Multnomah County Oregon

Board of Commissioners & Agenda

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BOARD OF COMMISSIONERS

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APRIL 24 & 26, 2007 BOARD MEETINGS

FASTLOOK AGENDA ITEMS OF INTEREST

Pg 2	9:00 a.m. Tuesday Executive Session
Pg 2	9:30 a.m. Tuesday Budget Work Session
Pg 3	6:00 p.m. Tuesday Public Budget Hearing
Pg 4	9:30 a.m. Thursday Opportunity for Public Comment on Non-Agenda Matters
Pg 5	9:55 a.m. Thursday 2007 Legislative Update
Pg 5	10:20 a.m. Thursday Multnomah County 2007-2009 Affirmative Action Plan
Pg 5	10:45 a.m. Thursday Resolution Adopting County Policies to Reduce Benzene Pollution
Pg 5-6	1:30 p.m. Thursday Hearings on Four Measure 37 Claims

Thursday meetings of the Multnomah County Board of Commissioners are cable-cast live and taped and may be seen by Cable subscribers in Multnomah County at the following times:

Thursday, 9:30 AM, (LIVE) Channel 30
Saturday, 10:00 AM, Channel 29
Sunday, 11:00 AM, Channel 30
Tuesday, 8:00 PM, Channel 29

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Tuesday, April 24, 2007 - **9:00 AM**
Multnomah Building, Sixth Floor Commissioners Conference Room 635
501 SE Hawthorne Boulevard, Portland

EXECUTIVE SESSION

E-1 The Multnomah County Board of Commissioners will meet in Executive Session Pursuant to ORS 192.660(2)(d),(e) and/or (h). Only Representatives of the News Media and Designated Staff are allowed to attend. News Media and All Other Attendees are Specifically Directed Not to Disclose Information that is the Subject of the Session. No Final Decision will be made in the Session. Presented by County Attorney Agnes Sowle. 15-30 MINUTES REQUESTED.

Tuesday, April 24, 2007 - **9:30 AM**
Multnomah Building, First Floor Commissioners Boardroom 100
501 SE Hawthorne Boulevard, Portland

BUDGET WORK SESSION

WS-1 Multnomah County 2007-2008 General Government Budget Work Session. This meeting is open to the public however no public testimony will be taken. 2.5 HOURS REQUESTED.

- Introductions
- Central Citizen Budget Advisory Committee Presentation
- Non-Departmental Presentations
- County Management Presentation
- Community Services Presentation
- Library Services Presentation

CABLE PLAYBACK INFO:
Tuesday, April 24 - 9:30 AM LIVE Channel 29
Friday, April 27 - 8:00 PM Channel 29
Saturday, April 28 - 2:00 PM Channel 29
Sunday, April 29 - 11:00 AM Channel 29

Tuesday, April 24, 2007 - **6:00 PM**
Multnomah County East Building, Sharron Kelley Conference Room
600 NE 8th, Gresham

BUDGET HEARING

PH-1 Public Hearing on the 2007-2008 Multnomah County Budget. Testimony is limited to three minutes per person. Fill out a speaker form available in the conference room and turn it into the Board Clerk. The conference room will be open one hour prior to the hearing.

CABLE PLAYBACK INFO:
Tuesday, April 24 - 6:00 PM LIVE Channel 29
Friday, April 27 - 10:30 PM Channel 29
Saturday, April 28 - 4:30 PM Channel 29
Sunday, April 29 - 1:30 PM Channel 29

Thursday, April 26, 2007 - **9:30 AM**
Multnomah Building, First Floor Commissioners Boardroom 100
501 SE Hawthorne Boulevard, Portland

REGULAR MEETING

CONSENT CALENDAR - 9:30 AM
NON-DEPARTMENTAL

C-1 Appointment of Joseph Barcott to the Multnomah County BICYCLE AND PEDESTRIAN CITIZEN ADVISORY COMMITTEE

SHERIFF'S OFFICE

C-2 New Full On Premises Sales Liquor License for THE VIEW POINT INN, 40301 E Larch Mountain Road, Corbett, OR 97019

DEPARTMENT OF COUNTY MANAGEMENT

C-3 RESOLUTION Authorizing Cancellation of Uncollectible Personal Property Taxes for Tax Years 1992/93 through 2006/07

REGULAR AGENDA

PUBLIC COMMENT - 9:30 AM

Opportunity for Public Comment on non-agenda matters. Testimony is limited to three minutes per person. Fill out a speaker form available in the Boardroom and turn it into the Board Clerk.

SERVICE DISTRICTS - 9:30 AM

(Recess as the Board of County Commissioners and convene as the governing body for **DUNTHORPE RIVERDALE SANITARY SERVICE DISTRICT NO. 1)**

R-1 Appointment of Lane Hickey to Serve a Three-Year Term on the Dunthorpe-Riverdale Sanitary Service District No. 1 Budget Committee

R-2 Appoint Dunthorpe-Riverdale Sanitary Service District No. 1 Budget Committee Chair and Secretary for Fiscal Year 2007-2008

R-3 Dunthorpe-Riverdale Sanitary Service District No. 1 Budget Message Presentation followed by Public Hearing and Consideration of Approval of the 2007-2008 Dunthorpe Riverdale Sanitary Service District No. 1 Proposed Budget for Submittal to Tax Supervising and Conservation Commission

(Adjourn as the governing body for Dunthorpe Riverdale Sanitary Service District No. 1 and convene as governing body for **MID-COUNTY STREET LIGHTING SERVICE DISTRICT NO. 14)**

R-4 Appoint Mid-County Street Lighting Service District No. 14 Budget Committee Chair and Secretary for Fiscal Year 2007-2008

R-5 Mid-County Street Lighting Service District No. 14 Budget Message Presentation followed by Public Hearing and Consideration of Approval the 2007-2008 Mid County Street Lighting Service District No. 14 Proposed Budget for Submittal to Tax Supervising and Conservation Commission

(Adjourn as the governing body for Mid-County Street Lighting Service District No. 14 and reconvene as Board of County Commissioners)

DEPARTMENT OF LIBRARY SERVICES – 9:45 AM

R-6 Budget Modification LIB-06 Adding a 0.5 FTE Position at Central Library-John Wilson Room of Department of Library Services

DEPARTMENT OF HEALTH – 9:50 AM

R-7 Budget Modification HD-15 Appropriating $10,000 from the National Association of Community Health Centers (NACHC) for the Health Department to Participate in NACHC's Hepatitis C Virus Initiative

R-8 NOTICE OF INTENT to Apply for a $40,000 Grant Funding from the Patterson Foundation to Support the Purchase of Dental Equipment

PUBLIC AFFAIRS OFFICE – 9:55 AM

R-9 Update on 2007 Legislative Activities. Presented by Gina Mattioda. 30 MINUTES REQUESTED.

DEPARTMENT OF COUNTY MANAGEMENT – 10:20 AM

R-10 Adopting Multnomah County's Affirmative Action Plan for 2007-2009

NON-DEPARTMENTAL - 10:40 AM

R-11 RESOLUTION Consenting to Department of State Lands Lease Under the New Sauvie Island Bridge

R-12 RESOLUTION Adopting County Policies to Reduce Benzene Pollution. Presented by Commissioner Jeff Cogen, Lisa Arkin-Oregon Toxics Alliance, Kevin Downing-DEQ, Molly Chidsey-Sustainability Office, and Niki Hruska, Temp-Control. 20 MINUTES REQUESTED.

Thursday, April 26, 2007 - **1:30 PM**
Multnomah Building, First Floor Commissioners Boardroom 100
501 SE Hawthorne Boulevard, Portland

REGULAR MEETING - CONTINUED

DEPARTMENT OF COMMUNITY SERVICES - 1:30 PM

PH-1 Public Hearing to consider and possibly act upon a Measure 37 Claim for Charles Maxson for up to $385,000 in compensation or relief from land use regulations to allow the partition of each lot into two lots with four residential home sites overall on properties located at 38755 and 39062 E.

Knieriem Rd., Corbett [T1N, R4E, Sec 36C, TL 300 & 400] (Case File T1-06-095). Presented by Ken Born and Sandra Duffy.

PH-2 Public Hearing to consider and possibly act upon a Measure 37 Claim by Sandra Baker et al and Barkers Five LLC for $33.6 million in compensation or relief from regulations to allow the claimants to construct 3 additional single family dwellings then subdivide and sell 2-acre lots for properties located in the vicinity of 15610 NW Germantown Road, Portland (Case File T1-06-098). Presented by Derrick Tokos and Sandra Duffy

PH-3 Public Hearing to consider and possibly act upon a Measure 37 Claim by George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC, for $8.5 million or relief from regulations to allow mining of all economically viable sources of gravel, followed by subdivision of the 206 acre property into 75-100 buildable single family dwelling lots, Corbett (Case File T1-06-124). Presented by Derrick Tokos and Sandra Duffy.

PH-4 Public Hearing to consider and possibly act upon a Measure 37 Claim by George Raymond Smith, The Raymond Smith LLC, Raymond Smith Trusts, and Lenske Properties LLC, for $20.3 million in compensation or relief from regulations to allow the claimants to subdivide 561 acres (17 properties) into 90-104 residential lots and to log riparian buffers along Howard Creek and a tributary. The properties are located south of Corbett, in the vicinity of the Howard Canyon Quarry, Corbett (Case File T1-06-087). Presented by Derrick Tokos and Sandra Duffy

BOARD COMMENT

Opportunity (as time allows) for Commissioners to provide informational comments to Board and public on non-agenda items of interest or to discuss legislative issues.

Jim Zupancic, J.D., CRE

President

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Zupancic Group Inc.

Real Estate Advisors and Developers

MULTNOMAH COUNTY
AGENDA PLACEMENT REQUEST (short form)

Board Clerk Use Only	
Meeting Date:	04/26/07
Agenda Item #:	PH-1
Est. Start Time:	1:30 PM
Date Submitted:	04/12/07

Agenda Title:	**Public Hearing to consider and possibly act upon a Measure 37 Claim for Charles Maxson for up to $385,000 in compensation or relief from land use regulations to allow the partition of each lot into two lots with four residential home sites overall on properties located at 38755 and 39062 E. Knieriem Rd., Corbett [T1N, R4E, Sec 36C, TL 300 & 400] (Case File T1-06-095)**

Note: If Ordinance, Resolution, Order or Proclamation, provide exact title. For all other submissions, provide a clearly written title.

Requested Meeting Date:	April 26, 2007	**Amount of Time Needed:**	20 minutes
Department:	**Community Services**	**Division:**	Land Use & Transportation
Contact(s):	Derrick Tokos, Ken Born, Sandra Duffy		
Phone:	503-988-3043 **Ext.** 29397	**I/O Address:**	455/116
Presenter(s):	Ken Born, Sandra Duffy		

General Information

1. What action are you requesting from the Board?

Action requested is to provide a public hearing and render a decision regarding a Measure 37 claim by Charles Maxson to waive land use regulations which prohibit the partition, and development of two new single family dwellings on two lots located at 38755 and 39062 E. Knieriem Rd. Land use planning has outlined an approach to deciding this claim in a staff report dated April 11, 2007.

2. Please provide sufficient background information for the Board and the public to understand this issue. Please note which Program Offer this action affects and how it impacts the results.

The claimant, Charles Maxson, is seeking $385,000 in compensation or relief from land use regulations to allow the 8.96-acre and 19.79-acre lot to be divided into four parcels overall with two homes on each newly created, vacant parcel. He acquired his current interest in the property on April 25, 1991 (Tax Lot 400) and November 25, 1992 (Tax Lot 300).

County zoning for the property in 1991 and 1992 was MUF-19. The minimum lot size in this agriculture and timber district was 19 acres. These regulations would not have allowed a further

division of the property. Further, the MUF-19 zone did not allow for more than one dwelling on a lot of any size. The lots which are the subject of this claim both contain a dwelling at present.

It is for these reasons that staff recommends the Board of Commissioners deny this claim.

3. **Explain the fiscal impact (current year and ongoing).**
   The claimants assert a reduction in value of $385,000. A comparative market analysis provided by the claimants does establish that the above listed regulations have reduced the fair market value of the identified property.

4. **Explain any legal and/or policy issues involved.**
   Policy and legal issues are outlined in a staff report from Land Use Planning dated April 11, 2007. The County Attorney has advised that any property rights obtained by relief from land use regulations are not transferable under Ballot Measure 37, consistent with the DOJ opinion of February 2005.

5. **Explain any citizen and/or other government participation that has or will take place.**
   Public notice of this hearing has been mailed to all property owners within 750 feet of the subject property, and the claimant. Deliberation and any action on this item will be done following a public hearing at which interested citizens will have an opportunity to testify and provide written comment in accordance with the Board of Commissioners rules of procedure for the hearing.

Required Signature

Elected Official or Department/ Agency Director: M. Cecilia Johnson **Date: 04/12/07**

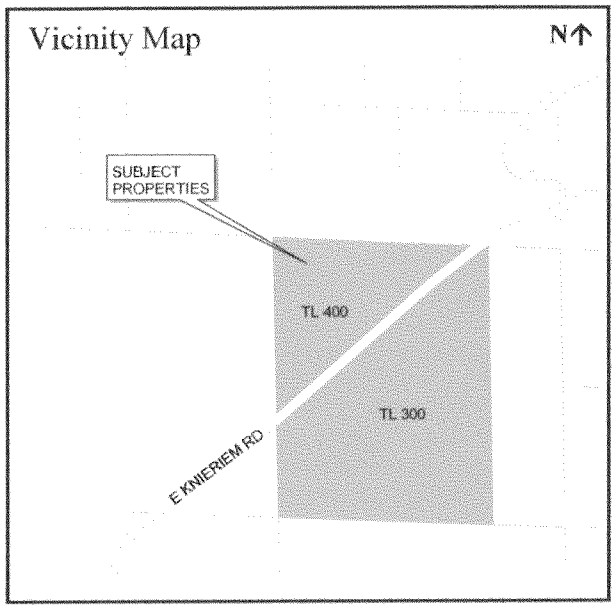
LAND USE & TRANSPORTATION PLANNING PROGRAM
1600 SE 190TH Avenue Portland, OR 97233
PH: 503-988-3043 FAX: 503-988-3389
http://www.co.multnomah.or.us/landuse

Staff Analysis of Measure 37 Claim

The following matter is scheduled for public hearing, deliberation and possible action before the Multnomah County Board of Commissioners

Hearing Date, Time, & Place:

Thursday, April 26, 2007 at 1:30 pm or soon thereafter, in the Commissioners' Board Room of the Multnomah Building, located at 501 SE Hawthorne, Portland, Oregon.



Case File: T1-06-095

Claimants: Charles Maxson
1731 Diomede St.
Anchorage, AK 99504

Location: 38755 and 39062 E. Knieriem Rd.
Corbett, OR 97014
TL 400, Sec 36C, T1N, R4E, W.M.
Tax Account # R944360720
&
TL 300, SEC 36C, T1N, R4E, W.M
Tax Account # R944360080

Claim: Up to $385,000 in compensation or relief from land use regulations to allow a partition of each lot into two lots with four residential home sites overall in the CFU-4 zone district.

Zoning: Commercial Forest Use-4 (CFU-4)

Site Size: 8.96 acres & 19.79 acres

Approach to Deciding the Claim:

For a claim to be valid, the land use regulations challenged must restrict the claimant's use of private real property in a manner that reduces its fair market value relative to how it could have been used at the time the claimants acquired the property. As outlined in this report and memorandum from the County Attorneys Office, this requirement has not been met. The reasons for this are as follows:

(a) The claimant has failed to establish that they acquired and have continuously owned the property prior to the date the challenged regulations were enacted and;
(b) The claimant has failed to document that two additional dwellings and a partition of the two existing lots could have been approved under the land use regulations in effect at the time they acquired the property.

Claim Summary

(The following is a step-by-step evaluation of the claim, which consists of materials submitted by the claimants. The analysis is structured as a series of questions that must be answered to establish if a claim is valid, comparable to the methodology outlined in a February 24th, 2005 memo from the State Attorney General's Office.)

The claimant is challenging County zoning regulations enacted after 1964. He asserts that his interest in the property was acquired in February of 1964. At that time, the claimant maintains that he was entitled to construct two additional dwellings and to divide the land into four lots overall, pursuant to the County's F-2 zoning regulations. The claimant also asserts that the value of the properties have been reduced by up to $385,000 due to county land use regulations enacted after he acquired the property. An appraisal has not been provided to substantiate this figure.

1. Did the claimant acquire the property before the laws in question were adopted?

No. The claimant obtained an interest in the subject properties on April 25, 1991 (Tax Lot 400) and November 25, 1992 (Tax Lot 300) (Exhibit A.5) after regulations challenged in this claim were enacted which prohibit further division of the properties and additional homes.

A deed submitted by the claimant (Exhibit A.5), shows that he first acquired the property on February 27, 1964. County assessment records also identify the claimant as the current owner of the property (Exhibit B.4). However, deed documentation, title report (Exhibit A.16 and A.26), and other information provided by the claimant show that the claimant has not maintained continual ownership since 1964.

Charles Maxson's current interest in Tax Lot 400 began on April 25, 1991, when William and Brent Maxson, Charles' sons, deeded 8.89 acres out of the entire 28.75-acres, back to Charles (Book 2406, Page 1858). Prior to that date, William and Brent owned Tax Lots 400 and 300 for 14 years, after acquiring them from Charles' mother, Julia Young (Book 1167, Page 1908).

Similarly, Charles' current ownership interest in Tax Lot 300 began on November 25, 1992, when Brent deeded the remaining 19.93-acres to Charles (Book 2617, Page 1899).

Further analysis by the County Attorney's Office specific to these ownership issues is included in Exhibit D.2.

The zoning designation that applied to the property in 1991 and 1992 was known as Multiple Use Forest-19 (MUF-19). A copy of the zoning map is included as Exhibit B.1. A copy of the corresponding MUF-19 regulations is also presented as Exhibit B.2. The purpose of the MUF district zone was to conserve and encourage the growing and harvesting of timber and small wood lot management. The minimum lot size in this district was 19 acres (11.15.2178(A)).

Dwellings were allowed as of right only on properties larger than 38 acres in size (§11.15.2168(E)). A dwelling could be permitted on a property between 10 and 38 acres in size if approved in conjunction with an ongoing forest practice, wood processing operation or farm use as a "use permitted under prescribed conditions" (§11.15.2170(A)). The submittal of a resource management plan outlining how the forest practice, wood processing operation or farm use was to be managed was required as a condition of approval under this provision. As a conditional use, a dwelling was allowed only if the land was incapable of sustaining a farm or forest use, or was a legal lot less than 10 acres in size (§11.15.2172(C)).

The zoning changed from MUF-19 to Commercial Forest Use (CFU) on January 7, 1993.

2. ***Have the challenged regulations restricted the use of the property?***

No. County regulations in effect when the claimant acquired his current interest in the properties prohibited construction of two additional dwellings or further division of the properties.

The zoning first changed from F-2 to Multiple Use Forest-20 (MUF-20) on October 6, 1977. The zoning changed to MUF-19 on August 14, 1980 and then to CFU on January 7, 1993. The Commercial Forest Use-4 regulations challenged by the claimant first came into effect on August 8, 1998 and were amended on May 15, 2002. The 1991 and 1992 acquisition dates occurred well after the 2 acre minimum lot size standard was repealed.

Even if the claimants had acquired properties in 1964, as noted in their claim, the right to establish a dwelling was not guaranteed under the F-2 zoning in effect at that time. Under the F-2 zoning, the claimants would have been required to demonstrate that a proposed dwelling was *"required to carry out grazing, agriculture, horticulture or the growing of timber"* (§3.112, Ord. #100).

MUF-19 regulations in effect on April 25, 1991 and November 25, 1992 prohibit further division, meaning relief from challenged regulations would not allow the development that is sought. A land division in the MUF-19 zone would have required the subject lots to be at least 38 acres in size, each. Further, the MUF-19 zone did not allow for more than one dwelling on a lot of any size. The lots which are the subject of this claim both presently contain dwellings.

3. ***Have the regulations reduced the fair market value of the properties?***

No. The claimant has failed to establish that the challenged regulations have reduced the fair market value of the property.

As established above, regulations in effect when the claimants acquired the properties in 1991 and 1992 did not allow construction of two additional dwellings, or partition of the two lots into four lots. Since the claimants have not shown that their use of the properties has been restricted, there is no reduction to the fair market value of the properties.

Public Notice

Public notice of this hearing was mailed to all property owners within 750 feet of the subject property. Deliberation and any action on this item will be done following a public hearing at which interested citizens will have an opportunity to testify and provide written comment in accordance with the Board of Commissioners rules of procedure for the hearing.

Conclusion

In conclusion, the claimant has failed to establish that regulations preventing them from constructing two additional dwellings, or dividing the properties into four lots, has resulted in a restriction of their use of the land and reduction in its value. The MUF-19 regulations in effect when the owner acquired his current interest in the property did not allow for a land division of property less than 38 acres in size.

Consequently, staff recommends that the Board of Commissioners deny this claim.

Issued by:

By: Kenneth Born, AICP, Planner

For: Karen Schilling- Planning Director
Date: April 11, 2007

Exhibits

Copies of the exhibits, referenced herein, and all other materials submitted to the County related to this claim are included in the case record that is on file at the Land Use and Transportation Planning Office.

Exhibit #	# of Pages	Description of Exhibit	Date Received/ Submitted
A.1	1	Signed Measure 37 Application Form	11/22/06
A.2	3	Claim Narrative	11/22/06
A.3	2	Limited Power of Attorney Document	11/22/06
A.4	3	Affidavits: a. Charles Maxson re. ownership issues, 11/20/06 b. Brent Maxson re. ownership issues, 11/17/06 c. William Maxson re. ownership issues, 11/21/07	11/22/06
A.5	2	Deed Information: a. Contract of Sale dated February 11, 1964 from Dean D. Lundstrom and Adeline A. Lundstrom to Walter E. Knieriem and Mignon L. Knieriem b. Assignment of Contract dated April 6, 1964 to Dean D. Lundstrom and Adeline A. Lundstrom c. Contract of Sale dated February 27, 1964 from Walter E. Knieriem and Mignon L. Knieriem to Charles W. Maxson d. Contract of Sale dated March 2, 1964 from Charles W. Maxson to Arthur B. Altman and Edna A. Altman e. Assignment dated December 10, 1964 to Julia Wyser Young f. Deed dated December 26, 1973 from Dean D. Lundstrom and Adeline A. Lundstrom to Julia Wyser Young g. Deed dated March 30, 1977 from Julia C. Young to William E. Maxson and Brent E. Maxson h. Quitclaim Deed dated April 25, 1991 from William E. Maxson to Brent E. Maxson to Charles W. Maxson i. Deed restrictions recorded August 2, 1991 j. Quitclaim Deed dated April 25, 1991 from William E. Maxson and Brent E. Maxson to Multnomah County k. Road Deed dated August 19, 1991 from William E. Maxson and Brent Maxson to Multnomah County l. Settlement Agreement dated August 19, 1991 between Corbett Water District and William E. Maxson and Brent E. Maxson m. Bargain and Sale Deed dated November 25, 1992 between Brent E. Maxson and Charles W.	11/22/06

		Maxson n. Deed of Trust dated January 20, 2003 from Charles W. Maxson to Fidelity Wells Fargo Home Mortgage, Inc. o. Quitclaim Deed dated June 26, 2003 from Charles W. Maxson to Charles W. Maxson Revocable Living Trust dated February 28, 2003 p. Covenant dated June 24, 2005 filed by Charles W. Maxson	
A.6	4	List of Deeds, Leases and Contracts (March 1964 to June 2005), Ticor Tile Insurance Company	01/07/07
A.7	1	Designation of applicant's representative	11/22/06
A.8	21	Applicable 1962 Multnomah County Zoning Map and Ordinance	11/22/06
A.9	27	Multnomah County East of Sandy River Rural Area (CFU-4)	11/22/06
A.10	6	Multnomah County Multiple Use Forest District Regulation	11/22/06
A.11	10	ORS 215.780 and House Bill 3661	11/22/06
A.12	1	Summary of Current Restrictions	11/22/06
A.13	29	Broker's Opinion of Value (Comparative Market Analysis)	11/22/06
A.14	11	Copy of State of Oregon Measure 37 Claim Form	11/22/06
A.15	3	Correspondence re. Incomplete Letter	01/07/07
A.16	4	Status of Record Title Report	01/07/07
A.17	2	Application to Exempt a Manufactured Structure from Registration and Titling	01/07/07
A.18	2	Manufactured Home Rider to the Mortgage/Deed of Trust/Security Deed dated January 31, 2003	01/07/07
A.19	1	Substitution of Trustee and Full Reconveyance recorded May 3, 2003	01/07/07
'B'		Staff Exhibits	Date
B.1	1	Zoning Map in Effect on April 25, 1991 and November 25, 1992	N/A
B.2	8	MUF-19 Regulations in Effect on April 25, 1991 and November 25, 1992	N/A
B.3	1	Current Zoning Map	N/A
B.4	1	Assessment and Taxation Property Information	N/A
'C'		Administration & Procedures	Date
C.1	2	Incomplete Letter	12/19/06
C.2	2	Abatement Offer Letter	12/19/06
C.3	2	Letter to claimant from County Attorney's Office re. *Hall v. Multnomah Co.*	01/26/07

C.4	2	Letter from Staff to Claimant	03/22/07
'D'		Comments Received	Date
D.1	1	Memorandum: Multnomah County Attorney's Office, Sandy Duffy	04/11/07
D.2	1	Memorandum: Multnomah County Transportation Division, Alison Winter	04/11/07

Multnomah County Attorney's Office
501 S.E. Hawthorne Blvd., Suite 500
Portland, Oregon 97214
PHONE: (503) 988-3138
FAX: (503) 988-3377

MEMORANDUM

To: Ken Born
Multnomah County Planner

CC: Derrick Tokos
Principal Planner, Multnomah County

From: Sandra Duffy
Assistant County Attorney
Multnomah County Attorney's Office

Date: April 11, 2007

Re: Charles Maxson, Ballot Measure 37 Claim T1-06-095

I have reviewed your staff report for legal sufficiency under ORS 197.352 (Measure 37). Your staff report has adequately addressed each required criteria and correctly applied Measure 37.

04/26/07 Maxson, Baker, Smith and Lenske M 37 Hearings Script

Thursday, April 24, 2007 - **1:30 PM**
Multnomah Building, First Floor Commissioners Boardroom 100
501 SE Hawthorne Boulevard, Portland

REGULAR MEETING - CONTINUED

Chair Ted Wheeler convenes the meeting at 1:30 p.m., with Vice-Chair Maria Rojo de Steffey and Commissioners Lisa Naito, Lonnie Roberts and Jeff Cogen present.

INTRODUCTION:

Chair: This is the time set for public hearings on the claims of ***Charles Maxson; Sandra Baker et al and Barkers Five LLC; George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC; and George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC*** under Ballot Measure 37. I am Ted Wheeler, Chair of the Multnomah County Board of Commissioners. Also in attendance are Commissioners Maria Rojo, Lisa Naito, Jeff Cogen and Lonnie Roberts.

All information relevant to these claims may be submitted and will be considered in these hearings. The evidence may be in any form including oral and written testimony, letters, petitions or other written material, slides, photographs, maps drawings or other items.

The Commission will base its decision on the evidence presented, along with the information on the claim in the Planning file. The Board decision will be by Order adopted by the Board.

DISCLOSURES:

Chair: Board members are required to disclose the content of any *ex parte* contacts. Any Board member who has received any factual information obtained outside the information provided by the county planning staff or this hearing is an *ex parte* contact. A visit to the property is considered an *ex parte* contact. Any *ex parte* contacts should be disclosed at this time. Such disclosures should include the time and date of the visit, what he/she

observed, who (if anyone) the Commissioner talked to at the site and any other relevant facts or observations obtained as a result of the site visit.

Chair: I have *no ex parte* contacts to disclose regarding any of the claims we are hearing today.

or if the Chair has disclosures to make

I have the following disclosures to make: _____

Chair: [Invite the other Commissioners to make any necessary disclosures.) Commissioner Rojo? Commissioner Naito? Commissioner Cogen? Commissioner Roberts? [If there are none, each Commissioner should say "none" on the record.]

[If there are disclosures of *ex parte* contacts, the claimant and the public should be given an opportunity to rebut the substance of any disclosure. "Does anyone have any rebuttal testimony relating to any disclosure?"]

Chair: Board members are also required to disclose any conflicts of interest and to recuse themselves from deliberation and voting if a conflict exists. It is deemed a conflict of interest if any Board member, or a member of his/her immediate family or household, has a financial interest in the outcome of a matter before the Board. It is a conflict of interest if a Board member lives within the geographical area entitled to notice of a claim.

Chair: Does any Board member, or a member of his/her immediate family or household, have a financial interest in the outcome of any of the claims now before us?

I do [do not] have a financial interest in the outcome of any of these claims. [Invite other commissioners to make any necessary disclosures.] Commissioner Rojo? Commissioner Naito? Commissioner Cogen? Commissioner Roberts? [If yes, that person must recuse himself/herself on the record.]

Does any Board member live within the geographical area entitled to notice of any of these claims?

I do [do not] live within the geographical area of any of these claims. Commissioner Rojo? Commissioner Naito? Commissioner Cogen? Commissioner Roberts?

[Any commissioner who lives within the relevant geographical area of a claim must recuse himself/herself. MCC 7.540]

CONDUCT OF THE HEARING:

Chair: In each of these hearings, I will ask for testimony and other evidence in the following order:

1. Staff report
2. Claimant or claimant's representative
3. Others who wish to be heard on the claim
4. Commission discussion, questions, deliberation
5. Future scheduling if necessary

HOW TO PRESENT TESTIMONY:

Chair: There are testimony cards at the back of the room and should be filled out by anyone wishing to testify. The claimants need not fill out a card. The cards should be given to the Board Clerk.

1. State your name and address before you begin your presentation
2. Avoid repetitive testimony
3. During the hearing, I ask those in the audience to refrain from any demonstration in support or opposition to the claim.

Chair: Please call the first hearing.

Board Clerk:

PH-1 Public Hearing to consider and possibly act upon a Measure 37 Claim for Charles Maxson for up to $385,000 in compensation or relief from land use regulations to allow the partition of each lot into two lots with four residential home sites overall on properties located at 38755 and 39062 E. Knieriem Rd., Corbett [T1N, R4E, Sec 36C, TL 300 & 400] (Case File T1-06-095). Presented by Ken Born and Sandra Duffy.

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:

Do I have a motion on PH-1?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of Charles Maxson

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

Chair: Please call the next hearing.

Board Clerk:
PH-2 Public Hearing to consider and possibly act upon a Measure 37 Claim by Sandra Baker et al and Barkers Five LLC for $33.6 million in compensation or relief from regulations to allow the claimants to construct 3 additional single family dwellings then subdivide and sell 2-acre lots for properties located in the vicinity of 15610 NW Germantown Road, Portland (Case File T1-06-098). Presented by Derrick Tokos and Sandra Duffy

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:

Do I have a motion on PH-2?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of Sandra Baker et al and Barkers Five LLC

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

Chair: Please call the next hearing.

Board Clerk:
PH-3 Public Hearing to consider and possibly act upon a Measure 37 Claim by George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC, for $8.5 million or relief from regulations to allow mining of all economically viable sources of gravel, followed by subdivision of the 206 acre property into 75-100 buildable single family dwelling lots, Corbett (Case File T1-06-124). Presented by Derrick Tokos and Sandra Duffy.

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:
Do I have a motion on PH-3?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

Chair: Please call the next hearing.

Board Clerk:
PH-4 Public Hearing to consider and possibly act upon a Measure 37 Claim by George Raymond Smith, The Raymond Smith LLC, Raymond Smith Trusts, and Lenske Properties LLC, for $20.3 million in compensation or relief from regulations to allow the claimants to subdivide 561 acres (17 properties) into 90-104 residential lots and to log riparian buffers along Howard Creek and a tributary. The properties are located south of Corbett, in the vicinity of the Howard Canyon Quarry, Corbett (Case File T1-06-087). Presented by Derrick Tokos and Sandra Duffy

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:

Do I have a motion on PH-4?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of George Raymond Smith, The Raymond Smith LLC, Raymond Smith Trusts, and Lenske Properties LLC

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

BOARD COMMENT

Opportunity (as time allows) for Commissioners to provide informational comments to Board and public on non-agenda items of interest or to discuss legislative issues.

THERE BEING NO FURTHER BUSINESS, THE MEETING IS ADJOURNED.

DRAFT

BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

ORDER NO. _____

Order Denying Ballot Measure 37 Request of Charles Maxson Relating to a Parcel of Land Located at 38755 and 39062 E. Knieriem Rd., Corbett, OR 97014, Multnomah County, Oregon

The Multnomah County Board of Commissioners Finds:

a. Party: Charles Maxson is the Ballot Measure 37 Claimant who filed a demand for compensation to Multnomah County. The claim was submitted on November 22, 2006.

b. Subject Real Property: This claim relates to real property located 38755 and 39062 E. Knieriem Rd., Corbett, OR 97014, Multnomah County, Oregon, more specifically described as:

TL 400, Sec 36C, T1N, R4E, W.M.
Tax Account # R-944360720
&
TL 300, SEC 36C, T1N, R4E, W.M
Tax Account # R-944360080

c. Relevant Dates of Property Ownership:

The Claimant has failed to established that he obtained an interest in the property prior to the County's adoption of the land use regulations challenged in this claim.

The claimant obtained an interest in the subject properties on April 25, 1991 (Tax Lot 400) and November 25, 1992 (Tax Lot 300) after regulations challenged in this claim were enacted which prohibit further division of the properties and additional homes.

A deed submitted by the claimant, shows that he first acquired the property on February 27, 1964. County assessment records also identify the claimant as the current owner of the property. However, deed documentation, title report and other information provided by the claimant show that the claimant has not maintained continual ownership since 1964.

Charles Maxson's current interest in Tax Lot 400 began on April 25, 1991, when William and Brent Maxson, Charles' sons, deeded 8.89 acres out of the entire 28.75-acres, back to Charles (Book 2406, Page 1858). Prior to that date, William and Brent owned Tax Lots 400 and 300 for 14 years, after acquiring them from Charles' mother, Julia Young (Book 1167, Page 1908).

Similarly, Charles' current ownership interest in Tax Lot 300 began on November 25, 1992, when Brent deeded the remaining 19.93-acres to Charles (Book 2617, Page 1899).

The zoning designation that applied to the property in 1991 and 1992 was known as Multiple Use Forest-19 (MUF-19). The minimum lot size in this district was 19 acres (MCC 11.15.2178(A)).

Dwellings were allowed as of right only on properties larger than 38 acres in size (§11.15.2168(E)). A dwelling could be permitted on a property between 10 and 38 acres in size if approved in conjunction with an ongoing forest practice, wood processing operation or farm use as a "use permitted under prescribed conditions" (§11.15.2170(A)). The submittal of a resource management plan outlining how the forest practice, wood processing operation or farm use was to be managed was required as a condition of approval under this provision. As a conditional use, a dwelling was allowed only if the land was incapable of sustaining a farm or forest use, or was a legal lot less than 10 acres in size (§11.15.2172(C)).

The zoning changed from MUF-19 to Commercial Forest Use (CFU) on January 7, 1993, after the claimant acquired an interest in the property.

The Board finds that the claimant failed to obtain an interest in the subject property prior to the county adopting the challenged regulations set out in the claim.

d. County Codes as a Restriction on Use of the Property:

The Claimant has not established that the challenged land use regulations have restricted his use of the subject property.

County regulations in effect when the claimant acquired an interest in the subject property prohibited construction of two additional dwellings or further division of the properties.

The zoning first changed from F-2 to Multiple Use Forest-20 (MUF-20) on October 6, 1977. The zoning changed to MUF-19 on August 14, 1980 and then to CFU on January 7, 1993. The Commercial Forest Use-4 regulations challenged by the claimant first came into effect on August 8, 1998 and were amended on May 15, 2002. The 1991 and 1992 acquisition dates occurred well after the 2 acre minimum lot size standard (F-2) was repealed.

Even if the claimant had acquired properties in 1964, as noted in his claim, the right to establish a dwelling was not guaranteed under the F-2 zoning in effect at that time. Under the F-2 zoning, the claimant would have been required to demonstrate that a proposed dwelling was "required to carry out grazing, agriculture, horticulture or the growing of timber" (§3.112, Ord. #100).

MUF-19 regulations in effect on April 25, 1991 and November 25, 1992 prohibit further division, meaning relief from challenged regulations would not allow the development that is sought. A land division in the MUF-19 zone would have required the subject lots to be at least 38 acres in size, each. Further, the MUF-19 zone did not allow for more than one dwelling on a lot of any size. The lots which are the subject of this claim both presently contain dwellings.

The Board finds that the Claimant has not established that the challenged land use regulations have restricted his use of the subject property.

e. County Code Restrictions Reduce Fair Market Value:

The Claimant has not established that the challenged land use regulations have reduced the fair market value of the property.

As established above, regulations in effect when the claimants acquired the properties in 1991 and 1992 did not allow construction of two additional dwellings, or partition of the two lots into four lots. Since the claimants have not shown that their use of the properties has been restricted, there is no reduction to the fair market value of the properties.

The Board finds that the Claimant has not established that the challenged regulations have reduced the fair market value of the subject property.

f. Public Notice

Section 3.50 of the County Charter requires notice to the public of all Board agenda matters. This notice was provided. The Claimant and persons who own land within 750 feet of the subject property received notice by mail.

g. Validity of Claim for Compensation: The Board finds that:

(1) The Claimant's acquisition of the subject property occurred after the County's adoption of the land use regulations challenged in this claim.

(2) The Claimant has not established that the challenged land use regulations have restricted his use of the subject property.

(3) The Claimant has not established that the challenged land use regulations have reduced the fair market value of the subject property.

The Multnomah County Board of Commissioners Orders that Claimant's Measure 37 claim is denied.

ADOPTED this 26th day of April, 2007.

BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

_____
Ted Wheeler, Chair

REVIEWED:

AGNES SOWLE, COUNTY ATTORNEY
FOR MULTNOMAH COUNTY, OREGON

By_____
Jed R. Tomkins, Assistant County Attorney

SUBMITTED BY:
Agnes Sowle, County Attorney

MULTNOMAH COUNTY
AGENDA PLACEMENT REQUEST (short form)

Board Clerk Use Only	
Meeting Date:	04/26/07
Agenda Item #:	PH-2
Est. Start Time:	1:50 PM
Date Submitted:	04/12/07

Agenda Title:	**Public Hearing to consider and possibly act upon a Measure 37 Claim by Sandra Baker et al and Barkers Five LLC for $33.6 million in compensation or relief from regulations to allow the claimants to construct 3 additional single family dwellings then subdivide and sell 2-acre lots for properties located in the vicinity of 15610 NW Germantown Road, Portland (Case File T1-06-098)**

Note: If Ordinance, Resolution, Order or Proclamation, provide exact title. For all other submissions, provide a clearly written title.

Requested Meeting Date:	April 26, 2007	**Amount of Time Needed:**	20 minutes
Department:	**Community Services**	**Division:**	Land Use & Transportation
Contact(s):	Derrick Tokos, Sandra Duffy		
Phone:	503-988-3043 **Ext.** 22682	**I/O Address:**	455/116
Presenter(s):	Derrick Tokos, Sandra Duffy		

General Information

1. What action are you requesting from the Board?

Action requested is to provide a public hearing and render a decision regarding a Measure 37 claim by Sandra Baker and Barkers Five LLC, through its agent Sandra Baker, seeking compensation or relief from regulations that prohibit the claimants from constructing three additional single family dwellings and then subdividing and selling 2 acre lots. The subject properties are in the vicinity of 15610 NW Germantown Road. They include Tax Lots 400 and 600, Section 08D, Township 1N, Range 1W, W.M. (38.5 acres) and Tax Lot 500, Section 08C, Township 1N, Range 1W, W.M. (24.76 acres). Land Use Planning staff has outlined an approach to deciding this claim in a staff report dated April 12, 2007.

2. Please provide sufficient background information for the Board and the public to understand this issue. Please note which Program Offer this action affects and how it impacts the results.

For a claim to be valid, the land use regulations challenged must restrict the claimants use of private real property in a manner that reduces its fair market value relative to how it could have been used at the time the claimants acquired the property. As outlined in the staff report and memorandum from the County Attorney's Office, this requirement has not been met.

The claimants are challenging County regulations enacted after December of 1972, and assert that the rules in effect at that time allowed three additional dwellings and subdivision of the properties into 2 acre lots. Deed documents; however, establish that the properties were actually acquired more recently, in 1988 and 2006. Exclusive Farm Use rules in effect in 1988 and 2006 did not allow three additional dwellings or division of the property into two acre lots.

Even if the claimants had acquired the properties in 1972, the right to establish a dwelling was not guaranteed under the F-2 zoning in effect at that time. Under the F-2 zoning, the claimants would have been required to demonstrate that a proposed dwelling was "*required to carry out grazing, agriculture, horticulture or the growing of timber*".

Staff recommends the Board of Commissioners deny this claim.

3. **Explain the fiscal impact (current year and ongoing).**
   The claimants assert a reduction in value of $33.6 million; however, this dollar figure is not supported by an appraisal. No compensation is due because the claimants have failed to establish that land use regulations have restricted their use of the property.

4. **Explain any legal and/or policy issues involved.**
   Policy and legal issues are outlined in a staff report from Land Use Planning dated April 12, 2007. The County Attorney has advised that any property rights obtained by relief from land use regulations are not transferable under Ballot Measure 37, consistent with the DOJ opinion of February 2005.

5. **Explain any citizen and/or other government participation that has or will take place.**
   Public notice of this hearing has been mailed to all property owners within 750 feet of the subject property, and the claimant. Deliberation and any action on this item will be done following a public hearing at which interested citizens will have an opportunity to testify and provide written comment in accordance with the Board of Commissioners rules of procedure for the hearing.

Required Signature

Elected Official or Department/ Agency Director: M. Cecilia Johnson **Date: 04/12/07**

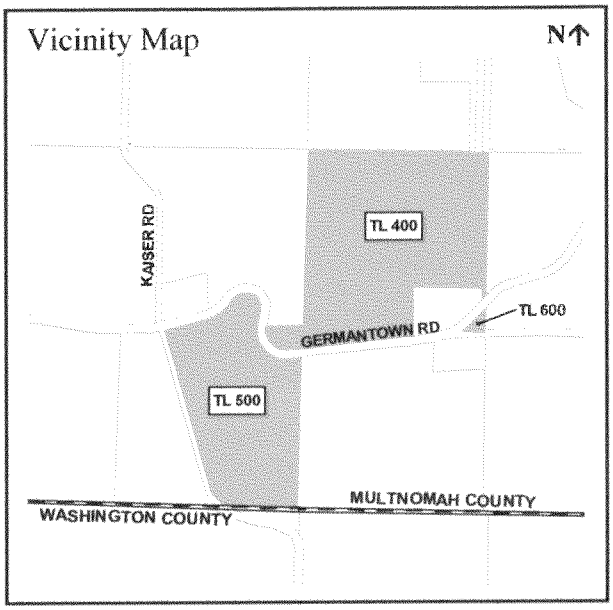
LAND USE & TRANSPORTATION PLANNING PROGRAM
1600 SE 190TH Avenue Portland, OR 97233
PH: 503-988-3043 FAX: 503-988-3389
http://www.co.multnomah.or.us/landuse

Staff Analysis of Measure 37 Claim

The following matter is scheduled for public hearing, deliberation and possible action before the Multnomah County Board of Commissioners

Hearing Date, Time, & Place:

Thursday, April 26, 2007 at 1:30 pm or soon thereafter, in the Commissioners' Board Room of the Multnomah Building, located at 501 SE Hawthorne, Portland, Oregon.



Case File: T1-06-098

Claimants: Sandra Baker et al
Barkers Five LLC
13493 NW Countryview Way
Portland, OR 97229

Location: Vicinity of 15610 NW Germantown Road
Tax Lots 400 and 600, Section 08D, Township 1N, Range 1W, W.M.
Tax Lot 500, Section 08C, Township 1N, Range 1W, W.M.

Claim: Up to $33.6 million in compensation or relief from County land use regulations to allow the claimants to construct three additional single family dwellings then subdivide and sell 2-acre lots.

Zoning: Exclusive Farm Use (EFU), Significant Environmental Concern for Wildlife Habitat and Streams (SEC-h, SEC-v), Slope Hazard

Site Size: Approx. 38.5 acres (Tax Lots 400 and 600), 24.76 acres (Tax Lot 500)

Approach to Deciding the Claim:

For a claim to be valid, the land use regulations challenged must restrict the claimants use of private real property in a manner that reduces its fair market value relative to how it could have been used at the time the claimants acquired the property. As outlined in this report and memorandum from the County Attorneys Office, this requirement has not been met. The reasons for this are as follows:

(a) The claimants have failed to establish that they acquired and have continuously owned the property prior to the date the challenged regulations were enacted and;

(b) The claimants have failed to document that three additional dwellings and a subdivision of 2 acre lots could have been approved under the land use regulations in effect at the time they acquired the property.

Claim Summary

(The following is a step-by-step evaluation of the claim, which consists of materials submitted by Mark O'Donnell, ESQ, on behalf of the claimants. The analysis is structured as a series of questions that must be answered to establish if a claim is valid, comparable to the methodology outlined in a February 24th, 2005 memo from the State Attorney General's Office.)

The claimants are challenging County zoning regulations enacted after 1972. They assert that the Barker children (Steven Barker, Sandra Baker Barker, Margaret Barker, Gregory Barker, and Nancy Miller Barker) acquired an interest in the properties in December of 1972. At that time they believe they were entitled to construct three additional dwellings and divide the land into 2 acre lots pursuant to the County's F-2 zoning regulations. The claimants assert that the properties have a fair market value of $400,000 under current land use restrictions, and that they are worth at least $34 million were they subject to zoning in effect in 1972. An appraisal has not been provided to substantiate these figures.

1. *Did the claimant acquire the property before the laws in question were adopted?*

   No. Claimants Sandra Baker et al acquired Tax Lots 400 and 600 on December 30, 1988, and Sandra Baker, as an agent of Barkers Five, LLC acquired Tax Lot 500 on March 2, 2006, after regulations challenged in this claim were enacted.

   The conveyance history prepared by the claimants, indicates that Tax Lots 400 and 600 were transferred from Barkers Investment Company to the individual children and parents on December 27, 1988. The parents, George and Mary Barker, retained a 52.5% undivided interest and the children each received a 9.5% undivided interest. The State of Oregon found this type of transaction to be a change of ownership in a Measure 37 decision involving these properties dated November 30, 2006 (Exhibit 2). We concur with the State, and similarly find that the claimants first acquired an interest in Tax Lots 400 and 600 on December 27, 1988.[1]

   A deed submitted by the claimants shows that Tax Lot 500 was conveyed from Barkers Investments, Five, an Oregon Partnership, to Barkers Five, LLC, an Oregon Limited Liability Company, on March 2, 2006. The County Attorney has advised that the sale of a property to a Limited Liability Company is a change of ownership for purposes of Measure 37. Accordingly, we find that Barkers Five LLC, through its agent, Sandra Baker, first acquired an interest in Tax Lot 500 on March 2, 2006. An LLC is a distinct legal entity capable of possessing an interest in property. A member of an LLC has an ownership interest in the entity, but has no ownership interest in property held by the LLC.

2. *Have the challenged regulations restricted the use of the property?*

   No. County regulations in effect when the claimants acquired the properties prohibited construction of 3 additional dwellings or subdivision of the properties into 2 acre lots.

   The 2 acre minimum lot size provision in the F-2 zoning code was increased to 20 acres on December 9, 1975 (§3.1240.a, Ord. #115). It was later increased to 38 acres in 1980 (Ord. #236) and 80 acres in 1993. The 1988 and 2006 acquisition dates occurred well after the 2 acre minimum lot size standard was repealed. Even if the claimants had acquired the properties in 1972, the right to establish a dwelling was not guaranteed under the F-2 zoning in effect at that time. Under the F-2 zoning, the claimants would have been required to demonstrate that a proposed dwelling was "*required to carry out grazing, agriculture, horticulture or the growing of timber*" (§3.112, Ord. #100).

[1] Deeds submitted by the claimant were signed on December 27, 1988 but were recorded three days later on December 30, 1988. This discrepancy is immaterial to the claim as there were no changes to County land use regulations between those dates.

The claimants assert that EFU regulations in effect in 1988 would have allowed at least three additional dwellings. They appear to argue that the regulations permitted them to construct an additional non-farm residence on Tax Lot 500, because NW Germantown Road divided the property into separate parcels. While it is true that NW Germantown Road bisects the property, it has not divided it into two parcels. Current and prior deeds describe Tax Lot 500 as a single parcel. Further, the claimants acknowledge that the 1988 statute they cite as authority for the additional non-farm dwelling aggregated separate parcels under the same ownership, where they were separated by a roadway. County EFU zoning that applied to the property in 1988 contained aggregation language in its Lot of Record section, stating:

> *"Parcels of land which are contiguous and in which greater than possessory interests are held by the same person, partnership, or business entity, shall be aggregated to comply as nearly as possible with the area or front lot line minimums of this district. The word "contiguous" shall refer to parcels of land which have any common boundary and shall include, but not be limited to, parcels separated only by an alley, street or other right-of-way."* (§11.15.2018(B)(1), Ord. #300).

Given this language, even if Tax Lot 500 were to consist of two parcels (one to either side of the road) they would be aggregated as one property for development purposes because the total acreage is less than the 38 acre minimum lot size in effect at the time. A single non-farm dwelling could be approved on a Lot of Record, provided it met the approval criteria (§11.15.2012(B)(3), Ord. #300). Because a dwelling already exists on Tax Lot 500, a second non-farm dwelling could not be permitted under the 1988 rules even if the claimants had acquired the property in 1988. EFU regulations in effect when the claimants acquired the property on March 2, 2006 also do not allow a second non-farm dwelling.

The claimants similarly assert that 1988 EFU regulations allowed non-farm dwellings on Tax Lots 400 and 600. In addition to NW Germantown bisecting the property, with Tax Lot 400 north of the road and Tax Lot 600 south of the road, the claimants assert that an intervening property separates the two tax lots, making them two parcels.[2] There is no property separating the two tax lots. Tax Lots 400 and 600 are part of Parcel 1 of Partition Plat 1993-82 (Exhibit 4). The Partition Plat shows the easternmost 43.79 feet of Tax Lot 400 as being contiguous to Tax Lot 600, separated only by the road. It also includes notes indicating that the two areas, together, make up Parcel 1 of the Partition Plat. Because Tax Lots 400 and 600 were created as a single parcel in 1993, neither would be eligible for a non-farm dwelling under rules in effect in 1988 because those rules only allowed a non-farm dwelling on lots or parcels created prior to August 14, 1980 (§11.15.2018(A)(1), Ord. #300)).

Lastly, the claimants assert that a farm dwelling would have been permitted on Tax Lot 400, citing a provision in the 1988 EFU zoning code that allowed a dwelling in conjunction with a farm use on a 38 acre parcel (§11.15.2008(C), Ord. #300). In 1988 the property was slightly over 41 acres in size and contained the farm dwelling that was later divided off as Parcel 2 of the 1993 Partition Plat. A second farm dwelling could not be authorized under this provision.

---

[2] The intervening property, described by the claimants, is Parcel 2 of the Partition Plat. It is a 3 acre parcel that the claimant's parents, George and Mary Barker, divided out of the original 41 acre property. The County permitted the creation of the 3 acres as a "homestead lot." The purpose of the homestead lot provision was to encourage the retention of agricultural lands in large parcels while providing the opportunity for residents that are no longer able or who no longer desire to farm the land to retain their home and sell the balance of the property (§11.15.2012(B)(8), Ord. #643). The 3 acres contains the original farm dwelling. The parents obtained the property outright once the Partition Plat was recorded (bk 2739, pg 1193).

3. *Have the restrictions reduced the fair market value of the property?*

No. The fair market value of the property has not been reduced because the claimants' use of the property has not been restricted.

