve it but restrained.
5. We discuss this in a meeting or one on one.
6. Q&A - any questions or clarifications?
7. Use Scenario 2 pump installed before.
<table>
<thead>
<tr>
<th>Well Name</th>
<th>Latitude (°')</th>
<th>Longitude (°')</th>
<th>Elevation (MSL)</th>
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<tr>
<td>West Well (No. 1)</td>
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<td>156°20'19.55</td>
<td>169.39</td>
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<td>East Well (No. 2)</td>
<td>20°56'13.95</td>
<td>156°20'19.30</td>
<td>172.73</td>
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Maliko-Moretti Wells 1 & 2 (5620.05406)

Well Elevation
Benchmark Elevation
(0.01 ft. above msl)

Concrete Pad

Benchmark reference control point
Hana Highway Monument
Elevation = 207.12 MSL

PLOT PLAN
(Provide Latitude and Longitude of well referenced to NAD27 to nearest second)

Surveyor's stamp and signature

BRUCE R. LEE, LPLS
5983-LS, exp. 4/04
DATE: January 10, 2003

TO: CHARLIE
State Water Commission

WAILANI DRILLING

FROM: CARL R. MUSTO

RE: MORETTI WELLS

The following is/are transmitted herewith:

Revised Plot Plan

Comments:

Information converted to NAD27 as requested by Charlie. Original will not be mail.

TOTAL NUMBER OF PAGES TO BE SENT (Including this sheet): 2
DATE: January 10, 2003

TO:

Charlie
State Water Commission

Wailani Drilling

FROM: Carl R. Musto

RE: Moretti Wells

The following is/are transmitted herewith:

Revised Plot Plan - Signed copy

Comments:

Information converted to NAD27 as requested by Charlie. Original will not be mailed.

TOTAL NUMBER OF PAGES TO BE SENT (including this sheet): 2
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**Well Elevation**

Benchmark Elevation
(0.01 ft. above MSL)

Concrete Pad

Benchmark reference control point

Hana Highway Monument
Elevation = 207.12 MSL

**Surveyor's stamp and signature**

BRUCE R. LEE
LICENSED PROFESSIONAL LAND SURVEYOR
No. 5983-LS
HAWAII, U.S.A.

BRUCE R. LEE, LELS
5983-LS, exp. 4/04

**PLOT PLAN**

(Provide Latitude and Longitude of well referenced to NAD27 to nearest second)
**Maliko-Moratti #1 Well No. 5620-05**

<table>
<thead>
<tr>
<th>LATITUDE (WGS 84)</th>
<th>LONGITUDE (WGS 84)</th>
<th>ELEVATION (MSL)</th>
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<tr>
<td>East Well</td>
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<td>156°20'09&quot;.29</td>
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**Well Elevation**

Benchmark Elevation **172.73**

(0.01 ft. above msl)

**Concrete Pad**

**Benchmark reference control point**

Hana Highway Monument

Elevation = 207.12 (MSL)

---

**PLOT PLAN**

(Provide Latitude and Longitude of well referenced to NAD83 and seconds: WGS 84)

---

**Surveyor's stamp and signature**

BRUCE R. LEE, LPLS
5983-LS

Dec 23 12:49p
Walani Drilling, Inc.
1-808-572-0925
P.4
MEMO and ROUTE SLIP

WCR 2 Check for Well No. 5620-05 (survey to regulation memo)

1. **Pump Tests Check** (special condition of PIP? Yes/No)       Glenn Bauer (initial if yes)
   - Yes
   - No
   - If no, describe deficiency
   - Followed WCPI Stds
   - Analysis attached
   - Proposed pump cap o.k.

2. **Aquifer Pump Test:**
   - Followed WCPI Stds
   - T & S analysis attached

3. **Well Interference:**
   - Estimated Steady-State drawdown at 1-mile radius is __________ ft.
   - Analysis attached

4. **Stream Surface Water Impacted:**
   - Yes
   - No
   - If yes, identify most probable stream

2. **Pump Installation Check**        Mitch Ohye (initial)
   - Yes
   - No
   - If no, describe deficiency
   - Data complete
   - Followed WCPI Stds
   - Well database updated

3. Charley/Lenore/Ryan (initial) take action based on above analysis

4. Roy (initial) check

5. Subia (initial) finalize

6. Linnel (initial) signature

7. Charley/Lenore/Ryan File
Alternative way for determining $T$ from step-drawdown data (Mink, per. comm)

$Q = 120 = 23100 \text{ ft}^3/\text{d}$

$s_1 = \sqrt{Q_1} = 0.87$

$s_2 = \sqrt{Q_2} = 0.54$

Well Depth below sea level = 8

Radius of well (ft) = 0.25 = $r$

$n = \frac{s_1 - (Q_1/Q_2)s_2}{Q_1(Q_1 - Q_2)} = 3.37 \times 10^{-10}$

$j = \frac{s}{Q_1} - nQ = 2.99 \times 10^{-5}$

Laminar flow equation:

$s = jQ = 0.69 \quad 79.31\% \text{ Head loss due to laminar flow}$

Thiem Eq.

$T = \frac{1}{2\pi j} (\ln{r_{BSL}/r})$

$re = \text{Well Depth BSL} \times 1.6 = 28$

Therefore:

$T = \frac{1}{2\pi j} (\ln{r_{BSL}/r}) = 25141 \text{ ft}^2/\text{d}$
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART I
Well Construction

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 808-587-2225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dln/owrm/

<table>
<thead>
<tr>
<th>1. State Well No.: 5620-05 Well Name: Maliko-Moretti Well</th>
<th>Island: Maui</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address: 471 Alakapa Pl, Paia 96779 Tax Map Key: 2-7-4:6</td>
<td></td>
</tr>
<tr>
<td>3. Drilling Company: Wailani Drilling</td>
<td></td>
</tr>
<tr>
<td>4. Drilling method used during construction: ☑ Rotary ☐ Percussion ☐ Other (describe)</td>
<td></td>
</tr>
<tr>
<td>5. Date Well Construction (drilled, cased, grouted) completed: 11/8/02 Fill out attached Driller's Log</td>
<td></td>
</tr>
</tbody>
</table>

   In addition to the driller's log, if a geologic log was prepared, please submit with this form.

| 6. Was the subject well cored? ☑ Yes ☐ No |
| 7. Initial water-level encountered 180 ft. below ground Date and time of measurement: 10/29/01 |
| 8. Step-Drawdown Test completed? ☑ Yes Attach Step-Drawdown Test form (12/17/97 SDPTD Form) |
| 9. Constant Rate Aquifer Test completed? ☑ Yes Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form) |

Parameters prior to pump test:

| 10. Water-level: 3.64 ft. above msl Date and time of measurement: 11/25/02 |
| 11. Chloride: 260 ppm Date and time of sampling: 11/25/02 |
| 12. Temperature: 67.5°F Date and time of measurement: 11/25/02 |

13. Fill in the as-built section on the other side of this sheet.

14. Fill in attached surveyor's report.

15. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.)

16. The proposed manufacturer's rated pump capacity is __85___ gpm at a head of __385___ ft.

17. Remarks: ____________________________

---

Licensed Driller (print) Mike Robertson C-57 Lic. No. 2015

Signature ____________________________ Date 11/20/02

Permittee (print) Frances M. Moretti

Signature ____________________________ Date 11/20/02

WCR1 Form 912201 Page 1 of 4
Solid Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
Stainless Steel: (check one):
□ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120
Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2996
□ Centrifugally Cast Resin Pipe conforming to ASTM D2997
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
Stainless Steel: (check one):
□ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120
Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2996
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□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296

WCR1 Form 911201 Page 2 of 6
MEMO and ROUTE SLIP

WCR 1 Check for Well No. 5620-05 (survey to regulation memo)

1. **Pump Tests Check** Glenn Bauer (initial)
   - **Yes**  No  If no, describe deficiency
   - Step-Drawdown Test:
     - followed WCPI Stds □ □ □
     - analysis attached □ □ □
     - proposed pump cap o.k. □ □ □
   - Aquifer Pump Test:
     - followed WCPI Stds □ □ □
     - T & S analysis attached □ □ □
   - Well Interference:
     - estimated Steady-State
drawdown at 1-mile radius is ______ ft.
     - analysis attached □ □ □
   - Stream Surface Water Impacted: □ □ □ ← If yes, identify most probable stream

2. **Construction Check** Mitch Ohye (initial)
   - **Yes**  No  If no, describe deficiency
   - data complete □ □ □
   - followed WCPI Stds □ □ □
   - well database updated □ □ □

3. Charley/Lenore/Ryan (initial) take action based on above analysis

ATTACHMENTS FOR PUMP INSTALLATION PERMIT:
1. COVER LETTER
2. PERMIT (2x)
3. BOH COMMENTS
4. LAND DIV. COMMENTS
5. WCR 2 FORM
6. WUR FORM
7. USGS MAP
8. PARCEL CHECK
9. DATABASE PRINTOUT
10. GLENN'S WORKSHEET
11. WELL CHECK PRINT
    CBWR Action Notice not necessary – only WCP.
    To be sent to applicant

4. Roy (initial) check
5. Subia (initial) finalize
   - (initial) signature
7. Charley/Lenore/Ryan File

12/13/02

*MALIKO MATHEW

1. Why did we accept Yes/03?
   - Final location 1bd only then
   - They have well submitted
   - already - ATP?
   - action only for "c"

2. They went to CBWR to review WCP,
   - and WCRI went out in that
   - earlier with I came on me instead
   - but final well location was under
   - wrong datum
Return Receipt Fax Memo

For: Charley Ice

From: Ann Robertson

Signed Pump Installation Permit for Hoalua-Grace Well (No.5413-11)
 Signed Pump Installation Permit for Ho’olawa-Cookman (No.5514-04)
 Well Completion Report Part II for Hoalua-Grace Well (No.5413-11)
 Well Completion Report Part II for Ho’olawa-Cookman (No.5514-04)
 Pump Curve for Hoalua-Grace Well (No.5413-11)
 Pump Curve for Ho’olawa-Cookman (No.5514-04)

Well Completion Report Part I for Ho’olawa-Kahui Pono (No.5514-06)
 Driller’s Log for Ho’olawa-Kahui Pono (No.5514-06)
 Well Head Elevation Survey for Ho’olawa-Kahui Pono (No.5514-06)
 Constant-Rate Pump Test for Ho’olawa-Kahui Pono (No.5514-06)
 Pump Curve for Ho’olawa-Kahui Pono (No.5514-06)

Well Completion Report Part I for Maliko-Moretti Well 1 (No.5620-05)
 Driller’s Log for Maliko-Moretti Well 1 (No.5620-05)
 Well Head Elevation Survey for Maliko-Moretti Well 1 (No.5620-05)
 Constant-Rate Pump Test for Maliko-Moretti Well 1 (No.5620-05)
 Step-Drawdown Pump Test for Maliko-Moretti Well 1 (No.5620-05)
 Pump Curve for Maliko-Moretti Well 1 (No.5620-05)

Well Completion Report Part I for Maliko-Moretti Well 2 (No.5620-06)
 Driller’s Log for Maliko-Moretti Well 2 (No.5620-06)
 Well Head Elevation Survey for Maliko-Moretti Well 2 (No.5620-06)
 Constant-Rate Pump Test for Maliko-Moretti Well 2 (No.5620-06)
 Pump Curve for Maliko-Moretti Well 2 (No.5620-06)

Revised Well Completion Report Part I for Nahiku-Mau Well (No.4803-01)
 Constant-Rate Pump Test for Nahiku-Mau Well (No.4803-01)
 Pump Curve for Nahiku-Mau Well (No.4803-01)

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at [redacted]

Thank you,

Ann Robertson
# WELL COMPLETION REPORT - PART II

**Pump Installation**

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at [phone number]. For updates to this form or additional information, please visit our website at [http://www.state.hi.us/dlr/cwrm/](http://www.state.hi.us/dlr/cwrm/).

