ANNUAL COMPLIANCE REPORT

Makakilo Quarry, Hawaii

Prepared By

GRACE PACIFIC CORPORATION

November 7, 2011

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1.0 INTRODUCTION

This Annual Compliance Report has been in compliance with Condition No. 9 of the State Land Use Commission's Findings of Fact, Conclusions of Law, and Decision and Order, Special Use Permit, Docket No. SP73-147, filed and effective on November 7, 2008 (the "Special Use Permit" or "SUP"), and certain conditions of the Decision and Order for the Conditional Use Permit No. 2007/CUP-91, dated July 17, 2009 (the "Conditional Use Permit" or "CUP").

This is Grace Pacific's third annual report demonstrating the status of compliance with the conditions of the SUP and the CUP. This report covers the period from October 1, 2010 through September 30, 2011.

Grace Pacific is also including in this 2011 Annual Compliance Report the disposition of Condition 1c under the Conditional Use Permit (Minor) 2007/CUP-47 allowing for joint development of parcels 9-2-3:82 and 9-2-3:74.

Please find attached as Appendix H the July 1, 2011 letter from DPP to Belt Collins stating that the documentation submitted meets condition 1c of the permit and that the applicant (Grace Pacific) may proceed with processing of their building permit(s).

2.0 ANNUAL COMPLIANCE REPORT FOR THE SPECIAL USE PERMIT

(Special Use Permit, Docket No. SP73-147, adopted and approved on November 6, 2008, filed and effective on November 7, 2008)

2.1 SUP CONDITION #1

1.	*Within six (6) months of the Land Use Commission's Decision and Order approving the Special Use Permit, the Applicant shall submit:*
a.	*A new site plan with metes and bounds map and description delineating the approximately 541-acre Property, including the boundaries of the quarry excavation and berming areas, the processing site and conveyor tunnel, and the buffer area to the Director of Planning and Permitting for review and approval. The site plan shall also be submitted to the Land Use Commission.*
b.	*A fire protection and control plan to Honolulu Fire Department for review and approval. A copy of the approved plan shall be submitted to the Director of Planning and Permitting within 30 days of approval.*

2.1.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #1.A

Receipt of the requested Site Plan Delineation Key Map and the Metes and Bounds of the Makakilo Quarry was acknowledged by DPP in their letter of December 28, 2010 (Appendix A of this 2011 Report).

As requested by DPP in a letter dated August 24, 2010 (Appendix A to the 2010 Report), Belt Collins, Grace Pacific's agent, submitted to DPP for review and approval on October 27, 2010 an Updated Site Plan Delineation Key Map and the Metes and Bounds of the Makakilo Quarry (Appendix C to the 2010 Report). An original Site Boundary Map was submitted by Belt Collins on November 06, 2009 (Appendix A to the 2009 Report). The State Land Use Commission Boundary interpretation of Grace Pacific's 2009 submittal was dated April 20, 2010 (Appendix B to the 2010 Report).

2.1.2 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #1.B

Satisfaction of Condition #1.B was acknowledged by DPP in their letter of August 24, 2010 (Appendix A to the 2010 Report).

No changes were made to the Fire Protection and Control Plan in the current reporting period. If changes are made in the future, revised plans will be included in the Annual Report.

2.2 SUP CONDITION #2

2.	*Within one (1) year of the Land Use Commission's Decision and Order approving the Special Use Permit, the Applicant shall submit to the Director of Planning and Permitting for review and approval a renaturalization plan in coordination with the proposed Closure Grading Plan for the quarry site and buffer area mauka of the H-1 Freeway showing landscaping details including plant types, sizing and spacing, irrigation facilities and distribution systems.*

2.2.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #2

A Renaturalization Plan (RP) was submitted by Belt Collins on November 6, 2009 for review and approval. (Appendix C to the 2009 Report).

Modifications to the Renaturalization Plan were requested by DPP in a letter to Belt Collins dated August 24, 2010 (Appendix A to the 2010 Report).

In a letter dated October 8, 2010, Belt Collins requested clarification from DPP regarding said modifications (Appendix E to the 2010 Report).

In response to the October 8th request, DPP responded in a letter dated December 28, 2010 (Appendix A to this 2011 Report), stating:

"Regarding Condition 2 which requires the submittal and approval of a Renaturalization Plan (RP), we note that our August 24, 2009 letter indicates that the RP dated November 5, 2009 does not cover the remaining portions of the quarry rim, the quarry floor and the surrounding buffer areas disturbed by golf course construction….Should you wish to clarify or modify the language of this condition, your options are to seek clarification with the Land Use Commission or submit a request to modify Condition No. 2 to the Planning Commission."

In a letter dated January 18, 2011 from Belt Collins to DPP (Appendix B to this 2011 Report), it was stated that Grace Pacific is in contact with Mr. Orlando Davidson, Executive Director of the State Land Use Commission and Grace Pacific hopes to reach a determination about how best to proceed to meet compliance for SUP Condition #2.

On March 28, 2011, Belt Collins wrote to DPP indicating that Grace Pacific had decided to prepare a revision to the November 2009 RP and requested a meeting with DPP to discuss the extent of the physical area that DPP wishes to include in the revised RP (Appendix C to this 2011 Report).

No further guidance has been received from DPP as of this report date as to the extent of the physical area DPP wishes to include in the revised RP.

2.3 SUP CONDITION #3

3.	*All resource extraction, related aggregate processing and concrete and asphalt production activities, including recycling activities shall cease by December 31, 2032. Final beneficial re-use plans as approved by the Department of Planning and Permitting shall be implemented immediately upon the cessation of said resource extraction and related quarrying activities.*

2.3.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #3

Grace Pacific acknowledges this condition of the Special Use Permit.

2.4 SUP CONDITION #4

4.	*The Applicant shall close the processing site on Parcel 4 by relocating all uses on the site into the quarry pit or Campbell Industrial Park by December 31, 2012, and Parcel 4 shall be returned to landscaped open space use within six (6) years of the date of the Land Use Commission's Decision and Order. A landscape plan shall be submitted to the Director of Planning and Permitting for review and approval on the second anniversary date of the Land Use Commission's Decision and Order and the approved landscape plan shall be implemented within one (1) year of its approval. Landscaping shall be maintained in a natural state for the life of the Special Use Permit.*

2.4.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #4

Grace Pacific acknowledges this condition of the Special Use Permit to relocate all processing site uses from Parcel 4 by December 31, 2012.

A Lower Quarry Landscape Plan addressing the return of Parcel 4 to landscaped open space was submitted by Belt Collins to DPP on June 13, 2011 (Appendix D to this

2011 Report). Grace Pacific acknowledges that this submittal was due November 6, 2010, and apologies for its tardy submission.

No written response from DPP as to comments or approval of the Lower Quarry Landscape Plan has been received as of the date of this report.

2.5 SUP CONDITION #5

5.	*Beginning January 1, 2012, quarry operations shall be limited to the following days/hours:*
a.	*Quarry excavation, crushing, stockpiling, equipment maintenance, and recycling facility – 6:00 a.m. to 6:00 p.m., Monday to Saturday.*
b.	*Hot-mix asphalt plant - 6:00 a.m. to 6:00 p.m., Monday to Friday.*
c.	*Unloading of cold-planed asphaltic concrete during re-paving jobs - 6:00 p.m. to 10:00 p.m., Sunday to Friday.*

2.5.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #5

Grace Pacific acknowledges there will be a change in operating hours beginning in 2012, under this condition of the Special Use Permit.

2.6 SUP CONDITION #6

6.	*Except for quarry, recycling activities in the quarry, and renaturalization activities, the remainder of Tax Map Key: 9-2-03: 74 shall remain in open space buffer for the life of the quarry and related activities. Minor accessory uses or structure may be permitted on Parcel 74 with the express written consent of the Director of Planning and Permitting. Any other uses shall be processed pursuant to Section 205-6. Hawai`i Revised Statues.*

2.6.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #6

Grace Pacific acknowledges this condition of the Special Use Permit.

2.7 SUP CONDITION #7

7.	*As may be required by the State Department of Health, the Applicant shall place in service additional dust control measures to control dust generation at the project such that no visible fugitive dust shall cross the combined property boundaries of Tax Map Key: 9-2-03: 74 and 82.*

2.7.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #7

Grace Pacific acknowledges this condition of the Special Use Permit.

2.8 SUP CONDITION #8

8.	*The Applicant shall, as a result of modifications to the final grading and beneficial re-use plans, submit an update of the drainage plan, prepared by a qualified civil engineer, as may be required by the Director of Planning and Permitting for review and approval.*

2.8.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #8

Grace Pacific acknowledges this condition of the Special Use Permit.

2.9 SUP CONDITION #9

9.	*On each anniversary date of the Land Use Commission's Decision and Order, the Applicant or its successor shall file with the Department of Planning and Permitting and the Land Use Commission a report and supporting documentation demonstrating the statues of compliance with each of the conditions of the Special Use Permit approval. Included in the supporting documentation shall be an updated rectified aerial imagery of the quarry, buffer area and processing site and dust control management plan. The following items shall also be a part of the supporting documentation:*
a.	*Observations of fugitive dust.*

b. A report on replanting activities, including the areas replanted, and the type of vegetation planted.

c. A report of any citizen's complaints relating to the operation along with the actions taken to ameliorate those complaints.

The Director may present its analysis and recommendations on the annual report to the Planning Commission and the State Department of Health for further action pursuant to the Rules of the Planning Commission.

2.9.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #9

A copy of the Makakilo Quarry Aerial Topography dated August 08, 2011 is attached to this 2011 Report as Appendix E.

Also submitted with this report is a DVD containing electronic files of the Rectified Aerial Imagery, AutoCAD file of the Aerial Topography and electronic files of this Annual Report and related Appendixes.

2.9.2 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #9.A

No observations of fugitive dust were reported to Grace Pacific or the State Department of Health, Clean Air Branch for the period October 1, 2010 through September 30, 2011. Correspondence from the Clean Air Branch dated October 21, 2011 is attached to this 2011 Report as Appendix I.

2.9.3 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #9.B

Grace Pacific has limited its replanting efforts in the Upper Quarry to temporary erosion control, awaiting approval of the Renaturalization Plan. Grace Pacific continues to maintain the buffer and screening plantings along Farrington Highway, the Kapolei Knolls buffer and the H-1 shoulder overlooking the Lower Quarry site.

2.9.4 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #9.C

No reports of citizen complaints relating to operations during the period October 1, 2010 through September 30, 2011 were received by Grace Pacific. A copy of the "Grace Pacific Makakilo Quarry Hotline" Phone Log is attached to this 2011 Report as Appendix F.

2.10 SUP CONDITION #10

10.	*The Applicant shall provide a beneficial re-use plan for lands disturbed by its quarry operations. The plan shall include planning and preparation of the design and implementation scenarios for the beneficial re-use of the pit area consistent with established land use policies for the site and surrounding area. The re-use planning document and accompanying scenarios and drawings shall be submitted to the Department of Planning and Permitting, for review and approval within the fifth (5th) year after the date of the Land Use Commission's Decision and Order approving this expansion. An updated re-use plan shall be submitted to the DPP for review and approval every five (5) years thereafter. The beneficial re-use planning and design document shall be an ongoing document prepared by a professional qualified in re-use planning and contain objectives, implementation and funding strategies for reclamation of the pit area for the purpose of achieving the area's long term land use policies. The Applicant will update the plan, as may be required by the Director of Planning and Permitting, to respond appropriately to any changes in the surrounding area's land use policies.* *The beneficial re-use plan shall include at least one public access across Tax Map Key: 9-2-03: 74, connecting Tax Map Key: 9-2-03:81 and the extension of Makakilo Drive, across the project in which safe pedestrian/bicycling passage can be established. Access requirements, such as but not limited to, subdivision, nature of improvements, routing, hours accessible, shall be established as part of the final beneficial re-use plan. Suggested routing of the public access is shown on Exhibit A.*

2.10.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #10

Grace Pacific acknowledges this condition of the Special Use Permit.

2.11 SUP CONDITION #11

11.	*Approval of this Special Use Permit does not constitute compliance with other land use ordinances or governmental agencies' requirements. They are subject to separate review and approval. The Applicant shall be responsible for insuring that the final plans for the project approved under this permit comply with all applicable provisions of the Land Use Ordinance and other governmental agencies' provisions and requirements.*

2.11.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #11

Grace Pacific acknowledges this condition of the Special Use Permit.

2.12 SUP CONDITION #12

12.	*The Applicant and/or landowner shall notify the Director of Planning and Permitting and the Land Use Commission of any changes in uses on the Property; termination of any uses on the Property; and/or transfer in ownership of the Property or any uses on the Property. The Planning Commission shall then, in consultation with the Director of Planning and Permitting, determine the appropriate disposition of this Special Use Permit and facilities.*

2.12.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #12

Grace Pacific acknowledges this condition of the Special Use Permit.

Letters notifying DPP and LUC that a change of ownership occurred were sent on November 05, 2009 (Appendix G to the 2009 Report) and on March 26, 2010 (Appendix J on the 2010 Report).

2.13 SUP CONDITION #13

13.	*In the event of noncompliance with any of the conditions set forth herein, the Director of Planning and Permitting may terminate all uses approved under this Special Use Permit or the Director may declare this Special Use Permit null and void or seek available civil procedures to enforce compliance.*

2.13.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #13

Grace Pacific acknowledges this condition of the Special Use Permit.

2.14 SUP CONDITION #14

14.	*The Applicant shall, for the life of the Special Use Permit, establish and disclose to the community, a telephone number dedicated to receiving and recording complaints relating to quarry and recycling operations. A continuous volume of complaints shall warrant reconsideration of the Special Use Permit by the Planning Commission.*

2.14.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #14

Grace Pacific has posted the Makakilo Quarry Hotline information 671-GRACE (671-4722) on its website, wwww.gracepacificcorp.com, for disclosure to the community.

In addition, Grace Pacific has established a process to enhance its communication with the community by establishing a Community Advisory Group. The Community Advisory Group will to provide an opportunity for Grace Pacific to share information about its operations with area residents and obtain feedback from the community.

The Community Advisory Group is composed of residents and representatives from neighboring community associations as well as from Neighborhood Board No. 34, Makakilo/Kapolei/Honokai Hale. Its' current members are:

James Brown, Kapolei Knolls

Judy Cocke, Anuhea

Ken Dorner, Villages of Kapolei

Maeda Timson, former Chairperson, Neighborhood Board No. 34

Thad Spreg, Wai Kaloʻi

The Community Advisory Group has agreed to meet on an ad hoc basis ensuring channels of communication are maintained between Grace Pacific and the community. The initial meeting was held April 27, 2010, and tours of the quarry with the members were conducted in September of 2010. The next meeting is scheduled for November, 2011.

2.15 SUP CONDITION #15

15.	*The uses in the quarry excavation area shall be limited to rock excavation, crushing, stockpiling, a new hot-mix asphalt plant, recycling of concrete rubble, glass, and asphaltic concrete pavement, equipment maintenance, employee support, parking, administration, and a water well and pump. No other uses shall be permitted without the approval of the Land Use Commission.*

2.15.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #15

Grace Pacific acknowledges this condition of the Special Use Permit.

2.16 SUP CONDITION #16

16.	*The Applicant shall establish the quarry expansion in substantial compliance with the representations made to the Land Use Commission in obtaining the Land Use Commission Special Use Permit. Failure to do so may result in the revocation of the permit.* *IT IS FURTHER ORDERED that the conditions imposed by the LUC on March 23, 1973, in this docket that are applicable to the sanitary landfill operations shall remain in fill force and effect.*

2.16.1 GRACE PACIFIC'S RESPONSE TO SUP CONDITION #16

Grace Pacific acknowledges this condition of the Special Use Permit.

3.0 ANNUAL COMPLIANCE REPORT FOR THE CONDITIONAL USE PERMIT

(Conditional Use Permit, No. 2007/CUP-91, dated July 17, 2009)

3.1 CUP CONDITION #1

1.	*Blasting shall be restricted to the hours of 8:00 am to 12:00 noon, Mondays through Fridays.*

3.1.1 GRACE PACIFIC'S RESPONSE TO CUP CONDITION #1

Grace Pacific acknowledges this condition of the Conditional Use Permit.

3.2 CUP CONDITION #2

2.	*Within one year of this Decision and Order, the applicant shall submit to the Director of the DPP for review and approval, final grading plans with contour intervals of five feet in areas where the slope is greater than ten percent; two feet in areas where the slope is ten percent or less.*

3.2.1 GRACE PACIFIC'S RESPONSE TO CUP CONDITION #2

Grace Pacific acknowledges this condition of the Conditional Use Permit.

A Final Grading Plan was submitted to DPP on November 06, 2009 (Appendix J to the 2009 Report). A letter from DPP dated November 05, 2009 acknowledged confirmation Condition 2 of the Conditional Use Permit was met (Appendix A to the 2010 Report)

3.3 CUP CONDITION #3

3.	*On the fifth anniversary date of this Decision and Order, and an updated every fifth year thereafter, as may be required by the Director, the applicant shall submit a beneficial reuse plan which shall show how the property is to be left in a form suitable*

for reuse for purposes permissible in the district, relating such reuses to existing or proposed uses of surrounding properties. Among items to be included in the plan are feasible circulation patterns in and around the site, the treatment of exposed soil or subsoil, including measures to be taken to replace topsoil or establish vegetation in excavated areas in order to make the property suitable for the proposed reuse, treatment of slopes to prevent erosion and delineation of floodways and floodplains (if any) to be maintained in open usage. Submittal of the beneficial reuse plan under Condition 12 of the Land Use Commission Decision and Order, dated November 7, 2008, may satisfy the requirements of this condition (providing the reuse plan complies with Land Use Ordinance Section 5.520, Specific Use Development Standards, for Resource Extraction).

3.3.1 GRACE PACIFIC'S RESPONSE TO CUP CONDITION #3

Grace Pacific acknowledges this condition of the Conditional Use Permit.

3.4 CUP CONDITION #4

4. Prior to the issuance of a building permit for any structures within and/or the relocation of any structures to the Project Site, the applicant shall submit to the Director for review and approval:

a. A site plan showing compliance with all development standards of the Land Use Ordinance, including but not limited to, parking and loading, structure heights and setbacks, and building coverage.

b. A water source and distribution plan approved by the Board of Water Supply. The plan shall include the disposition of the existing water source in the processing site.

c. An outdoor lighting plan showing all existing and proposed outdoor lighting fixtures. All exterior lighting shall be fully shielded to prevent glare and light spillage on surrounding lots and public rights-of-way. Lighting for unloading of cold-planed asphalt shall be directed away from adjoining residential uses and be turned off upon completion of unloading operations.

3.4.1 GRACE PACIFIC'S RESPONSE TO CUP CONDITION #4.A, B, AND C

A Site Plan, Water Source and Distribution Plan and Outdoor lighting Plan were submitted by Belt Collins to DPP on July 08, 2011 for review and approval. A copy of the letter is attached as Appendix G of this 2011 Report.

3.5 CUP CONDITION #5

5.	*The applicant shall stabilize exposed soils during the construction of any berms to minimize runoff impacts to the area's natural drainage features. Landscaping of any berms shall commence within 30 days of completion of berm construction.*

3.5.1 GRACE PACIFIC'S RESPONSE TO CUP CONDITION #5

Grace Pacific acknowledges this condition of the Conditional Use Permit.

3.6 CUP CONDITION #6

6.	*Operation of the resource extraction facility and accessory uses shall be in general conformance with the approved project, as described herein and shown on plans on file with the DPP. Any modification to the project and/or plans shall be subject to the prior review and approval by the Director. Major modifications shall require a new Conditional Use Permit.*

3.6.1 GRACE PACIFIC'S RESPONSE TO CUP CONDITION #6

Grace Pacific acknowledges this condition of the Conditional Use Permit.

3.7 CUP CONDITION #7

7.	*This application has only been reviewed and approved pursuant to the provisions of Section 21-5.520 (Resource Extraction), and its approval shall not constitute compliance with the requirements of other governmental agencies. These are subject to separate review and approval. The application shall be responsible for insuring that the final plans for the project approved under this permit comply with all applicable government agencies' provisions and requirements, including compliance with all other provisions of the Land Use Ordinance.*

3.7.1 GRACE PACIFIC'S RESPONSE TO CUP CONDITION #7

Grace Pacific acknowledges this condition of the Conditional Use Permit.

3.8 CUP CONDITION #8

8.	*The applicant and/or landowner shall submit written notification to the Director of DPP of any changes in use, including the addition of any accessory uses and/or structure, termination of any use on the property; and/or transfer in ownership of the property or of any use on the property. In the case of any addition and/or change in use, the Director shall determine if the proposed change requires a minor or major modification of the Conditional Use Permit. In the event of a change in ownership, the Director shall notify the new owner (by copy of this report) that the site and/or facility is permitted and/or governed by the Conditional Use Permit, and that compliance with all conditions of approval is required.*

3.8.1 GRACE PACIFIC'S RESPONSE TO CUP CONDITION #8

Grace Pacific acknowledges this condition of the Conditional Use Permit.

Letters notifying DPP and LUC that a change of ownership occured were sent on November 05, 2009 (Appendix G to the 2009 Report) and on March 26, 2010 (Appendix J on the 2010 Report).

3.9 CUP CONDITION #9

9.	*The Director may modify the conditions of this permit by imposing additional conditions, modifying existing conditions, or deleting conditions deemed satisfied upon a finding that circumstances related to the approved project have significantly changed so as to warrant a modification to the conditions of approval. In the event of the noncompliance with any of the conditions set forth herein, the Director may terminate all uses approved under this permit or halt their operation until all conditions are met or may declare this Conditional Use Permit null and void or seek civil enforcement.*

3.9.1 GRACE PACIFIC'S RESPONSE TO CUP CONDITION #9

Grace Pacific acknowledges this condition of the Conditional Use Permit.

-------- End of 2011 Annual Report ---------

ANNUAL COMPLIANCE REPORT

Makakilo Quarry, Hawaii

2011

APPENDIX A:

LETTER FROM DPP TO BELT COLLINS DATED DECEMBER 28, 2010 REGARDING GRACE PACIFIC'S SECOND ANNUAL COMPLIANCE REPORT

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

PETER B. CARLISLE
MAYOR

DAVID K. TANOUE
DIRECTOR

ROBERT M. SUMITOMO
DEPUTY DIRECTOR

2007/SUP-6(ry)
2007/CUP-91

December 28, 2010

Mr. Lee W. Sichter
Belt Collins Hawaii, Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819-4554

Dear Mr. Sichter:

Subject: Second Annual Report
Land Use Commission Docket No. SP73-147 Grace Pacific Corporation
Makakilo Quarry
Tax Map Keys: 9-1-016: 004, 9-2-002:006, 9-2-083: 074 and 082

We have reviewed the Second Annual Report dated November 5, 2010. Also, additional documentation dated October 27, November 3, 2010 and your request dated October 8, 2010, regarding clarification of Condition 3 of the Land Use Commission's Decision for Docket No. SP73-147 Grace Pacific Corporation were reviewed. We provide the following responses:

Special Use Permit (SUP) Conditions:

1. Regarding Condition 2 which requires the submittal and approval of a Renaturalization Plan (RP), we note that our August 24, 2009, letter indicates that RP dated November 5, 2009, does not cover the remaining portions of the quarry rim, the quarry floor, and surrounding buffer areas disturbed by golf course construction. Condition No. 2 states, in part, as follows:

   "...shall submit to the Director of Planning and Permitting for review and approval a renaturalization plan in coordination with the proposed Closure Grading Plan for the quarry site and buffer area mauka of the H-1 Freeway showing landscape details including plant types, sizing and spacing, irrigation facilities and distribution systems."

   Our August 24 letter further indicates that renaturalization of the remaining portion of the quarry rim and pit walls, the quarry floor and the impacted soils of the buffer area, as was represented by the applicant, will contribute to the reduction of fugitive dust and associated impacts on surrounding neighbors. Thus, we find that in order to satisfy Condition No. 2, a revised RP which includes the excluded areas, stamped and signed by a Hawaii licensed landscape architect, be submitted for review and approval.

Should you wish to clarify or modify the language of this condition, your options are to seek clarification with the Land Use Commission or submit a request to modify Condition No. 2 to the Planning Commission.

2. Regarding Condition No. 9, we have not received the referenced AutoCAD file of the aerial topography.

3. Regarding Condition No. 14, on December 21, the 2010, the DPP staff called the "Makakilo Quarry Hotline" phone number, 671-4722, and found that this number was disconnected. The DPP staff also checked the applicant's web page, www.gracepacificcorp.com, however, an updated complaints contact number could not be found. As we do not have any records as to when the phone number was disconnected, we cannot conclude that the applicant's report that there were no citizen complaints is a reliable indication of the community's complaints on the quarry and recycling's operations.

Please submit the material referenced above as soon as possible and notify the Department of Planning and Permitting as soon as the complaints hotline and web information have been re-established. If you have any questions, please contact Raymond Young of our staff at 768-8049.