As established above, regulations in effect when the claimants acquired the properties in 1988 and 2006 did not allow construction of three additional dwellings or subdivision of the properties into 2 acre lots. Since the claimants have not shown that their use of the properties has been restricted, there is no reduction to the fair market value of the properties. With respect to subdividing and selling 2 acre lots, a reduction in value has not occurred because development rights cannot be transferred. Even if a subdivision could have been approved at the time the claimants acquired the properties, Measure 37 rights are personal to the claimants and are of no value to a new owner. For instance, the current Exclusive Farm Use zoning regulations would be applied once a newly created lot is sold to a new owner. These regulations would prohibit the establishment of a dwelling on the property rendering it unbuildable. Because the resulting lots would have no development value, no reduction in value will occur as compared to the present value of the property under the current EFU zoning regulations (i.e. 2 acre lots are of no more value as farmland than a 38 acre property (Tax Lot 400) or 24 acre property (Tax Lot 500)).

PUBLIC NOTICE

Public notice of this hearing was mailed to all property owners within 750 feet of the subject property. Deliberation and any action on this item will be done following a public hearing at which interested citizens will have an opportunity to testify and provide written comment in accordance with the Board of Commissioners rules of procedure for the hearing.

CONCLUSION

For the reasons stated herein, the claimants have failed to establish that regulations enacted after they acquired the properties in 1988 and 2006 have restricted their use of the land and reduced its value.

Consequently, staff recommends that the Board of Commissioners deny this claim.

Issued by:

By: _____
Derrick Tokos, Principal Planner

For: Karen Schilling, Planning Director

Date: Thursday, April 12, 2007

Exhibits

Copies of the documents referenced herein are in the claim record that is on file at the Land Use and Transportation Planning Office.

Multnomah County Attorney's Office
501 S.E. Hawthorne Blvd., Suite 500
Portland, Oregon 97214
PHONE: (503) 988-3138
FAX: (503) 988-3377

MEMORANDUM

To: Chuck Beasley
Multnomah County Planner

Cc: Derrick Tokos, Principal Planner

From: Sandy Duffy
Assistant County Attorney
Multnomah County Attorney's Office

Date: April 11, 2007

Re: Barkers 5 LLC, T1-06-098

I have reviewed your staff report for legal sufficiency under ORS 197.352 (Measure 37). Your staff report has adequately addressed each required criteria and correctly applied Measure 37.

04/26/07 Maxson, Baker, Smith and Lenske M 37 Hearings Script

Thursday, April 24, 2007 - **1:30 PM**
Multnomah Building, First Floor Commissioners Boardroom 100
501 SE Hawthorne Boulevard, Portland

REGULAR MEETING - CONTINUED

Chair Ted Wheeler convenes the meeting at 1:30 p.m., with Vice-Chair Maria Rojo de Steffey and Commissioners Lisa Naito, Lonnie Roberts and Jeff Cogen present.

INTRODUCTION:

Chair: This is the time set for public hearings on the claims of ***Charles Maxson; Sandra Baker et al and Barkers Five LLC; George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC; and George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC*** under Ballot Measure 37. I am Ted Wheeler, Chair of the Multnomah County Board of Commissioners. Also in attendance are Commissioners Maria Rojo, Lisa Naito, Jeff Cogen and Lonnie Roberts.

All information relevant to these claims may be submitted and will be considered in these hearings. The evidence may be in any form including oral and written testimony, letters, petitions or other written material, slides, photographs, maps drawings or other items.

The Commission will base its decision on the evidence presented, along with the information on the claim in the Planning file. The Board decision will be by Order adopted by the Board.

DISCLOSURES:

Chair: Board members are required to disclose the content of any *ex parte* contacts. Any Board member who has received any factual information obtained outside the information provided by the county planning staff or this hearing is an *ex parte* contact. A visit to the property is considered an *ex parte* contact. Any *ex parte* contacts should be disclosed at this time. Such disclosures should include the time and date of the visit, what he/she

observed, who (if anyone) the Commissioner talked to at the site and any other relevant facts or observations obtained as a result of the site visit.

Chair: I have *no ex parte* contacts to disclose regarding any of the claims we are hearing today.

or if the Chair has disclosures to make

I have the following disclosures to make: _____

Chair: [Invite the other Commissioners to make any necessary disclosures.) Commissioner Rojo? Commissioner Naito? Commissioner Cogen? Commissioner Roberts? [If there are none, each Commissioner should say "none" on the record.]

[If there are disclosures of *ex parte* contacts, the claimant and the public should be given an opportunity to rebut the substance of any disclosure. "Does anyone have any rebuttal testimony relating to any disclosure?"]

Chair: Board members are also required to disclose any conflicts of interest and to recuse themselves from deliberation and voting if a conflict exists. It is deemed a conflict of interest if any Board member, or a member of his/her immediate family or household, has a financial interest in the outcome of a matter before the Board. It is a conflict of interest if a Board member lives within the geographical area entitled to notice of a claim.

Chair: Does any Board member, or a member of his/her immediate family or household, have a financial interest in the outcome of any of the claims now before us?

I do [do not] have a financial interest in the outcome of any of these claims. [Invite other commissioners to make any necessary disclosures.] Commissioner Rojo? Commissioner Naito? Commissioner Cogen? Commissioner Roberts? [If yes, that person must recuse himself/herself on the record.]

Does any Board member live within the geographical area entitled to notice of any of these claims?

I do [do not] live within the geographical area of any of these claims. Commissioner Rojo? Commissioner Naito? Commissioner Cogen? Commissioner Roberts?

[Any commissioner who lives within the relevant geographical area of a claim must recuse himself/herself. MCC 7.540]

CONDUCT OF THE HEARING:

Chair: In each of these hearings, I will ask for testimony and other evidence in the following order:

1. Staff report
2. Claimant or claimant's representative
3. Others who wish to be heard on the claim
4. Commission discussion, questions, deliberation
5. Future scheduling if necessary

HOW TO PRESENT TESTIMONY:

Chair: There are testimony cards at the back of the room and should be filled out by anyone wishing to testify. The claimants need not fill out a card. The cards should be given to the Board Clerk.

1. State your name and address before you begin your presentation
2. Avoid repetitive testimony
3. During the hearing, I ask those in the audience to refrain from any demonstration in support or opposition to the claim.

Chair: Please call the first hearing.

Board Clerk:

PH-1 Public Hearing to consider and possibly act upon a Measure 37 Claim for Charles Maxson for up to $385,000 in compensation or relief from land use regulations to allow the partition of each lot into two lots with four residential home sites overall on properties located at 38755 and 39062 E. Knieriem Rd., Corbett [T1N, R4E, Sec 36C, TL 300 & 400] (Case File T1-06-095). Presented by Ken Born and Sandra Duffy.

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:

Do I have a motion on PH-1?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of Charles Maxson

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

Chair: Please call the next hearing.

Board Clerk:
PH-2 Public Hearing to consider and possibly act upon a Measure 37 Claim by Sandra Baker et al and Barkers Five LLC for $33.6 million in compensation or relief from regulations to allow the claimants to construct 3 additional single family dwellings then subdivide and sell 2-acre lots for properties located in the vicinity of 15610 NW Germantown Road, Portland (Case File T1-06-098). Presented by Derrick Tokos and Sandra Duffy

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:

Do I have a motion on PH-2?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of Sandra Baker et al and Barkers Five LLC

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

Chair: Please call the next hearing.

Board Clerk:
PH-3 Public Hearing to consider and possibly act upon a Measure 37 Claim by George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC, for $8.5 million or relief from regulations to allow mining of all economically viable sources of gravel, followed by subdivision of the 206 acre property into 75-100 buildable single family dwelling lots, Corbett (Case File T1-06-124). Presented by Derrick Tokos and Sandra Duffy.

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:
Do I have a motion on PH-3?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

Chair: Please call the next hearing.

Board Clerk:
PH-4 Public Hearing to consider and possibly act upon a Measure 37 Claim by George Raymond Smith, The Raymond Smith LLC, Raymond Smith Trusts, and Lenske Properties LLC, for $20.3 million in compensation or relief from regulations to allow the claimants to subdivide 561 acres (17 properties) into 90-104 residential lots and to log riparian buffers along Howard Creek and a tributary. The properties are located south of Corbett, in the vicinity of the Howard Canyon Quarry, Corbett (Case File T1-06-087). Presented by Derrick Tokos and Sandra Duffy

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:

Do I have a motion on PH-4?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of George Raymond Smith, The Raymond Smith LLC, Raymond Smith Trusts, and Lenske Properties LLC

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

BOARD COMMENT

Opportunity (as time allows) for Commissioners to provide informational comments to Board and public on non-agenda items of interest or to discuss legislative issues.

THERE BEING NO FURTHER BUSINESS, THE MEETING IS ADJOURNED.

DRAFT

BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

ORDER NO. _____

Order Denying Ballot Measure 37 Request of Sandra Baker, Steven Barker, Margaret Barker, Gregory Barker, and Nancy Miller Barker and Barkers Five, LLC Relating to the Parcels of Real Property Located in the Vicinity of 15610 NW Germantown Road, Portland, Multnomah County, Oregon

The Multnomah County Board of Commissioners Finds:

a. **Parties:** Sandra Baker, Steven Barker, Margaret Barker, Gregory Barker, and Nancy Miller Barker (hereinafter referred to as the Barker Family) and Barkers Five, LLC are the Ballot Measure 37 Claimants who filed a demand for compensation to Multnomah County on November 28, 2006.

b. **Subject Real Property:** This claim relates to the parcel of real property located in the vicinity of 15610 NW Germantown Road, Portland, Multnomah County, Oregon, and more specifically described as:

Tax Lots 400 and 600, Section 08D, Township 1N, Range 1W, W.M.; and

Tax Lot 500, Section 08C, Township 1N, Range 1W, W.M.

c. **Relevant Dates of Property Ownership:**

The Claimants have not established that they obtained an interest in the property prior to the County's adoption of the land use regulations challenged in this claim.

Tax Lots 400 and 600: On December 27, 1988, Barkers Investment Company, an Oregon corporation, transferred Tax Lots 400 and 600 to the Barker Family. In a decision dated November 30, 2006, the State of Oregon found that the foregoing conveyance constituted a change in ownership because, under Oregon law, shareholders of a corporation have no ownership interest in corporate property. ORS 60.431(2). The County agrees with the State that the Barker Family acquired an interest in Tax Lots 400 and 600 on December 27, 1988. The County adopted the land use regulations challenged in this claim prior to that date (see section d. below).

Tax Lot 500: On March 2, 2006, Barkers Investments, Five, an Oregon partnership, conveyed Tax Lot 500 by deed to Barkers Five, LLC, an Oregon Limited Liability Company (LLC). Under Oregon law, a conveyance by a partnership to an LLC constitutes a change in ownership even though partners of the partnership may also be members of the LLC. ORS 67.050 and 67.070 (partnership is an independent legal entity); ORS 67.060 (partners have no ownership interest in partnership property); ORS

63.077 (LLC is an independent legal entity); ORS 63.239 (members have no ownership interest in LLC property). Accordingly, Barkers Five, LLC acquired an interest in Tax Lot 500 on March 2, 2006. The County adopted the land use regulations challenged in this claim prior to that date (see section d. below).

The Board finds that the Barker Family acquired an interest in Tax Lots 400 and 600 on December 27, 1988, and that Barkers Five, LLC acquired an interest in Tax Lot 500 on March 2, 2006. In each case, the Claimants' acquisition of an interest in the subject properties occurred after the County adopted the land use regulations challenged in this claim.

d. **County Codes as a Restriction on Use of the Property:**

The Claimants have not established that the challenged land use regulations have restricted the proposed use of the property.

The Claimants seek compensation or relief from County land use regulations to allow the construction of three additional single family dwellings and the right to subdivide Tax Lots 400 and 500 into 2-acre lots for sale. The subject parcels are located within an Exclusive Farm Use (EFU) zoning district. EFU zoning prohibits the uses proposed in this claim. EFU zoning has applied to the subject parcels since August 14, 1980. Ord. #238. Because the County zoned the subject parcels EFU prior to the Claimants' acquisition of an interest in those parcels (see section c. above), the challenged land use regulations have not restricted the proposed use within the meaning of ORS 197.352.

Tax Lots 400 and 600: On December 27, 1988, a 38-acre minimum lot size standard applied to Tax Lots 400 and 600. Ord. #236 (1980). This standard prevented the Barker Family from subdividing and selling 2-acre lots on those parcels on December 27, 1988.

In 1993, Tax Lots 400 and 600 were incorporated as part of Parcel 1 of Partition Plat 1993-82. On December 27, 1988, EFU regulations applicable to the subject parcels only allowed a non-farm dwelling on lots or parcels created prior to August 14, 1980. MCC 11.15.2018(A)(1), Ord. #300 (1982). These regulations prevented the Barker Family from establishing a non-farm dwelling on Tax Lots 400 and 600 on December 27, 1988.

On December 27, 1988, EFU regulations applicable to Tax Lot 400 allowed a dwelling in conjunction with a farm use on a 38 acre parcel. MCC 11.15.2008(C), Ord. #300. On that date, the property was slightly over 41 acres in size and contained a farm dwelling that was later divided off as Parcel 2 of Partition Plat 1993-82. A second farm dwelling could not have been authorized under this provision on December 27, 1988. Accordingly, the dwelling proposed for Tax Lot 400 does not constitute a "use permitted at the time the owner acquired the property." ORS 197.352(8).

Tax Lot 500: Barkers Five, LLC acquired an interest in Tax Lot 500 on March 2, 2006. The land use regulations in effect on March 2, 2006 that govern the proposed use of Tax

Lot 500 remain in effect and have not been altered or amended in any way material to this claim since that date.

The Board finds that the Claimants have not established that the challenged land use regulations have restricted their use of the subject properties.

e. **County Code Restrictions Reduce Fair Market Value:**

The Claimants have not established that the challenged land use regulations have reduced the fair market value of the property.

As established above, regulations in effect when the Claimants acquired the properties in 1988 and 2006 did not allow construction of three additional dwellings or subdivision of the properties into 2-acre lots. Since the Claimants have not shown that their use of the properties has been restricted, there is no reduction to the fair market value of the properties.

The Board finds that the Claimants have not established that the challenged regulations have reduced the fair market value of the subject property.

f. **Public Notice**

Section 3.50 of the County Charter requires notice to the public of all Board agenda matters. This notice was provided. The Claimant and persons who own land within 750 feet of the subject property received notice by mail.

g. **Validity of Claim for Compensation:** The Board finds that:

(1) The Board finds that the Barker Family acquired an interest in Tax Lots 400 and 600 on December 27, 1988, and that Barkers Five, LLC acquired an interest in Tax Lot 500 on March 2, 2006. In each case, the Claimants' acquisition of an interest in the subject properties occurred after the County adopted the land use regulations challenged in this claim.

(2) The Board finds that the Claimants have not established that the challenged land use regulations have restricted their use of the subject properties.

(3) The Board finds that the Claimants have not established that the challenged regulations have reduced the fair market value of the subject property.

The Multnomah County Board of Commissioners Orders:

Based on the above findings, the Claimant's request is denied.

ADOPTED this 26th day of April, 2007.

BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

_____
Ted Wheeler, Chair

REVIEWED:

AGNES SOWLE, COUNTY ATTORNEY
FOR MULTNOMAH COUNTY, OREGON

By_____
Jed R. Tomkins, Assistant County Attorney

SUBMITTED BY:
Agnes Sowle, County Attorney

BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

ORDER NO. 07-076

Order Denying Ballot Measure 37 Request of Sandra Baker, Steven Barker, Margaret Barker, Gregory Barker, and Nancy Miller Barker and Barkers Five, LLC Relating to the Parcels of Real Property Located in the Vicinity of 15610 NW Germantown Road, Portland, Multnomah County, Oregon

The Multnomah County Board of Commissioners Finds:

a. **Parties:** Sandra Baker, Steven Barker, Margaret Barker, Gregory Barker, and Nancy Miller Barker (hereinafter referred to as the Barker Family) and Barkers Five, LLC are the Ballot Measure 37 Claimants who filed a demand for compensation to Multnomah County on November 28, 2006.

b. **Subject Real Property:** This claim relates to the parcel of real property located in the vicinity of 15610 NW Germantown Road, Portland, Multnomah County, Oregon, and more specifically described as:

Tax Lots 400 and 600, Section 08D, Township 1N, Range 1W, W.M.; and

Tax Lot 500, Section 08C, Township 1N, Range 1W, W.M.

c. **Relevant Dates of Property Ownership:**

The Claimants have not established that they obtained an interest in the property prior to the County's adoption of the land use regulations challenged in this claim.

Tax Lots 400 and 600: On December 27, 1988, Barkers Investment Company, an Oregon corporation, transferred Tax Lots 400 and 600 to the Barker Family. In a decision dated November 30, 2006, the State of Oregon found that the foregoing conveyance constituted a change in ownership because, under Oregon law, shareholders of a corporation have no ownership interest in corporate property. ORS 60.431(2). The County agrees with the State that the Barker Family acquired an interest in Tax Lots 400 and 600 on December 27, 1988. The County adopted the land use regulations challenged in this claim prior to that date (see section d. below).

Tax Lot 500: On March 2, 2006, Barkers Investments, Five, an Oregon partnership, conveyed Tax Lot 500 by deed to Barkers Five, LLC, an Oregon Limited Liability Company (LLC). Under Oregon law, a conveyance by a partnership to an LLC constitutes a change in ownership even though partners of the partnership may also be members of the LLC. ORS 67.050 and 67.070 (partnership is an independent legal entity); ORS 67.060 (partners have no ownership interest in partnership property); ORS

63.077 (LLC is an independent legal entity); ORS 63.239 (members have no ownership interest in LLC property). Accordingly, Barkers Five, LLC acquired an interest in Tax Lot 500 on March 2, 2006. The County adopted the land use regulations challenged in this claim prior to that date (see section d. below).

The Board finds that the Barker Family acquired an interest in Tax Lots 400 and 600 on December 27, 1988, and that Barkers Five, LLC acquired an interest in Tax Lot 500 on March 2, 2006. In each case, the Claimants' acquisition of an interest in the subject properties occurred after the County adopted the land use regulations challenged in this claim.

d. **County Codes as a Restriction on Use of the Property:**

The Claimants have not established that the challenged land use regulations have restricted the proposed use of the property.

The Claimants seek compensation or relief from County land use regulations to allow the construction of three additional single family dwellings and the right to subdivide Tax Lots 400 and 500 into 2-acre lots for sale. The subject parcels are located within an Exclusive Farm Use (EFU) zoning district. EFU zoning prohibits the uses proposed in this claim. EFU zoning has applied to the subject parcels since August 14, 1980. Ord. #238. Because the County zoned the subject parcels EFU prior to the Claimants' acquisition of an interest in those parcels (see section c. above), the challenged land use regulations have not restricted the proposed use within the meaning of ORS 197.352.

Tax Lots 400 and 600: On December 27, 1988, a 38-acre minimum lot size standard applied to Tax Lots 400 and 600. Ord. #236 (1980). This standard prevented the Barker Family from subdividing and selling 2-acre lots on those parcels on December 27, 1988.

In 1993, Tax Lots 400 and 600 were incorporated as part of Parcel 1 of Partition Plat 1993-82. On December 27, 1988, EFU regulations applicable to the subject parcels only allowed a non-farm dwelling on lots or parcels created prior to August 14, 1980. MCC 11.15.2018(A)(1), Ord. #300 (1982). These regulations prevented the Barker Family from establishing a non-farm dwelling on Tax Lots 400 and 600 on December 27, 1988.

On December 27, 1988, EFU regulations applicable to Tax Lot 400 allowed a dwelling in conjunction with a farm use on a 38 acre parcel. MCC 11.15.2008(C), Ord. #300. On that date, the property was slightly over 41 acres in size and contained a farm dwelling that was later divided off as Parcel 2 of Partition Plat 1993-82. A second farm dwelling could not have been authorized under this provision on December 27, 1988. Accordingly, the dwelling proposed for Tax Lot 400 does not constitute a "use permitted at the time the owner acquired the property." ORS 197.352(8).

Tax Lot 500: Barkers Five, LLC acquired an interest in Tax Lot 500 on March 2, 2006. The land use regulations in effect on March 2, 2006 that govern the proposed use of Tax

Lot 500 remain in effect and have not been altered or amended in any way material to this claim since that date.

The Board finds that the Claimants have not established that the challenged land use regulations have restricted their use of the subject properties.

e. **County Code Restrictions Reduce Fair Market Value:**

The Claimants have not established that the challenged land use regulations have reduced the fair market value of the property.

As established above, regulations in effect when the Claimants acquired the properties in 1988 and 2006 did not allow construction of three additional dwellings or subdivision of the properties into 2-acre lots. Since the Claimants have not shown that their use of the properties has been restricted, there is no reduction to the fair market value of the properties.

The Board finds that the Claimants have not established that the challenged regulations have reduced the fair market value of the subject property.

f. **Public Notice**

Section 3.50 of the County Charter requires notice to the public of all Board agenda matters. This notice was provided. The Claimant and persons who own land within 750 feet of the subject property received notice by mail.

g. **Validity of Claim for Compensation:** The Board finds that:

(1) The Board finds that the Barker Family acquired an interest in Tax Lots 400 and 600 on December 27, 1988, and that Barkers Five, LLC acquired an interest in Tax Lot 500 on March 2, 2006. In each case, the Claimants' acquisition of an interest in the subject properties occurred after the County adopted the land use regulations challenged in this claim.

(2) The Board finds that the Claimants have not established that the challenged land use regulations have restricted their use of the subject properties.

(3) The Board finds that the Claimants have not established that the challenged regulations have reduced the fair market value of the subject property.

The Multnomah County Board of Commissioners Orders:

Based on the above findings, the Claimant's request is denied.

ADOPTED this 26th day of April, 2007.

BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

Ted Wheeler, Chair

REVIEWED:

AGNES SOWLE, COUNTY ATTORNEY
FOR MULTNOMAH COUNTY, OREGON

By _____
Jed R. Tomkins, Assistant County Attorney

SUBMITTED BY:
Agnes Sowle, County Attorney

MULTNOMAH COUNTY
AGENDA PLACEMENT REQUEST (short form)

Board Clerk Use Only	
Meeting Date:	04/26/07
Agenda Item #:	PH-3
Est. Start Time:	2:10 PM
Date Submitted:	04/12/07

Agenda Title: **Public Hearing to consider and possibly act upon a Measure 37 Claim by George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC, for $8.5 million or relief from regulations to allow mining of all economically viable sources of gravel, followed by subdivision of the 206 acre property into 75-100 buildable single family dwelling lots, Corbett (Case File T1-06-124)**

Note: If Ordinance, Resolution, Order or Proclamation, provide exact title. For all other submissions, provide a clearly written title.

Requested Meeting Date:	April 26, 2007	**Amount of Time Needed:**	30 minutes
Department:	Community Services	**Division:**	Land Use & Transportation
Contact(s):	Derrick Tokos, Sandra Duffy, Chuck Beasley		
Phone:	503-988-3043 **Ext.** 22682	**I/O Address:**	455/116
Presenter(s):	Derrick Tokos, Sandra Duffy		

General Information

1. **What action are you requesting from the Board?**

   Action requested is to provide a public hearing and render a decision regarding a Measure 37 claim by Raymond Smith as agent for The Raymond Smith LLC, and Shirlee Lenske as agent for Lenske Properties LLC, seeking compensation or relief from regulations that prohibit the claimants from mining the property and then subdividing the 206 acres into 70-100 buildable lots for single family dwellings. The five subject properties contain the Howard Canyon Quarry site located southeast of the community of Corbett. They include Tax Lot 200, Section 01A, Township 1S, Range 4East, W.M. (9.75 acres), Tax Lot 500, Section 36D, T1N, R4E W.M. (38.87 acres), Tax Lot 1000, Section 01B, T1S 4E, W.M. (32.63 acres), Tax Lot 100, Section 01B, T1S, R4E W.M. (39.06 acres) and Tax Lot 100, Section 01A, T1S4E, W.M. (74.66 acres). Land Use Planning staff has outlined an approach to deciding this claim in the staff report dated April 11, 2007.

2. **Please provide sufficient background information for the Board and the public to understand this issue. Please note which Program Offer this action affects and how it impacts the results.**
   For a claim to be valid, the land use regulations challenged must restrict the claimants use of private

real property in a manner that reduces its fair market value relative to how it could have been used at the time the claimants acquired the property. As outlined in the staff report and in the memorandum from the County Attorney's Office, this requirement has been met for the mining use, and not met for the subdivision.

The claimants are challenging County regulations enacted after parcels were acquired in 1958, 1959, and 1977, and assert that the rules in effect at that time allowed mining and subdivision of the parcels into lots averaging 2 acres in size. Deed documents; however, establish that the properties were transferred to Limited Liability Corporations (LLCs) in March of 2001, thereby changing ownership to that date. This issue is analyzed in detail in the attached January 9, 2007 memo from Assistant County Attorney Jed Tomkins.

The claimants have established that the Howard Canyon Reconciliation Report revision in Ordinance 1050 (adopted October 2004) reduced the value of the properties because it removed protection of the site for mining. Road Rules and perhaps other regulations adopted after March of 2001 that are not limited to health and safety, may have also reduced the value of the property for mining.

The EFU and CFU-4 regulations in effect when the claimant acquired the properties do not allow subdivisions. Therefore, there has not been a reduction in value for this purpose.

Staff recommends the Board of Commissioners waive Ordinance 1050, the HCRR revisions adopted in 2004, and the March 2004 Road Rules and other regulations that limit mining, except for the land use regulations which are not covered by Measure 37, as set out in ORS 197.352(3).

3. **Explain the fiscal impact (current year and ongoing).**
   The claimants assert a reduction in value of $8.5 million; however, this dollar figure is not supported by an appraisal prepared in accordance with the county ordinance.

4. **Explain any legal and/or policy issues involved.**
   Policy and legal issues are outlined in a staff report from Land Use Planning dated April 11, 2007.

5. **Explain any citizen and/or other government participation that has or will take place.**
   Public notice of this hearing has been mailed to all property owners within 750 feet of the subject property, and the claimant. Deliberation and any action on this item will be done following a public hearing at which interested citizens will have an opportunity to testify and provide written comment in accordance with the Board of Commissioners rules of procedure for the hearing.

Required Signature

Elected Official or Department/ Agency Director: M. Cecilia Johnson **Date: 04/12/07**

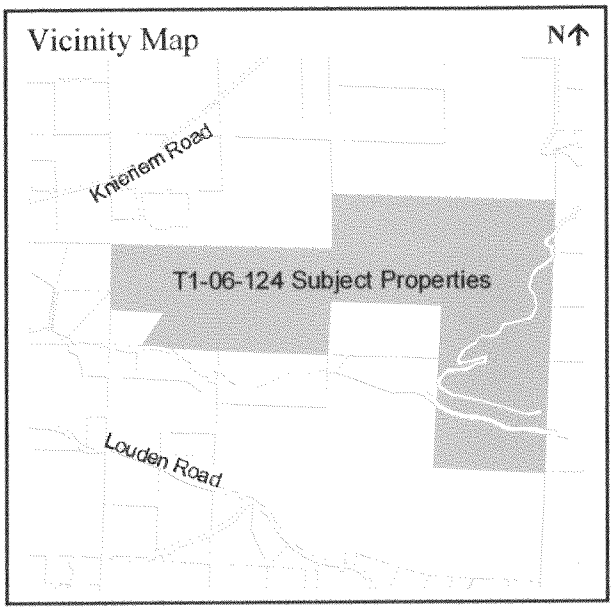
LAND USE & TRANSPORTATION PLANNING PROGRAM
1600 SE 190TH Avenue Portland, OR 97233
PH: 503-988-3043 FAX: 503-988-3389
http://www.co.multnomah.or.us/landuse

Staff Analysis of a Measure 37 Claim

The following matter is scheduled for public hearing, deliberation and possible action before the Multnomah County Board of Commissioners

Hearing Date, Time, & Place:

Thursday, April 26, 2007 at 1:30 pm or soon thereafter, in the Commissioners' Board Room of the Multnomah Building, located at 501 SE Hawthorne, Portland, Oregon.



Case File: T1-06-124

Claimants: George Raymond Smith,
The Raymond Smith,LLC. and
ShirleeLenske,
Lenske Properties, LLC.

Location/: Parcel Id., Size			
	1S4E01A-00200	R994010020	19.75 acres
	1N4E36D-00500	R944360130	38.87
	1S4E01B-01000	R994010160	32.63
	1S4E01B-00100	R994010170	39.06
	1S4E01A-00100	R994010010	74.66

Claim: Compensation in the amount of $8,488,380 or relief from land use regulations to allow mining of all economically viable sources of gravel, followed by subdivision of the 206 acre property into 75 – 100 buildable single family lots.

Zoning: Exclusive Farm Use (EFU), Commercial Forest Use (CFU-4), Significant Environmental Concern for streams (SEC-s) and Hillside Development (HD).

Approach to Deciding the Claim:

For a claim to be valid, the land use regulations challenged must restrict the claimants use of private real property in a manner that reduces its fair market value relative to how it could have been used at the time the claimants acquired the property. As outlined in this report and memorandum from the County Attorneys Office, this requirement has not been met. The reasons for this are as follows:

(a) The claimants have failed to establish that they acquired a the property prior to the date all of the challenged regulations were enacted and;

(b) The claimants have failed to document that subdivisions totaling 75 – 100 buildable lots and dwellings could have been approved, or that the contemplated mining could have been allowed, under the land use regulations in effect at the time they acquired the property.

Planning staff recommends that the Board of Commissioners deny this claim.

Claim Summary:

(The following is a step-by-step evaluation of the claim, which consists of the application materials submitted by Mark O'Donnell, ESQ, on behalf of the claimants. The analysis is structured as a series of questions that must be answered to establish if a claim is valid, comparable to the methodology outlined in a February 24th, 2005 memo authored by the State Attorney General's Office.)

This claim involves five contiguous properties that are owned by The Raymond Smith LLC, and the Lenske Properties, LLC. Ownership in the properties was transferred to the LLCs on March 1, 2001. The properties are located southeast of the community of Corbett and contain all of the Howard Canyon Quarry site. The western most parcel is 32.63 acres and is zoned Exclusive Farm Use (EFU), and the other four parcels are zoned Commercial Forest Use (CFU-4).

The claim asks for:

(1) Compensation in the amount of $8,488,380 or the ability to mine the property of all economically viable gravel resources;

(2) followed by development of several subdivisions for single family lots ranging from 2 to 10 acres in size. Approximately 75 – 100 buildable lots are desired.

*1. **Did the claimant acquire the properties before the laws in question were adopted?***

In part. Claimants George Raymond Smith, LLC and Shirlee Lenske, LLC, acquired the properties on March 1, 2001, after most of the regulations challenged in this claim were enacted.

The claimants are challenging County zoning regulations contained in Chapter 35, the Comprehensive Plan, Mineral Extraction Policies, Traffic Rules, and Urban Rural Growth Management Policies. Most of these regulations were in effect when the properties were deeded to the Limited Liability Corporations in March of 2001. Below is a list of County regulations that have been challenged, and the adoption/effective dates (see also claimant's Exhibit G).

- Multnomah County Comprehensive Framework Plan, plan map adopted 1964.
- Chapter 35, the zoning code for the East of Sandy River Rural Area wherein the properties lie, became effective January 1, 2001.
- Howard Canyon Reconciliation Report
  - Designated the site as a protected Goal 5 mineral resource, adopted in June of 1996.
  -Amended to allow only limited mining in Ord. 1050, adopted October of 2004.
- East of Sandy River Rural Area Plan, adopted July 10, 1997.
- Road Rules, adopted March 23, 2004.
- Design and Construction Manual (for roadways), adopted June 20, 2000.
- MCC Chapter 29.560 Street Standards revised September 2004.
- Urban Rural Growth Management Policies: Staff is unaware of this County regulation.

The Warranty Deed and Co-Tenancy Agreement submitted by the claimants indicates that all of the prior owners' interests in the parcels were conveyed to the Smith – Lenske LLCs on March 1, 2001 (Exhibit 1.3). The claimants also include a warranty deed dated July of 2004, which

shows Raymond Smith grantor of all of the subject properties to Raymond Smith Trustee (claimant's Exhibit 1.4). The partial title report in claimant's Exhibit D indicates that the grantor had no record interest in the land at the time, therefore staff believes this deed is not material to "ownership" for purposes of Measure 37.

Prior to transfer of the properties into the LLC in 2001, the properties had been placed into joint ownership by Rueben Lenske and Raymond Smith, as individuals, in October of 1983. Additional information on earlier acquisition of the parcels by the owners is in the narrative statement in claimants' Exhibit E. Four of the five parcels involved in this claim were acquired by either Smith or Lenske in July of 1959 or January of 1977, when the properties were zoned F2. The 74.66 acre parcel number 23 (1S4E01A-00100) was acquired by Raymond Smith in February of 1958, prior to zoning.

The County Attorney has advised that the sale of a property to a Limited Liability Company is a change of ownership for purposes of Measure 37. An LLC is a distinct legal entity capable of possessing an interest in property. A member of an LLC has an ownership interest in the entity, but has no ownership interest in property held by the LLC. Consequently, members of the Smith and Lenske families ceased to possess individual interests in the properties when they conveyed them to their respective Limited Liability Companies. Accordingly, we find that The Raymond Smith, LLC, through its agent, George Raymond Smith, and Lenske Properties, LLC, through its agent Shirlee Lenske, first acquired an interest in the properties as of the effective date of the agreement.

2. ***Have the challenged regulations restricted the use of the properties for the claimant?***

Some of them have. Regulations associated with the potential for mineral and aggregate extraction changed after ownership of the properties transferred to the LLCs on March 1 2001, thus restricting the use of the properties. All of the other County regulations were in effect prior to transfer of ownership and therefore do not restrict the use of the properties.

The County mining-related regulations in effect in March of 2001 included the 1996 Howard Canyon Reconciliation Report (HCRR) and related provisions of the CFU-4 zone district. The CFU-4 regulations have not been changed in any substantive manner that the claimant has identified since prior to claimant's ownership date. The HCRR (1996) designated the quarry as a significant mining resource and protected it for resource extraction. The HCRR was revised October 7, 2004 by Ordinance 1050, to not protect the site as a resource and to prohibit mining in an amount greater than allowed under a Department of Geology and Mineral Industries Grant of Total Exemption. This 2004 action by the County restricts the site's use for this purpose.

Multnomah County Road Rules, amended after March of 2001, contain procedures, standards, and improvement requirements applicable to public (County) roads. The Rules implement MCC Chapter 29.500 et. seq. The original ordinance was passed on 4-20-78 {Ord 162}, and has been amended from time to time over the years. This code restricts the mining use, except where they are health and safety requirements (or otherwise exempt regulations as set out in ORS 197.352(3)). The Board should waive any regulations adopted after March 1, 2001, that are not health and safety related (or otherwise exempt regulations as set out in ORS 197.352(3)) and that restrict the use of the property for mining.

County regulations related to subdividing the property in effect when ownership transferred to the LLCs are contained in MCC Chapter 35. These regulations include uses allowed in the CFU-4 and EFU zones, and other land use related regulations, and subdivision regulations. The CFU and EFU regulations did not allow small lots or dwellings on those lots at the time of the transfer of the properties to the LLCs.

3. ***Have the regulations reduced the fair market value of the properties?***

Some of them. The value of the property was reduced due to the change in the HCRR that prohibits expanded mining. The fair market value of the property for subdivision purposes has not been reduced due to the cited Comprehensive Plan provisions and Chapter 35 of the zoning code.

The revision of the HCRR reduced the value of the properties by removing the site from the inventory of protected mineral resources, and not protecting mining from conflicting uses. Whether mining under the 1996 HCRR will occur is unclear at this time. This is because mining can only happen after a PAM overlay zone has been applied to the site by action of the Board of County Commissioners. The 1996 HCRR in itself did not establish a right to mine, it established a right to continue along a process to define the terms under which mining could occur.

With respect to subdividing and selling 75 - 100 lots, the CFU-4 and EFU zoning in effect on the property in 2001 did not allow this, therefore there has been no reduction in value due to these regulations.

PUBLIC NOTICE

Public notice of this hearing was mailed to all property owners within 750 feet of the subject property. Deliberation and any action on this item will be taken following a public hearing at which interested citizens will have an opportunity to testify and provide written comment in accordance with the Board of Commissioners rules of procedure for the hearing.

CONCLUSION

Considering the above:

(1) Claim for subdivision - the claimants have failed to establish that regulations preventing them from dividing the property and selling 75 – 100 buildable home sites, have resulted in a restriction of their use of the land and reduction in value. The CFU and EFU rules in effect upon transfer of the property to the current owner did not allow the proposed subdivision and dwellings.

(2) Claim for expanded mining - the claimants have established that changes to regulations adopted after they acquired the property have reduced its value for mining. The revisions to the HCRR adopted in October of 2004 under Ordinance 1050 removed protection of the site for mining. Between 1996 and that time, the claimants could have applied for Board approval of a zone change to apply the PAM overlay zone, and a Conditional Use permit to mine the site.

Consequently, the Planning staff recommends that the Board of Commissioners deny the subdivision claim. Staff recommends that the Board not apply the revisions to the Howard Canyon Reconciliation Report in Ordinance 1050 (2004). Staff further recommends that the Board not apply regulations

adopted after March 1, 2001 that restrict mining to an extent that they are not health and safety related or otherwise exempt regulations as set out in ORS 197.352(3). If the Board chooses to waive land use regulations, staff recommends that the Board address the following in the Board Order:

1. Include a statement that any waiver or modification of the county land use regulations does not constitute a waiver or modification of corresponding state laws, or administrative rules. Before any building permits may be issued, an authorization from the stat must be secured.

2. Note that waiver of the listed regulations also constitutes a waiver of Comprehensive Plan and Rural Area Plan policies that the rules implement.

3. Action by the Board of Commissioners to not apply regulations does not authorize immediate development of the intended use. Rules that still apply require that land use and building permits be approved by the County before development can proceed.

4. Include a statement that any right obtained by a claimant through the Board's grand of a waiver of County land use regulations is transferable only to the extent allowed by law.

Issued by:

By DT

By: Chuck Beasley
Chuck Beasley, Senior Planner

For: Karen Schilling, Planning Director

Date: April 11, 2007

Referenced Exhibits

Copies of the exhibits, referenced herein, are in the case record that is on file at the Land Use and Transportation Planning Office.

Multnomah County Attorney's Office
501 S.E. Hawthorne Blvd., Suite 500
Portland, Oregon 97214
PHONE: (503) 988-3138
FAX: (503) 988-3377

MEMORANDUM

To: Chuck Beasley
Multnomah County Planner

Cc: Derrick Tokos, Principal Planner

From: Sandy Duffy
Assistant County Attorney
Multnomah County Attorney's Office

Date: April 11, 2007

Re: George Raymond Smith, The Raymond Smith, LLC and Shirlee Lenske, Lenske Properties, LLC (The Howard Canyon Quarry)
T1-06-124

I have reviewed your staff report for legal sufficiency under ORS 197.352 (Measure 37). Your staff report has adequately addressed each required criteria and correctly applied Measure 37.

04/26/07 Maxson, Baker, Smith and Lenske M 37 Hearings Script

Thursday, April 24, 2007 - **1:30 PM**
Multnomah Building, First Floor Commissioners Boardroom 100
501 SE Hawthorne Boulevard, Portland

REGULAR MEETING - CONTINUED

Chair Ted Wheeler convenes the meeting at 1:30 p.m., with Vice-Chair Maria Rojo de Steffey and Commissioners Lisa Naito, Lonnie Roberts and Jeff Cogen present.

INTRODUCTION:

Chair: This is the time set for public hearings on the claims of ***Charles Maxson; Sandra Baker et al and Barkers Five LLC; George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC; and George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC*** under Ballot Measure 37. I am Ted Wheeler, Chair of the Multnomah County Board of Commissioners. Also in attendance are Commissioners Maria Rojo, Lisa Naito, Jeff Cogen and Lonnie Roberts.

All information relevant to these claims may be submitted and will be considered in these hearings. The evidence may be in any form including oral and written testimony, letters, petitions or other written material, slides, photographs, maps drawings or other items.

The Commission will base its decision on the evidence presented, along with the information on the claim in the Planning file. The Board decision will be by Order adopted by the Board.

DISCLOSURES:

Chair: Board members are required to disclose the content of any *ex parte* contacts. Any Board member who has received any factual information obtained outside the information provided by the county planning staff or this hearing is an *ex parte* contact. A visit to the property is considered an *ex parte* contact. Any *ex parte* contacts should be disclosed at this time. Such disclosures should include the time and date of the visit, what he/she

observed, who (if anyone) the Commissioner talked to at the site and any other relevant facts or observations obtained as a result of the site visit.

Chair: I have *no ex parte* contacts to disclose regarding any of the claims we are hearing today.

or if the Chair has disclosures to make

I have the following disclosures to make: _____

Chair: [Invite the other Commissioners to make any necessary disclosures.) Commissioner Rojo? Commissioner Naito? Commissioner Cogen? Commissioner Roberts? [If there are none, each Commissioner should say "none" on the record.]

[If there are disclosures of *ex parte* contacts, the claimant and the public should be given an opportunity to rebut the substance of any disclosure. "Does anyone have any rebuttal testimony relating to any disclosure?"]

Chair: Board members are also required to disclose any conflicts of interest and to recuse themselves from deliberation and voting if a conflict exists. It is deemed a conflict of interest if any Board member, or a member of his/her immediate family or household, has a financial interest in the outcome of a matter before the Board. It is a conflict of interest if a Board member lives within the geographical area entitled to notice of a claim.

Chair: Does any Board member, or a member of his/her immediate family or household, have a financial interest in the outcome of any of the claims now before us?

I do [do not] have a financial interest in the outcome of any of these claims. [Invite other commissioners to make any necessary disclosures.] Commissioner Rojo? Commissioner Naito? Commissioner Cogen? Commissioner Roberts? [If yes, that person must recuse himself/herself on the record.]

Does any Board member live within the geographical area entitled to notice of any of these claims?

I do [do not] live within the geographical area of any of these claims. Commissioner Rojo? Commissioner Naito? Commissioner Cogen? Commissioner Roberts?

[Any commissioner who lives within the relevant geographical area of a claim must recuse himself/herself. MCC 7.540]

CONDUCT OF THE HEARING:

Chair: In each of these hearings, I will ask for testimony and other evidence in the following order:

1. Staff report
2. Claimant or claimant's representative
3. Others who wish to be heard on the claim
4. Commission discussion, questions, deliberation
5. Future scheduling if necessary

HOW TO PRESENT TESTIMONY:

Chair: There are testimony cards at the back of the room and should be filled out by anyone wishing to testify. The claimants need not fill out a card. The cards should be given to the Board Clerk.

1. State your name and address before you begin your presentation
2. Avoid repetitive testimony
3. During the hearing, I ask those in the audience to refrain from any demonstration in support or opposition to the claim.

Chair: Please call the first hearing.

Board Clerk:

PH-1 Public Hearing to consider and possibly act upon a Measure 37 Claim for Charles Maxson for up to $385,000 in compensation or relief from land use regulations to allow the partition of each lot into two lots with four residential home sites overall on properties located at 38755 and 39062 E. Knieriem Rd., Corbett [T1N, R4E, Sec 36C, TL 300 & 400] (Case File T1-06-095). Presented by Ken Born and Sandra Duffy.

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:

Do I have a motion on PH-1?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of Charles Maxson

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

Chair: Please call the next hearing.

Board Clerk:
PH-2 Public Hearing to consider and possibly act upon a Measure 37 Claim by Sandra Baker et al and Barkers Five LLC for $33.6 million in compensation or relief from regulations to allow the claimants to construct 3 additional single family dwellings then subdivide and sell 2-acre lots for properties located in the vicinity of 15610 NW Germantown Road, Portland (Case File T1-06-098). Presented by Derrick Tokos and Sandra Duffy

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:

Do I have a motion on PH-2?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of Sandra Baker et al and Barkers Five LLC

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

Chair: Please call the next hearing.

Board Clerk:

PH-3 Public Hearing to consider and possibly act upon a Measure 37 Claim by George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC, for $8.5 million or relief from regulations to allow mining of all economically viable sources of gravel, followed by subdivision of the 206 acre property into 75-100 buildable single family dwelling lots, Corbett (Case File T1-06-124). Presented by Derrick Tokos and Sandra Duffy.

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:
Do I have a motion on PH-3?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

Chair: Please call the next hearing.

Board Clerk:
PH-4 Public Hearing to consider and possibly act upon a Measure 37 Claim by George Raymond Smith, The Raymond Smith LLC, Raymond Smith Trusts, and Lenske Properties LLC, for $20.3 million in compensation or relief from regulations to allow the claimants to subdivide 561 acres (17 properties) into 90-104 residential lots and to log riparian buffers along Howard Creek and a tributary. The properties are located south of Corbett, in the vicinity of the Howard Canyon Quarry, Corbett (Case File T1-06-087). Presented by Derrick Tokos and Sandra Duffy

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:

Do I have a motion on PH-4?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of George Raymond Smith, The Raymond Smith LLC, Raymond Smith Trusts, and Lenske Properties LLC

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

BOARD COMMENT

Opportunity (as time allows) for Commissioners to provide informational comments to Board and public on non-agenda items of interest or to discuss legislative issues.

THERE BEING NO FURTHER BUSINESS, THE MEETING IS ADJOURNED.

DRAFT

BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

ORDER NO. _____

Order Granting, in Part, with Conditions, Ballot Measure 37 Request of the Raymond Smith, LLC and the Lenske Properties, LLC Relating to Five Real Properties Commonly Known as the Howard Canyon Quarry Site Located Southeast of Corbett, Multnomah County, Oregon

The Multnomah County Board of Commissioners Finds:

a. **Parties:** The Raymond Smith, LLC and the Lenske Properties, LLC are the Ballot Measure 37 claimants (Claimants) who filed a demand for compensation to Multnomah County (County) on November 29, 2006.

b. **Subject Real Property:** This claim relates to five real properties commonly known as the Howard Canyon Quarry Site located southeast of Corbett, Multnomah County, Oregon and more specifically described as:

1S4E01A-00200	R994010020	19.75 acres
1N4E36D-00500	R944360130	38.87
1S4E01B-01000	R994010160	32.63
1S4E01B-00100	R994010170	39.06
1S4E01A-00100	R994010010	74.66

c. **Relevant Dates of Property Ownership:**

The Claimants have established that they obtained an interest in the subject property prior to the County's adoption of some of the land use regulations challenged in this claim.

Ownership of the subject property was transferred to the Raymond Smith, LLC and the Lenske Properties, LLC on March 1, 2001. Under Oregon law, a conveyance of property to an LLC constitutes a change in ownership even though prior owners of the property may also be members of the LLC. ORS 63.077 (LLC is an independent legal entity) and ORS 63.239 (members of an LLC have no ownership interest in LLC property). Accordingly, the Claimants acquired an interest in the subject property on March 1, 2001.

The County adopted the following land use regulations after the Claimants acquired an interest in the subject property:

- Howard Canyon Reconciliation Report: Amended to allow only limited mining. Ord. 1050 (2004);
- Road Rules (March 23, 2004); and
- MCC 29.560: Street Standards revised (September, 2004).

The County adopted the following land use regulations prior to the Claimants' acquisition of the subject property on March 1, 2001:

- Multnomah County Comprehensive Framework Plan (plan map adopted 1964);
- MCC Chapter 35: Zoning code for the East of Sandy River Rural Area (January 1, 2001);
- Howard Canyon Reconciliation Report: Designating the site as a protected Goal 5 mineral resource (June, 1996);
- East of Sandy River Rural Area Plan (July 10, 1997); and
- Design and Construction Manual (for roadways) (June 20, 2000).

The Board finds that the Claimants' acquisition of the subject property on March 1, 2001, preceded the County's adoption of the challenged land use regulations relating to the proposed mining use, and that the Claimants' acquired the subject property after the County adopted the challenged land use regulations relating to the proposed subdivision use.

d. **County Codes as a Restriction on Use of the Property:**

The Claimants have established that the challenged land use regulations have restricted their use of the property.

Mining Use: In 1996, the County adopted the Howard Canyon Reconciliation Report (HCRR). Rather than establishing a right to mine, the HCRR established a procedural right to the determination of terms under which mining could occur. On October 7, 2004, the County adopted Ordinance 1050, which revised the HCRR to remove protection of the site as a mineral resource and to prohibit mining in an amount greater than that allowed under a Department of Geology and Mineral Industries Grant of Total Exemption. Ordinance 1050 restricts mining on the subject property.

The County amended the Multnomah County Road Rules on March 23, 2004, which implement MCC Chapter 29.500 et. seq. The amended rules restrict mining on the subject property.

Subdivision Use: The County's subdivision regulations in effect when the Claimants acquired an interest in the property on March 1, 2001, prohibited the Claimants' proposed subdivision. MCC c. 35. Accordingly, those regulations do not restrict the Claimants use of the property under ORS 197.352. Since the Claimants have not shown that their use of the properties has been restricted, there is no reduction to the fair market value of the properties.

The Board finds that the Claimants have established that the challenged land use regulations relating to the proposed mining use have restricted their use of the subject property, and that the challenged land use regulations relating to the proposed subdivision use have not restricted their use of the subject property.

e. **County Code Restrictions Reduce Fair Market Value:**

The Claimant has established that the challenged land use regulations have reduced the fair market value of the property.

Mining Use: Ordinance 1050 (revision of the HCRR) has reduced the value of the subject property as a mineral mine by removing that property from the inventory of protected mineral resources and by not protecting mining thereon from conflicting uses.

Subdivision Use: The regulations in effect when the Claimants acquired the subject property on March 1, 2001, did not allow the proposed subdivision. Since the Claimants have not shown that their right to a subdivision use on the subject property has been restricted, there is no reduction to the fair market value of the subject property with respect to that use.

The Board finds that the Claimants have established that the challenged land use regulations relating to the proposed mining use have reduced the fair market value of the subject property, and that the challenged land use regulations relating to the proposed subdivision use have not reduced the fair market value of the subject property.

f. **Public Notice**

Section 3.50 of the County Charter requires notice to the public of all Board agenda matters. This notice was provided. The Claimant and persons who own land within 750 feet of the subject property received notice by mail.

g. **Validity of Claim for Compensation:** The Board finds that:

(1) The Board finds that the Claimants' acquisition of the subject property on March 1, 2001, preceded the County's adoption of the challenged land use regulations relating to the proposed mining use, and that the Claimants' acquired the subject property after the County adopted the challenged land use regulations relating to the proposed subdivision use.

(2) The Board finds that the Claimants have established that the challenged land use regulations relating to the proposed mining use have restricted their use of the subject property, and that the challenged land use regulations relating to the proposed subdivision use have not restricted their use of the subject property.

(3) The Board finds that the Claimants have established that the challenged land use regulations relating to the proposed mining use have reduced the fair market value of the subject property, and that the challenged land use regulations relating to the proposed subdivision use have not reduced the fair market value of the subject property.

The Multnomah County Board of Commissioners Orders that:

1. **Claimants' Measure 37 claim relating to mining use is granted, and that Claimants' Measure 37 claim relating to subdivision use is denied.**

2. **The County will not pay the compensation demanded by Claimants.**

3. **In lieu of compensation, County Land Use Planning shall not apply County land use regulations relating to mining use adopted since March 1, 2001, except for those exempted under ORS 197.352 (3), to allow the Claimants to use the subject property for mining uses permitted under regulations in effect at that time.**

4. **Section 3 above, constitutes a waiver of Comprehensive Plan and Rural Area Plan policies that the regulations implement.**

5. **The following Conditions of Approval apply to this decision:**

   (a) Section 3 above does not constitute a waiver or modification of corresponding state laws, state administrative rules or metropolitan service district regulations that enforce land use regulations applicable to the property.

   (b) To the extent that any law, order, deed, agreement or other legally enforceable public or private requirement provides that the property may not be used without a permit, license, or other form of authorization or consent, this order does not authorize the use of the property unless the claimants first obtain that permit, license or other form of authorization or consent. Such requirements may include, but are not limited to: a building permit, a land use decision, other permits or authorizations from local, state or federal agencies, and restrictions on the use of the property imposed by private parties.

   (c) Any use of the property by the claimant under the terms of this order remain subject to the following laws or local codes: (a) those in effect on the date of the acquisition of the subject property; (b) any enacted or enforced by a public entity other that the County; and (c) those laws not subject to Measure 37 including, without limitation, those exempted under Section (3) of Measure 37.

(d) Any rights obtained by a claimant through the Board's grant of a waiver of County land use regulations is transferable only to the extent allowed by law.

ADOPTED this 26th day of April, 2007.

BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

_____
Ted Wheeler, Chair

REVIEWED:

AGNES SOWLE, COUNTY ATTORNEY
FOR MULTNOMAH COUNTY, OREGON

By_____
Jed R. Tomkins, Assistant County Attorney

SUBMITTED BY:
Agnes Sowle, County Attorney

MULTNOMAH COUNTY
AGENDA PLACEMENT REQUEST (short form)

Board Clerk Use Only	
Meeting Date:	04/26/07
Agenda Item #:	PH-4
Est. Start Time:	2:40 PM
Date Submitted:	04/12/07

Agenda Title:	**Public Hearing to consider and possibly act upon a Measure 37 Claim by George Raymond Smith, The Raymond Smith LLC, Raymond Smith Trusts, and Lenske Properties LLC, for $20.3 million in compensation or relief from regulations to allow the claimants to subdivide 561 acres (17 properties) into 90-104 residential lots and to log riparian buffers along Howard Creek and a tributary. The properties are located south of Corbett, in the vicinity of the Howard Canyon Quarry, Corbett (Case File T1-06-087)**

Note: If Ordinance, Resolution, Order or Proclamation, provide exact title. For all other submissions, provide a clearly written title.

Requested Meeting Date:	April 26, 2007	**Amount of Time Needed:**	30 minutes
Department:	**Community Services**	**Division:**	Land Use & Transportation
Contact(s):	Derrick Tokos, Sandra Duffy		
Phone:	503-988-3043 **Ext.** 22682	**I/O Address:**	455/116
Presenter(s):	Derrick Tokos, Sandra Duffy		

General Information

1. What action are you requesting from the Board?

Action requested is to provide a public hearing and render a decision regarding a Measure 37 claim by George Raymond Smith, The Raymond Smith LLC, Raymond Smith Trusts, and Lenske Properties LLC seeking compensation or relief from regulations that prohibit the claimants from developing the properties with several subdivisions of single family residences on lots ranging from 1 acre to 10 acres in size (90 – 104 lots). The claim also seeks relief to log riparian buffers along Howard Creek and a tributary. The claim involves 17 properties, most of which are located in the vicinity of the Howard Canyon, south of Corbett. Land Use Planning staff has outlined an approach to deciding this claim in a staff report dated April 12, 2007.

2. Please provide sufficient background information for the Board and the public to understand this issue. Please note which Program Offer this action affects and how it impacts the results.

For a claim to be valid, the land use regulations challenged must restrict the claimants use of private real property in a manner that reduces its fair market value relative to how it could have been used at

the time the claimants acquired the property. As outlined in the staff report and memorandum from the County Attorney's Office, this requirement has not been met.

The claimants are challenging County zoning regulations enacted after George Raymond Smith acquired individual interests in all but two of the properties, between 1945 and 1969. They assert that these regulations have prevented them from dividing the properties into 1 to 10 acre single family residential lots, depending upon whether or not a particular property was un-zoned at the time of acquisition (i.e. prior to 7/10/1958) or was subject to the County's F-2 zoning regulations (7/10/1958 to 10/6/1977). Deed documents; however, establish that the properties were actually acquired more recently, on March 1, 2001. County zoning in effect on this date did not allow the properties to be divided into lots of this size.

Even if the claimants had acquired properties when they were zoned F-2, as noted in their claim, the right to establish a dwelling was not guaranteed. Under the F-2 zoning, the claimants would have been required to demonstrate that a proposed dwelling was "*required to carry out grazing, agriculture, horticulture or the growing of timber*".

County regulations have not restricted the claimants from conducting a timber harvest because they list the activity as an outright allowed use.

Staff recommends the Board of Commissioners deny this claim.

3. **Explain the fiscal impact (current year and ongoing).**
   The claimants assert a reduction in value of $20.3 million; however, this dollar figure is not supported by an appraisal. No compensation is due because the claimants have failed to establish that land use regulations have restricted their use of the property.

4. **Explain any legal and/or policy issues involved.**
   Policy and legal issues are outlined in a staff report from Land Use Planning dated April 12, 2007. The County Attorney has advised that any property rights obtained by relief from land use regulations are not transferable under Ballot Measure 37, consistent with the DOJ opinion of February 2005.

5. **Explain any citizen and/or other government participation that has or will take place.**
   Public notice of this hearing has been mailed to all property owners within 750 feet of the subject property, and the claimant. Deliberation and any action on this item will be done following a public hearing at which interested citizens will have an opportunity to testify and provide written comment in accordance with the Board of Commissioners rules of procedure for the hearing.

Required Signature

Elected Official or Department/ Agency Director: M. Cecilia Johnson **Date: 04/12/07**

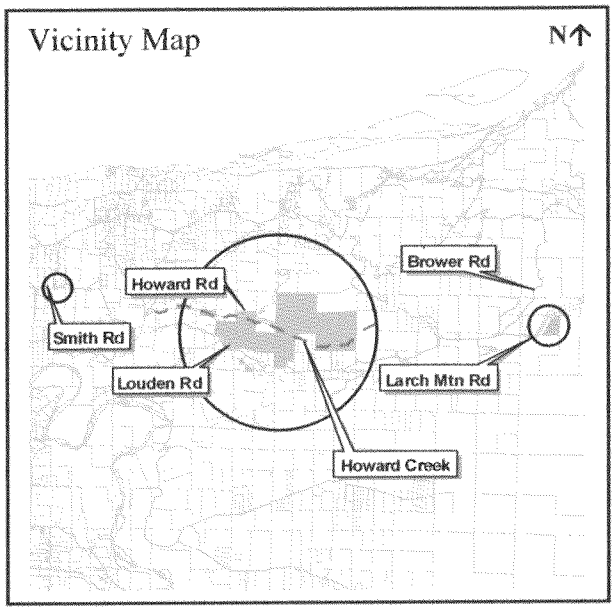
LAND USE & TRANSPORTATION PLANNING PROGRAM
1600 SE 190TH Avenue Portland, OR 97233
PH: 503-988-3043 FAX: 503-988-3389
http://www.co.multnomah.or.us/landuse

Staff Analysis of Measure 37 Claim

The following matter is scheduled for public hearing, deliberation and possible action before the Multnomah County Board of Commissioners

Hearing Date, Time, & Place:

Thursday, April 26, 2007 at 1:30 pm or soon thereafter, in the Commissioners' Board Room of the Multnomah Building, located at 501 SE Hawthorne, Portland, Oregon.



Case File: T1-06-087

Claimants: George Raymond Smith
The Raymond Smith LLC
Raymond Smith Trusts
P.O. Box 183, Corbett, OR 97019

Lenske Properties, LLC
7475 SE 52nd Ave, Portland OR 97206

Location: 17 properties (see Table 1). The properties are located in Sections 1, 1B, 1DC and 34C, T1S, R4E and Sections 3, 6, 6C and 6D, T1S, R5E, W.M.

Claim: Up to $20.3 million in compensation or relief from County land use regulations to allow the claimants to develop the properties with several subdivisions of single family residences on lots ranging from 1 acre to 10 acres in size (90 – 104 lots). The claim also seeks relief to log riparian buffers along Howard Creek and a tributary.

Zoning: Commercial Forest Use 3 (CFU-3), Commercial Forest Use 4 (CFU-4), Rural Residential (RR), Significant Environmental Concern (SEC-s), and Slope Hazard (HD).

Site Size: Approximately 561 acres

Approach to Deciding the Claim:

For a claim to be valid, the land use regulations challenged must restrict the claimants use of private real property in a manner that reduces its fair market value relative to how it could have been used at the time the claimants acquired the property. As outlined in this report and memorandum from the County Attorneys Office, this requirement has not been met. The reasons for this are as follows:

(a) The claimants have failed to establish that they acquired and have continuously owned the property prior to the date the challenged regulations were enacted and;

(b) The claimants have failed to document that 90 to 104 subdivision lots, each ranging between 1 and 10 acres in size, could have been approved under the land use regulations in effect at the time they acquired the property.

Claim Summary

(The following is a step-by-step evaluation of the claim, which consists of materials submitted by Mark O'Donnell, ESQ, on behalf of the claimants. The analysis is structured as a series of questions that must be answered to establish if a claim is valid, comparable to the methodology outlined in a February 24th, 2005 memo from the State Attorney General's Office.)

The claimants are challenging County zoning regulations enacted after George Raymond Smith acquired individual interests in all but two of the properties, between 1945 and 1969[1]. They assert that these regulations have prevented them from dividing the properties into 1 to 10 acre single family residential lots, depending upon whether or not a particular property was un-zoned at the time of acquisition (i.e. prior to 7/10/1958) or was subject to the County's F-2 zoning regulations (7/10/1958 to 10/6/1977). The claimant's state that they intend to create 90 to 104 buildable single family lots spread over 561 acres. In addition to the residential subdivisions, the claimants assert a right to log non-health and safety related riparian buffers along Howard Creek and a tributary.

The claimants state in the claim that they believe the net value lost as a result of the land use regulations to be $20,295,460.00. Of that, $190,000.00 is attributed to the stumpage value of the timber. An appraisal has not been provided to substantiate these figures.

Properties subject to this claim are located in the vicinity of Howard Road and Louden Road between O'Reagan Road and Mannthey Road. Some are also located adjacent to Larch Mountain Road east of Brower Road and others are near the intersection of Curtis Drive and Smith Road. Two of the properties have addresses, which are 46724 E Larch Mountain Road (Property #8) and 39826 SE Louden Road (Property #13). Specific descriptions for the properties are as follows:

TABLE #1

PROPERTY #	ACCT NUMBER	DESCRIPTION	SIZE	ZONING
1	R994010190	TAX LOT 100, SECTION 1, T1S, R4E	157.66	CFU-4/SEC-s/HD
2	R995060080	TAX LOT 100, SECTION 6D, T1S, R5E	80.00	CFU-4/SEC-s/HD
3	R995060020	TAX LOT 600, SECTION 6, T1S, R5E	80.00	CFU-4/HD
4	R995060030	TAX LOT 200, SECTION 6, T1S, R5E	37.87	CFU-4/HD
5	R995060040	TAX LOT 500, SECTION 6, T1S, R5E	82.62	CFU-4/SEC-s/HD
6	R995060060	TAX LOT 300, SECTION 6, T1S, R5E	63.05	CFU-4/SEC-s/HD
7	R995060110	TAX LOT 400, SECTION 6, T1S, R5E	20.00	CFU-4/HD
8	R995030030	TAX LOT 1200, SECTION 3, T1S, R5E	8.04	CFU-3
9	R944340030	TAX LOT 300, SECTION 34C, T1S, R4E	0.98	RR
10	R995030160	TAX LOT 1300, SECTION 3, T1S, R5E	9.21	CFU-3
11	R994010050	TAX LOT 800, SECTION 1B, T1S, R4E	7.35	CFU-4/SEC-s/HD
12	R994010370	TAX LOT 1000, SECTION 1C, T1S, R4E	3.62	CFU-4
13	R994010230	TAX LOT 1000, SECTION 1DC, T1S, R4E	2.45	RR
14	R995060290	TAX LOT 300, SECTION 6, T1S, R5E	19.35	CFU-4/HD
15	R994010530	TAX LOT 1300, SECTION 1DC, T1S, R4E	3.51	RR/HD
16	R995030180	TAX LOT 1400, SECTION 3, T1S, R5E	5.61	CFU-3
17	R944341220	TAX LOT 1800, SECTION 34C, T1S, R4E	0.99	RR

[1] Reuben Lenske, Mr. Smith's prior business partner, acquired the other two properties in 1977 and 1997 (Properties #11 and #12, Table 1). While both are referenced in the claim, it does not appear that the claimants are asserting that regulations have restricted the use of the property acquired by Mr. Lenske in 1997.

1. *Did the claimant acquire the property before the laws in question were adopted?*

No. Claimant George Raymond Smith conveyed his individual interest in the properties to The Raymond Smith, LLC on March 1, 2001, after regulations challenged in this claim were enacted. Claimant Lenske Properties, LLC acquired an interest in the properties on the same date. The Raymond Smith Trusts do not own the properties.

The conveyance history prepared by the claimants, indicates that the properties were transferred into The Raymond Smith, LLC, an Oregon Limited Liability Company, and Lenske Properties, LLC, an Oregon Limited Liability Company, pursuant to a Co-Tenancy Agreement effective March 1, 2001. The agreement was recorded on February 17, 2004 (Instrument #2004-024397). Together the two companies own all of the properties, with the percentage interest held by each varying on a parcel by parcel basis. The County Attorney has advised that the sale of a property to a Limited Liability Company is a change of ownership for purposes of Measure 37. Accordingly, we find that The Raymond Smith, LLC, through its agent, George Raymond Smith, and Lenske Properties, LLC, through its agent Shirlee Lenske, first acquired an interest in the properties as of the effective date of the agreement.

An LLC is a distinct legal entity capable of possessing an interest in property. A member of an LLC has an ownership interest in the entity, but has no ownership interest in property held by the LLC. Consequently, members of the Smith and Lenske families ceased to possess individual interests in the properties when they conveyed them to their respective Limited Liability Companies.

The claimants also include a warranty deed dated July of 2004, which shows that George Raymond Smith conveyed the properties to Raymond Smith Trustee (Instrument #2004-130412). The partial title report provided by the claimants notes that Mr. Smith did not individually possess title to the property at that time, meaning that nothing was effectively conveyed to the trust. Given this information, staff believes this deed is not material to "ownership" for purposes of Measure 37.

2. *Have the challenged regulations restricted the use of the property?*

No. County regulations in effect when The Raymond Smith, LLC and Lenske Properties, LLC, acquired the properties on March 1, 2001 prohibited them from dividing the properties into 90 to 104 residential subdivision lots ranging from 1 to 10 acres in size. County regulations do not restrict the claimants from harvesting timber, as that activity is an outright allowed use

Zoning districts in effect on March 1, 2001 are the same as those that apply to the properties today. They are listed in Table 1 above. The minimum lot size in the CFU-3 and CFU-4 districts is 80 acres (§35.2063 and §35.2263). For CFU-4 zoned properties, the 80 acre minimum lot size requirement has been in effect since January 7, 1993 (Ord.743). The CFU-3 properties have been subject to an 80 acre minimum lot size since August 14, 1980 (Ord. #236). The 2001 acquisition date occurred well after these regulations were in place prohibiting the creation of 1 to 10 acre lots.

Prior county zoning, applicable to CFU-3 and CFU-4 zoned properties, with a fixed minimum lot size standard smaller than 10 acres, was the F-2 zone district. The F-2 zone was an agricultural district with a 2 acre minimum lot size. It applied to the properties from July 10, 1958 to December 8, 1975 (Ord. #100). Even if the claimants had acquired properties during this timeframe, as noted in their claim, the right to establish a dwelling was not guaranteed under the F-2 zoning in effect at

that time. Under the F-2 zoning, the claimants would have been required to demonstrate that a proposed dwelling was "*required to carry out grazing, agriculture, horticulture or the growing of timber*" (§3.112, Ord. #100).

Some properties listed in Table 1 are within an RR zone district. This zone has a 5 acre minimum lot size (§35.3155). This minimum lot size standard has been in effect since October 13, 1983 (Ord. #395). As noted in Table 1, none of the RR zoned properties is large enough to be divided in compliance with this requirement.

In addition to subdividing the properties, claimants assert that County regulations prevent them from harvesting timber along Howard Creek and a tributary. They specifically refer to riparian buffers as restricting this use. While it may be that this portion of the claim is directed at State regulations that are outside the scope of the County's jurisdiction, staff has nonetheless evaluated whether or not County regulations restrict this use. They have not. The CFU-3, CFU-4, and RR districts expressly state that forest operations, such as timber harvests, are an outright allowed use (e.g. §35.2220). The SEC-s overlay zone, adopted to protect, conserve, enhance, and restore natural features such as stream and riparian areas, similarly exempts timber harvests from County permitting requirements recognizing that it is an activity regulated by the State Forest Practices Act (§35.4515). The County applied the SEC-s overlay to Howard Creek in October of 1995 (Ord. #830).

3. *Have the restrictions reduced the fair market value of the property?*

No. The fair market value of the property has not been reduced because the claimants use of the property has not been restricted.

As established above, regulations in effect when the claimants acquired the properties in 2001 did not allow them to divide the land into 90 to 104, 1 to 10 acre lots and did not restrict the claimants from conducting a timber harvest along Howard Creek or its tributaries. Since the claimants have not shown that their use of the properties has been restricted, there is no reduction to the fair market value of the properties. Furthermore, with respect to subdividing and selling 1 to 10 acre lots, a reduction in value has not occurred because development rights cannot be transferred. Even if a subdivision could have been approved at the time the claimants acquired the properties, Measure 37 rights are personal to the claimants and are of no value to a new owner. For instance, the current CFU zoning regulations would be applied once a newly created lot is sold to a new owner. These regulations would prohibit the establishment of a dwelling on the property rendering it unbuildable. Because the resulting lots would have no development value, no reduction in value will occur as compared to the present value of the property under the current zoning regulations (i.e. 1 to 10 acre lots are of no more value as wood lots than a 80 acre or 157 acre property).

PUBLIC NOTICE

Public notice of this hearing was mailed to all property owners within 750 feet of the subject property. Deliberation and any action on this item will be done following a public hearing at which interested citizens will have an opportunity to testify and provide written comment in accordance with the Board of Commissioners rules of procedure for the hearing.

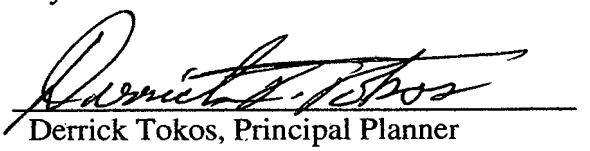
CONCLUSION

For the reasons stated herein, the claimants have failed to establish that regulations enacted after they acquired the properties on March 1, 2001 have restricted their use of the land and reduced its value.

Further, County regulations have not restricted the claimants from conducting a timber harvest because they list the activity as an outright allowed use.

Consequently, staff recommends that the Board of Commissioners deny this claim.

Issued by:

By: 
Derrick Tokos, Principal Planner

For: Karen Schilling, Planning Director

Date: Thursday, April 12, 2007

Exhibits

Copies of the documents referenced herein are in the claim record that is on file at the Land Use and Transportation Planning Office.

Multnomah County Attorney's Office
501 S.E. Hawthorne Blvd., Suite 500
Portland, Oregon 97214
PHONE: (503) 988-3138
FAX: (503) 988-3377

MEMORANDUM

To: Derrick Tokos
Principal Planner

From: Sandy Duffy
Assistant County Attorney
Multnomah County Attorney's Office

Date: April 11, 2007

Re: George Raymond Smith, The Raymond Smith LLC, Lenske Properties, LLC (17 properties)

I have reviewed your staff report for legal sufficiency under ORS 197.352 (Measure 37). Your staff report has adequately addressed each required criteria and correctly applied Measure 37.

04/26/07 Maxson, Baker, Smith and Lenske M 37 Hearings Script

Thursday, April 24, 2007 - **1:30 PM**
Multnomah Building, First Floor Commissioners Boardroom 100
501 SE Hawthorne Boulevard, Portland

REGULAR MEETING - CONTINUED

Chair Ted Wheeler convenes the meeting at 1:30 p.m., with Vice-Chair Maria Rojo de Steffey and Commissioners Lisa Naito, Lonnie Roberts and Jeff Cogen present.

INTRODUCTION:

Chair: This is the time set for public hearings on the claims of ***Charles Maxson; Sandra Baker et al and Barkers Five LLC; George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC; and George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC*** under Ballot Measure 37. I am Ted Wheeler, Chair of the Multnomah County Board of Commissioners. Also in attendance are Commissioners Maria Rojo, Lisa Naito, Jeff Cogen and Lonnie Roberts.

All information relevant to these claims may be submitted and will be considered in these hearings. The evidence may be in any form including oral and written testimony, letters, petitions or other written material, slides, photographs, maps drawings or other items.

The Commission will base its decision on the evidence presented, along with the information on the claim in the Planning file. The Board decision will be by Order adopted by the Board.

DISCLOSURES:

Chair: Board members are required to disclose the content of any *ex parte* contacts. Any Board member who has received any factual information obtained outside the information provided by the county planning staff or this hearing is an *ex parte* contact. A visit to the property is considered an *ex parte* contact. Any *ex parte* contacts should be disclosed at this time. Such disclosures should include the time and date of the visit, what he/she

observed, who (if anyone) the Commissioner talked to at the site and any other relevant facts or observations obtained as a result of the site visit..

Chair: I have *no ex parte* contacts to disclose regarding any of the claims we are hearing today.

or if the Chair has disclosures to make

I have the following disclosures to make: _____

Chair: [Invite the other Commissioners to make any necessary disclosures.) Commissioner Rojo? Commissioner Naito? Commissioner Cogen? Commissioner Roberts? [If there are none, each Commissioner should say "none" on the record.]

[If there are disclosures of *ex parte* contacts, the claimant and the public should be given an opportunity to rebut the substance of any disclosure. "Does anyone have any rebuttal testimony relating to any disclosure?"]

Chair: Board members are also required to disclose any conflicts of interest and to recuse themselves from deliberation and voting if a conflict exists. It is deemed a conflict of interest if any Board member, or a member of his/her immediate family or household, has a financial interest in the outcome of a matter before the Board. It is a conflict of interest if a Board member lives within the geographical area entitled to notice of a claim.

Chair: Does any Board member, or a member of his/her immediate family or household, have a financial interest in the outcome of any of the claims now before us?

I do [do not] have a financial interest in the outcome of any of these claims. [Invite other commissioners to make any necessary disclosures.] Commissioner Rojo? Commissioner Naito? Commissioner Cogen? Commissioner Roberts? [If yes, that person must recuse himself/herself on the record.]

Does any Board member live within the geographical area entitled to notice of any of these claims?

I do [do not] live within the geographical area of any of these claims. Commissioner Rojo? Commissioner Naito? Commissioner Cogen? Commissioner Roberts?

[Any commissioner who lives within the relevant geographical area of a claim must recuse himself/herself. MCC 7.540]

CONDUCT OF THE HEARING:

Chair: In each of these hearings, I will ask for testimony and other evidence in the following order:

1. Staff report
2. Claimant or claimant's representative
3. Others who wish to be heard on the claim
4. Commission discussion, questions, deliberation
5. Future scheduling if necessary

HOW TO PRESENT TESTIMONY:

Chair: There are testimony cards at the back of the room and should be filled out by anyone wishing to testify. The claimants need not fill out a card. The cards should be given to the Board Clerk.

1. State your name and address before you begin your presentation
2. Avoid repetitive testimony
3. During the hearing, I ask those in the audience to refrain from any demonstration in support or opposition to the claim.

Chair: Please call the first hearing.

Board Clerk:

PH-1 Public Hearing to consider and possibly act upon a Measure 37 Claim for Charles Maxson for up to $385,000 in compensation or relief from land use regulations to allow the partition of each lot into two lots with four residential home sites overall on properties located at 38755 and 39062 E. Knieriem Rd., Corbett [T1N, R4E, Sec 36C, TL 300 & 400] (Case File T1-06-095). Presented by Ken Born and Sandra Duffy.

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:

Do I have a motion on PH-1?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of Charles Maxson

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

Chair: Please call the next hearing.

Board Clerk:
PH-2 Public Hearing to consider and possibly act upon a Measure 37 Claim by Sandra Baker et al and Barkers Five LLC for $33.6 million in compensation or relief from regulations to allow the claimants to construct 3 additional single family dwellings then subdivide and sell 2-acre lots for properties located in the vicinity of 15610 NW Germantown Road, Portland (Case File T1-06-098). Presented by Derrick Tokos and Sandra Duffy

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:

Do I have a motion on PH-2?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of Sandra Baker et al and Barkers Five LLC

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

Chair: Please call the next hearing.

Board Clerk:
PH-3 Public Hearing to consider and possibly act upon a Measure 37 Claim by George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC, for $8.5 million or relief from regulations to allow mining of all economically viable sources of gravel, followed by subdivision of the 206 acre property into 75-100 buildable single family dwelling lots, Corbett (Case File T1-06-124). Presented by Derrick Tokos and Sandra Duffy.

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:
Do I have a motion on PH-3?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of George Raymond Smith, The Raymond Smith LLC, and Shirlee Lenske, Lenske Properties LLC

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

Chair: Please call the next hearing.

Board Clerk:
PH-4 Public Hearing to consider and possibly act upon a Measure 37 Claim by George Raymond Smith, The Raymond Smith LLC, Raymond Smith Trusts, and Lenske Properties LLC, for $20.3 million in compensation or relief from regulations to allow the claimants to subdivide 561 acres (17 properties) into 90-104 residential lots and to log riparian buffers along Howard Creek and a tributary. The properties are located south of Corbett, in the vicinity of the Howard Canyon Quarry, Corbett (Case File T1-06-087). Presented by Derrick Tokos and Sandra Duffy

Chair: [Ask for testimony in the order listed above]

AT THE CONCLUSION OF THE TESTIMONY:

Chair: [Ask for Board discussion, questions, deliberation, motion and/or future scheduling if necessary]

AFTER DISCUSSION:

Do I have a motion on PH-4?

COMMISSIONER _____ MOVES
COMMISSIONER _____ SECONDS
APPROVAL OF Order Granting, with Conditions OR Order Denying Ballot Measure 37 Request of George Raymond Smith, The Raymond Smith LLC, Raymond Smith Trusts, and Lenske Properties LLC

OPPORTUNITY FOR BOARD COMMENTS

ALL IN FAVOR, VOTE AYE, OPPOSED____?

THE MOTION FAILS
OR
THE ORDER IS ADOPTED

BOARD COMMENT

Opportunity (as time allows) for Commissioners to provide informational comments to Board and public on non-agenda items of interest or to discuss legislative issues.

THERE BEING NO FURTHER BUSINESS, THE MEETING IS ADJOURNED.

DRAFT

BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

ORDER NO. _____

Order Denying Ballot Measure 37 Request of The Raymond Smith, LLC and Lenske Properties, LLC Relating to Seventeen Real Properties Located in East Multnomah County, Oregon

The Multnomah County Board of Commissioners Finds:

a. **Parties:** The Raymond Smith, LLC and Lenske Properties, LLC are the Ballot Measure 37 Claimants who filed a demand for compensation to Multnomah County on November 15, 2006.

b. **Subject Property:** This claim relates to Seventeen Real Properties Located in East Multnomah County, Oregon, more specifically described as:

PROPERTY #	ACCT NUMBER	DESCRIPTION	SIZE	ZONING
1	R994010190	TAX LOT 100, SECTION 1, T1S, R4E	157.66	CFU-4/SEC-s/HD
2	R995060080	TAX LOT 100, SECTION 6D, T1S, R5E	80.00	CFU-4/SEC-s/HD
3	R995060020	TAX LOT 600, SECTION 6, T1S, R5E	80.00	CFU-4/HD
4	R995060030	TAX LOT 200, SECTION 6, T1S, R5E	37.87	CFU-4/HD
5	R995060040	TAX LOT 500, SECTION 6, T1S, R5E	82.62	CFU-4/SEC-s/HD
6	R995060060	TAX LOT 300, SECTION 6, T1S, R5E	63.05	CFU-4/SEC-s/HD
7	R995060110	TAX LOT 400, SECTION 6, T1S, R5E	20.00	CFU-4/HD
8	R995030030	TAX LOT 1200, SECTION 3, T1S, R5E	8.04	CFU-3
9	R944340030	TAX LOT 300, SECTION 34C, T1S, R4E	0.98	RR
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12	R994010370	TAX LOT 1000, SECTION 1C, T1S, R4E	3.62	CFU-4

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17	R944341220	TAX LOT 1800, SECTION 34C, T1S, R4E	0.99	RR

c. **Relevant Dates of Property Ownership:**

The Claimants have not established that they obtained an interest in the property prior to the County's adoption of the land use regulations challenged in this claim.

Ownership of the subject property was transferred to The Raymond Smith, LLC and Lenske Properties, LLC on March 1, 2001. Under Oregon law, a conveyance of property to an LLC constitutes a change in ownership even though prior owners of the property may also be members of the LLC. ORS 63.077 (LLC is an independent legal entity) and ORS 63.239 (members of an LLC have no ownership interest in LLC property). Accordingly, the Claimants acquired an interest in the subject property on March 1, 2001. The County adopted the land use regulations challenged in this claim prior to that date (see section d. below).

The Board finds that the Claimants' acquisition of an interest in the subject property on March 1, 2001, occurred after the County adopted the land use regulations challenged in this claim.

d. **County Codes as a Restriction on Use of the Property:**

The Claimants have not established that the challenged land use regulations have restricted the proposed use of the property.

With respect to the Claimants' proposed uses, the applicable zoning regulations in effect on March 1, 2001, continue to apply without alteration today. The applicable zoning codes are listed in the table in section b. above. These minimum lot size regulations within the various zoning codes prohibit the Claimants from creating 1 to 10 acre lots on the subject property.

The County's land use regulations do not restrict the harvesting of timber. The CFU-3, CFU-4, and RR zoning codes expressly state that forest operations, such as timber harvests, are an outright allowed use. E.g., MCC 35.2220. The SEC-s overlay zone, adopted to protect, conserve, enhance, and restore natural features such as stream and riparian areas, similarly exempts timber harvests from County permitting requirements

recognizing that it is an activity regulated by the State Forest Practices Act. MCC 35.4515.

The Board finds that the Claimants have not established that the challenged land use regulations have restricted their use of the subject properties.

e. **County Code Restrictions Reduce Fair Market Value:**

The Claimants have not established that the challenged land use regulations have reduced the fair market value of the property.

As established above, regulations in effect when the Claimants acquired the subject property on March 1, 2001, did not allow the creation of 1 to 10 acre lots on that property. Furthermore, County land use regulations do not restrict the Claimants' proposed timber harvest activities. Since the Claimants have not shown that their use of the properties has been restricted, there is no reduction to the fair market value of the properties.

The Board finds that the Claimants have not established that the challenged regulations have reduced the fair market value of the subject property.

f. **Public Notice**

Section 3.50 of the County Charter requires notice to the public of all Board agenda matters. This notice was provided. The Claimant and persons who own land within 750 feet of the subject property received notice by mail.

g. **Validity of Claim for Compensation:** The Board finds that:

(1) The Board finds that the Claimants' acquisition of an interest in the subject property on March 1, 2001, occurred after the County adopted the land use regulations challenged in this claim.

(2) The Board finds that the Claimants have not established that the challenged land use regulations have restricted their use of the subject properties.

(3) The Board finds that the Claimants have not established that the challenged regulations have reduced the fair market value of the subject property.

The Multnomah County Board of Commissioners Orders:

Based on the above findings, the Claimant's request is denied.

ADOPTED this 26th day of April, 2007.

BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

_____
Ted Wheeler, Chair

REVIEWED:

AGNES SOWLE, COUNTY ATTORNEY
FOR MULTNOMAH COUNTY, OREGON

By_____
Jed R. Tomkins, Assistant County Attorney

SUBMITTED BY:
Agnes Sowle, County Attorney

BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

ORDER NO. 07-078

Order Denying Ballot Measure 37 Request of The Raymond Smith, LLC and Lenske Properties, LLC Relating to Seventeen Real Properties Located in East Multnomah County, Oregon

The Multnomah County Board of Commissioners Finds:

a. **Parties:** The Raymond Smith, LLC and Lenske Properties, LLC are the Ballot Measure 37 Claimants who filed a demand for compensation to Multnomah County on November 15, 2006.

b. **Subject Property:** This claim relates to Seventeen Real Properties Located in East Multnomah County, Oregon, more specifically described as:

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8	R995030030	TAX LOT 1200, SECTION 3, T1S, R5E	8.04	CFU-3
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17	R944341220	TAX LOT 1800, SECTION 34C, T1S, R4E	0.99	RR

c. **Relevant Dates of Property Ownership:**

The Claimants have not established that they obtained an interest in the property prior to the County's adoption of the land use regulations challenged in this claim.

Ownership of the subject property was transferred to The Raymond Smith, LLC and Lenske Properties, LLC on March 1, 2001. Under Oregon law, a conveyance of property to an LLC constitutes a change in ownership even though prior owners of the property may also be members of the LLC. ORS 63.077 (LLC is an independent legal entity) and ORS 63.239 (members of an LLC have no ownership interest in LLC property). Accordingly, the Claimants acquired an interest in the subject property on March 1, 2001. The County adopted the land use regulations challenged in this claim prior to that date (see section d. below).

The Board finds that the Claimants' acquisition of an interest in the subject property on March 1, 2001, occurred after the County adopted the land use regulations challenged in this claim.

d. **County Codes as a Restriction on Use of the Property:**

The Claimants have not established that the challenged land use regulations have restricted the proposed use of the property.

With respect to the Claimants' proposed uses, the applicable zoning regulations in effect on March 1, 2001, continue to apply without alteration today. The applicable zoning codes are listed in the table in section b. above. These minimum lot size regulations within the various zoning codes prohibit the Claimants from creating 1 to 10 acre lots on the subject property.

The County's land use regulations do not restrict the harvesting of timber. The CFU-3, CFU-4, and RR zoning codes expressly state that forest operations, such as timber harvests, are an outright allowed use. E.g., MCC 35.2220. The SEC-s overlay zone, adopted to protect, conserve, enhance, and restore natural features such as stream and riparian areas, similarly exempts timber harvests from County permitting requirements

recognizing that it is an activity regulated by the State Forest Practices Act. MCC 35.4515.

The Board finds that the Claimants have not established that the challenged land use regulations have restricted their use of the subject properties.

e. **County Code Restrictions Reduce Fair Market Value:**

The Claimants have not established that the challenged land use regulations have reduced the fair market value of the property.

As established above, regulations in effect when the Claimants acquired the subject property on March 1, 2001, did not allow the creation of 1 to 10 acre lots on that property. Furthermore, County land use regulations do not restrict the Claimants' proposed timber harvest activities. Since the Claimants have not shown that their use of the properties has been restricted, there is no reduction to the fair market value of the properties.

The Board finds that the Claimants have not established that the challenged regulations have reduced the fair market value of the subject property.

f. **Public Notice**

Section 3.50 of the County Charter requires notice to the public of all Board agenda matters. This notice was provided. The Claimant and persons who own land within 750 feet of the subject property received notice by mail.

g. **Validity of Claim for Compensation:** The Board finds that:

(1) The Board finds that the Claimants' acquisition of an interest in the subject property on March 1, 2001, occurred after the County adopted the land use regulations challenged in this claim.

(2) The Board finds that the Claimants have not established that the challenged land use regulations have restricted their use of the subject properties.

(3) The Board finds that the Claimants have not established that the challenged regulations have reduced the fair market value of the subject property.

The Multnomah County Board of Commissioners Orders:

Based on the above findings, the Claimant's request is denied.

ADOPTED this 26th day of April, 2007.

BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

Ted Wheeler, Chair

REVIEWED:

AGNES SOWLE, COUNTY ATTORNEY
FOR MULTNOMAH COUNTY, OREGON

By _____
Jed R. Tomkins, Assistant County Attorney

SUBMITTED BY:
Agnes Sowle, County Attorney

#1

(1)

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4/26/07

SUBJECT: PH-3 T1-06-124

PH-4 T1-06-087

AGENDA NUMBER OR TOPIC: _____

FOR: _____ AGAINST: X THE ABOVE AGENDA ITEM

NAME: Peter F Fry

ADDRESS: 123 NE Lilrepose - POBox 312

CITY/STATE/ZIP: Corbett, OR 97019

PHONE: DAYS: ~~503 274~~ 503-274-2744 EVES: _____

EMAIL: _____ FAX: _____

SPECIFIC ISSUE: _____

WRITTEN TESTIMONY: Yes

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

Peter Finley Fry AICP Ph.D. (503) 274-2744

2153 SW Main Street, #105, Portland, Oregon USA 97205 • Fax (503) 274-1415 • pfinleyfry@aol.com

April 25, 2007

Board of County Commissioners
Multnomah County
501 SE Hawthorne
Portland, Oregon 97214

RE: T1-06-087
T1-06-124

Multnomah County can not approve these Measure 37 claims because the applicant has not proven that the application of the referenced regulation results in loss of value. The Howard Canyon Economic, Social, Environmental, and Energy (ESEE) analysis is a scientific document without regulatory force. The document found that a gravel operation at this location of greater than 5,000 cubic yards a year would endanger and damage the surrounding community.

I am directly endangered and damaged if these claims are granted. I live near the proposed quarry and subdivision, raise livestock, and use the rural roads. The large increase of industrial traffic would endanger my use of the rural roads and the operation of my property. The allowance of unplanned housing not anticipated by the Comprehensive Plan would result in a loss of public services including water and roads and an increase in costs to me. The allowance of these claims so scarcely documented would lower what is considered acceptable for all claims damaging my constitutional rights to due process and equal treatment.

T1-06-087
The applicant proposes to log non-health and safety related riparian buffers along Howard Creek and a tributary. I have submitted studies that are included in this record by reference that find that there is no non-health or safety related riparian buffers that are regulated. The riparian buffer regulations are based on scientific data to be consistent with federal law.

The applicant asserts with no basis or expertise that the proposed lots would be worth $195,192.00 on average. Market data submitted into the record show numerous lots available in the market today with greater amenities (views) and full services for a third of the asserted values. These lots would likely be located on newly timbered land, many without views, and in the dark canyons. The proposed lots would be difficult to serve.

In Fred Hall versus Multnomah County (Case No. 0603-02342), the Circuit Court of Oregon denied the Fred Hall claim, in part, because: "the court did not have a credible or firm baseline for the as-is value, nor did the court have a credible or firm baseline for the as-is value nor did the court have the value of Parcel 1 or 2 without this 160-minimum lot size. Plaintiff's appraiser did not calculate or even considered what it would cost to create smaller lots and the accompanying costs of roads, water, sewer or septic, utilities, cables, etc." This is particularly

true in this case as, in my professional opinion; the applicant has vastly overestimated the value of their lots and has not presented any information as to the net return or the loss of value created by the regulation.

As a professional planner, I have been hired to resolve land uses around three subdivisions (in litigation) with similar characteristics in regards to slopes, streams, and vegetation to the proposed subdivisions. I am often hired to inspect and consult on proposed subdivisions in steep areas without services. In every case, the cost of infrastructure exceeded the values of the lots. None of these properties have been developed. All of these properties were in or near urbanized areas with services to the edge of the property.

The presented evidence in this record shows that the subdivision's return is less then the cost of development. Therefore the net value is less then zero and the resource regulation's effect is to actually increase the lands value in acknowledging that the land's highest and best use is timber.

T1-06-124
The analysis of the value of a future subdivision is the same as presented in the previous discussion of T1-06-087.

The alleged expansion value of the quarry is also suspect based on the scientific analysis of the quarry's value in relationship to the cost of mitigation and reclamation. While the Multnomah County's conclusion to prohibit more then 5,000 cubic yards per year must be acknowledged as regulatory, the Howard Canyon ESEE analysis has no regulatory affect. The document is a scientific analysis of the economic, social, environmental, and energy impact of either protecting the resource at the expense of conflicting uses or to not protect the resource as the conflicting uses have greater value then the resource. The document concluded that the resource had less value then the conflicting uses and should not be protected. The document further asserted that extraction of the resource would endanger the surrounding uses, increase neighbor's costs, and recommended that the resource shall not be utilized. The resource continues to be extracted under an Oregon State exemption that allows extraction without mitigation or reclamation.

An important conclusion of the Howard Canyon ESEE analysis is that the profitability of the quarry declines with the expansion of production. This result stems from the fact that the quarries product is not unique or in large demand. The quarry's profitability stems from the fact that the quarry's operator does not pay any mitigation for their impact, nor do they pay for any reclamation of the site. In fact, observation of transport trucks reveals that the truck employees are not employees of the quarry, but rather independent contractors without the benefits or protection of actual employees. An employed work force would further increase the quarries operational costs. A previous operator, in fact, declared bankruptcy during the operation of this and other quarries.

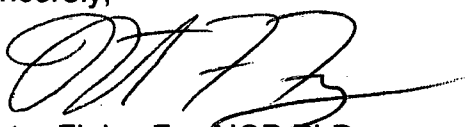
Again, the applicant's presentation fails to provide the information required in the Fred Hall versus Multnomah County (Case No. 0603-02342) decision making it impossible to determine the net value increase allowed if the quarry was to operate as a protect resource. The factual information presented in this record asserts that the quarry would actually operate at a loss if allowed to expand. Therefore the current regulatory affect is again to identify the quarry's highest and best value as a State Exempt quarry without responsibility for mitigation or reclamation as require by laws designed to protect the public's health and safety.

Conclusion

The staff analysis fails to demand sufficient information to make credible recommendations. The applicant's presentation fails to provide sufficient information to meet their required Measure 37 burden of proof that the current regulations actually reduced value. The evidence in this record clearly supports the potential damage caused by inappropriate logging within the riparian buffer zone. The evidence asserts that the applicant has dramatically inflated the value of lots and they never presented any information regarding the costs of development. The evidence argues that the cost of development exceeds the value of lots and therefore the regulatory affect of allowing a subdivision in either claim is actually to reduce the value of the land from its highest and best use. The evidence shows that increasing the quarry from the State Exempt 5,000 cubic yards not only endangers the public, but that the quarry would operate as a net loss. Therefore the regulatory affect of the Howard Canyon Comprehensive Pan amendment actually increases the quarry's value as it allows the quarry to operate as a State Exempt quarry without the mitigation and reclamation required for a professional operation.

The tragedy of Measure 37 is that is creates unrealistic expectation for people who have never professionally developed anything. The evolution of zoning and building police power is to help the developers develop property in a responsible and professional manner. To strip away the knowledge and progression that is provide by new and relevant regulation is to allow Oregon to slip back into a savage and uncivilized past.

Sincerely,



Peter Finley Fry ~~AICP~~ PhD

Attachments

ENTERED
DEC 26 2006
IN REGISTER SD

CERTIFIED TO BE A TRUE COPY OF THE ORIGINAL.
DATED: JAN 03 2007
COURT CLERK

FILED
06 DEC 18 PM 3:37
CIRCUIT COURT
FOR MULTNOMAH COUNTY

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF MULTNOMAH

FRED HALL,
Plaintiff

v.

MULTNOMAH COUNTY,
Defendant.

Case No. 0603-02342

GENERAL JUDGMENT

This case came before the court for trial on December 4, 2006, the Honorable Douglas G. Beckman presiding. Plaintiff was represented by James Leuenberger and defendant was represented by Stephen L. Madkour, Assistant County Attorney.

Testimony and evidence was presented by both parties in support of their cases and at the conclusion the parties rested. At the close of the evidence, defendant moved for a directed verdict pursuant to ORCP 60. The court denied defendant's motion, finding that there was some evidence that subsequent regulations may have reduced the value of plaintiff's properties.

Based on the testimony of the witnesses, and the evidence on record, Judge Beckman rendered a verdict in favor of the defendant Multnomah County and against plaintiff Fred Hall, and issued special findings as follows:

1. For parcels 1 and 2, which is in the Zone F2, the plaintiff had the burden of proving that under F2 in 1971 he could have created this high-density residential area with 60 to 75 lots in this hilly forest area of Multnomah County.

Multnomah County Attorney
501 SE Hawthorne Blvd., Suite 500
Portland, Oregon 97214
(503) 988-3138 Fax: (503) 988-3377
Email: stephen.l.madkour@co.multnomah.or.us

2. That zoning ordinance required that the district not be used for any use except the following: grazing, agriculture, horticulture or the growing of timber, and that the dwelling or dwellings for the owner, operator or help required to carry out the grazing, agriculture, horticulture and the growing of timber – those were the uses that were available in 1971.

3. And the court found no evidence that any dwelling would be required – that's the word that's used in the ordinance – that the dwelling be required to carry out these grazing and agriculture and other uses.

4. There was no evidence that any dwelling would be required to carry out grazing, agriculture, horticulture, or the growing of timber, according to Paragraph 3.112 of the Multnomah County Zoning Ordinance.

5. Plaintiff also failed to meet his burden of proving how any subsequent regulation reduced the fair market value. An appraisal, like the one in the Wiley matter, is needed to show first that – what is the market value of the property as-is in 2005, and secondly the market value of the property without the minimum 160-acre lot size, and the difference between the two would be the reduction in fair market value.

6. In Fred Hall's case, the court did not have a credible or firm baseline for the as-is value, nor did the court have the value of Parcel 1 or 2 without this 160-minimum lot size. Plaintiff's appraiser did not calculate or even consider what it would cost to create smaller lots and the accompanying costs of roads, water, sewer or septic, utilities, cables, etc. He wasn't asked to do that, and he just opined what a two-acre home site might go for in an already-approved subdivision in that area of Multnomah County. His comps, though, already had water, roads, utilities, etc., and so it was an apples-to-oranges comparison.

7. Now, Fred Hall's conclusory ballpark estimate that costs would be about ten per cent of the completed lots is not supported by any evidence or any facts showing why this is a real cost figure. Under *State Highway Commission v. Central Paving*, the Court is required to disregard the irrelevant testimony of plaintiff's appraiser, since he did not back out any absorption costs, such that proper factors for determining a reduction in value were not considered by the expert witness at all, nor did he consider any health or safety issues which of course the County still has the duty to impose and supervise, concerning road slopes, maximum grades, fire breaks, etc. He made no evaluation of whether the lots would be used for grazing, agriculture, horticulture, timber, or whether such small lots would be feasible for such use.

8. Finally, the court does not believe the County would have approved a land-use permit, which is required under 8.90 – Paragraph 8.90 – of the Zoning Ordinance in 1971 for anything near the scope of this 62-lot, high-density residential area.

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9. On Parcel No. 3, that is CFU 80, it is a commercial forest use, authorizing uses associated with the production, management and harvesting of timber, and wood processing operations, farm use, and so forth. Again, the court finds no credible evidence that any dwelling was necessary for the forest uses such as timber production and harvesting, or other uses permitted in a commercial forest-use zone, such as wood chipping or farm use, or whether a home would meet fire safety measures and other County requirements for a dwelling in a commercial forest use area. Again, plaintiff's appraiser assessment leaps over these issues and assumes a hypothetical condition that a lot is buildable under the regulations and requirements that existed in 1991, when plaintiff acquired the 90 acres. Again, he does not calculate any absorption costs, or a credible baseline value as-is for the proper computation of a Measure 37 claim, so the Court is left really with no basis to make the proper before-and-after calculation of any reduction in fair market value caused by the subsequent 160-acre lot size requirement.

10. For these reasons, and based on these findings and conclusions, the Court awards judgment in favor of Multnomah County and against Fred Hall.

Therefore, IT IS HEREBY ORDERED AND ADJUDGED that a GENERAL JUDGMENT be entered in favor of defendant Multnomah County and against plaintiff Fred Hall.

MONEY AWARD

1. Judgment Creditor:	Multnomah County
2. Judgment Creditor Address:	Office of County Attorney 501 SE Hawthorne Boulevard, Suite 500 Portland, OR 97214 503/988-3138
3. Judgment Debtor:	Fred Hall
4. Judgment Debtor's Address:	23421 NW Moreland Road North Plains, OR 97133
Judgment Debtor's Birthday:	Unknown
Judgment Debtor's Social Security No.:	Unknown
Judgment Debtor's ODL#:	Unknown
Judgment Debtor's Attorney:	James Leuenberger, OSB# 89154

Multnomah County Attorney
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Email: stephen.l.madkour@co.multnomah.or.us

5. Public Body Entitled to Award: Multnomah County

6. Amount of Money Award: None

7. Pre-Judgment Interest Owed: None

8. Post-Judgment Interest Owed: 9 % simple from date of judgment on item 10.

9. Costs: None

10. Prevailing Party Fee: $550.00

11. Attorney Fees: None

DATED this 15th day of December, 2006.

Douglas G. Beckman

Honorable Douglas G. Beckman
Circuit Court Judge

Judgment submitted by:

Stephen L. Madkour, OSB #94109
Assistant County Attorney
Of Attorneys for Defendant

Multnomah County Attorney
501 SE Hawthorne Blvd., Suite 500
Portland, Oregon 97214
(503) 988-3138 Fax: (503) 988-3377
Email: stephen.l.madkour@co.multnomah.or.us

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** SLD **4/18/2007** **10:16:11 AM**
ML#: 4072177 **Area:** 144 **List Price:** $189,900
Address: 32816 NE Chamberlain RD
City: Corbett **Zip:** 97019
Additional Parcels: N /
Map Coord: 600/D/5 **Zoning:**
County: Multnomah **Tax ID:** R322578
Subdivision: SEC 33 01N 04E
Manufhs Okay: **CC&Rs:**
Elem: CORBETT **Middle:**
High: CORBETT **Prop Type:** RESID
Legal: SECTION 33 1N 4E; TL 400 2.00 ACRES

GENERAL INFORMATION

Lot Size: 1-2.99AC **Acres:** 2 **Lot Dimensions:**
Waterfront: N / **River/Lake:** **Availability:** SALE **#Lots:**
Perc Test: Y / APROVED **RdFrntg:** N **Rd Surfc:**
Seller Disc: **Other Disc:** **View:** TREES
Lot Desc: BRUSH, SECLDED, TREES **Soil Type/Class:**
Topography: LEVEL, SLOPED
Soil Cond: NATIVE **Present Use:** RAWLAND

IMPROVEMENTS

Utilities: POW-AVL, WAT-AVL
Existing Structure: N /

REMARKS

XSt/Dir: Scenic Hwy L@ Lucas Rd, L@ Mershon Rd, R @ Chamberlain Rd to 3rd Dr on R
Public: Water & Power to prop. Very nice secluded 2ac off Chamberlain on private rd. Must see back of property to see lovely home site.Was perked & approved for standard septic in 1983 Corbett Water Dist. Must apply to Gorge Commission w/house plans for their approval...was already granted once.

FINANCIAL

PTax/Yr: 733.97 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 11/16/2006 **DOM:** 743 **Sold:** 12/8/2006 **Terms:** CASH /CNTRACT **O/Price:** $220,000 **Sold:** $185,000

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** SLD **4/18/2007** **10:16:11 AM**
ML#: 6050038 **Area:** 144 **List Price:** $159,900
Address: 46801 NE TOLL RD
City: Corbett **Zip:** 97019
Additional Parcels: /
Map Coord: 200/D/1 **Zoning:** gma
County: Multnomah **Tax ID:** R322986
Subdivision:
Manufhs Okay: Y **CC&Rs:**
Elem: CORBETT **Middle:** CORBETT
High: CORBETT **Prop Type:** RESID
Legal: SECTION 27 1N 5E; TL 200 3.92 ACRES

GENERAL INFORMATION

Lot Size: 3-4.99AC **Acres:** 3.92 **Lot Dimensions:**
Waterfront: / **River/Lake:** **Availability:** SALE **#Lots:**
Perc Test: / **RdFrntg:** N **Rd Surfc:**
Seller Disc: EXEMPT **Other Disc:** **View:** RIVER, VALLEY
Lot Desc: PRIVATE, SECLDED, STREAM, TREES, WOODED **Soil Type/Class:**
Topography: SLOPED
Soil Cond: NATIVE **Present Use:** RESIDNC

IMPROVEMENTS

Utilities: PHONE, POWER, SEPTIC, SPRING
Existing Structure: Y / NO-VALU

REMARKS

XSt/Dir: larch mtn. rd. to brower to toll
Public: Unbelievable view- Columbia River. Year round creek, timber, ponds, gravity H2O system, protected from gorge winds,1500ft, dead end road. Call for appointment. Will carry contract. Building code for Gorge Act can be found on Mult. Co. website.

FINANCIAL

PTax/Yr: 2511.86 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 9/27/2006 **DOM:** 103 **Sold:** 10/13/2006 **Terms:** CNTRACT **O/Price:** $195,000 **Sold:** $145,000

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

No Photo Available

Presented by: Frani Grover
Willamette Realty Group

Client Full

LOTS AND LAND **Status:** SLD **4/18/2007** **10:16:10 AM**
ML#: 6004169 **Area:** 144 **List Price:** $103,030
Address: 1022 SW Halsey ST
City: Troutdale **Zip:** 97060
Additional Parcels: /
Map Coord: 599/F/4 **Zoning:** A2
County: Multnomah **Tax ID:** R240056
Subdivision:
Manufhs Okay: Y **CC&Rs:** Y
Elem: TROUTDALE **Middle:**
High: REYNOLDS **Prop Type:** RESID
Legal: PARTITION PLAT 1998-44; LOT 2; NEW PLAT-1998 (3/98)

GENERAL INFORMATION

Lot Size: 7K-9,999SF **Acres:** 0.2 **Lot Dimensions:**
Waterfront: N / OTHER **River/Lake:** **Availability:** SALE **#Lots:** 1
Perc Test: N / **RdFrntg:** **Rd Surfc:**
Seller Disc: DSCLOSUR **Other Disc:** **View:**
Lot Desc: DIVIDE **Soil Type/Class:** nativ
Topography: SLOPED
Soil Cond: NATIVE **Present Use:** NONCONF

IMPROVEMENTS

Utilities: NONE
Existing Structure: N / NONE

REMARKS

XSt/Dir: ADJ TO 1022 SW HALSEY ST TROUTDALE OR
Public: good location not to many left .