---

<table>
<thead>
<tr>
<th>1. State Well No.:</th>
<th>5620-05</th>
<th>Well Name: Maliko-Moretti</th>
<th>Island: Maui</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address:</td>
<td>471 Ahakupa Pl, Paia HI</td>
<td>Tax Map Key: 2-7-4-6</td>
<td></td>
</tr>
<tr>
<td>3. Pump Installation Company:</td>
<td>Wailani Drilling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Date Pump Installed:</td>
<td>11/25/02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. PERMANENT PUMP INFORMATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump Type, Make, Serial No.:</td>
<td>Grundfos 858100-9</td>
<td>Rated Capacity: 85 gpm</td>
<td></td>
</tr>
<tr>
<td>Motor Type, H.P., Voltage, rpm:</td>
<td>Franklin 10HP 240V, 3450 RPM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of flow meter:</td>
<td>Micrometer which measures in gallons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Method of flow measurement:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Flowmeter Manufacturer Micrometer Make MM 3 Size 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Weir* □ Open Pipe* □ Orifice* □ Other*, explain below</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*attach schematic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Fill in the as-built section on the other side of this sheet.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Other remarks/comments:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This is being faxed to Water Commission as part of variance procedure</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Pump Installation Contractor (print)** Mike Robertson (C-570-57a/A) Lic. No. 20115

**Signature**

Mike Robertson

**Date** 12/6/02

**Permittee (print)** Francesco Moretti

**Signature**

Francesco Moretti

**Date** 12/6/02

WCR2 Form 5/2000
Bench mark elevation surveyed to nearest 0.01 ft. = 172.73 ft. mean sea level.

Identify reference point elevation for water level measurements through chase tube (13.87 ft. mean sea level).

Describe reference point:
Monitor Tube Steel Nipple on well head.

- Pump intake depth = 182 ft. (referenced to bench mark)
- Chase tube depth = 180 ft. (referenced to bench mark)
- If airline installed, bottom of airline elevation = A/A ft. mean sea level.
From: Mike Robertson

Items to follow, being submitted according to the variance:

- ✔ Step-Drawdown Pump Test for Maliko-Moretti Well #1 (Well No. 5620-05)
- ✔ Constant-Rate Pump Test for same

Also to follow:
- ✔ Signed Well Construction Permit for Haiku-Robertson (Well No. 5615-06)

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at [redacted].

Thank you:

Mike Robertson
Waterloo Hydrogeologic
180 Columbia St. W.
Waterloo, Ontario, Canada
ph (519) [REDACTED]

Pumping test analysis
Time-Drawdown-method after
COOPER & JACOB
Confined aquifer

Date: 27.11.2002  Page 1

Project: Maliko-Moretti #1
Evaluated by: Charley Ice

Pumping Test No. Step Drawdown Test conducted on: 25 Nov 02
5620-05
Discharge 25025.00 ft³/d

Transmissivity [ft²/d]: 8.55 x 10⁴
**Waterloo Hydrogeologic**  
180 Columbia St. W.  
Waterloo, Ontario, Canada  
ph (519)  

**Pumping test analysis**  
Time-Drawdown-method after  
COOPER & JACOB  
Confined aquifer  

**Date:** 27.11.2002  
**Page:** 2  

**Project:** Maliko-Moretti #1  
**Evaluated by:** Charley Ice  

---  

**Pumping Test No.** 5620-05  
**Step Drawdown**  
Test conducted on: 25 Nov 02  
Maliko-Moretti  

**Discharge:** 25025.00 ft³/d  
Distance from the pumping well 1.00 ft  

**Static water level:** 3.64 ft below datum  

<table>
<thead>
<tr>
<th>Pumping test duration</th>
<th>Water level</th>
<th>Drawdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>[d]</td>
<td>[ft]</td>
<td>[ft]</td>
</tr>
<tr>
<td>2</td>
<td>0.00069</td>
<td>170.25</td>
</tr>
<tr>
<td>3</td>
<td>0.00104</td>
<td>170.23</td>
</tr>
<tr>
<td>4</td>
<td>0.00139</td>
<td>170.16</td>
</tr>
<tr>
<td>5</td>
<td>0.00347</td>
<td>170.16</td>
</tr>
<tr>
<td>6</td>
<td>0.00694</td>
<td>170.16</td>
</tr>
<tr>
<td>7</td>
<td>0.01389</td>
<td>170.18</td>
</tr>
<tr>
<td>8</td>
<td>0.01736</td>
<td>170.18</td>
</tr>
</tbody>
</table>
### WELL COMPLETION REPORT - PART I

**Well Construction**

**Instructions:** Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 521, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please contact the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-6425. For updates to this form or additional information, please visit our website at [http://www.state.hi.us/dlnr/cwm/](http://www.state.hi.us/dlnr/cwm/).

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. State Well No.:</td>
<td>5620-05 Well Name: Maliko Moretti Well Island: Maui</td>
</tr>
<tr>
<td>2. Address:</td>
<td>471 Kakapa Pl, Paia 96779 Tax Map Key: 2-7-4:6</td>
</tr>
<tr>
<td>3. Drilling Company:</td>
<td>Wailani Drilling</td>
</tr>
<tr>
<td>4. Drilling method used during construction:</td>
<td>✔ Rotary □ Percussion □ Other (describe)</td>
</tr>
<tr>
<td>5. Date Well Construction (drilled, cased, grouted) completed:</td>
<td>11/8/02 Fill out attached Driller's Log</td>
</tr>
</tbody>
</table>

In addition to the driller's log, if a geologic log was prepared, please submit with this form.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Was the subject well cored?</td>
<td>□ Yes ✔ No</td>
</tr>
<tr>
<td>7. Initial water-level encountered</td>
<td>180 ft. below ground Date and time of measurement: 10/29/02</td>
</tr>
<tr>
<td>8. Step-Drawdown Test completed?</td>
<td>□ No ✔ Yes Attach Step-Drawdown Test form (121727 SDPTD Form)</td>
</tr>
<tr>
<td>9. Constant Rate Aquifer Test completed?</td>
<td>□ No ✔ Yes Attach Constant Rate Aquifer Test form (121727 CRPTD Form)</td>
</tr>
</tbody>
</table>

**Parameters prior to pump test:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Water-level:</td>
<td>3.64 ft. above msl Date and time of measurement: 11/25/02</td>
</tr>
<tr>
<td>11. Chloride:</td>
<td>260 ppm Date and time of sampling: 11/25/02</td>
</tr>
<tr>
<td>12. Temperature:</td>
<td>67.5 °F Date and time of measurement: 11/25/02</td>
</tr>
</tbody>
</table>

13. Fill in the as-built section on the other side of this sheet.

14. Fill in attached surveyor's report.

15. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.)

16. The proposed manufacturer's rated pump capacity is 85 gpm at a head of 385 ft.

17. Remarks: __________________________

---

**Licensed Driller (print):** Mike Robertson  C-57 Lic. No. 2015

**Signature:**

**Permittee (print):** Francesca Moretti

**Signature:**
13. AS-BUILT WELL SECTION

(Please attach as-built drawing/diagram illustrated below)

Elevation at top of casing: 172.73 ft., msl
(Corrected to nearest 0.01 ft.)

Hole Diameter: 12.25 in.

Minimum of 2' Radius 8' Thick Concrete Pad

Ground Elevation: [111.75 ft., msl]

Solid Casing: (≥ 90% x (Ground Elev. - Water Level Elev.))
Length: 181 ft.
Nominal Diameter: 6 in.
Wall Thickness: 0.25 in.
Bottom Elevation: -7.95 ft., msl

Open Casing: X Perforated □ Screen
Length: 20 ft.
Nominal Diameter: 6 in.
Wall Thickness: 0.25 in.
Bottom Elevation: -27.95 ft., msl

Open Hole:
Length: N/A ft.
Diameter: N/A in.
Bottom Elevation: N/A ft., msl

Solid Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/WWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
Stainless Steel: (check one): □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one): □ Schedule 40 □ Schedule 80
PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2996
□ Centrifugally Cast Resin Pipe conforming to ASTM D2997
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/WWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
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□ FEP Fluorocarbon Tubing conforming to ASTM D3296
Table 1 (SDPTD Form 12/17/97)

STEP-DRAWDOWN PUMP TEST DATA
(not required for wells producing < 100,000 gpd or 70 gpm)

<table>
<thead>
<tr>
<th>Pumped Well No.</th>
<th>Pumped Well Name</th>
<th>Observation well no.</th>
<th>Distance between Obs. &amp; Pumped Well</th>
<th>Target Q</th>
<th>Reference pt. for depth to water</th>
<th>Static Water Level @ start of test</th>
</tr>
</thead>
<tbody>
<tr>
<td>5620-05</td>
<td></td>
<td>N/A</td>
<td>173.0 ft. msl</td>
<td>120</td>
<td>2.80 ft. msl</td>
<td>3.64 ft. msl</td>
</tr>
</tbody>
</table>