Very truly yours,

David K. Tanoue, Director
Department of Planning and Permitting

DKT:bkg
Doc: 820819

cc: Land Use Commission
Grace Pacific Corporation
DR Horton – Schuler Homes, LLC

ANNUAL COMPLIANCE REPORT

Makakilo Quarry, Hawaii

2011

APPENDIX B:

LETTER FROM BELT COLLINS TO DPP DATED JANUARY 18, 2011 REGARDING GRACE PACIFIC'S SECOND ANNUAL COMPLIANCE REPORT

January 18, 2011
11P-010 / 2004-33-8000

Mr. David K. Tanoue, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Mr. Tanoue:

Second Annual Report
LUC Docket No. SP73-147, Grace Pacific Corporation
Makakilo Quarry

Thank you for your letter of December 28, 2010 regarding the above project. Following are responses to your comments in the order they were presented in your letter.

1. As we appear to have a difference of opinion regarding the requirements of Condition 2, we have taken your advice and have contacted Mr. Orlando Davidson, Executive Director of the State Land Use Commission. We are presently in conversation with him and hope to reach a determination shortly about how best to proceed.

2. Enclosed is a CD of the requested AutoCADD file.

3. We wish to assure you that the Makakilo Quarry Hotline has not been disconnected. Enclosed is a copy of an email that Grace Pacific received from Hawaiian Telcom stating that the telephone company experienced "...a software problem in the switch on our side..." which caused the outage on December 21, 2010. We are advised that the Grace Pacific web page has been updated to include a reference to the phone number.

   With regard to your comment, "...we cannot conclude that the applicant's report that there were no citizen complaints is a reliable indication of the community's complaints on the quarry and recycling operations...," please be informed that Grace Pacific creates a weekly summary of all phone calls made to the hotline, as well as a separate transcript of each call received, in an effort to ensure that the community's concerns are fully addressed. For these reasons, the petitioner is confident in the representations made in its annual reporting.

   Grace Pacific and its consultants have made every effort to comply with all applicable laws and regulations pertaining to the operations of the Makakilo Quarry and the entitlements granted thereto. Grace Pacific has a record of over 30 years of continuous and faithful dedication to the interests of its neighbors and the greater community.

Belt Collins Hawaii Ltd. | 2153 North King Street, Suite 200 | Honolulu, HI 96819-4554 USA
Tel: 808.521.5361 | Fax: 808.538.7819 | www.beltcollins.com | honolulu@beltcollins.com

We will provide follow-up correspondence on our communications with the office of the State Land Use Commission regarding the specifics of Condition 2. Should you require any future information on the other items in your December 28, 2010 letter as addressed herein, kindly contact us.

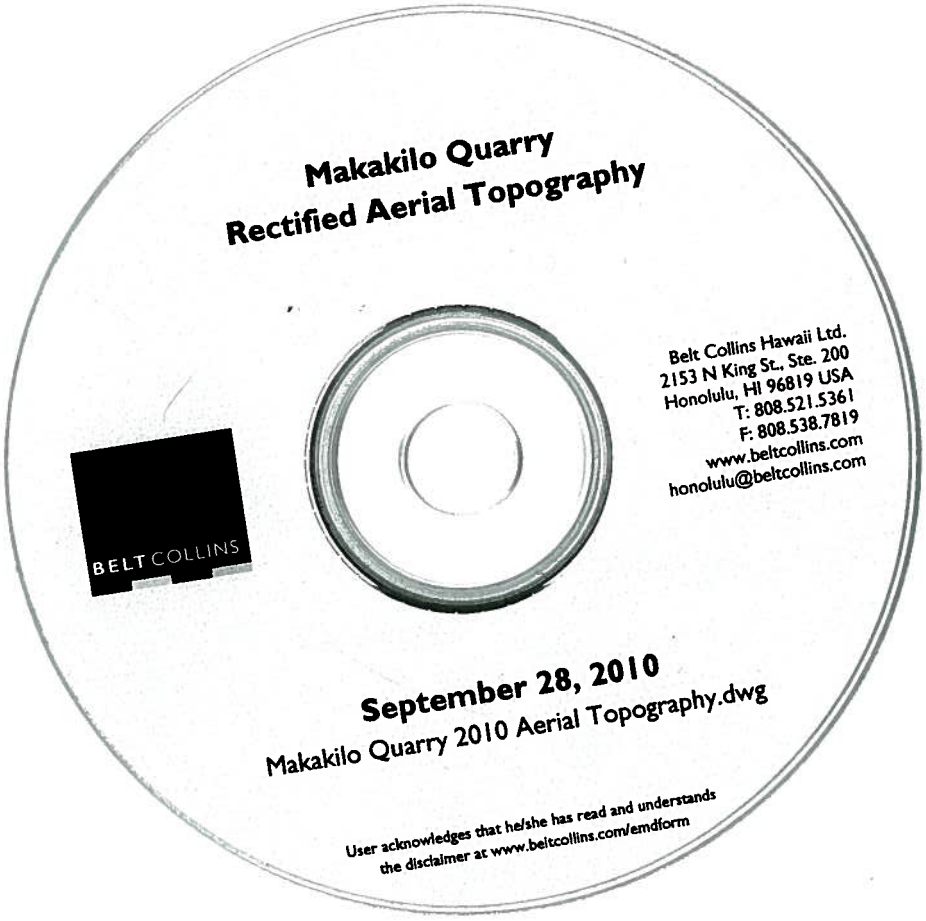
Very truly yours,

BELT COLLINS HAWAII LTD.

Lee Sichter
Principal Planner

LWS:jdk
enclosures

cc: Robert Creps/Grace Pacific Corporation
J. Douglas Ing, Esq./Watanabe Ing LLC
Orlando "Dan" Davidson/State Land Use Commission
Mike Jones/D.R. Horton – Schuler Homes, LLC


Makakilo Quarry
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T: 808.521.5361
F: 808.538.7819
www.beltcollins.com
honolulu@beltcollins.com
September 28, 2010
Makakilo Quarry 2010 Aerial Topography.dwg
User acknowledges that he/she has read and understands
the disclaimer at www.beltcollins.com/emdform

To <RCREPS@GRACEPACIFICCORP.COM> 01/03/2011 04:53 PM
cc "Moani Browne" <Moani.Browne@hawaiiantel.com>
Subject Hawaiian Telcom Ticket information - 8086714722

Aloha Mr. Creps –

Per your request, here is the information regarding the recent trouble on your phone line. Ticket 964004 was created at approximately 2:59pm on December 22, 2010 when you reported that customers were receiving a disconnect recording when calling telephone number 671-4722. Unfortunately when our technicians looked into this, we found that there was a software issue in the switch on our side that caused this to occur. Once our technicians restored the service into our switch, your line was back in service. Our records also indicate that we made test calls to 671-4722 at approximately 6:36pm on December 22nd and were successful in reaching the Grace Pacific Makakilo Hotline.

We apologize for this error as it occurred through no fault of Grace Pacific, and I sincerely hope it did not cause any adverse situations for your company.

Thank you, Moani

~~*~*~*~*~*~*~*

Moani Browne
Supervisor – 24 Hour Services Center
808-546-6004

ANNUAL COMPLIANCE REPORT

Makakilo Quarry, Hawaii

2011

APPENDIX C:

LETTER FROM BELT COLLINS TO DPP DATED MARCH 28, 2011
REGARDING REVISED RENATURALIZATION PLAN

March 28, 2011
2004.33.8000 / 11P-060

Mr. David K. Tanoue, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Mr. Tanoue:

Revised Renaturalization Plan
LUC Docket No. SP73-147, Grace Pacific Corporation
Makakilo Quarry, Ewa, O`ahu

We are writing to follow up on our letter of January 18, 2011 to you concerning the above matter. As we indicated in that letter, we had conversations with the staff of the State Land Use Commission. While a petition to the LUC remains an option, we have decided to prepare a revision to the Renaturalization Plan, dated November 4, 2009, which was previously submitted to you in fulfillment of and compliance with Condition 2.

To that end, we respectfully request a meeting with DPP to discuss the extent of the physical area that you wish to be included in revised plan. In your letter of August 24, 2010, you stated that the November 5, 2009 Renaturalization Plan

> "...excludes renaturalization of the balance of the quarry rim, the quarry floor and the surrounding buffer areas disturbed by golf course construction. Renaturalization of all areas with appropriate landscaping is necessary...the renaturalization plan should be expanded to include all areas disturbed by the quarry operations and former golf course construction as was represented by Grace Pacific." [emphasis added]

Before we can move forward with the requested revision to the plan, we wish to scope the extent of the area to be included. We are unclear concerning your reference to what representation by Grace Pacific you are referring at the top of page two of the August 24, 2010 letter. It would be most helpful if you could identify this representation. We look forward to the discussion of the areas to be included in the revised plan.

As you know, economic conditions have been quite challenging over the past three years. The cost of extending renaturalization beyond the area addressed in our 2009 plan may be considerable over the remaining life of the quarry. Therefore, your assistance in identifying the extent of the revised plan would be greatly appreciated. As you are probably aware, natural revegetation of much of the former Makakilo Golf Course has already occurred since Grace Pacific first began discussions with the City about quarry expansion in 2004. We look forward to meeting with you on this matter.

Very truly yours,

BELT COLLINS HAWAII LTD.

Lee W. Sichter
Principal Planner

LWS:jdk
cc: R. Creps
J. Douglas Ing

Belt Collins Hawaii Ltd. | 2153 North King Street, Suite 200 | Honolulu, HI 96819-4554 USA
Tel: 808.521.5361 | Fax: 808.538.7819 | www.beltcollins.com | honolulu@beltcollins.com

ANNUAL COMPLIANCE REPORT

Makakilo Quarry, Hawaii

2011

APPENDIX D:

LETTER FROM BELT COLLINS TO DPP DATED JUNE 13, 2011
REGARDING LOWER QUARRY LANDSCAPE PLAN

June 13, 2011
11P-130 / 2004-33-8000

Mr. David K. Tanoue, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Mr. Tanoue:

Lower Quarry Landscape Plan
LUC Docket No. SP73-147, Grace Pacific Corporation
Makakilo Quarry, Ewa, O`ahu

On behalf of Grace Pacific Corporation, we respectfully submit for your review and approval a landscape plan for the lower quarry of Makakilo Quarry. Condition No. 4 of the Land Use Commission (LUC) Docket No. SP73-147, Findings of Fact, Conclusions of Law, and Decision and Order, state that a landscape plan shall be submitted to the Director of Planning and Permitting for review and approval on the second anniversary date of the LUC's Decision and Order and the approved landscape plan shall be implemented within one year of its approval.

The second anniversary date was November 6, 2010. At that time Grace Pacific was preparing its second annual compliance report and inadvertently overlooked the submission date for the landscape plan. This plan is being filed to meet Condition No. 4 described above.

Sincerely yours,

Belt Collins Hawaii Ltd.

Glen T. Koyama
Project Manager

GTK:ajk
Enclosure

cc: Mr. Robert Creps, Grace Pacific Corporation

Belt Collins Hawaii Ltd. | 2153 North King Street, Suite 200 | Honolulu, HI 96819-4554 USA
Tel: 808.521.5361 | Fax: 808.538.7819 | www.beltcollins.com | honolulu@beltcollins.com

Makakilo Quarry

Grace Pacific Corporation

Lower Quarry Landscape Plan

Date: May 31, 2011

Prepared by:
Belt Collins Hawaii Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819

Prepared for:
Grace Pacific Corporation
P.O. Box 78
Honolulu, HI 96810

Table of Contents

Exhibits

1. Purpose of the Lower Quarry Landscape Plan

On November 6, 2008, **t**he Land Use Commission of the State of Hawaii adopted the Decision and Order in the matter of the Application of Grace Pacific Corporation to Extend the Life of the Makakilo Quarry (Docket No. SP73-147).

Condition No. 4 of the Approval requires that the Lower Quarry (the Processing Site), being Tax Map Key 9-1-016-004 ("Parcel 4", or the" Property"), be returned to landscaped open space use within six years of the date of the Decision and Order, that date being November 6, 2014. Condition No. 4 further required that a landscape plan (the "Plan") be submitted to the Director of Planning and Permitting for review and approval on the second anniversary date of the Decision and Order.

The second anniversary date was November 6, 2010. At that time Grace Pacific was preparing its second annual compliance report and inadvertently overlooked the submission date for the landscape plan. This plan is being filed to meet Condition No. 4 described above.

2. Cessation of Operations and Removal of Plant and Equipment

Condition No. 4 of the Approval requires that Grace Pacific close the Processing Site on Parcel 4 by relocating all uses on the site into the Upper Quarry pit or Campbell Industrial Park by December 31, 2012.

Upon the ceasing of operations, Grace Pacific will remove all of the mobile equipment not supporting the removal and remedial work being performed, the crushing and screening plants, conveyors, truck scale, trailers, sheds, tanks, the maintenance shop and related structures.

The office building and related infrastructure will be retained for security purposes, and the deep well and electrical substation and related infrastructure will remain to support operations in the Upper Quarry. All utility and communications lines supporting the office, substation and operations in the Upper Quarry will be retained. The deep well and substation, as well as the entrance to the tunnel under the H-1 Freeway, will be fenced off for security purposes.

All concrete footings, slabs, underground piping and conduit, and the portion of the IWS (individual wastewater system) not serving the office will be removed and properly disposed of off- site. All of the asphalt pavement, other than what is necessary to access the office and the perimeter of the Property for maintenance and security purposes will be removed. All overhead utility and communications lines, other than those described above, will be removed.

3. Voluntary Response Program

Grace Pacific is entering into a Voluntary Response Program (VRP) Agreement with the State of Hawai`i Department of Health for the assessment and remediation of potential environmental impacts arising from the historical industrial use of the Property. It is expected that the Agreement will be signed in June of 2011, and that work under the VRP will begin shortly thereafter, starting from the Kapolei Knolls end of the Property and working towards the maintenance shop.

The tasks contemplated under the VRP are as follows:

Task 1: Summary of Environmental Work.
Task 2: General Work Plan.
Task 3: Detailed Work Plan.
Task 4: Site Characterization.
Task 5: Environmental Hazard Evaluation.
Task 6: Remedial Alternatives Analysis.
Task 7: Public Participation Plan and Draft Response Action Memorandum.
Task 8: Final Response Action Memorandum.
Task 9: Remedial Action.
Task 10: Letter of Completion.

It is contemplated that as remedial actions under the VRP, including land farming (the above-ground remediation of soils to reduce the concentrations of petroleum hydrocarbons), and other remedial actions are completed, the affected portions of the Property will be released for landscaping as described in the Plan. The portions of the Property not subject to remediation will be landscaped following removal of the plant and equipment.

4. Continuance/Discontinuance of Current Landscape Plan

Grace Pacific's current obligations for landscaping of the Lower Quarry arise from the original 1973 Conditional Use Permit (72/CUP-15) and the 2002 Use Variance (2002/VAR-51) relocating the B-Grade activities to the Upper Quarry and allowing concrete and asphalt recycling in the Upper Quarry.

The 1973 CUP required visual screening of the quarry operations from viewpoints along the H-1 Freeway and Farrington Highway. An oleander hedge has been planted and maintained behind the guardrail along the H-1, and a berm with a chain-link security fence along the Farrington Highway boundary has been established and maintained with Oleander and other shrubs.

The 2002 Use Variance required a 50 foot wide (minimum) landscape strip, including canopy-form trees and other plantings along the southwestern property line, abutting the Kapolei Knolls subdivision. Grace Pacific has planted and maintains a 300 foot buffer as described above.

The existing landscaping will be maintained during the removal of plant and equipment and, as described further in the Plan, will thereafter be reduced in scope as the need for visual screening ceases.

A graded and grassed maintenance road will be created to keep access to the existing well location, utility structures, and tunnel.

5. Primary Objectives of the Landscape Plan

Visual Screening. For the period of time that the Property has an industrial appearance, being the active quarry processing and the subsequent removal of plant and equipment, visual screening will be an important element of the Plan. As noted above, as the requirement for screening declines, the nature of the landscaping will also de-emphasize visual screening.

Erosion and Dust Control. As the industrial activities cease on the Property, the focus of the landscape plan will shift from visual mitigation to minimizing erosion and dust emanating from the Property. The landscaped open space requirement, or buffer zone nature of the land use, does not suggest anything more than a gently graded, grassed open space.

Minimal Disturbance of Landforms. As can be seen from the topography of Exhibit 2 (comparison of 1969 (pre-quarry) with current), minimal disturbance of the original landforms has occurred from the quarry activity. The plan contemplates retaining this minimal disturbance, with grading work conducted only as necessary to enhance run-on/run-off sheet flow and to minimize opportunities for erosion.

Conservation of Water Resources. While Grace Pacific will be maintaining its deep well on the Property, requirements for landscaping and dust control in the Upper Quarry leave a minimal amount available for the Property. The existing BWS water supply off of Farrington Highway should be adequate for the needs of this Plan.

Drought Tolerant Plant Palette. It is contemplated that a grassing and ground cover mix will be established on the graded slopes previously affected by quarry operations. A carefully selected combination of adapted grass and ground cover species that are fast growing, drought tolerant and that will reseed or otherwise spread will be used. No large landscape materials will be used. A mixture of species will be used so that the most adapted plant types will establish within the varying microclimates present within the site. The colors and textures of the species used will be similar over the rainy and dry seasons to those occurring in the surrounding natural

hillside areas. This area should be considered a temporary re-naturalization only and mitigation should be limited to the establishment of the hydro-seeded grass and groundcover mixes recommended in this report which will blend with the surrounding hillsides around Makakilo.

Two Year Grow-in Period. Irrigation will be required to establish and maintain plant materials in this area. Rotary impact heads will be used for a period of approximately two years to establish the grassing and groundcovers. The irrigation rates will be slowly reduced during the second year of establishment to acclimate the plants to the climate of the area. Irrigation main and lateral lines will be buried in shallow 4" trenches to minimize UV exposure and other damage and to lengthen usable life of system. The system will be left in place after the two-year establishment period to be turned on periodically in times of drought to minimize potential fire hazards.

6. Exhibits to the Plan include;

- Exhibit 1 - Proposed Post-Closure Grading Plan for the Lower Quarry;
- Exhibit 2 - Overlay Comparison between 1969 Pre-Quarry Topography and Proposed Post-Closure Grading Plan;
- Exhibit 3 - Site Condition after Removal of Quarry Operations;
- Exhibit 4 - Plan and Section of Existing Landscape Buffer along Kapolei Knolls.
- Exhibit 5 - Plan and Section of Berm along Farrington Highway.
- Exhibit 6 - Selection of Recommended Grasses and Groundcover.
- Exhibit 7 - Before and After Views of Farrington Highway Berm.
- Exhibit 8 - Before and After Views from H-1 towards Diamond Head.

7. Landscape Guidelines

A. General Planting and Irrigation Guidelines

i. Landscape installation is to be performed by persons familiar with planting work and under the supervision of a qualified planting foreman. Work progress needs to be coordinated with the Owner's representative as areas become available for planting.

ii. The Landscape Contractor is to verify the location of all on-site utilities (including irrigation piping and wiring) before commencing work.

iii. Contractor must take all reasonable precautions to coordinate work and to minimize damage to graded site, electrical, gas, or irrigation lines, roads and curbs, and any related work.

iv. Plant locations shown on the plans are diagrammatic and subject to field adjustment by the Landscape Architect.

v. The Landscape Architect reserves the right to make substitutions, additions, and deletions in the planting scheme as necessary. Any such changes will be accompanied by equitable adjustments in the contract price if and when appropriate.

vi. Quantities shown on the Landscape Materials List are for the convenience of the Contractor only. It is the responsibility of the Contractor to provide and install the necessary landscape materials in quantities sufficient to fulfill the design at the specified spacing and depth, in the locations shown.

vii. The Contractor is to field verify the location of grass mix areas with the Landscape Architect prior to planting. Areas of grasses are to be staked or sprayed in the field by the Contractor for review by Landscape Architect.

viii. For grassed areas, rotor head irrigation will be used, Laterals and mainline pipes will be buried a minimum of 4 “in depth. Rotor heads shall be positioned to overlap at least 10% of the throw radius of the heads to ensure good coverage. Refer to Exhibit 26 for typical rotor head installation detail.

ix. All irrigation system will be automatically controlled with a suitable timer.

B. Erosion Control - Hydro-mulch. (Refer to Appendix C for product information)

i. Irrigation systems shall be installed prior to hydro mulching.

ii. All grass seed used in hydro mulching is to be pure live seed, approved and guaranteed by the supplier

iii. Soil Preparation: Scarify 1/2" deep all graded or disturbed areas. Do not weed or apply any herbicide to hydro mulched areas.

iv. Seed ratio to be applied per landscape specifications.

v. Contractor to provide irrigation to hydro-mulched areas for a minimum of 2 years. Constant light irrigation is needed during establishment and germination to promote seed germination and proper root growth.

C. Erosion Control - Geobinder

i. These are made from naturally occurring gypsum, polymers and asphaltic emulsions. Cementitious gypsum binders added to cellulose form a crust-like barrier that controls water and wind-induced erosion. Applied at recommended rates, it replaces some uses of erosion control blankets. The binder also has many valuable side effects besides its primary use for erosion such as mitigation of toxic levels of salt, Boron and Magnesium that may be present in certain site soils.

ii. The plaster lowers soil surface temperatures by reflecting solar radiation, reduces siltation of streams and waterways, buffers soil pH and adds valuable calcium and sulfur to the soil.

D. Erosion Control - Synthetic blanket

i. A variety of different erosion control blankets are available. The best blankets allow some sunlight and water to filter through to promote plant growth. Only materials specifically manufactured for use as erosion control blankets will be used.