FINANCIAL

PTax/Yr: 589.17 **HOA Dues:** 0/ **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 4/1/2006 **DOM:** 79 **Sold:** 6/9/2006 **Terms:** CONV **O/Price:** $103,030 **Sold:** $103,030

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

Presented by: Frani Grover
Willamette Realty Group

Client Full

LOTS AND LAND **Status:** SLD **4/18/2007** **10:16:10 AM**
ML#: 6017231 **Area:** 144 **List Price:** $95,950
Address: SE Dora ST
City: Troutdale **Zip:** 97060
Additional Parcels: N/
Map Coord: 599/G/4 **Zoning:** R5
County: Multnomah **Tax ID:** R290595
Subdivision:
Manufhs Okay: Y **CC&Rs:** N
Elem: TROUTDALE **Middle:** WALT MOREY
High: REYNOLDS **Prop Type:** RESID
Legal: Troutdale &1st ADD;LOT 6 BLOCK 9, MAP 251N3E

GENERAL INFORMATION

Lot Size: 5K-6,999SF **Acres:** 0.11 **Lot Dimensions:** 50X100
Waterfront: N / **River/Lake:** **Availability:** SALE **#Lots:** 1
Perc Test: / **RdFrntg:** **Rd Surfc:** PAVEDRD
Seller Disc: **Other Disc:** **View:** RIVER, MNTAIN
Lot Desc: CLEARED, PRIVATE **Soil Type/Class:**
Topography: LEVEL
Soil Cond: **Present Use:** RESIDNC

IMPROVEMENTS

Utilities: POW-AVL, SWR-AVL, WAT-AVL
Existing Structure: N / NONE

REMARKS

XSt/Dir: E on Col River Hwy, R on Dora, between 3rd &4th on the west side of Rd
Public: View lot located within 3 blocks of downtown Troutdale shops and cafes. City of Troutdale says it is buildable, buyer to perform due diligence regarding any restrictions. Allow 6-9 weeks to close.

FINANCIAL

PTax/Yr: 406.28 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 3/14/2006 **DOM:** 6 **Sold:** 4/28/2006 **Terms:** CASH **O/Price:** $95,950 **Sold:** $101,500

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

Presented by: Frani Grover
Willamette Realty Group

Client Full

LOTS AND LAND **Status:** SLD **4/18/2007** **10:16:10 AM**
ML#: 6004142 **Area:** 144 **List Price:** $94,835
Address: 1022 SW Halsey ST
City: Troutdale **Zip:** 97060
Additional Parcels: /
Map Coord: 599/F/4 **Zoning:** A 2
County: Multnomah **Tax ID:** R240053
Subdivision:
Manufhs Okay: Y **CC&Rs:** Y
Elem: TROUTDALE **Middle:**
High: REYNOLDS **Prop Type:** RESID
Legal: PARTITION PLAT 1998-43; LOT 1; NEW PLAT-1998 (3/98)

GENERAL INFORMATION

Lot Size: 7K-9,999SF **Acres:** 0.18 **Lot Dimensions:**
Waterfront: N / OTHER **River/Lake:** **Availability:** SALE **#Lots:** 1
Perc Test: N / NONE **RdFrntg:** Y **Rd Surfc:** UNIMPR
Seller Disc: DSCLOSUR **Other Disc:** **View:**
Lot Desc: DIVIDE **Soil Type/Class:**
Topography: SLOPED
Soil Cond: NATIVE **Present Use:** OTHER

IMPROVEMENTS

Utilities: NONE
Existing Structure: Y / NONE

REMARKS

XSt/Dir: adj to 1022 Halsey st Troutdale Or 97060
Public: good location not to many left .

FINANCIAL

PTax/Yr: 589.17 **HOA Dues:** 0/ **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 4/1/2006 **DOM:** 79 **Sold:** 6/9/2006 **Terms:** CONV **O/Price:** $94,835 **Sold:** $94,835

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SQUARE FOOTAGE IS APPROXIMATE & MAY INCLUDE BOTH FINISHED & UNFINISHED AREAS - CONSULT BROKER FOR INFO.
SCHOOL AVAILABILITY SUBJECT TO CHANGE.

Presented by: Frani Grover
Willamette Realty Group

Client Full

LOTS AND LAND **Status:** SLD **4/18/2007** **10:16:09 AM**
ML#: 6004158 **Area:** 144 **List Price:** $87,135
Address: 1022 SW Halsey ST
City: Troutdale **Zip:** 97060
Additional Parcels: /
Map Coord: 599/F/4 **Zoning:** A2
County: Multnomah **Tax ID:** R240055
Subdivision:
Manufhs Okay: Y **CC&Rs:** Y
Elem: TROUTDALE **Middle:**
High: SPRNGWATR TRAIL **Prop Type:** RESID
Legal: PARTITION PLAT 1998-44; LOT 1; NEW PLAT-1998 (3/98)

GENERAL INFORMATION

Lot Size: 7K-9,999SF **Acres:** 0.16 **Lot Dimensions:**
Waterfront: N / **River/Lake:** **Availability:** SALE **#Lots:**
Perc Test: N / **RdFrntg:** **Rd Surfc:** GRAVLRD
Seller Disc: EXEMPT **Other Disc:** **View:**
Lot Desc: DIVIDE **Soil Type/Class:** nativ
Topography: SLOPED
Soil Cond: NATIVE **Present Use:** NONCONF

IMPROVEMENTS

Utilities: NONE
Existing Structure: Y / NONE

REMARKS

XSt/Dir: ADJ TO 1022 SW HALSEY ST TROUTDALE OR
Public: good location not to many left

FINANCIAL

PTax/Yr: 589.17 **HOA Dues:** 0/ **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 4/1/2006 **DOM:** 79 **Sold:** 6/9/2006 **Terms:** CONV **O/Price:** $87,135 **Sold:** $87,135

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** PEN **4/18/2007** **10:16:09 AM**
ML#: 6107283 **Area:** 144 **List Price:** $89,900
Address: NE CORBETT HILL RD
City: Corbett **Zip:** 97019
Additional Parcels: /
Map Coord: 600/H/5 **Zoning:**
County: Multnomah **Tax ID:** R322282
Subdivision:
Manufhs Okay: **CC&Rs:**
Elem: CORBETT **Middle:**
High: CORBETT **Prop Type:** RESID
Legal: SECTION 26 1N 4E; TL 100 2.70 ACRES

GENERAL INFORMATION

Lot Size: 1-2.99AC **Acres:** 2.7 **Lot Dimensions:**
Waterfront: / **River/Lake:** **Availability:** SALE **#Lots:**
Perc Test: / **RdFrntg:** Y **Rd Surfc:** PAVEDRD
Seller Disc: **Other Disc:** **View:** TREES, RIVER
Lot Desc: BRUSH, TREES **Soil Type/Class:**
Topography: SLOPED, STEEP
Soil Cond: **Present Use:** RAWLAND

IMPROVEMENTS

Utilities: POW-AVL, WAT-AVL
Existing Structure: /

REMARKS

XSt/Dir: I 84 exit 22 to SW corner of Corbett Hill Rd/Clara Smith Rd Intersection
Public: Gorge view! Build your home here! Buyer to do due diligence.

FINANCIAL

PTax/Yr: 70.86 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 3/28/2007 **DOM:** 103 **Sold:** **Terms:** **O/Price:** $119,000 **Sold:**

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** ACT **4/18/2007** **10:16:05 AM**
ML#: 7028955 **Area:** 144 **List Price:** $165,000
Address: Deverell RD
City: Corbett **Zip:** 97019
Additional Parcels: /
Map Coord: 0/Z/0 **Zoning:** CFU80
County: Multnomah **Tax ID:** R342837
Subdivision:
Manufhs Okay: **CC&Rs:**
Elem: CORBETT **Middle:** CORBETT
High: CORBETT **Prop Type:** FRM/FOR
Legal: SECTION 08 1S 5E; TL 1000 42.42 ACRES

GENERAL INFORMATION

Lot Size: 20-49.99AC **Acres:** 42.42 **Lot Dimensions:**
Waterfront: N / **River/Lake:** **Availability:** SALE **#Lots:**
Perc Test: / **RdFrntg:** **Rd Surfc:**
Seller Disc: **Other Disc:** ERA Disclosures **View:**
Lot Desc: STREAM **Soil Type/Class:**
Topography:
Soil Cond: NATIVE **Present Use:** TIMBER

IMPROVEMENTS

Utilities: NONE
Existing Structure: /

REMARKS

XSt/Dir: Larch Mtn Rd to Louden Rd to Deverell Rd
Public: Larch Mountain acreage with timber value. Recently logged and reforested up to current standards. Has year round creek. Zoned CFU80. Owner wishes to sell with adjacent house & property (ML#7028938).

FINANCIAL

PTax/Yr: 48.22 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

☑

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** SLD **4/18/2007** **10:26:09 AM**
ML#: 4057248 **Area:** 145 **List Price:** $134,950
Address: Adj. 46755 George Rd
City: Estacada **Zip:** 97023
Additional Parcels: /
Map Coord: 720/H/7 **Zoning:**
County: Clackamas **Tax ID:** 00962079
Subdivision:
Manufhs Okay: **CC&Rs:**
Elem: EAGLE CREEK **Middle:**
High: ESTACADA **Prop Type:** RESID
Legal: 35E22 TAX LOT 1503

GENERAL INFORMATION

Lot Size: 5-9.99AC **Acres:** 5 **Lot Dimensions:** 265 X 890
Waterfront: / **River/Lake:** **Availability:** SALE **#Lots:**
Perc Test: N / **RdFrntg:** **Rd Surfc:**
Seller Disc: EXEMPT **Other Disc:** **View:**
Lot Desc: BRUSH, TREES, PRIVRD **Soil Type/Class:**
Topography: SLOPED
Soil Cond: NATIVE **Present Use:**

IMPROVEMENTS

Utilities: PHONE, POWER
Existing Structure: N /

REMARKS

XSt/Dir: WILDCAT MT RD TO EAGLE FERN TO GEORGE RD. ADJ. TO 46755 SE GEORGE RD.
Public: NICE 5 ACRE WOODED BLD SITE. POWER AT STREET. OWNER TO PROVIDE PERK TEST PRIOR TO CLOSING.

FINANCIAL

PTax/Yr: 503.57 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 5/12/2006 **DOM:** 645 **Sold:** 7/7/2006 **Terms:** CASH **O/Price:** $134,950 **Sold:** $135,000

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

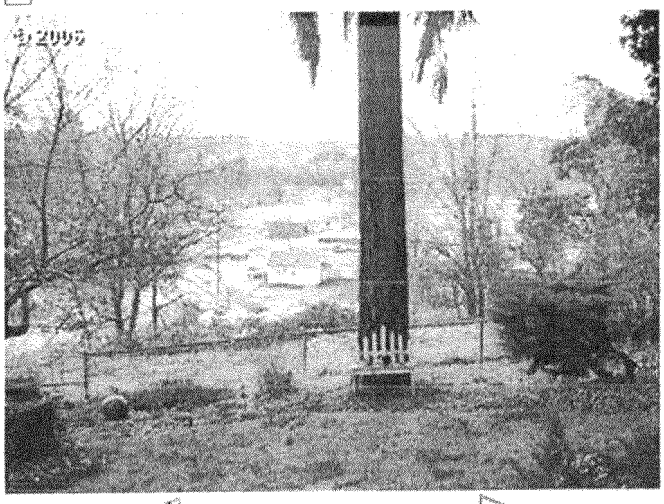

Image 1 of 3.

Presented by: Frani Grover, Willamette Realty Group — **Client Full**

LOTS AND LAND **Status:** SLD **4/18/2007** **10:26:08 AM**
ML#: 6016925 **Area:** 145 **List Price:** $84,900
Address: SE next to 370 Boulevar WAY
City: Estacada **Zip:** 97023
Additional Parcels: N /
Map Coord: 750/B/4 **Zoning:** R-1
County: Clackamas **Tax ID:** 00947514
Subdivision: ESTACADA ADD 01
Manufhs Okay: Y **CC&Rs:**
Elem: CLACKAMAS RIVER **Middle:** ESTACADA
High: ESTACADA **Prop Type:** RESID
Legal: 151 1ST ADD TO ESTACADA LTS 5 BLK 32

GENERAL INFORMATION

Lot Size: 3K-4,999SF **Acres:**
Waterfront: N / **River/Lake:**
Perc Test: / **RdFrntg:** Y
Seller Disc: DSCLOSUR **Other Disc:**
Lot Desc:
Topography: SLOPED
Soil Cond: NATIVE

Lot Dimensions: 50x100
Availability: SALE **#Lots:**
Rd Surfc: GRAVLRD
View: CITY
Soil Type/Class:

Present Use: RAWLAND

IMPROVEMENTS

Utilities: POWER, SEPTIC, SEWER, WATER
Existing Structure: N /

REMARKS

XSt/Dir: East on 4th, left on Shafford, left on lane
Public: Vacant lot next to 370 SE Boulevard Way. Buildable per Estacada planner.Purchaser to do all due diligence. Will have view, great infill lot, purchaser to pay all fess, purchaser to move or shorten carport, purchaser to verify property corners

FINANCIAL

PTax/Yr: 1327.74 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 5/23/2006 **DOM:** 76 **Sold:** 6/7/2006 **Terms:** CASH **O/Price:** $89,900 **Sold:** $80,000

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

☑

Presented by: Frani Grover
Willamette Realty Group

Client Full

LOTS AND LAND **Status:** SLD **4/18/2007** **10:26:08 AM**
ML#: 6005722 **Area:** 145 **List Price:** $72,000
Address: 0 Ginseng DR
City: Estacada **Zip:** 97023
Additional Parcels: /
Map Coord: 750/C/3 **Zoning:**
County: Clackamas **Tax ID:** 00940227
Subdivision: SPONHAUER ADD
Manufhs Okay: Y **CC&Rs:**
Elem: RIVER MILL **Middle:** ESTACADA
High: ESTACADA **Prop Type:** RESID
Legal: 1071 SPONHAUER ADD LT 8

No Photo Available

GENERAL INFORMATION

Lot Size: 10K-14,999SF **Acres:** **Lot Dimensions:**
Waterfront: / **River/Lake:** **Availability:** SALE **#Lots:**
Perc Test: / **RdFrntg:** **Rd Surfc:** PAVEDRD
Seller Disc: **Other Disc:** **View:** CITY, VALLEY
Lot Desc: **Soil Type/Class:**
Topography: SLOPED
Soil Cond: NATIVE **Present Use:**

IMPROVEMENTS

Utilities: POW-AVL, SWR-AVL, WAT-AVL
Existing Structure: /

REMARKS

XSt/Dir: 6th St. past Hi School, Rt on Shafford, Lf on Carol, Rt. on Ginseng.
Public: 11000 + Sq Ft lot overlooking the City of Estacada. Fantastic view of the valley. Bring your builder or check with the city of Estacada for a Manufactured home. Sewer, power and water available. N/T 345 NE Ginseng

FINANCIAL

PTax/Yr: 486.89 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 9/13/2006 **DOM:** 232 **Sold:** 9/25/2006 **Terms:** CASH **O/Price:** $72,000 **Sold:** $63,000

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

☑

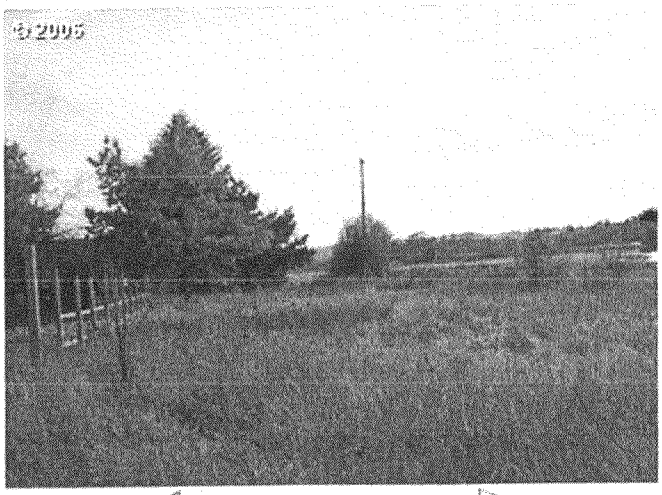

Image 1 of 4.

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** SLD **4/18/2007** **10:26:08 AM**
ML#: 6087821 **Area:** 145 **List Price:** $69,999
Address: 30213 SE FOLSOM RD
City: Eagle Creek **Zip:** 97022
Additional Parcels: N /
Map Coord: 720/A/4 **Zoning:**
County: Clackamas **Tax ID:** 00927000
Subdivision:
Manufhs Okay: Y **CC&Rs:** N
Elem: EAGLE CREEK **Middle:**
High: ESTACADA **Prop Type:** RESID
Legal: SECTION 05 TOWNSHIP 3S RANGE 4E TAX LOT 03801

GENERAL INFORMATION

Lot Size: 1-2.99AC **Acres:** 1.6 **Lot Dimensions:** Irregular
Waterfront: Y / CREEK **River/Lake:** **Availability:** SALE **#Lots:** 1
Perc Test: N / **RdFrntg:** Y **Rd Surfc:** PAVEDRD
Seller Disc: DSCLOSUR **Other Disc:** **View:**
Lot Desc: BRUSH, PASTURE, STREAM **Soil Type/Class:**
Topography: FLOODPL, LEVEL
Soil Cond: NATIVE **Present Use:** RAWLAND

IMPROVEMENTS

Utilities: PHONE, POW-AVL
Existing Structure: N /

REMARKS

XSt/Dir: Hwy 224 & Folsom Rd. 2 miles East of junction of Hwy 's 224 & 211
Public: Inexpensive pasture land! Seller is working on installing foot bridge to access largest portion of property. Enter property from Folsom Rd. Corner stakes are in place but need to cross Currin creek or jump fence on Hwy 224 end to walk entire property. Sorry for inconvenience.

FINANCIAL

PTax/Yr: 82.42 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 10/14/2006 **DOM:** 14 **Sold:** 1/18/2007 **Terms:** CASH **O/Price:** $69,999 **Sold:** $45,000

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

☑

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** PEN **4/18/2007** **10:26:07 AM**
ML#: 6088245 **Area:** 145 **List Price:** $167,000
Address: 36240 SE SQUAW MOUNTAIN RD
City: Estacada **Zip:** 97023
Additional Parcels: /
Map Coord: 750/F/5 **Zoning:**
County: Clackamas **Tax ID:** 01750340
Subdivision:
Manufhs Okay: Y **CC&Rs:** N
Elem: CLACKAMAS RIVER **Middle:** ESTACADA
High: ESTACADA **Prop Type:** RESID
Legal: 1997-34 PARTITION PLAT PARCEL 1

GENERAL INFORMATION

Lot Size: 1-2.99AC **Acres:** 1
Waterfront: / **River/Lake:**
Perc Test: / **RdFrntg:** Y
Seller Disc: EXEMPT **Other Disc:**
Lot Desc: POND, PRIVATE, STREAM, TREES
Topography:
Soil Cond:

Lot Dimensions:
Availability: SALE **#Lots:**
Rd Surfc:
View: TREES, CREEK
Soil Type/Class:

Present Use:

IMPROVEMENTS

Utilities: SEPTIC, WELL
Existing Structure: N /

REMARKS

XSt/Dir: hwy 224 thru Estacada to fall creek rd to squaw Mt. rd.
Public: One acre with small pond & creek. Nestled in the trees. It has an approved building site and has a well hand dug but certified by the county. the septic may need updated

FINANCIAL

PTax/Yr: 1028.57 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 3/15/2007 **DOM:** 164 **Sold:** **Terms:** **O/Price:** $167,000 **Sold:**

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

☑

No Photo Available

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** PEN **4/18/2007** **10:26:06 AM**
ML#: 7004139 **Area:** 145 **List Price:** $75,000
Address: 5 SE Espinosa
City: Estacada **Zip:** 97023
Additional Parcels: /
Map Coord: 750/C/4 **Zoning:**
County: Clackamas **Tax ID:** 00946926
Subdivision:
Manufhs Okay: **CC&Rs:**
Elem: CLACKAMAS RIVER **Middle:**
High: ESTACADA **Prop Type:** RESID
Legal: 172 FRALEYS ADD TO ESTACADA PT LTS 5&6

GENERAL INFORMATION

Lot Size: 7K-9,999SF **Acres:** **Lot Dimensions:**
Waterfront: / **River/Lake:** **Availability:** SALE **#Lots:**
Perc Test: / **RdFrntg:** **Rd Surfc:**
Seller Disc: **Other Disc:** **View:** CITY
Lot Desc: CULDSAC **Soil Type/Class:**
Topography: SLOPED
Soil Cond: **Present Use:**

IMPROVEMENTS

Utilities: POW-AVL, SEWER, WATER
Existing Structure: /

REMARKS

XSt/Dir: Hwy 224 to left on 4th up hill to right on Espinosa
Public:

FINANCIAL

PTax/Yr: 534.83 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

COMPARABLE INFORMATION

Pend: 1/10/2007 **DOM:** 1 **Sold:** **Terms:** **O/Price:** $75,000 **Sold:**

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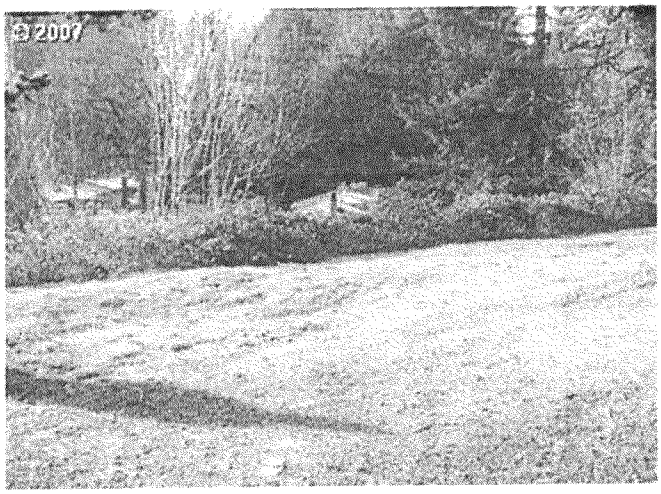
SCHOOL AVAILABILITY SUBJECT TO CHANGE.



Presented by: Frani Grover — **Client Full**
Willamette Realty Group

LOTS AND LAND **Status:** ACT **4/18/2007** **10:26:01 AM**
ML#: 6105440 **Area:** 145 **List Price:** $199,000
Address: 395 SW Juniper ST
City: Estacada **Zip:** 97023
Additional Parcels: Y /
Map Coord: 750/B/4 **Zoning:**
County: Clackamas **Tax ID:** 00936937
Subdivision:
Manufhs Okay: Y **CC&Rs:** N
Elem: CLACKAMAS RIVER **Middle:** ESTACADA
High: ESTACADA **Prop Type:** RESID
Legal: 570 MAP OF ESTACADA LAKE LTS 603 THRU 607&650 THRU 654

GENERAL INFORMATION

Lot Size: 20K-.99AC **Acres:**
Waterfront: / **River/Lake:**
Perc Test: / **RdFrntg:**
Seller Disc: DSCLOSUR **Other Disc:**
Lot Desc:
Topography: LEVEL
Soil Cond: NATIVE

Lot Dimensions:
Availability: SALE **#Lots:** 3
Rd Surfc: GRAVLRD
View:
Soil Type/Class:

Present Use: RESIDNC

IMPROVEMENTS

Utilities: PHONE, POWER, SWR-AVL, WAT-AVL
Existing Structure: Y / SHOP, STORAGE

REMARKS

XSt/Dir: Hwy 224 to ELM to Lakeshore R/ to Juniper
Public: Three Buildable lots. Proposed sizes aprx 7155 sq ft, 7151 sq ft, 6000 sq ft.Seller says needs parchment.Wont last at this price! Pice is for all 3 lots together.Great for investment/developer. Must close same time as home see ML# 6105424

FINANCIAL

PTax/Yr: 728.38 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

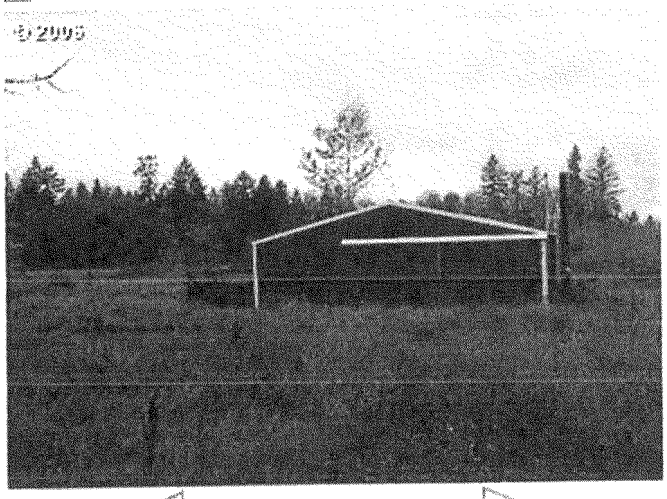

Image 1 of 7.

Presented by: Frani Grover — Willamette Realty Group — **Client Full**

LOTS AND LAND **Status:** ACT **4/18/2007** **10:26:01 AM**
ML#: 6100747 **Area:** 145 **List Price:** $179,950
Address: 23175 SE FILBERT RD
City: Eagle Creek **Zip:** 97022
Additional Parcels: /
Map Coord: 720/B/1 **Zoning:**
County: Clackamas **Tax ID:** 00683479
Subdivision:
Manufhs Okay: **CC&Rs:**
Elem: EAGLE CREEK **Middle:**
High: ESTACADA **Prop Type:** RESID
Legal: 177 ORCHARD HOMES LT 54

GENERAL INFORMATION

Lot Size: 5-9.99AC **Acres:** 5
Waterfront: N / **River/Lake:**
Perc Test: / **RdFrntg:** Y
Seller Disc: **Other Disc:**
Lot Desc: CLEARED, PASTURE
Topography: LEVEL
Soil Cond: NATIVE

Lot Dimensions:
Availability: SALE **#Lots:**
Rd Surfc: PAVEDRD
View: TREES, TERRITR
Soil Type/Class:

Present Use: RESIDNC

IMPROVEMENTS

Utilities: NONE
Existing Structure: Y / SHOP

REMARKS

XSt/Dir: 224 E to 211 N to Jackknife E to Filbert
Public: Beautiful Flat five acres, power at Street. 36 X 48 Pole Barn. Buyer to do their own due diligence. Failed septic perk test in 1992..15 yrs ago!.. are there alternative systems. ????

FINANCIAL

PTax/Yr: 355.56 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

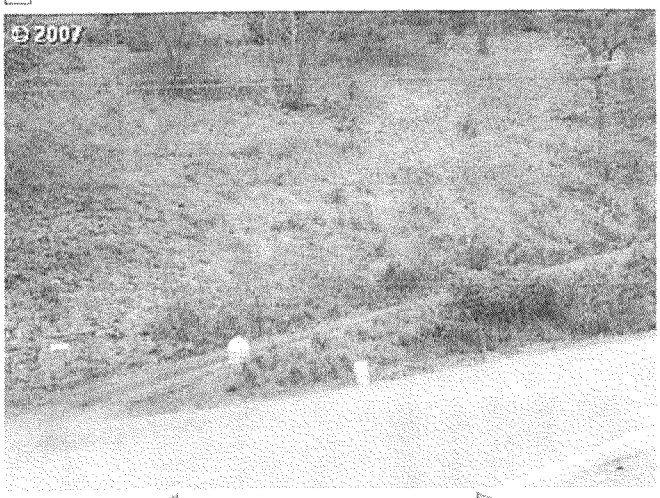

Image 1 of 8.

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** ACT **4/18/2007** **10:26:01 AM**
ML#: 7029657 **Area:** 145 **List Price:** $159,876
Address: 785 NE 6TH (PVRM) AVE
City: Estacada **Zip:** 97023
Additional Parcels: /
Map Coord: 746/B/6 **Zoning:** R1
County: Clackamas **Tax ID:** 00939630
Subdivision:
Manufhs Okay: Y **CC&Rs:**
Elem: CLACKAMAS RIVER **Middle:** ESTACADA
High: ESTACADA **Prop Type:** RESID
Legal: SECTION 21 TOWNSHIP 3S RANGE 4E QUARTER C TAX LOT 00401

GENERAL INFORMATION

Lot Size: 20K-.99AC **Acres:** 0.57 **Lot Dimensions:** irreg -24,829 sq ft
Waterfront: N / **River/Lake:** **Availability:** SALE **#Lots:**
Perc Test: / **RdFrntg:** Y **Rd Surfc:** PAVEDRD
Seller Disc: DSCLOSUR **Other Disc:** **View:**
Lot Desc: PRIVATE, TREES **Soil Type/Class:**
Topography: LEVEL, GEN-SLP
Soil Cond: **Present Use:** MOBL-HM, RESIDNC

IMPROVEMENTS

Utilities: POWER, SEPTIC, SWR-AVL, WATER
Existing Structure: Y / DRIVWAY, FENCED, MOBL-HM, RESIDNC

REMARKS

XSt/Dir: 6th Ave/Coupland
Public: SELLER IS ENTERTAINING OFFERS FROM $139,900-$159,876! Perfect new homesite ready w/Electricity,City water and septic system.Currently a well cared for mobile home on this great sized property 1/10 mile from Estacada High School.This over half-acre lot has long driveway leading up to a virtually level & completely fenced in home & yard suitable for kids&pets

FINANCIAL

PTax/Yr: 798.89 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

☑

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** ACT **4/18/2007** **10:26:00 AM**
ML#: 7000307 **Area:** 145 **List Price:** $146,000
Address: 0 Porter RD
City: Estacada **Zip:** 97023
Additional Parcels: N /
Map Coord: 750/H/5 **Zoning:** Forest
County: Clackamas **Tax ID:** 00962970
Subdivision:
Manufhs Okay: Y **CC&Rs:**
Elem: RIVER MILL **Middle:**
High: ESTACADA **Prop Type:** FRM/FOR
Legal: SECTION 30 TOWNSHIP 3S RANGE 5E TAX LOT 01010

GENERAL INFORMATION

Lot Size: 3-4.99AC **Acres:** 4.64 **Lot Dimensions:**
Waterfront: / CREEK **River/Lake:** **Availability:** SALE **#Lots:**
Perc Test: / NONE **RdFrntg:** N **Rd Surfc:** GRAVLRD
Seller Disc: DSCLOSUR **Other Disc:** **View:** TREES, CREEK
Lot Desc: **Soil Type/Class:**
Topography: STEEP
Soil Cond: NATIVE **Present Use:** RAWLAND

IMPROVEMENTS

Utilities: POWER
Existing Structure: N /

REMARKS

XSt/Dir: Porter Road to Driveway Easement down hill to level area follow signs
Public: Eagle Creek visable from the property. Very private setting and wouldjust be a great get-away place for recreation.

FINANCIAL

PTax/Yr: 36.67 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

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SCHOOL AVAILABILITY SUBJECT TO CHANGE.

Image 1 of 2.

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** ACT 4/18/2007 10:26:00 AM
ML#: 7031119 **Area:** 145 **List Price:** $125,000
Address: 0 SE Starr RD
City: Eagle Creek **Zip:** 97022
Additional Parcels: /
Map Coord: 719/G/6 **Zoning:** RRFF-5
County: Clackamas **Tax ID:** 00912221
Subdivision:
Manufhs Okay: Y **CC&Rs:** N
Elem: EAGLE CREEK **Middle:** ESTACADA
High: ESTACADA **Prop Type:** RESID
Legal: 622 CLACKAMAS RIVER VIEW LT 6; 3S 3E 12DC TL 600

GENERAL INFORMATION

Lot Size: 10K-14,999SF
Acres:
Lot Dimensions:
Waterfront: Y / RIVER
River/Lake: Clackamas
Availability: SALE **#Lots:** 1
Perc Test: N / NONE
RdFrntg: Y
Rd Surfc: PAVEDRD
Seller Disc: EXEMPT
Other Disc:
View: RIVER
Lot Desc: TREES
Soil Type/Class:
Topography: FLOODPL, LEVEL
Soil Cond: NATIVE
Present Use: RAWLAND

IMPROVEMENTS

Utilities: POW-AVL
Existing Structure: N /

REMARKS

XSt/Dir: Hwy 224 from Carver to Heiple, turn right to end then right on Starr Rd
Public: Small lot on Clackamas River. Will need septic approval and will need to meet all the rules for building on the edge of the Clackamas River flood plain. Property is partially in the flood plain. Not buildable by itself. Will require one or more other lots and even then may not be buildable.

FINANCIAL

PTax/Yr: 398.53
HOA Dues:
HOA Dues-2nd:
HOA Incl:

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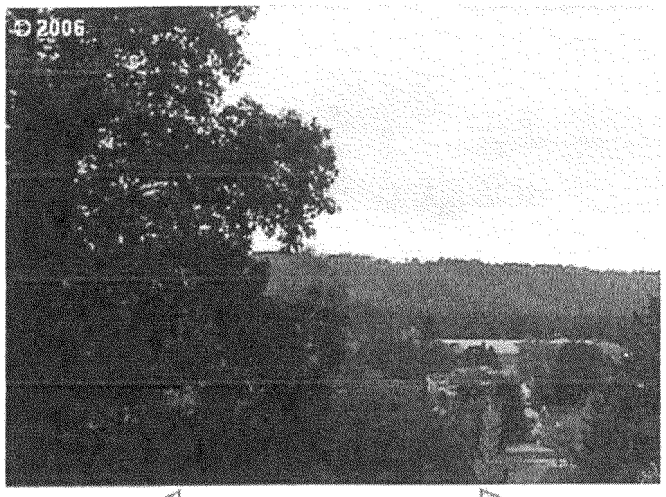

Image 1 of 5.

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Client Full

LOTS AND LAND **Status:** ACT **4/18/2007** **10:26:00 AM**
ML#: 6092516 **Area:** 145 **List Price:** $105,000
Address: 101 SE GINSENG DR
City: Estacada **Zip:** 97023
Additional Parcels: /
Map Coord: 750/C/4 **Zoning:**
County: Clackamas **Tax ID:** 00940432
Subdivision:
Manufhs Okay: **CC&Rs:**
Elem: CLACKAMAS RIVER **Middle:** ESTACADA
High: ESTACADA **Prop Type:** RESID
Legal: 1115 PURCELLS ADD LT 5 BLK 1

GENERAL INFORMATION

Lot Size: 15K-19,999SF **Acres:** **Lot Dimensions:**
Waterfront: / **River/Lake:** **Availability:** SALE **#Lots:**
Perc Test: / **RdFrntg:** **Rd Surfc:**
Seller Disc: **Other Disc:** **View:** MNTAIN, VALLEY
Lot Desc: **Soil Type/Class:**
Topography: SLOPED
Soil Cond: NATIVE **Present Use:** RAWLAND

IMPROVEMENTS

Utilities: POW-AVL, SWR-AVL, WAT-AVL
Existing Structure: N / NONE

REMARKS

XSt/Dir: hwy 211 to Main St , right on 4th up the hill to Ginseng
Public: Hard to find view lot in beautiful neighborhood. Many custom homes in the area. Gorgeous sunset and valley views. Extra large lot with much potential. Truly one of the nicest streets in town. Bring your dreams.

FINANCIAL

PTax/Yr: 368.05 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

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Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** ACT **4/18/2007** **10:26:00 AM**
ML#: 7019352 **Area:** 145 **List Price:** $99,500
Address: 598 NE WESTVIEW LN
City: Estacada **Zip:** 97023
Additional Parcels: Y / Level
Map Coord: 750/C/3 **Zoning:** R5
County: Clackamas **Tax ID:** 00941627
Subdivision: Vista Noel
Manufhs Okay: N **CC&Rs:** Y
Elem: EAGLE CREEK **Middle:** ESTACADA
High: ESTACADA **Prop Type:** RESID
Legal: SECTION 21 TOWNSHIP 3S RANGE 4E QUARTER CD TAX LOT 06400

GENERAL INFORMATION

Lot Size: 7K-9,999SF
Acres:
Lot Dimensions:
Waterfront: N /
River/Lake:
Availability: SALE **#Lots:** 41
Perc Test: /
RdFrntg: Y
Rd Surfc: PAVEDRD
Seller Disc: EXEMPT
Other Disc:
View: CITY, VALLEY
Lot Desc: PUBLCRD
Soil Type/Class:
Topography: LEVEL
Soil Cond: NATIVE
Present Use:

IMPROVEMENTS

Utilities: CABLETV, PHONE, POWER, SEWER, WATER
Existing Structure: N /

REMARKS

XSt/Dir: Reagan Hill Rd to Oakview Lane
Public: 41 Outstanding Level Lots, all have minimum of 7500 Sq Ft. Many Lots have a fabulous view of Portland city lights and the valley below. All utilities will be in place. Lots range from $99,500 to 112,500.

FINANCIAL

PTax/Yr: 8648.42 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

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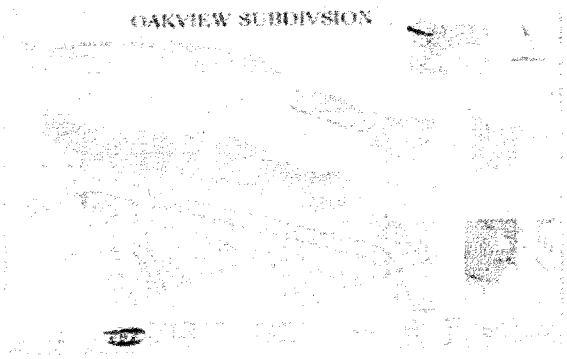

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** ACT **4/18/2007** **10:25:59 AM**
ML#: 6084017 **Area:** 145 **List Price:** $99,000
Address: 0 Oakview DR
City: Estacada **Zip:** 97023
Additional Parcels: Y /
Map Coord: 750/C/3 **Zoning:** R1
County: Clackamas **Tax ID:** 01514677
Subdivision:
Manufhs Okay: N **CC&Rs:**
Elem: EAGLE CREEK **Middle:** ESTACADA
High: ESTACADA **Prop Type:** RESID
Legal: SECTION 21 TOWNSHIP 3S RANGE 4E QUARTER C TAX LOT 01202

GENERAL INFORMATION

Lot Size: 7K-9,999SF **Acres:**
Waterfront: / **River/Lake:**
Perc Test: / **RdFrntg:** Y
Seller Disc: EXEMPT **Other Disc:**
Lot Desc: SECLDED
Topography: LEVEL, SLOPED
Soil Cond: NATIVE

Lot Dimensions:
Availability: SALE **#Lots:** 11
Rd Surfc: PAVEDRD
View: CREEK, CITY
Soil Type/Class:

Present Use: OTHER

IMPROVEMENTS

Utilities: CABLETV, GAS, PHONE, POWER, SEWER, WATER
Existing Structure: N /

REMARKS

XSt/Dir: 6th Ave to Shafford to Carol to Oakview
Public: 34 Total Building sites ranging from 7500 sq ft to 11921 sq ft. Many of these lots have beautiful views of Portland City Lights. Adjacent to Wade Creek.Estacada is moving up! Be the first to pick out your desired lot!

FINANCIAL

PTax/Yr: 40.71 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

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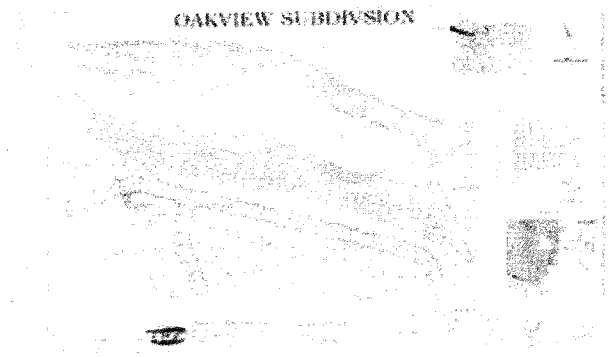

Presented by: Frani Grover
Willamette Realty Group

Client Full

LOTS AND LAND **Status:** ACT **4/18/2007** **10:25:59 AM**
ML#: 6084010 **Area:** 145 **List Price:** $96,000
Address: 0 Oakview DR
City: Estacada **Zip:** 97023
Additional Parcels: Y /
Map Coord: 750/C/3 **Zoning:** R1
County: Clackamas **Tax ID:** 00939701
Subdivision: Oakview
Manufhs Okay: N **CC&Rs:**
Elem: EAGLE CREEK **Middle:** ESTACADA
High: ESTACADA **Prop Type:** RESID
Legal: SECTION 21 TOWNSHIP 3S RANGE 4E QUARTER C TAX LOT 01200

GENERAL INFORMATION

Lot Size: 7K-9,999SF **Acres:** **Lot Dimensions:**
Waterfront: N / **River/Lake:** **Availability:** SALE **#Lots:** 4
Perc Test: / **RdFrntg:** Y **Rd Surfc:** PAVEDRD
Seller Disc: EXEMPT **Other Disc:** **View:** CREEK, CITY
Lot Desc: SECLDED **Soil Type/Class:**
Topography: SLOPED
Soil Cond: NATIVE **Present Use:** OTHER

IMPROVEMENTS

Utilities: CABLETV, GAS, PHONE, POWER, SEWER, WATER
Existing Structure: N /

REMARKS

XSt/Dir: 6th Ave to Shafford to Carol to Oakview
Public: 34 Building sites, All lots 7500 sq ft and up to 11921 sq ft. Beautiful views of Portland City Lights from many of the lots. Wad Creek is adjacent to property.Be one step ahead and pick out your desired lot

FINANCIAL

PTax/Yr: 27.2 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

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+2995

Presented by: Frani Grover
Willamette Realty Group
Client Full

LOTS AND LAND **Status:** ACT **4/18/2007** **10:25:58 AM**
ML#: 6083999 **Area:** 145 **List Price:** $89,000
Address: 0 Oakview DR
City: Estacada **Zip:** 97023
Additional Parcels: Y /
Map Coord: 750/C/3 **Zoning:** R1
County: Clackamas **Tax ID:** 01686991
Subdivision: Oakview
Manufhs Okay: N **CC&Rs:** Y
Elem: EAGLE CREEK **Middle:** ESTACADA
High: ESTACADA **Prop Type:** RESID
Legal: SECTION 21 TOWNSHIP 3S RANGE 4E QUARTER C TAX LOT 01303

GENERAL INFORMATION

Lot Size: 7K-9,999SF **Acres:** **Lot Dimensions:**
Waterfront: N / **River/Lake:** **Availability:** SALE **#Lots:** 19
Perc Test: / **RdFrntg:** Y **Rd Surfc:** PAVEDRD
Seller Disc: EXEMPT **Other Disc:** **View:** TREES, CITY
Lot Desc: SECLDED **Soil Type/Class:**
Topography: SLOPED
Soil Cond: NATIVE **Present Use:** OTHER

IMPROVEMENTS

Utilities: CABLETV, GAS, PHONE, POWER, SEWER, WATER
Existing Structure: N /

REMARKS

XSt/Dir: 6th Ave to Shafford to Carol to Oakview
Public: 34 Total Lots Priced from 89K to 99K all lots are 7500 sq ft and up. Many lots have a beautiful views of Portland City Lights. Wade Creek is adjacent to this property. Be the first to pick out your desire lots.

FINANCIAL

PTax/Yr: 1157.13 **HOA Dues:** **HOA Dues-2nd:**
HOA Incl:

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Subj: **Deforestation research sources**
Date: 4/24/2007 1:23:53 PM Pacific Daylight Time
From: CC2010Admin@vancouverusa.com
To: pfinleyfry@aol.com

Check Oregon Natural Resources Council

Google search text "Streamwater Quality After Logging in Southwest Oregon" and "Stream water Quality After Logging in Southwest Oregon"

Research and/or bibliographies that might have relevant research articles:

USDA Forest Publications. http://www.treesearch.fs.fed.us/pubs/psw/

1. U.S. General Accounting Office (GAO) report Oregon Watersheds: Many Activities Contribute to Increased Turbidity During Large Storms (July 1998, GAO/RCED-98-220) http://www.gao.gov/archive/1998/rc98220.pdf

2. Andrews Long Term Ecological Research Site Metadata Database
http://lterweb.forestry.oregonstate.edu/lterhja/Show_Cat_Personnel_ID_List.asp?searchtype=Pub&Personnel_ID_List=382

3. Monitoring Instream Turbidity to Estimate Continuous Suspended-Sediment Loads and Yields and Clay-Water Volumes in the Upper North Santiam River Basin, Oregon, 1998–2000. http://or.water.usgs.gov/pubs/WRIR03-4098/wri034098.pdf

4. "The effects of forest practices on stream temperature" -
http://www.for.gov.bc.ca/hfd/pubs/RSI/FSP/Cariboo/Misc056.pdf

5. From the EPA's Management Measure for Forestry - IV. References
http://www.epa.gov/nps/MMGI/Chapter3/ch3-4.html

6. AWWA
http://www.tpl.org/content_documents/protecting_the_source_04.pdf
Land conservation and protecting America's drinking water

7. The following are from http://www.stroudcenter.org/education/BufferBibliography(1).htm :

Where Rivers are Born: The Scientific Imperative for Defending Small Streams and Wetlands. 2003. Sponsored by American Rivers and Sierra Club.

This paper summarizes the scientific basis for understanding that the health and productivity of rivers and lakes depends upon intact small streams and wetlands. Co-authored by 11 leading scientists, including 2 from the Stroud Center. http://www.americanrivers.org/site/DocServer/WhereRiversAreBorn1.pdf?docID=182

Ernst, C., Gullick, R., Nixon, K. 2004. Protecting the Source: Conserving Forests to Protect Water. Opflow. Vol.30, No. 5. American Water Works Association.
Discusses results from a survey of water suppliers conducted in 2002 which found that water treatment costs for utilities using primarily surface water supplies varied depending on amount of forest cover in the watershed.
http://www.tpl.org/content_documents/landandwater_opflow_article.pdf

Stream Corridor Protection Strategy for Local Governments. 2002. University of Virginia.
Developed to help local government staff and others formulate protection strategies for their streams, in order to protect the health of their communities.
http://www.virginia.edu/ien/stream%20guide_final.pdf%202

Protecting the Source: Land Conservation and the Future of America's Drinking Water . (2004). Trust for Public Land & American Water Works Association.

Presents a series of best practices to guide communities' source protection efforts and showcase communities that are linking land and water protection effectively.
http://www.tpl.org/content_documents/protecting_the_source_04.pdf

Sweeney, B.W., T.L. Bott, J.K. Jackson, L.A. Kaplan, J.D. Newbold, L.J. Standley, W.C. Hession, and R.J. Horwitz. 2004. Riparian Deforestation, Stream Narrowing, and Loss of Stream Ecosystem Services. Proceedings of the National Academy of Sciences 101(39):14132-14137.

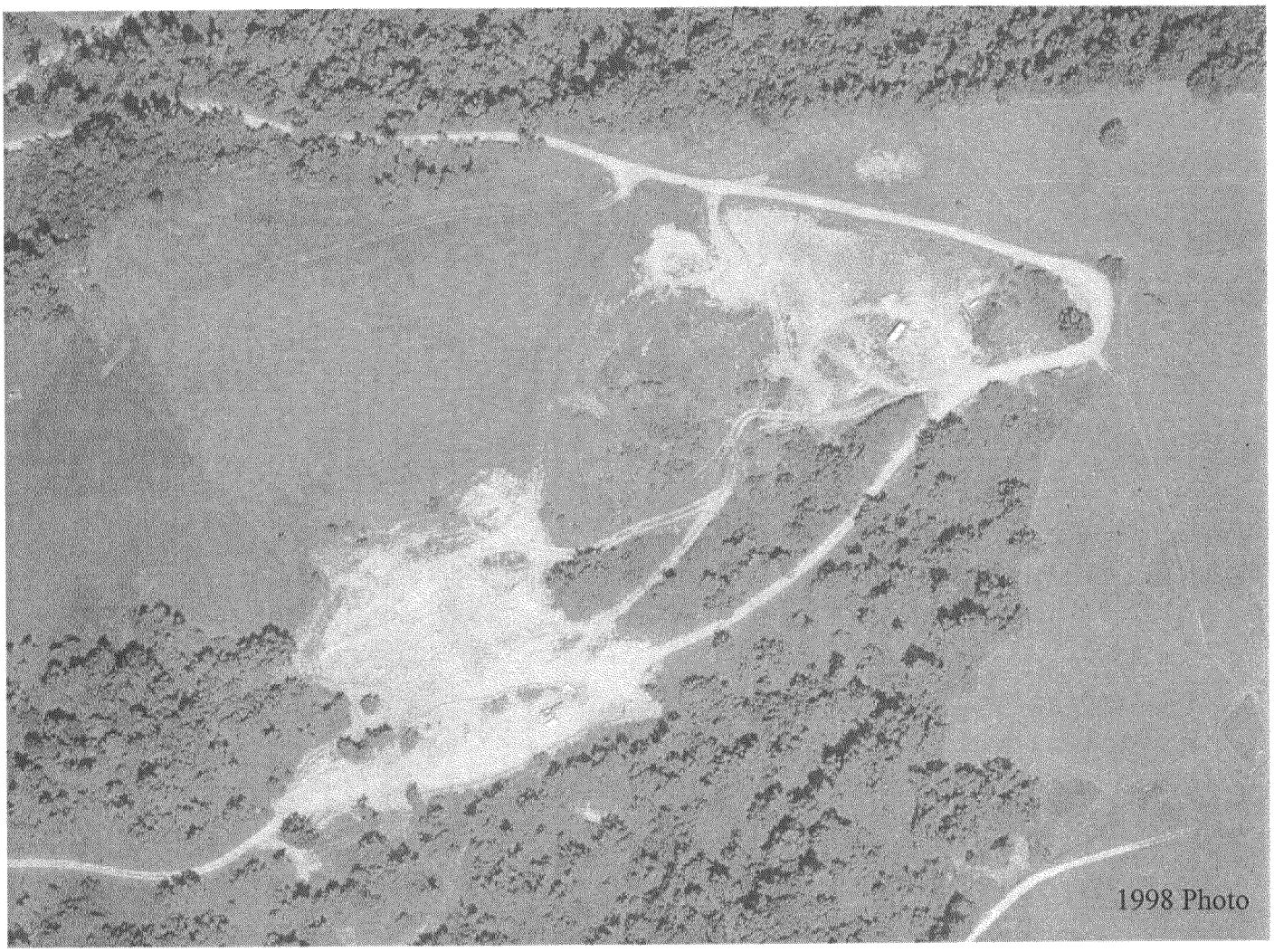
Horwitz, R. J., Hession, W. C., Sweeney, B. W. Effects of Forested and Unforested Riparian Zones on Stream Fishes. (2000). Proc. American Water Resources Association International Conference on Riparian Ecology and Management in Multi-Land Use Watersheds (American Water Resources Association, VA), pp. 197-202.

Newbold, J. D., D. C. Erman, and K. B. Roby. 1980. Effects of logging on macroinvertebrates in streams with and without buffer strips. Canadian Journal of Fisheries and Aquatic Sciences 37:1076-1085.

This web site gives an overview, but is rather simplistic. I included it because it might provide visuals/text (simple, understandable language) to pull together a public presentation. Unfortunately, no sources given.
http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/apa3317

Barbara Strasbaugh
Administrative Assistant
Community Choices
(360) 567-1067

Howard Canyon Reconciliation Report



Comprehensive Framework Plan Amendment
Updated October 7, 2004

MULTNOMAH COUNTY
LAND USE AND TRANSPORTATION PROGRAM
1600 SE 190th Avenue Portland, OR 97233
PH: 503-988-3043 FAX: 503-988-3389
http://www.co.multnomah.or.us/dbcs/LUT/land_use

HOWARD CANYON RECONCILIATION REPORT

COMPREHENSIVE FRAMEWORK PLAN AMENDMENT
UPDATED OCTOBER 7, 2004

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CHAPTER I

INTRODUCTION

CHAPTER I

INTRODUCTION

ORS 197.628 requires cities and counties to review their comprehensive plans and land use regulations periodically and make changes necessary to keep plans and regulations up-to-date and in compliance with the statewide planning goals. If plans are found to be out-dated or not in compliance with statewide planning goals, local governments must adopt findings and enact measures to make their plan and regulations current.