Water level measurements by: X steel tape, □ pressure transducer, □ airline

START TEST Date: 11/25/02 Time of day: 10:00 AM

Flow Meter Reading Start: 530 gals

<table>
<thead>
<tr>
<th>Suggested Elapsed Time (min)</th>
<th>Actual Elapsed Time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Drawdown S (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (at least 3 steps) (gpm)</th>
<th>EC (μmhos)</th>
<th>Cl- (mg/l)</th>
<th>Temp. °F or °C</th>
<th>Data in this table is for: Pumped Well Observation Well</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>-45</td>
<td></td>
<td>169.25</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Start test/ Step 1</td>
<td></td>
</tr>
<tr>
<td>-30</td>
<td></td>
<td>169.75</td>
<td>.50</td>
<td>80</td>
<td></td>
<td>67.9</td>
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<tr>
<td>-15</td>
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<td>.52</td>
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<tr>
<td>0</td>
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<td>260</td>
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<tr>
<td>1.5</td>
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<td>170.00</td>
<td>.75</td>
<td>100</td>
<td></td>
<td>2.40</td>
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<td>Chloride sample taken</td>
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</tr>
<tr>
<td>1</td>
<td></td>
<td>170.00</td>
<td>.75</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>Step 2 begin</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
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1. Minimum mandatory pumping rate Q.
2. Minimum mandatory length or step period of constant pumping rate.
3. Use same ending drawdown figure as start for recovery.
4. Flow meter reading at end of pumped period.
END TEST Date: 11/25/02 Time of day: 12:20 PM

ADDITIONAL REMARKS:

Person in charge of pump test (print): Mike Robertson

Signature: Mike Robertson

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
### CONSTANT-RATE PUMP TEST DATA

Pumped Well No. 5620-05
Pumped Well Name Maka-Marek
Target Q 130 gpm

Observation well no. N/A
Distance between Obs. & Pumped Well N/A ft.
Reference pt. for depth to water N/A ft. msl
Static Water Level @ start of test N/A ft. msl

Water level measurements by:  □ steel tape  □ pressure transducer  □ airline

START TEST Date: 11/25/02  Time of day: 1:30 pm

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1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery

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</table>

Data in this table is for: Return Well
☐ Observation Well
Remarks

Additional Remarks:

Person in charge of pump test (print): Mike Robertson

Signature: Mike Robertson

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.

END TEST Date: 11/26/02 Time of day: 2:30 p.m.
Wailani Drilling Inc. Lic.#C57-20115

Mike Robertson 655 Kulike Road Haiku, Maui, Hawaii 96708
Ph: 808 572-2673 Fax: [redacted] Cellular [redacted]

To: Charley Ice
For: Water Resource Commission

11/8/02

Dear Charley:

As per instructions from your office, this is to provide one week advance written notice for starting the pump testing on the following well:

Maliko-Moretti Well No. 5620-05

We would like to start the pump test next Thursday.

postponed to Monday (18 Nov 02)
for inability to get generator

Thank You;

Mike Robertson

dba Wailani Drilling Inc.

Certified By The National Groundwater Association
## Table 2 (CRPTD Form 12/17/97)

**CONSTANT-RATE PUMP TEST DATA**

<table>
<thead>
<tr>
<th>Pumped Well No.</th>
<th>Suggested Depth</th>
<th>Depth to water</th>
<th>Drawdown</th>
<th>Pumping rate</th>
<th>Temp. °C</th>
<th>Remarks</th>
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Water level measurements by: ☑ steel tape ☐ pressure transducer ☐ airline

**START TEST** Date: **11/25/02** Time of day: **1:30 p.m.**

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<tr>
<th>Flow Meter Reading Start</th>
<th>9575 gals</th>
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</table>

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<thead>
<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (ppm)</th>
<th>Cl⁻ (mp/l)</th>
<th>Temp. °F or °C</th>
<th>Remarks</th>
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Data in this table is for: ☑ Pumped Well ☐ Observation Well

Start Test

Start pump/Cl⁻ taken
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<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (in micros)</th>
<th>Cl (mg/l)</th>
<th>Temp. (°F or °C)</th>
<th>Remarks</th>
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1 Chloride sampling required

2 Use same ending drawdown figure as start for recovery

Table 2 (CRPTD Form 12/17/97)

Data in this table is for:

- Pumped Well
- Observation Well

Remarks:

- Max possible duration, water level or quality did not stabilize for any 24 hour period
- Begin recovery data next page
- Flow meter reading at end of pumped period: 196,875 gallons
<table>
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<th>Depth to water (nearest 0.1 ft)</th>
<th>Recovery Dr. own (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate (gpm)</th>
<th>EC (umhos)</th>
<th>Cl⁻ (mg/l)</th>
<th>Tem or °C</th>
<th>Remarks</th>
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END TEST Date: 11/26/02 Time of day: 2:30 p.m

ADDITIONAL REMARKS:

Person in charge of pump test (print): Mike Robertson

Signature: Mike Robertson

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
Table 1 (SDPTD Form 12/17/97)

ST-SD DRAWDOWN PUMP TEST DATA
(not intended for wells producing < 100,000 gpd or 70 g.)

Pumped Well No. 5620-05
Pumped Well Name Malaka-Mere Holt #1
Target Q 12.0 gpm

Observation well no. N/A
Distance between Obs. & Pumped Well N/A ft.
Reference pt. for depth to water 172.69 ft. msl
Static Water Level @ start of test 3.64 ft. msl

Water level measurements by: ☑ steel tape ☐ pressure transducer ☐ airline

START TEST Date: 11/25/02 Time of day: 10:00 am

Flow Meter Reading Start: 530 gals

<p>| Suggested Elapsed Time (min) | Actual Elapsed Time (min) | Depth to Water (nearest 0.1 ft) | Drawdown S (unadjusted to nearest 0.1 ft) | Pumping rate Q (gpm) (at least 3 steps) | EC (µhos) | Cl⁻ (mg/l) | Temp. °F or °C | Data in this table is for: ◐ Pumped Well ◐ Observation Well Remarks |
|-----------------------------|--------------------------|---------------------------------|------------------------------------------|----------------------------------------|---------|----------|-------------|---------------------------------|------------------------|
| -45                         |                          | 169.25                          |                                         |                                        |         |          |             |                                 | Start test/ Step 1    |
| -30                         |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| -15                         |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 0                           |                          | &quot;                               |                                         |                                        |         |          |             |                                 | Start pump            |
| 1                           |                          | 169.75                          | .50                                      | 80                                     |         |          | 67.9        |                                 |                        |
| 1.5                         |                          | 169.77                          | .52                                      |                                        |         |          |             |                                 |                        |
| 2                           |                          | 169.79                          | .54                                      |                                        |         |          | 260         |                                 |                        |
| 2.5                         |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 3                           |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 4                           |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 5                           |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 6                           |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 7                           |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 8                           |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 10                          |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 15                          |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 20                          |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 25                          |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 30²                         |                          | &quot;                               |                                         |                                        |         |          |             | 240²               | Chloride sample taken |
| 1                           |                          | 170.0                           | .75                                      | 100                                    |         |          |             |                                 | Step 2 begin          |
| 1.5                         |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 2                           |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 2.5                         |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |
| 3                           |                          | &quot;                               |                                         |                                        |         |          |             |                                 |                        |</p>
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<tr>
<th>Suggested Elapsed Time (min)</th>
<th>Actual Elapsed Time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Water level down (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (at least 3 steps) (gpm)</th>
<th>EC (mhos)</th>
<th>Cl- (mg/l)</th>
<th>Temp. °F</th>
<th>Temp. °C</th>
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Data in this table is for:
- Pumped Well
- Observation Well

Remarks:
- Step 3 Begin

Table 1 (SDPTD Form 12/17/97)
<table>
<thead>
<tr>
<th>Depth</th>
<th>Time (min)</th>
<th>Time (min)</th>
<th>Actual Pumping Rate</th>
<th>Duration to Next Step (at least 3 periods or nearest to nearest step)</th>
<th>Chloride (Cl(^-)) (unadjusted)</th>
<th>Chloride (Cl(^-)) (adjusted)</th>
<th>Water Quality</th>
<th>Remarks</th>
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<td>Drawn</td>
<td>Elapsed</td>
<td>Elapsed</td>
<td>Q (gpm)</td>
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<td>EC (mhos)</td>
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<td>stabilize for any 24 hour period</td>
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</table>

Data in this table is for: Pumped Well Observation Well

Max possible duration: 9570 gallons

Flow meter reading at end of pumped period: 9570 gals

Step 1: Starting pumping rate Q

Step 2: Minimum length of step period of constant pumping rate

Step 3: Minimum mandatory Chloride (Cl\(^-\)) measurement/sampling at end of every step

Step 4: Use same ending drawdown figure as start for recovery
<table>
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<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth To Water (nearest 0.1 ft)</th>
<th>Recovery Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate (Q) (gpm)</th>
<th>EC (µhos)</th>
<th>Cl⁻ (mg/l)</th>
<th>Remarks</th>
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<td>80% recovery achieved</td>
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END TEST  Date: 11/25/02  Time of day: 12:20 pm

ADDITIONAL REMARKS:

Person in charge of pump test (print): Mike Robertson

Signature: Mike Robertson

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
## DRILLER'S LOG

**WELL NUMBER:** 5620-05 (Well #1)

<table>
<thead>
<tr>
<th>Depths (ft)</th>
<th>Rock Description, Water Level, etc.</th>
<th>Dates</th>
<th>Depths (ft)</th>
<th>Rock Description, Water Level, etc.</th>
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**Remarks:**
Return Receipt Fax Memo

For: Charley Ice

Charley, Enclosed are the following items:

- Renewed Permit (new condition)
- Signed Well Construction Permit app for Maliko Moretti Well #5620-05
- Start Work Notice

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at [redacted]

Thank you:

Mike Robertson
To: Charley Ice  
For: Water Resource Commission

Dear Charley:

This is to provide written notice for starting work on the following well:

Maliko-Moretti Well No. 5620-05

Thank You:

Mike Robertson  
dba Wailani Drilling Inc.
REISSUED WELL CONSTRUCTION PERMIT
Maliko-Moretti Well #1, Well No. 5620-05

Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled 'Water Use, Wells, and Stream Diversion Works', this document permits the construction and testing of Maliko-Moretti Well #1 (Well No. 5620-05) at Pauwela at Maliko Gulch, Maui, TMK 2-7-4-5, subject to the Hawaii Well Construction & Pump Installation Standards (123/37) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1-in. diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall prepare the well coordinates with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is not attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In basalt groundwater, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basalt groundwater unless otherwise authorized by the Chairperson.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, burial or concentrations of shells or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall stop work and contact the Department's Historic Preservation immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established groundwater flow standards. This permit or the authorization to construct the well shall not constitute a determination of cumulative water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation (referenced to mean sea level, instl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997, HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

10. The permit may be revoked by the Commission if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

11. If the work is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

12. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

13. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: April 1, 2002
Expiration Date: April 1, 2004

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the driller have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: FRANCESCO MORETTI
Printed Name: FRANCESCO MORETTI
Firm or Title: OWNER
Driller's Signature: MIKE ROBERTSON
C-57 License #: 20115
Date: 10/25/02
Printed Name: MIKE ROBERTSON
Firm or Title: Wailani Drilling Inc.