Exhibits

- Exhibit 1 - Proposed Post-Closure Grading Plan for the Lower Quarry;
- Exhibit 2 - Overlay Comparison between 1969 Pre-Quarry Topography and Proposed Post-Closure Grading Plan;
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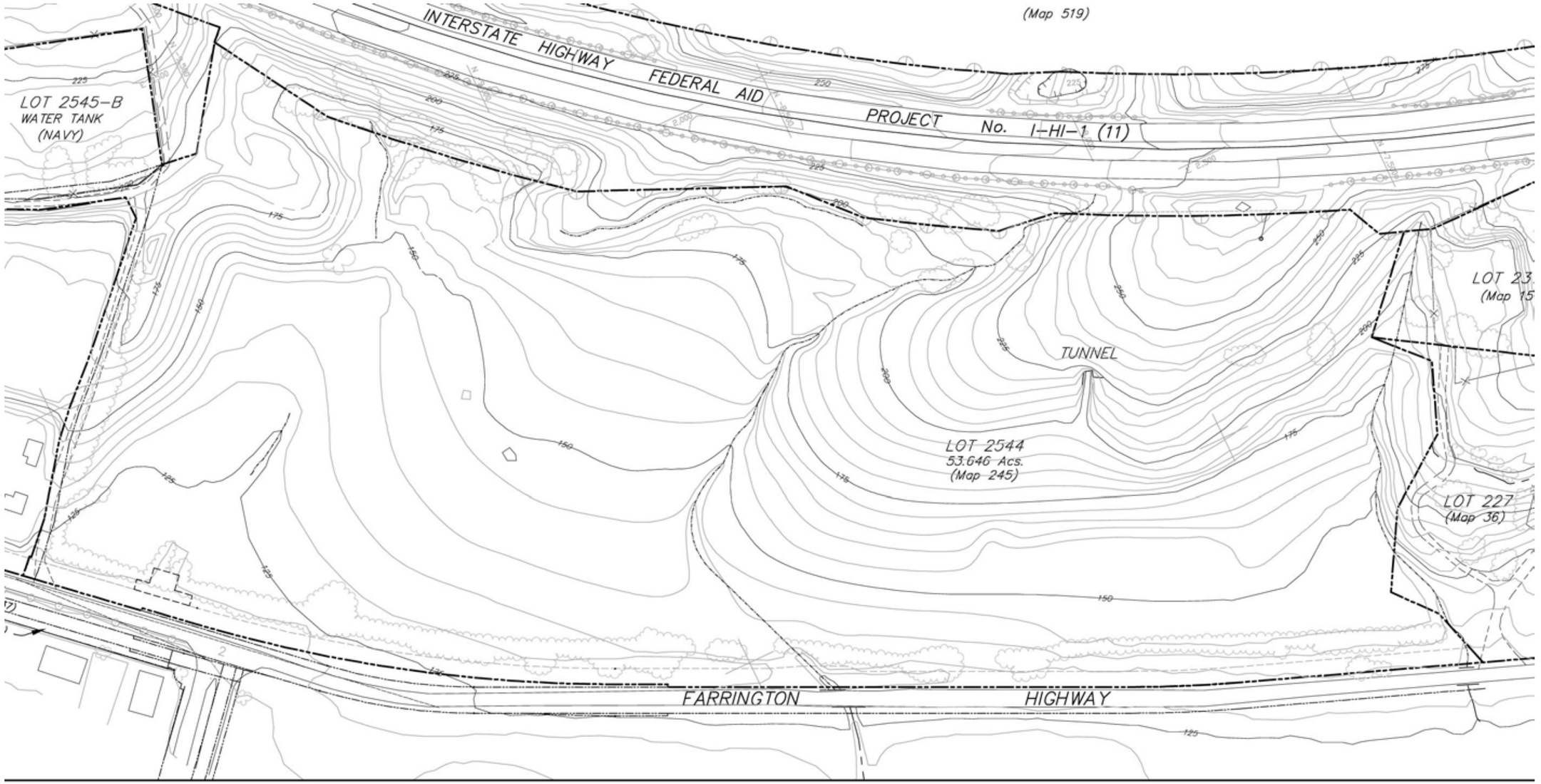


SITE CONDITIONS AFTER GRADING
MAKAKILO QUARRY – GRACE PACIFIC CORPORATION
MAY 31, 2011

Exhibit 1

Proposed Post-Closure Grading Plan for the Lower Quarry

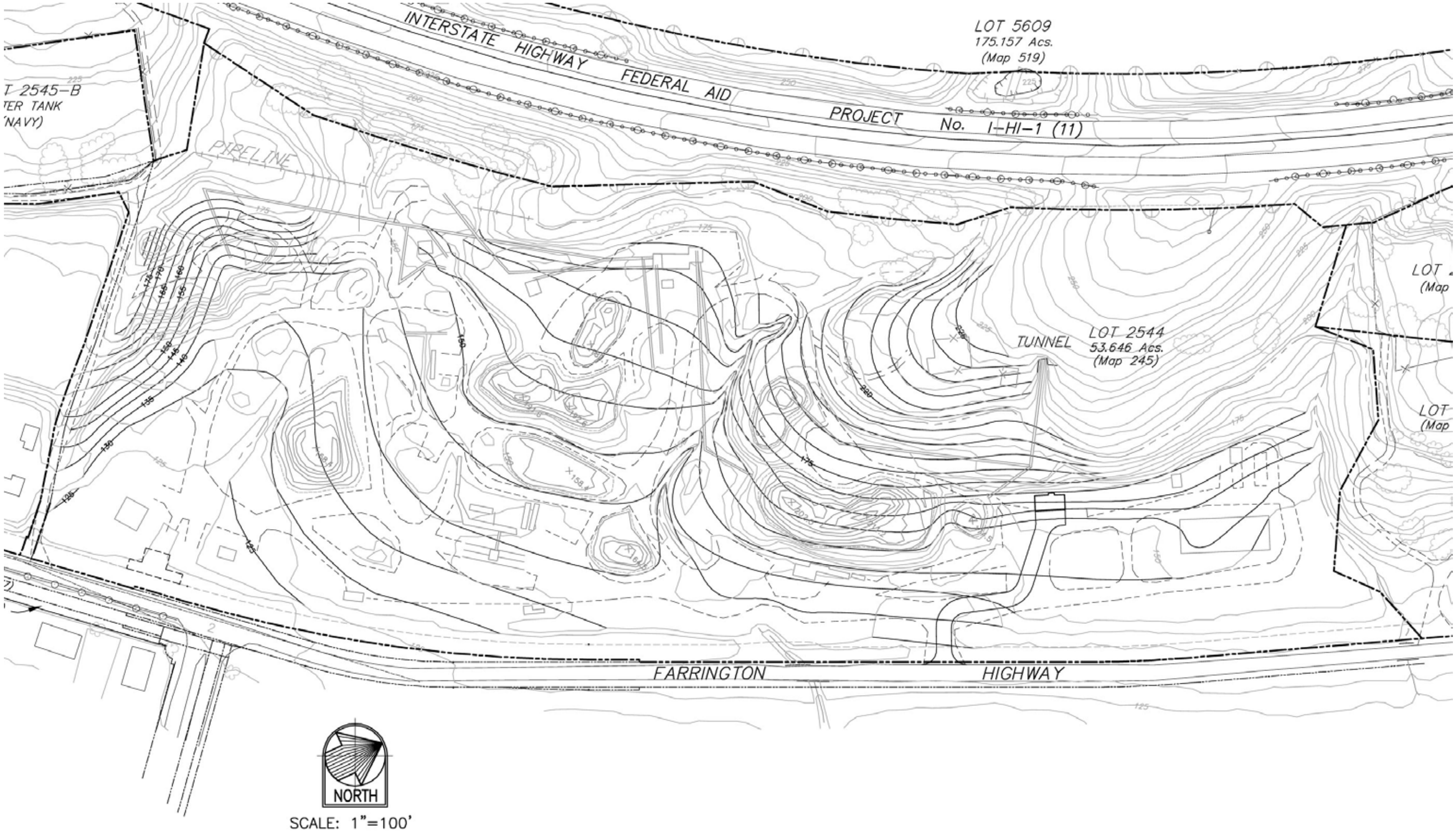


Exhibit 2

Overlay Comparison between 1969 Pre-Quarry Topography and Proposed Post-Closure Grading Plan

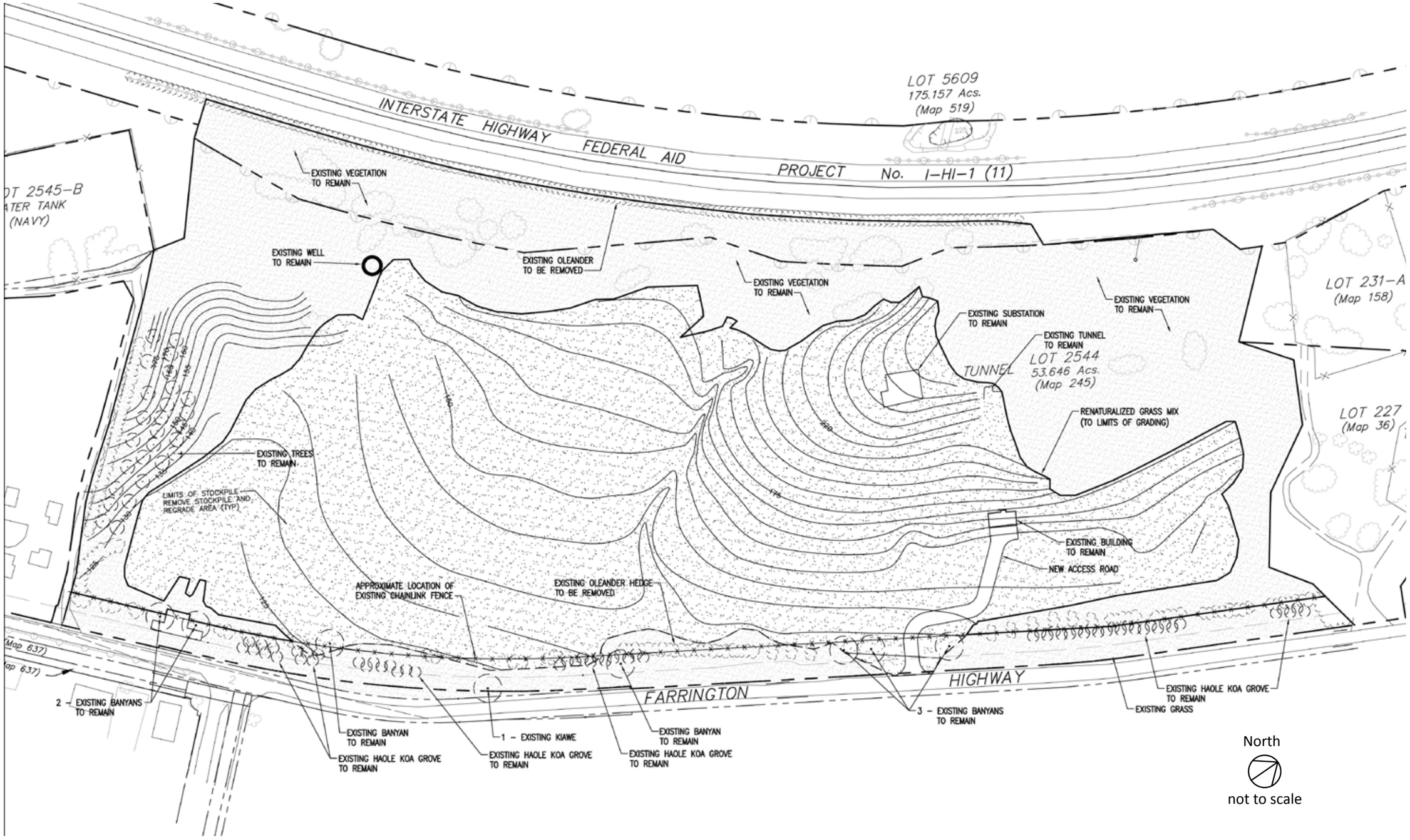
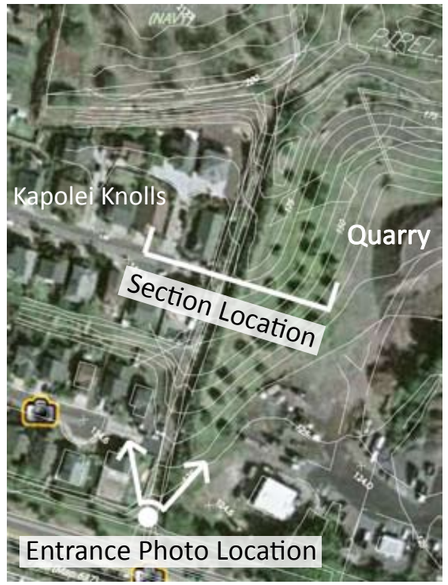


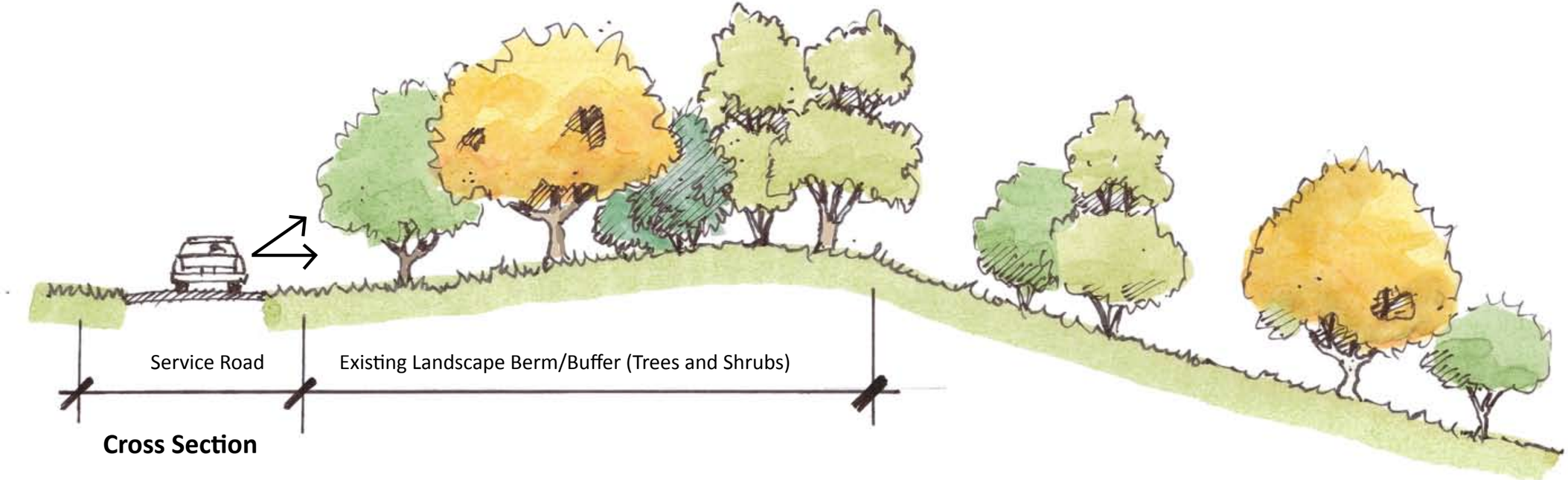
Exhibit 3

Site Condition After Removal of Quarry Operations



Plan View of Service Road

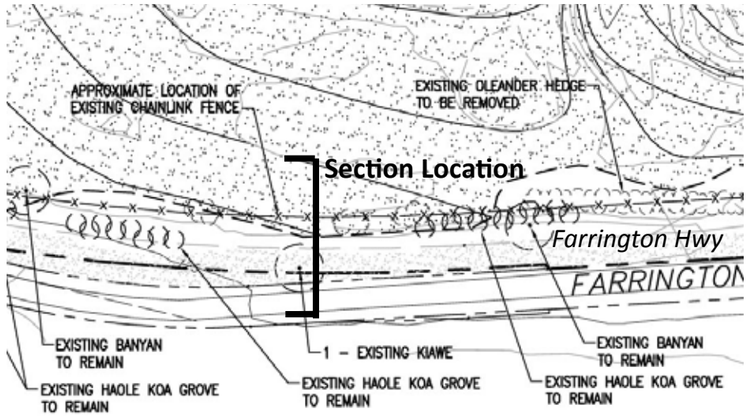
View of Service Road Entrance



Cross Section

Exhibit 4

Plan and Section of Existing Landscape Buffer Along Kapolei Knolls



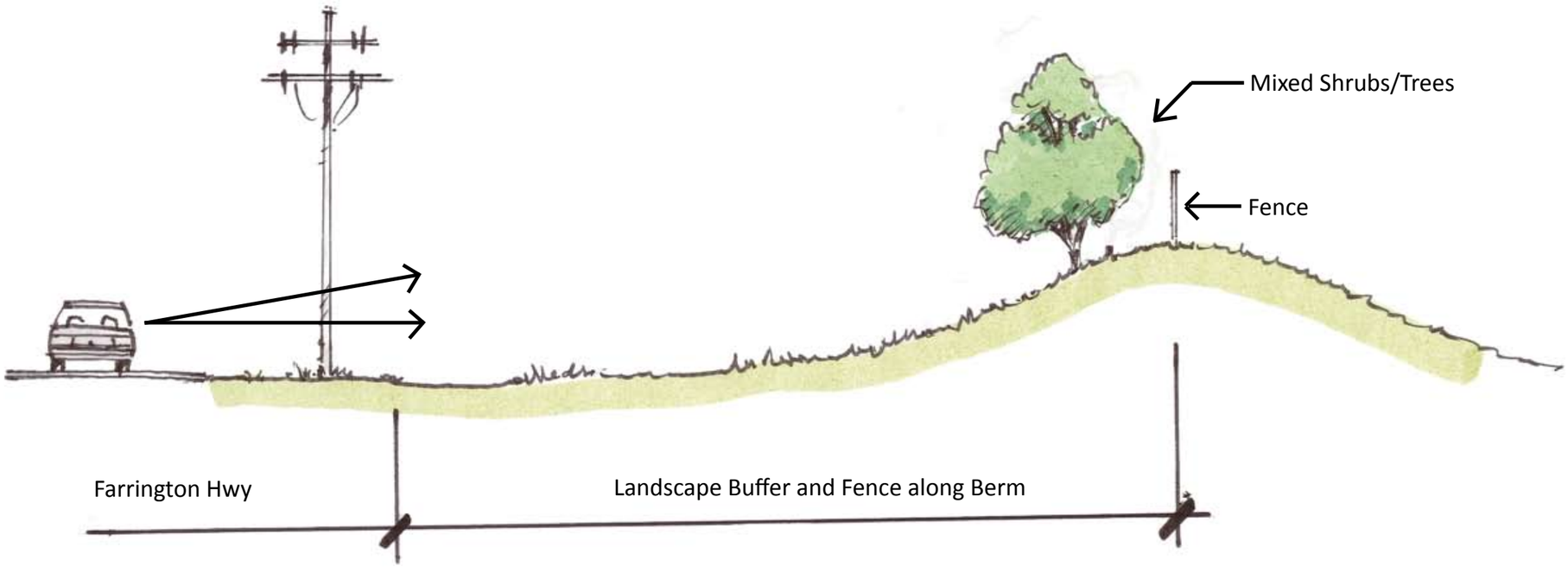


Exhibit 5

Plan and Section of Berm Along Farrington Highway

Buffelgrass

Common Bermuda

Annual Rye

PLANT MATRIX

BOTANICAL NAME	COMMON NAME	OUTPLANTING SIZE (hardened to sun and drought)	ESTIMATED OUTPLANTING QUANTITY PER ACRE	REMARKS
Cenchrus ciliaris ‘Laredo”	Loredo Buffelgrass	Un-hulled Seeds	10 lbs. de-hulled seeds	Hydroseed with bonded fiber matrix (Airtrol Geobinder) fertilizer (450 lbs. per acre, 10-30-10 + 2% iron/zinc) and mulch in one mix.
Cynodon dactylon	Common bermuda	Hulled Seeds	25 lbs. de-hulled seeds	
Lolium multiflorum	Annual rygrass	Seeds	25 lbs. seeds	

Exhibit 6

Selection of Recommended Grasses and Groundcover

BEFORE (Existing)

View Location of Planted Berm

AFTER (Removal of Shrubs at Fence)

Exhibit 7

Before and After Views of the Farrington Highway Berm

BEFORE (Existing Quarry Operations)

AFTER (Re-naturalized, regraded and planted)

Exhibit 8

Before and After Views from H-1 Toward Diamond Head Crater

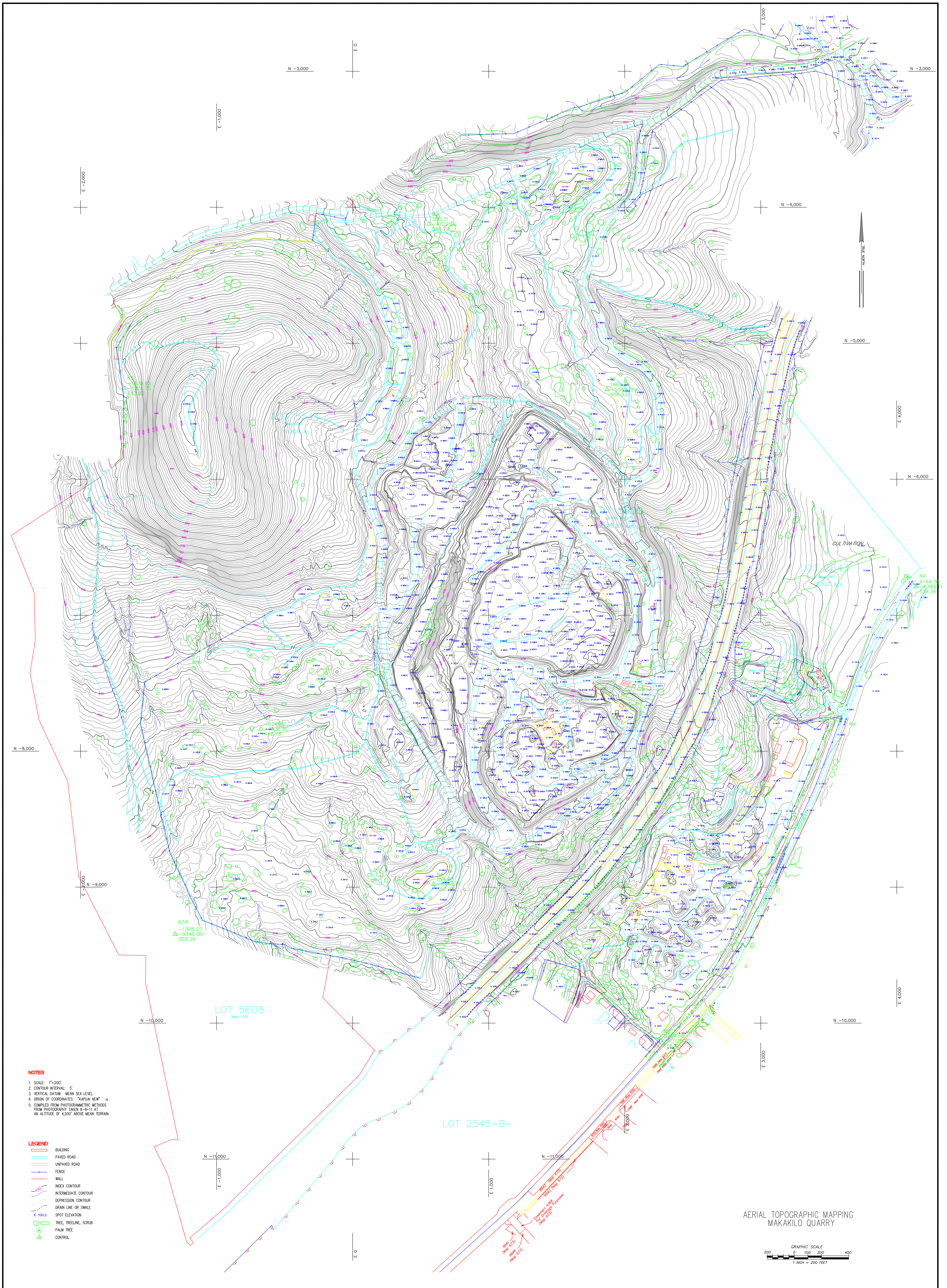
ANNUAL COMPLIANCE REPORT

Makakilo Quarry, Hawaii

2011

APPENDIX E:

MAKAKILO QUARRY AERIAL TOPOGRAPHY
DATED AUGUST 08, 2011



R. M. TOWILL CORPORATION
SINCE 1930

2024 N. King St., Suite 200
Honolulu, Hawaii 96819
September, 2011

ANNUAL COMPLIANCE REPORT

Makakilo Quarry, Hawaii

2011

APPENDIX F:

MAKAKILO QUARRY HOTLINE PHONE LOG

OCTOBER 01, 2010 THROUGH SEPTEMBER 30, 2011

GRACE PACIFIC MAKAKILO QUARRY HOTLINE 671-4722
PHONE LOG

HOTLINE LOG FROM OCTOBER 1, 2010
TO SEPTEMBER 30, 2011

Date of Call	Time of Call	Last Name	First Name	Message/Description of Call	Caller's Contact Info	Investigation/ Responsible Party	Investigation/ Action Taken	Follow-up with Caller	Date Of Follow-up
None									8/4/2010

ANNUAL COMPLIANCE REPORT

Makakilo Quarry, Hawaii

2011

APPENDIX G:

LETTER FROM BELT COLLINS TO DPP DATED JULY 08, 2011
REGARDING COMPLIANCE WITH CUP CONDITION #4

BELT COLLINS®

July 8, 2011
2004-33-8000 / 11P-136

Mr. David K. Tanoue, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, HI 96813

Dear Mr. Tanoue:

Conditional Use Permit No. 2007/CUP-91
Grace Pacific Corporation
92-1130 Pueonani Street - Makakilo
Tax Map Keys 9-2-3: Por 74 and 82; and 9-2-2: Por 6

On behalf of Grace Pacific Corporation, we submit for your review and approval the enclosed set of building drawings in compliance with Condition #4 of Conditional Use Permit No. 2007/CUP-91 which states:

Prior to the issuance of a building permit for any structures within and/or the relocation of any structures to the Project Site, the applicant shall submit to the Director for review and approval:

a. *A site plan showing compliance with all development standards of the Land Use Ordinance, including but not limited to, parking and loading, structure heights and setbacks, and building coverage.*
b. *A water source and distribution plan approved by the Board of Water Supply. The plan shall include the disposition of the existing water source in the processing site.*
c. *An outdoor lighting plan showing all existing and proposed outdoor lighting fixtures. All exterior lighting shall be fully shielded to prevent glare and light spillage on surrounding lots and public rights-of-way. Lighting for unloading of cold-planed asphalt shall be directed away from adjoining residential uses and be turned off upon completion of unloading operations.*

These drawings provide the plans for equipment expansion in Makakilo Quarry. They are also for review by Mr. Keith Tamura of your staff. Mr. Tamura has made an initial review of the equipment expansion plans as part of the Applicant's building permit application process for the quarry.