On October 30, 1980, the Land Conservation and Development Commission acknowledged the Multnomah County Comprehensive Framework Plan and land use regulations to be in compliance with the statewide planning goals. Approximately seven years later, on August 27, 1987, the Department of Land Conservation and Development (DLCD) notified the county of requirements under the periodic review and initiated a periodic review process with the county. On February 22, 1989, Multnomah County submitted its proposed periodic review order to the DLCD, and the department subsequently directed the county to complete additional work on two aggregate sites. The additional work was completed and conveyed to the DLCD on June 27, 1990.

The Land Conservation and Development Commission on April 23, 1993 determined additional Goal 5 work needed to be completed on several aggregate sites, streams and West Hills wildlife and scenic views (Remand Order 93-RA-876). This Remand Order required Multnomah County to complete work by October 29, 1993. Several extensions have been granted by the Land Conservation and Development Commission, in part because additional work on streams needed to be completed which had not been anticipated in the Remand Order . Under the requirements of the Multnomah County Periodic Review Revised Work Program (WKPROG - 0038), adopted by the commission on March 4, 1994, all remaining work must be submitted to the DLCD by September 6, 1994.

The revised work program requires Multnomah County to complete a Goal 5 planning process that concludes with the adoption of "Reconciliation Reports" and protection measures which resolve (reconcile) stream, wildlife, scenic views and mineral/aggregate resource issues. Two "Reconciliation Reports" have been prepared, one for the West Hills rural area and the other for the east rural county area in the vicinity of Howard Canyon. The "West Hills Reconciliation Report" and the "Howard Canyon Area Reconciliation Report" focus on different Goal 5 issues.

Four Goal 5 resource issues exist in the rural West Hills of the county and two Goal 5 resource issues are analyzed in the Howard Canyon area. West Hills Goal 5 resource issues which are analyzed include wildlife, scenic views, streams and the Angell Brothers aggregate site. In the Howard Canyon area, three streams within the Howard Canyon drainage and the Howard Canyon aggregate site are the subject of the Reconciliation Report.

In general, the Reconciliation Reports record the County's effort to complete the Goal 5 process as outlined in OAR 660-16-000. The rule requires local governments to analyze the significance of Goal 5 resources, and, if deemed significant (designated "1-C"), determine the appropriate level of protection ("3-A", "3-B", and "3-C") and provide protection strategies. The process includes a number of steps intended to provide the basis for establishing a rationale for deciding which resources should be protected and what types of protection are required.

Specifically, the Goal 5 process begins with the local government determining significance based on an analysis of location, quality, and quantity. The local government is required to use the best available information to make determinations throughout the Goal 5 process. If the resource is deemed "significant" it is designated "1-C" and the process continues. Conversely, the process is concluded if the resource is determined to not be significant and designated "1-A". Significant resources must then be analyzed to determine the appropriate level of protection when compared to other resources and conflicting uses. This analysis compares the **E**conomic, **S**ocial, **E**nvironmental, and **E**nergy consequences of protecting the entire resource as compared to allowing conflicts to exist. This analysis is commonly referred to as the ESEE analysis. The last step in the Goal 5 process is the determination of the level of protection based on the rationale provided by the the ESEE analysis. At this final step, local governments are required to identify the "uses" that will be allowed on the resource site and vicinity, and explain programs deemed necessary to protect the resource.

The "Reconciliation Report" is organized in a manner that follows the Goal 5 process. The report consists of two major parts: "Resource" chapters for each Goal 5 resource under review (*i.e.,* streams, scenic view, wildlife, mineral/aggregate), followed by the "Conflict Resolution and Protection Program" chapter. Each "resource" chapter is broken down into three subsections. Subsection "A" explains the "significance" determination and includes a discussion of "location", "quantity", and "quality". Subsection "B" contains the ESEE analysis, including a description and rationale for the "Impact Area" and a listing and description of conflicting uses. Subsection "C" contains the appendixes, which include technical background information and responses to public comments received throughout the process. The public comment/response component of the of the appendix is intended to provide a quick reference of the primary issues identified by the public during draft report stages of the Reconciliation Report development.

The last chapter of the "Reconciliation Report" is the "Conflict Resolution and Protection Program". This chapter reconciles conflicts between each Goal 5 resource and other uses and/or other Goal 5 resources. The chapter also reaches conclusions concerning the appropriate level of protection and suggests specific protection strategies. Subsection "B" discusses previously identified ESEE consequences for each conflicting use and reconciles any differences to reach conclusions concerning whether conflicting uses should be allowed. Subsection "C", "Resource Protection", determines the level of protection and discusses a protection program for each of the Goal 5 resources.

The "Reconciliation Report" is considered an amendment to the Multnomah Comprehensive Framework Plan. The "Reconciliation Reports" include both findings and policy recommendations. Policy recommendations will be incorporated into the Comprehensive Framework Plan by separate actions by the Multnomah County Planning Commission and Board of County Commissioners pursuant to the Multnomah County Code and state statutes. Also, some subsequent Planning Commission and Board actions may be required to implement the full set of strategies outlined in the protection programs.

The "Reconciliation Report" is intended to satisfy in part the requirements of the Land Conservation and Development Commission's Remand Order 93-RA-876 and satisfies all other statewide goal requirements of the county's work program approved by the Commission, WKPROG - 0038.

On October 21, 1994, Multnomah County transmitted the completed Reconciliation Report to the Department of Land Conservation and Development. The Department received one objection to the Howard Canyon Reconciliation Report, from an attorney representing the Howard Canyon Quarry. On February 7, 1995, the Director of the Department of Land Conservation & Development issued a report which found flaws in the Howard Canyon Reconciliation Report. In response to County and objector comments, the Director issued a revised report on February 28, 1995, which did not change the staff recommendation regarding the Howard Canyon Reconciliation Report.

In response to the Director's report, Multnomah County made changes to the Howard Canyon Reconciliation Report, in an effort to respond to the DLCD's criticisms. On September 7, 1995, the Multnomah County Board of Commissioners adopted a revised Howard Canyon Reconciliation Report. However, the attorney representing the Howard Canyon quarry filed seven objections to the County's revised document. After review, the Land Conservation and Development Commission concurred with two of these seven objections and, along with an additional minor change, directed Multnomah County, on March 7, 1996, to make specific changes to the Howard Canyon Reconciliation Report related to the area of significance, monitoring of on-going noise issues, and County Engineer discretion. The attached document contains revisions which comply with the LCDC direction. *[Amended 1996, Ord. 857 § II]*

In 2004, the Planning Commission and Board of County Commissioners concluded that due to change in circumstances and new information that an amended decision was necessary in regard to the aggregate resource in this report. The decision was made to "Allow Conflicting Uses Fully" and prohibit expansion of mining except as allowed currently under a Department of Geology and Mineral Industries Grant of Total Exemption. See the history and documentation for this 2004 decision in the revised Chapter III of this report. *[Amended 2004, Ord. 1050 § 1]*

CHAPTER II

HOWARD CANYON STREAM RESOURCES

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Matrices

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Matrix 2: ESEE Consequences – Prohibiting Conflicting Uses II-26

A. SIGNIFICANCE DETERMINATION

1. BACKGROUND

Multnomah County's Periodic Review Order was reviewed by the Land Conservation & Development Commission on April 23, 1993 (Remand Order 93-RA-876). Among the actions of the Commission was a finding that the Multnomah County Comprehensive Plan and land use regulations for significant streams do not comply with Goal 5 of the Oregon Statewide Planning Program and Oregon Administrative Rules (OAR) 660, Division 16, which implements the Statewide Planning Program. The Remand Order stated that the County must amend the comprehensive plan to map or identify significant streams.

To complete this work, the County must conduct an inventory of streams in order to determine which are significant. The procedure for determining significance is stated in OAR 660-16-000 (1) through (5). The rule directs the local government to determine whether there is sufficient information on the location, quality, and quantity of the resource at a particular site. The County has determined that the most efficient way to complete this work for the entire County is to conduct stream inventories concurrently with the Rural Area Planning Program, by which rural area plans will be adopted for the entire rural Multnomah County between now and 1998. The Howard Canyon Stream inventory is being completed at this time because of the need to analyze the significance of streams which may be impacted by the Howard Canyon quarry site.

This significance chapter is the second of two documents completed to date which discuss significance of streams in Multnomah County per the Remand Order. The first of these documents, Multnomah County Ordinance # 784, amends the Multnomah County Comprehensive Plan to provide specific criteria for judging the significance of streams, and adopts a map of streams which have already been determined to be significant pursuant to the criteria.

This significance chapter covers three streams in the Howard Canyon area of Corbett, Big Creek, Howard Canyon Creek, and Knieriem Creek. Significance reports on these streams have been completed at this time because of their relevance to the issue of mineral and aggregate resources pursuant to the Howard Canyon Quarry site. Significance reports on the remainder of the streams in the eastern, rural unincorporated portions of the County will be completed as part of the preparation of Rural Area Plans for these areas over the next four years

2. LOCATION

The three streams surveyed are located east of the Sandy River and approximately one-half to two miles south and east of the rural community of Corbett. Knieriem Creek and Howard Canyon Creek are tributaries of Big Creek, which in turn is a tributary of the Sandy River which empties into the Sandy at Oxbow County Park. The Sandy River is designated as a state scenic waterway and a federal wild and scenic waterway. Within the County's existing Goal 5 inventory the Sandy River is designated as a significant natural area and a

significant water body. A map of the sites is located within the SRI/Shapiro section of this chapter contained within Appendix A.

3. QUANTITY

For a measurement of quantity, the length and drainage area of these three streams will be compared to the length and drainage area of all Oregon Department of Forestry Class I designated streams within the eastern unincorporated area of Multnomah County outside of the Columbia Gorge National Scenic Area and west of the Bull Run River watershed (more detailed statistics on East County streams is not available at this time). The following table summarizes this comparison:

STREAM	LENGTH	DRAINAGE AREA
KNIERIEM CREEK	2.4 mi.	1,185 acres
HOWARD CANYON CREEK	3.2 mi.	1,575 acres
BIG CREEK	1.2 mi.	1,374 acres (excluding Knieriem & Howard Canyon Creek drainages)
TOTAL FOR THREE CREEKS	6.8 mi.	4,134 acres
TOTAL FOR EAST MULTNOMAH COUNTY (EAST OF SANDY RIVER, CLASS I STREAMS ONLY, EXCLUDING GORGE NSA AREA, WEST OF BULL RUN WATERSHED)	84 mi.	33,000 acres
PERCENTAGE OF THREE CREEKS VS. EAST RURAL AREA	8%	12%

Comparatively speaking, these streams and their watersheds are a small percentage of all stream mileage and watershed area within an area of similar streams in East Multnomah County. When streams in the West Hills, Sauvie Island, and remainder of eastern Multnomah County are added, these streams are even less significant in terms of quantity. Following is a discussion of stream quantity in the West Hills and Sauvie Island.

WEST HILLS

A recently completed inventory of streams in the West Hills has identified 64.2 miles of USGS-mapped streams draining a combined area of 19,425 acres. The drainages on the east side of the West Hills, into Multnomah Channel, are generally small and steeply-sloped, on heavily forested or recently cut land. the drainages on the west side are part of

the Tualatin River watershed, and are generally gently-sloped, draining both forest and farm land. The character of these western drainages is most directly comparable to Big, Howard Canyon, and Knieriem Creeks. The streams in these drainages are approximately 23.4 miles long, and drain approximately 7,470 acres.

SAUVIE ISLAND

Sauvie Island is approximately 26 square miles(16,600 acres) in size. Since the island is virtually flat, waterways on the island are of a much different nature than those of the West Hills, being best characterized as drainage ways for runoff from adjacent agricultural lands and as sloughs and wetlands.

REMAINDER OF EAST MULTNOMAH COUNTY

The remainder of East Multnomah County streams include streams to the west of the Sandy River, which run through urbanized and developed rural areas, the Bull Run watershed, which is tributary to the Sandy River and is in a condition adequate to supply drinking water to the City of Portland, and various streams in the Columbia River Gorge. Length and watershed data for these streams is not available.

4. QUALITY

The quality of these three streams is measured by the five criteria adopted by Multnomah County as part of Ordinance 784 discussed above and contained within Policy 16-G of the Multnomah County Comprehensive Framework Plan. These criteria, and the measurements used to judge these criteria, are discussed extensively in the "Multnomah County Significant Streams Study Howard Canyon Area" contained in the Appendix.

Based upon the inventory of streams conducted by SRI/Shapiro and contained in the Appendix, all three of the streams in the Howard Canyon area meet at least several of the criteria for significance stated in Policy 16-G of the Multnomah County Comprehensive Plan.

In terms of quality relative to other streams in the eastern portion of Multnomah County, east of the Sandy River and outside of the Columbia Gorge NSA, detailed data is available only for Gordon Creek, a tributary of the Sandy which lies to the south of the three creeks inventoried. This data is contained within *An Inventory of Nine Stream Corridors in Multnomah County, Oregon* prepared for the East and West Multnomah County Soil and Water Conservation Districts in 1990. This report found Gordon Creek to be relatively undisturbed by human intrusion and of a quality which, despite different measurement levels, is higher than that of Knieriem, Howard Canyon, and Big Creeks. Absent a detailed survey of all East County streams which will be completed during Multnomah County's Rural Area Plan Program as each plan is prepared, the only other comparison of relative quality available is the common designation of these three streams and 77 other miles of streams in East Multnomah County between the Sandy River and the Bull Run drainage (south of the Columbia Gorge NSA) as Class 1 streams by the Oregon Department of

Forestry.

Multnomah County has recently collected detailed information on quality of streams in the West Hills of Multnomah County. Some information is also available as to significant water features on Sauvie Island. Very little information is available on stream resources in the remainder of East Multnomah County.

WEST HILLS

A recently completed inventory of streams in the West Hills has identified 62.2 miles of significant streams draining a combined area of 18,750 acres. These streams are significant because they meet at least one of the five criteria contained in the Multnomah County Comprehensive Plan for evaluating significance. The most comparable streams in the West Hills, those within the Tualatin River basin, are all deemed to be significant.

SAUVIE ISLAND

Sauvie Island contains numerous protected water resources. However, these resources are not directly comparable to the streams of the Howard Canyon area in that they are slow-moving drainages and sloughs on the island's flat terrain.

REMAINDER OF EAST MULTNOMAH COUNTY

The limited amount of quality information on the remainder of streams in East Multnomah County is not directly comparable to these three streams. Streams in the Bull Run watershed serve a national forest area and Portland City's water supply. Streams in the Columbia Gorge are part of a National Scenic Area. Streams west of the Sandy River flow through urbanized areas.

5. CONCLUSION

Big Creek, Howard Canyon Creek, and Knieriem Creek are significant streams based upon the above description of location, quantity, and quality and are designated "1-C".

B. RESOURCE ANALYSIS REPORT

1. INTRODUCTION

The analysis of significant streams is an element of the broader analysis of water resources as required by Goal 5. The stream analysis is focused on stream channels and the riparian zone along stream channels. This analysis doe snot directly address associated wetlands or the watershed outside the riparian zone. It is recognized that other future Goal 5 studies including a Wildlife Habitat analysis and an analysis of Scenic Resources will address resource protection on a broad scale and will discuss impacts similar to those that will affect the watershed as a whole.

As part of the Goal 5 process, streams were inventoried to determine location, quantity, and quality. The qualitative aspect of each stream was examined using a modified "streamwalk" methodology and a wildlife habitat assessment process. Field inventory data sheets were prepared for two-tenths mile segments. The "streamwalk" data forms included the collection of information related to the stream channel, streambank stability, the width of the riparian corridor, streamside vegetation, stream conditions, and adjacent land use. The wildlife habitat assessment forms addressed habitat in terms of the presence of water, food, and cover. The inventory was valuable in assessing the significance of each stream. It was also valuable in providing information on riparian zone width, wetlands, and adjacent uses. This data is important in addressing impacts areas and conflicting uses.

The Goal 5 analysis is designed to meet the requirements of the Goal 5 Administrative Rule (OAR Chapter 660, Division 16). The report will address impact areas, conflicting uses, and the economic, social, environmental, and energy (ESEE) consequences of conflicting uses. Each component of the analysis is organized by county study area.

2. DESCRIPTION OF RESOURCE

This report discusses three significant streams in the Howard Canyon area of East Multnomah County. These streams drain westward from Ross Mountain to the Sandy River. They lie between the Sandy River and Louden Road to the south, and Larch Mountain Road and the rural community of Corbett to the north. The Sandy River is designated as a state scenic waterway and a federal wild and scenic waterway. Within the County's existing Goal 5 inventory the Sandy River is designated as a significant natural area and a significant water body. A map of the sites is contained within Appendix A.

The significant streams discussed in this Resource Analysis are as follows:

STREAM	LENGTH (feet)	DRAINAGE AREA (acres)
Big Creek	5,125	4,135*
Knieriem Creek	12,670	1,185
Howard Canyon Creek	15,840	1,575

* includes drainage area for Howard Canyon and Knieriem Creeks.

The rationale for determining that these streams are significant is contained within the attached Appendix relating to significance at the back of this report.

3. IMPACT AREAS

The impact areas for this study is the riparian zone along each stream, and additional area which is within 300 feet of the centerline of the stream.. The riparian zone influences the quality and health of the stream and varies in width. It is affected by adjacent slope and the size of the vegetation along the stream. Generally, wider riparian zones have steep slopes with large trees, which shade the stream and contribute woody debris to the stream channel. The additional width to 300 feet is justified by a February, 1992 study authored by the Washington State Department of Ecology, entitled Wetland Buffers, Use and Effectiveness. The study includes data on optimal distances from wetlands and streams for the protection of wildlife habitat. The study proposes a buffer of 300 feet from an existing stream in order to protect basic wildlife habitat values associated with the stream.

For streams that flow through or contribute water to public parks or to recreation areas used by the public, the impact area includes the downstream park or recreational facility.

Each stream is examined in terms of the number of properties abutting the stream and the zoning of the adjacent properties. The property/land use data provided is based on County study area maps.

Streams in the Howard Canyon area include: Big Creek, Knieriem Creek, and Howard Canyon Creek. All three streams met the County's significance criteria.

HOWARD CANYON
LAND USE DATA

STREAM	NUMBER OF ADJACENT PROPERTIES	ZONING OF ADJACENT PROPERTIES	
		#	ZONING
Big	11	1 6 4	EFU - EXCLUSIVE FARM USE CFU - COMMERCIAL FOREST USE RR - RURAL RESIDENTIAL
Knieriem	18	7 11	EFU - EXCLUSIVE FARM USE CFU - COMMERCIAL FOREST USE
Howard Canyon	19	7 12	EFU - EXCLUSIVE FARM USE CFU - COMMERCIAL FOREST USE

The riparian zone and land use adjacent to each stream is discussed below. Land uses were inventoried and documented by field survey crews. It was noted if uses were "present" and whether the use was "clearly impacting" the stream.

Big Creek - The width of the riparian zone along Big Creek averages 126 feet with a range of 80-200 feet. Adjacent land uses which clearly impact the stream include logging, housing,, roads and culverts, and agriculture (pasture land). The stream drains to the Sandy River.

Knieriem Creek - The width of the riparian zone along Knieriem Creek averages 107 feet with a range of 0-160 feet. Adjacent land uses which clearly impact the stream include housing, roads and culverts, and agriculture (pasture land). The stream drains to Big Creek and then to the Sandy River.

Howard Canyon Creek - The width of the riparian zone along Howard Canyon Creek averages 150 feet with a range of 10-200 feet. Adjacent land uses which clearly impact the stream include roads and culverts, housing, and agriculture (pasture land). The stream drains to Big Creek and then to the Sandy River.

4. CONFLICTING USE ANALYSIS

a. Planned Uses

Conflicting uses include those uses which conflict or interfere with the protection of the significant streams. To identify conflicting uses, the uses permitted under the zoning ordinance and comprehensive plan were examined. In addition, other known conflicts are noted. Conflicting uses which "clearly impact" the stream were identified in the field by survey crews and have been referred in the previous section.

The analysis is based primarily on uses outlined in the zoning ordinance. The zoning districts that affect the relevant sites include the following:

- Exclusive Farm Use - EFU
- Commercial Forest Use - CFU
- Rural Residential - RR

Uses that represent potential conflicts with streams include any use that results in the removal of vegetation along the riparian zone. The removal of vegetation and trees will reduce shade along the stream, eliminate wildlife cover, and decrease the amount of woody debris that enters the stream channel. When this occurs, the stream will fail to provide economic, social, and environmental benefits. When healthy, streams and the associated riparian zone provide water for domestic use and irrigation, fish and wildlife habitat, and flood storage capacity. A stream on which the riparian zone has been eliminated or severely damaged poses a threat by the increased amount of runoff and turbidity and by the increased potential for flooding.

The generic uses permitted in each zone are described in the following table:

USE	EFU	CFU	RR
Forestry/Timber	P	P	P
Wood Processing (limited)	CU	P/C	NP
Farm Use (crops/livestock)	P	P	P
Resource Conservation	P	P	P
Single-Family Residential (> 80 acres)	P/C	CU	P
Single-Family Residential. on < 80 acres in conjunction with a Farm/Forest Use	P/C	CU	P
Farm Use (crops/livestock)	P	P	P
Farm/Forest Worker Housing	CU	NP	P/C
Wholesale/retail for farm/forest products	CU	NP	P/C
Playgrounds, Churches, and Schools	CU	NP	CU
Parks/Golf Courses	CU	CU	CU
Other Community Service Uses	CU	CU	CU
Mining/Geothermal	CU	CU	CU
Agricultural Processing	NP	NP	CU
Wood Processing (sawmills, etc.)	CU	CU	NP
Fowl, feed lot, swine, fur farming	P	CU	CU
Dog Kennels	CU	NP	CU
Aircraft Landing Area	CU	CU	NP
Single Family Residential (Non Farm/Forest)	CU	CU	P
Home Occupations	CU	P	P
Planned Developments	NP	NP	CU
Cottage Industries	NP	NP	CU
Rural Service/Commercial	NP	NP	CU

KEY: P - Permitted
P/C - Permitted with conditions
CU - Conditional Use
NP - Not Permitted

b. Conflicting Use Impacts

For purposes of further analysis, uses are grouped into general categories. The categories and a brief discussion of the nature of the conflicts follow.

Forestry Use - Forestry uses have significant conflicts with stream resources. The standard process of clear cutting increases run-off and turbidity in the streams. THis results in a reduction in water quality and a loss of fish habitat. Logging roads that cross streams result in extensive stream damage. Field teams conducting the stream survey in the Howard Canyon area noted numerous instances where logging roads and clear cutting had significantly damaged the streams. Wood processing facilities and wholesale/retail sales of forest products will result in the increase in storm water runoff from impervious surfaces. Housing in connection with forest use may be located near streams and have impacts similar to those listed below under residential use. Forestry use includes the following uses permitted under the zoning ordinance: forestry/timber; wood processing (limited); wood processing (sawmills, etc.); forest worker housing; single family residential in conjunction with a forest use; wholesale/retail for forest products.

Agricultural Use - Agricultural use conflicts with stream resources in a variety of ways. Agricultural chemicals, including pesticides and fertilizers, may enter the stream and destroy or alter wildlife habitat. Farm livestock may graze near and enter the stream thereby destroying riparian vegetation and depositing excrement, which can affect water quality. Riparian vegetation may be removed to maximize cultivated area. Agricultural processing, housing, and wholesale/retail use will result in the increase of storm water runoff from impervious surfaces. Housing will also have impacts similar to those listed below under residential use. Agricultural use includes the following uses permitted under the zoning ordinance: farm use crops/livestock; agricultural processing; fowl, feed lot, and swine for farming; farm worker housing; single family residential housing in conjunction with a farm use; wholesale/retail for farm products.

Residential Use - Streams provide an amenity for a residential dwelling. According to Rick Walker, a residential appraiser with Palmer Groth and Pietka, a stream will generally increase the value of any nearby dwelling. For this reason, pressure exists for new dwellings to be located near streams. Riparian vegetation may need to be removed to site the dwelling near the stream. Often residents living along streams clear the native vegetation adjacent to the stream and install lawn up to the stream bank, which results in a significant loss of habitat. Residential development adjacent to the stream increases impervious surface, which can result in increased runoff to the stream. Residential use includes the following uses permitted under the zoning ordinance; single family residential on >80 acres; single family residential (non farm/forest); home occupations; and planned developments.

Community Service Use/Commercial Use - Community service and commercial uses conflict with streams due to the potential for increased storm water runoff from structures and parking areas. The increase in storm water runoff from hard surfaces will increase the rate of flow and result in erosion and a deterioration of water quality. Parks or recreation facilities, including golf courses, may result in the removal of vegetation along the stream and the use of pesticides and fertilizer. Community service/commercial uses include the following uses from

the zoning ordinance: playgrounds, churches, schools; parks; other community service uses; dog kennels; cottage industries; and rural service/commercial.

Mining - Aggregate mining is a potential conflict for streams in the study areas. Aggregate mining will result in alteration of the land contours and the diversion of the stream. Until full restoration of the stream following the mining operation, the stream resource will be impacted. The time period of this impact will vary depending on the restoration plans filed with the Department of Geology and Mineral Industries (DOGAMI). Following restoration the stream may return to health, but it will no longer follow the original natural stream bed. Aggregate mining operations located away from the channel can have water quality impacts related to siltation and increased turbidity from mine runoff. Mining uses include the following uses from the zoning ordinance: mining/geothermal.

The Howard Canyon Quarry, which comprises the ridge between the canyons of Knieriem Creek on the north and Howard Canyon Creek on the south, is identified as a Goal 5 Mineral and Aggregate resource site(site #8). The Howard Canyon Quarry is located upslope from both Knieriem Creek and Howard Canyon Creek.

Transportation/Public Improvements - Transportation systems create conflicts with streams. Fill is often necessary to cross a stream. Culverts generally increase erosion. Field teams found that private logging roads have severe impacts on streams in the Howard Canyon Area. Public improvements, such as utility extensions, can result in alteration and conflict of streams. No planned public improvements were identified.

Other Uses - Aircraft landing areas are not likely to be located in this area due to topography constraints. If a landing area were toe sited, it would most likely be located away from a stream channel due to slope and vegetation constraints. Resource conservation is a permitted use and does not present a conflict with the stream resource. No other uses allowed outright, conditionally, or under prescribed conditions have been noted within the impact area for these streams.

c. Conflicting Use By Study Area

Conflicting uses are examined by study area and stream. Known conflicts are described based on field observations. No other uses allowed outright, conditionally, or under prescribed conditions have been noted within the impact area for these streams.

Big Creek: This watershed is affected primarily by use of adjacent properties as pasture land and by rural residential development in its upper reach (below the confluence of Howard Canyon Creek and Knieriem Creek). The lower stream segments, west of Gordon Creek Road, are more protected by vegetation and steep topography.

Knieriem Creek: This watershed is affected by logging in its upper reach, mining in its middle reach, and use of adjacent property as pasture land in its lower reach where it joins Howard Canyon Creek. Rural residential uses associated with exclusive farm use also impact the watershed, primarily along the lower stream segments. The creek flows into Big Creek.

Howard Canyon Creek: This watershed, like the Knieriem Creek watershed, is affected by logging in its upper reach, mining in its middle reach, and adjacent pasture land uses in its lower segments where it joins Knieriem Creek. A small segment of the creek, near its confluence with Knieriem Creek, is affected by rural residential use associated with the exclusive farm use zone.

5. ESEE ANALYSIS

The ESEE consequences analysis includes a general discussion of impacts by conflicting use category. The initial section examines impacts on the stream if the conflicting uses are allowed. The second section addresses impacts on the conflicting uses if the stream is protected. Each section includes a listing of impacts that are keyed to matrices that specifically tie the impacts to each stream. The matrices are organized by County study area.

a. ESEE Consequences of Allowing Conflicting Uses - Impacts on Streams

i. Economic Consequences of Allowing Conflicting Uses

Negative economic impacts result from conflicting uses which lower water quality and reduce the usefulness of water withdrawn from the stream. The reduction of water quality has a direct economic impact on those properties and streams where water rights exist for domestic and irrigation purposes. If water quality is lowered to a point that water is no longer useful, alternative sources will need to be identified. An economic consequence is noted only in those instances where water rights exist along the stream. Conflicting uses that have the potential of lowering water quality include uses which increase runoff, erosion, turbidity, and pollutants.

A negative economic consequence also will result if water quantity is reduced or increased due to stream or riparian alteration. Streamside vegetation has the effect of moderating the flow and transport of water through the drainage. Removal of vegetation increases the rate of runoff and reduces water storage capacity. This results in higher peak flows and lower flows during drought periods.

Development of paved parking areas or roadways associated with transportation facilities, community service commercial uses, and residential uses will generally increase the rate of runoff and increase the potential for erosion unless storm water detention facilities are planned in conjunction with the improvement. Detention facilities or special designs are generally addressed on a case-by-case basis depending on the scale of the proposed development or improvement.

The three creeks in the Howard Canyon area are part of the Sandy River watershed, in turn part of the Columbia River watershed. Between 1980 and 1990, over one billion dollars were spent on efforts to restore the Columbia River salmon fishery. Habitat destruction and associated impacts on flows and water quality are important factors contributing to the salmon crisis which has only continued to escalate into the 1990's. Without question, salmon are an important economically to the Northwest. Although none of the creeks are utilized by anadromous fish (due to a natural barrier) they are tributaries to the Sandy River which is an important spawning and rearing area. Big Creek flows into the Sandy River approximately 100 yards upstream from a known spawning area for Fall chinook salmon and winter steelhead. The Sandy River is a reflection on the quality of its tributaries.

The Federal Bureau of Land Management and Oregon State Parks have estimated that up to one million people annually utilize the Sandy River for a myriad of recreational activities. This intense use creates substantial economic activity for a variety of businesses throughout the region.

MATRIX KEY

ECON 1: Negative economic impacts from reduced water quality for domestic or irrigation use or use by commercially important fish due to increased runoff, erosion, turbidity, water temperature, or pollutants

ECON 2: Negative economic impacts result from changes in water quantity that can affect availability for domestic or irrigation use due to loss of storage capacity and increased runoff.

ii. Social Consequences of Allowing Conflicting Uses

Conflicting uses adjacent to a stream may have a social impact if removal of riparian vegetation has occurred and there has been a significant loss of wildlife habitat. The social impact results in the loss of opportunities for nature study and recreational activities if vegetation and wildlife habitat are removed. Streams that flow through public parks or publicly-accessed recreation facilities have the greatest potential to be negatively affected in this manner. Although none of the study area streams flow through publicly-owned parks or recreation facilities, they do drain to the Sandy River, which flows past state parks and private recreation facilities (e.g. Camp Collins). The Sandy River is an important spawning and rearing area for salmon.

Social consequences also result from impacts on the aesthetic quality of a stream if riparian vegetation is removed and a stream is degraded. This has an overall impact on the livability of the area.

The removal of riparian vegetation will also reduce water storage capacity and increase the rate of runoff. This has the potential of increasing the capacity for flooding, especially where wetlands are associated with the stream. For those streams with wetlands, negative social consequences may occur if vegetation is removed and the wetlands flood storage capacity reduced.

MATRIX KEY

SOC 1: Negative social impacts result from the loss of educational and recreational opportunities associated with wildlife habitat and riparian vegetation.

SOC 2: Negative social impacts result from the loss of flood storage capacity and increases in the rate of runoff.

SOC 3: Negative social impacts result from a loss in aesthetic quality and livability.

iii. Environmental Consequences of Allowing Conflicting Uses

Environmental consequences of allowing conflicting uses vary by the type of conflicting use. As noted above, forestry practices that include clear cut areas result in increased runoff, turbidity, water temperature, and sedimentation. The removal of vegetation reduces food and cover for wildlife. The loss of wildlife habitat directly impacts wildlife diversity. During the stream inventory, field teams observed a wide range of wildlife from amphibians and rodents to elk and eagles. As one would expect, clear cut areas contained less habitat and less wildlife.

Consequences of agricultural use include water quality and wildlife habitat impacts. Agricultural use adjacent to the stream my result in damage to the stream through the use of chemical pesticides and fertilizers. Livestock along a stream will negatively impact the water quality by trampling streamside vegetation, overgrazing, and through the deposition of animal excrement. Removal of streamside vegetation either by livestock or to increase cultivated area will reduce wildlife cover and habitat. Pastures where streams are not fenced have the greatest potential for negative impact.

Residential, community service, and commercial uses negatively impact the environmental quality of streams. The primary impact is the loss of wildlife habitat that results from nearby human activity. For example, it is rare when elk wander into residentially developed areas. Domestic animals are a major source of conflict with wildlife and often drive animals from their natural habitat. New residential dwellings often include residential lawns which replace riparian vegetation along streams and the wildlife cover that it provides. As noted previously, parking areas associated with community service or commercial uses may increase runoff. These areas may also result in water quality deterioration due to oils and materials that are washed into the streams and drainageways.

Transportation and public improvements have negative environmental consequences. Roads that cross streams often are culverted. Culverts increase the rate of flow and result in a narrowing of the stream channel. Culverts and roads also create a barrier for wildlife migration.

Roads also result in wildlife mortality when animals are hit by vehicles.

Allowing mining in or directly adjacent to the stream will result in temporary adverse stream impacts including rerouting and stream channel destruction. Reclamation would include stream channel restorations. Allowing mining within the watershed of the stream, as is the case with the proposed Howard Canyon quarry, could result in increased stream siltation if runoff is not cleansed prior to it entering the stream. Environmental compliance issues for quarry operations are regulated by the Oregon Department of Geology and Mineral Industries and the Oregon Department of Environmental Quality.

MATRIX KEY:

ENV 1: Negative environmental impacts result from the loss of wildlife habitat when riparian vegetation is removed or destroyed.

ENV 2: Negative environmental impacts result from deterioration in water quality due to increased runoff, turbidity, water temperature, and pollutants.

ENV 3: Negative environmental impacts result from increased disturbance or mortality of wildlife, or by limiting the mobility of wildlife.

iv. Energy Consequence of Allowing Conflicting Uses

Energy consequences of allowing conflicting uses are less clear than other impacts. When streams are used for small hydro-electric or mill purposes a negative impact may occur if the flow of the stream is interrupted. No negative energy impacts were found for any of the streams in the Howard Canyon Area.

MATRIX KEY:

ENRGY1: Negative energy impacts would result from decreased water flow.

v. Summary of ESEE Consequences - Impacts on Streams

A summary of ESEE consequences describing impacts on streams is included in Matrix 1. The matrix lists ESEE impacts by stream and conflicting use category.

b. ESEE Consequences of Prohibiting Conflicting Uses - Impacts on Uses

i. Economic Consequences of Prohibiting Conflicting Uses

Prohibiting natural resource based activities, including forestry, agriculture and mining, can result in substantial economic impacts by causing loss in jobs, preventing creation of new jobs, reducing tax revenues, and reducing revenues from the sale of raw materials or finished products.

MATRIX 1.

HOWARD CANYON
ESEE CONSEQUENCES
Allowing Conflicting Uses - Impacts On Streams

Stream	Forestry	Agriculture	Residential	Community Service	Mining	Transportation /Public Improvements
Big	-	ENV 1,2,3 ECON 1,2	ENV 1,2,3	ENV 2,3	EVN 2	SOC 1,2 ENV 1,2,3
Knieriem Canyon	SOC 2,3 ENV 1,2 ECON 1,2	ENV 1,2,3 ECON 1,2	ENV 1,2,3	ENV 2,3	ENV 1,2 SOC 1,3	SOC 1 ENV 1,2,3
Howard Canyon	SOC 2,3 ENV 1,2 ECON 1,2	ENV 1,2,3 ECON 1,2	ENV 1,2,3	ENV 2,3	ENV 1,2 SOC 1,2,3	SOC 1,2 ENV 1,2,3

MATRIX KEY:

ECON 1: Reduced water quality for domestic or irrigation use.

ECON 2: Reduced or increased water quantity for domestic or irrigation use.

SOC 1: Loss of educational and recreational opportunities associated with the loss of wildlife habitat.

SOC 2: Loss of flood storage capacity.

SOC 3: Negative social impacts result from a loss in aesthetic quality and livability.

ENV 1: Loss of wildlife habitat when riparian vegetation is removed or destroyed.

ENV 2: Deterioration of water quality.

ENV 3: Increased disturbance or mortality of wildlife, or limitation in the mobility of wildlife.

ENRGY 1: Decreased water flow for energy use.

Note: 1) For Forestry, Community Service, and Mining uses the listed impacts represent potential for the impact to result. Forestry and mining impacts are not likely on Big Creek due to the location of the resources at the upper reaches of the streams. For Agriculture, Residential, and Transportation/Public Improvements uses the listed impacts represent actual impacts that are currently occurring along the creek.

2) Refer to previous section for a description of the impacts.

The economic value of a resource-based operation is increased when it is located relatively close to markets or potential customers, since the cost of transporting the raw materials is reduced. For example, construction projects, such as major public road projects, benefit from having a rock source nearby and the cost of such projects can increase when a nearby mining activity is prohibited.

Similarly, prohibiting transportation or other public improvement projects, particularly utility projects, can increase the cost of providing a service to consumers. For example, if development of an electric substation is not allowed, it may cost more to provide electricity to residents in the county or region, because the power must be obtained from a more distant source or purchased from another utility with excess supply.

Prohibiting residential development to protect streams can negatively affect the value (purchase price and tax assessment) of a lot, thus affecting the property owner. A reduction in value can affect the potential tax revenue to the County.

With any use, the economic costs of carrying on an activity (whether extraction, construction, or residential development) can increase when regulations or standards are enacted to specify conditions under which the activity can occur. For example, regulations that limit the size of the working face, specify the timing of reclamation activities, or require extensive screening of mining activities can increase the economic cost to the operator of carrying on the mining business.

In regard to the Howard Canyon Quarry, it is one of a very limited number of known aggregate sources available for development in Multnomah County. Limitations on site development to preserve significant streams will result in a shortened life span of the facility, with economic impacts on the owners, and on employees and suppliers.

MATRIX KEY:

ECON 1: Negative economic impacts result from lost jobs, reduced tax revenues, or reduced revenue from the sale of goods and services.

ECON 2: Negative economic impacts result from increased cost of transporting raw materials to markets or consumers, and providing services.

ECON 3: Negative economic impacts result from decreased property value (for residential uses).

ECON 4: Negative economic impacts result from regulations and standards that specify conditions under which an activity or use can occur.

ECON 5: Negative economic impacts result from increased cost due to practices or construction techniques.

ii. Social Consequences of Prohibiting Conflicting Uses

Prohibiting natural resource based activities, such as forestry, agriculture, and mining, can affect property owners who depend on revenue from the activity as an income source. Reduced income from prohibiting these activities can affect the way of life of families that may have carried on the operation (e.g. timber production, farming, or mining) for several generations, These families, who have a heritage of being involved with these activities, would consider a change in their way of life a negative social impact. In regard to quarry operations, once resources are depleted, social impacts result from attendant relocation or dislocation of employees.

Another social impact of prohibiting resource based activities is reducing or eliminating access to a local source of a needed material. For example, mining provides a social benefit by providing a needed supply or rock and aggregate material for construction projects in the county and region. This social benefit would be negatively affected by prohibiting mining activities because access to these materials would become more difficult. In addition, longer haul distances increase traffic loads with resultant social impacts.

Prohibiting certain uses can affect the amenities available to local residents, whether these are natural or man-made. For example, residential lots located along a stream often are sought by buyers, since the stream is considered a positive natural amenity. Not allowing residential development on lots with stream access would prevent this social benefit. Similarly, community services and commercial facilities provide a social benefit to local residents by providing needed goods and services near where they live and work. Prohibiting these uses would negatively affect this social benefit by causing residents to drive further to obtain the goods and services.

MATRIX KEY

SOC 1: Negative social impacts result from reduced income (from natural resource based activities).

SOC 2: Negative social impacts result from affecting or changing the way of life of families involved in natural resource based activities and industries.

SOC 3: Negative social impacts result from reduced or eliminated access to local sources of needed materials.

SOC 4: Negative social impacts result from reduced availability of amenities (both natural and man-made).

iii.. Environmental Consequences of Prohibiting Conflicting Uses

Not allowing uses that involve construction of buildings or public improvements can result in the use occurring elsewhere. Transfer of the use to a new location can result in the same or even greater environmental impacts on site, depending on the natural features of the new site,

its location, and the type of development or activity that is proposed. It is possible that the new site would require more infrastructure or improvements to service, thus resulting in greater impacts from construction of roads, utilities, and services.

MATRIX KEY:

ENV 1: Negative environmental impacts result from transferring development (and associated impacts) from a site where a conflicting use is prohibited to one where it is allowed.

iv. Energy Consequences of Prohibiting Conflicting Uses

One energy consequence of prohibiting natural resource based uses is increased use of energy for transporting raw materials to markets and consumers. For example, it requires less energy to transport logs from a harvesting site near a mill than from a site farther away. Similarly, transporting rock and aggregate materials to Portland from more distant locations requires more energy than from a source within the County.

Prohibiting resource based uses can result in a shortage of goods and services, such as lumber or produce, for construction or processing. Particularly with lumber and forestry products, limited availability can result in use of alternative, less energy-efficient building materials.

Prohibiting residential uses and development of community services and commercial areas can result in greater distances between local residents and the places where they work and purchase goods and services. If community services or commercial amenities are located farther from residents, they must drive greater distances to obtain these goods and services. Increased travel results in increased use of energy for transportation.

Greater distances between raw materials and processing, products and markets, and consumers and goods and services, can result in additional energy expenditure to construct needed roads, transportation facilities (such as transit centers), and infrastructure that may not be necessary if conflicting uses were allowed to occur.

MATRIX KEY:

ENRGY 1: Negative energy impacts result from increased use of energy for transporting raw materials to markets and consumers.

ENRGY 2: Negative energy impacts result from shortage of goods and services, such as lumber or produce, for construction or processing.

ENRGY 3: Negative energy impacts result from greater distances between local residents and the places where they work and purchase goods and services.

ENRGY 4: Negative energy impacts result from increased energy expenditure to construct additional roads, transportation facilities, and infrastructure to accommodate greater distance

between products and consumers.

v. Summary of ESEE Consequences -

A summary of ESEE consequences describing impacts on conflicting uses is included in Matrix 2. The matrix lists ESEE impacts by stream and conflicting use category.

c. Other Applicable Statewide Planning Goals

OAR 660-16-005(2) states: "The applicability and requirements of other Statewide Planning Goals must also be considered, where appropriate, at this stage of the process." The following additional Statewide Planning Goals apply to this ESEE analysis:

i. Goal 3 - Agricultural Lands

Goal 3 applies to those lands designated and zoned for Exclusive Farm Use. Portions of the three streams in the Howard Canyon Area run through lands designated and zoned for Exclusive Farm Use. This designation is intended to preserve and maintain agricultural lands. Limitations of agricultural uses in order to protect streams would result in a direct conflict between implementation of Goal 3 and Goal 5 of the Statewide Planning Program.

ii. Goal 4 - Forest Land

Goal 4 applies to those lands zoned Commercial Forest Use. All significant streams in the Howard Canyon Area run through lands designated and zoned as Commercial Forest Use lands. Forest operations, practices, and auxiliary uses are subject only to such regulation of uses as are found in ORS 527.722, which states that "no unit of local government shall adopt any rules, regulations, or ordinances or take any other actions that prohibit, limit, regulate, subject to approval or in any other way affect forest practices on forestlands located outside of an acknowledged urban growth boundary." Consequently, regardless of impacts forest practices may have on significant streams, the County cannot place restrictions on forest practices in areas designated and zoned as Commercial Forest Use lands.

iii. Goal 5 - Open Spaces, Scenic and Historic Areas, and Natural Resources

Direction from the Department of Land Conservation and Development staff, as part of the Remand Order, requires that only those Goal 5 resources that have been inventoried and determined to be significant are appropriate to be included within the ESEE analysis. Mineral & Aggregate Resources (the Howard Canyon Quarry site) has been deemed to be a use which conflicts with streams.

iv. Goal 6 - Air, Water, and Land Resources Quality

Goal 6 requires that, "All waste and process discharges from future development, when combined with such discharges...shall not (1) exceed the carrying capacity of such resources, con-

MATRIX 2.

HOWARD CANYON
ESEE CONSEQUENCES
Prohibiting Conflicting Uses - Impacts on Conflicting Uses

Stream	Forestry	Agriculture	Residential	Community Service	Mining	Transportation /Public Improvements
Big	-	ECON 1,2,4 SOC 1,2,3 ENRGY 1,2,4	ECON 3,4,5 SOC 4 ENV 1 ENRGY 3,4	ECON 4,5 SOC 4 ENV 1 ENRGY 3,4	-	ECON 2,4,5 ENRGY 4
Knieriem	ECON 1,2,4 SOC 1,2,3 ENRGY 1,2,4	ECON 1,2,4 SOC 1,2,3 ENV 1 ENRGY 1,2,4	ECON 3,4,5 SOC 4 ENV 1 ENRGY 3,4	ECON 4,5 SOC 4 ENV 1 ENRGY 3,4	ECON 1,2,4 SOC 1,2,3 ENRGY 1,2,4	ECON 2,4,5 ENRGY 4
Howard Canyon	ECON 1,2,4 SOC 1,2,3 ENRGY 1,2,4	ECON 1,2,4 SOC 1,2,3 ENV 1 ENRGY 1,2,4	ECON 3,4,5 SOC 4 ENV 1 ENRGY 3,4	ECON 4,5 SOC 4 ENV 1 ENRGY 3,4	ECON 1,2,4 SOC 1,2,3 ENRGY 1,2,4	ECON 2,4,5 ENRGY 4

MATRIX KEY:

ECON 1: Lost jobs, reduced tax revenues, and reduced revenue from the sale of goods and services.

ECON 2: Increased cost of transporting raw materials to markets or consumers, and providing services.

ECON 3: Decreased property value (for residential uses).

ECON 4: Increased cost resulting from regulations and standards that specify conditions under which an activity or use can occur.

ECON 5: Increased cost due to changes in customary practices or construction techniques.

SOC 1: Reduced income (from natural resource based activities) and possible "taking" of private property for public benefit.

SOC 2: Affecting or changing the way of life of families involved in natural resource based activities and industries.

SOC 3: Reduced or eliminated access to local sources of needed materials.

SOC 4: Reduced availability of amenities (both natural and man-made).

ENV 1: Transferring development (and associated impacts) from a site where a conflicting use is prohibited to one where it is allowed.

ENRGY 1: Increased use of energy for transporting raw materials to markets and consumers.

sidering long range needs; (2) degrade such resources; or (3) threaten the availability of such resources."

All of the impacts posed by various uses upon streams have a bearing on the water quality of such streams. To the extent that these conflicts can be resolved in a manner which preserves or enhances the existing water quality of these significant streams, such resolution would be in conformance with the requirements of Goal 6.

In addition, Clean Water Act requirements may affect proposed conflicting uses. As noted, Goal 6 requires that all waste and process discharges from future development, combined with those from existing development, not threaten to violate or violate state or federal environmental quality statutes.

v. Goal 7 - Areas Subject to Natural Disasters and Hazards

Goal 7 requires "Developments subject to damage or that could result in loss of life shall not be planned nor located in known areas of natural disasters and hazards without appropriate safeguards." Pursuant to this Goal, the Multnomah County Comprehensive Framework Plan has identified areas of Natural Hazards in the West Hills which are the result of steep slopes, unstable geological and soil conditions, erosion potential and stream flooding.

Many of the impacts posed by various uses upon streams have a bearing on the capacity of these streams to instigate flooding and siltation problems to downstream areas. To the extent that these conflicts can be resolved in a manner which minimizes the flood and siltation hazard potential of streams, they would be in conformance with the requirements of Goal 7.

vi. Goal 9 - Economic Development

Goal 9 calls for adequate opportunities for a variety of economic activities in the state. Opportunities for local businesses and industries that process local resources and serve local residents may be limited because of their conflicts with significant streams.

vii. Goal 10 - Housing

Goal 10 focuses on providing housing types to meet needs within urban growth boundaries. It indicates that ordinances and incentives should be used to increase population densities in urban areas rather than rural areas such as the Howard Canyon significant streams sites.

6. SUMMARY

a. General Conclusions

The consequences of not protecting significant streams are primarily environmental in nature, while the consequences of prohibiting or limiting conflicting uses in order to preserve significant streams are primarily economic, social, and energy in nature.

b. Synopsis of ESEE Consequences

Consequences if Forestry is not allowed:
Economic: Lost jobs, reduced tax revenues, increased transport costs
Social: Reduced property rights, end of "timber" lifestyle, no more local sources
Environmental: Insignificant
Energy: More energy use for transporting materials & building infrastructure, shortage of goods

Consequences if Forestry is allowed in a limited manner:
Economic: Regulatory burden, potential for some los jobs, tax revenues
Social: Reduced property rights, impact on "timber" lifestyle, reduced local sources
Environmental: Insignificant
Energy: Some increase in energy use for transporting materials to market, shortage of goods

Consequences if Forestry is fully allowed:
Economic: Reduced water quality for use, change in water quantity for use
Social: Loss of flood storage capacity
Environmental: Loss of riparian vegetation, reduced water quality
Energy: Insignificant

Consequences if Agriculture is not allowed:
Economic: Lost jobs, reduced tax revenues, increased transport costs
Social: Reduced property rights, end of farming lifestyle, no more local sources
Environmental: Transferring environmental impacts to another site
Energy: More energy use for transporting materials & building infrastructure, shortage of goods

Consequences if Agriculture is allowed in a limited manner:
Economic: Regulatory burden, potential for some lost jobs, tax revenues
Social: Reduced property rights, impact on "timber" lifestyle, reduced local sources
Environmental: Transfer of some environmental impacts to another site
Energy: Some increase in energy use for transporting materials to market, shortage of goods

Consequences if Agriculture is fully allowed:
Economic: Reduced water quality for use, change in water quantity for use
Social: Insignificant
Environmental: Loss of riparian vegetation, reduced water quality, greater wildlife disturbance
Energy: Insignificant

Consequences if Residential Use is not allowed:
Economic: Decreased property value
Social: Reduced availability of amenities
Environmental: Transferring environmental impacts to another site
Energy: Greater distance between destinations, increased cost of infrastructure

Consequences if Residential Use is limited:
Economic: Regulatory burden, changes in customary practices
Social: Reduced availability of amenities
Environmental: Transferring environmental impacts to another site
Energy: Insignificant

Consequences if Residential Use is fully allowed:
Economic: Insignificant
Social: Insignificant
Environmental: Loss of riparian vegetation, loss of water quality, more disturbance of wildlife
Energy: Insignificant

Consequences if Community Service Uses are not allowed:
Economic: Changes in customary practices
Social: Reduced availability of amenities
Environmental: Transferring environmental impacts to another site
Energy: Greater distance between destinations, increased cost of infrastructure

Consequences if Community Service Uses are limited:
Economic: Regulatory burden, changes in customary practices
Social: Reduced availability of amenities
Environmental: Transferring environmental impacts to another site
Energy: Insignificant

Consequences if Community Service Uses are fully allowed:
Economic: Insignificant
Social: Insignificant
Environmental: Deterioration of water quality, increased disturbance of wildlife
Energy: Insignificant

Consequences if Mining is not allowed:
Economic: Lost jobs, reduced tax revenues, increased transport costs
Social: Reduced property rights, no more local sources
Environmental: Insignificant
Energy: More energy use for transporting materials & building infrastructure, shortage of goods

Consequences if Mining is allowed in a limited manner:
Economic: Regulatory burden, potential for some los jobs, tax revenues
Social: Reduced property rights, impact on "timber" lifestyle, reduced local sources
Environmental: Insignificant
Energy: Some increase in energy use for transporting materials to market, shortage of goods

Consequences if Mining is fully allowed:
Economic: Insignificant
Social: Insignificant
Environmental: Loss of riparian vegetation, deterioration of water quality
Energy: Insignificant

Consequences if Transportation/Public Improvements are not allowed:
Economic: Increased cost of material transport, changes in practices
Social: Insignificant
Environmental: Insignificant
Energy: Increased energy expenditure on infrastructure

Consequences if Transportation/Public Improvements are allowed in a limited manner:
Economic: Increased cost of material transport, regulatory burden, changes in practices
Social: Insignificant
Environmental: Insignificant
Energy: Increased energy expenditure on infrastructure

Consequences if Transportation/Public Improvements are fully allowed:
Economic: Insignificant
Social: Loss of education & recreation associated with wildlife habitat
Environmental: Loss of riparian vegetation, loss of water quality, more disturbance of wildlife
Energy: Insignificant

APPENDIX A

INVENTORY/SIGNIFICANCE ANALYSIS

PREPARED BY SRI/SHAPIRO

INVENTORY/SIGNIFICANCE ANALYSIS

INTRODUCTION

Inventories have been completed for streams in the Howard Canyon Area. The inventory profiles address location, quality, and quantity consistent with Statewide Planning Goal 5 requirements. The inventory is part of the Multnomah County Significant Streams study. Stream profiles are mapped and organized by planning area. Maps indicate which stream reaches were inventoried.