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachment

USGS
Department of Health, Safe Drinking Water, Wastewater, and Clean Water Branches
Maui Department of Water Supply
Wailani Drilling, Inc.
October 23, 2002

Ref: 5620-05.act

Mr. Francesco Moretti
Maliko Trading Company, LLC
471 Alakapa Place
Pā‘ia, HI 96779

Dear Mr. Moretti:

Notice of Commission Action
Modification of Well Construction Permit

This letter serves as your official notice of action taken by the Commission on Water Resource Management (Commission) on the subject application. By a unanimous vote of the Commission at their meeting on October 16, 2002, the Commission:

Approved the modification of the Well Construction Permit for the Maliko-Moretti Well #1 (Well No. 5620-05), with the following special condition allowing the installation of the permanent pump for the purposes of pump testing only. All conditions of the original permit remain in force. Similar to the variance situation, the following sequence is prescribed:

1. Following completion of well construction, the permittee shall notify staff one week prior to pump tests. **11/8/02** (ppd 11/14/02)

2. The pump tests shall be started within one week of the installation of the pumps. Otherwise, the pumps shall be removed. **11/25/02**

3. The step-drawdown test shall be conducted first and the well allowed to rest one full day or until full water level recovery occurs before starting the constant-rate test. SSD: recovery by 12:00 pm, 11/25/02; CR: start 1:30 pm, 11/25/02

4. The applicant shall submit pump test results within one day of the completion of the pump tests on forms provided by the Commission. **11/17/02**

5. Staff will complete its analysis of pump results and respond with approval or further advice within one business day; pump installation permit shall be issued following approval upon receipt of full well completion report part 2.

**IT approved 11/27/02; continued; checked 12/26/02** proceed w/ WCR 2
**PLOT PLAN**

(Provide Latitude and Longitude of well referenced to UAD2 in decimal degree, WGS 84)

<table>
<thead>
<tr>
<th>Well Type</th>
<th>Latitude (WGS 84)</th>
<th>Longitude (WGS 84)</th>
<th>Elevation (MSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Well</td>
<td>20°56'03&quot;.00</td>
<td>156°20'09&quot;.54</td>
<td>169.39'</td>
</tr>
<tr>
<td>East Well</td>
<td>20°56'02&quot;.35</td>
<td>156°20'09&quot;.29</td>
<td>172.73</td>
</tr>
</tbody>
</table>

**Well Elevation**

Benchmark Elevation 172.73

(0.01 ft. above msl)

**Concrete Pad**

**Benchmark reference control point**

Hana Highway Monument
Elevation = 207.12 (MSL)

**Surveyor’s stamp and signature**

BRUCE R. LEE, LPLS
5983-LS
2012-10-23

WCR1 Form 01/31/01 Page 4 of 4
Performance Curves 85 GPM

Model 85S

FLOW RANGE: 18 - 118 GPM
OUTLET SIZE: 3" NPT
NOMINAL DIA. 6"

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

4" MOTOR STANDARD. 1.5-5 HP/3450 RPM
6" MOTOR STANDARD. 7.5-50 HP/3450 RPM.
* Alternate motor sizes available.

Performance conforms to ISO 9906 Annex A
@ 5 ft. min. submergence.
Mr. Francesco Moretti  
Maliko Trading Company, LLC  
471 Alakapa Place  
Pā'ia, HI 96779  

Dear Mr. Moretti:

Notice of Commission Action  
Modification of Well Construction Permit  

This letter serves as your official notice of action taken by the Commission on Water Resource Management (Commission) on the subject application. By a unanimous vote of the Commission at their meeting on October 16, 2002, the Commission:

Approved the modification of the Well Construction Permit for the Maliko-Moretti Well #1 (Well No. 5620-05), with the following special condition allowing the installation of the permanent pump for the purposes of pump testing only. All conditions of the original permit remain in force. Similar to the variance situation, the following sequence is prescribed:

1. Following completion of well construction, the permittee shall notify staff one week prior to pump tests.

2. The pump tests shall be started within one week of the installation of the pumps. Otherwise, the pumps shall be removed.

3. The step-drawdown test shall be conducted first and the well allowed to rest one full day or until full water level recovery occurs before starting the constant-rate test.

4. The applicant shall submit pump test results within one day of the completion of the pump tests on forms provided by the Commission.

5. Staff will complete its analysis of pump results and respond with approval or further advice within one business day; pump installation permit shall be issued following approval upon receipt of full well completion report part 2.
6. In the event that pump tests or pump size are not satisfactory to Commission staff, the applicant shall rerun the pump tests in accordance with "1" through "5" above until installed pumps are in compliance with permit requirements.

Please file this letter with the original permit, post a copy with the well site copy of the permit.

If you have any questions, please contact Charley Ice of the Commission staff at [redacted] or toll-free at [redacted] extension 70251.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

Cl:ss

c: Wailani Drilling, Inc.
Mr. Francesco Moretti
Maliko Bay Trading Company
471 Alakapa Place
Paia, HI 96779

Dear Mr. Moretti:

Reissued Well Construction Permit
Maliko-Moretti Well #1 (Well No. 5620-05)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorize well construction activities but excludes installation work for your permanent pump. As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 13: Special Condition #3 was added by the Commission at its October 16, 2002 meeting in response to your request for a variance on installation of permanent pumps for the purpose of pump testing only.

Special Conditions

1. Attached for your information is a copy of the Department of Health’s (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities.

2. The well casing shall meet the minimum thickness required in the Hawaii Well Construction and Pump Installation Standards (HWCPIS, January 1997).

3. The following installation and testing sequence shall be observed:
   a. Following completion of well construction, the permittee shall notify staff one week prior to pump tests.
   b. The pump tests shall be started within one week of the installation of the pumps. Otherwise, the pumps shall be removed.
   c. The step-drawdown test shall be conducted first and the well allowed to rest one full day or until full water level recovery occurs before starting the constant-rate test.
   d. The applicant shall submit pump test results within one day of the completion of the pump tests on forms provided by the Commission.
   e. Staff will complete its analysis of pump results and respond with approval or further advice within one business day; pump installation permit shall be issued following approval upon receipt of full well completion report part 2.
   f. In the event that pump tests or pump size are not satisfactory to Commission staff, the applicant shall rerun the pump tests in accordance with “a” through “e” above until installed pumps are in compliance with permit requirements.
This permit does not authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon completed application and information provided to and accepted by Commission staff as required in the Well Construction & Pump Installation Standards (1/23/97) and any special conditions performed under this permit.

Please sign and have the contractor sign both permit originals and return one for our files. Also, copies of the aquifer pump test worksheet and the well completion report form are enclosed for your use.

IMPORTANT - Drilling work shall not commence until a fully signed permit is returned to the Commission. Please provide all the information in this packet to your well drilling contractor. The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the well construction contractor, or other party who constructs the well(s), submits a completed Part I of the Well Completion Report form (enclosed) within sixty (60) days after the well construction work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Charley Ice of the Commission staff at [redacted] or toll-free at [redacted] extension 70251.

Aloha,

[Signature]

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosures

c: Wailani Drilling, Inc.
RF ISSUED WELL CONSTRUCTION PERMIT

Maliko-Moretti Well #1, Well No. 5620-05

Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Maliko-Moretti Well #1 (Well No. 5620-05) at Pauwela at Maliko Gulch, Maui, TMK 2-7-4, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1 1/4-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall stop work and contact the Department's Historic Preservation immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation (referenced to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997; HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated a lien on the property may result.

10. The permit may be revoked by the Commission if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner shall apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

12. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

13. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: April 1, 2002
Expiration Date: April 1, 2004

GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the driller have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: ___________________________ Date: ___________
Printed Name: ________________________________ Firm or Title: __________

Driller's Signature: ____________________________ Date: ___________
C-57 License #: _____________________________
Printed Name: ________________________________ Firm or Title: __________

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachment:
  c. USGS
Department of Health, Safe Drinking Water, Wastewater, and Clean Water Branches
Maui Department of Water Supply
Waianae Drilling, Inc.
STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

October 16, 2002
Honolulu, Oahu

Maliko Trading Company, LLC
Request for Variance of Pump Test Standards
Maliko-Moretti #1 (Well No. 5620-05)
Well Construction: 6-inch Casing Diameter, 225 ft. Deep Well
Pump Installation: 135 gpm for domestic use
TMK 2-7-4:6, Lower Ha‘iku, above Maliko Gulch, Maui

APPLICANT:
Maliko Trading Company, LLC
471 Alakapa Place
Pa‘ia, Maui, HI 96779

LANDOWNER:
Francesco Moretti
471 Alakapa Place
Pa‘ia, Maui, HI 96779

DESCRIPTION:
Location: (See Exhibit 1)
Dimensions: (See Exhibit 2)

BACKGROUND:
February 26, 2002
Well Construction/ Pump Installation Permit Application accepted.

April 1, 2002
Well Construction Permit approved.

August 15, 2002
Fully signed permit returned with notice to start work.

Item 6
August 28, 2002 Letter received requesting variance to install the proposed 135-gpm permanent pump prior to issuance of pump installation permit to conduct required well pumping tests

WATER AVAILABILITY:

Ha'ikū Aquifer System of the Koolau Sector
Estimated Sustainable Yield: 31 mgd
Proposed Use: 0.014 mgd, domestic

ISSUES/ANALYSIS:

Well construction and pump installation permitting is a two-step process, with review of pump tests intervening between well construction permit and pump installation permit. The purpose for this is to prevent installation of a pump of capacity exceeding the aquifer recovery characteristics and to ensure well construction compliance with standards.

On March 18, 1998, the Commission approved installation of pumps of less than 70-gpm capacity prior to issuance of a pump installation permit to conduct well testing, due in part to the economics and hazards of removing a test pump and then reinstalling it as a permanent pump in small individual wells for rural use, and in part because potentially oversized pumps in these smaller, remoter wells would not be expected to create irrevocable problems to the aquifer.