If there are any questions regarding this submittal, please do not hesitate to contact me at 521-5361.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Glen T. Koyama

GTK:jdk
cc: Robert Creps, Grace Pacific Corporation
Enclosure

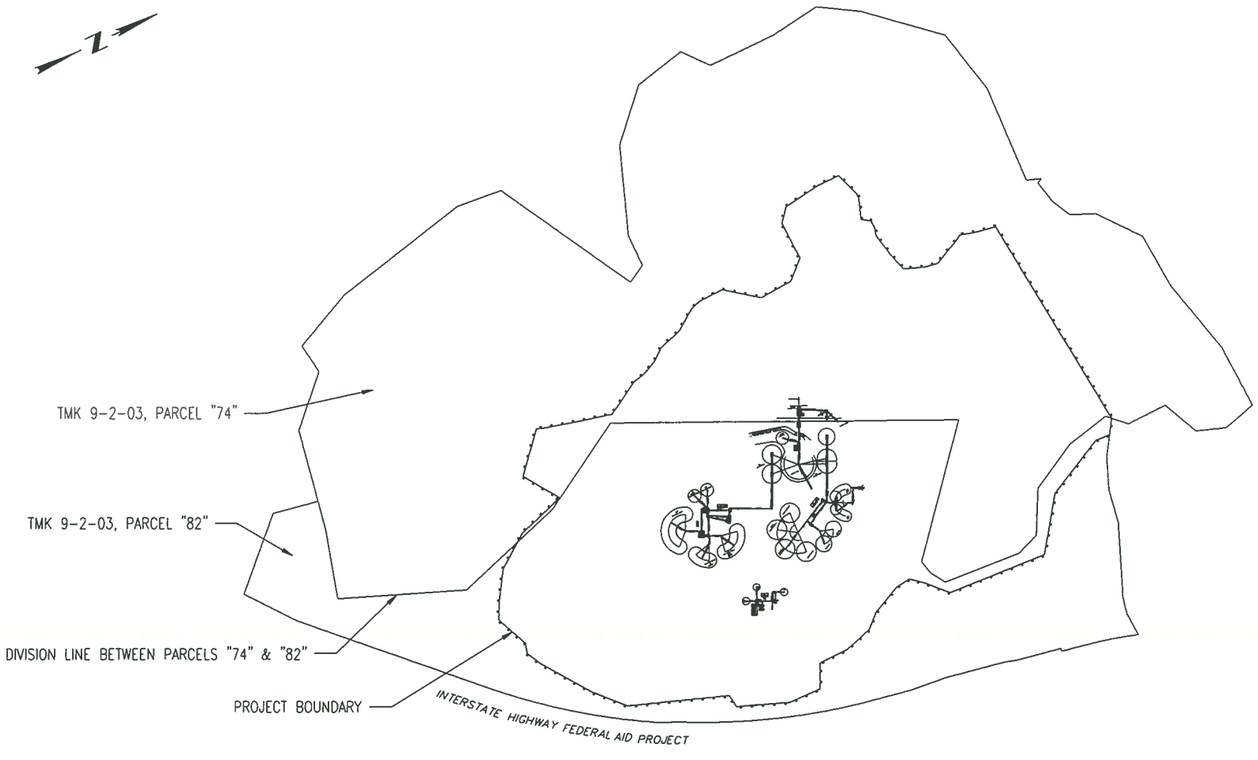
Belt Collins Hawaii Ltd. | 2153 North King Street, Suite 200 | Honolulu, HI 96819-4554 USA
Tel: 808.521.5361 | Fax: 808.538.7819 | www.beltcollins.com | honolulu@beltcollins.com

GRACE PACIFIC CORPORATION, MAKAKILO QUARRY

MAKAKILO, OAHU, HAWAII

QUARRY EQUIPMENT EXPANSION

TMK: 9-2-03, PARCELS 74 AND 82



SITE PLAN

1"=500'

OWNER

GRACE PACIFIC CORPORATION
949 KAMOKILA BLVD.
SUITE 100
KAPOLEI, HI 96707

ENGINEER

KH2A ENGINEERING, INC.
BRIAN YEE, PE
(503) 230-9348
byee@kh2aengineering.com

OWNER'S AGENT

TAPESTRY PARTNERS LTD.
ERIC PICKLE
(253) 833-0126
eric@tapestrypartners.net

CONTRACTOR

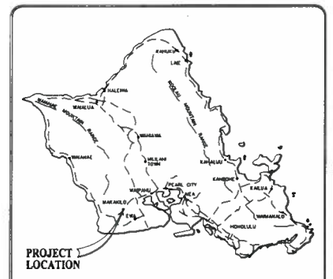
TO BE NAMED AT TIME OF PERMIT

SPECIAL INSPECTOR

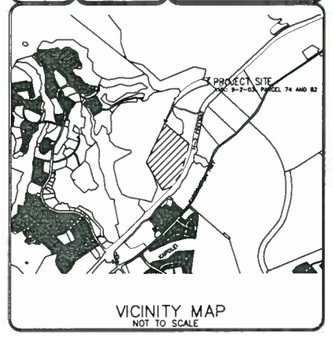
TO BE NAMED AT TIME OF PERMIT

ADDRESS

SITE HAS NO ADDRESS



ISLAND OF OAHU



VICINITY MAP
NOT TO SCALE

CODE REVIEW SUMMARY

IBC GENERAL OVERVIEW

THIS PROJECT ADDS ROCK PROCESSING AND CONVEYING EQUIPMENT LOCATED IN AN EXISTING OUTDOOR ROCK QUARRY. THE EQUIPMENT IS NON-COMBUSTIBLE AND IS SUPPORTED ON STRUCTURAL STEEL. THERE WILL BE SMALL OPERATOR CONTROL ROOMS AND MOTOR CONTROL ROOMS.

TOTAL AREA OF OCCUPIED CONTROL ROOMS		OCCUPANTS
1. PRIMARY STAGE OPERATOR'S CAB	64 SQ.FT.	1
2. A-ROCK OPERATOR'S CAB	64 SQ.FT.	1
3. B-ROCK OPERATOR'S CAB	64 SQ.FT.	1
4. WASH PLANT	49 SQ.FT.	1
TOTAL AREA OF MOTOR CONTROL ROOMS		
1. PRIMARY STAGE MCC ROOM	151 SQ.FT.	1
2. PRIMARY/SECONDARY MCC ROOM (T1)	151 SQ.FT.	1
3. A-ROCK PLANT MCC ROOM (T2)	304 SQ.FT.	1
4. A-ROCK PLANT MCC ROOM (T3)	151 SQ.FT.	1
5. B-ROCK/RECYCLE PLANT MCC ROOM (T4)	304 SQ.FT.	1
6. WASH PLANT	320 SQ.FT.	1

CONSTRUCTION TYPE: II B
OCCUPANCY TYPE: U HEAVY EQUIPMENT

ACCESSIBILITY CHAPTER 11

SECTION 1101.2 OF 2003 IBC WITH LOCAL AMENDMENTS:

THIS PROJECT IS SUBJECT TO THE CONFORMANCE WITH THE DESIGN AND CONSTRUCTION REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES.

ENERGY CONSERVATION CHAPTER 13

CLIMATE ZONE 1

CONDITIONED SPACE - A SPACE WITHIN A BUILDING ENVELOPE HEATED OR COOLED BY HVAC SYSTEM		1302 1302
EXTERIOR ENVELOPE - OTHER BUILDINGS		
INSULATION MATERIALS		
FLOORS	R-11	
ROOFS	R-19	
WALLS	R-13	
WINDOWS <30% GLAZING FRACTION	≤0.54 U FACTOR ≤0.54 SHADING COEFFICIENT	
DOORS	≤0.54 U FACTOR	
VAPOR RETARDER		
1-PERM VAPOR RETARDER ON WARM SIDE OF ALL EXTERIOR WALLS, FLOORS AND CEILINGS.		1312.1.4
HVAC		
SIMPLE SYSTEMS (PACKAGED UNITARY EQUIPMENT)		1317.1
AIRCOOLED, CONSTANT VOLUME PACKAGED UNITARY EQUIPMENT. THAT PROVIDE HEATING AND COOLING AND REQUIRES ONLY EXTERNAL CONNECTION TO DUCTWORK AND ENERGY SERVICES.		1317.9
VENTILATION		
NATURAL 4% OF FLOOR AREA OR 20 CFM OUTDOOR AIR PER OCCUPANT		
HVAC CONTROL		
PROGRAMMABLE		
THERMOSTAT, DOWN TO 55°F, UP TO 85°F		1317.4.2.1
OFF HOUR CONTROL		1317.4.3
AUTOMATIC SHUTDOWN		1317.4.3.1

INDIVIDUAL WASTE WATER SYSTEM

IWS FILE NO.: 45458 (SEPTIC TANK)
PLUMBING FIXTURES
6 WATER CLOSET
6 LAVATORY

MINE SAFETY AND HEALTH ADMINISTRATION

THE PROJECT SITE IS A M.S.H.A. REGULATED "CLOSED ACCESS FACILITY", FOR SITE MAP REFER TO THE "GENERAL NOTES" PAGE 3.

MAKAKILO QUARRY - M.S.H.A. MINE # 51-00173
MINE IS MONITORED BY THE WESTERN DISTRICT OFFICE VACAVILLE
2060 PEABODY ROAD, SUITE 610
VACAVILLE, CA 95687
(707) 271-1250

ZONING: AG-2 & R-5

USE PERMITS: THE DECISION AND ORDER FOR THE "SPECIAL USE PERMIT", DOCKET NO. SP73-147, FILED AND EFFECTIVE ON NOVEMBER 7, 2008.

THE DECISION AND ORDER FOR THE "CONDITIONAL USE PERMIT" NO. 2007/CIP-91, DATED JULY 17, 2009.

ALL USE PERMITS, ZONING & L.U.O. INFORMATION ON PAGES 003A, 003B, 003C, 003D, 003E 362, 363, 364, 365 & 366. THESE SHEETS ARE ALSO NUMBERED LUO 01 - LUO 10.

DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
APPROVED FOR CONSTRUCTION

BRIAN K YEE
LICENSED PROFESSIONAL ENGINEER
No. 11092
HAWAII U.S.A.

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

KH2A ENGINEERING INC.
PORTLAND OREGON
KH2A PROJECT NUMBER: 1306
PLOT SCALE: 6000

Rev	Description	Date	By
G	DPP Restructure	10 JAN 11	DC
F	GENERAL UPDATES	4 FEB 11	DC
E	GENERAL UPDATES	23 MAY 10	MC
D	GENERAL UPDATES	17 MAY 10	MC

Item	Qty.	Description	Drawing
Mfr.		Bill of Materials	
Mdse.			

AMI
Aggregate Machinery Inc.
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

Title
SITE PLAN
MAKAKILO QUARRY EXPANSION
GRACE PACIFIC CORPORATION

Design By:	Drawn By:	Date:	Scale:
BKY	GR	29 APRIL 10	NOTED

Sheet: 1 Of 1 | Drawing No. D05475 | Rev. G

GENERAL NOTES

LOADING CRITERIA

ROOF LL	20.0 PSF
FLOOR LL	50.0 PSF OR 1000 LB. CONCENTRATED LL
CONVEYOR WALKWAY LL	40.0 PSF OR 300 LB. CONCENTRATED
WIND	BASIC WIND SPEED = 105 MPH 3 SECOND GUST EXPOSURE C
SEISMIC	S_s=0.6 S1=0.16 SITE CLASS B SOIL IMPORTANCE FACTOR = 1.0

GENERAL REQUIREMENTS

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE "INTERNATIONAL BUILDING CODE" ("IBC") 2003.
2. THE OWNER HAS APPLIED TO THE COUNTY OF HONOLULU FOR THE GENERAL BUILDING PERMIT AND WILL OBTAIN AND PAY FOR THIS PERMIT PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR ALL PERMITS AND BONDS AS REQUIRED FOR THE CONSTRUCTION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION METHODS, TECHNIQUES, SEQUENCING, AND SAFETY REQUIRED FOR THE CONSTRUCTION.
4. ALL STAIRS, HANDRAILS, GUARDRAILS, LADDERS, RAMPS AND MECHANICAL GUARDS SHALL COMPLY WITH 29 CODE OF THE FEDERAL REGULATIONS SECTION 1910.
5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO BEGINNING WORK. NOTIFY ENGINEER OF ANY DISCREPANCIES BEFORE BEGINNING WORK.
6. A "STRUCTURAL" ELEMENT IS DEFINED AS A MEMBER, PLATE OR FASTENER ASSOCIATED WITH A COLUMN, BEAM OR DIAGONAL BRACE AS DETAILED ON THE STRUCTURAL ARRANGEMENT DRAWINGS.

SUBMITTALS

1. CONTRACTOR SHALL PROVIDE TO ENGINEER PRIOR TO FABRICATION ALL SHOP DRAWINGS, PRODUCT DATA, ETC. NECESSARY FOR PERFORMANCE OF THE WORK IN THE SHOP AND AT THE SITE. SUBMIT (5) SETS OF THE FOLLOWING:

   WELDING/CUTTING PERMIT
   INSPECTION/TESTING REPORTS
   REINFORCING STEEL SHOP/PLACEMENT DRAWINGS
   CONCRETE MIX DESIGN
   STRUCTURAL STEEL ERECTION DRAWINGS
   WELDER CERTIFICATIONS
   WELDING PROCEDURES
   EQUIPMENT CATALOG CUTSHEETS
   BUILDING SYSTEMS
   DOORS AND HARDWARE

PROJECT/SITE CONDITIONS

1. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS. IF EXISTING CONDITIONS DIFFER FROM THOSE SHOWN, THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONTINUANCE OF THE WORK.
2. CONTRACTOR SHALL BE RESPONSIBLE TO WORK AROUND ALL OBSTRUCTIONS DURING THE INSTALLATION OF NEW MATERIALS.

TEMPORARY CONSTRUCTION FACILITIES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN AND CONSTRUCTION OF ALL TEMPORARY SHORING, BRACING, ETC. REQUIRED FOR THE CONSTRUCTION.
2. ALL SHORING PLANS, BRACING DESIGNS AND CALCULATIONS SHALL BE STAMPED BY A REGISTERED STRUCTURAL ENGINEER LICENSED IN THE STATE OF HAWAII. SUBMIT (5) SETS OF SHORING PLANS AND CALCULATIONS.

FIRE PREVENTION AND PROTECTION

1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE STATE AND LOCAL FIRE-PREVENTION REGULATIONS AND ORDINANCES. WHERE THESE REGULATIONS DO NOT APPLY, APPLICABLE PARTS OF NFPA NO. 241 "STANDARD FOR SAFEGUARDING OF BUILDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS" SHALL BE FOLLOWED.
2. CUTTING AND WELDING SAFETY PROCEDURES SHALL BE IN ACCORDANCE WITH NFPA NO. 51B "STANDARD FOR FIRE PREVENTION IN USE OF CUTTING OR WELDING OPERATIONS". PRIOR TO ANY CUTTING OR WELDING, A CUTTING/WELDING PERMIT SHALL BE OBTAINED EACH DAY FOR EACH CUTTING/WELDING OPERATION FROM THE OWNER'S REPRESENTATIVE RESPONSIBLE FOR AUTHORIZING CUTTING OR WELDING OPERATIONS. CUTTING OR WELDING WITHOUT A PERMIT SHALL NOT BE PERMITTED.

INSPECTION AND TESTING

1. SPECIAL INSPECTIONS SHALL CONFORM TO SECTION 1704 OF THE "IBC" 2003.

   REINFORCING STEEL PLACEMENT
   CONCRETE PLACEMENT
   HIGH STRENGTH BOLTS
   SHOP WELDING
   FIELD WELDING
   BOLTS INSTALLED IN CONCRETE
   STRUCTURAL MASONRY

2. ALL INSPECTIONS AND TESTING WITH RELATED SAMPLING, WHETHER REQUIRED BY THE CONSTRUCTION DOCUMENTS OR BY THE GOVERNING BUILDING CODE SHALL BE PERFORMED BY AN INDEPENDENT TESTING AGENCY MEETING THE REQUIREMENTS OF ASTM E329. THE OWNER SHALL SECURE AND PAY FOR THE SERVICES OF THE INDEPENDENT TESTING AGENCY TO PERFORM ALL INSPECTIONS AND TESTS. SUBMIT COPY OF INSPECTION/TEST REPORTS TO THE ENGINEER. CONTRACTOR TO NOTIFY SPECIAL INSPECTOR WHEN INSPECTIONS ARE REQUIRED.

STRUCTURAL STEEL/METAL FABRICATIONS

1A. STRUCTURAL STEEL:

   STEEL WIDE FLANGE SHAPES SHALL BE ASTM A992
   RECTANGULAR AND SQUARE HSS SHAPES SHALL BE ASTM A500 GRADE B, FY=46KSI, GALVANIZED.
   STRUCTURAL STEEL PLATES SHALL BE ASTM A572 GRADE 50.
   STEEL PIPE SHALL BE ASTM A53 GRADE B, FY=35 KSI, GALVANIZED.

1B. NON-STRUCTURAL, SECONDARY STEEL:

   SECONDARY, NON-STRUCTURAL STEEL PLATES SHALL BE ASTM A36 MINIMUM.
   ANGLES, CHANNEL AND BAR SHALL BE ASTM A36 MINIMUM.
   STEEL WIDE FLANGE SHAPES SHALL BE ASTM A36 MINIMUM.
   RECTANGULAR AND SQUARE HSS SHAPES SHALL BE ASTM A500 GRADE B GALV.
   STEEL PIPE SHALL BE ASTM A53 GRADE B, FY=35 KSI, GALVANIZED.

2. FLOOR PLATES: ASTM A36 RAISED (MEDIUM) PATTERN. THICKNESS IS EXCLUSIVE OF RAISED PATTERN HEIGHT. SEE PAINTING NOTES FOR COATING SYSTEM.
3. STAIR TREADS SHALL BE ANSI MBG 531 GALVANIZED GRIP STRUT AS NOTED ON PLANS. GRATING GRIP STRUT TO BE CONNECTED TO SUPPORTING MEMBERS WITH BENT-CLIP & GALVANIZED TEKS SCREWS FASTENERS OR WELDED. PROVIDE FASTENERS @ 18" O.C. WITH 2 MIN. PER PANEL. SUBMIT CLIP DETAILS WITH SHOP DETAILS.
4. FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".

5A. FASTENERS - STRUCTURAL
HIGH STRENGTH, STRUCTURAL BOLTS SHALL BE ASTM A325. HIGH STRENGTH BOLTING SHALL BE IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". TIGHTENED BOLTS TO BE FULLY PRETENSIONED IN ACCORDANCE WITH SECTION 8 OF THIS AISC CODE. BOLTS SHALL BE HOT DIP GALVANIZED.

5B. FASTENERS - NON-STRUCTURAL
NON-HIGH STRENGTH, NON-STRUCTURAL FASTENERS SHALL BE ASTM A307 GRADE A ZINC PLATED OR HOT DIP GALVANIZED.

6. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 "STRUCTURAL WELDING CODE-STEEL". WELDING FILLER METAL SHALL BE AWS A5.1 OR A5.5 E70XX ELECTRODES, AWS A5.18 ER70S-X, OR AWS A5.20 E7XTX LOW HYDROGEN TYPE. WELDERS SHALL BE AWS AND COUNTY OF HONOLULU CERTIFIED. AWS AND COUNTY OF HONOLULU CERTIFIED.
SUBMIT COPY OF ALL PROCEDURE QUALIFICATIONS AND WELDER CERTIFICATIONS PRIOR TO ANY WELDING.
7. SURFACES TO BE WELDED SHALL BE PROTECTED FROM PAINTING BY USE OF MASKING. INADVERTENT OVER-SPRAY ON SURFACES TO BE WELDED SHALL BE REMOVED BY WIRE BRUSHING.
8. ANCHOR BOLTS SHALL BE ASTM F1554 GRADE 36 & 105 BOLTS, HOT DIP GALVANIZED. FOR DIAMETERS AND LENGTHS SEE PLANS.

REINFORCING STEEL

1. REINFORCING STEEL SHALL BE ASTM A615 GRADE 60 DEFORMED BARS.
2. WELDED WIRE FABRIC (WWF) SHALL BE ASTM A185 AND GALVANIZED.
3. FABRICATION AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CRSI MSP-1 "MANUAL OF STANDARD PRACTICE" AND CHAPTER 5 OF ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
4. REINFORCING STEEL LAP SPLICES NOT OTHERWISE INDICATED SHALL BE ACI STANDARD CLASS B IF SPLICED AT THE SAME LOCATION OR CLASS A IF SPLICES ARE STAGGERED BETWEEN ADJACENT BARS ONE LAP LENGTH MINIMUM.
5. UNLESS OTHERWISE INDICATED, MINIMUM CLEARANCE FOR REINFORCING STEEL SHALL BE 1" FOR #5 AND SMALLER BARS AND 1-1/2" FOR #6 AND LARGER BARS. INSTALL WITH PROPER BAR SUPPORTS PRIOR TO CONCRETE PLACEMENT. MINIMUM CONCRETE COVER OVER BARS AGAINST EARTH SHALL BE 3".

CONCRETE

1. CONCRETE SHALL BE f'c = 4,000 PSI @ 28 DAYS. SLUMP SHALL BE 3" ± 1". CONCRETE SHALL CONTAIN A WATER REDUCER. MAXIMUM SIZE AGGREGATE SHALL BE 3/4". CONCRETE MATERIALS AND QUALITY SHALL BE IN ACCORDANCE WITH ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". SUBMIT COPY OF CONCRETE MIX DESIGN IN ACCORDANCE WITH SECTION 1704, 2003 IBC.
2. TRANSPORTING OF READY-MIX CONCRETE SHALL BE IN ACCORDANCE WITH ASTM C94 "STANDARD SPECIFICATION FOR READY-MIX CONCRETE" AND CONCRETE PLACEMENT AND CURING SHALL BE IN ACCORDANCE WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
3. EXTERIOR SLAB FINISH SHALL BE BROOM FINISH.
4. PROVIDE 3/4" CHAMFER @ ALL CORNERS.
5. STRENGTH TESTING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS". A SET OF (4) - 6" x 12" CYLINDERS SHALL BE MADE FOR EACH 50 CUBIC YARDS OR FRACTION THEREOF OF CONCRETE PLACED EACH DAY.

GROUT

1. GROUT TO BE MASTERFLOW 555 NON-SHRINK GROUT AS MANUFACTURED BY MASTER BUILDERS TECHNOLOGIES.
2. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

PAINTING

1. STRUCTURAL STEEL AND EQUIPMENT SHALL BE PAINTED WITH THE FOLLOWING SYSTEM:

   SURFACE PREPARATION: SSPC-SP3 POWER TOOL CLEANING PRIMER COAT - FORREST 16P300X RED OXIDE PRIMER, OR EQUAL. INTERMEDIATE AND TOPCOATS - FORREST QUIXNAMEL INDUSTRIAL ENAMEL 100, COLOR RAL #3005 WINE RED, 2.0-2.5 MILS DFT, OR EQUAL.

2. HANDRAILS, GUARDRAILS, DRIVE GUARDS, TAIL PULLEY GUARDING, TAKE-UP GUARD FENCES, TAKE-UP WEIGHT BOXES, AND SCISSOR TAKE-UP WEIGHTS SHALL BE SAFETY YELLOW.
3. INTERMEDIATE AND FINISH COATS NOT TO BE INCLUDED ON THE FAYING SURFACES OF ANY CONNECTION DESIGNATED TO BE SLIP CRITICAL. PREPARE SURFACE AND APPLY IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ALL PAINT TO BE SHOP APPLIED.
4. PAINT SHALL BE APPLIED IN ACCORDANCE WITH THE APPLICABLE PARTS OF SSPC PA1 "SHOP, FIELD, AND MAINTENANCE PAINTING" AND THE MANUFACTURER'S LABELED INSTRUCTIONS AND SPECIFICATIONS. TOUCH-UP PAINTING OF DAMAGED AREAS AS A RESULT OF THIS PROJECT SHALL BE DONE IN ACCORDANCE WITH SECTION 9.3 OF SSPC PA-1.
5. SURFACE PREPARATION SHALL BE IN ACCORDANCE WITH THE PAINT MANUFACTURERS LABELED INSTRUCTIONS AND SPECIFICATIONS EXCEPT STRUCTURAL STEEL SURFACE PREPARATION SHALL BE SSPC SP3, AND FIELD TOUCH-UP SHALL BE SSPC-SP3.

FOUNDATIONS

1. ALLOWABLE SOIL BEARING PRESSURE SHALL BE 6000 PSF, WITH 1/3 INCREASE FOR WIND AND SEISMIC.
2. ALL FOOTINGS HAVE BEEN DESIGNED TO BEAR ON UNDISTURBED SOILS OR ENGINEERED FILLS AT DEPTHS INDICATED.
3. FOUNDATIONS WERE DESIGNED PER GEOLABS, INC. SOILS REPORT, DATED 10/28/2010.
4. RECLAIM FEEDER HOUSES WERE DESIGNED USING PRESSURES DEVELOPED PER SHAW REPORT DATED APRIL 14, 2010.
5. A COPY OF SOILS REPORT SHALL BE MADE AVAILABLE TO COUNTY OF HONOLULU. SOILS REPORT SHALL INCLUDE SEISMIC SITE CLASS.