Stream profile sheets include the location and the length of stream inventoried. The profiles provide information on economic use based on water rights data. The profiles address educational, recreational, and public safety issues. Natural resource values are addressed in terms of Stream Class, threatened and endangered species information, wildlife habitat assessment information and riparian vegetation. A qualitative description of each stream is also provided.

The significance criteria is addressed in a matrix format. If any of the criteria are is satisfied, the stream is considered significant and a Goal 5 analysis is conducted. If the stream does not meet the criteria, an ESEE analysis under Goal 5 is not prepared and no further action is required or appropriate under Goal 5. These streams are not included on the Plan Inventory for Goal 5 purposes.

The significance analysis is conducted on a stream by stream basis. Because a stream's tributaries contribute to the health, quality, and significance of the whole stream, individual tributaries are examined collectively. Field data was collected along individual stream segments, but the data has been consolidated for purposes of this evaluation. The limitations of this process are that data is averaged and segments of exceptionally high quality or exceptionally low quality may be over looked. The advantage of this process is that streams are examined as a whole and are not fractured into small segments that may include highly conflicting data. It should be noted that water seasonality is based on USGS mapping. Canopy cover is "winter canopy." In areas with a deciduous overstory component, "summer canopy" cover could be significantly higher.

SIGNIFICANCE CRITERIA

Policy 16-G sets forth the criteria for determining significance of water resources and wetlands. The methodology followed for use of the criteria is described below.

A. Economic Value

Strategy A of Policy 16-G states that sites should be designated significant "if any use of the water resource can be shown to be feasible for use in significantly increasing a specified economic activity or function or substantially increasing the economic value of the land through which the waters flow".

To assess economic significance, we analyzed surface water rights for properties along the streams. A list of surface water rights was obtained from the Oregon Water Resources Department. The list of relevant permits is included as part of the stream profile. The rate or quantity of water being diverted and the use of the water is noted. All uses, including domestic use, are assumed to provide an economic benefit to the user.

B. Recreation Value

Strategy B of Policy 16-G states that a water resource should be designated significant if:

1. The resource lies within the boundaries of a public park or recreation facility and the resource is an integral part of the facility's recreational activities; or

2. The resource contributes water to a park or recreation facility and diversion or degradation of the resource would significantly diminish the recreational value of the resource.

Park and recreation facilities along stream segments and downstream were documented. The role of the water resource in regard to the recreational activity was noted. For example, boating or fishing activities are water based and diversion and degradation of the water resource would clearly diminish the recreational quality of the resource.

C. Educational Value

Strategy C of Policy 16-G states that water resources should be designated significant if they have been identified as being ecologically or scientifically significant by the Oregon Natural Heritage Program or if the resource is used for public educational purposes.

Sue Vrilakas, botanist and data manager for the Oregon Natural Heritage Program conducted a data system search of the West Hills Rural Area for rare, threatened, and endangered plant and animal species. The search, completed on February 22, 1994, identified 34 records in the general vicinity but only four records were within the watersheds for the streams being studied. The existence of the significant sites is noted on the inventory profile sheets but detailed locations are not provided due to the confidential nature of the data.

Ron Klein of the Metro Greenspaces program was contacted regarding public educational activities. Ron provided information on streams that have been used for classes offered by the Portland Audubon Society and for public and private school classes sponsored through the Green City Data grants program.

D. Public Safety

Policy 16-G includes strategy D which states that sites and resources should be designated significant in the following cases:

1. The water resource is within the Watershed Management Unit of an existing or proposed municipal water source; or

2. The water resource is part of the groundwater area for a municipal water supply; or

3. The water resource and surrounding lands are flood storage areas which if altered would increase the frequency or height of floods downstream.

Strategy D also addresses water quality in terms of the significance of the riparian vegetation associated with the water resource.

To document water source information, the cities of Portland, Beaverton, Hillsboro, and Scappoose were contacted. Staff at each city indicated that the study area streams were not part of the respective municipal water supply systems.

In regard to flood storage, field inventories documented whether wetlands were associated with the streams. The number of wetlands and the approximate size of wetlands were noted. Depending on the size of the wetland and the form of the stream channel, wetlands may provide water storage capacity that will reduce the intensity of a storm event. When streams and wetlands provided this function, a determination of significance was made.

In regard to water quality and riparian vegetation, the width of the riparian corridor was documented in the field and canopy cover was noted. The inventory profiles provide the average maximum width of the corridor. If 75% of the stream length had canopy cover that was less than 25%, the riparian vegetation was determined to be insignificant and have little positive influence on water quality. If greater canopy cover was provided, the riparian area was considered significant. If field surveyors were unable to inventory at least two-thirds of the length of a stream within the county, the relationship of riparian vegetation and water quality could not be established with confidence. For this reason, if a stream appears to meet the canopy cover criteria, it is considered significant only if more than two-thirds of the stream was inventoried.

E. Natural Area Value

Strategy E of Policy 16-G addresses the natural area value of the resource. Sites are considered significant if they are designated Class 1 by the Oregon Department of Forestry, if the area is the habitat of a threatened or endangered species or if a Wildlife

Habitat Assessment form has been completed and the site scored 45 or more points. A site may also be considered significant if it scores between 35-44 and it provides an essential connection between or enhances adjoining higher rated areas.

As part of the inventory Class 1 waters were documented and noted on inventory forms. If any portion of the stream within the County is designated Class 1, the stream was considered significant.

As noted under Educational Value, above, the Oregon Natural Heritage Program data base was searched for rare, threatened and endangered plant and animal species. Inventory forms identify whether sites were identified. Due to the confidential nature of the data, details are not provided.

Wildlife Habitat Assessment forms were completed for segments along each stream at two/tenths of a mile intervals. The data is summarized in a table following each of the profile forms. Streams averaging 45 points and above were considered significant resources. Sites with WHA scores between 35-44 points were designated significant if they function as "essential connections or demonstrably enhance higher rated adjacent areas." The scope of this study was limited to the stream channel area and only addresses connections and enhancement within a given stream channel. Connections or enhancement to upslope areas were not considered.

For the purposes of this report, a riparian area is comprised of an aquatic ecosystem and associated upland area. Water in the aquatic ecosystem influences upland vegetation and microclimate. Upland areas affect the aquatic ecosystem by providing thermal regulation, biomass, and structure.

SIGNIFICANCE MATRIX

The Significance Matrix summarizes the findings and research documented on the profile sheets. The matrix is designed so that a yes - no answer is provided when the county significance criteria are satisfied. The conclusion is based on whether the threshold for significance has been met.

SIGNIFICANCE MATRIX – Study Area: Howard Canyon

CRITERIA:	STREAMS: Big	Howard Canyon	Knieriem
ECONOMIC:			
Water Rights Permits	Y	Y	Y
RECREATION:			
Within Park/Rec. Facility	N	N	N
Contributes water to Park/Rec. Facility	Y	Y	Y
EDUCATION:			
Designated significant by the Oregon Natural Heritage Program	N	N	N
Used for public education	N	N	N
PUBLIC SAFETY:			
Within Watershed Management Unit	N	N	N
Groundwater Recharge for Municipal Supply	N	N	N
Flood Storage Function	Y	Y	Y
Riparian Zone Water Quality Benefits	N	Y	N
NATURAL AREA VALUE:			
Designated Class 1	Y	Y	Y
Habitat of an Endangered or Threatened Species	N	N	N
Wildlife Habitat Assessment Score			
If > 44 points – considered significant	N	Y	Y
If 35–44 points, essential connections are provided	Y	–	–
CONCLUSION: Significant	Y	Y	Y

Key:	
Y – Yes	I – Incomplete
N – No	NA – Not Applied

BIG CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: Howard Canyon

Length Inventoried: 5,124 ft

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 6,000 ft

Area of Watershed in Multnomah County: 4,134 acres - Includes Knieriem and Howard Creek drainages.

Abutting Land Use Designations (percent of study area stream length):

	Exclusive Farm Use	Commercial Forest Use	Rural Residential
Big Creek	15%	70%	15%

Stream Description:

The survey started at the west side of the bridge where the stream crosses Littlepage Road and ended where the stream creates a 90 ft falls. There was no safe way of continuing the survey past this point. The mouth of the stream could not be located in the amount of time allowed.

Big Creek was severely impacted by housing and pasture land. Over half of the surveyed area had paved roads adjacent to the stream. Streamside vegetation was degraded and cover was minimal in most areas. In some parts of the riparian area natural vegetation was present. There were at least two obvious withdrawal sites with pipes in the stream and a landowner told us how he had confronted another neighbor about gravel removal from Big Creek. Much of the creek contained potentially good gravel cobble. The flow of the stream was fast enough for good aeration.

Section one runs along Littlepage Rd. The first half of this section has some riffles and deep areas that could count as pools. It even contained some backwater areas. The stream is wide, average 35 feet, consisting mainly of runs. There is woody debris in the first half of this section along with trees and shrubs that have been recently uprooted, see photos. Banks are undercut or have silt build up. However,in the first half there is some cover and groundcover is more natural.
The second part of section one is closer to the road and more severely impacted by housing and pastures. What over there is, is brushy and grass runs up to stream. Banks are often bare and muddy. Animals have unrestricted access to stream. There are good gravels in this section, though somewhat embedded.

Section two continues to look like the last half of section one. Pasture is dominant and cover is minimal. Parts of the creek are fenced off to limit animal access. Alders and cedars provide some cover toward the end of this section. Banks not well covered and show signs of erosion, see photos.

Stream fairly uniform but in some places depths can reach hip boot level. Flow is steady, not many pools or riffles, mostly runs.

Section three had better cover from cedar trees. Much of the groundcover continues to be lawn grass. First part of the section is pasture. There is a fence and blackberry brambles form a partial barrier to animal access. Second half of this section almost looks like a park with evidence of horse use. Some intrusive plants in area like English ivy and Himalayan blackberry and non-native holly trees. Large area of banks are bare.

There is a pumping station by a modern-looking brown house. This house also has a tire structure to enforce landscape. There looks like there might be some construction in this area. There are some boulder and riffle areas in this section.

Section four is characterized by change in gradient. Rapids instead of riffles are evident. Boulders make up the major part of the substrate. Houses on both sides of the creek still impact area and there seems to be another pumping station right by small falls. Creek entering Big Creek from the south side had cattle in and around it. There are steep hillsides but surrounding area is still pasture and houses. Some woody debris in and around streams but not much. Landslide area in this section. Canyon walls provided the majority of shade in this area.

Section five had natural riparian vegetation and cover. More evidence of landslide. Cover is shrubby consisting of flowering currant and willows; trees include some cedar, with more Douglas fir. There is more woody debris in this area than before. Springs and tributaries coming in from both sides of canyon. Predominant plants are sword fern, piggyback, bleeding hearts, and oxalis.

Substrate along this section was bedrock and boulders. Water very fast with a 90ft falls at about 900ft into section. Banks showed large areas of wearing away and, as mentioned, there was landslide by the falls where the survey ended.

ECONOMIC

DWR Water Rights Data:

Permit Number	Location	Use	Rate/Quantity
S8927	SWSE 2 1S4E	Domestic	.0500 CFS
S12596	SESW 2 1S4E	Domestic (incl. lawn & garden)	.0100 CFS
S16233	SWNE 2 1S4E	Irrigation	.0600 CFS
S22546	SWSW 35 1N4E	Irrigation	.0700 CFS
S22539	NESW 2 1S4E	Irrigation	.3000 CFS
S24926	SESE 3 1S4E	Irrigation	.4600 CFS
S22535	SWSW 2 1S4E	Irrigation	.2500 CFS
S24053	SWSW 2 1S4E	Irrigation	.1600 CFS
S37747	SWSE 2 1S4E	Irrigation	.0200 CFS
S39817	SWSE 2 1S4E	Domestic	.0050 CFS
S39817	SWNE 2 1S4E	Irrigation	.0400 CFS
S39817	SWNE 2 1S4E	Livestock	.0050 CFS

RECREATION

Park/Recreational Facility: Big Creek drains to the Sandy River. The creek meets the river at Camp Collins, a private YMCA camp adjacent to Oxbow County Park. The Sandy flows downsream through Dabney State Park and Lewis and Clark State Park.

EDUCATIONAL

Oregon Natural Heritage Program - significance designation: None

Public Educational Use: None identified

PUBLIC SAFETY

Within a Watershed Management Unit: N/A

Groundwater Recharge for a Municipal System: N/A

Flood Storage Area:

Number of wetlands/ approximate size: Small wetlands adjacent to stream.

Flood Storage Capacity: Small increase in storage capacity beyond that of the immediate stream channel.

Riparian Corridor: see attached table

Average Width: 126 ft

Range of Width: 80-200 ft

Benefit to Water Quality: The current low level of low canopy cover will allow seasonal increases in water temperature and may result in higher peak flow levels. Stream cover is insufficient to be a benefit to water quality.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 100%

Threatened and Endangered Species data: N/A

Wildlife Habitat Assessment: (see attached table) Wildlife Habitat quality is directly related to water quality activities.

Average score: 42

Range of scores: 39-49

Essential Connections: Wildlife habitat quality is directly related to water quality and seasonality. High water quality is essential for survival, growth, reproduction, and migration of species present in aquatic and riparian communities. Overstory removal and other activity can alter the amount and timing of streamflow by changing on-site hydrologic processes. This can result in increased sediment transport, higher peak flows and lower summer water levels, which would negatively influence the riparian habitat quality. The water quality created by upstream conditions should maintain the downstream areas at the current habitat quality.

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA: Howard Canyon

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Big Creek	1	8	6	4	4	3	3	2	3	2	2	1	1	1	0	40
Big Creek	2	8	6	5	4	3	3	2	3	3	2	0	0	2	0	41
Big Creek	3	8	6	4	3	3	3	2	3	3	2	0	0	2	0	39
Big Creek	4	8	6	7	3	5	4	2	4	4	2	1	0	3	0	49
Big Creek	5	8	6	5	2	3	3	2	3	3	2	2	2	2	0	43
AVERAGES		8.0	6.0	5.0	3.2	3.4	3.2	2.0	3.2	3.0	2.0	0.8	0.6	2.0	0.0	42.4

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width of Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0–25%	25–50%	50–75%	75–100%
Big Creek	1	50	80	X			
Big Creek	2	20	100	X			
Big Creek	3	30	50	X			
Big Creek	4	50	50	X			
Big Creek	5	100	100		X		
AVERAGES		50.0	76.0	80%	20%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

HOWARD CANYON CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: Howard Canyon

Length Inventoried: 15,840 ft

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 17,000 ft + 8,000 ft for two unsurveyed tributaries.

Area of Watershed in Multnomah County: 1,575 acres

Abutting Land Use Designations (percent of study area stream length):

	Exclusive Farm Use	Commercial Forest Use	Rural Residential
Howard Canyon	20%	80%	0%

Stream Description:

The survey started from the confluence with Big Creek at Littlepage Road. The first seven sections have housing and pasture lands adjacent to stream. Where there is pasture, animals for the most part have unrestricted access and at the time this survey was done, cattle were actually seen in the stream. Streamside cover is of moderate quality and density near houses and pasture cover was sparse to none. Banks along this area were eroding with large pieces of bank falling off into stream because of a storm event.

The start of the Howard Canyon Creek survey was arbitrary and assigned to Littlepage Road. This is how the data sheets and this report will reference the stream, however, the first section could be assigned as Big Creek and the first 400 ft of section two could also be assigned as Big Creek.

Sections 8-12 showed many small springs coming from north side of road. At least 12 small tributaries formed from springs crossed under road via culvert. These springs usually corresponded to adjacent wetlands along the main stream. These sections were also characterized by large cedars, cedar snags and large downed woody debris on hillside and in stream.

Section 1 started at bridge where stream crosses under Littlepage Road. Most of section one was landscaped front yard of house. Large cedars provided cover along with salmonberry, red alders, and willows for shrub layer. In front of house groundcover was mostly grass but other groundcover was more natural like piggyback, sword fern, buttercup, English ivy, and Himalayan blackberry. Area that was not house yard had good natural cover. Toward end of section there was a small wetland area that had dense, tall horsetails. Substrate in this area was composed of mainly cobble and gravels. Typical banks were silt with some cover. The water in this system even after flood event contained suspended material, however the substrate did not seem severely embedded.

Section two consisted mostly of pasture for cows and possibly horses. Animals had unlimited access to stream and there were severe erosion problems and bank degradation. Cover was minimal to non-existent. There was evidence of vehicle traffic through stream via mud road. Pasture drained directly to stream. Substrate consisted of cobbles and gravels. No pools were evident at time of sampling.

Section three was continuation of section two. Pasture with unrestricted access to stream by animals. Some cover was provided by brushy alders and willows. Severe bank erosion. Saw rivulets coming from pasture into stream during storm event. Substrate still a mixture of gravel and cobbles.

Section four at the beginning has pasture with cows in stream. Stream is culverted and crosses Howard Road. This section has new construction, trailer house, and outbuildings on it. Much of the bank around houses is garden area and grass. Steep mud bank on new construction site. Man-made pond in same area between new house and trailer house. Cover is provided by hillside and sparse trees. Stream consists of runs and some riffles. Substrate continues to be gravel and cobble.

Section five has structures close to stream but the cover is more natural. Thick blackberry brambles prevent access to stream first 400ft. Howard Road is still running parallel to stream but further away than downstream sections. Trees consist of cedar, red alder, big leaf maple. Shrub layer is made up of alder, willows, and salmonberry. Groundcover is blackberry, waterleaf, piggyback, sword fern. Small wetland appears toward end of this section. There is a side gravel road that heads north off Howard Road that has large dump truck traffic.

Section six starts with a house and outbuildings. Grass runs down to streamside and front of house has large cement patio area. Cover here is cedar, hemlock and alders predominantly. Large snags and large down woody debris along banks make good habitat. Very brushy along streamside after the house, made up of salmonberry, willow, small red alder, and blackberry. Noticed some 12-inch cedar seedlings growing along streamside in this section. Groundcover upstream from house consists of sword fern, licorice fern, oxalis, nettles, phalaris.

Garbage dumped adjacent to stream severe in one area where the road is fairly close to stream. Some pools in this area but hard to tell because of level of water. Lots of large and small woody debris in and around stream. Substrate appeared to be mostly cobble and gravel.

Section seven has more tributaries coming in on both sides of the creek allowing for better developed wetlands on either side of creek. Big cedars across stream, along bank and standing snags. Looks like a fire went through this section some years back. Cover came from cedars, hemlock, Douglas fir, red alder. shrub layer consisted of willow, salmonberry, vine maple, and small red alders.

Besides wetlands alongside stream there were mud bars or silt build up. Substrate when visible was cobble and gravel. This section had some good riffles and lots of down woody debris.

Section eight is similar to section seven but the brush is not so dense. Snags are smaller and there is more down woody debris in and around stream. More moss and groundcover consists of sword fern, bracken fern, licorice fern, oxalis, iris, nettles, piggyback, devil's club. Cedar, hemlock, red alder still predominant tree cover and shrubs still salmonberry, willow with some blackberry.

Section nine is similar to last two sections. Most of the same plant species with good assortment of liverworts on bank in evidence. Still lots of good moss and to groundcover add bleeding heart and mullen. Possibly more hemlocks in this area and black cottonwoods added to cedar, red alders as tree layer. There are more small tributaries coming in and more wetlands on both sides of creek. Wetlands have skunk cabbage. Cedar and deciduous snags and down woody debris in and around stream still common. Shrub layer not as dense as previous sections made up of willow, salmonberry, not as much blackberry. Substrate is gravel and cobble with gravel bars along side. Also have island in stream to add to diversity.

Section ten looks comparable to sections seven through nine. New feature in this section are the islands in the stream adding to the diversity of habitat. Most of these islands are 10ft wide and 20ft long. There are several in this section. Not as many large snags, but still some smaller deciduous snags. Less brush in this section. There seems to be less tributaries and correspondingly less wetlands. Half way through section there is a dirt road that crosses stream that is used, possible house(s) on south side of creek that use road. Banks in this section appear more undercut with possible erosion potential. Substrate silt, gravel and cobble.

Section eleven has more conifer cover with cedars being the dominant tree. Stream receives good shade from trees and down woody debris in stream. Tributaries, springs, and wetlands are back in this section. Stream has good diversity with pools, backwater, runs and riffles. Plants stay about the same with moss and liverworts in wet and shady areas. Substrate still gravel and cobble with more sand, silt still present.

Section twelve is similar to eleven but less riffles and pools. Tributaries and wetlands on both sides of stream. Cover is still good. There is more silt in stream though it is usually in isolated areas or near stream bank. Gravel and cobble does not seem to be severely embedded. Not as much large woody debris but still plenty of small woody debris in and around stream.

Section thirteen has the faster riffles back like in section eleven. Sections eleven, twelve and thirteen are very comparable in cover and plant species. Still have liverworts and moss, sword fern, piggyback. Shrub layer is still dense with dominant plant species being salmonberry and willow. Large cedars present but not as numerous as in eleven. Not as many wetlands but tributaries and wetlands are still present. Snags, woody debris in and around streams add to habitat dimensions. Substrate embeddedness is minimal.

Section fourteen at the beginning has skunk cabbage wetlands. Trees do not seem as old and cover is less. More brushy with smaller snags than in previous sections. No new plant species. There is still down woody debris in and around stream but not as common. This is the first section that has had boulders except for pasture in first section. Stream more uniform. Banks are undercut.

Section fifteen is where the fork in stream is. This survey chose the stream on left looking upstream. Other stream headed south and quickly disappeared from sight. Both streams looked similar in flow. Wetlands and tributaries drop out in this section. Plant species stay the same except no liverworts and less moss. Add deer fern to plant list. Very shrubby, predominantly willow. There is still woody debris in and around stream, but not as common. Trees and woody debris much smaller in diameter. Substrate still gravel and cobble with silt in isolated areas. Stream continues on.

ECONOMIC

DWR Water Rights Data:

Permit Number	Location	Use	Rate/Quantity
S22539	NESW 2 1S4E	Irrigation	.3000 CFS

RECREATION

Park/Recreational Facility: Howard Canyon Creek flows into Big Creek which drains into the Sandy River. Big Creek meets the Sandy River at Camp Collins, a private YMCA camp adjacent to Oxbow County Park. The Sandy flows downstream through Dabney State Park and Lewis and Clark State Park.

EDUCATIONAL

Oregon Natural Heritage Program - significance designation: None

Public Educational Use: None identified

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage Area:

Number of wetlands/ approximate size: Eleven - small to medium size wetlands adjacent to stream.

Flood Storage Capacity: The wetlands provide greater flood storage capacity than the stream channel alone. They are spread out over the length of the stream and will also mitigate flow rates.

Riparian Corridor: see attached table

Average Width: 150 ft

Range of Width: 10-200 ft

Benefit to Water Quality: Present canopy cover is sufficient to increase water quality by maintaining stream temperature and mitigate peak flows.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 100%

Threatened and Endangered Species data: None

Wildlife Habitat Assessment: see attached table

Average score: 55.4

Range of scores: 22-73

Essential Connections: N/A

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA: Howard Canyon

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water: A	B	C	D	Food: E	F	G	Cover: H	I	J	Additional Values: K	L	M	N	TOTAL SCORE
Howard Canyon Creek	1	8	6	6	4	5	5	3	6	6	3	1	1	3	0	57
Howard Canyon Creek	2	8	6	1	3	1	1	1	1	1	1	0	0	1	0	25
Howard Canyon Creek	3	8	6	0	2	0	1	1	1	1	1	0	0	1	0	22
Howard Canyon Creek	4	8	6	3	2	2	2	2	2	2	2	0	0	1	0	32
Howard Canyon Creek	5	8	6	6	4	5	6	3	6	6	3	2	2	3	0	60
Howard Canyon Creek	6	8	6	7	4	5	7	3	6	6	3	2	2	3	0	62
Howard Canyon Creek	7	8	6	7	5	4	5	3	7	7	3	2	2	3	0	62
Howard Canyon Creek	8	8	6	7	4	6	7	3	6	6	3	2	2	3	0	63
Howard Canyon Creek	9	8	6	6	5	4	6	3	6	5	3	3	3	5	0	63
Howard Canyon Creek	10	8	6	6	4	6	6	3	6	6	3	2	2	4	0	62
Howard Canyon Creek	11	8	6	7	7	7	7	3	7	7	3	2	3	6	0	73
Howard Canyon Creek	12	8	6	6	7	7	7	3	6	6	3	2	2	5	0	68
Howard Canyon Creek	13	8	6	6	6	6	6	3	6	6	3	3	3	5	0	67
Howard Canyon Creek	14	8	6	5	6	6	6	3	4	5	3	3	4	4	0	63
Howard Canyon Creek	15	8	6	4	3	4	4	2	4	4	2	4	4	3	0	52
AVERAGES		8.0	6.0	5.1	4.4	4.5	5.1	2.6	4.9	4.9	2.6	1.9	2.0	3.3	0.0	55.4

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY STUDY AREA: Howard Canyon

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width of Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0–25%	25–50%	50–75%	75–100%
Howard Canyon Creek	1	100	100		X		
Howard Canyon Creek	2	0	100	X			
Howard Canyon Creek	3	0	10	X			
Howard Canyon Creek	4	100	10	X			
Howard Canyon Creek	5	100	60		X		
Howard Canyon Creek	6	100	50		X		
Howard Canyon Creek	7	100	60		X		
Howard Canyon Creek	8	100	50		X		
Howard Canyon Creek	9	100	90		X		
Howard Canyon Creek	10	100	50		X		
Howard Canyon Creek	11	100	50		X		
Howard Canyon Creek	12	100	50		X		
Howard Canyon Creek	13	100	70		X		
Howard Canyon Creek	14	100	100		X		
Howard Canyon Creek	15	100	100	X			
AVERAGES		86.7	63.3	27%	73%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

KNIERIEM CREEK
Stream Profile

GENERAL INFORMATION

Location Study Area: Howard Canyon

Length Inventoried: 12,670 ft

Estimate of Total Length - main branch and tributaries in Multnomah County (excludes extensions out of County): 12,670 ft

Area of Watershed in Multnomah County: 1,185 acres

Abutting Land Use Designations (percent of study area stream length):

	Exclusive Farm Use	Commercial Forest Use	Rural Residential
Knieriem Creek	15%	85%	0%

Stream Description:

Knieriem Creek in general is impacted by housing, roads running alongside and lack of cover. Large trees are minimal in the area. The diversity of different water habitats in the sections are low, tending mostly toward runs with few pools and riffles. Substrate is embeddded and consists predominantly of silt. The water is murky and banks show signs of erosion.

Knieriem Creek has two areas of severe impacts to the stream and riparian area. The first two sections, starting at the mouth where Knieriem Creek and Howard Canyon Creek meet, run through pasture. Animals have direct access to stream and there is little or no riparian vegetation. The stream also looks channelized.

The second major area of concern is near the source. There is dense housing for a rural area at the end of Salzman Road off the Crown Point Highway. A private gravel drive leads across the stream. To the east there is stream diversion, ponding and clearing of riparian vegetation.

Section one Knieriem Creek meets Howard Canyon Creek in pasture next to Howard Road. There is no cover and cattle have unrestricted access to stream. Banks show severe signs of erosion and in places stream is channelized.

Section two has pasture and houses alongside the creek. Cover is minimal consisting mainly of willows and Himalayan blackberry brambles. There is a pond adjacent to stream, great blue heron and mallards were sighted there.

Section three has better tree cover than the previous section, still sparse. Wetlands adjacent to streamside. Stream substrate predominantly silt in this section. Banks show some signs of erosion. Some woody debris in stream.

Section three has woody debris in and around stream. Gravels are present but embedded. Wetlands are adjacent to stream. Knieriem Road runs 20-30ft away from stream. Cover is better in this area with some conifers.

Section four similar to section three. Banks show signs of erosion. Cover is still sparse but there are tress and woody material is present in and around stream. Wetlands present both sides of stream.

Section five single family dwelling with much clearing and construction started in this section. Land scraped clean down to stream. There is a gravel road that crosses and continues alongside the stream and up hill. English ivy is present around construction area. Stream heavily silted.

Section six has three noticeable tributaries entering stream. There is housing at downstream and upstream portions of section. Stream itself has more diversity. Riffles are better developed and there are boulders. Banks still show signs of severe erosion. Cover is better, and there is woody debris in and around stream. Wetlands are present but not common.

Section seven has brushy cover with some trees. Pond and better developed wetlands in this section. Some woody debris in stream and snags along riparian area. House and pasture impacts section at downstream beginning.

Section eight similar to sections six and seven. Hillside provides shade and there are more trees in riparian area. Several springs enter creek in this section. Substrate still silty and gravels embedded.

Section nine has grassy road leading down to stream from hill. Hillside has sparse vegetation with possibility of pasture and construction above horizon. Creek extremely turbid. Bank erosion evident. Some tree cover. Silt built up alongside stream. Dominant substrate still silt.

Section ten is transition between nine and eleven. Few conifers and cover is sparse. Water is very silty, noticed abrupt change around 700ft into section where water cleared. Could not locate source of turbidity. Possible construction on hilltop. Bank erosion still evident.

Section eleven is most natural section. Cover is thicker with more sword ferns. There is a footpath that follows creek from gravel road at end of this section down through section eight. Small wetlands adjacent to stream. Man-made pond runs alongside stream for about 120ft and is 30ft wide. Pond receives shade form hillside and trees.

Section twelve highly impacted by housing and construction. Stream has been diverted to make two pond areas. Trees have been cut and riparian area cleared. Segment outside construction area is brushy and substrate is silty. Flow is mostly runs. Banks eroded and covered with silt.

ECONOMIC

DWR Water Rights Data:

Permit Number	Location	Use	Rate/Quantity
15917	NENE 2 1S4E	Irrigation	.8700 CFS
40933	NENE 2 1S4E	Irrigation	.0600 CFS
40933	NENE 2 1S4E	Livestock	.005 CFS

RECREATION

Park/Recreational Facility: Knieriem Creek flows into Big Creek which drains into the Sandy River. Big Creek meets the Sandy River at Camp Collins, a private YMCA camp adjacent to Oxbow County Park. The Sandy flows downstream through Dabney State Park and Lewis and Clark State Park.

EDUCATIONAL

Oregon Natural Heritage Program - significance designation: None

Public Educational Use: None identified

PUBLIC SAFETY

Within a Watershed Management Unit: No

Groundwater Recharge for a Municipal System: No

Flood Storage Area:

Number of wetlands/ approximate size: Five adjacent to stream channel.

Flood Storage Capacity: The wetlands provide greater flood storage then the stream channel alone. They are spread out over the length of the stream and will also mitigate flow rate and reduce erosion.

Riparian Corridor: see attached table

Average Width: 10 ft

Range of Width: 0-160 ft

Benefit to Water Quality: Canopy where it exists is predominantly deciduous - it will mitigate summer temperatures to maintain summer stream temperatures.

NATURAL AREA

Class I Stream Designation:

% of stream within county designated as Class I: 100%

Threatened and Endangered Species data: None

Wildlife Habitat Assessment: see attached table

Average score: 51
Range of scores: 30-72

Essential Connections: N/A

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY STUDY AREA: Howard Canyon

RIPARIAN CORRIDOR

STREAM NAME	SITE NO.	Width of Rip. Corridor*		Extent of Overhead Canopy:			
		Left (ft)	Right (ft)	0–25%	25–50%	50–75%	75–100%
Knieriem Creek	1	0	0	X			
Knieriem Creek	2	10	10	X			
Knieriem Creek	3	60	80	X			
Knieriem Creek	4	100	30	X			
Knieriem Creek	5	50	20	X			
Knieriem Creek	6	80	50	X			
Knieriem Creek	7	80	60	X			
Knieriem Creek	8	60	60		X		
Knieriem Creek	9	50	80	X			
Knieriem Creek	10	40	80	X			
Knieriem Creek	11	80	80	X			
Knieriem Creek	12	80	40	X			
AVERAGES		57.5	49.2	92%	8%	0%	0%

*Width of riparian corridor in feet (in segment) looking downstream.

MULTNOMAH COUNTY SIGNIFICANT STREAMS STUDY

STUDY AREA: Howard Canyon

WILDLIFE HABITAT ASSESSMENT

STREAM NAME	SITE NO.	Water:				Food:			Cover:			Additional Values:				TOTAL SCORE
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Knieriem Creek	1	8	6	1	2	1	4	3	1	1	3	0	0	1	0	31
Knieriem Creek	2	8	6	5	4	3	3	3	3	2	3	0	0	2	0	42
Knieriem Creek	3	8	6	6	4	5	5	3	5	4	2	2	2	3	0	55
Knieriem Creek	4	8	6	5	4	5	5	3	5	5	3	1	1	3	0	54
Knieriem Creek	5	8	6	6	5	6	6	3	3	3	2	0	0	2	0	50
Knieriem Creek	6	8	6	5	6	6	6	3	6	6	3	2	2	3	0	62
Knieriem Creek	7	8	6	5	6	4	4	4	6	6	3	2	2	4	0	60
Knieriem Creek	8	8	6	6	4	5	6	3	5	5	3	3	3	4	3	64
Knieriem Creek	9	8	6	4	4	3	3	3	4	3	3	2	2	3	0	48
Knieriem Creek	10	8	6	4	3	4	3	3	2	2	3	3	3	3	0	47
Knieriem Creek	11	8	6	7	8	7	7	3	6	6	3	3	3	5	0	72
Knieriem Creek	12	8	6	2	2	2	2	3	1	1	2	0	0	1	0	30
AVERAGES		8.0	6.0	4.7	4.3	4.3	4.5	3.1	3.9	3.7	2.8	1.5	1.5	2.8	0.3	51.3

APPENDIX B

SAMPLE WILDLIFE ASSESSMENT FORM

MULTNOMAH COUNTY SIGNIFICANT STREAMS
SRI/SHAPIRO
RIPARIAN WILDLIFE HABITAT ASSESSMENT*

SITE NUMBER 2	TOTAL HABITAT SCORE AS EXISTING 24	POTENTIAL HABITAT SCORE IF ENHANCED	TOTAL ACRES
SITE LOCATION Burlington	FIELD DATES 03/08/94	FIELD OBSERVERS BSH/ADL	

GENERAL COMMENTS Continues through clear cut stream slopes become less steep. Stream bed widens - R Road crosses stream 48-52" culvert. Fill 100-200' wide & 100' high

Tree Ø

Shrubs - salmonberry, vine maple, occ. Willow and red oiser dogwood

g.c. Rushes

CWD - small diameter 4-6" abundant. 1 lg Douglas fir snag upslope 18" low

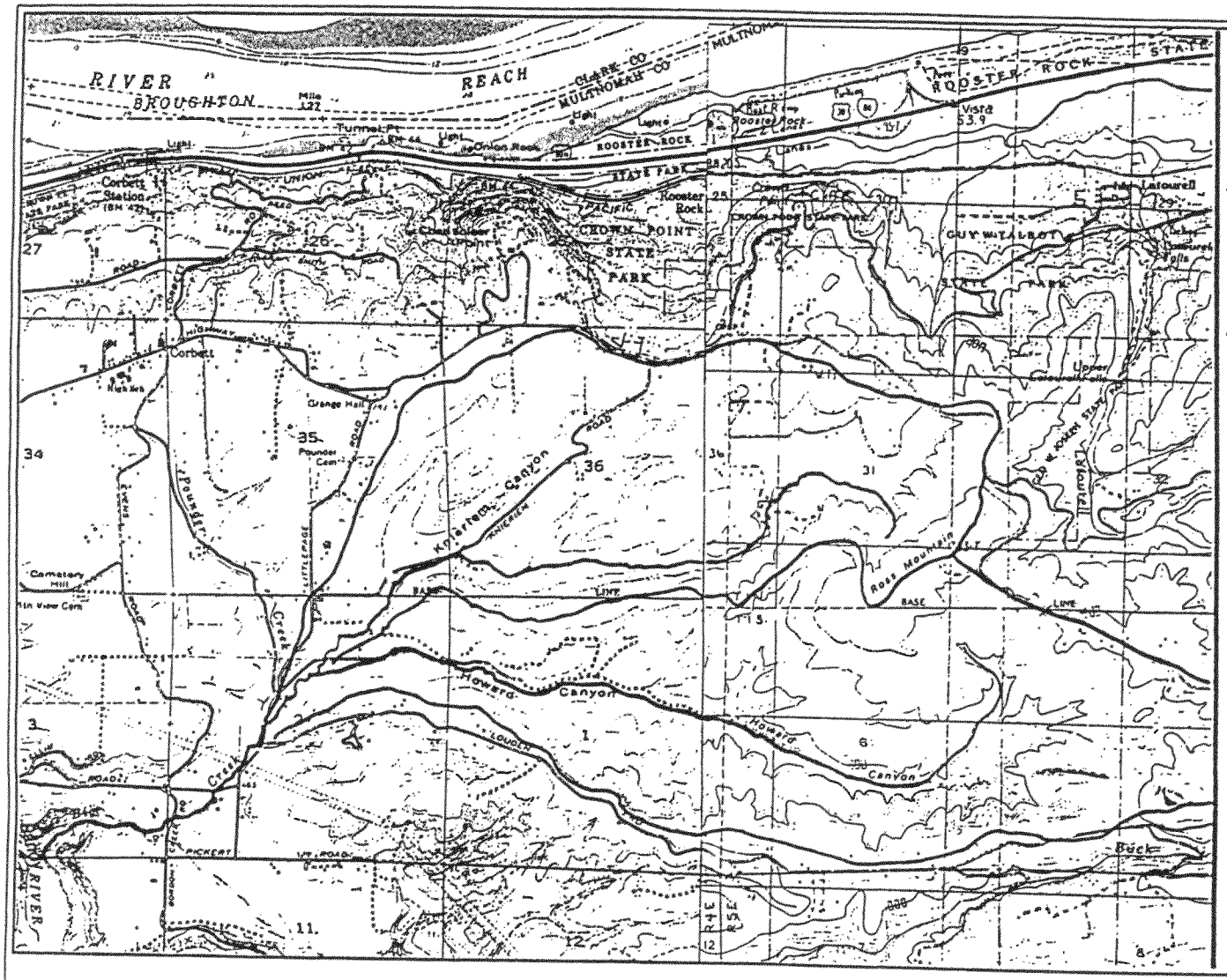
Pair of red tails seen hunting

	COMPONENT	DEGREE	SCORE	COMMENTS
WATER	Seasonality	Seasonal 4 ---------- Perennial 8	4	U.S.G.S
	Quality	Stagnant 0 ---------- Seasonally Flooded 3 ---------- Continually Flushed 6	3	
	Proximity to Cover	None 0 ---------- Nearby 4 ---------- Immediately Adjacent 8	Ø	
	Diversity (Streams, Ponds Wetlands	One Present 2 ---------- Two Present 4 ---------- Three Present 8	2	
	Variety	Low 0 ---------- Medium 4 ---------- High 8	3	
FOOD	Quantity	Low 0 ---------- Medium 4 ---------- High 8	3	
	Seasonality	None 0 ---------- Limited 2 ---------- Year Round 4	1	
COVER	Structural Diversity	Low 0 ---------- Medium 4 ---------- High 8	1	
	Variety	Low 0 ---------- Medium 4 ---------- High 8	2	
	Seasonality	None 0 ---------- Limited 2 ---------- Year Round 4	1	

ADDITIONAL VALUES

Disturbance	Physical	High 0 ---------- Medium 2 ---------- Low 4	Ø	CC Powerline Road's
	Human	High 0 ---------- Medium 2 ---------- Low 4	4	
Interspersion		Low 0 ---------- Medium 3 ---------- High 6	Ø	
Unique Features -4 points each		Wildlife ____ Flora ____ Rarity of Habitat Type	Ø	

*Developed with the assistance of Mike Houck, Portland Audubon Society, Ralph Rogers U.S.E.P.A., Dennis Peters & Diana Hwang, U.S. Fish & Wildlife Service, Gene Herb Oregon Dept. of Fish & Wildlife, Esther Lev, Biological Consultant


RIVER
BROUGHTON
REACH
CLARK CO
MULTNOMAH CO
ROOSTER ROCK
STATE PARK
CROWN POINT
Howard Canyon
Rose Mountain
Corbett
Buck
PICKETT
Cemetery Hill
Orange Hall
Pounder Creek
Kilpatrick Canyon
Latourell
GUY W. TALBOT
Upper Latourell Falls
Vista 53.9
Corbett Station
Rooster Rock
Crown Point
Lint
Base
Line
Road
Creek
Canyon
Falls
Park
Hill
Cem
Sta
Mile
Light
Tunnel
Pt
Lights
Parking
Picnic
Area
Trail
Lookout
Ridge
Bridge
River
Ft
Rt
Ave
Mt
Ln
Ct
Dr
Pl
Blvd
Cir
Sq
Ter
Hwy
Pkwy
Exit
Entrance
Ramp
Interchange
Overpass
Underpass
Toll
Gate
Station
Office
Building
Church
School
Hospital
Library
Museum
Park
Golf
Course
Campground
Picnic
Area
Boat
Launch
Marina
Dock
Pier
Beach
Swimming
Pool
Tennis
Court
Baseball
Field
Football
Field
Soccer
Field
Track
Stadium
Arena
Theater
Restaurant
Hotel
Motel
Gas
Station
Repair
Shop
Garage
Parking
Lot
Structure
Post
Office
Police
Station
Fire
Station
Jail
Courthouse
Cemetery
Monument
Memorial
Statue
Fountain
Clock
Tower
Windmill
Water
Tank
Reservoir
Dam
Levee
Canal
Ditch
Pipeline
Power
Line
Substation
Transformer
Antenna
Radio
Tower
Television
Tower
Microwave
Tower
Satellite
Dish
Solar
Panel
Wind
Turbine
Hydroelectric
Plant
Nuclear
Plant
Coal
Plant
Oil
Plant
Gas
Plant
Refinery
Storage
Tank
Pipeline
Compressor
Station
Meter
Station
Valve
Station
Pump
Station
Treatment
Plant
Sewer
Line
Manhole
Septic
Tank
Leach
Field
Well
Spring
Stream
River
Lake
Pond
Swamp
Marsh
Bog
Glacier
Snowfield
Rock
Outcrop
Cliff
Talus
Slope
Landslide
Earthquake
Fault
Volcano
Crater
Lava
Flow
Ash
Flow
Pumice
Obsidian
Basalt
Andesite
Rhyolite
Granite
Sandstone
Limestone
Shale
Coal
Seam
Mine
Quarry
Gravel
Pit
Sand
Pit
Clay
Pit
Oil
Well
Gas
Well
Geothermal
Well
Hot
Spring
Fumarole
Mud
Pot
Geyser
Sinkhole
Cave
Entrance
Karst
Feature
Glacial
Moraine
Kame
Esker
Drumlin
Outwash
Plain
Kettle
Hole
Erratic
Boulder
Striation
Groove
Roche
Moutonnee
Cirque
Arete
Horn
Col
Hanging
Valley
Fjord
Alluvial
Fan
Delta
Floodplain
Terrace
Meander
Scar
Oxbow
Lake
Braided
Stream
Estuary
Tidal
Flat
Salt
Marsh
Mangrove
Coral
Reef
Kelp
Bed
Seagrass
Bed
Algal
Bloom
Red
Tide
Upwelling
Zone
Thermocline
Halocline
Pycnocline
Chemocline
Redoxcline
Oxycline
Nutricline
Phosphocline
Nitrocline
Silicocline
Ferrocline
Manganocline
Sulfidocline
Methanocline
Ammonocline
Nitrocline
Phosph

CHAPTER III

HOWARD CANYON AGGREGATE RESOURCE

Mineral and Aggregate Inventory Site #8

HOWARD CANYON RECONCILIATION REPORT UPDATE

ORDINANCE NO. 1050
ADOPTED OCTOBER 7, 2004

Howard Canyon
Reconciliation Report
October 7, 2004

Multnomah County
Department of Business and Community Services
Land Use and Transportation Program

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Howard Canyon Reconciliation Report Update

Adopted October 7, 2004

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Project History

The Howard Canyon Quarry is located approximately two miles southeast of Corbett in eastern Multnomah County. It is on top of a ridge with an east-west orientation between Knieriem Creek (on the north) and Howard Creek (on the south). (See Figure #1)

A quarry has operated on the property since the 1970s, though the size of the quarry has always been relatively small (i.e. less than five acres). The quarry has operated without a state or local permit under a Grant of Total Exemption from the Department of Geology and Mineral Industries (DOGAMI). The exemption allows the extraction of up to 5,000 cubic yards of material or disturbing less than one acre of land within a 12-month period until mining affects five or more acres.

According to Multnomah County records, mining activity on this site began in the early 1970's. In 1971, Multnomah County denied an application for a temporary permit to mine and crush rock (case file BA 78-71). In 1980, a Multnomah County Hearings Officer denied, and the Board of County Commissioners upheld the denial under appeal, of a conditional use application for a gravel mine and crusher. In 1987, Multnomah County again denied a CU for a commercial gravel quarry. These applications were denied based on the conditional use criteria, related to the rural character of the area, impacts to road system, and noise.

In 1987, the Department of Land Conservation and Development (DLCD) notified the county of requirements under state rules to complete work on Statewide Planning Goal 5, and specifically regarding two aggregate sites within the county. In a plan passed by the Board of County Commissioners in 1990 and submitted to DLCD, the Howard Canyon aggregate site was classified "3B, allow conflicting uses", meaning no protection under Goal 5. The "3B" determination was rejected by DLCD in 1993 because the aggregate resource in Howard Canyon was found to be significant. The Board of County Commissioners adopted the Howard Canyon Reconciliation Report (HCRR) in 1995. The 1995 report changed the designation for Howard Canyon from "3B" to "3C, limit conflicting uses", meaning the aggregate resource was protected under Goal 5, and uses that might conflict with the mining operation must be regulated. The property owner appealed the 1995 report to the Land Conservation and Development Commission (LCDC), who directed the county to make some specific changes to the report. The county made the specified changes that included adding the western 1000 feet of the site into the extraction area, eliminating additional noise study requirements, and deleting the provisions allowing the Transportation Division to request additional traffic studies over and above those already required. The Board of County Commissioners finalized the Howard Canyon Reconciliation Report in June, 1996, which became an acknowledged part of Multnomah County's Comprehensive Plan.

In 1999, a conditional use permit application for mining this resource site was submitted to the County. This application proposed a level of mining activity that was dramatically different from the base assumptions in the HCRR. The conditional use permit application

revealed weaknesses or out of date assumptions in the HCRR. Therefore, Multnomah County decided it necessary to revisit the HCRR and re-analyze the impacts of increased production levels and future quarry operations on the site and the surrounding community.

On January 24 and March 6, 2000, the Multnomah County Planning Commission conducted two public hearings on a legislative zone change to place the Protected Aggregate and Mineral (PAM) Overlay Subdistrict onto the zoning map on and around Howard Canyon. This was the final step to implement the program to achieve protection of the resource under the state goal. The Planning Commission recommended on April 3, 2000, that the Board of County Commissioners adopt with conditions the PAM Overlay Subdistrict on properties in and around Howard Canyon quarry. The Board of County Commissioners held a public meeting on June 13, 2000, and agreed with testimony presented that circumstances have changed since the HCRR was originally adopted.

According to the Board's motion, this update to the 1996 HCRR should address:

1. Requirements of the federal ESA to protect the Lower Columbia River Steelhead and its critical habitat and the need for improved stream protection;
2. Changes in mining methods and use of rock in the Howard Canyon Quarry;
3. Associated noise and impacts on surrounding farm operations that had not been adequately addressed in the 1996 HCRR; and
4. The apparent lack of evidence for determining the significance of the westerly 1,000-foot extent of the geologic resource area.

The Board directed staff not to make any revisions to the transportation portion of the HCRR.

In 2001, Multnomah County hired the Winterbrook Planning consultant team to manage the following:

- A geologic assessment of the western 1,000 feet of the resource area.
- A biological assessment of impacts to streams and ESA salmonid habitat.
- A noise impact study.
- A farm and forest impact study.
- An ESEE analysis.
- An update to the 1996 HCRR.

The results of the preliminary impact reports were reviewed in a public meeting on May 16, 2002 at the Corbett School. Based on public comments received at the meeting, the impact reports were finalized and a draft of the updated HCRR was prepared. The July 25, 2002 draft HCRR report was reviewed at a Planning Commission work session on August 5, 2002.

Figure 1. Study Area

Subsequently, the draft report was updated in September 2002 in advance of a Planning Commission public hearing on October 7, 2002. Public testimony from that hearing and subsequent written testimony and evidence submitted to the County was incorporated into the February 2003 draft of the HCRR. Another Planning Commission public hearing was held on March 3, 2003, at which the quarry owners and neighbors agreed to pursue mediation to resolve conflicts.

In March 2003, Richard Forrester was hired to do an assessment for the mediation and found that the basic requirements for mediation were in place. As the assessment transitioned to mediation, the neighbors requested another mediator. Carie Fox was hired in June 2003 and met with the key parties individually and in groups, attended a neighbor meeting, and convened an information-sharing meeting with the parties and various experts, including representatives of ODOT and DOGAMI. She also spent considerable time in shuttle negotiations between the parties. The key issues were noise, safety, trust, follow-through, profitability of the operation, the ability to enjoy property rights, and the overlay and its impacts on property values. The mediation broke down because agreement between all parties would have required a higher level of trust than was likely to evolve in the requisite time. On January 5th, 2004, the mediation effort was terminated.

On May 3, 2004, the Planning Commission held a public hearing in Corbett to review the proposed revisions to this report. The County staff recommendation was to protect the resource and limit mining to current levels under the Grant of Total Exemption (5,000 cubic yards per year) with mitigation measures (Appendix H). After lengthy public testimony, the Planning Commission deliberated and reached a tentative decision to recommend not protecting the resource and prohibit future expansion of mining on the site. On June 7, 2004, the Planning Commission found that allowing conflicting uses fully and prohibiting mining under Goal 5 would resolve many of the negative impacts on the surrounding community while understanding that the Comprehensive Framework Plan polices will continue to allow the quarry to operate at existing levels of extraction under their DOGAMI Grant of Total Exemption.

On September 9 and 30, 2004, the Board of County Commissioners held public hearings on Ordinance No.1050 to amend the HCRR to allow conflicting uses fully and prohibit expansion of mining. The ordinance was adopted on October 7, 2004.

Overview of the Issues

Streams and ESA Salmonid Habitat

The 1996 HCRR assessed three streams that surround and drain the Howard Canyon Quarry site: Big Creek, Knieriem Creek and Howard Canyon Creek. Knieriem Creek and Howard Canyon are the closest streams to the mine and join to form Big Creek, which flows into the Sandy River. All three streams have been designated by Oregon Department of Fish and Wildlife as Class 1 "significant" streams. Multnomah County has designated these streams as significant Goal 5 resources. The 1996 HCRR concluded that all three streams could be adequately protected from impacts from the proposed quarry operations.