On January 30, 2002, the Commission approved installation of a 550-gpm permanent pump in a Kona, Hawai'i irrigation well for well testing, along with an activity sequence protocol, as appears below. This protocol was again approved in the Commission action on July 24, 2002 approving three permanent pumps in irrigation wells in Kihei, and one in Lahaina, Maui.

1. One week notice to CWRM staff prior to pump testing
2. Well testing within one week of pump installation, or pump removal
3. The step-drawdown test to be conducted first, with one full day recovery before starting constant-rate test.
4. Transmittal of pump test results no less than one day after tests.
5. Staff review and analysis of pump test information and response within one business day following receipt of results. Pump Installation Permit to follow transmittal of full well completion report (full documentation).
6. Pump removal if tests do not support designed capacity in that aquifer location.

In all these cases, the variance has allowed pump testing to proceed before issuance of the pump installation permit, on the basis of a quick turn-around protocol. However, staff still issues pump installation permits only after analyzing pump test data, to prevent use of water without acceptable aquifer testing. In this case, the well has not yet been drilled, and as pump tests are authorized under well construction permits, staff finds it more ideal to modify the existing permit with similar language rather than requesting a variance.
RECOMMENDATION:

That the Commission:

A. Approve the modification of the Well Construction Permit for the Maliko-Moretti Well #1 (Well No. 5620-05), with a special condition allowing the installation of the permanent pump for the purposes of pump testing only. All conditions of the original permit remain in force. Similar to the variance situation, the following sequence is prescribed:

1. Following completion of well construction, the permittee shall notify staff one week prior to pump tests.
2. The pump tests shall be started within one week of the installation of the pumps. Otherwise, the pumps shall be removed.
3. The step-drawdown test shall be conducted first and the well allowed to rest one full day or until full water-level recovery occurs before starting the constant-rate test.
4. The applicant shall submit pump test results within one day of the completion of the pump tests on forms provided by the Commission.
5. Staff will complete its analysis of pump results and respond with approval or further advice within one business day; pump installation permit shall be issued following approval upon receipt of full well completion report part 1.
6. In the event that pump tests or pump size are not satisfactory to Commission staff, the applicant shall rerun the pump tests in accordance with “1” through “5” above until installed pumps are in compliance with permit requirements.

B. Authorize the Chairperson to approve and issue a pump installation permit supported by information provided from aquifer pumping test results, required in Well Construction Standard Condition 6e (Exhibit 3), subject to the Standard Pump Installation Conditions in Exhibit 4.

Respectfully submitted,

LINNEL T. NISHIOKA
Deputy Director

Exhibit(s): 1 (Location Map)  
2 (Proposed Well Section)  
3 (Modified Well Construction Permit Cover Letter with New Condition)  
4 (Original Well Construction Permit)
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

- Hole Diameter: 12.15" in.
- Elevation at top of casing 20' ft. msl.
- Minimum radius from ground elevation to top of water surface or 500 ft., whichever is less.
- Ground Elevation: 200 ft. msl.
- Note: Neither bentonite nor mud should be used in saturated zone during drilling.

**HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS**

Please refer to the standards to ensure that your as-built is in compliance with applicable standards.

**Solid Casing:**
- Length: 20.5 ft.
- Nominal Diameter: 6" in.
- Wall Thickness: .250 in.
- Bottom Elevation: -5 ft. msl.

**Open Casing:**
- Length: 20' ft.
- Nominal Diameter: 4.5" in.
- Wall Thickness: .250 in.
- Bottom Elevation: -2.5 ft. msl.

For non-silt water Basel Wells - bottom elevation of well should not be deeper than 1/4 of equiter thickness or,

Bottom Elevation of Well Limit = \((\text{Water Elevation} - \frac{\text{Water Level Elevation}}{2})\)

Example: Estimated + 20 ft. Water Level Elev. → Bottom Elevation of Well Limit = \((20 - \frac{4.5}{2})\) = -18.5 ft.

**Solid Casing Material:**
- Carbon Steel: compliant with (check one or more): ANSI/AWWA C200
- API Spec. 5L
- ASTM A53
- ASTM A120
- And compliant with (check one or more):
  - ASTM A213
  - Type E
  - Type S
  - Grade B
  - Other

**Stainless Steel:**
- (check one):
  - ASTM A403 (production wells)
  - ASTM A312 (monitor wells)

**ABS Plastic conforming to ASTM F490 and ASTM D2987:**
- (check and/or):
  - Schedule 40
  - Schedule 80

**PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241):**
- (check and/or):
  - Schedule 40
  - Schedule 80
  - Schedule 120

**Thermoset Plastic:**
- (check and/or):
  - Filament Wound Resin Pipe conforming to ASTM D3298
  - Centrifugally Cast Resin Pipe conforming to ASTM D2987
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - Polyethylene Tubing conforming to ASTM D3298
October 1, 2002

Mr. Francesco Moretti
Maliko Bay Trading Company
471 Alakapa Place
Pa'ia, Maui, HI 96779

Dear Mr. Moretti:

Well Construction Permit
Maliko-Moretti Well (Well No. 5620-05)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorize well-construction activities but excludes installation work for your permanent pump. As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 13:

Special Conditions

1. Attached for your information is a copy of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities.

2. The well casing shall meet the minimum thickness required in the Hawaii Well Construction and Pump Installation Standards (HWCPIS, January 1997)

3. The permanent pump may be installed for pump testing purposes only. Use of water from the well before issuance of the permanent pump installation permit is prohibited. Issuance of the permanent pump installation permit is contingent upon acceptable aquifer testing following the protocol below:
   a. Following the completion of well construction, the permittee shall notify staff shall be notified one week prior to pump tests.
   b. The pump tests shall be started within one week of the installation of the pumps. Otherwise, the pumps shall be removed.
   c. The step-drawdown test shall be conducted first and the well allowed to rest one full day or until full water level recovery occurs before starting the constant-rate test.
   d. The applicant shall submit pump test results within one day of the completion of the pump tests on forms provided by the Commission.
   e. Staff will complete its analysis of pump results and respond with approval or further advice within one business day; pump installation permit shall be issued following approval upon receipt of full well completion report part 1.
   f. In the event that pump tests or pump size are not satisfactory to Commission staff, the applicant shall rerun the pump tests in accordance with "a" through "e" above until installed pumps are in compliance with permit requirements.

Approval and issuance of your pump installation permit is contingent upon completed application and information provided to and accepted by Commission staff as required in the Well Construction & Pump Installation Standards (1/23/97) and any special conditions performed under this permit.

Please sign and have the contractor sign both permit originals and return one for our files. Also, copies of the aquifer pump test worksheet and the well completion report form are enclosed for your use.

EXHIBIT 3
IMPORTANT - Drilling work shall not commence until a fully signed permit is returned to the Commission. Please provide all the information in this packet to your well drilling contractor. The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the well construction contractor, or other party who constructs the well(s), submits a completed Part I of the Well Completion Report form (enclosed) within sixty (60) days after the well construction work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Charley Ice of the Commission staff at [Phone number] or toll-free at [Phone number] extension 70251.

Aloha,

GILBERT S. COLOMA-AGARAN  
Chairperson

Enclosures  
C: Wailani Drilling, Inc.
WELL CONSTRUCTION PERMIT
Maliko-Moretti #1, Well No. 5620-05

Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Maliko-Moretti #1 (Well No. 5620-05) at Pauwela at Maliko Gulch, Maui, TMK 2-7-4, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 14-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall stop work and contact the Department's Historic Preservation immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation (referenced to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997; HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

10. The permit may be revoked by the Commission if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(l) prior to any well sealing or plugging work.

12. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

13. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: April 1, 2002
Expiration Date: April 1, 2004

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the driller have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: ___________________________ Date: __________________
Printed Name: _________________________ Firm or Title: ________________________

Driller's Signature: __________________________ Date: __________________
C-57 License #: ________________________
Printed Name: __________________________ Firm or Title: ________________________

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachment:
C: USGS
Department of Health Safe Drinking Water, Wastewater, and Clean Water Branches
Maul Department of Water Supply
Wailani Drilling Company

EXHIBIT 4
REQUEST for VARIANCE

To: Charlie Ice
For: State of Hawaii Water Resource Commission
From: Wailani Drilling

Well name: Maliko Moretti Well #1  Well Number: 5620-05

Variance Type: Procedural
Variance Requested:
1. Do not remove the pump that was installed for to use it as permanent pump.

Variance Procedure:
1. To leave “test pump only” in well after pump test DO NOT leave or install any power supply or pump at well site or with owner.
2. To secure wellhead with lock and/or seal to prevent possible use while pump test data is reviewed or issuance of pump permit. (usually 60-90 day per
3. Sign Pump Installation Permit
4. Remove lock and seal, install pump controller, hard wire pump for permanent use.

Reason for Variance:
In this case the well owner has requested to purchase the test pump for use as their permanent pump. Prime reasons for requesting to leave the pump in the well during the pump test data evaluation verses pulling and reinstalling the pump are:

1. This variance will eliminate the procedure of pulling and reinstalling a pump, thus tremendously reducing the risks, hazards and liabilities associated with a pump installation process.
2. The procedural variance will give an estimated cost savings to the well.

Thank You for your attention to this matter.

Mike Robertson, President
Wailani Drilling

Certified By And A Member Of The National Ground Water Association
April 17, 2002

Mr. Francesco Moretti
Maliko Bay Trading Company
471 Alakapa Place
Paia, HI 96779

Dear Mr. Moretti:

Well Construction Permit
Maliko-Moretti #1 (Well No. 5620-05)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorize well construction activities but excludes installation work for your permanent pump. As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 13:

Special Conditions

1. Attached for your information is a copy of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities.

2. The well casing shall meet the minimum thickness required in the Hawaii Well Construction and Pump Installation Standards (HWCPIS, January 1997).

This permit does not authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon completed application and information provided to and accepted by Commission staff as required in the Well Construction & Pump Installation Standards (1/23/97) and any special conditions performed under this permit. However, a permanent pump may be installed prior to the permanent pump installation permit issuance in accordance with the Commission's April 15, 1998 Declaratory Ruling No. DEC-ADM98-G5, which states that:

"Permanent pump installation for capacities between 0-70 gpm and where the proposed use is for private individual needs in non-ground-water management areas may be allowed prior to the final pump installation permit issuance. When required as a condition of the well construction permit, subsequent pumping tests shall validate the acceptability of the permanent pump. The permanent pump installed prior to final pump installation permit issuance is subject to removal if the testing shows that a smaller pump is required to reduce the potential of affecting neighboring wells and localized upconing at the applicant's well."
If you qualify and wish to take advantage of this ruling, please include a written request to install the permanent pump prior to final pump installation permit issuance when you return to us your signed well construction permit.