SITE PREPARATION

1. AREAS TO RECEIVE FILL SHALL BE SCARIFIED TO A DEPTH OF 8 INCHES, MOISTURE CONDITIONED TO AT LEAST 2 PERCENT ABOVE OPTIMUM MOISTURE AND COMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTION PER ASTM D 1557.
2. FILL MATERIALS SHALL BE SELECT GRANULAR NON-EXPANSIVE CRUSHED BASALT, WELL GRADED FROM COARSE TO FINE WITH PARTICLES NO LESS THAN 3 INCHES MAXIMUM DIMENSION. FILL SHALL CONTAIN 10 TO 30 PERCENT PASSING 200 MESH. SIEVE BY WEIGHT. FILL MATERIAL SHALL HAVE CBR OF 20 OR HIGHER AND SWELL LESS THAN 1 PERCENT PER ASTM D 1883.
3. THE SELECT GRANULAR FILL SHALL BE MOISTURE-CONDITIONED ABOVE OPTIMUM PLACED IN LEVEL LIFTS NOT EXCEEDING 8 INCHES LOOSE AND COMPACTED TO A MINIMUM OF 95 PERCENT OF MAXIMUM DRY DENSITY WITH SHEEPSFOOT ROLLERS, VIBRATORY ROLLERS, OR OTHER TYPES OF ACCEPTABLE COMPACTION EQUIPMENT.
4. FOUNDATION EXCAVATIONS SHALL BE RECOMPACTED TO 95% RELATIVE COMPACTION. SOFT OR LOOSE MATERIALS SHALL BE OVER EXCAVATED TO FIRM SOILS BELOW AND SELECT GRANULAR MATERIALS SHALL BE BACK FILLED TO 95% RELATIVE COMPACTION.

DATE: 10 JUNE 2011
REVISED PRINT

DATE: 04 FEBRUARY 2011
APPROVED FOR CONSTRUCTION

BRIAN K YEE
LICENSED PROFESSIONAL ENGINEER
No. 11092
HAWAII U.S.A.

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KH2A ENGINEERING INC.
PORTLAND OREGON
KH2A PROJECT NUMBER: 1306 PLOT SCALE: 1

Rev	Item	Qty.	Description	Drawing
K	Mov Sh-2 - D05880, Ad Site Prep			
J	General Updates			
I	Further clarify steel specifications			
H	Clarify steel and fastener specs			
G	Reformat panel spec. sect. 1			

Weight | By | Date
08 JAN 11 | LC
04 FEB 11 | LC
25 SEP 10 | LC
28 SEP 10 | LC
15 SEP 10 | LC

Bill of Materials

AMI
Aggregate Machinery Inc.
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

Title
GENERAL NOTES
MAKAKILO QUARRY EXPANSION
GRACE PACIFIC CORPORATION

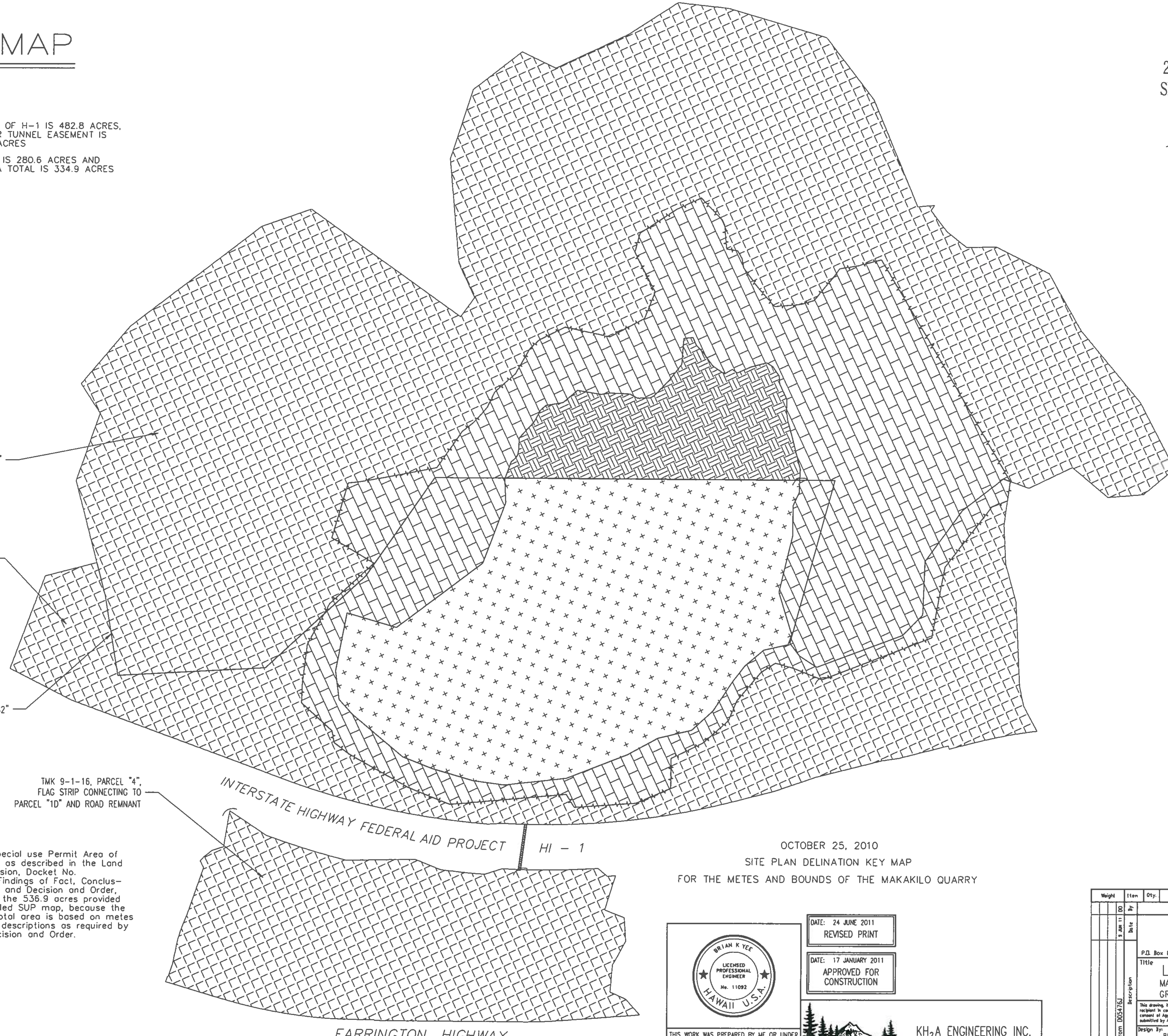
Design By	Drawn By	Date	Scale
BKY	CRO	29 APR 2010	FULL

Sheet 1 OF 1 | Drawing No. D05476 | Rev. K

S.U.P. KEY MAP

1"=300'

- APPROVED SPECIAL USE PERMIT AREA "MAUKA" OF H-1 IS 482.8 ACRES, "MAKAI" OF H-1 IS 54.0 ACRES AND CONVEYOR TUNNEL EASEMENT IS 0.1 ACRE THE OVERALL AREA TOTAL IS 536.9 ACRES
- DELINATION OF BUFFER AREA "MAUKA" OF H-1 IS 280.6 ACRES AND "MAKAI" OF H-1 IS 54.0 ACRES, OVERALL AREA TOTAL IS 334.9 ACRES
- DELINATION OF BERMING, LANDSCAPING AND GRADING AREA TOTAL IS 103.1 ACRES
- DELINATION OF EXISTING QUARRY AND PROCESSING AREA TOTAL IS 78.4 ACRES
- DELINATION OF QUARRY EXCAVATION EXPANSION AREA TOTAL IS 20.6 ACRES
- DELINATION OF CONVEYOR TUNNEL EASEMENT AREA TOTAL IS 0.1 ACRE



Note: The total Special use Permit Area of 541.5 acres, as described in the Land Use Commission, Docket No. SP73-147, Findings of Fact, Conclusions of Law, and Decision and Order, differs from the 536.9 acres provided in this detailed SUP map, because the indentified total area is based on metes and bounds descriptions as required by the SUP Decision and Order.

0 Ft — 500 Ft — 1000 Ft

1"=300'

OCTOBER 25, 2010

SITE PLAN DELINATION KEY MAP

FOR THE METES AND BOUNDS OF THE MAKAKILO QUARRY

BRIAN K YEE — LICENSED PROFESSIONAL ENGINEER — No. 11092 — HAWAII U.S.A.

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

DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
APPROVED FOR CONSTRUCTION

KH$_2$A ENGINEERING INC.
PORTLAND OREGON
KH2A PROJECT NUMBER: 1306
PLOT SCALE: 3600

Weight	Item	Qty.	Description	Drawing
			Bill of Materials	

9 JUN 11 — DD
From D05476J

AMI Aggregate Machinery Inc.
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

Title
L. U. O. & S. U. P. INFO.
MAKAKILO QUARRY EXPANSION
GRACE PACIFIC CORPORATION

Design By:	Drawn By:	Date:	Scale:
BKY	GRO	29 APR 2010	NOTED

Sheet	Of	Drawing No.	Rev.
1	5	D05880	ø

L.U.O. BOUNDARY & SITE MAP

PARCEL INFORMATION:

TOTAL PARCEL AREA OF 74 = 311.8 ACRES
TOTAL PARCEL AREA OF 82 = 175.2 ACRES
TOTAL PARCEL AREA COMBINED OF 74 & 82 = 487.0 ACRES
TOTAL SUP AREA "MAUKA" OF H-1 = 482.8 ACRES
TOTAL AREA OF COMBINED PARCELS 74 & 82 NOT INCLUDED IN SUP = 4.2 ACRES
TOTAL AREA OF BUFFER "MAUKA" OF H-1 OF SUP = 280.6 ACRES
TOTAL AREA FOR BERMING, LANDSCAPING,
GRADING AND OPERATIONS "MAUKA" OF H-1 OF SUP TOTAL = 202.2 ACRES

ZONING PROJECT AREA DATA:

ZONING Ag-2
LOT SIZE: 21,030,768.00 sf (482.8 ACRES)

PROPOSED USE: QUARRY EQUIPMENT EXPANSION

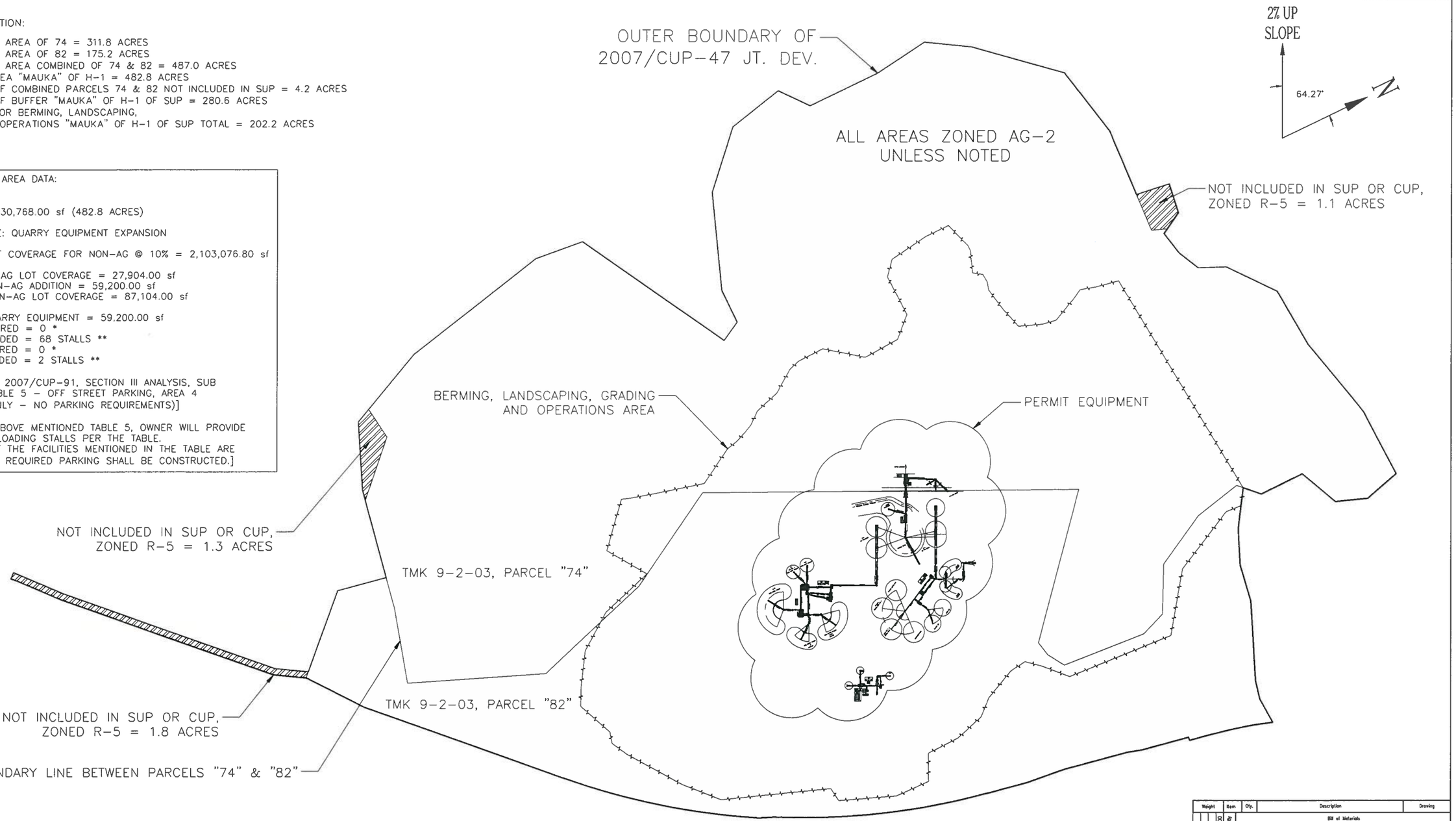
ALLOWABLE LOT COVERAGE FOR NON-AG @ 10% = 2,103,076.80 sf

EXISTING NON-AG LOT COVERAGE = 27,904.00 sf
PROPOSED NON-AG ADDITION = 59,200.00 sf
NEW TOTAL NON-AG LOT COVERAGE = 87,104.00 sf

PROPOSED QUARRY EQUIPMENT = 59,200.00 sf
PARKING REQUIRED = 0 *
PARKING PROVIDED = 68 STALLS **
LOADING REQUIRED = 0 *
LOADING PROVIDED = 2 STALLS **

* [PER CUP # 2007/CUP-91, SECTION III ANALYSIS, SUB SECTION 4, TABLE 5 - OFF STREET PARKING, AREA 4 (EQUIPMENT ONLY - NO PARKING REQUIREMENTS)]

** [PER THE ABOVE MENTIONED TABLE 5, OWNER WILL PROVIDE PARKING AND LOADING STALLS PER THE TABLE. WHEN EACH OF THE FACILITIES MENTIONED IN THE TABLE ARE PERMITTED THE REQUIRED PARKING SHALL BE CONSTRUCTED.]



DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
APPROVED FOR CONSTRUCTION

BRIAN K YEE
LICENSED PROFESSIONAL ENGINEER
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HAWAII U.S.A.

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KH2A ENGINEERING INC.
PORTLAND OREGON
KH2A PROJECT NUMBER: 1306
PLOT SCALE: 300

Weight	Item	Qty.	Description	Drawing
	Apr		Bill of Materials	

AMI Aggregate Machinery Inc.
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

Title
L. U. O. & C. U. P. INFO.
MAKAKILO QUARRY EXPANSION
GRACE PACIFIC CORPORATION

Design By:	Drawn By:	Date:	Scale:
BKY	GRO	29 APR 2010	NOTED

Sheet: 2 Of 5 | Drawing No. D05880 | Rev. Ø

Description From: D05476J
Rev

L.U.O. EXISTING & PROPOSED LIGHTING

Key #	Description	Existing Exterior Lighting (All Shielded)
L1	Primary Plant	(1) 90W Single Bulb, (2) 400W Lights
L2	Primary Plant Compressor House	(1) 90W Single Bulb
L3	Secondary Plant – Screen1	(4) 400W Lights
L4	Secondary Plant – Screen2	(2) 400W Lights
L5	Secondary Plant – Conveyors	(2) 400W Lights
L6	Office Trailer 1	(1) 400W Lights, (2) 180W Double Bulb Spot Light
L7	Office Trailer 2	(1) 400W Lights, (5) 180W Double Bulb Spot Light
L8	Office Trailer 3	(2) 400W Lights, (1) 180W Double Bulb Spot Light
L9	Office Trailer 4	(2) 400W Lights, (2) 180W Double Bulb Spot Light
L10	Equipment Staging Area	(2) 1000W Lights
L11	Restroom	(2) 180W Double Bulb Spot Light
L12	Upper Quarry Scale House	(6) 180W Double Bulb Spot Light

No Proposed Lighting on New Quarry Equipment Planned

2% UP SLOPE

64.27°

N

PROPOSED QUARRY EQUIPMENT

L1
L2
L3
L4
L5
L6
L7
L8
L9
L10
L12
T2

INSET LOCATION

0 ft 500 ft 1000 ft

1"=180'

DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
APPROVED FOR CONSTRUCTION

BRIAN K YEE
LICENSED PROFESSIONAL ENGINEER
No. 11092
HAWAII U.S.A.

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KH$_2$A ENGINEERING INC.
PORTLAND OREGON
KH2A PROJECT NUMBER: 1306
PLOT SCALE: 180

Weight	Item	Qty.	Description	Drawing
			Bill of Materials	

By: BKY
Date: 9 JUN 11
Description: From D05478J
Rev.

AMI
Aggregate Machinery Inc.
P.O. Box 17169 · Salem, OR 97305-7169 · (503) 390-6284 · FAX (503) 390-6342

Title
L. U. O. & C. U. P. INFO.
MAKAKILO QUARRY EXPANSION
GRACE PACIFIC CORPORATION

Design By:	Drawn By:	Date:	Scale:
BKY	GRD	29 APR 2010	NOTED

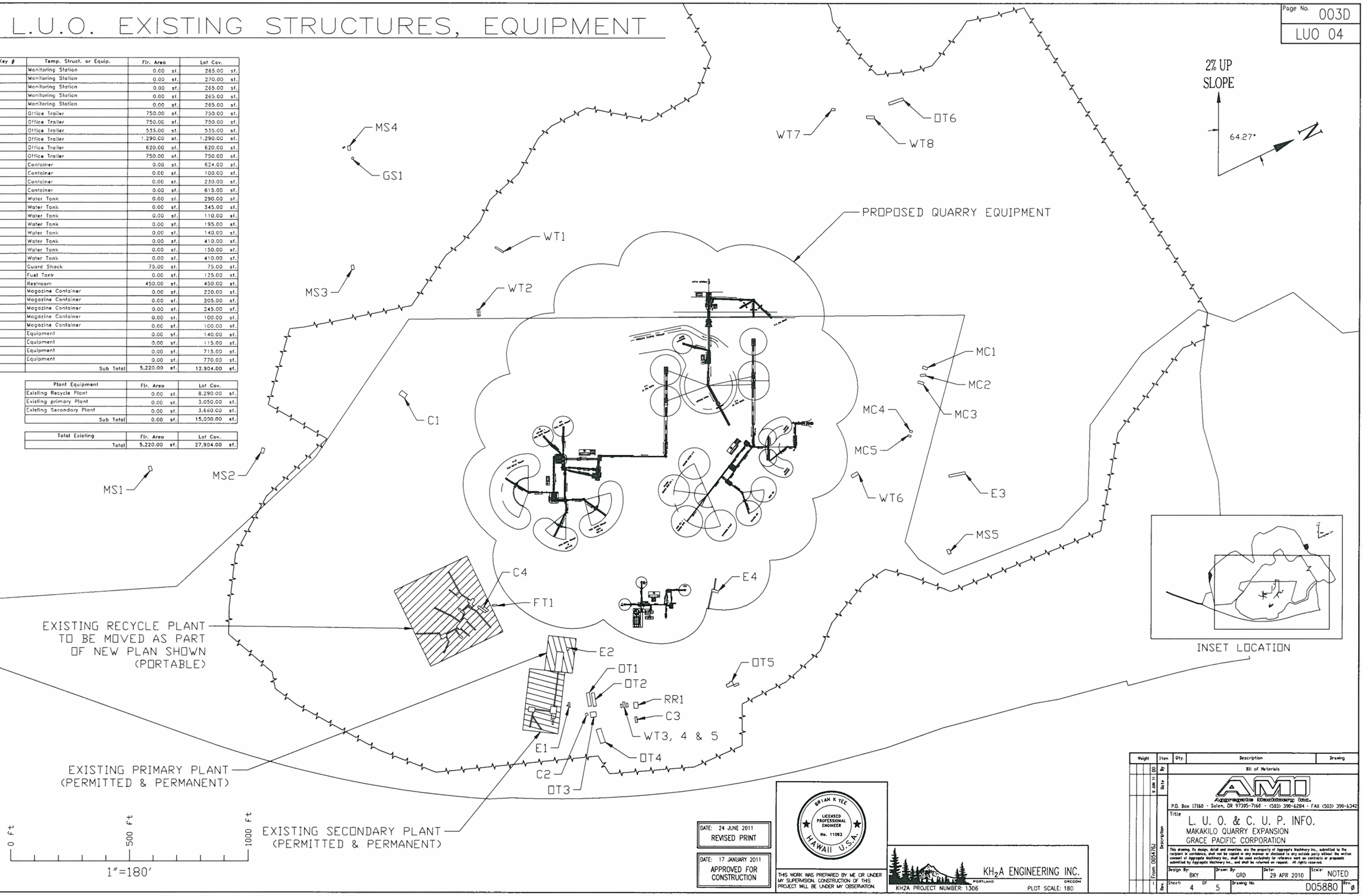
Sheet: 3 OF 5
Drawing No.: D05880
Rev.: Ø

L.U.O. EXISTING STRUCTURES, EQUIPMENT

Key #	Temp. Struct. or Equip.	Flr. Area	Lot Cov.
MS1	Monitoring Station	0.00 sf.	265.00 sf.
MS2	Monitoring Station	0.00 sf.	270.00 sf.
MS3	Monitoring Station	0.00 sf.	265.00 sf.
MS4	Monitoring Station	0.00 sf.	265.00 sf.
MS5	Monitoring Station	0.00 sf.	265.00 sf.
OT1	Office Trailer	750.00 sf.	750.00 sf.
OT2	Office Trailer	750.00 sf.	750.00 sf.
OT3	Office Trailer	535.00 sf.	535.00 sf.
OT4	Office Trailer	1,290.00 sf.	1,290.00 sf.
OT5	Office Trailer	620.00 sf.	620.00 sf.
OT5	Office Trailer	750.00 sf.	750.00 sf.
C1	Container	0.00 sf.	624.00 sf.
C2	Container	0.00 sf.	100.00 sf.
C3	Container	0.00 sf.	230.00 sf.
C4	Container	0.00 sf.	615.00 sf.
WT1	Water Tank	0.00 sf.	290.00 sf.
WT2	Water Tank	0.00 sf.	345.00 sf.
WT3	Water Tank	0.00 sf.	110.00 sf.
WT4	Water Tank	0.00 sf.	195.00 sf.
WT5	Water Tank	0.00 sf.	140.00 sf.
WT6	Water Tank	0.00 sf.	410.00 sf.
WT7	Water Tank	0.00 sf.	150.00 sf.
WT8	Water Tank	0.00 sf.	410.00 sf.
GS1	Guard Shack	75.00 sf.	75.00 sf.
FT1	Fuel Tank	0.00 sf.	125.00 sf.
RR1	Restroom	450.00 sf.	450.00 sf.
MC1	Magazine Container	0.00 sf.	220.00 sf.
MC2	Magazine Container	0.00 sf.	205.00 sf.
MC3	Magazine Container	0.00 sf.	245.00 sf.
MC4	Magazine Container	0.00 sf.	100.00 sf.
MC5	Magazine Container	0.00 sf.	100.00 sf.
E1	Equipment	0.00 sf.	140.00 sf.
E2	Equipment	0.00 sf.	115.00 sf.
E3	Equipment	0.00 sf.	715.00 sf.
E4	Equipment	0.00 sf.	770.00 sf.
	Sub Total	5,220.00 sf.	12,904.00 sf.

Plant Equipment	Flr. Area	Lot Cov.
Existing Recycle Plant	0.00 sf.	8,290.00 sf.
Existing primary Plant	0.00 sf.	3,050.00 sf.
Existing Secondary Plant	0.00 sf.	3,660.00 sf.
Sub Total	0.00 sf.	15,000.00 sf.

Total Existing	Flr. Area	Lot Cov.
Total	5,220.00 sf.	27,904.00 sf.



DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
APPROVED FOR CONSTRUCTION

BRIAN K YEE
LICENSED PROFESSIONAL ENGINEER
No. 11092
HAWAII U.S.A.