However, in 1998, the National Marine Fisheries Service (NMFS) declared the Lower Columbia River steelhead as a threatened species under the federal Endangered Species Act (ESA). The listing included salmonid populations inhabiting in the Sandy River in east Multnomah County. In 1999, NMFS listed as threatened eight additional salmon populations under the ESA, including fall run Chinook salmon, which inhabits east Multnomah County including the Sandy River. Soon thereafter, NMFS identified and officially designated the critical habitat that was required for the long-term survival for these species. In early 2002, the NMFS withdrew the critical habitat designation for 19 salmon and steelhead populations (including those in the Sandy River) pending a review of the economic impacts on affected businesses, communities, and individuals. However, salmon and steelhead trout habitat remains protected by the essential fish habitat provisions of the Magnusson-Stevens Act. The designation of fish stocks under the ESA and through the Magnusson-Stevens Act gives federal protection to these species and the habitat upon which they depend to live, feed and reproduce. The Sandy River basin, consisting of the Sandy River mainstem and its larger, fish-bearing tributaries, was included in this critical habitat designation for the endangered steelhead and fall Chinook salmon.

On June 26, 2002, the US Fish and Wildlife Service determined that the southwestern Washington/Columbia River population of coastal cutthroat trout does not need ESA protection. This determination was based on a review of population data that showed that in a large portion of the southwestern Washington/Columbia River area cutthroat trout populations are relatively robust and the offspring of freshwater populations are likely able to become anadromous. Consequently, the US Fish and Wildlife Service concluded that coastal cutthroat trout in this population segment are not likely to become endangered in the foreseeable future.

This report considers the potential impacts of mining operations on salmonid habitat in Howard Canyon Creek, Knieriem Creek, Big Creek, and the Sandy River.

Noise Impacts

The noise study used in the 1996 HCRR was completed by Daly, Standlee & Associates, Inc. (the Daly, Standlee Report, dated February 19, 1990). It assumed a specific mix of mining equipment for aggregate extraction and the known sound generation of each piece of equipment. Based on this noise analysis, the 1996 HCRR concluded that the noise associated with the assumed aggregate operation would not violate the Oregon Department of Environmental Quality (DEQ) noise standards within a 1,200-foot perimeter. Consequently, the impact area for the Howard Canyon Quarry was determined to be 1,200 feet around the aggregate resource.

The noise study conducted for this report addresses increased level of mining activity and a different mix of equipment.

Farm Impacts

The western portion of the Howard Canyon site and the surrounding area to the west is zoned Exclusive Farm Use (EFU). Multnomah County Framework Plan Policy 16-B, Strategies I and J require an analysis to determine if the proposed mining operation will force a significant change in accepted farm or forest practices or significantly increase costs. In addition, testimony as part of the recent conditional use permit process raised issues related to impacts on surrounding farms, especially livestock.

This report includes a farm and forest impact assessment and considers potential impacts that could significantly change or increase the cost of farming practices.

Geologic Resources

As part of the adoption process of the 1996 HCRR, questions were raised concerning accuracy and reliability of the information related to the location, quality and quantity of the mineral and aggregate resource underlying the western 1,000 feet of the mapped resource area.

This report confirms the location, quantity, and quality of the basalt formation in the western 1,000 feet of the resource site.

Policy Framework

Multnomah County Comprehensive Framework Plan Policy 16-B contains specific criteria for the consideration of post-acknowledgement plan amendments (PAPAs) concerning aggregate resources.[1] Therefore, Policy 16-B is the adopted and acknowledged policy controlling the review of the amendments to the Howard Canyon Reconciliation Report. Policy 16-B, Strategy A specifically states that aggregate resources will be managed consistent with OAR 660, Division 16 (the "old Goal 5 rule").

A key difference in approach between the 1996 HCRR and this report is a consideration that the County take a more proactive role in regulating protected mining operations and mitigating the impacts. This policy interpretation is consistent with Policy 16-B, Strategy M:

> ***M. The County shall impose conditions on surface mining when necessary to lessen conflicts identified as part of a site-specific Goal 5 analysis. Where such conditions conflict with criteria and standards in the Protected Aggregate and Mineral Resources Overlay, the conditions developed through the Goal 5 process shall control.***

In the 1996 HCRR, the County deferred to the Oregon Department of Geology and Mining Industries (DOGAMI) and the Oregon Department of Environmental Quality (DEQ) to ensure compliance with noise, air quality, and water quality standards. Multnomah County Commission expressed concern regarding the ability of these agencies to effectively regulate and enforce Oregon State and Multnomah County laws. In light of the continuing controversy over the mining operations and the potential federal Endangered Species Act and quality of life impacts, this update considers the feasibility of the County establishing specific performance standards to mitigate adverse impacts. These standards would serve as approval criteria for a future conditional use permit. In some cases, these performance standards exceed DOGAMI or DEQ requirements.

Goal 5 Rule Requirements

There are two state administrative rules that implement Statewide Planning Goal 5. The "old" Goal 5 rule refers to OAR 660, Division 16. The "new" Goal 5 rule refers to OAR 660, Division 23, which was adopted by LCDC in 1996. The Department of Land Conservation and Development has determined that the old Goal 5 rule is applicable until the County amends the Framework Plan and land use regulations as part of a periodic review work program.[2]

The Goal 5 process, includes the following steps:

- Inventory – determine the location (map boundary and impact area), quality (compared to other similar resources), and quantity (relative abundance) of each resource site (OAR 660-016-000).

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[1] The "new" Goal 5 rule states that these criteria will apply until the regulations are updated to conform to the requirements of OAR 660, Division 23 at the next scheduled periodic review (OAR 660-023-0180 (7)).
[2] Letter from Gary Fish, DLCD, September 16, 2002

- Determine significance – three options: 1) not significant (no further action), 2) delay Goal 5 process (inadequate information), or 3) significant (continue Goal 5 process) (OAR 660-016-000 (5)).
- Identify conflicting uses – examine uses allowed in zoning districts within impact area to determine if they have a negative impact on the resource site (OAR 660-016-005). For aggregate resources, need to look at impacts resulting from quarry operations as well as impacts on quarry operations from conflicting uses within impact area. Also, look at quarry conflicts with other Goal 5 resources.
- Analyze ESEE consequences of alternative decision options – Both impacts to the resource site and conflicting uses must be considered. ESEE analysis is adequate if it enables a jurisdiction to provide reasons to explain the consequences of decision options for specific sites (OAR 660-16-0005(2)).
- Adopt a protection program. Assuming there is adequate information, OAR 660-16-0010 requires local jurisdictions to "resolve" conflicts by adopting one of the following three decisions options:

    1. Protect the Resource Site: In the case of aggregate and mineral resource sites, this means to fully allow mining and restrict new conflicting uses within the impact area.

    2. Allow Conflicting Uses Fully: In the case of aggregate and mineral sites, this means prohibiting mining because mining conflicts cannot be restricted to acceptable levels.

    3. Limit Conflicting Uses: In the case of aggregate and mineral sites, this means to allow mining on a limited basis with restrictions on the conflicting uses to mitigate conflicts.

The Goal 5 rule does not require that all significant resource sites be protected. Local governments may choose to fully protect the resource site by allowing mining without local restrictions, prohibit mining activity (allow conflicting uses fully) or allow mining and conflicting uses on a limited basis.

Significant Goal 5 Resource Determination

OAR 660-16-000 directs local governments to determine the location, quality, and quantity of the resource at a particular site. Based on that evidence, the local government must determine the significance of the site.

The 1996 HCRR determined that the Howard Canyon Quarry was a significant mineral and aggregate resource site.[3] The underlying reasons were: the aggregate meets the ODOT specifications; the resource size of over 2 million cubic yards, which was more than the Comprehensive Plan criteria in effect at the time of the report; and the site is the only one in unincorporated East Multnomah County with sufficient, known information on the quality of the resources; and uncertainty regarding future production potential from other sites.

The old Goal 5 rule provides little guidance for determining the significance of mineral and aggregate resources. However, the new Goal 5 rule includes criteria for determining the significance of aggregate resources (OAR 660-23-180(3)(a)) that provides some guidance:

- Representative samples of aggregate material meet ODOT specifications for base rock for air degradation, abrasion, and sodium sulfate soundness
- The estimated amount of material is more than 2,000,000 tons in the Willamette Valley

OAR 660-23-180(1)(a) defines "aggregate resources" as naturally occurring concentrations of stone, rock, sand and gravel, decomposed granite, lime, pumice, cinders and other naturally occurring solid materials used in road building. Neither rule defines "mineral resources" nor includes criteria for determining the significance of mineral resource sites.[4] ORS 517.750(7) defines "Minerals" as soil, coal, clay, stone, sand, gravel, metallic ore and any other solid material or substance excavated for commercial, industrial or construction use from natural deposits situated within or upon lands in this state. The distinction between mineral sites and aggregate sites could be relevant because the resource is a columnar basalt formation that can be used as decorative rock as a building or landscaping material (a mineral resource) or as riprap and crushed rock for road building (an aggregate use).

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[3] Page III-10, 1996 HCRR

[4] Proposed Administrative Rule Amendments (May 6, 2004) include the following changes to the definitions in OAR 660-023-0180 (1):

(a) "Aggregate resources" are naturally occurring concentrations of stone, rock, sand, ~~and~~ [**and**] gravel, decomposed granite, lime**stone**, pumice, cinders, and other naturally occurring solid materials **commonly** used in road building **and other construction**.

(f) "Mineral resources" are those materials and substances described in ORS 517.750(7) but excluding materials and substances described as "aggregate resources" under subsection (a) of this section.

Howard Canyon Resource Site

The following analysis provides an overview of the Howard Canyon resource site as whole and summarizes information from the 1996 HCRR. This information is presented for comparison to the geologic assessment conducted on the westernmost 1,000 feet for this report.

The Howard Canyon resource site is a ridge top with an east-west orientation, approximately two miles southeast of Corbett in eastern Multnomah County (Figure 2). The ridge is a Boring Lava formation that runs east-west between Knieriem Creek on the north and Howard Canyon Creek on the south.

The determination of significance in the 1996 HCRR was based on a January 1989 report by H.G. Schlicker & Associates (the Schlicker report), which is incorporated by reference.[5]

Location

In the 1996 HCRR, the potential resource site was shown on a map submitted by the property owner and confirmed by 31 test pits dug by both the property owner and H.G. Schlicker & Associates (identified on a map in the appendix to the Schlicker report). The westernmost test pit, as shown on the Schlicker report test pit map, is approximately 1,000 feet from the western boundary of the resource site submitted by the property owner. Lacking any conflicting information, this boundary was used for the 1996 HCRR.

As part of this report, the boundary of the westernmost 1,000 feet is assessed and reported below.

Quantity

According to the Schlicker report, the basalt occupies the upper 50 feet or more of the ridge crest except for the thin layer overburden (soil, rocks, and boulders). The test pits indicate the overburden is, on average, about seven feet thick. The top two feet of the basalt is highly weathered and is considered to be overburden. For the purposes of calculating the volume of the formation, the overburden is estimated to be ten feet thick.[6] Therefore, the basalt formation is estimated to be 40 feet thick. The 1996 HCRR cited a 1986 DOGAMI on-site inspection report that indicated the inspector also thought the basalt layer was 40 feet thick.[7]

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[5] Geologic Reconnaissance, Howard Canyon Quarry, East Multnomah County, Oregon, January 9, 1989 by H.G. Schlicker & Associates is included as Appendix 1 to the Throop Geologic Assessment (Appendix B).
[6] Page 1, Schlicker Report
[7] Page III-8, 1996 HCRR

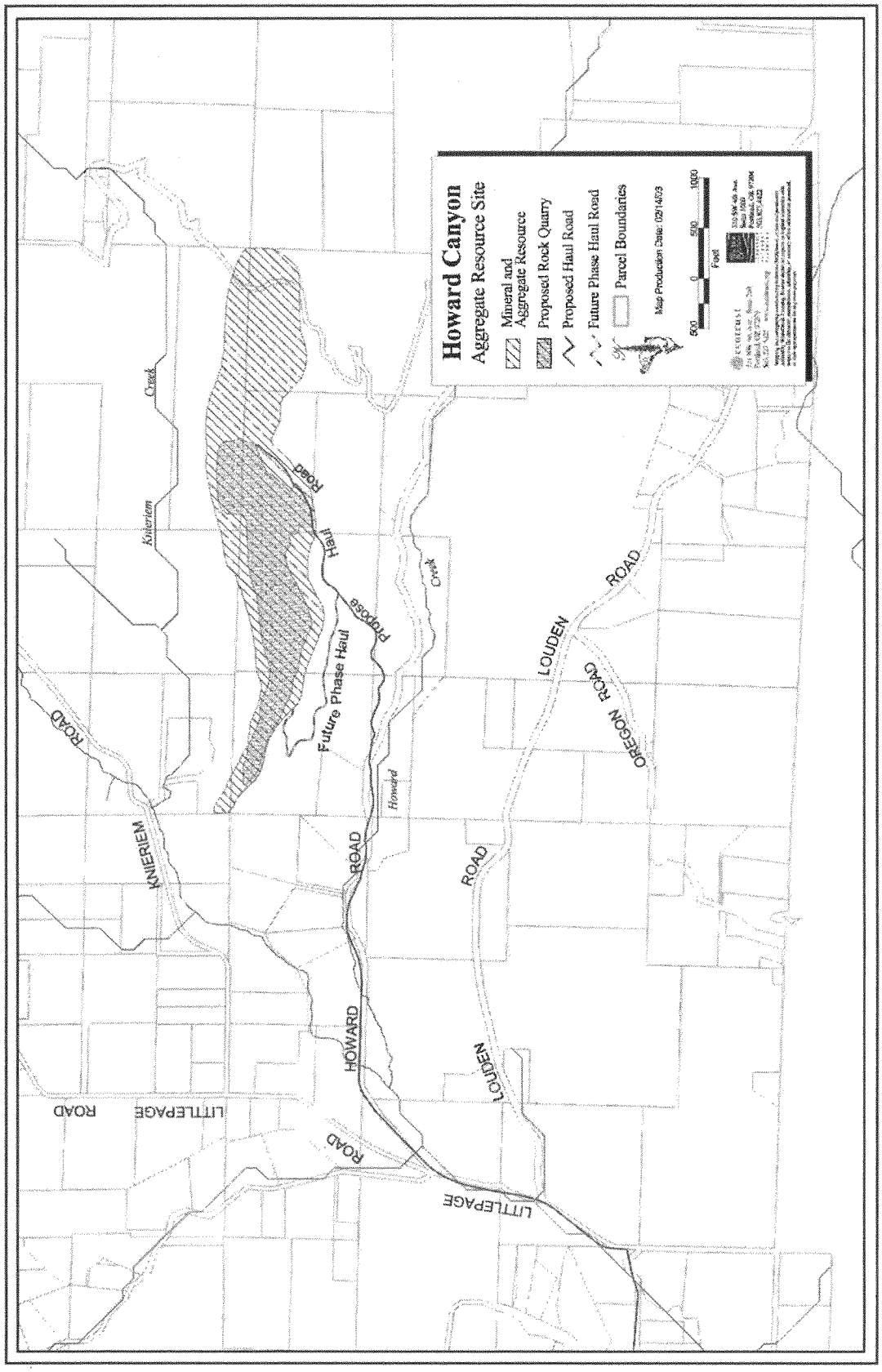

Figure 2. Resource Site

The Schlicker report estimates that the ridge rock deposit is more than 4,200 feet long and 350 feet wide. The volume of rock in place is approximately 2.1 million cubic yards. When rock is crushed the volume expands about 25% therefore the deposit will produce more than 2.7 million cubic yards of crushed basalt, or 4.05 million tons.[8] The Schlicker report also explains the lava formation is believed to occupy a deep "V" shaped valley and the center of the valley should be much deeper. Schlicker's subsequent analysis of drilling results in a revised estimate that the basalt formation has a minimum thickness of 51.5 feet, with a revised estimate of 3.57 million cubic yards or 5.35 million tons.[9]

Schlicker's conversion factor was 1.9 tons per cubic yard. The ODOT test done for the Throop Geologic Assessment found a specific gravity of 2.85, which translates into a conversion factor of 2.4 tons per cubic yard.[10] Calculating the quantity with this conversion rate yields an estimate of 5.04 to 5.76 million tons.

Columnar Basalt

The existing quarry face is columnar basalt, which is a relatively unusual variety of basalt that is particularly well suited to use in landscaping and as building material. To create the columnar formation, the basalt had to solidify and cools quickly to form distinctive formations, which have one long axis and six-sides perpendicular to that axis (columns). Hence, the name columnar basalt. Not all basalt flows have columns. Even where columnar basalt is found, only a portion of the larger basalt formation may have the columnar basalt. The columnar characteristics may not be uniform throughout the entire formation, therefore the actual quantity of columnar basalt is uncertain.

Quality

Aggregate Resource

The 1996 HCRR cites a December 13, 1988 letter from Rittenhouse-Zeman & Associates, Geotechnical & Hydrogeological Consultants, reporting the results of laboratory testing of rock samples from the Howard Canyon Quarry.[11] The purpose of the test was to determine the suitability and quality of the rock products for use in construction as defined by the Oregon State Highway Division (OSHD). Attached to the Rittenhouse-Zeman letter was a letter from Northwest Testing Laboratories reporting the results of the American Standard for Materials and Testing (ASTM) test C-535, Resistance to Abrasion of Large Size Course Aggregate by use of Los Angeles Machine, Grading #3. The percent wear of the Howard Canyon sample was 32.7 percent. The OSHD specifications require that the sample can have a maximum of 35 percent wear.

Columnar Basalt

Even where columnar basalt is found, only a portion of the larger basalt formation may have the columnar basalt. Although exposed columnar basalt formations can be found in the Columbia River Gorge, as of July 2002, only three privately owned basalt quarries

[8] Page 3, Schlicker Report
[9] Addendum to Schlicker Report, dated March 29, 1989
[10] Page 11, Throop Geologic Assessment (Appendix B)
[11] Page III-9, 1996 HCRR

were permitted by DOGAMI in Multnomah County. Another five basalt quarries were permitted in Clackamas County and 13 were permitted in Washington County. A telephone survey of these quarries found that none of the quarries were currently extracting columnar basalt. One local source of columnar basalt was identified in Washougal, Washington, but this quarry reported that its columnar formations were exhausted. Other identified sources include eastern Oregon and the Moses Lake, Washington area.

Confirmation of Western 1,000 feet

The Board of County Commissioners expressed concern about the reliability of the location of the basalt formation in the western 1,000 feet due to the lack of test pits. Multnomah County hired Allen Throop, a registered geologist, to assess the geologic resources of the western 1,000 feet. The Throop report is incorporated by reference as Appendix B to this report and is the basis for the following findings.

Location

Throop conducted a site visit on January 18, 2002 and analyzed stereo-pair aerial photos from 1999 and 2002 to determine the location of the basalt formation. Throop determined that the basalt formation has two distinct areas. The main part of the formation is a broad flat-topped ridge, which extends approximately 125 feet into the western 1,000-foot study area, referred to as Phase 6 on the Olson Mining Plan (Appendix C). West of this flat-topped ridge, the basalt formation becomes a narrow hogback ridge with steep slopes on either side, referred to as Phase 7 on the Olson Mining Plan (Appendix C). It extends approximately 875 feet to the northwest corner of the property. The location of the basalt formation is identified in Figure 2. The Throop report illustrates the different cross-sections for the flat-topped ridge and hogback ridge (see Figure 3).

Quantity

During his site investigation, Throop located the lowest elevation of basalt boulders in a road cut, which he concluded was the bottom of the basalt formation. Using a hand level, he determined that the bottom of the basalt layer was approximately 40 feet below the highest basalt exposed at the upper end of the road.[12]

Throop estimated the hogback ridge (Phase 7) contains a geologic reserve of approximately 140,000 cubic yards of basalt, with a smaller mineable resource.[13]

Quality

A petrographic analysis was conducted to compare rock samples from the existing quarry and the hogback ridge. The petrographer's conclusion is the rocks are from the same formation.[14]

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[12] Page 5, Throop Geologic Assessment (Appendix B)
[13] Page 8, Throop Geologic Assessment (Appendix B)
[14] Appendix 5, Throop Geologic Assessment (Appendix B)

Rock samples from the existing quarry and the hogback ridge were sent to the ODOT Materials Laboratory for testing. The test results for the two samples are similar and meet ODOT standards for coarse degradation and abrasion (Table 1).

Table 1. ODOT Rock Quality Test Results

ODOT Standard	**Coarse Degradation** 30.0% max.	**Abrasion** 35.0% max.
Hogback Ridge	21.9%	30.2%
Existing Quarry	19.4%	30.4%

The Throop assessment confirms the location of the basalt formation in the western 1,000 feet. Through petrographic analysis, the western 1,000 feet is part of the same formation as the main part of the quarry. Therefore, the western 1,000 feet is part of the Howard Canyon resource site.

Confirmation of Significance Determination

The Howard Canyon site is a significant Goal 5 mineral and aggregate resource, based on the following findings:

- Quantity - The resource site represents a large quantity of basalt material, in excess of 5 million tons.
- Quality - Laboratory testing confirms the basalt meets ODOT standards for air degradation and abrasion and is suitable for aggregate use.
- Quality - The columnar basalt formations are suitable for riprap in road construction as well as decorative rock in landscaping and building construction.

Location – There are a limited number of mineral and aggregate resource sites in east Multnomah County and adjacent portions of Clackamas County. There are no other basalt quarries in the region that actively mine columnar basalt.

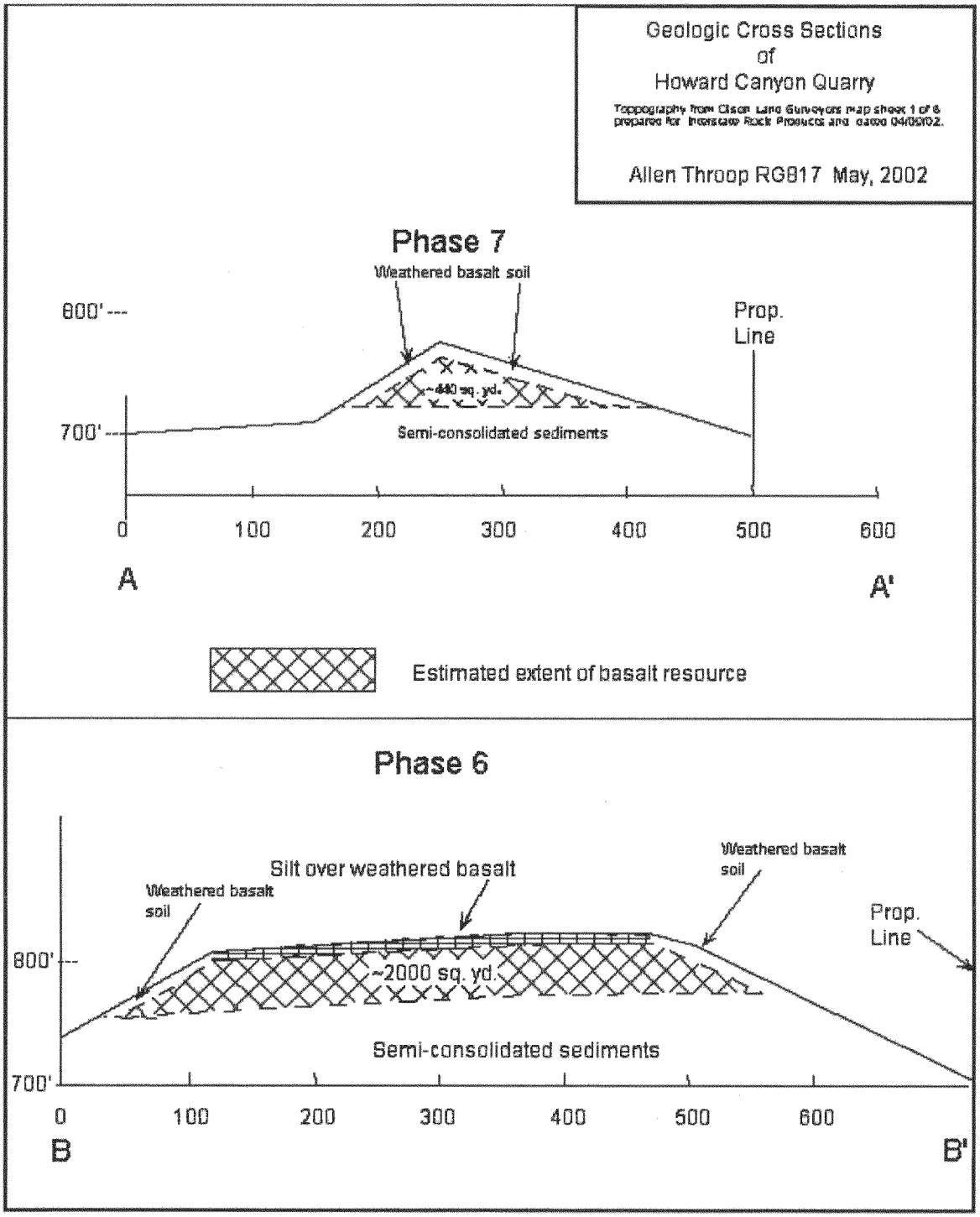

Figure 3. Howard Canyon Cross Sections

Resource Analysis

Proposed Mining Plan

Existing Operations

The existing quarry is currently operating under a small-scale Grant of Total Exemption (GTE) from DOGAMI and does not have a County conditional use permit. DOGAMI has established limits for small-scale mining operations called a Grant of Total Exemption (GTE) (OAR 632-030-0016 (2). These limits include:

- Mining a quantity of less than 5,000 cubic yards of material or disturbing less than one acre of land within a period of 12 consecutive months; or
- For mining operations begun after July 1, 1975, this exemption terminates as soon as mining operations affect more than five acres of land.[15]

The quarry also has a DOGAMI exemption to supply aggregate for forest roads on contiguous parcels. In the past, the owners of the quarry also have supplied aggregate for road building on their substantial forestland holdings in the area that are contiguous to the quarry.

In 1994, when the current Comprehensive Framework Plan policies were adopted, the County included an exemption for Howard Canyon that allows continued lawful mining operations under a DOGAMI GTE without a conditional use permit (Policy 16-B.H.1b). This county exemption allows continued operation of the quarry within the GTE limits. If, and when, DOGAMI finds those limits have been exceeded and the GTE is terminated, then mining operations would be subject to the findings and conclusions in the HCRR.

The columnar basalt is extracted primarily for decorative rock purposes.[16] The mining process begins by loosening the rock with explosives.[17] After blasting, the rock is sorted into three categories: split rock, wall rock, and decorative landscape boulders. The split rock is loaded into a quarry truck and transported to an adjacent pad, where it is manually broken down using an air drill and sledgehammers to split into uniform blocks. The wall rock is processed to size using a hydraulic rock hammer on the arm of an excavator. After stockpiling, the material is loaded into dump trucks for transportation offsite. Approximately 50% of the trucks are loaded with an excavator that lifts the rock into the dump trucks. The remaining 50% of the trucks are loaded with a front-end loader.

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[15] It is unclear as to whether the mining operations had to have begun or had to have a GTE certificate, in order to be exempt from this limit.

[16] Verbal communications with Dan Gustafson, Interstate Rock, December 18, 2001

[17] Letter from Olson Engineering, Inc., February 26, 2002 (Appendix C)

Haul trucks enter the quarry via Knieriem Road. After loading, the trucks exit via Howard Road. The number of trucks per day varies depending on orders for the basalt. There is no rock crusher located on site.

Proposed Mining Plan

In 2002, on behalf of the property owners, Interstate Rock Products, Inc. and Olson Engineering prepared a proposed mining plan for an expanded operation that was used as the basis for determining potential conflicts and impacts.

The mining process would be similar to the current operations, but the proposed volumes and levels of activity vary (see Table 2). The total mine area is approximately 31 acres, with about 5 acres impacted at any one time. The amount of material produced for decorative and aggregate purposes would vary, depending on demand. Depending on the level of activity the quarry could supply material over the next 10 to 400 years. The 200,000 cubic yards per year alternative is a demonstration of the level of activity needed to deplete the resource in a relatively short amount of time.

Table 2. Quarry Operations Alternatives

Rate of Extraction	**5,000 cy/yr**	**35,000 cy/yr**	**75,000 cy/yr**	**200,000 cy/yr**
Percent of Decorative/Aggregate	80/20	60/40	30/70	0/100
Hours of Operation	7am – 5pm	7am – 5pm	7am – 5pm	7am – 5pm
Avg. No. of Trucks Per Day[1]	2 (4 trips)	14 (28 trips)	30 (60 trips)	80 (160 trips)
Number of Blasts per Year L = Low Yield H= High Yield	1H	3L 1H	6L 3H	8L 5H
Drilling per Year	5 days	20 days	40 days	100 days
Splitting per Year	50 days	75 days	75 days	-
Crushing per Year	10 days	30 days	100 days	200 days
Loading	0.5 hrs/day	2.2 hrs/day	3.2 hrs/day	5.0 hrs/day
Hauling	0.3 hrs/day	0.8 hrs/day	1.5 hrs/day	3.0 hrs/day

Source: Olson Engineering, April 4, 2002 (Appendix C)

1. Each truck represents two trips – one inbound (empty) and one outbound (full).

As part of this operation, the haul truck route would use Howard Road to enter and exit the site. Knieriem Road would not be used. The proposed truck route travels along local roads for a significant distance (3.9 miles) before reaching a major arterial. Figure 4 illustrates the proposed truck route. From Howard Road, the trucks would travel down Littlepage Road to Hurlburt Road to the Historic Columbia River Highway to Interstate 84.

Define Impact Areas

OAR 660-16-000(2) requires the identification of an impact area for the resource. The impact area is the area in which specific conflicting uses may adversely affect the resource. However, mineral and aggregate resources are different from other Goal 5 resources. The impact area is defined in terms of: 1) surrounding uses that could

adversely affect the resource; and 2) those land uses that could be adversely affected by the expected mining activities.

The 1996 HCRR established a 1,200-foot impact area, primarily based on a 1990 noise assessment study.[18] Also, the 1996 HCRR limited its analysis along the truck route to impacts to the local transportation system and not to adjoining properties along the route. Public testimony at previous hearings for the conditional use permit and the May 16, 2002 community meeting held as part of the preparation of this report have suggested that the 1996 impact area is inadequate (see Appendix G).

The impact area in this report has two parts: 1) the impact area surrounding the proposed quarry, and 2) the truck route used to transport the material offsite.

Quarry Impact Area

Establishing an impact area for the quarry operations requires judgment. The larger the impact area, the more properties that may be placed under the restrictions of the Protected Aggregate and Mineral (PAM) Resource Overlay Subdistrict (Appendix A), if the resource is a protected site. Therefore, an impact area that extends farther than actual conflicts may result in unnecessary restriction on future permitted land uses for some property owners.

Noise, dust, and blasting associated with mining activities may adversely affect surrounding land uses. The 1996 HCRR established a 1,200-foot impact area, primarily based on a 1990 noise assessment study.[19] This method was based on noise receptor locations that either met or exceeded the DEQ noise standard without any mitigation. However, this methodology does not adequately address the variations in topography surrounding the site that can impact how noise travels. For example, in the noise study conducted for this update, one site at 770 feet from the extraction area was below the DEQ standard, where as a site that is 1,025 feet from the resource area exceeded the standard and another site 1,565 feet from the resource area met the DEQ standard exactly.[20]

In general, a 1,500-foot impact area is used for this report. The impact area is measured from the edge of the mineral and aggregate resource area. This impact area is large enough to encompass dwellings and farms that could be adversely impacted by mining activities on the site (Figure 5). The 1,500-foot impact area includes the minor drainages off the ridge down to Knieriem Creek and Howard Canyon Creek, which will address potential impacts to the significant Goal 5 stream resources.

[18] Page III-14, 1996 HCRR
[19] Page III-14, 1996 HCRR
[20] See Duble Noise Report (Appendix D)

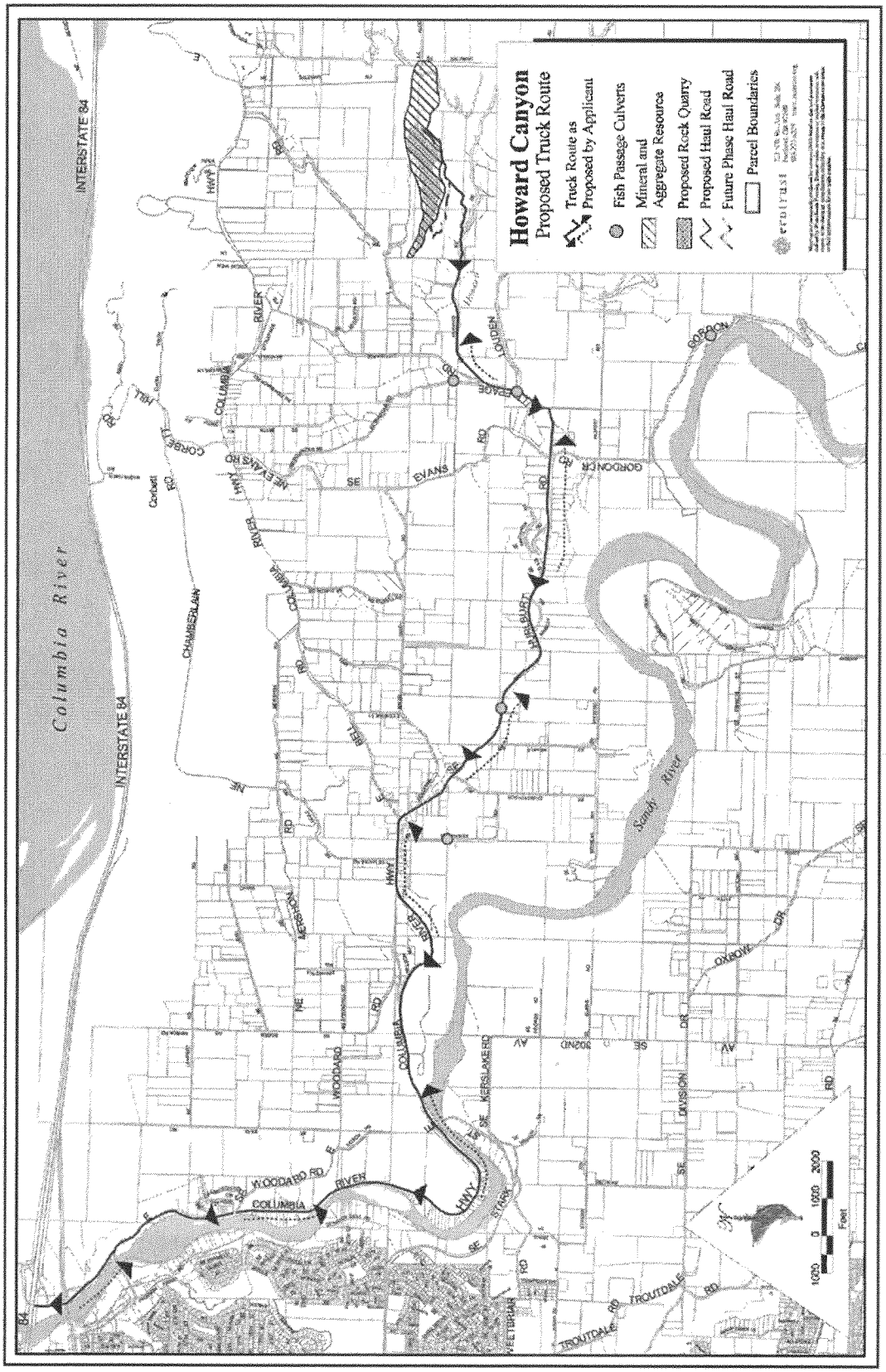

Figure 4. Proposed Truck Route

The impact area extends beyond 1,500 feet to the south and southeast of the site to include a pocket of 21 parcels zoned for rural residential uses along Louden Road. These parcels are 150 feet above the quarry on a ridge that forms the south side of Howard Canyon. The higher elevation and lack of intervening topography create potential noise conflicts. This potential was confirmed by public testimony from residents in this area complaining about noise from the existing quarry operations.[21]

Truck Route Impact Area

The proposed truck route will use Howard Road to enter and exit the site (Figure 4). Knieriem Road will not be used. The proposed truck route travels along local roads for a significant distance (3.9 miles) before reaching a major arterial. From Howard Road, the trucks will travel down Littlepage Road to Hurlburt Road to the Historic Columbia River Highway (HCRH) to Jordan Road to Interstate 84. The proposed truck route is preferred to alternate routes via Evans Road or Littlepage Road to the Historic Columbia River Highway to Corbett Hill Road and then to Interstate 84 because it is not as steep or nor will it impact the community of Corbett, including the public schools.

Howard Road and Littlepage Road are classified by Multnomah County as local roads, which are designed to provide access to abutting property, but not to serve through traffic. Hurlburt Road is classified as a rural collector, which serves as a link between local roads and rural arterials. Hurlburt Road intersects with the Historic Columbia River Highway in Springdale, approximately 3.9 miles from the Howard Canyon quarry entrance. All local roads are designed to be two-lane roads, with differing lane widths, roadway geometrics, and shoulder improvements. Hurlburt Road and Littlepage Road, from Knieriem Road to Hurlburt Road, are designated as a bikeway routes.

The Historic Columbia River Highway (HCRH) is a state highway and is designated by ODOT as a district highway, which is characterized as a traffic distributor between areas in and outside the County. It is also designated as scenic highway and national historic landmark. There are concerns about the ability of the HCRH to accommodate the increased truck traffic, including the design of the roadway (two-lane section with shoulders), limited bridge crossings, designation on the National Register of Historic Places, and a route through Springdale (a rural center). Therefore, the truck route impact area is extended to include the Historic Columbia River Highway from Hurlburt Road to Interstate 84.

Rural residential dwellings are located along the truck route, with varying setbacks. The minimum front setbacks in the zoning districts range from 30 to 60 feet from the centerline of the road. The Duble Noise Study uses an average building setback of 50 feet to evaluate truck noise impact.[22] Differences in actual setbacks, changes in grades or truck speeds could increase the noise levels. Therefore, in order to account for possible increased noise levels, the truck route impact area is defined as 100 feet from centerline on either side of the road.

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[21] May 2002 Community Meeting Summary (Appendix G).
[22] Page 8, Duble Noise Study (Appendix D)

Identify Conflicting Uses

OAR 660-16-005 requires the identification of conflicting uses.[23] Examining the uses allowed in each zoning district within the impact area does this identification. A conflicting use is one, which, if allowed, could negatively impact a Goal 5 resource site. For mineral and aggregate resource sites, conflicting uses also include those that would be adversely impacted by mining.

Allowed Uses

Quarry Impact Area

There are four zoning districts within the impact area: Exclusive Farm Use (EFU), Commercial Forest Use - 4 (CFU-4), Multiple Use Agriculture (MUA-20), and Rural Residential (RR). The majority of acreage is zoned CFU-4, primarily the resource site and north, south, and east of the resource site. EFU zoning applies to one (34 acre) parcel within the resource site and nine parcels located due west of the resource site. There is one parcel zoned MUA-20 located in the northwest corner of the impact area. There are 21 parcels with 16 dwellings in the RR zone within the impact area. The permitted uses for each of these districts are listed in Appendix A.

The permitted uses that have the potential to be impacted by mining activities are:

> Residential Dwellings (including mobile homes and caretaker residences) – There are 35 residential dwellings within the quarry impact area, including 16 within the rural residential area. These dwellings are considered conflicting uses. The potential for additional dwellings in the impact area is relatively low. There are 14 vacant parcels in the impact area. Recent changes to Goal 3 (agricultural land) and Goal 4 (forest land) limit the potential for new dwellings. Residential dwellings are noise sensitive and therefore conflict with the quarry operations. The adverse noise impacts (conflicts) are discussed below.
>
> Home Occupations – Type A home occupations are allowed uses in the CFU-4, EFU, MUA-20 and RR districts. Type B home occupations are conditional uses in all four districts. Cottage industries and limited rural commercial uses are conditional uses in the MUA-20 district.[24] These uses (and conflicts) involve people in activities that might be sensitive to noise impacts from mining activities. For the purposes of this analysis, these types of uses are potential conflicts that

[23] The new Goal 5 rule limits the conflicting use identification to existing and approved uses, not just allowed uses (OAR 660-23-180(4)(b)). It also limits the conflicts to discharges (noise, dust, etc.), local roads, other Goal 5 resources, and farm practices.

[24] Cottage Industry is defined as "A processing, assembling, packaging or storage industry, generally employing fewer than 20 persons, conducted wholly within an enclosed building located on a site isolated from other such uses, generating low traffic volumes and with little or no noise, smoke, odor, dust, glare or vibration detectable at any property line." (MCC 33.0005(A)(8))

are equivalent to residential dwellings. That is, noise impacts to residential uses are similar in nature to impacts to home occupations.

Community Uses – Uses such as parks, campgrounds, schools, churches, and day care facilities are permitted as allowed, review, or conditional uses in the various zoning districts. None of these types of uses are located within the impact area. The nature of these uses (and conflicts) involves people in activities that might be sensitive to noise impacts from mining activities. For the purposes of this analysis, these types of uses are potential conflicts and are considered to be equivalent to residential dwellings.

Farm Uses – Farm uses are allowed in all four districts. Certain agricultural practices, such as raising livestock, can be sensitive to noise impacts from mining activities. Per the requirements of Multnomah County Framework Plan Policy 16-B, Strategies I and J, farm uses are considered to be conflicting uses and are discussed below.

Truck Route Impact Area

The truck route passes through a mix of EFU, CFU, MUA-20, and Rural Residential zoning districts with a similar set of conflicting uses as described within the impact area.

Rural Center – The truck route passes through Springdale, a rural center. Rural centers have a concentration of rural residential uses with limited commercial facilities, small-scale industrial uses, and public uses. The Springdale rural center currently has 55 existing residences with 12 vacant and developable parcels. The rural center also contains several commercial uses and other community-serving uses, including two churches, a fire station, a County road shop, and until 1995 the Springdale Elementary School (now occupied by a children's theater and museum).[25] The rural center represents a concentration of uses that are potentially sensitive to truck traffic from quarry operations. The uses allowed in the Springdale rural center potentially conflict with quarry truck traffic.

[25] East of Sandy River Rural Plan

Noise

Noise Standards

The DLCD Goal 5 Aggregate Mining Handbook advises (page 24) that local governments consider Department of Environment Quality (DEQ) regulations that regulate water and air pollution, including noise standards.

There are three different DEQ standards that could apply to this situation, depending on whether the quarry is considered to be an existing use or a new use on a previously used site or a new site. Under OAR 340-035-0015(17):

> ***"Existing Industrial or Commercial Noise Source means any industrial or commercial noise source for which installation or construction was commenced prior to January 1, 1975."***

County records indicate mining activity at the Howard Canyon Quarry as far back as the late 1960s and therefore it may be considered an existing industrial or commercial noise source. However, no land use or zoning permit has ever been issued by Multnomah County.

Under OAR 340-035-0015(33):

> ***"New Industrial or Commercial Noise Source means any industrial or commercial noise source for which installation or construction was commenced after January 1, 1975 on a site not previously occupied by the industrial or commercial noise in question."***

Under OAR 340-035-0015(47):

> ***"Previously Unused Industrial or Commercial Site means property which has not been used by any industrial or commercial noise source during the 20 years immediately preceding commencement of construction of a new industrial or commercial source on that property."***

The issue then becomes how the terms "site" and "property" are interpreted. The Howard Canyon Quarry is comprised of six discrete parcels, not one encompassing parcel. As such, each parcel is a freely transferable property. The distinction is important in that ORS 92.017 provides that "[a] lot or parcel lawfully created shall remain a discrete lot or parcel, ... as provided by law." Subsequently, each parcel may be sold as an individual property without any required County zoning or land division review. This could result in new and different ownership of the various parcels within the mapped quarry. It follows then, crossing a parcel line into a previously unused industrial or commercial "site" constitutes a previously unused industrial or commercial "property" and would therefore be a new use on that parcel and hence a new noise source.

Alternatively, the term "property" could be interpreted to mean "contiguous parcels under common ownership", in which case the expanded quarry could be considered an existing source.

DEQ Daytime Noise Standards

Type of Source	L50 Hourly Standard
Existing Source	55 dBA
New Source on Previously Used Site	55 dBA
New Source on Previously Unused Site	Ambient plus 10dBA

Source: OAR 340-35-0035

Although the original quarry operations may qualify as an existing source under the DEQ definitions, the quarry has operated under a small-scale Grant of Total Exemption without a permit from the County. Expansion of the quarry will require new permits. The expanded quarry operations also will cross parcel lines onto property that was previously unused. Therefore, for the purposes of evaluating the noise impacts, this analysis will use the stricter standard for New Sources on Previously Unused Sites (Ambient plus 10dBA). Also, per OAR 340-35-0035(1)(b)(ii), the noise analysis will include all noises generated or attributable to the quarry, including the off-site impacts of truck traffic.

Noise Levels

Al Duble, P.E., an acoustical engineer, prepared for Multnomah County a study of the noise impacts of the Howard Canyon Quarry (see Appendix D). Ambient noise was measured at seven residential sites surrounding the resource site in February and March 2002 (see Figure 6). The noise of rock extraction and processing sources also were measured. Future noise levels were calculated with "Noisecalc", a popular computer sound propagation program.

Table 3. Predicted Noise Levels Compared To Ambient Levels

Site No.	Distance To Future Extraction [1]	Quietest Daytime Hour (Ambient)	Predicted Noise Level	Difference
1 – Howard Rd.	1,025 ft	39dBA	51dBA	+12dBA
2 – Howard Rd.	1,400 ft	62dBA[2]	44dBA	-18dBA
3 – Howard Rd.	1,375 ft	37dBA	43dBA	+6dBA
4 – Louden Rd.	2,750 ft	37dBA	40dBA	+3dBA
5 – Knieriem Rd.	400 ft	40dBA	53dBA	+13dBA
6 – Salzman Rd.	1,565 ft	38dBA	48dBA	+10dBA
7 – Howard Rd.	770 ft	38dBA	47dBA	+9dBA

1. Per the Olson Engineering Mining Plan (Appendix C).
2. This site abuts Howard Canyon Creek, which raises the ambient noise level.

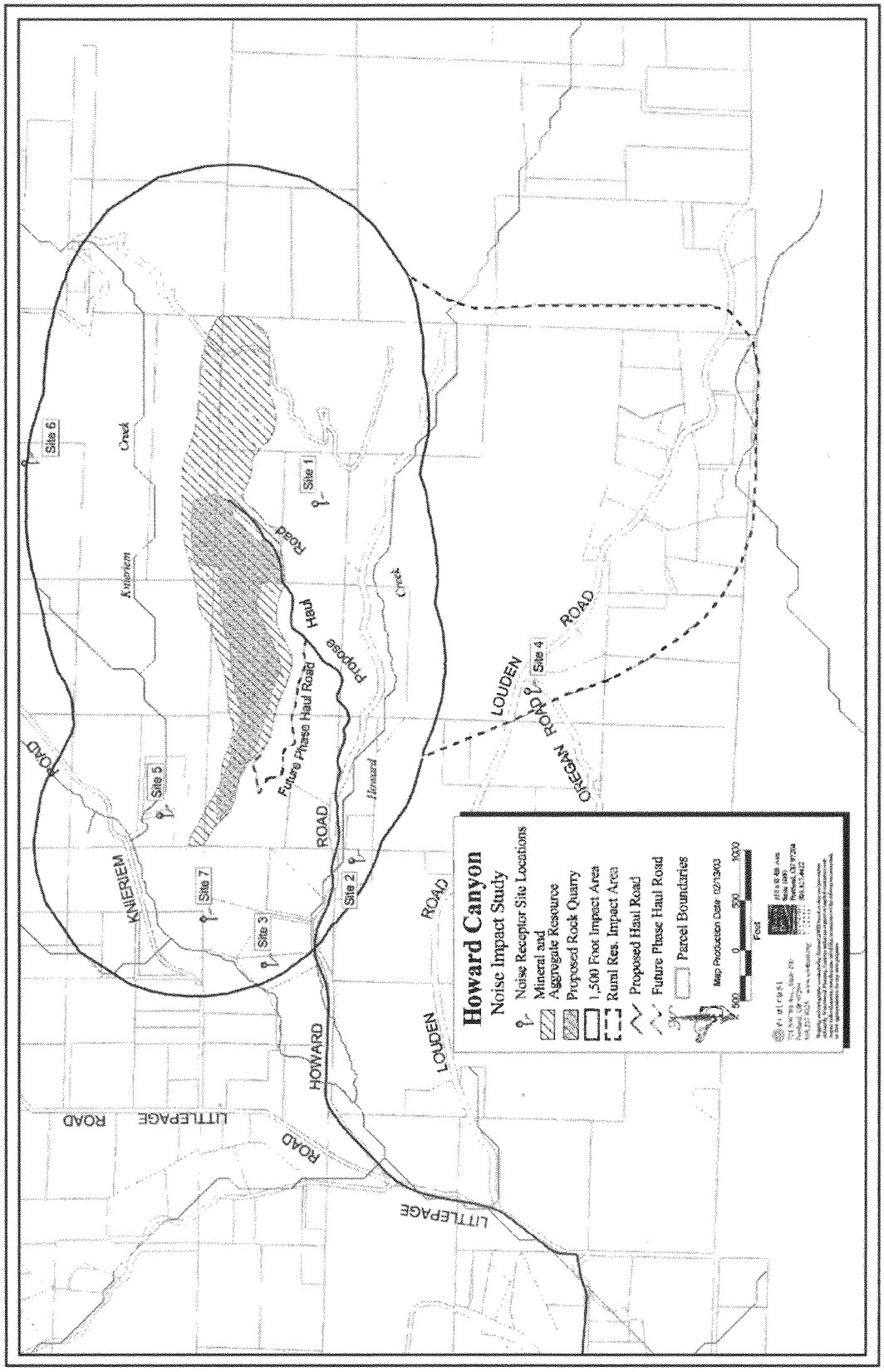

Figure 6. Noise Impact Study

Table 4. Predicted Noise Levels Compared To Ambient plus 10 dBA Standard

Site No.	Distance To Future Extraction	DEQ Hourly Standard (Ambient plus 10 dBA)	Predicted Noise Level	Difference
1 – Howard Rd.	**1,025 ft**	**49dBA**	**51dBA**	**+2dBA**
2 – Howard Rd.	1,400 ft	62dBA	44dBA	-18dBA
3 – Howard Rd.	1,375 ft	47dBA	43dBA	-4dBA
4 – Louden Rd.	2,750 ft	47dBA	40dBA	-7dBA
5 – Knieriem Rd.	**400 ft**	**50dBA**	**53dBA**	**+3dBA**
6 – Salzman Rd.	**1,565 ft**	**48dBA**	**48dBA**	**0**
7 – Howard Rd.	770 ft	48dBA	47dBA	-1dBA

Two locations (Sites #1 and 5) are predicted to exceed the more restrictive DEQ Ambient Degradation Standard, and a third location (Site #6) meets the standard exactly. These predicted noise levels create conflicts that need to be mitigated or addressed through the ESEE analysis.

Blasting Noise

Blasting noise was calculated based on distance to each site and charge weight and compared to the DEQ blast noise standard of 98dBC.

Table 5. Predicted Blast Noise Levels

Site No.	Distance To Future Extraction	Scaled Distance	Calculated Noise Level	DEQ Blast Standard	Difference
1 – Howard Rd.	1,025 ft	47 ft	96 dBC	98 dBC	-2dBC
2 – Howard Rd.	1,400 ft	114 ft	83 dBC	98 dBC	-15dBC
3 – Howard Rd.	1,375 ft	112 ft	82 dBC	98 dBC	-16dBC
4 – Louden Rd.	2,750 ft	224 ft	71 dBC	98 dBC	-27dBC
5 – Knieriem Rd.	**400 ft**	**37 ft**	**99 dBC**	**98 dBC**	**+1dBC**
6 – Salzman Rd.	1,565 ft	128 ft	84 dBC	98 dBC	-14dBC
7 – Howard Rd.	770 ft	63 ft	94 dBC	98 dBC	-4dBC

Only one site (site 5) exceeds the DEQ blast noise standard. However, the calculated noise levels exceed ambient levels, so are expected to be audible within the impact area.

Truck Noise

Truck noise was studied based on a maximum hourly volume of five trucks per hour (10 round trips), or 40 trucks per day. This volume exceeds the 30 trucks per day in the most intensive mining scenario at the 75,000 cubic yards per year extraction rate. At five trucks per hour, the calculated truck L10 noise level is 51 dBA. The L10 standard (ambient plus 10dBA) for the seven sites ranges from 51-63 dBA, with three sites at 51 or 52 dBA. Therefore, the haul trucks (at five trucks per hour) could meet this standard. If the truck volume decreases from five truck per hour to two per hour, the L10 truck noise would decrease to 43 dBA, well within the ambient plus 10dBA L10 standard.