Please sign and have the contractor sign both permit originals and return one for your files. Also, copies of the aquifer pump test worksheet and the well completion report form are enclosed for your use.

**IMPORTANT** - Drilling work shall not commence until a fully signed permit is returned to the Commission. Please provide all the information in this packet to your well drilling contractor. The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the well construction contractor, or other party who constructs the well(s), submits a completed Part I of the Well Completion Report form (enclosed) within sixty (60) days after the well construction work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Charley Ice of the Commission staff at [redacted] or toll-free at [redacted] extension, 70251.

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosures

c: Wailani Drilling Company
WELL CONSTRUCTION PERMIT
Maliko-Moretti #1, Well No. 5620-05

Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management’s Administrative Rules Section 13-168, entitled “Water Use, Wells, and Stream Diversion Works”, this document permits the construction and testing of Maliko-Moretti #1 (Well No. 5620-05) at Pauwela at Maliko Gulch, Maui, TMK 2-7-4-S, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1 1/4-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pumping test worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In basalt ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall stop work and contact the Department’s Historic Preservation immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation (referenced to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

9. The well construction permit application is incorporated into this reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997; HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

10. The permit may be revoked by the Commission if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-166-12(i) prior to any well sealing or plugging work.

12. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

13. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: April 1, 2002
Expiration Date: April 1, 2004

GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the driller have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee’s Signature: F. MORETTI  Date: 6/14/02
Printed Name: F. MORETTI  Firm or Title: MALLIKO-BAY DRILLING
Driller’s Signature: Mike Robertson  Date: 6/10/02
Printed Name: Mike Robertson  C-57 License #: 2015  Firm or Title: WAILANI DRILLING

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
ATTN. Charlie Ice

FROM Pacific Rim Productions

SUBJECT Attn Charlie

MESSAGE

Charlie here is the start work notice on Maliko-Moretti, but I noticed I had 2 signed copies of permit on file don't know if I have already sent you one, so here is a faxed copy will mail hard copy in mail.

Aloha......Bill
Dear Charlie:

This is to provide written notice for starting work on the following well:

Maliko-Moretti #1 on 8/19/02

Please fax a response to me to confirm.

Thank You;

Mike Robertson
dba Wailani Drilling Inc.
WELL CONSTRUCTION PERMIT

Maliko-Moretlli #1, Well No. 5620-05

Note: This permit shall be prominently displayed at the site until the work is completed.

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-165, entitled "Water Use, Wells, and Stream Diversions Works", this document permits the construction and testing of Maliko-Moretlli #1 (Well No. 5620-05) at Paunawa at Maliko Gulch, Maui, TMK 2-7-A3, subject to the Hawaii Well Construction & Pump Installation Standards (1232/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96808, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-165-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1½-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In basalt ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basalt ground water unless otherwise authorized by the Chairperson.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to remove any debris as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shale or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall stop work and contact the Department's Historic Preservation immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of concomitant water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation (reference to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997; HWCRS). If the HWCRS are not followed and a consequence water is wasted or contaminated, it shall be subject to the property may result.

10. The permit may be revoked by the Commission if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-165-10(2) prior to any well sealing or plugging work.

12. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assignees, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

13. Special conditions in the attached cover transmitted letter are incorporated herein by reference.

Date of Approval: April 1, 2002
Expiration Date: April 1, 2004

GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the driller have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: F. MORETTI Date: 6/14/02
Printed Name: F. MORETTI Firm or Title: Maliko Drilling

Driller's Signature: Mike Roberti C-57 License #: 2005 Date: 6/15/02
Printed Name: Mike ROBERTI Firm or Title: MALIKO DRILLING

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachment:

USGS
Department of Health's Safe Drinking Water, Wastewater, and Clean Water Branches
April 17, 2002

Mr. Francesco Moretti  
Maliko Bay Trading Company  
471 Alakapa Place  
Paia, HI 96779

Dear Mr. Moretti:

Well Construction Permit  
Maliko-Moretti #1 (Well No. 5620-05)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorize well construction activities but excludes installation work for your permanent pump. As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 13:

**Special Conditions**

1. Attached for your information is a copy of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities.

2. The well casing shall meet the minimum thickness required in the Hawaii Well Construction and Pump Installation Standards (HWCPIS, January 1997).

This permit **does not** authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon completed application and information provided to and accepted by Commission staff as required in the Well Construction & Pump Installation Standards (1/23/97) and any special conditions performed under this permit. However, a permanent pump may be installed prior to the permanent pump installation permit issuance in accordance with the Commission's April 15, 1998 Declaratory Ruling No. DEC-ADM98-G5, which states that:

"Permanent pump installation for capacities between 0-70 gpm and where the proposed use is for private individual needs in non-ground-water management areas may be allowed prior to the final pump installation permit issuance. When required as a condition of the well construction permit, subsequent pumping tests shall validate the acceptability of the permanent pump. The permanent pump installed prior to final pump installation permit issuance is subject to removal if the testing shows that a smaller pump is required to reduce the potential of affecting neighboring wells and localized upconing at the applicant's well."
If you qualify and wish to take advantage of this ruling, please include a written request to install the permanent pump prior to final pump installation permit issuance when you return to us your signed well construction permit.

Please sign and have the contractor sign both permit originals and return one for our files. Also, copies of the aquifer pump test worksheet and the well completion report form are enclosed for your use.

IMPORTANT - Drilling work shall not commence until a fully signed permit is returned to the Commission. Please provide all the information in this packet to your well drilling contractor. The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the well construction contractor, or other party who constructs the well(s), submits a completed Part I of the Well Completion Report form (enclosed) within sixty (60) days after the well construction work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Charley Ice of the Commission staff at ______ or toll-free at ______ extension, 70251.

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosures

c: Wailani Drilling Company
MEMORANDUM

TO: Linnel T. Nishioka, Deputy Director
Commission on Water Resource Management

FROM: Don Hibbard, Administrator
State Historic Preservation Division

SUBJECT Chapter 6E-42 Historic Preservation Review Pertaining to the Well Construction/Pump Installation Permit Application for the Proposed Maliko – Moretti Well (Well No. 5620-05)
Maliko Ahupua’a, Makawao District, Island of Maui
TMK: (2) 2-7-004:006

Thank you for the opportunity to review and comment on the Well Construction/Pump Installation Permit Application for the Proposed Maliko – Moretti Well Site, which was received by this office on March 19, 2002. Our review is based on reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was conducted of the subject parcel.

We have recently received a post field summary in the form of a letter report (from Lisa Rotunno-Hazuka, Archaeological Services Hawaii to Mr. Francesco Moretti, landowner dated March 31, 2002) indicating that the archaeological inventory survey has been conducted of the subject property. No significant historic properties were identified during the inventory survey. However, the archaeological report documenting the findings has not been submitted to this office for review. Therefore we are unable to provide comments pertaining to the proposed undertaking at this time.

Given the above information, we recommend that no ground-altering occur on the subject property until an acceptable archaeological report documenting the negative findings has been reviewed and accepted, in writing, by this office.

Please call Cathleen Dagher at [redacted] if you have any questions.

CD:jen
WELL CONSTRUCTION PERMIT
Maliko-Moretti #1, Well No. 5620-05

Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management’s Administrative Rules, Section 13-168, entitled “Water Use, Wells, and Stream Diversion Works”, this document permits the construction and testing of Maliko-Moretti #1 (Well No. 5620-05) at Pauwela at Maliko Gulch, Maui, TMK 2-7-4:6, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1 1/4-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In basin ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basin ground water unless otherwise authorized by the Chairperson.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall stop work and contact the Department’s Historic Preservation immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation (referenced to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997; HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

10. The permit may be revoked by the Commission if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

12. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

13. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: April 1, 2002
Expiration Date: April 1, 2004

GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the driller have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee’s Signature: _______________________________ Date: _______________________________
Printed Name: _______________________________ Firm or Title: _______________________________

Driller’s Signature: _______________________________ C-57 License #: ______________________ Date: ______________________
Printed Name: _______________________________ Firm or Title: _______________________________

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachment
C USGS
Department of Health’s Safe Drinking Water, Wastewater, and Clean Water Branches
Maui Department of Water Supply
Wailani Drilling Company
COMMISSION ON WATER RESOURCE MANAGEMENT

ROUTE SLIP FOR PERMIT ISSUANCE

FROM: CHARLEY Bauert, G.

DATE: 15 Apr 02

TO: BAUER, G.

INIT.

TO: LUM, A.

INIT.

FOR:

SUSPENSE DATE: ____________________________

PLEASE:

1 Review & Comment
2 Type Final
3 Approval

Signature

4 Information

See Me
5 Type Draft

File

Xerox ______ copies

-----

WELL NUMBER 5620-05-06 WELL NAME Maliko Moretti 142

WELL CONSTRUCTION

ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:

1 COVER LETTER
2 PERMIT (2x)
3 PUMP TEST
4 DOH COMMENTS
5 LAND DIV. COMMENTS
6 WCR FORM
7 USGS MAP
8 PARCEL CHECK
9 DATABASE PRINTOUT
10 WELL CHECK PRINT

TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY

PUMP INSTALLATION

ATTACHMENTS FOR PUMP INSTALLATION PERMIT:

1 COVER LETTER
2 PERMIT (2x)
3 DOH COMMENTS
4 LAND DIV. COMMENTS
5 WCR FORM
6 WUR FORM
7 USGS MAP
8 PARCEL CHECK
9 DATABASE PRINTOUT
10 GLENN'S WORKSHEE

TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY
TO: Honorable Bruce S. Anderson, Director Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch
Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
Alec Wong, Clean Water Branch

FROM: Gilbert S. Coloma-Agaran, Chairperson Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Maliko-Moretti (Well No. 5620-05)

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by April 1, 2002. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at [Contact Information]

Class
Attachment(s)

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-29.

[ ] This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 15 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

[ ] If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

[ ] It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

For the applicant's information, a source of possible wastewater contamination is not located near the proposed well site (information attached).

[ ] An NPDES permit is required.

[ ] Other relevant DOH rules/regulations, information, or recommendations are attached.