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

KH2A ENGINEERING INC.
PORTLAND OREGON
KH2A PROJECT NUMBER: 1306
PLOT SCALE: 180

Weight	Item	Qty.	Description	Drawing
	Bill of Materials			

Aggregate Machinery Corp.
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

Title
L. U. O. & C. U. P. INFO.
MAKAKILO QUARRY EXPANSION
GRACE PACIFIC CORPORATION

Design By:	Drawn By:	Date:	Scale:
BKY	GRD	29 APR 2010	NOTED

Sheet: 4 OF 5 | Drawing No. D05880 | Rev. 0

From D054161

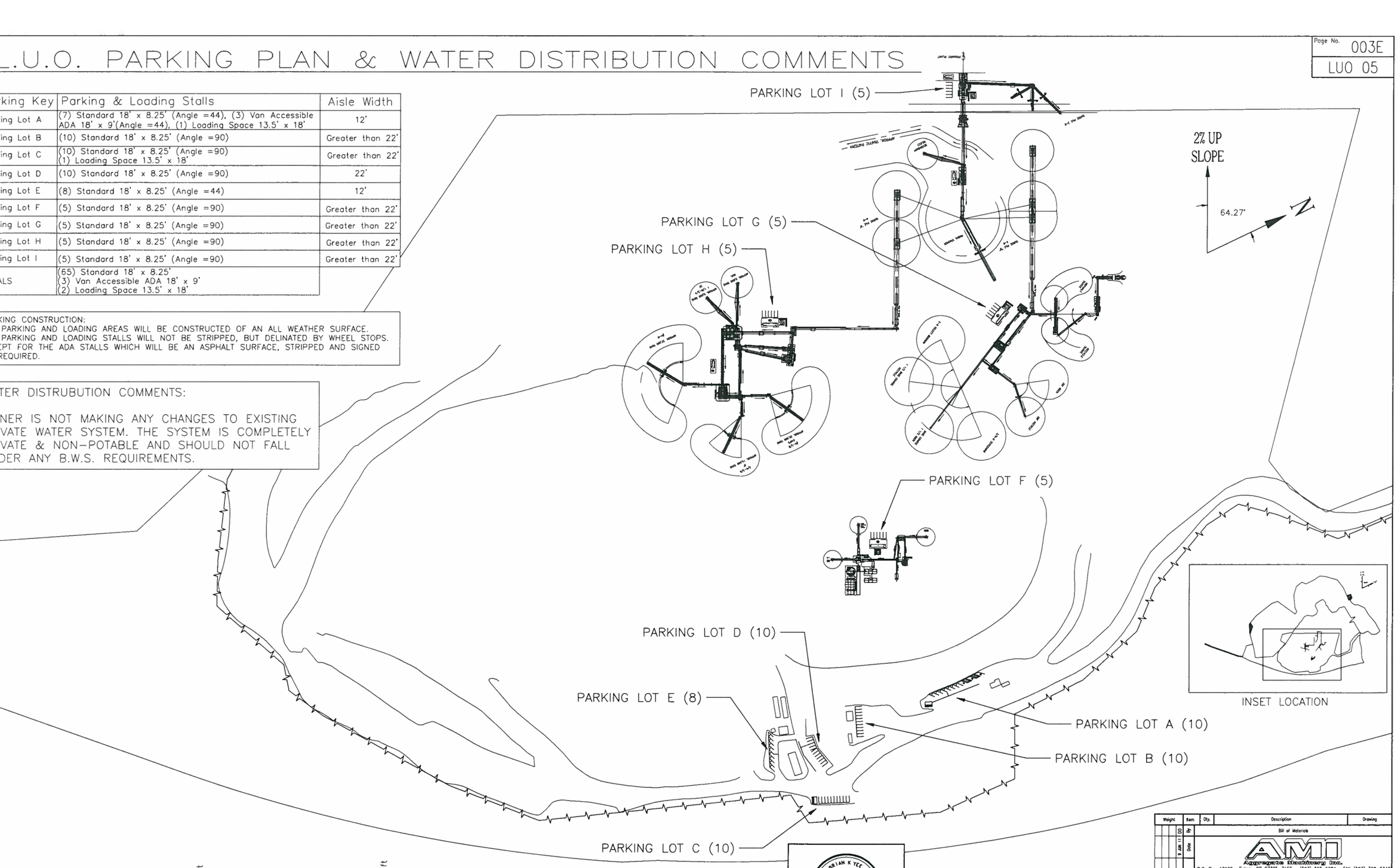
L.U.O. PARKING PLAN & WATER DISTRIBUTION COMMENTS

Parking Key	Parking & Loading Stalls	Aisle Width
Parking Lot A	(7) Standard 18' x 8.25' (Angle =44), (3) Van Accessible ADA 18' x 9'(Angle =44), (1) Loading Space 13.5' x 18'	12'
Parking Lot B	(10) Standard 18' x 8.25' (Angle =90)	Greater than 22'
Parking Lot C	(10) Standard 18' x 8.25' (Angle =90) (1) Loading Space 13.5' x 18'	Greater than 22'
Parking Lot D	(10) Standard 18' x 8.25' (Angle =90)	22'
Parking Lot E	(8) Standard 18' x 8.25' (Angle =44)	12'
Parking Lot F	(5) Standard 18' x 8.25' (Angle =90)	Greater than 22'
Parking Lot G	(5) Standard 18' x 8.25' (Angle =90)	Greater than 22'
Parking Lot H	(5) Standard 18' x 8.25' (Angle =90)	Greater than 22'
Parking Lot I	(5) Standard 18' x 8.25' (Angle =90)	Greater than 22'
TOTALS	(65) Standard 18' x 8.25' (3) Van Accessible ADA 18' x 9' (2) Loading Space 13.5' x 18'	

PARKING CONSTRUCTION:
ALL PARKING AND LOADING AREAS WILL BE CONSTRUCTED OF AN ALL WEATHER SURFACE. ALL PARKING AND LOADING STALLS WILL NOT BE STRIPPED, BUT DELINATED BY WHEEL STOPS. EXCEPT FOR THE ADA STALLS WHICH WILL BE AN ASPHALT SURFACE, STRIPPED AND SIGNED AS REQUIRED.

WATER DISTRUBUTION COMMENTS:

OWNER IS NOT MAKING ANY CHANGES TO EXISTING PRIVATE WATER SYSTEM. THE SYSTEM IS COMPLETELY PRIVATE & NON-POTABLE AND SHOULD NOT FALL UNDER ANY B.W.S. REQUIREMENTS.



DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
APPROVED FOR CONSTRUCTION

BRIAN K YEE
LICENSED PROFESSIONAL ENGINEER
No. 11092
HAWAII U.S.A.

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KH2A ENGINEERING INC.
PORTLAND OREGON
KH2A PROJECT NUMBER: 1306 PLOT SCALE: 120

Weight	Item	Qty.	Description	Drawing
			Bill of Materials	

Aggregate Machinery Inc.
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

Title
L. U. O. & C. U. P. INFO.
MAKAKILO QUARRY EXPANSION
GRACE PACIFIC CORPORATION

Design By:	Drawn By:	Date:	Scale:
BKY	GRD	29 APR 2010	NOTED

Sheet: 5 Of 5 | Drawing No. D05880 | Rev. Ø

From D05476J

N

64.27

2% UP SLOPE

b

EXISTING B-ROCK FINISH PORTABLE PLANT
NEW LOCATION
(NOT IN PERMIT SCOPE)

w

FOR WASH PLANT
SEE [MASTER DRAWING KEY]
WASH PLANT SECTION

r

EXISTING RECYCLE SUB-FEED PORTABLE PLANT
NEW LOCATION
(NOT IN PERMIT SCOPE)

a

FOR A-ROCK FINISH PLANT
SEE [MASTER DRAWING KEY]
A-ROCK FINISH PLANT SECTION

b

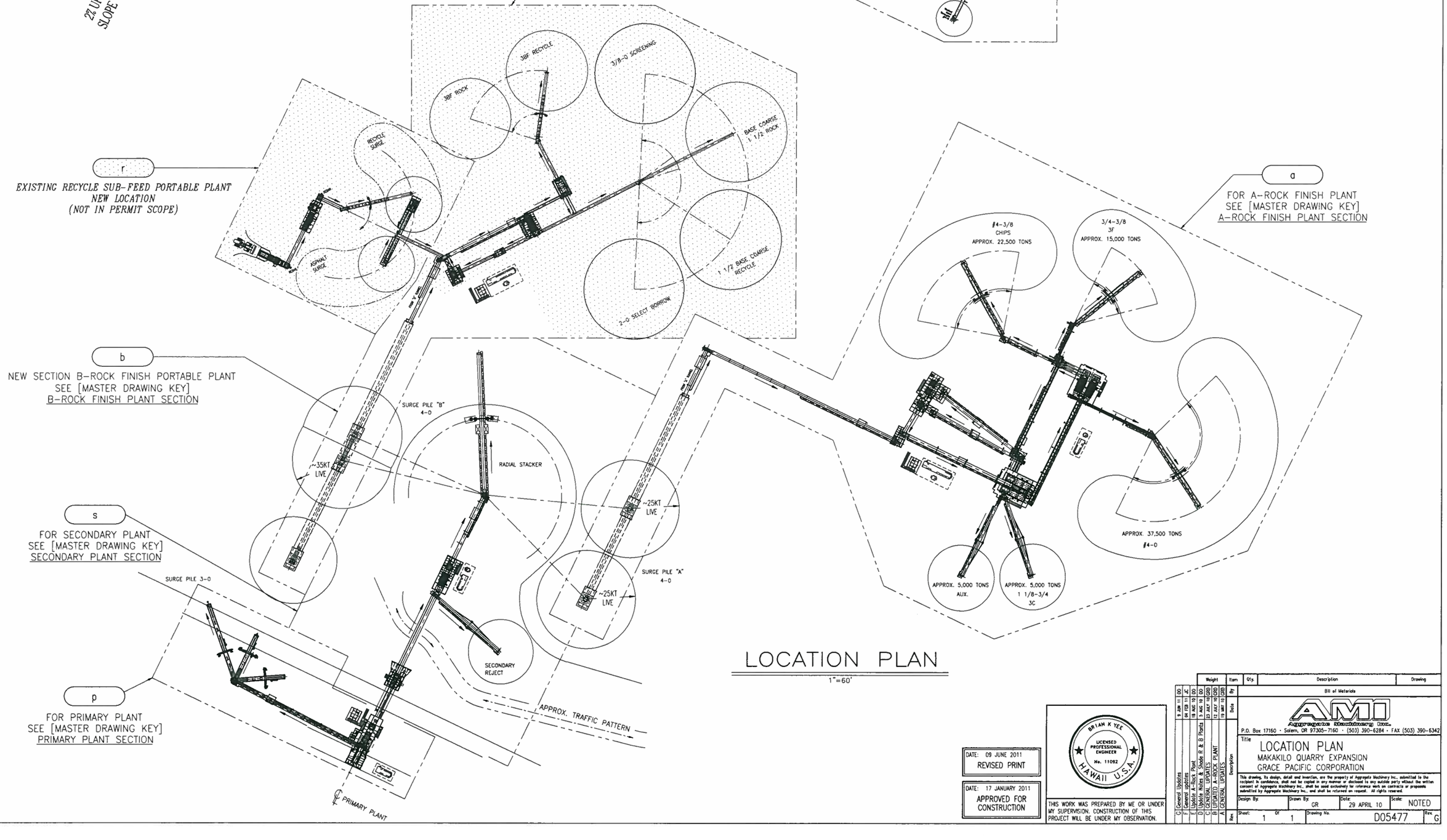
NEW SECTION B-ROCK FINISH PORTABLE PLANT
SEE [MASTER DRAWING KEY]
B-ROCK FINISH PLANT SECTION

s

FOR SECONDARY PLANT
SEE [MASTER DRAWING KEY]
SECONDARY PLANT SECTION

p

FOR PRIMARY PLANT
SEE [MASTER DRAWING KEY]
PRIMARY PLANT SECTION



LOCATION PLAN

1"=60'

DATE: 09 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
APPROVED FOR CONSTRUCTION

BRIAN K YEE
LICENSED PROFESSIONAL ENGINEER
No. 11092
HAWAII U.S.A.

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Rev.	Description	Date	By
G	General Updates	9 JAN 11	DO
F	General updates	04 FEB 11	JC
E	Update A-Rock Plant	18 AUG 10	DO
D	Update Notes & Shade R & B Plants	3 AUG 10	DO
C	GENERAL UPDATES	23 JULY 10	GDB
B	GENERAL UPDATES	21 JULY 10	GDB
A	GENERAL UPDATES	19 MAY 10	GDB

Item	Qty.	Description	Drawing

Bill of Materials

AMI
Aggregate Machinery Inc.
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

Title
LOCATION PLAN
MAKAKILO QUARRY EXPANSION
GRACE PACIFIC CORPORATION

Design By:	Drawn By:	Date:	Scale:
	GR	29 APRIL 10	NOTED

Sheet: 1 Of 1 | Drawing No. D05477 | Rev. G

MASTER DRAWING KEY

SHEET 1 OF 3

PAGE NUMBER

GENERAL

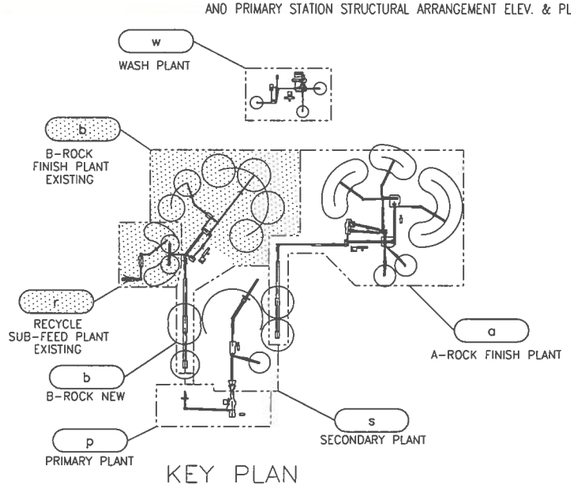
011 (P) PRIMARY PLANT

012 MAJOR CONVEYORS

017 P1-PRIMARY STATION

MINOR CONVEYORS

(CV1p) SEE [PAGE NUMBERS 018-033] GENERAL ARRANGEMENT ELEV. & PLAN VIEWS
(CV2p) SEE [PAGE NUMBERS 018-033] GENERAL ARRANGEMENT ELEV. & PLAN VIEWS
(CV3p) SEE [PAGE NUMBERS 018-036] GENERAL ARRANGEMENT ELEV. & PLAN VIEWS AND PRIMARY STATION STRUCTURAL ARRANGEMENT ELEV. & PLAN VIEWS



KEY PLAN

PAGE NUMBER

OPERATORS CAB

(ECp) SEE ELECTRICAL SECTION [PAGE NUMBER 265-269] OPERATOR'S CAB w/STAND & STAIRS AND PRIMARY PLANT CONTROL FOUNDATIONS

038 (S) SECONDARY PLANT

039 MAJOR CONVEYORS

048 SBs-SURGE BIN

059 S1-SECONDARY SCREENING AND CRUSHING STATION

MINOR CONVEYORS

(CV2s) SEE [PAGE NUMBERS D60-D69] GENERAL ARRANGEMENT ELEVATION & PLAN VIEWS

072 (a) A-ROCK FINISH PLANT

073 MAJOR CONVEYORS

PAGE NUMBER

MAJOR CONVEYORS CONT.

104 T1a-SURGE RECLAIM TUNNEL A

119 SB1a-A-ROCK SURGE BIN

125 A1-PRE-SCREENING STATION

138 GS1a-GATE STATION #1

MASTER DRAWING KEY CONTINUES ON PAGE 6

KH2A ENGINEERING INC. PORTLAND OREGON
KH2A PROJECT NUMBER: 1306 PLOT SCALE: 360

DATE: 24 JUNE 2011 REVISED PRINT
DATE: 17 JANUARY 2011 APPROVED FOR CONSTRUCTION

BRIAN K YEE LICENSED PROFESSIONAL ENGINEER No. 11092 HAWAII U.S.A.

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

Rev.	Description	Date	dr	Item	Qty.	Description	Drawing	Weight
E	DPP Restructure	13 JAN 11	DO			Bill of Materials		
D	ADD SHEET 3 & PAGE NUMBERS	27 JAN 11	DO					
C	Update Key Plan	29 MAR 10	JC					
B	Update Key Plan	19 MAY 10	JC					
A	Re-organize & Update Key Plan	10 AUG 10	JC					

AMI Aggregate Machinery Inc.
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

Title: MASTER DRAWING KEY
MAKAKILO QUARRY EXPANSION
GRACE PACIFIC CORPORATION

Design By: | Drawn By: DO | Date: 4 AUGUST 2010 | Scale: NONE
Sheet: 1 Of 3 | Drawing No. D05592 | Rev. E

MASTER DRAWING KEY

SHEET 2 OF 3

PAGE NUMBER

144 **A2–FINISH CRUSHING STATION**

145 GENERAL ARRANGEMENT–ELEVATION . . . . . D05464 SHT. 1 OF 3
146 GENERAL ARRANGEMENT–SIDE VIEW . . . . . D05464 SHT. 2 OF 3
147 GENERAL ARRANGEMENT–PLAN . . . . . D05464 SHT. 3 OF 3
148 STRUCTURAL–SUPPORT STEEL FRAMING PLAN AND SECTIONS . . D05485 SHT. 1 OF 6
149 STRUCTURAL–SUPPORT STEEL FRAMING SECTIONS . . . . . D05485 SHT. 2 OF 6
150 STRUCTURAL–SUPPORT STEEL FRAMING SECTIONS . . . . . D05485 SHT. 3 OF 6
151 STRUCTURAL–SUPPORT STEEL FRAMING SECTIONS . . . . . D05485 SHT. 4 OF 6
152 STRUCTURAL–SUPPORT STEEL FRAMING SECTIONS . . . . . D05485 SHT. 5 OF 6
153 STRUCTURAL–SUPPORT STEEL FRAMING DETAILS . . . . . D05485 SHT. 6 OF 6
154 FOUNDATION–PLAN . . . . . D05499 SHT. 1 OF 2
155 FOUNDATION–SECTIONS AND DETAILS . . . . . D05499 SHT. 2 OF 2
156 PIPING – HYDRAULIC . . . . . D05589 SHT. 1 OF 1

157 **A3–FINISH SCREENING STATION**

158 GENERAL ARRANGEMENT–SIDE VIEW . . . . . D05465 SHT. 1 OF 3
159 GENERAL ARRANGEMENT–ELEVATION . . . . . D05465 SHT. 2 OF 3
160 GENERAL ARRANGEMENT–PLAN . . . . . D05465 SHT. 3 OF 3
161 STRUCTURAL–SUPPORT STEEL FRAMING PLAN . . . . . D05486 SHT. 1 OF 4
162 STRUCTURAL–SUPPORT STEEL FRAMING SECTIONS . . . . . D05486 SHT. 2 OF 4
163 STRUCTURAL–SUPPORT STEEL FRAMING SECTIONS . . . . . D05486 SHT. 3 OF 4
164 STRUCTURAL–SUPPORT STEEL FRAMING DETAILS . . . . . D05486 SHT. 4 OF 4
165 FOUNDATION–PLAN, SECTIONS AND DETAILS . . . . . D05500 SHT. 1 OF 1

166 **GS2a–GATE STATION #2**

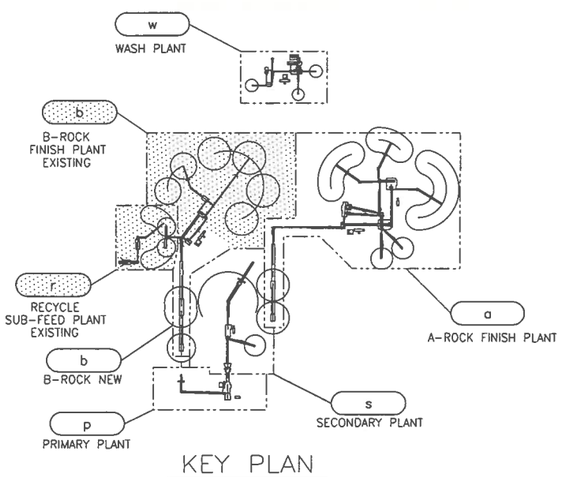
167 GENERAL ARRANGEMENT . . . . . D05473 SHT. 1 OF 1
168 STRUCTURAL–SUPPORT STEEL FRAMING PLAN AND SECTIONS . . D05487 SHT. 1 OF 1
169 FOUNDATION–PLAN, SECTION AND DETAIL . . . . . D05501 SHT. 1 OF 1
170 PIPING – HYDRAULIC CONTROLS . . . . . D05588 SHT. 1 OF 1

MINOR CONVEYORS

(CV4.1a) SEE [PAGE NUMBERS 126–137] GEN. ARRANGEMENT PLAN & ELEV. VIEWS
(CV4.2a) SEE [PAGE NUMBERS 126–137] GEN. ARRANGEMENT PLAN & ELEV. VIEWS
(CV5a) SEE [PAGE NUMBERS 126–137] GEN. ARRANGEMENT PLAN & ELEV. VIEWS
(CV6a) SEE [PAGE NUMBERS 126–137] GEN. ARRANGEMENT PLAN & ELEV. VIEWS
(CV7a) SEE [PAGE NUMBERS 126–137] GEN. ARRANGEMENT PLAN & ELEV. VIEWS
(CV10a) SEE [PAGE NUMBERS 145–155] GEN. ARRANGEMENT PLAN & ELEV. VIEWS
(CV12.1a) SEE [PAGE NUMBERS 158–165] GEN. ARRANGEMENT PLAN & ELEV. VIEWS
(CV12.2a) SEE [PAGE NUMBERS 158–165] GEN. ARRANGEMENT PLAN & ELEV. VIEWS
(CV13a) SEE [PAGE NUMBERS 158–165] GEN. ARRANGEMENT PLAN & ELEV. VIEWS
(CV14a) SEE [PAGE NUMBERS 158–165] GEN. ARRANGEMENT PLAN & ELEV. VIEWS
(CV15a) SEE [PAGE NUMBERS 158–165] GEN. ARRANGEMENT PLAN & ELEV. VIEWS

OPERATORS CAB

(ECa) SEE ELECTRICAL SECTION [PAGE NUMBER 282–286] OPERATOR'S CAB w/STAND & STAIRS AND A–ROCK PLANT CONTROL FOUNDATIONS



KEY PLAN

PAGE NUMBER

171 (r) **RECYCLE SUB–FEED PLANT**

RELOCATED PORTABLE PLANT (NOT IN PERMIT SCOPE)
EXCEPT ELECTRICAL MCC AND CONTROL CAB

172 (b) **B–ROCK FINISH PLANT–NEW**

173 MAJOR CONVEYOR

174 (CV1b) STRUCTURAL ARRANGEMENT . . . . . D05545 SHT. 1 OF 1
175 (CV1b) FOUNDATION ARRANGEMENT . . . . . D05519 SHT. 8 OF 22

176 **T1b–SURGE RECLAIM TUNNEL B**

177 GENERAL ARRANGEMENT–RECLAIM TUNNEL B . . . . . D05467 SHT. 1 OF 4
178 GENERAL ARRANGEMENT–RECLAIM TUNNEL B . . . . . D05467 SHT. 2 OF 4
179 MULTI–PLATE ARRANGEMENT–RECLAIM TUNNEL B . . . . . D05467 SHT. 3 OF 4
180 MULTI–PLATE ARRANGEMENT–RECLAIM TUNNEL B . . . . . D05467 SHT. 4 OF 4
181 FOUNDATION ARRANGEMENT–PLAN AND ELEVATION . . . . . D05503 SHT. 1 OF 10
182 FOUNDATION ARRANGEMENT–BACKFILL NOTES AND SECTIONS . . D05503 SHT. 2 OF 10
183 FOUNDATION ARRANGEMENT–DETAIL . . . . . D05503 SHT. 3 OF 10
184 FOUNDATION ARRANGEMENT–SECTION . . . . . D05503 SHT. 4 OF 10
185 FOUNDATION ARRANGEMENT–DETAIL . . . . . D05503 SHT. 5 OF 10
186 FOUNDATION ARRANGEMENT–SECTION . . . . . D05503 SHT. 6 OF 10
187 FOUNDATION ARRANGEMENT–SECTION . . . . . D05503 SHT. 7 OF 10
188 FOUNDATION ARRANGEMENT–SECTIONS . . . . . D05503 SHT. 8 OF 10
189 FOUNDATION ARRANGEMENT–CATCH BASIN PLAN & SECTIONS . . D05503 SHT. 9 OF 10
190 FOUNDATION ARRANGEMENT–CATCH BASIN SECTIONS & DETAILS . D05503 SHT. 10 OF 10

OPERATORS CAB

(ECb) SEE ELECTRICAL SECTION [296–300] OPERATOR'S CAB w/STAND & STAIRS AND PLANT CONTROL FOUNDATIONS

191 (b) **B–ROCK FINISH PLANT–EXISTS**

RELOCATED PORTABLE PLANT (NOT IN PERMIT SCOPE)
EXCEPT ELECTRICAL MCC AND CONTROL CAB

192 (w) **WASH PLANT**

193 MODIFIED CONVEYORS

194 (CV1w) (FD1w) GENERAL ARRANGEMENT . . . . . D05565 SHT. 1 OF 1
195 (CV1w) (FD1w) STRUCTURAL ARRANGEMENT . . . . . D05547 SHT. 1 OF 1
196 (CV2w) GENERAL ARRANGEMENT . . . . . D05567 SHT. 1 OF 2
197 (CV2w) GENERAL ARRANGEMENT . . . . . D05567 SHT. 2 OF 2
198 (CV2w) STRUCTURAL ARRANGEMENT . . . . . D05549 SHT. 1 OF 1
199 (CV2w) FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 2 OF 23
200 (CV4w) GENERAL ARRANGEMENT . . . . . D05569 SHT. 1 OF 2
201 (CV4w) GENERAL ARRANGEMENT . . . . . D05569 SHT. 2 OF 2
202 (CV4w) STRUCTURAL ARRANGEMENT . . . . . D05551 SHT. 1 OF 1
203 (CV4w) FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 4 OF 23
204 (CV6w) GENERAL ARRANGEMENT . . . . . D05571 SHT. 1 OF 2
205 (CV6w) GENERAL ARRANGEMENT . . . . . D05571 SHT. 2 OF 2
206 (CV6w) STRUCTURAL ARRANGEMENT . . . . . D05553 SHT. 1 OF 2
207 (CV6w) STRUCTURAL ARRANGEMENT . . . . . D05553 SHT. 2 OF 2
208 (CV6w) FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 6 OF 23

PAGE NUMBER

209 NEW CONVEYORS

210 (CV7w) GENERAL ARRANGEMENT . . . . . D05572 SHT. 1 OF 1
211 (CV7w) STRUCTURAL ARRANGEMENT . . . . . D05554 SHT. 1 DF 1
212 (CV7w) FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 7 OF 23
213 (CV8w) GENERAL ARRANGEMENT . . . . . D05573 SHT. 1 OF 1
214 (CV8w) STRUCTURAL ARRANGEMENT . . . . . D05555 SHT. 1 OF 1
215 (CV8w) FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 8 OF 23
216 (CV9w) GENERAL ARRANGEMENT . . . . . D05574 SHT. 1 OF 1
217 (CV9w) STRUCTURAL ARRANGEMENT . . . . . D05556 SHT. 1 OF 1
218 (CV9w) FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 9 OF 23
219 (CV10w) GENERAL ARRANGEMENT . . . . . D05575 SHT. 1 DF 1
220 (CV10w) STRUCTURAL ARRANGEMENT . . . . . D05557 SHT. 1 OF 1
221 (CV10w) FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 1D OF 23

222 **GS1w–GATE STATION**

223 GENERAL ARRANGEMENT . . . . . D05566 SHT. 1 OF 1
224 STRUCTURAL ARRANGEMENT . . . . . D05548 SHT. 1 OF 1
225 FOUNDATION–PLAN, SECTION AND DETAIL . . . . . D05564 SHT. 18 OF 23

226 **W1–DRY SCREEN STATION**

227 GENERAL ARRANGEMENT . . . . . D05568 SHT. 1 OF 1
228 STRUCTURAL ARRANGEMENT . . . . . D05550 SHT. 1 OF 1
229 FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 3 OF 23

230 **W2–DRY CRUSHING STATION**

231 GENERAL ARRANGEMENT . . . . . D05570 SHT. 1 OF 1
232 STRUCTURAL ARRANGEMENT . . . . . D05552 SHT. 1 OF 2
233 STRUCTURAL ARRANGEMENT . . . . . D05552 SHT. 2 OF 2
234 FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 5 OF 23

235 **W3–WASHPLANT STATION**

236 GENERAL ARRANGEMENT . . . . . D05576 SHT. 1 OF 2
237 GENERAL ARRANGEMENT . . . . . D05576 SHT. 2 OF 2
238 STRUCTURAL ARRANGEMENT . . . . . D05558 SHT. 1 OF 3
239 STRUCTURAL ARRANGEMENT . . . . . D05558 SHT. 2 OF 3
240 STRUCTURAL ARRANGEMENT . . . . . D05558 SHT. 3 OF 3
241 FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 11 OF 23

242 **DWw DEWATERING STATION**

243 GENERAL ARRANGEMENT . . . . . D05581 SHT. 1 OF 4
244 GENERAL ARRANGEMENT . . . . . D05581 SHT. 2 OF 4
245 GENERAL ARRANGEMENT . . . . . D05581 SHT. 3 OF 4
246 GENERAL ARRANGEMENT . . . . . D05581 SHT. 4 OF 4
247 STRUCTURAL ARRANGEMENT . . . . . D05563 SHT. 1 OF 4
248 STRUCTURAL ARRANGEMENT . . . . . D05563 SHT. 2 OF 4
249 STRUCTURAL ARRANGEMENT . . . . . D05563 SHT. 3 OF 4
250 STRUCTURAL ARRANGEMENT . . . . . D05563 SHT. 4 OF 4
251 FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 20 OF 23
252 FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 21 OF 23
253 FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 22 OF 23
254 FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 23 OF 23
255 (T1w) (T4w) FRESH WATER TANK ARRANGEMENT . . . . . D05580 SHT. 1 OF 1
256 (T1w) (T4w) STRUCTURAL ARRANGEMENT . . . . . D05562 SHT. 1 OF 1
257 (T1w) (T4w) FOUNDATION ARRANGEMENT . . . . . D05564 SHT. 15 OF 23
258 PAGE NOT USED . . . . . D0XXXX SHT. 1 OF 2
259 PAGE NOT USED . . . . . D0XXXX SHT. 2 OF 2

MASTER DRAWING KEY
CONTINUES ON PAGE 7

KH2A ENGINEERING INC.
PORTLAND OREGON
KH2A PROJECT NUMBER: 1306 PLOT SCALE: 360

DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
APPROVED FOR CONSTRUCTION

BRIAN K YEE
LICENSED PROFESSIONAL ENGINEER
No. 11092
HAWAII U.S.A.

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Rev	Description	Date	By
1	E DPP Restructure	13 JUNE 11	DS
	D UPDATE & ADD PAGE NUMBERS	5 JAN 11	KC
	C Update Key Plan	30 DEC 10	DO
	B Update Key Plan	18 NOV 10	KC
	A Re-organize & Update Key Plan		

Item | Qty. | Description | Drawing
Bill of Materials

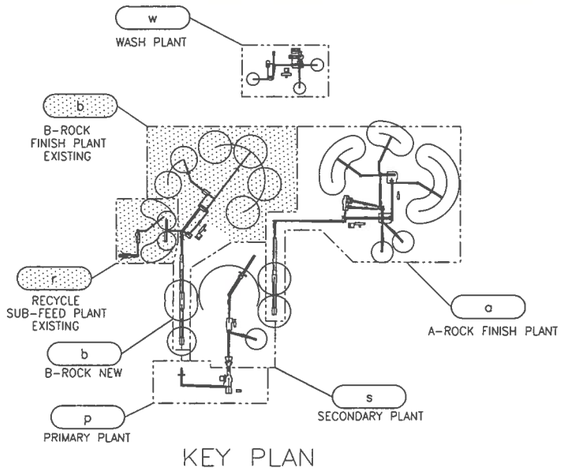
AMI Aggregate Machinery Inc.
P.O. Box 17160 · Salem, OR 97305–7160 · (503) 390–6284 · FAX (503) 390–6342

Title
MASTER DRAWING KEY
MAKAKILO QUARRY EXPANSION
GRACE PACIFIC CORPORATION

Design By: | Drawn By: DO | Date: 4 AUGUST 2010 | Scale: NONE
Sheet: 2 Of 3 | Drawing No. D05592 | Rev. E

MASTER DRAWING KEY

SHEET 3 OF 3



KEY PLAN

KH2A ENGINEERING INC.
PORTLAND OREGON
KH2A PROJECT NUMBER: 1306
PLOT SCALE: 360

DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
APPROVED FOR CONSTRUCTION

BRIAN K YEE LICENSED PROFESSIONAL ENGINEER No. 11092 HAWAII U.S.A.

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

Rev	Description	Date	By
E	DPP Restructure	12 JAN 11	DO
D	UPDATE & ADD PAGE NUMBERS	5 JAN 11	DRS
C	Update Key Plan	20 AUG 10	JC
B	Update Key Plan	19 AUG 10	DO
A	Re-sequence & Update Key Plan	13 AUG 10	JC

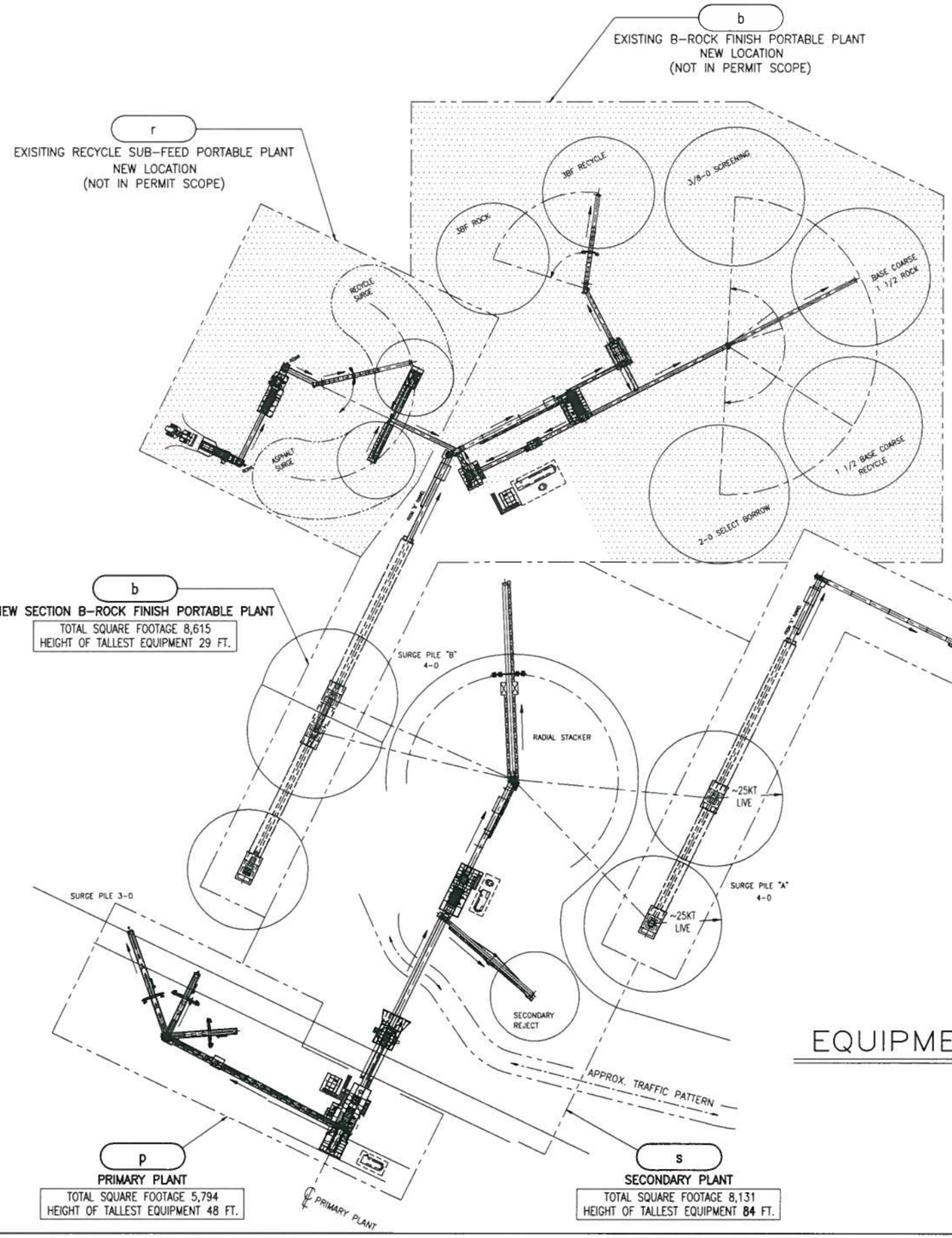
Item	Qty.	Description	Drawing	Weight
1		Bill of Materials		

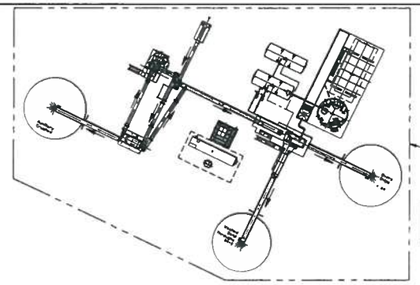
AMI Aggregate Machinery Inc.
P.O. Box 17160 - Salem, OR 97305-7160 - (503) 390-6284 - FAX (503) 390-6342

Title: MASTER DRAWING KEY
MAKAKILO QUARRY EXPANSION
GRACE PACIFIC CORPORATION

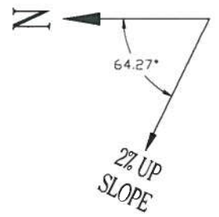
Design By: | Drawn By: DO | Date: 4 AUGUST 2010 | Scale: NONE

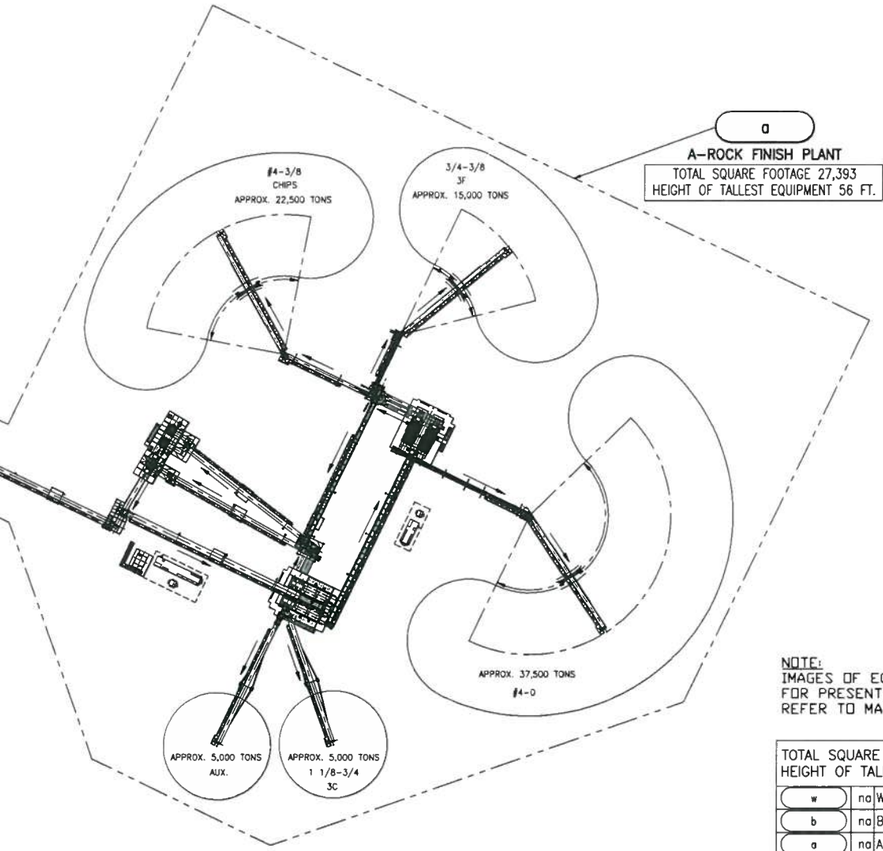
Sheet: 3 OF 3 | Drawing No. D05592 | Rev. E





w
WASH PLANT
TOTAL SQUARE FOOTAGE 9,247
HEIGHT OF TALLEST EQUIPMENT 43 FT.





NOTE:
IMAGES OF EQUIPMENT REPRESENTED HERE FOR PRESENTATION.
REFER TO MAIN DRAWING SET FOR SPECIFICS.

EQUIPMENT HEIGHTS & AREAS

1"=60'

TOTAL SQUARE FOOTAGE FOR ALL PLANTS 59,200
HEIGHT OF TALLEST EQUIPMENT FOR ALL PLANTS 84 FT.

Item	Qty.	Description	Drawing
w	na	WASH PLANT	D05593-5
b	na	B-ROCK FINISH PLANT	D05593-4
a	na	A-ROCK FINISH PLANT	D05593-3
s	na	SECONDARY PLANT	D05593-2
p	na	PRIMARY PLANT	D05593-2

Weight

DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
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HAWAII U.S.A.

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Rev	Description	Date	By
E	DPP Restructure	6 JAN 11	DO
D	DPP Restructure	4 MAY 11	DO
C	GENERAL UPDATES	17 JAN 11	DO
B	ADD 3RD 2" on 3	16 NOV 10	DO
A	Update Description	16 AUG 10	DO

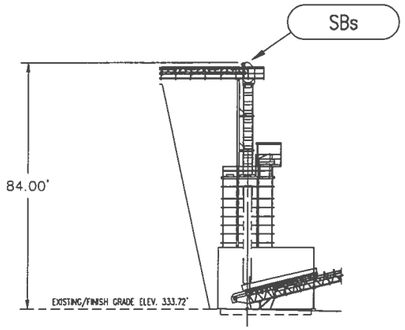
Bill of Materials

AMI Aggregate Machinery Inc.
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

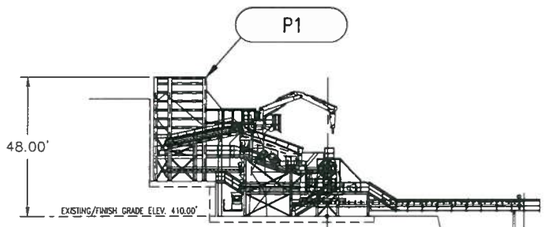
Title
EQUIPMENT HEIGHTS & AREAS
MAKAKILO QUARRY EXPANSION
GRACE PACIFIC CORPORATION

Design By:	Drawn By:	Date:	Scale:
	DO	5 AUGUST 10	1"=60'

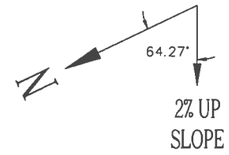
Sheet 1 OF 5 | Drawing No. D05593 | Rev. E



TALLEST PIECE OF EQUIPMENT IN THE SECONDARY PLANT



TALLEST PIECE OF EQUIPMENT IN THE PRIMARY PLANT



NOTE:
IMAGES OF EQUIPMENT REPRESENTED HERE FOR PRESENTATION.
REFER TO MAIN DRAWING SET FOR SPECIFICS.
HEIGHTS DETERMINED AT ITEM STRAIGHT DOWN TO GRADE.

CV2b	ref	PRE-SCREEN FEED CONVEYOR (B)	SEE DRAWING D05593 sh4 of 5 PAGE NO. 365
CV1b	ref	TUNNEL RECLAIM CONVEYOR (B)	
T1a	ref	SURGE RECLAIM TUNNEL (B) w/ESC.	

CV2a	ref	TRANSFER FEED CONVEYOR (A)	SEE DRAWING D05593 sh3 of 5 PAGE NO. 364
CV1a	ref	TUNNEL RECLAIM CONVEYOR (A)	
T1a	ref	SURGE RECLAIM TUNNEL (A) w/ESC.	

SECONDARY PLANT TOTAL SQUARE FOOTAGE 8,131
SECONDARY PLANT HEIGHT OF TALLEST EQUIPMENT 84 FT.

EMs	1	SECONOARY MOTOR CONTROL CENTER	11ft	331.65'	340sf
EXs	1	SECONDARY TRANSFORMER, 2000KVA	8ft	331.65'	214sf
CV5s	1	SURGE RADIAL STACKING CONVEYOR	71ft	328.09'	3,207sf
CV4s	1	UNDERCONE /SURGE RAD FEED CONV.	19ft	329.75'	722sf
CV3s	1	STOCKOUT CONVEYOR (3/8 REJECT)	46ft	333.64'	893sf
S1	1	SECONDARY CRUSH'G / SCREENING STA.	46ft	331.64'	1,234sf
CV1s	1	SECONOARY SCALPER FEED CONVEYOR	46ft	333.72'	796sf
SBs	1	SECONDARY SURGE BIN	84ft	333.72'	725sf

PRIMARY PLANT TOTAL SQUARE FOOTAGE 5,794
PRIMARY PLANT HEIGHT OF TALLEST EQUIPMENT 48 FT.

ECp	1	PRIMARY CONTROL HOUSE	29ft	410.00'	506sf
EMp	1	PRIMARY MOTOR CONTROL CENTER	10ft	422.00'	384sf
CV5p	1	B-ROCK RADIAL TELE-STOCKOUT CONV.	16ft	410.00'	1,395sf
CV4p	1	B-ROCK REJECT TRANSFER CONVEYOR	17ft	410.00'	1,249sf
P1	1	PRIMARY STATION	48ft	410.00'	2,260sf

HEIGHTS DETERMINED AT ITEM STRAIGHT DOWN TO NEAREST GRADE

Identifier	Qty.	Description	Height	Grade	Area

Legend

DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
APPROVED FOR CONSTRUCTION

BRIAN K YEE
LICENSED PROFESSIONAL ENGINEER
No. 11092
HAWAII U.S.A.

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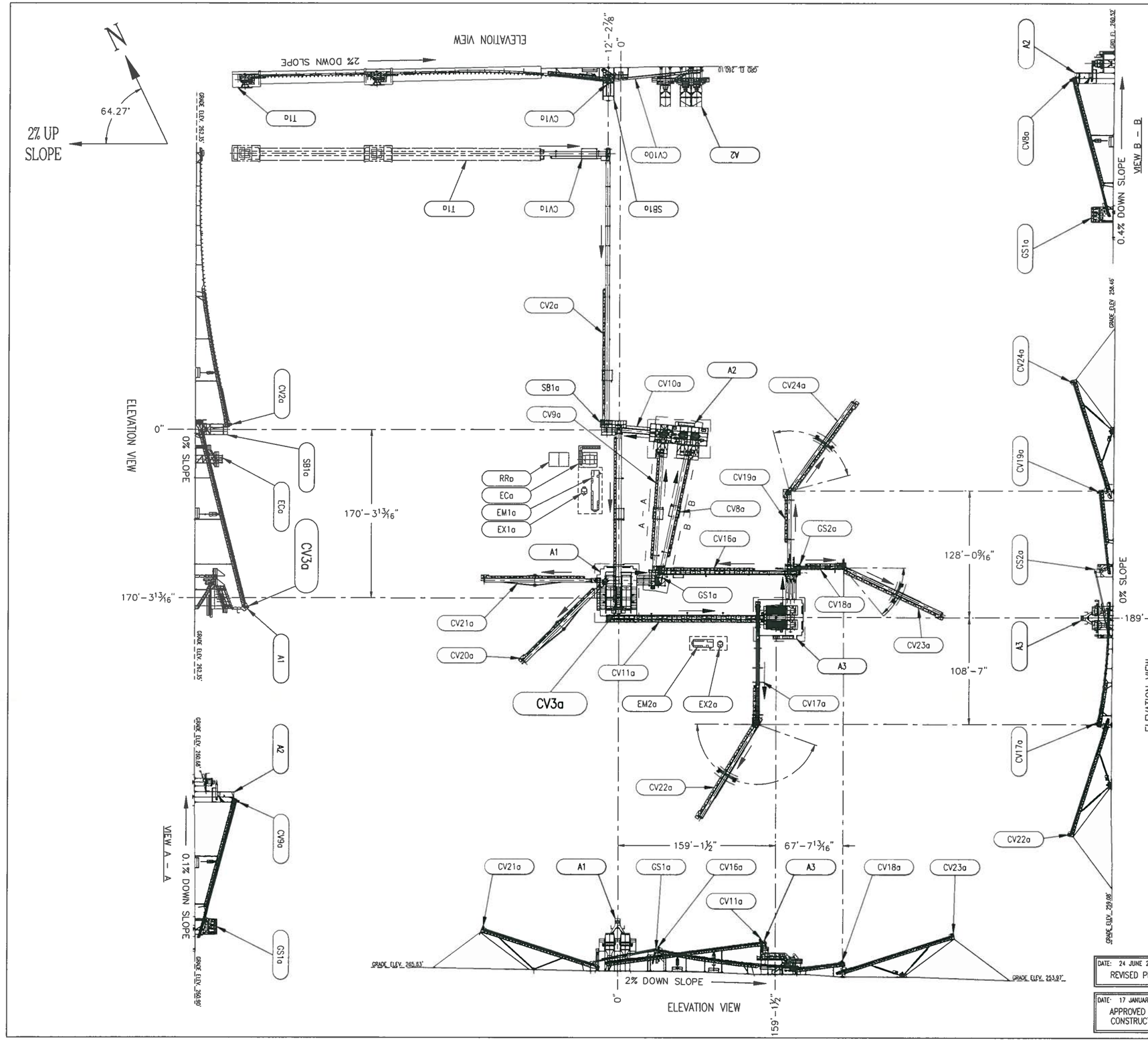
Rev.	Description	Drawn By	Date
E	DPP Restructure	JC	6 JAN 11
D	DPP Restructure	DO	4 MAR 11
C	GENERAL UPDATES	DO	17 JAN 11
B	Chg Line Wts	DO	18 AUG 10
A	Removed scales	JC	09 AUG 10

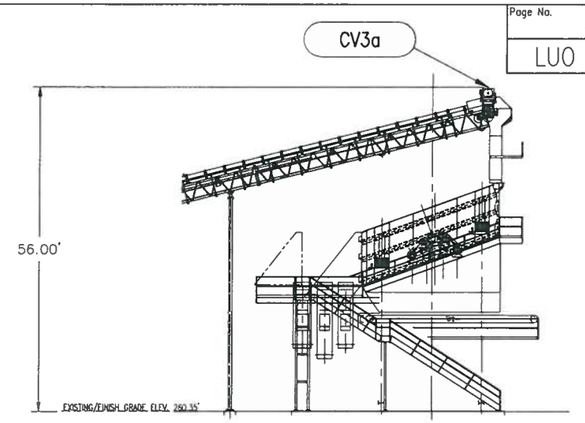
AMI Aggregate Machinery Group
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

Title
EQUIPMENT HEIGHTS & AREAS
PRIMARY & SECONDARY PLANTS
GRACE PACIFIC CORPORATION

Design By:	Drawn By:	Date:	Scale:
	JC / DO	09 AUG 10	1"=50'

Sheet: 2 Of 5 | Drawing No. D05593 | Rev. E





TALLEST PIECE OF EQUIPMENT IN THE 'A' ROCK PLANT

NOTE:
IMAGES OF EQUIPMENT REPRESENTED HERE FOR PRESENTATION.
REFER TO MAIN DRAWING SET FOR SPECIFICS.
HEIGHTS DETERMINED AT ITEM STRAIGHT DOWN TO GRADE.