[ ] No comments/objections

Contact Person: Lori N. Kajiwara
Phone: 808-[Redacted]

Signed: Lori N. Kajiwara
Date: 3-26-02
March 18, 2002

TO: Honorable Bruce S. Anderson, Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch
Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
Alec Wong, Clean Water Branch

FROM: Gilbert S. Coloma-Agaran, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Maliko-Moretti (Well No. 5620-05)

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by April 1, 2002. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at

RESPONSE:

This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or 10 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-29.

This well does not qualify as a source serving a public water system (less than 25 people or more people at least 60 days per year or 10 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and bedflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable sytems with warning signs to prevent ingestion consumption of non-potable water. Bedflow prevention devices should be routinely inspected and tested.

It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

For the applicant's information, a source of possible wastewater contamination (leaks) is not located near the proposed well site (information attached).

An NPDES permit is required.

Other relevant DOH rules/regulations, information, or recommendations are attached.

No comments/objections

Contact Person: Bill Wong
Phone:

Signed: Bill Wong

Date: 4/1/02
The Department of Health, Safe Drinking Water Branch has the following additional comments for the Well Construction / Pump Installation Permit Application for the Maliko-Moretti Well (Well No. 6-5620-05 Maui):

1. Please be advised that the Department of Health has experienced drinking water and groundwater contamination by submersible pumps containing mercury. Specifically, the failure of the seals of the pumps allowed mercury to leak out into the well shaft resulting in contamination of the well and the water served by the well. Please review your pump specifications to be sure that the submersible pump(s) you are proposing to use do not contain materials which could result in either groundwater contamination or drinking water contamination.

2. Please also be advised that wells located further upstream have been found to be contaminated with Dibromochloropropane and Trichloropropane. It is recommended that the Maliko-Moretti Well be tested for these and all other regulated drinking water contaminants prior to use.
Facsimile Request and Cover Sheet  
Wastewater Branch  
919 Ala Moana Blvd. Room 309  
Honolulu, Hawaii 96814-4920  
(808) 586-4294 Fax (808) 586-4300

From: Lori Kajiwara, Planning/Design Section  
Email: ikajiwara@oha.health.state.hi.us

Subject: Request for Information

Do you have any IWS files or records on or nearby for the following:

(2)  
File #: 4144  
Record Date: 10/2/98

Please check all that apply:

[ ] sewered  [ ] no record  [ ] cesspool  [ ] septic tank  [ ] aerobic unit

File # if applicable: 4144  
# of Bedrooms: 4BD

Submit Date: 10/5/98

Plan Approval Date: 10/5/98

Inspection Date: NO INSPECTION REPORT

System “Approval for Use” Date: 

Other:

Please fax site/plot plan if available. Thank you.
March 18, 2002

TO: Harry Yada, Acting Administrator
   Land Division

FROM: Linnet T. Nishioka, Deputy Director
       Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Maliko-Moretti (Well No. 5520-05)

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by April 1, 2002. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at [Contact Information]

Class: Attachment(s)

RESPONSE:

[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.

[✓] A water lease/permit is not required of this applicant.

[ ] A water lease/permit has been obtained by the applicant through lease no.

[✓] This well project [ ] requires [✓] does not require a CDUP. If a CDUP is required it [ ] has [ ] has not been approved and [ ] is [ ] is not currently active.

[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.

[ ] No objections

[✓] Other comments: Original source of private title is Grant N. 166 issued prior to Statehood in 1959.

Contact Person: Gary Martin Phone: 587-0421

Signed: Harry Yada Date: March 22, 2002
March 18, 2002

5620-05.ack

Mr. Francesco Moretti
Maliko Bay Trading Company
471 Ala Kapa Place
Paia, HI 96779

Dear Mr. Moretti:

Well Construction/Pump Installation Permit Application for Well Nos. 5620-05 & 06

We acknowledge receipt, on February 26, 2002, of your completed Well Construction/Pump Installation permit applications and filing fee for the Maliko-Moretti Wells #1 & 2 (Well Nos. 5620-05 & 06). You can expect your applications to be processed within ninety (90) days from this date.

For your information, the process of constructing a well is normally regulated and permitted in two (2) steps. First, a well construction permit is issued for drilling and testing purposes only. Based upon information provided by you through a Well Completion Report Part 1 (Well Construction), a pump installation permit (upon completed application) may then be issued to authorize pump work. If a pump is installed then a Well Completion Report Part 2 (Pump Installation) is required.

Once construction of the two wells is permitted, the wells will be processed thereafter separately.

If you have any questions about your permit application, please contact Charley Ice of the Commission staff at [redacted] or toll-free at [redacted] extension 70251.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

Cl: ss

c: Wailani Drilling, Inc.
TO:    Honorable Bruce S. Anderson, Director
       Department of Health
       Attention: Dennis Tulang, Wastewater Branch
                  William Wong, Safe Drinking Water Branch
                  Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
                  Alec Wong, Clean Water Branch

FROM:  Gilbert S. Coloma-Agaran, Chairperson
        Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Maliko-Moretti (Well No. 5620-05)

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump
Installation permit application.

We would appreciate your comments on the captioned application for any conflicts or
inconsistencies with the programs, plans, and objectives specific to your department. Please respond
by returning this cover memo form by April 1, 2002. If we do not receive comments or a request for
additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this
permit application, request additional information, or request additional review time, please contact
Charley Ice of the Commission staff at ____________

Ci: ss
Attachment(s)

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people
at least 60 days per year) or 15 or more service connections) and must receive Director of Health approval prior to its use to comply
with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-229.

[ ] This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year
or 15 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical
presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source
increases to meet the public water system definition then Director of Health approval is required prior to implementation.

[ ] If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and
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clearly labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention
devices should be routinely inspected and tested.

[ ] It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

[ ] For the applicant's information, a source of possible wastewater contamination [] is [] is not located near the proposed well site
          (information attached).

[ ] An NPDES permit is required.

[ ] Other relevant DOH rules/regulations, information, or recommendations are attached.

[ ] No comments/objections

Contact Person: _____________________________ Phone: ____________

Signed: _____________________________ Date: ____________
March 18, 2002

TO: Harry Yada, Acting Administrator
   Land Division

FROM: Linnel T. Nishioka, Deputy Director
       Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Maliko-Moretti (Well No. 5520-05)

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by April 1, 2002. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at ____________

RESPONSE:

[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.

[ ] A water lease/permit is not required of this applicant.

[ ] A water lease/permit has been obtained by the applicant through lease no. ________________________

[ ] This well project [ ] requires [ ] does not require a CDUP. If a CDUP is required it [ ] has [ ] has not been approved and [ ] is [ ] is not currently active.

[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments:

Contact Person: ___________________________ Phone: _________

Signed: ___________________________ Date: _____________
TO: Don Hibbard, Administrator  
Historic Preservation

FROM: Linnel T. Nishioka, Deputy Director  
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application  
Maliko-Moretti (Well No. 5620-05)

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by April 1, 2002. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at [redacted].

**RESPONSE:**

[ ] There may be areas in the vicinity of the well site that contain subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal.

[ ] Other relevant Historic Preservation rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments:

Contact Person: ___________________________  
Phone: ________________

Signed: ___________________________  
Date: ________________
<table>
<thead>
<tr>
<th>F YR</th>
<th>APP</th>
<th>D</th>
<th>SRC/CTR</th>
<th>COST</th>
<th>PROJECT</th>
<th>PH</th>
<th>ACT</th>
<th>AMOUNT</th>
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REMARKS:
LINE (1) Well No. 5620-05 (WCPA/PIPA)
LINE (2) Well No. 5620-06 (WCPA/PIPA)
LINE (3) Well No. 4702-01 (WCPA/PIPA)
LINE (4) Well No. 4326-10 (WCPA/PIPA)
WAILANI DRILLING INC.
PH: (808) 572-2673
655 KULIKE ROAD
HAiku, MAUl, HI 96708

PAY TO THE ORDER OF Water Resource Commission
Twenty-Five and 00/100

Water Resource Commission
P.O. Box 621
Honolulu, Hawaii 96809

Randy Smith Permit

Date 2/13/2002

WAILANI DRILLING INC.
PH: (808) 572-2673
655 KULIKE ROAD
HAiku, MAUl, HI 96708

PAY TO THE ORDER OF Water Resource Commission
Twenty-Five and 00/100

Water Resource Commission
P.O. Box 621
Honolulu, Hawaii 96809

Date 2/13/2002

WAILANI DRILLING INC.
PH: (808) 572-2673
655 KULIKE ROAD
HAiku, MAUl, HI 96708

PAY TO THE ORDER OF Water Resource Commission
Twenty-Five and 00/100

Water Resource Commission
P.O. Box 621
Honolulu, Hawaii 96809

Date 2/15/2002

WAILANI DRILLING INC.
PH: (808) 572-2673
655 KULIKE ROAD
HAiku, MAUl, HI 96708

PAY TO THE ORDER OF Water Resource Commission

twenty-five 25.00

Date 2/13/02

well permit

An Robertson

An Robertson

An Robertson

An Robertson
IMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR NEW APPLICATIONS

FROM: CHARLEY BAUER, G. CHING, F. FUJII, N. HARDY, R. HIGA, D. HIRANO, E. IMISSION ON WATER RESOURCE MANAGEMENT
DATE: 28-Feb-02 SUSPENSE DATE: ________________

TO: BAUER, G. CHING, F. FUJII, N. HARDY, R. HIGA, D. HIRANO, E. IMISSION ON WATER RESOURCE MANAGEMENT

PLEASE:
1 Review & Comment
2 Type Final, label new file folder
3 Approval
3 Signature
4 Information
5 Xerox __ copies

WELL NUMBER 5020 WELL NAME Moretti Maliko

[ ] WELL CONSTRUCTION [ ] PUMP INSTALLATION [X] BOTH

ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated

1 TRANS. LETTER
2 CWRM MAP
3 APPL. FORM (3X)
4 USGS MAPS (3X)
5 TAX MAPS (3X)
6 PARCEL OWNER VERIF. MLS PRINTOUT
7 CONTRACTOR VERIF. DCCA LICENSE SCREEN PRINTOUT
8 ALL INFO FILLED IN
9 BACKGROUND CHECK

FOLDER:
[ ] MADE NEW FILE FOLDER, ATTACHED
[ ] FILE FOLDER ALREADY MADE, IN FILE CABINET

INCOMPLETE ACTION DATES:

DATE ACTION
12-Mar-02 Take care of yellow marks on background

writing on documentation of land ownership 13-Mar-02
Return Receipt Fax Memo

For: Charlie Ice

Charlie. Enclosed are the following items:

___ Application for Well Permit/Andy Graham
___ Application for Well Permit/Randy Smith
___ Application for Well Permit/Moretti

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at

From: Bill Steele
State of Hawaii
COMMISSION N WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

If Well Construction and/or If Pump Installation

APPLICANT INFORMATION: (Fill out all three, if applicable, and place a check next to the primary contact)

1. (a) WELL OWNER: HAIKU BAY TRADING CO Contact Person: FRANCOE MORETTI Phone: 808-872-8770
   Mailing Address: 471 ALAKAPA PL PAIA HAWAII 96779
   Fax: 808-872-8770
   E-mail: FRANCOE@MALIKOBAY.COM

2. (b) LAND OWNER: FRANCOE MORETTI Contact Person: SAME Phone: SAME
   Mailing Address: 471 ALAKAPA PL PAIA HAWAII 96779
   Fax: 808-872-8770
   E-mail: FRANCOE@MALIKOBAY.COM

3. (c) CONTRACTOR: Wailu Drilling Inc Contact Person: MIKE ROBERTSON Phone: 8085728273
   Mailing Address: 655 KULUKEA RD HAiku
   Fax: E-mail: Lisc. #: (circle one: C-97, C-97-A, or A)

WELL & PUMP INFORMATION: (Please fill in the diagram on the back of this form.)