"A" ROCK PLANT TOTAL SQUARE FOOTAGE 27,393
"A" ROCK PLANT HEIGHT OF TALLEST EQUIPMENT 56 FT.

EM2a	1	MOTOR CONTROL CENTER #2	11ft	261.42'	532sf
EX2a	1	TRANSFORMER, 1500KVA	8ft	261.42'	Inc EM2a
ECa	1	CONTROL HOUSE	29ft	262.58'	Inc EM1a
EM1a	1	MOTOR CONTROL CENTER #1	11ft	262.58'	1,649sf
EX1a	1	TRANSFORMER, 2500KVA	8ft	262.58'	Inc EM1a
RRa	1	RESTROOM	1 ft	262.58'	280sf

CV24a	1	RADIAL STACKER (CHIPS)	48ft	259. '	788sf
CV23a	1	RADIAL STACKER (3-FINE)	48ft	256.75'	788sf
CV22a	1	RADIAL STACKER (#4)	48ft	26 .35'	788sf
CV21a	1	STOCKOUT (AUX)	44ft	262.35'	921sf
CV20a	1	STOCKOUT (3-COARSE)	44ft	263.25'	891sf
CV19a	1	TRANSFER CONVEYOR (CHIPS)	18ft	259.00'	436sf
CV18a	1	TRANSFER CONVEYOR (3-FINE)	17ft	257.27'	298sf
CV17a	1	THROUGHS CROSS TRANSFER CONVEYOR	17ft	259.35'	574sf
CV16a	1	RE-CRUSH RETURN CONVEYOR	26ft	259.35'	865sf
GS2a	1	FINISH SCREEN GATE STATION	20ft	256.35'	Inc A3
A3	1	FINISH SCREENING STATION	35ft	259.35'	2,199sf
CV11a	1	FINISH SCREEN FEED CONVEYOR	37ft	261.15'	1,080sf
CV10a	1	COMMON UNDER CRUSHER CONVEYOR	14ft	261.35'	203sf
A2	1	FINISH CRUSHING STATION	46ft	261.35'	2,185sf
CV9a	1	VSI CRUSHER SURGE FEED CONVEYOR	46ft	262.35'	824sf
CV8a	1	CONE CRUSHERS SURGE FEED CONV.	46ft	262.35'	886sf
GS1a	1	PRE-SCREEN GATE STATION	25ft	262.35'	nc A1
A1	1	PRE-SCREENING STATION	53ft	262.35'	2,549sf
CV3a	1	PRE-SCREEN FEED CONVEYOR	56ft	262.35'	1,184sf
SB1a	1	A-ROCK SURGE BIN	33ft	262.35'	211sf
CV2a	1	TRANSFER FEED CONVEYOR	38ft	262.35'	1,535sf
CV1a	1	A-TUNNEL RECLAIM CONVEYOR	17ft	262.35'	603sf
T1a	1	SURGE RECLAIM TUNNEL (A) w/ESC.	NA	NA	5,124sf

HEIGHTS DETERMINED AT ITEM STRAIGHT OOWN TO NEAREST GRADE

Identifier	Qty.	Description	Height	Grade	Area
Legend					

DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
APPROVED FOR CONSTRUCTION

BRIAN K YEE
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HAWAII U.S.A.

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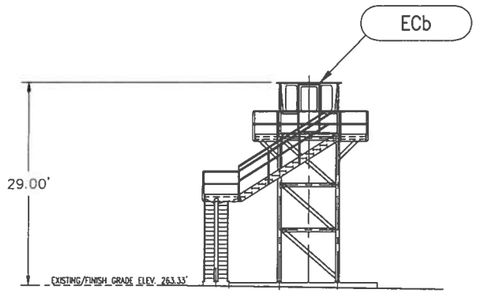
Rev	Description	Date	By
E	DPP Restructure	4 SEP 11	DO
D	DPP Restructure	1 SEP 11	DO
C	CONCEPTUAL UPDATES	18 AUG 10	DO
B	Chg Text WT	18 AUG 10	DO
A	Add CV1a & Tunnel	16 AUG 10	DO

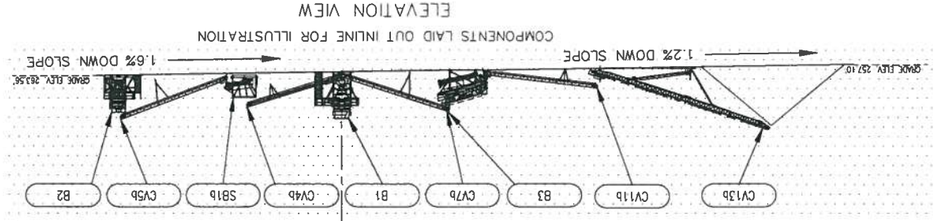
AMI
Aggregate Machinery Inc.
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

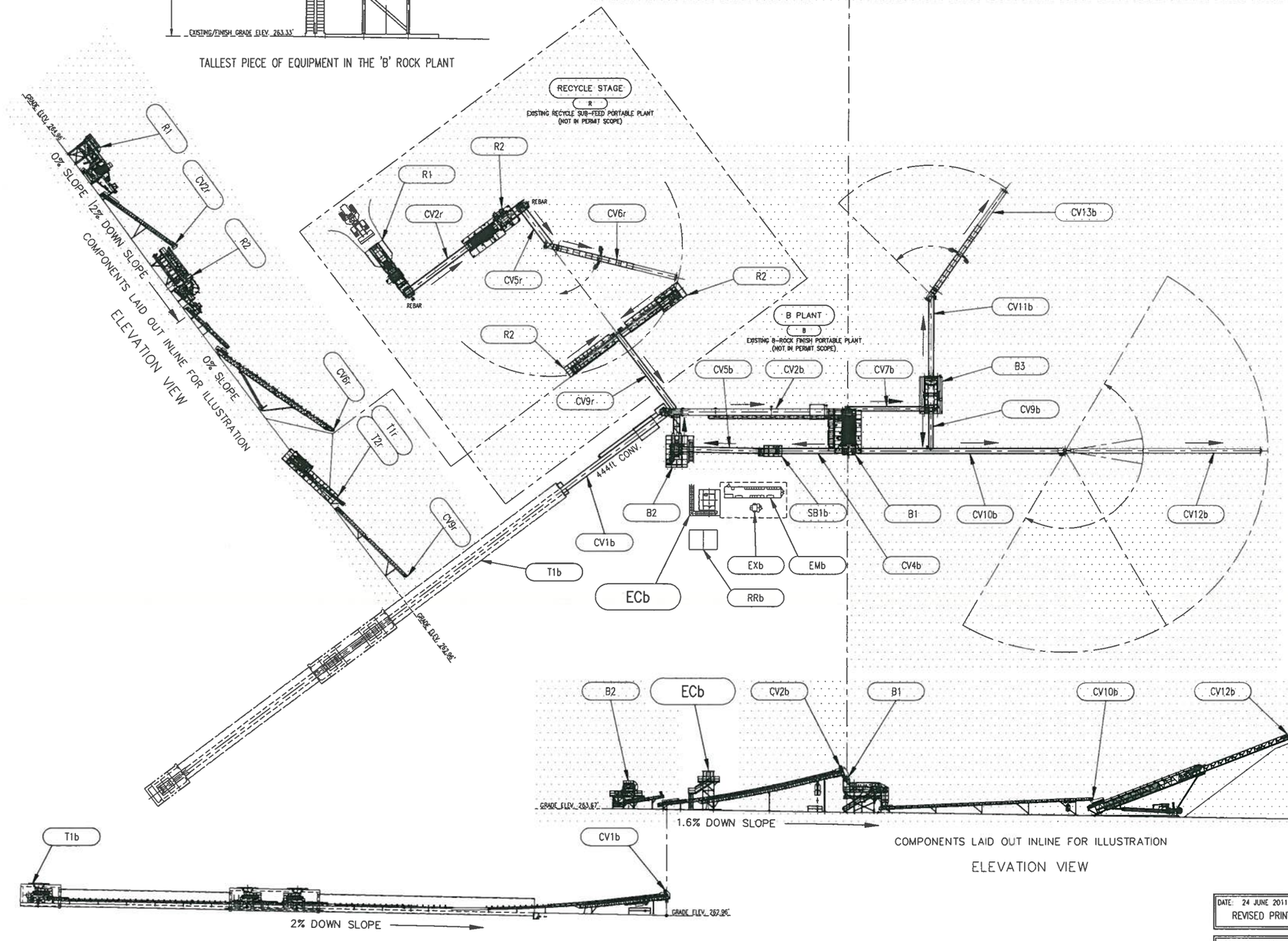
Title
EQUIPMENT HEIGHTS & AREAS
A-ROCK FINISH PLANT
GRACE PACIFIC CORPORATION

Design By: | Drawn By: JC | Date: 09 AUG 10 | Scale: 1"=50'
Sheet: 3 Of 5 | Drawing No. D05593 | Rev. D



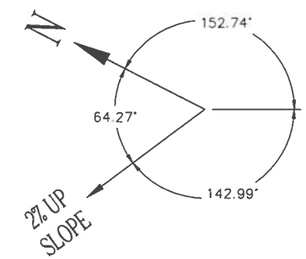
TALLEST PIECE OF EQUIPMENT IN THE 'B' ROCK PLANT





COMPONENTS LAID OUT INLINE FOR ILLUSTRATION

ELEVATION VIEW



NOTE:
IMAGES OF EQUIPMENT REPRESENTED HERE FOR PRESENTATION.
REFER TO MAIN DRAWING SET FOR SPECIFICS.
HEIGHTS DETERMINED AT ITEM STRAIGHT DOWN TO GRADE.

CV9r	1	RECYCLE FEED CONVEYOR	EXISTING RECYCLE SUB-FEED PORTABLE PLANT NEW LOCATION (NOT IN PERMIT SCOPE)
T2r	1	RECLAIM TUNNEL	
T1r	1	RECLAIM TUNNEL	
CV6r	1	SURGE PILE RADIAL STACKER	
CV5r	1	TRANSFER CONVEYOR	
R2	1	IMPACTOR STATION	
CV2r	1	SCALPER FEED CONVEYOR	
CV1r	1	UNDER JAW CONVEYOR	
R1	1	JAW CRUSHING STATION	
R	1	RECYCLE SUBFEED PLANT	

CV13b	1	3BF RADIAL STACKER	EXISTING B-ROCK FINISH PORTABLE PLANT NEW LOCATION (NOT IN PERMIT SCOPE)
CV12b	1	BASE RADIAL TELE-STACKER	
CV11b	1	3BF TRANSER CONVEYOR	
CV10b	1	BASE TRANSFER CONVEYOR	
CV9b	1	FINES TRANSFER CONVEYOR	
B3	1	RE-SCREEN STATION	
CV7b	1	RE-SCREEN FEED CONVEYOR	
B2	1	B-CONE CRUSHING STATION	
CV5b	1	CONE FEED CONVEYOR	
SB1b	1	SURGE BIN	
CV4b	1	SURGE FEED CONVEYOR	
B1	1	B-SCREENING STATION	
CV2b	1	PRE-SCREEN FEED CONVEYOR	

"B" ROCK PLANT TOTAL SQUARE FOOTAGE 8,615
"B" ROCK PLANT HEIGHT OF TALLEST EQUIPMENT 29 FT.

ECb	1	CONTROL HOUSE	29ft	263.33'	524sf
EMb	1	MOTOR CONTROL CENTER	11ft	263.33'	1,175sf
EXb	1	TRANSFORMER, 2500 KVA	8ft	263.33'	Inc EMb
RRb	1	RESTROOM	10ft	263.33'	28Dsf

CV1b	1	TUNNEL RECLAIM CONVEYOR (B)	18 ft	263.16'	666sf
T1b	1	SURGE RECLAIM TUNNEL (B) w/ESC.	NA	NA	5,990sf
B	1	B-ROCK FINISH PLANT	–	–	–

HEIGHTS DETERMINED AT ITEM STRAIGHT DOWN TO NEAREST GRADE

Identifier	Qty.	Description	Height	Grade	Area

Legend

DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
APPROVED FOR CONSTRUCTION

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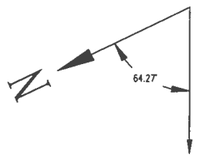
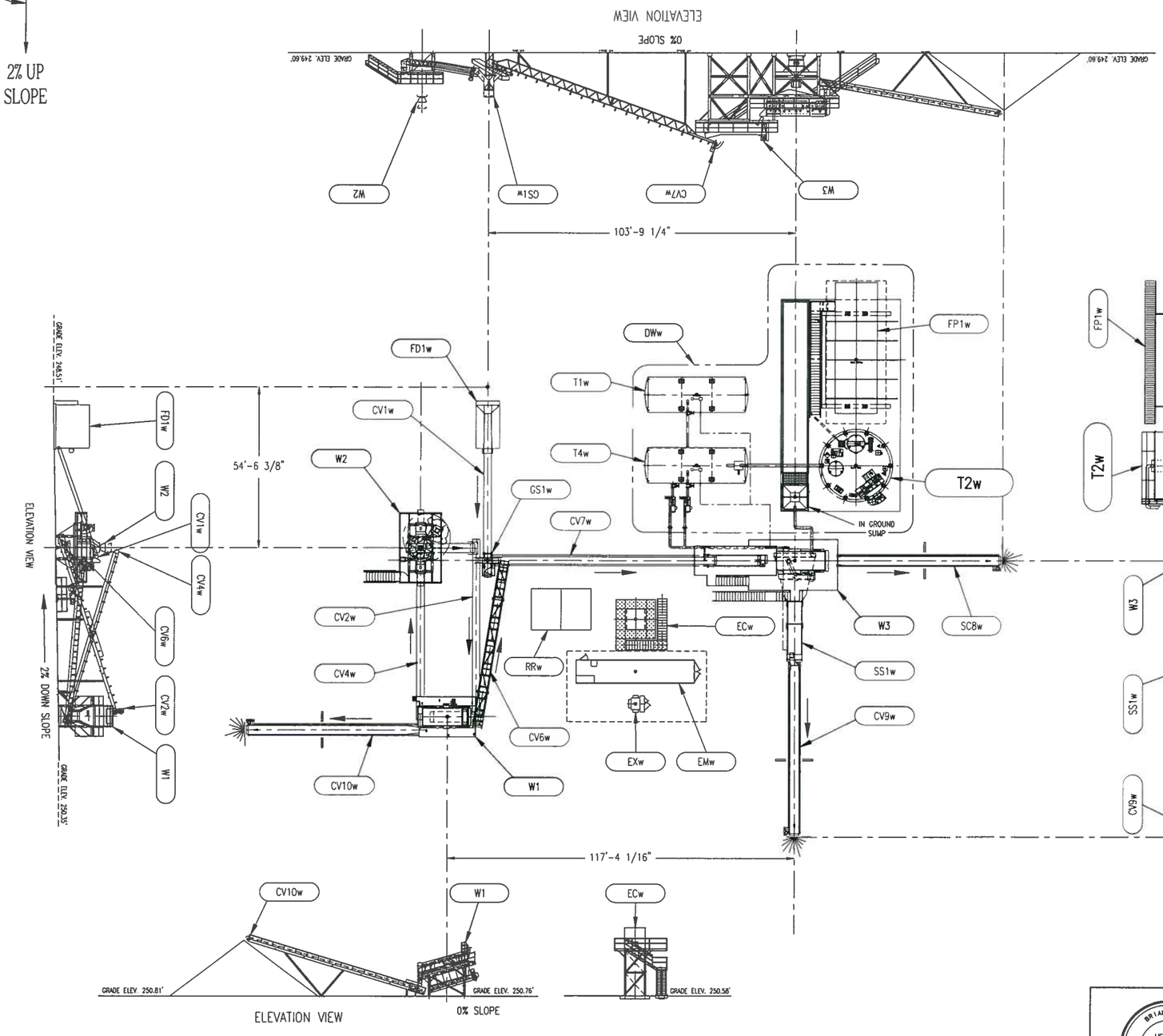
Rev.	Description	Dwg	Date
E	DPP Restructure	00	8 JAN 11
D	DPP Restructure	00	4 MAY 11
C	GENERAL UPDATES	00	17 JAN 11
B	Chg Text Wt	00	16 AUG 10
A	Project Set 4	00	16 JUL 10

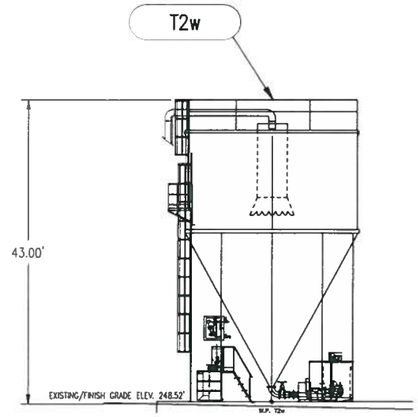
AMI
Aggregate Machinery Inc.
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

Title
EQUIPMENT HEIGHTS & AREAS
RECYCLE & B-ROCK PLANTS
GRACE PACIFIC CORPORATION

Design By:
Drawn By: JC
Date: 16 AUGUST 2010
Scale: 1"=40'
Sheet: 4 Of 5
Drawing No. D05593
Rev. E







TALLEST PIECE OF EQUIPMENT IN THE WASH PLANT

NOTE:
IMAGES OF EQUIPMENT REPRESENTED HERE FOR PRESENTATION.
REFER TO MAIN DRAWING SET FOR SPECIFICS.
HEIGHTS DETERMINED AT ITEM STRAIGHT DOWN TO GRADE.

WASH PLANT TOTAL SQUARE FOOTAGE 9,247
WASH PLANT HEIGHT OF TALLEST EQUIPMENT 43 FT.

ECw	1	CONTROL HOUSE	24ft	250.58'	296sf
EMw	1	MOTOR CONTROL CENTER	11ft	250.58'	1,140sf
EXw	1	TRANSFORMER, 1500KVA	8ft	250.58'	Inc EMw
RRw	1	RESTROOM	10ft	250.56'	280sf
FP1w	1	FILTERPRESS	38ft	248.52'	2,970sf
T4w	1	FRESH WATER TANK	13ft	249.00'	973sf
T2w	1	DECANTER	43ft	248.52'	Inc FP1w
T1w	1	FRESH WATER TANK - PERMITTED OPTIONAL	13ft	248.52'	Inc T4w
CV10w	1	PRODUCT STOCKOUT CONVEYOR (AUX)	22ft	250.81'	234sf
CV9w	1	PRODUCT STOCKOUT CONVEYOR (SAND)	22ft	250.32'	234sf
CV8w	1	PRODUCT STOCKOUT CONVEYOR (CHIPS)	22ft	249.58'	223sf
SS1w	1	SAND SCREW	19ft	249.60'	109sf
W3	1	WASH PLANT STATION	35ft	249.60'	865sf
CV7w	1	WASH PLANT FEED CONVEYOR	35ft	249.62'	231sf
CV6w	1	SCREEN THRUS TRANSFER CONVEYOR	14ft	250.76'	189sf
W2	1	DRY CRUSHING STATION	18ft	249.64'	418sf
CV4w	1	CRUSHER FEED CONVEYOR	24ft	249.70'	96sf
W1	1	DRY SCREENING STATION	25ft	250.76'	273sf
CV2w	1	SCREEN FEED CONVEYOR	25ft	250.35'	128sf
GS1w	1	GATE STATION	16ft	249.40'	356sf
CV1w	1	LIFT CONVEYOR	18ft		83sf
FD1w	1	BELT FEEDER	18ft		133sf

HEIGHTS DETERMINED AT ITEM STRAIGHT OOWN TO GRADE

Identifier	Qty.	Description	Height	Grade	Area

Legend

DATE: 24 JUNE 2011
REVISED PRINT

DATE: 17 JANUARY 2011
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Rev	Description	Date	By
E	DPP Restructure	2 JUN 11	DO
D	DPP Restructure	6 MAY 11	DO
C	GENERAL UPDATES	17 JAN 11	DO
B	City Line Wt.	18 DEC 10	DO
A	Preliminary Color	14 DEC 10	DO

AMI
Aggregate Machinery Inc.
P.O. Box 17160 · Salem, OR 97305-7160 · (503) 390-6284 · FAX (503) 390-6342

Title
EQUIPMENT HEIGHTS & AREAS
WASH PLANT
GRACE PACIFIC CORPORATION

Design By:	Drawn By:	Date:	Scale:
	JC	6 AUG 10	1"=20'

Sheet: 5 OF 5 | Drawing No. D05593 | Rev. E

ANNUAL COMPLIANCE REPORT

Makakilo Quarry, Hawaii

2011

APPENDIX H:

LETTER FROM DPP TO BELT COLLINS DATED JULY 1, 2011
REGARDING CONDITIONAL USE PERMIT 2007/CUP-47

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

PETER B. CARLISLE
MAYOR

DAVID K. TANOUE
DIRECTOR

JIRO A. SUMADA
DEPUTY DIRECTOR

2011/ELOG-1410(JM)

July 1, 2011

Mr. Glen T. Koyama
Belt Collins Hawaii, Ltd.
2153 North King Street, Suite 200
Honolulu, Hawaii 96819-4554

Dear Mr. Koyama:

Subject: Conditional Use Permit No. 2007/CUP-47
Puu Makakilo, Inc. and James Campbell Company LLC
92-1130 Pueonani Street (Makakilo Quarry) – Honouliuli
Tax Map Key 9-2-3: 74 and 82

We have reviewed the documentation submitted on June 27, 2011, and determined that it meets Condition 1c of the above Conditional Use Permit. As such, the Applicant may now proceed with processing of their building permit(s).

If you have any questions, please contact James Morisato of our staff at 768-8026 .

Very truly yours,

for David K. Tanoue, Director
Department of Planning and Permitting

DKT:nw

Doc. No. 860240

ANNUAL COMPLIANCE REPORT

Makakilo Quarry, Hawaii

2011

APPENDIX I:

CORRESPONDENCE FROM STATE OF HAWAII CLEAN AIR BRACH
DATED OCTOBER 21, 2011

RE: Complaint Reports for Grace Pacific Makakilo Quarry CSP No. 0045-01-C/CT

Cab General to: MDEntremont 10/21/2011 10:46 AM

From: "Cab General" <Cab.General@doh.hawaii.gov>
To: <MDEntremont@gracepacificcorp.com>
History: This message has been replied to.

Dear Ms. D'Entremont,

The Clean Air Branch have reviewed our files and did not find any complaints in calendar year 2010 to present 2011.

If you have any questions, please call me at 586-4200.

Thank you,
Jill

From: MDEntremont@gracepacificcorp.com [mailto:MDEntremont@gracepacificcorp.com]
Sent: Fri 10/21/2011 7:10 AM
To: Cab General
Subject: Complaint Reports for Grace Pacific Makakilo Quarry CSP No. 0045-01-C/CT

Good Morning,

I am interested in obtaining any reported complaints against Grace Pacific regarding air quality issues for our Makakilo Quarry for the years2010 and to date for 2011.

Please advise how best to retrieve this information

Thank you for your assistance

Margaret D'Entremont
Admin. Asst.
Grace Pacific Quarry Office
(808) 674-3545 Direct
(808) 306-7998 Cell
(808) 674-3998 Fax