2. WELL NAME: MORETTI-MALIKO
   Island: HAiku
   Address: HAiku, HAWAII, 96779
   Tax Map Key: Zone: 274, 6009: 70
   Parcels: 274, 6009: 70
   Attach the relevant portion of (a) a 7.5-Minute Series USGS topographic map (scale 1:24,000) and include the name of the quad, and (b) a property tax map, showing well location referenced to established property boundaries.

3. PROPOSED WORK: (check all that apply)
   □ Construct New Well
   □ Modify Existing Well
   □ Abandon/Seal
   *State Well No.: ____________________ (if unknown, please call Commission at 808-572-8273)

4. CONSTRUCTION:
   □ Drilled □ Dug □ Shaft □ Tunnel
   Is this well part of a battery of wells? □ Yes □ No (Please describe)

5. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: ___________ gallons per minute
   Pump Type (check one):
   □ Deep Well Turbine □ Rotary □ Propeller
   □ Submersible 10 HP □ Rotary-Displacement □ Reciprocating
   □ Centrifugal □ Rotary-Gear □ Impulse

8. PROPOSED USE: (check all that apply)
   □ Industrial
   □ Municipal (including hotels, stores, etc.)
   □ Domestic (individual, noncommercial water system)
   □ Other (please explain):
   Does this well serve 25 or more people or have 15 or more service connections? □ Yes □ No

8. PROPOSED USE: (check all that apply)
   □ Industrial
   □ Municipal (including hotels, stores, etc.)
   □ Domestic (individual, noncommercial water system)

   Does this well serve 25 or more people or have 15 or more service connections? □ Yes □ No

7. (a) PROPOSED AMOUNT OF WATER
   (b) METHOD OF FLOW MEASUREMENT

OTHER IMPORTANT INFORMATION

8. LEGAL REQUIREMENTS:
   □ Yes □ No
   □ EA □ None □ Other (explain): ____________
   □ Other (explain): ____________

9. REMARKS, EXPLANATIONS:

   To be Pumped to task a higher elevation or 14 meter lift
   (if more space is needed, please attach additional sheet)

I understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 60 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) such approved shall not constitute a determination of cumulative water rights and 5) the wells shall be designed and constructed in accordance with applicable laws and regulations.

Well Owner
LANDOWNER
CONTRACTOR
Signature
Date: 2/12/03
Signature: FRANCESCO MORETTI
Date: 2/12/02
Signature: MIKE ROBERTSON
Date: d/2/02

Off-Color Permit

1,000 gallons per day

Open Pipe □ Weir □ Office □ Other (explain): ____________

Approvals:

[Handwritten Signature]
[Handwritten Signature]
[Handwritten Signature]
10. PROPOSED WELL SECTION

Please attach schematic if different from diagram provided below.

Elevation at top of casing: 261 ft, max

- Cement Grout: 40 ft
  (min. 70% of distance from ground elevation to top of water surface or 900 ft, whichever is less)

- Available space between hole and casing (min. 5 ft)

- Rock or Gravel Padding:
  \[ \frac{2}{3} \text{ ft, max} \]

- Estimated Water Level Elevation: 265 ft, max

Solid Casing: L x 80% × (Ground Elevation - Water Level Elev)

- Total Length: 205 ft
- Nominal Diameter: 6 in
- Wall Thickness: 2.5 in
- Bottom Elevation: -5 ft, max

Open Casing: ET Perforated Screen

- Total Length: 205 ft
- Nominal Diameter: 6 in
- Wall Thickness: 2.5 in
- Bottom Elevation: -2.5 ft, max

- Note: Neither bentonite nor mud should be used in saturated zone during drilling

Open Hole:

- Length: " NA " ft
- Diameter: " NA " in
- Bottom elevation: " NA " ft, max

* The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Amendment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.

For non-cast water Bored Wells – bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = (Water Elevation + 2 ft Water Level Elev)

Example: Estimated + 2 ft Water Level Elev. => Bottom Elevation of Well Limit = (2 ft + 2 ft) = 4 ft.

Solid Casing Material:

- Carbon Steel: compliant with (check one or more): ASTM A42, ASTM A48, Other
- Stainless Steel: (check one): ASTM A312 (mirror finish), ASTM A409 (production welds)
- ABS Plastic conforming to ASTM F180 and ASTM D1527 (check one): Schedule 40, Schedule 80
- PVC Plastic conforming to ASTM D2241 (check one): Schedule 40, Schedule 80, Schedule 120
- Thermoset Plastic: (check one): Epoxy Reinforced Resin Pipe conforming to ASTM D3106, Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950, Polyethylene Pipe conforming to ASTM D2200

Open Casing Material:

- Carbon Steel: compliant with (check one or more): ASTM A42, ASTM A48, Other
- Stainless Steel: (check one): ASTM A312 (mirror finish), ASTM A409 (production welds)
- ABS Plastic conforming to ASTM F180 and ASTM D1527 (check one): Schedule 40, Schedule 80
- PVC Plastic conforming to ASTM D2241 (check one): Schedule 40, Schedule 80, Schedule 120
- Thermoset Plastic: (check one): Epoxy Reinforced Resin Pipe conforming to ASTM D3106, Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950, Polyethylene Pipe conforming to ASTM D2200
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State of Hawaii
COMMISSION C
WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

WELL & PUMP INFORMATION:

WELL NAME: MORETTO - MALIKO
Island: Maui
Address: Haiku, Maui
Tax Map Key: 2-7-009-006

PROPOSED WORK:
- Construct New Well
- Modify Existing Well
- Abandon/Seal

PROPOSED USE:
- Municipal (Including hotels, stores, etc.)
- Domestic (Individual, non-commercial water system)
- Industrial

PROPONENT AMOUNT OF WITHDRAWAL: 14,000 gallons per day

METHOD OF FLOW MEASUREMENT:
- Flowmeter
- Open-pipe
- Weir
- Office

LEGAL REQUIREMENTS:
- CDUP
- SMAP
- EIS
- EA

REMARKS, EXPLANATIONS:
- THIS IS A NON-GRADED AREA. ADMISSIBLE RECOVERABLE WATER TO BE PUMPED TO A HIGHER ELEVATION ON 14 AREA LOT.

Signature: [Signature]
Date: 2-12-02
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

<table>
<thead>
<tr>
<th>Hole Diameter: 2/3.5&quot; in.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevation at top of casing 201 ft.</td>
</tr>
<tr>
<td>Minimum of 2' Radius 8.4&quot; Thick Concrete Pad (to contain benchmark surveyed to rounds 0.01 ft.)</td>
</tr>
<tr>
<td>Airf gap space between hole and casing (min. 3&quot;)</td>
</tr>
<tr>
<td>Rock or Gravel Packing:</td>
</tr>
<tr>
<td>Estimated Water Level Elevation: 500 ft. m.a.s.l.</td>
</tr>
<tr>
<td>Solid Casing: 9.5% x (Ground Elev. - Water Level Elev.)</td>
</tr>
<tr>
<td>Nominal Diameter: 6&quot; in.</td>
</tr>
<tr>
<td>Wall Thickness: 0.250 in.</td>
</tr>
<tr>
<td>Bottom Elevation: -25&quot; ft. m.a.s.l.</td>
</tr>
<tr>
<td>Open Casing: Perforated</td>
</tr>
<tr>
<td>Nominal Diameter: 6&quot; in.</td>
</tr>
<tr>
<td>Wall Thickness: 0.250 in.</td>
</tr>
<tr>
<td>Bottom Elevation: -25&quot; ft. m.a.s.l.</td>
</tr>
</tbody>
</table>

* The approximate elevation must be referenced to mean sea level (m.s.l.) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.

For non-cont water basin Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = (Water Elevation - 0.25 Water Thickness) |

Example: Estimated = 2 ft. Water Level Elev.  --- Bottom Elevation of Well Limit = (2 - 0.25 ft.) = -1.45 ft. |

Solid Casing Material:
- Carbon Steel: compliant with (check one or more): AWWA C200, API Spec. 5L, ASTM A25, ASTM A329
- Stainless Steel: (check one or more): ASTM A53, Type E, Type S, Grade B
- PVC Plastic conforming to ASTM F1980 and ASTM D22412 (check one): Schedule 40, Schedule 80
- Thermoset Plastic: (check one): Filament Wound Resin Pipe conforming to ASTM D2299, Centrifugal Cast Resin Pipe conforming to ASTM D2299, Reinforced Plastic Molder Pressure Pipe conforming to ASTM D2517, Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950, PTFE Fluorocarbon Tubing conforming to ASTM D3263, FEP Fluorocarbon Tubing conforming to ASTM D3266

Open Casing Material:
- Carbon Steel: compliant with (check one or more): AWWA C200, API Spec. 5L, ASTM A25, ASTM A329
- Stainless Steel: (check one or more): ASTM A53, Type E, Type S, Grade B
- PVC Plastic conforming to ASTM F1980 and ASTM D1765 or ASTM D22412 (check one): Schedule 40, Schedule 80, Schedule 120
- Thermoset Plastic: (check one): Filament Wound Resin Pipe conforming to ASTM D2299, Centrifugal Cast Resin Pipe conforming to ASTM D2299, Reinforced Plastic Molder Pressure Pipe conforming to ASTM D2517, Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950, PTFE Fluorocarbon Tubing conforming to ASTM D3263, FEP Fluorocarbon Tubing conforming to ASTM D3266