However, the truck noise level is based on a reference point of 50 feet, a reference speed of 35 mph, and a flat grade. Noise levels for houses located closer than 50 feet to the road will be louder.[26] If the distance decreases from 50 feet to 25 feet, then the noise is expect to increase 6 dBA.[27] Trucks traveling faster than 35 mph will be louder. Trucks accelerating uphill or using their engine "Jake" breaks on a downhill section will be louder. All of these conditions exist along the truck route, and therefore have the potential to create conflicts.

The predicted noise levels for trucks have the potential to create conflicts that need to be mitigated or addressed through the ESEE analysis.

Quality of Life Issues

The DEQ hourly noise standard does not adequately reflect the impact from continuous quarry activities. It does not distinguish between one hour of operation or eight hours of operation. It does not distinguish between one day of operation or eight months of operation. However, there is no objective standard to measure or quantify this impact to the quality of life to the surrounding area.

Therefore, the long-term noise impacts on quality of life are potential conflicts that need to be mitigated or addressed through the ESEE analysis. These impacts will be addressed as a social impact, especially in terms of impacts to the rural quality of life. Noise impacts may be considered an environmental impact, related to air quality, or an economic impact, related to the cost of mitigation measures, such as additional sound insulation. For this study, the impacts are related to the social impacts, in that, mitigation measures to mitigate social impacts will reduce any environmental or economic impact.

Local Transportation Network

The Howard Canyon Quarry is only accessible from local roads and is 3.9 miles from the nearest arterial at the intersection of Hurlburt Road and the Historic Columbia River Highway (HCRH) and another 4.8 miles (a total of 8.7 miles) to Interstate 84. The Corbett area is located between the Sandy and Columbia Rivers with only three access routes across the Sandy River to the Portland metropolitan area – the HCRH, Corbett Hill Road to Interstate 84, and Gordon Creek Road to the south.

Other operating quarries in Multnomah County, such as the Angell Brothers site and the County's 190th Ave site, have direct access to collector, major collector, or arterial streets.

Bridges and Culverts

Water and topography limit the point of ingress and egress to the rural area east of the Sandy River and require all traffic to pass over one of several bridges or viaducts. Bridge Inventory Ratings differ for different truck configurations. The typical aggregate haul truck is a Type 3 truck, which has tandem (double) rear axels and a total maximum

[26] The minimum front setback in the Rural Residential and Rural Center zones is 30 feet.
[27] Page 8, Duble Noise Study (Appendix D)

weight of 25 tons when fully loaded. The proposed truck route limits the number of bridge or culvert crossings to the following: [28]

Littlepage Road Culvert over Big Creek: This 12-foot span concrete culvert is about 2,000 feet south of the Howard Road intersection. A 1992 evaluation by the County's Bridge Section listed the culvert as a Type 3 Inventory Rating, which is defined as 25 tons for Type 3 trucks. The Inventory Rating is defined as the load that can safely utilize an existing structure for an indefinite period. The listed Operating Rating for the culvert is 33.3 tons.

Hurlburt Road Culvert (#520-03) over Smith Creek: This culvert is at milepost 0.380 on SE Hurlburt Road. According to the IRIS database, the caste-in place concrete culvert is a 70' long box, with a height of 36" and width of 48". There is a headwall on the inlet. Cover depth is 10' with fall slope of 2% from inlet to outlet. The pipe has a 10-degree skew off of perpendicular of the road. There is only 1 pipe at this crossing. Maintenance crews regularly inspect the culverts, but the original inventory was done at August 1994, and the non-engineering inventory team views the pipe as "Adequate" in meeting the draining needs. The pipe is in Fair condition. This pipe is identified as one of the County's 45 fish passage culverts, but it's rating places it in the lowest third of program priority.

Howard Road Culverts over Howard Canyon Creek: A February 6, 2003 letter by Brian Freeman, P.E., of Group Mackenzie on behalf of the property owner identified four culverts along Howard Road that require improvements to provide adequate cover, structural support, or pipe strength.

Roads

The 1996 HCRR included an assessment of the local road segments nearest the Howard Canyon Quarry.[29] This assessment is supplemented by an overlay analysis by Pavement Services, Inc. (PSI) prepared for the quarry owner. [30]

Howard Road: This road is designated as a local road on the Multnomah County Functional Classification for Trafficways. The distance from the site driveway to the Littlepage Road intersection is 6,300 feet and runs parallel to Howard Canyon Creek and Big Creek with four culvert crossings. The roadway appears to be in fair to good condition with no evident distress. The existing structural section of the road is 2.75 to 4.0 inches of asphalt concrete on a 5 to 13 inch thick aggregate base. The PSI overlay analysis indicates that an overlay of about 0.5 to 2.0 inches (average of 1.3 inches) thick is needed to handle the haul trucks from the quarry.

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[28] Multnomah County, Division of Transportation, Bridge Office

[29] Page III-18, 1996 HCRR

[30] *Howard Canyon Quarry Haul Route Pavement Evaluation*, December 18, 2001 by Pavement Services, Inc.

Littlepage Road: This road is designated as a local road on the Multnomah County Functional Classification for Trafficways. Littlepage Road, from Hurlburt Road to Knieriem Road, is designated as a bikeway, but rural area bikeway standards do not require paved shoulders or a bike lane. The distance from Howard Road to Hurlburt Road is 2,200 feet and runs parallel to Big Creek with one culvert crossing. The roadway appears to be in very good condition with no evident distress. The existing structural section of the road is seven inches of asphalt concrete on a four-inch aggregate base. The PSI overlay analysis indicates that, on average, a 1.5-inch overlay is needed north of Louden Road, but no overlay is required south of Louden Road to handle the haul trucks from the quarry.

Hurlburt Road: This road is designated as a rural collector road on the Multnomah County Functional Classification for Trafficways. The distance from Littlepage Road to the Historic Columbia River Highway is 2.3 miles with one culvert crossing. The roadway surface has been chip sealed and generally appears to be in good condition, with occasional areas of low severity alligator cracking. The roadway has two travel lanes that are 10-feet and wider with varying shoulder widths. The existing structural section of the roadway is 7.0 to 9.75 inches of asphalt concrete on a 5 to 10 inch thick aggregate base. The PSI overlay analysis indicates that no overlay is required except for two isolated locations that require 0.6 inches overlay to handle the haul trucks from the quarry.

Hurlburt Road is a designated bikeway, but rural area bikeway standards do not require paved shoulders or bike lanes. Improving the bikeway along Hurlburt Road is a $1,000,000 project and is on Multnomah County's Fiscal Year 2003-2007, Transportation Capital Improvement Plan (TCIP), but is not scheduled to be constructed.

Historic Columbia River Highway (HCRH): This road is designated as a district highway in the Oregon Highway Plan (1999). The distance from Hurlburt Road to the Troutdale Bridge across the Sandy River is 4.33 miles and runs parallel to the Sandy River. The highway is a registered national historic landmark starting at the Lewis & Clark State Park through Springdale and Corbett and east into the Columbia River Gorge National Scenic Area. The HCRH has two 12-foot wide travel lanes with varying shoulder widths. Some shoulder widths are paved with the rest gravel. The roadway surface appears to be in good condition except for a very few locations of low severity distress and one location of a small sinkhole failure marked for repair. The existing structural section of the road is 6.0 to 8.5 inches of asphalt concrete on a 4 to 10 inch aggregate base. The PSI overlay analysis indicates that strengthening the roadway is required at approximately 30% of the test locations, with an average overlay of about 0.3 inches to handle the haul trucks from the quarry.

Jordan Road: This road is a short (0.69 mile) connector between the Sandy River bridge and I-84. It is not classified by Multnomah County or ODOT, but is under the jurisdiction of Oregon State Parks with a maintenance agreement with ODOT. Jordan Road has two 12-foot wide travel lanes with varying shoulder widths. The northbound lane width narrows to 10 feet as the road passes under the railroad bridge, with the bridge buttress approximately 2 feet from the edge of the roadway. At this point, the roadway curves and northbound trucks are forced to cross the centerline into the southbound lane. An expansion of the road at this location requires approval by the Union Pacific railroad as well as potential impacts to the Sandy River, a national scenic waterway.

The roadway surface is in fair to good condition except for the area near the I-84 interchange, which is in poor condition. The existing structural section of the road is 4.25 inches of asphalt concrete on a 10-inch aggregate base. The PSI overlay analysis indicates that strengthening the roadway is required at two locations, with an average overlay of about 0.7 inches to handle the haul trucks from the quarry.

The only planned road maintenance or improvement projects along the route is a shoulder widening project for pedestrian and bicycle use for Hurlburt Road from Littlepage Road to the Historic Columbia River Highway. The project is identified as a Bike Fund project on the 2003-2007 Transportation Capital Improvement Program. The cost is estimated at $1,000,000. This project ranks 66th out of 75 projects on the list and is not scheduled for construction.

The following conflicts exist on the local transportation network:

- The proposed truck route crosses at least 6 bridges or culverts that may not be able to handle a significant increase in truck traffic over a long-term basis.
- The proposed truck route is on local roads that are unable to carry a significant increase in truck traffic over a long-term basis.
- Hurlburt Road and Littlepage Road are designated bikeways without bicycle lanes or paved shoulders, which could create conflicts between quarry truck traffic and pedestrians, bicyclists and equestrians.
- The northbound lane of Jordan Road as it passes under the railroad bridge is too narrow, which causes northbound trucks to cross the centerline into the southbound lane.
- The Historic Columbia River Scenic highway is a designated national historic landmark, scenic byway, a primary accessway for the area, and a regional attractor for tourism and recreation.

The potentially significant impacts to local roads are conflicts that need to be mitigated or addressed through the ESEE analysis. Road maintenance and improvement projects will be addressed as an economic impact. Safety issues and conflicts between users, especially pedestrians, bicyclists, and equestrians, will be addressed as a social issue.

No specific road improvement projects have been identified at this time, so the environmental impacts are difficult to determine. However, road improvement projects could involve removal or replacement of culverts that are barriers to fish passage. Therefore, given all road projects are required to comply with federal ESA rules to minimize impacts to salmonids and their habitat, road projects are assumed to have minimal environmental impacts and will not be considered as part of the ESEE analysis.

Other Goal 5 Resources

Multnomah County has conducted four analyses of significant natural resources in the East of the Sandy River Rural Plan area. As part of the initial adoption of the Multnomah County Comprehensive Framework Plan in 1980, the first survey identified several large-scale significant resource sites (or combinations of many significant resources categories), wildlife habitat areas and historic sites. In 1990, a second inventory identified significant wetlands and associated wildlife habitat areas. The third analysis was the 1996 HCRR. The fourth analysis was the *East of Sandy River Wildlife Habitat and Stream Corridor ESEE Report*, completed in 1997. Based on these analyses, the other Goal 5 resources that potentially conflict with the Howard Canyon Quarry, include:

- Significant Streams
- Big Game Wintering Habitat Areas
- Historic Resources

Significant Streams

The 1996 HCRR determined that Howard Canyon Creek, Knieriem Creek, and Big Creek are significant Goal 5 resources.[31] Howard Canyon Creek and Knieriem Creek are tributaries to Big Creek, which in turn is a tributary of the Sandy River (see Figure 7). The drainage area of all three creeks is approximately 4,134 acres. The Oregon Department of Fish and Wildlife (ODFW) designates all three creeks as Class 1 streams. The Sandy River is designated by the County as a significant Goal 5 resource and as a state scenic waterway and a federal wild and scenic waterway.

Multnomah County has protected all three streams with the SEC (Significant Environmental Concern) overlay zone that applies within 300 feet of the stream centerline. This zoning overlay limits new development within 300 feet of the streams and requires full mitigation of any impacts through proper design and revegetation of disturbed areas. In areas where damage is unavoidable, the development must show other stream enhancements will improve the overall quality of the stream from its previous state. Forestry and agriculture activities are exempt from this ordinance.

[31] Pager II-8, 1996 HCRR

For this report, Multnomah County contracted with Pacific Habitat Services, Inc. to prepare a Biological Assessment (BA) to address the potential effects of expanding the existing Howard Canyon Quarry on species currently listed or candidates proposed for listing under the federal Endangered Species Act (ESA) and the State of Oregon's ESA (see PHS Biological Assessment, Appendix E). A list of the species potentially affected by the quarry expansion is included in Table 6.

Table 6. Federal ESA Status of Species Found in the Howard Canyon area

Species	Scientific Name	Evolutionary Significant Unit (ESU)	ESA Listing Status	Listing Decision Date
Steelhead Trout**	*Oncorhynchus mykiss*	Lower Columbia River	Threatened	March 13, 1998
Coastal Cutthroat Trout**	*Oncorhynchus clarki clarki*	Southwest WA/Columbia River	Proposed as Threatened	Since March 1999
Chinook Salmon**	*Oncorhynchus tshawytscha*	Lower Columbia River	Threatened	March 16, 1999
Coho Salmon**	*Oncorhynchus kisutch*	Lower Columbia River/Southwest WA	Candidate to Propose as Threatened	July 1995

* The state of Oregon has classified steelhead trout stocks, coastal cutthroat trout, and lower Columbia River Coho salmon as Sensitive Species of Critical Concern under the Oregon ESA.

** Steelhead and Coho salmon are under the jurisdiction of the National Marine Fisheries Service (NMFS). Coastal cutthroat trout are under the jurisdiction of the US Fish and Wildlife Service (USFWS).

Salmon and steelhead trout habitat in the Sandy River and its larger fish-bearing tributaries are federally protected by the essential fish habitat provisions of the Magnusson-Stevens Act. The 80-foot high waterfall in Big Creek precludes passage by Chinook salmon and steelhead trout from the Sandy River. As such, these species do not inhabit Big Creek, Howard Canyon Creek or Knieriem Creek. However, these creeks do provide habitat for resident cutthroat trout.

Although the waterfall restricts anadromous fish from entering the three creeks, the quality of water in the creeks still influences the quality of anadromous salmonid habitat in the Sandy River. For example, downstream of the confluence of the Sandy River and Big Creek are spawning gravels. These gravels could be negatively affected by changes in water quality stemming from riparian degradation or in-stream impacts to the three creeks. If the operation of the quarry impacts the spawning gravels, then NMFS could consider it as significantly modifying or impairing essential behavioral patterns (e.g. spawning), which is a "take," as defined within the ESA.

The BA assesses the potential effects of mining within the watersheds. It includes an assessment of the current quality and quantity of riparian habitat along the three creeks and an assessment of the in-stream habitat and fish presence within the three creeks. This information is used to determine the environmental baseline of the watershed. Potential

impacts from expanding the proposed quarry are weighed against how the environmental baseline could be affected by the mining operation. Proposed conservation measures to ensure that the environmental baseline is not adversely affected are included.

Stream Characteristics

The northern slope from the quarry area into Knieriem Creek is relatively undissected by drainages; suggesting that most of the surface and ground water from the quarry area goes south to Howard Canyon Creek. Howard Canyon Creek, which lies approximately 1300 feet south of the quarry area, has a gradient of approximately 2%. Tributary drainages to the creek from the quarry area have a variable spacing and strike with an average spacing of 370 feet. The gradient of these small tributary channels varies from 0.15 to 0.25.

A general pattern for the creeks is the change from canopied streams, with better quality riparian habitat, stable banks and better large woody debris (LWD) recruitment in the upper watershed, to less complex, increasingly channelized and exposed streams lower in the watershed. A common feature of the creeks within the vicinity of the quarry is the general lack of complex instream habitat, which primarily stems from the lack of large woody debris (LWD) within the streams. Logging, agricultural activities, and other local land use practices have reduced LWD recruitment in the watersheds. It also appears that several landowners within the area keep their streams and banks "clean".

Water quality was not directly measured during field visits. Therefore, the environmental baseline for water quality can only be indirectly addressed. Upstream of the quarry where human influence is minimal, the water quality of Howard Canyon Creek, Knieriem Creek and its small tributary Ross Creek appeared very good. Canopy cover is good which maintains lower temperatures during the summer. Chemical influences and sedimentation are likely not a problem. Though it was raining during one site visit, all streams ran clear. Downstream, where the streams run through yards and pastures, it is likely that nutrients and fecal coliform from livestock and septic tanks enter the streams. Chemicals leaching into the stream systems likely occur where there are insufficient buffers from roads (hydrocarbons) and when the creeks flow through yards and pastures or yards (herbicides, fertilizers). Additionally, the streams probably become slightly more turbid due to the unstable and failing banks.

Although the quality of the water degrades in all of the streams lower in the watershed, the quality does not appear to be sufficiently poor to inhibit populations of cutthroat trout from persisting along the entire stream network even during the summer.

The riparian areas of the creeks have been impacted by grazing, agricultural activities, rural road construction, and landscaped areas associated with residential construction. In general, the upper reaches of Howard Canyon Creek and Knieriem Creek both have undisturbed sections of riparian vegetation and human influences are minimal. The lower ends of the drainages have already been altered. There are significant impacts from roads, houses and yards, and livestock with access to the stream. Near the confluence of Knieriem Creek and Big Creek, tree cover is entirely lacking from the riparian areas. In

general, roads, culverts, clearing and residential development have impacted Big Creek. However, areas below Hurlburt Road appear to have an undisturbed riparian cover extending through Oxbow Park to the Sandy River. The riparian areas have not been directly impacted by the existing quarry operation.

There is no anadromous fish passage from the Sandy River into Big Creek, Howard Canyon, Creek and Knieriem Creek. A large natural 80-foot waterfall exists on Big Creek just above the confluence with the Sandy River. The cutthroat trout that exist upstream of the barrier are not prevented from traveling downstream and may add to the genetic diversity of cutthroat trout in the Sandy River. Upstream of the waterfall, a number of culverts provide difficult or impossible barriers to upstream migration of juvenile and adult cutthroat on Big Creek, Howard Canyon Creek, and Knieriem Creek. The barriers result from the long length of several culverts, the steep slope of several culverts, and eroded outfalls creating jump barriers greater than 6 inches high.

Where property access was granted, a backpack electroshocker (permit issued by the Oregon Department of Fish and Wildlife) was used to assess the presence of fish in Knieriem Creek, Howard Canyon Creek, and Big Creek. The survey determined that only two fish taxa: cutthroat trout and a sculpin species tentatively identified as the reticulate sculpin (*Cottus perplexus*), reside in the three creeks.[32] Only sculpins were found in lower Knieriem Creek. The numbers of fish found through the survey were relatively low. All fish appeared in good health with no obvious anomalies including sores, fin rot, or parasites. Collected fish were revived in buckets, identified and returned to the streams.

Potential Effects from Quarry Operations

The impact of quarry operations is dependent of several parameters of watershed health, including: temperature, turbidity, chemical contaminants/nutrients, physical barriers, substrate, large woody material, percent pool area, pool quality, pool frequency, off-channel habitat, refugia, width/depth ratio, streambank condition, floodplain connectivity, peak/base flows, drainage network increase, road density/location, disturbance history, and riparian reserves.

It is unlikely that the quarry will have direct impact on the creeks or the riparian vegetation along the creeks. However, impacts to water quality can have a detrimental effect on fish populations, even within the Sandy River. Increasing the sediment load decreases the viability of the cutthroat trout populations, many of which are isolated to certain reaches of the creeks by substandard culverts that do not allow fish passage and, therefore, the ability to escape from impaired water quality conditions. A spawning gravel bar in the Sandy River, located just downstream of the mouth of Big Creek, could be detrimentally influenced by an increase in sediment deposition resulting from the proposed quarry expansion.

Stormwater runoff from the quarry could become a very large sediment source, especially if overburden stockpiles are washed down into Howard Canyon Creek. Also, increased

[32] Page 4, PHS Biological Assessment (Appendix E)

truck traffic on adjacent roads also may contribute to sediment entering the creeks from mud, dirt, and dust blowing off the trucks and load. Vehicle refueling and maintenance as well as accidental chemical spills could impact water quality. Implementation of strict conservation measures will be needed to reduce adverse impacts to water quality.

Potentially significant impacts to streams and listed salmonid species will be mitigated or addressed as an environmental impact through the ESEE analysis.

Sensitive Big Game Wintering Areas Habitat

The East of Sandy Rural Plan incorporated by reference the finding of *The East of Sandy River Wildlife Habitat and Stream Corridor ESEE Report*, completed in 1997. This report concludes that the Howard Canyon quarry is located near three types of wildlife habitat area – primary, secondary and impacted. Primary wildlife habitat, consisting of large connected blocks of forest land in various successional stages, is located to the east. Secondary wildlife habitat (mixed forest and agriculture areas) and impacted wildlife habitat (rural residential and agricultural areas) areas are located to the west. Primary and secondary wildlife habitat areas were found significant.

In response to the previous conditional use permit application, the Oregon Department of Fish and Wildlife (ODFW) identified Howard Canyon and its environs as winter range for blacktail deer and Roosevelt elk.[33]

Impacts to winter range for blacktail deer and Roosevelt elk are addressed as an environmental impact in this ESEE analysis.

Historic Resources

Public comments and testimony have raised the issue of potential impacts to the historic resource qualities of the HCRH. The County's 1980 inventory identified two historical sites within the East of Sandy River rural area outside of the Columbia Gorge National Scenic Area. These are the Mountain View Cemetery, which is county-owned and thus protected, and the Graff house, a Queen Anne-style structure located on Louden Road, erected in 1885, and privately owned. This house is on the National Register of Historic Places. It also has a Historic Preservation Overlay zone, which requires review of any alterations for their effect on the site's historic nature. There are many County-designated historic sites within the Columbia Gorge National Scenic Area, which are now protected under the National Scenic Area Management Plan. In addition, a 1981 Oregon Department of Transportation (ODOT) study (*the Columbia River Highway Project*) inventoried historic resources along the HCRH. The inventory studied five structures in Springdale that have some historic significance, including the Springdale School Building. The study documented the well-known historic nature of the HCRH itself, which also is on the National Register of Historic Places. ODOT has determined that widening the HCRH to include turn lanes would have an adverse effect on the historic designation.

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[33] Email from Gregory Hobart, Habitat Biologist, ODFW to Virginia Bowers, Multnomah County, dated March 29, 2001

Farm and Forest Impact Study

The Board of Commissioners directed County staff to review potential impacts to surrounding farms. Because Multnomah County policies address farm and forest impacts, this study was expanded to include forests as well as farms.

The Farm and Forest Impact Assessment included a windshield survey and a mail survey to determine possible impacts from quarry operations. The windshield survey of the impact area and truck route was conducted to observe and note different farm and forest practices. An impact survey was mailed to all property owners within the impact area and along the truck route to identify potential conflicts between the quarry operations and existing farm and forest practices.[34] The summary of survey results is in Appendix F. In addition, a significant number of letters and public testimony has been submitted to document adverse impacts to farms in the surrounding area and along the truck route.

Current Farm and Forest Practices

In general, agricultural practices within the impact area and along the truck routes are a mix of small-scale farms, primarily raising livestock (horses, cattle, sheep, goats, llamas, and alpacas) with pastures for grazing or growing hay. There are a few farms that grow crops (vegetables and berries) or nursery stock.

Commercial forest lands are located primarily to the east of the quarry site. There are few small-scale wood lots located along the truck route.

Potential Changes to Farm and Forest Practices

Many of the survey respondents did not identify any impacts from the existing quarry or potential changes from an expansion.

Some respondents identified negative impacts to livestock related to blasting and truck traffic. These noise impacts scare animals, causing them to panic, breakdown fences and get loose. These respondents indicated a need to be more cautious with handling livestock, such as creating buffer zones and keeping them away from the edge of the road. A few respondents indicated breeding problems such as miscarriages or animals too nervous to breed. One respondent indicated negative impacts, especially from truck traffic, on their show horses. The trucks distract and otherwise make the show horse too nervous to train properly. They said increased operating hours and truck traffic would limit their training time.

One respondent indicated the need to wear masks and other protective measures to mitigate dust impacts while cutting and bailing hay.

A few respondents indicated that it might be necessary to change hauling hours during harvest time to avoid heavy truck traffic.

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[34] Of 344 surveys mailed to property owners, 48 surveys were returned. Not all survey returns were from farm or forest property owners. Some were from rural residential owners with no farm or forest activity. Some addressed traffic and other quality of life impacts unrelated to farm or forest impacts. The survey results are summarized in Appendix F.

None of the forest property owners indicated a potential impact to their practices from the proposed quarry operations.

Potential Cost Increases to Farm and Forest Practices

A couple of respondents indicated increased feed costs due to the loss of pasture land as they try to create a buffer zone by moving livestock away from the truck traffic. In the case of the show horses, the respondent indicated that there would be additional costs to transport the horses to an alternative training grounds or added lighting costs to be able to train at night.

A few respondents indicated added costs for landscaping or fence improvements including adding additional rails or hot wires.

One respondent indicated they would have increased hauling and handling costs if they changed their harvesting and hauling times to off peak hours to avoid truck traffic.

Additional Public Testimony

Testimony at the public hearings and written testimony submitted to the record confirm the impacts identified in the farm survey with additional detail. Selected excerpts include:

> Charles Diebert owns a 120-acre farm on NE Salzman Road, northeast of the resource site. Mr. Diebert has testified about conflicts between his livestock and noise from existing quarry operations and truck traffic (exhaust brakes).[35] In particular, his animals have experienced miscarriages and have died as a result of stress from loud noises. He is no longer able to utilize "field breeding" and had to build a breeding place at a significant cost.
>
> Michael Bogden owns a farm on Knieriem Road, where he raises livestock, including horses, goats, and llamas.[36] Mr. Bogden describes existing conflicts with respect to training his show horse, breeding his llama, and panicked goats in his pastures, which will require additional fencing.
>
> Sue Clark owns a farm on SE Littlepage Road, where she raises show horses.[37] Conflicts with truck traffic limits use of local roads for training, which could require transporting horses to another site for training. Also, noise from truck traffic interrupts the breeding of mares brought to the farm.
>
> Leslie Roach owns R&R New Options Equine, which operates on leased pastures on Littlepage Road.[38] The farm rehabilitates sick or injured horses and raises and/or trains horses. The farm also offers riding lessons. Existing truck traffic, especially the exhaust brakes, spooks young and inexperienced horses. One barn

[35] Letter from Charles Diebert
[36] Letter from Michael Bogden, March 1, 2003
[37] Letter from Sue Clark, March 1, 2003
[38] Letter from Leslie Roach, March 3, 2003

located near the road is used to house pregnant mares, and there is a concern about the noise impact from quarry truck traffic.

Alan Stokes owns a farm on SE Howard Road, where he raises cattle and grows hay.[39] Moving farm equipment along SE Howard Road is difficult due to its narrow width and blind corners. Also, quarry activities, especially blasting, could cause cattle to stampede or miscarriages at calving time. The alternative will be to create buffers in the pastures, which will increase feeding costs.

Adverse Impacts

Potentially significant impacts or increased costs on farm practices are related to noise and truck traffic and are potential conflicts that need to be mitigated or addressed through the ESEE analysis. To extent that mitigation measures reduce noise and truck traffic impacts for other conflicting uses (i.e. residential dwellings), some of the impacts to farms will be reduced. However, as evidenced by the conflicts with the existing small-scale GTE quarry operations, there is an inherent conflict between trucks and livestock.

Farm impacts will be primarily addressed as an economic impact, in terms of added cost of farming practices as a result of the quarry operations.

[39] Letter from Alan Stokes

ESEE Consequences

OAR 660-016-005 (2) requires that if conflicting uses to the resource are identified, then the economic, social, environmental and energy (ESEE) consequences of the conflicts must be identified and analyzed. Both the impacts on the resource site and on the conflicting use must be considered. The applicability and requirements of other Statewide Planning Goals, where appropriate, must also be considered. (OAR 660-16-0005)

The ESEE analysis is divided into three major components:

1. The consequences of the main quarry operations as a function of the amount of material extracted.
2. The consequences of mining on the hogback ridge.
3. The consideration of other Statewide Planning Goals.

Overview

The ESEE analysis is based on three basic scenarios outlined in OAR 660-16-010:

Fully Allow Mining (Protect the Resource Site without Local Restrictions)
Allow unlimited extraction of mineral and aggregate material, with minimal mitigation measures to comply with minimum state standards for noise and stormwater impacts. It assumes no additional local requirements or conditions of approval. ESEE consequences are summarized in Table 7. In general, there are no or minimal positive economic benefits in providing a regional and local source of mineral and aggregate material, with negative impacts to the surrounding area, in terms of reduced quality of life, increased costs to farms, increased potential of water quality impacts and sedimentation in the streams, and increased costs related to road maintenance and improvement projects.

Fully Allow Conflicting Uses (Prohibit Mining)
This scenario evaluates the consequences of no quarry activities. It assumes that the conflicts with existing and new residential dwellings and farms effectively prevent extraction of the aggregate and mineral resource. The ESEE Consequences are summarized in Table 7. In general, eliminating a regional and local source of mineral and aggregate material will have no or minimal negative economic impacts to the county and the region. Prohibiting extraction would have a major economic impact to the quarry owner and operator; however, this impact would be mitigated by the continuing operations under the DOGAMI GTE. These impacts are balanced by positive impacts to the surrounding area, in terms of improved quality of life and decreased costs to farms.

Limit Mining and Conflicting Uses
This scenario explores three alternatives of balancing the conflicts between extraction and the surrounding uses. The ESEE Consequences are summarized in Table 7.

1. Base Measures plus Severe Limits on Volume – The scenario includes Base Mitigation Measures for stormwater and noise with strict limits on volume of material to represent continued operation of the quarry at levels similar to the DOGAMI GTE limits. In general, there will be no economic impacts to the county and the region because there will be a continuation of the supply at historic levels. The quarry owner will continue to realize some economic benefit, but it will be reduced by the added cost of the mitigation measures. The negative impacts to the surrounding area, in terms of impacts to quality of life and to farms, are reduced but still present.

2. Base Measures plus Moderate Limits on Volume of Material – This scenario includes Base Mitigation Measures plus limits extraction to a maximum of 17,500 cubic yards per year. In general, there are no or minimal positive economic benefits in providing a regional and local source of mineral and aggregate material, with increased economic benefits to the quarry owner and operator. These economic benefits are offset by increased costs for mitigation measures, such as additional noise and water quality monitoring or more extensive road improvements. There are increased negative impacts to the surrounding area, in terms of reduced quality of life and increased costs to farms. The negative impacts are related to the overall level of quarry activities (duration of operations) and volume of truck traffic.

3. Base Mitigation Measures – This scenario allows extraction up to 35,000 cubic yards per year. In general, there are no or minimal positive economic benefits in providing a regional and local source of mineral and aggregate material, but greatly increased economic benefits to the quarry owner and operator. These economic benefits are offset by increased costs for mitigation measures, such as additional noise and water quality monitoring and more extensive road improvements. There are increased negative impacts to the surrounding area, in terms of reduced quality of life, increased costs to farms, and increased costs related to road maintenance and improvement projects. The negative impacts are related to the overall level of quarry activities (duration of operations) and volume of truck traffic.

Table 7. Summary of ESEE Consequences

	Fully Allow Mining	Limit Mining and Conflicting Uses	Prohibit Mining
Economic	• No or minimal positive effects to the region and east Multnomah County. • Positive economic effects to quarry owner and operator. • Possible negative effects to property values in the area. • Negative effects from increased cost of farm practices. • Negative effects from decreased development in rural center. • Negative effects due to lower water quality and increased treatment costs. • Negative effects due to decreased outdoor recreation opportunities. • Negative impacts due to increased road maintenance costs. • Marginal positive impacts in providing local aggregate source.	• No or minimal positive effects to the region and east Multnomah County. • Decreasing positive economic effects to quarry owner and operator. • Decreasing negative effects to property values in the area. • Decreasing negative effects from increased cost to farms. • Decreasing negative effects from decreased development in rural center. • Decreasing negative effects from improved water quality and lower treatment costs. • Decreasing negative effects due to decreased outdoor recreation opportunities. • Decreasing negative impacts due to increased road maintenance costs. • Marginal positive impacts from a local aggregate source.	• No or minimal negative effects to the region and east Multnomah County. • Negative economic effects to quarry owner and operator. • Possible positive impact on property values for quarry impact area. • Positive economic effects on farm practices due to reduced costs. • Positive effects from increased development in rural center. • Possible positive impacts on water quality and decreased treatment costs. • Positive impacts due to lower road maintenance costs. • Positive effects due to increased outdoor recreation opportunities. • Marginal negative effects from loss of local aggregate supply.
Social	• Negative impacts on quality of life due increased noise levels from the quarry operations and truck traffic. • Negative effects from ped, bike, and equestrian conflicts with truck traffic. • Negative impacts from reduced outdoor recreation opportunities.	• Decreasing negative impacts on quality of life due to lower noise levels from quarry operations and lower truck traffic. • Decreasing negative effects from conflicts with truck traffic. • Decreasing negative impacts on reduced outdoor recreation opportunities.	• Increased quality of life due to elimination of noise impacts. • Positive impacts from eliminating ped, bike, and equestrian conflicts with truck traffic. • Positive impacts from increased outdoor recreation opportunities.
Environmental	• Negative effects to streams due to lower water quality and increased potential of sedimentation. • Negative effects on big game wintering habitat due to increased quarry activities and truck traffic.	• Positive effects to streams due measures to protect water quality and decreased sedimentation. • Decreasing negative effects on big game wintering habitat due to mitigation measures on quarry activities and truck traffic. • Positive effects if road projects result in removal of fish barriers.	• Positive effects to streams due decreased sedimentation. • Positive effects on big game wintering habitat. • Possible negative effects if road projects are delayed that would result in removal of fish barriers.
Energy	• Positive effects from decreased travel distances for aggregate.	• Positive effects from decreased travel distances for aggregate.	• Negative effects from increased travel distances for aggregate.

ESEE Consequences of Alternatives Scenarios

Fully Protect the Mineral and Aggregate Resource (Allow Mining without Local Restrictions)

This scenario assumes extraction of mineral and aggregate material with no local restrictions. Federal and state (DEQ and DOGAMI) rules that mitigate noise and stormwater impacts apply, but there are no local limitations on the amount of extraction, except for compliance with DEQ standards for truck noise, which may limit truck traffic to 5 trucks per hour, or 40 trucks per day. This scenario assumes the County only imposes limited conditions of approval, even for local roads, and defers to the state agencies for enforcement of noise and stormwater standards.

Economic Consequences

- Region and Countywide

Aggregate is an important construction material used in building foundations and roads. The Portland metropolitan region is a net importer of quality aggregate rock.[40] Multnomah County imports aggregate from Columbia County and Clark County, Washington. Production numbers for Multnomah County are unavailable, but the total production for 2000-01 for Multnomah, Washington, and Clackamas counties was 9.1 million tons.[41] Total demand for aggregate in the three counties was estimated at 15.5 million tons.[42]

Multnomah County has 11 permitted quarries, including Howard Canyon.[43]

Extraction at 75,000 cubic yards per year represents less than one percent of the estimated regional demand for aggregate. Therefore, the quarry is expected to have minimal influence on the regional price of aggregate.

The Howard Canyon Quarry will create jobs in terms of quarry operators, truck drivers, and processors. However, the total number of jobs is expected to be negligible in terms of the total employment in the county or the region.

Result: Minimal positive economic impacts for the county and the region.

- Local (East of Sandy River)

Howard Canyon Quarry is the only known source of quality aggregate material east of the Sandy River.[44]

The local market for mineral and aggregate resources has three components:

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[40] Whelan, Robert M., Mineral Economist, DOGAMI, An Economic Analysis of Construction Aggregate Markets and the Results of a Long-Term Forecasting Model for Oregon, DOGAMI Special Paper 27, 1995.
[41] DOGAMI, July 10, 2002
[42] Whelan, 1995.
[43] DOGAMI Database, July 10, 2002
[44] DOGAMI Database, July 10, 2002

1. Maintenance of existing improvements.
2. New development.
3. Major public (road) projects.

The demand for maintenance of existing improvements and new development is expected to be low given the surrounding area is rural in character and outside the Urban Growth Boundary with the vast majority of land designated as resource land. One current supplier estimated that local demand is approximately 2,000 tons per year.[45] The demand for major public road projects is variable. All of the local roads will require maintenance at some point, but given the current lack of transportation improvement funding, the timing of such projects is uncertain.

Based on telephone surveys to regional suppliers, the cost of aggregate is relatively inexpensive ($12-36 per ton).[46] A local source could reduce transportation costs up to one-third according to public testimony.[47] Therefore, assuming these transportation cost reductions were passed on to the customer, then a 16-ton load of aggregate could cost $50 to $110 less. Assuming the total local demand is 2,000 tons per year and the local cost is $24,000 to $72,000 annually, which could be a positive economic benefit of $8,000 to $24,000 per year.

Result: Minimal positive economic effects in east Multnomah County by reducing the transportation costs for aggregate.

- Quarry Owner and Operator

Full extraction with minimum regulatory standards represents a major economic benefit to the Howard Canyon Quarry owners and operators. Gross revenue of 75,000 cubic yards of material is calculated in Table 8, based on prices quoted in telephone surveys to regional suppliers.[48]

Table 8. Quarry Gross Revenue Projection

Volume (cubic yards)	**Weight** (tons) (2.4 tons per cy)	**Gross Revenue** Decorative: $100/ton Aggregate: $7.25/ton	**Total Gross Revenue**
75,000 cy per year			**$6.31 million**
Decorative – 30%	54,000 tons	$5.40 million	
Aggregate – 70%	126,000 tons	$0.91 million	

Result: Major positive economic effects to quarry owner and operator.

[45] Public Testimony by Sherwood Davis (local hauler), Planning Commission Public Hearing, October 7, 2002.
[46] Public Testimony by Peter Finley Fry (dated October 1, 2002) and Robert Grott (October 7, 2002).
[47] Public Testimony by Sherwood Davis (local hauler), Planning Commission Public Hearing, October 7, 2002.
[48] Public Testimony by Robert Grott (October 7, 2002).

- Residential

Public testimony from several property owners from the surrounding area expressed strong opinions that their property values are reduced due to impacts associated with the current small-scale quarry operations, and that expansion of the quarry would further reduce their property values. Testimony by Bruce Lockwood, a real estate broker, indicated a negative impact to property values due to noise from the quarry activities, truck traffic, and the PAM overlay zone.[49] Proponents of the quarry have submitted conflicting evidence indicating quarries do not have a negative effect on property values based on photographs, aerial photographs, and tax assessment data for parcels adjacent to operating quarries in Clark County, Washington.[50] However, this information was not assembled by real estate professionals; is based on sites that are surrounded by urban development; two of the four sites front onto a state highway; and the analysis does not adequately explain the orientation of the quarry which may limit noise or truck impacts.

A protection program to allow full development of the resource may have an economic effect in limiting use or development of property within the impact area through the application of the County's Protected Aggregate and Mineral Resource (PAM) overlay zone. Most of the property within the impact area is zone EFU or CFU, which already carry strict limits on new residential dwelling development. There are 28 vacant parcels within the impact area, 12 of which are in contiguous ownership under the owner of the Howard Canyon Quarry.

Result Negative economic effects to surrounding property owners from decrease in property values due to adverse noise impacts and truck traffic.
Possible negative economic effects to surrounding property owners who would be restricted in future development of their property through the application of the PAM overlay zone.

- Farms

The farm impact analysis and public testimony indicates significant economic costs to surrounding farms in the form of increased fencing costs to keep livestock under control when startled by quarry activities or haul trucks; increased feed costs due to the loss of pasture land reserved as a buffer to reduce impacts to livestock; loss of revenue due to adverse impacts to breeding, such as miscarriages; and loss in quality and/or quantity of crop production due to dust impacts.

Farms also require aggregate as part of their on-going operations for driveways and access roads. A local source will reduce transportation costs to deliver aggregate for these uses.

Result: Negative economic effects from increased cost of farm practices.
Minimal positive economic effects from a local source of aggregate for area farms.

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[49] Letter from Bruce Lockwood, Oregon Realty Co., dated August 20, 2003.
[50] Letter from Tim Ramis, Ramis,Corrigan & Bachrach, dated February 5, 2003.

- Rural Center

Springdale is an unincorporated rural community at the junction of Hurlburt Road and the Historic Columbia River Highway along the proposed truck route. There are 16 dwellings with frontage on Hurlburt Road and another 15 dwellings along the Historic Columbia River Highway. Many of these dwellings are closer than the 50-foot setback used in the truck noise calculations. These shorter setback distances increase noise levels and adverse noise impacts, which in turn can decrease property values. In addition, a significant increase in truck traffic could decrease the attractiveness of Springdale for commercial development, which may threaten the viability of existing businesses or discourage new businesses from locating in Springdale.

Any new development will need for aggregate for driveways and access roads. Howard Canyon Quarry is the only known source of quality aggregate material east of the Sandy River. A local supply will reduce travel distances required to deliver aggregate where it is needed.

Result: Negative economic effects due to possible reduced property values and decreased attractiveness for development in the Springdale rural center. Minimal positive economic impacts to new development due to decreased transportation costs for aggregate.

- Streams

The negative economic impacts could be lower water quality and increased treatment costs for downstream users due to increased runoff, turbidity, and pollutants. Minimum stormwater controls would be required by state regulations. However, a site visit by County staff and consultants in November, 2001, raised concerns about adequate maintenance of these facilities and the ability of state agencies to enforce even the minimum standards. These shortcomings raise the possibility of increased runoff and sedimentation into the adjacent streams. However, given the distance between the quarry and the streams, the intervening drainages and vegetation reduce the amount of sediment reaching the stream.

The three creeks are part of the Sandy River watershed, which is an important salmon and steelhead fishery. The Sandy River is a popular sport fishing area that attracts visitors who create substantial economic activity for a variety of businesses in the region. Water quality is an important factor in salmon recovery plans. Lower water quality and reductions in the salmon fishery could cause negative economic impacts.

Result: Possible negative economic effects to downstream water users due to lower water quality and increased treatment costs.
Possible negative economic effects to region if lower water quality reduces salmon fishery.

- Big Game Wintering Habitat

Hunting and outdoor recreation (wildlife watching) have positive economic consequences for local businesses and the travel industry. To the extent that unrestricted mining operations adversely affect the quantity of big game in east Multnomah County, there could be a corresponding adverse impact on the local economy.

Result: Possible negative economic effects to local businesses and the travel industry due to decreased outdoor recreation opportunities.

- Roads

Fully allowing mining of Howard Canyon will result in a significant increase in truck traffic on local roads and bridges. Some of these roads have the minimum or substandard structural support. The truck traffic will accelerate wear and tear and increase maintenance costs.

However, a local source will reduce transportation costs to deliver aggregate for local maintenance and improvement projects.

Result: Negative economic impacts due to increased road maintenance costs.
Possible positive economic effects from a local source of aggregate for local projects.

Social Consequences

- Residential

At the public meetings, in the farm survey returns, and in written testimony, several property owners from the surrounding area expressed strong opinions about noise impacts and negative effects on the rural quality of life. Many commented that they choose to live in the area for peace and quiet of a rural area and that the existing small-scale quarry operations were a nuisance.

Under this scenario, the minimum regulatory standard for noise levels would be 55dBA, the DEQ L50 hourly standard for existing uses. The Duble noise study predicted the noise levels from future quarry operations would below the 55dBA level (see Table 3 above).[51] However, the DEQ standard may not adequately measure the impacts from the duration of the quarry activities. The DEQ standard is an hourly standard and does not adequately account for the continuous operations of the quarry. Unfortunately, there is no objective, measurable standard that distinguishes between one hour of operations and eight hours of operations, or one month of operations or eight months of operations.

[51] Page 9, Duble Noise Study (Appendix D)

Dust is another potential nuisance. Sources include rock crushers and unpaved private access driveways. Rock crushing equipment previously used at the site have obtained DEQ air contaminant discharge permits that require dust control.[52]

Public comments at the community meeting raised concerns about adequate enforcement of noise and dust standards, and the ability or willingness of the quarry operator to comply with those standards.

Result: Negative social impacts from a perceived reduction in the rural quality of life due to noise and dust impacts from the quarry operations.

- Farms

Possible social effect on farms are addressed either as a noise-related quality of life issue under residential uses (above) or as a safety conflict between trucks and equestrians under roads.

- Rural Center

At the community meeting and in the farm survey returns, several property owners commented about the noise impact of truck traffic traveling through Springdale and a perceived negative impact on the quality of life and Springdale's function as a community center.

Under this scenario, the minimum regulatory standard for truck noise levels would be 60dBA, the DEQ L10 hourly standard for existing uses. The Duble noise study predicted the noise levels from future truck traffic generated by quarry operations would be 51dBA, below the L10 standard.[53] The setback of residential dwellings in Springdale is less than the 50 feet used in the noise calculations. If an average setback of 25 feet is used, then the noise level increases to 57dBA, but is still below the DEQ L10 hourly standard. The DEQ standard is an hourly standard and does not adequately account for the continuous operations of the quarry.

Result: Negative social impacts from a reduction in the rural quality of life due to increased truck traffic from the quarry operations.

- Streams

Many regional residents enjoy fishing. To the extent that unrestricted mining operations adversely affect fish in adjacent streams, there could be a corresponding adverse social impact on residents due to reduced fishing opportunities.

Result: Negative social impacts from a reduction in fishing opportunities.

- Big Game Wintering Habitat

Hunting and outdoor recreation (wildlife watching) are enjoyed by many regional residents. To the extent that unrestricted mining operations adversely affect the quantity

[52] Page III-33, 1996 HCRR
[53] Page 8, Duble Noise Study (Appendix D)

of big game in east Multnomah County, there could be a corresponding adverse social impact on residents due to reduced hunting and recreational opportunities.

Result: Negative social impacts from a reduction in hunting and recreational opportunities.

- Roads

At the public meetings, in the farm survey returns, and written testimony, several property owners from the surrounding area expressed concerns about their inability to ride horses on local roads due to conflicts with truck traffic. They indicated that they ride along local roads to access trails along the Sandy River and Oxbow Regional Park. Many of the local roads are narrow and do not have shoulders, which limit the space for trucks to pass and create unsafe conditions for horse riders along the side of the road.

The Historic Columbia River Highway is a popular bicycle route and Littlepage Road and Knieriem Road are designated bicycle routes. There is a planned improvement project to add shoulders to Hurlburt Road for pedestrian, bicycle, and equestrian use, but no specific construction date. Increase truck traffic on these narrow, two-lane roads will increase conflicts with other users, especially on weekends when recreational use is higher.

Result: Negative social impacts from unsafe conditions for pedestrians, bicyclists, and equestrians due to conflicts with truck traffic on narrow local roads.

Environmental Consequences

- Residential

The possible air quality impacts from noise and dust are addressed as a social consequence.

- Farms

Environmental effects on farms, primarily due to dust, are addressed as an economic consequence.

- Rural Center

The possible air quality impacts from noise and dust are addressed as a social consequence.

- Streams

The negative environmental impacts to the streams could be lower water quality due to increased runoff, turbidity, sedimentation and pollutants. Minimum stormwater controls would be required by state regulations. However, a site visit by County staff and consultants in November, 2001, raised concerns about adequate maintenance of these facilities and the ability of state agencies to enforce even the minimum standards. These shortcomings raise the possibility of increased runoff and sedimentation into the adjacent streams.

The three creeks are part of the Sandy River watershed, which is an important salmon and steelhead fishery. Water quality is an important factor in salmon recovery plans. Lower water quality could have negative impacts on the salmon fishery.

Result: Negative environmental effects to adjacent streams and the Sandy River watershed and salmon fishery due to lower water quality and sedimentation.

- Big Game Wintering Habitat

According to ODFW, fully allowing mining of Howard Canyon could disturb deer and elk in the area, especially during the winter.[54]

Result: Negative environmental impacts from quarry operations on big game wintering habitat.

- Roads

Increased truck traffic will increase the need for maintenance and improvement projects on local roads, which could have adverse impacts if not done in an environmentally, fish-friendly manner. Wider roads with shoulders could result in the loss of riparian areas at the stream crossings.

However, road improvement projects represent an opportunity to improve culverts, which will remove barriers to fish passage.

Result: Negative environmental effects to streams and riparian areas due to road maintenance and improvements projects required by increased truck traffic. Positive environmental effects to fish habitat if road improvement projects include culvert replacement and removal of barriers to fish passage.

Energy Consequences

- Residential

Any new residential development in the surrounding area will need for aggregate for driveways and access roads. Howard Canyon Quarry is the only known source of quality aggregate material east of the Sandy River. A local supply will reduce travel distances required to deliver aggregate where it is needed.

Result: Positive energy effects to new residential development due to decreased travel distances for aggregate.

- Farms

Farms in the area have a need for aggregate for driveways and access roads. Howard Canyon Quarry is the only known source of quality aggregate material east of the Sandy River. A local supply will reduce travel distances required to deliver aggregate where it is needed.

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[54] Email from Gregory Hobart, Habitat Biologist, ODFW to Virginia Bowers, Multnomah County, dated March 29, 2001

Result: Positive energy effects to farms due to decreased travel distances for aggregate.

- Rural Center

Any new development will need for aggregate for driveways and access roads. Howard Canyon Quarry is the only known source of quality aggregate material east of the Sandy River. A local supply will reduce travel distances required to deliver aggregate where it is needed.

Result: Positive energy effects to new development due to decreased travel distances for aggregate.

- Streams

There is no identified energy effect on streams.

- Big Game Wintering Habitat

There is no identified energy effect related to big game wintering habitat.

- Roads

Road maintenance and improvement projects need large quantities of aggregate. Howard Canyon Quarry is the only known source of quality aggregate material east of the Sandy River. A local supply will reduce travel distances required to deliver aggregate where it is needed.

Result: Positive energy effects to road projects due to decreased travel distances for aggregate.

Fully Allow Conflicting Uses (Prohibit Mining)

This scenario evaluates the consequences of prohibiting extraction of the resource. It assumes that the conflicts with existing and new residential dwellings and farms would effectively prevent extraction of the aggregate and mineral resource.

Economic Consequences

- Region and Countywide

If extraction is prohibited, then regional supplies will be slightly reduced and the cost for these products could increase due to scarcity and increased transportation costs to import from outside the region. But given the small potential production volumes and the large regional demand, the impact is expected to be minimal.

Result: No or minimal negative economic impacts in the County and the region due to potential increases in the cost of mineral and aggregate material.

- Local (East of Sandy River)

This scenario reflects the current situation in that all of the local market demand for aggregate is supplied from outside the area. Based on telephone surveys to regional

suppliers, the cost of aggregate delivered to the area is relatively inexpensive ($12-36 per ton).[55] Presumably a local source would reduce the transportation costs, which could be up to one-third of the cost. Therefore, assuming these transportation cost increases were passed on to the customer, then a 16-ton load of aggregate could cost $50 to $110 more than one coming from a local source. Assuming the total local demand is 2,000 tons per year and the local cost is $24,000 to $72,000 annually, then the local market area could save $8,000 to $24,000 per year in transportation costs by not having to bring in aggregate from outside the area.

Result: Minor negative economic effects in east Multnomah County by increasing the transportation costs for aggregate.

- Quarry Owner and Operator

County prohibition of mining would only prohibit the quarry from obtaining a conditional use permit from the County. It does not prevent the quarry from continuing to operate under the terms of the DOGAMI Grant of Total Exemption for a small-scale quarry. The quarry could continue to operate by limiting the physical extent of the quarry area to five acres and mining down into the formation.[56] If the quarry operations are found to have begun prior to July 1, 1975, then they can continue in perpetuity provided they meet the annual limits of 5,000 cubic yards of material and one acre of disturbance. In addition, the site qualifies for a different DOGAMI exemption to provide aggregate for roads on contiguous parcels. These exemptions allow for the continued operation of the quarry at historic levels, which will mitigate some of the economic impact of prohibiting the full exploitation of the resource.

Result: Negative economic effects to quarry owner and operator.

- Residential

At the public meetings, in the farm survey returns, and written testimony, several property owners from the surrounding area expressed strong opinions that their property values are reduced due to impacts associated with the current small-scale quarry operations. If the quarry operations were to cease and adverse noise impacts and truck traffic were to be eliminated, then property values may increase.

Any new residential development may have added transportation costs to deliver aggregate for foundations and driveways.

Result Possible positive economic effects to surrounding property owners from perceived increase in property values due to the elimination adverse noise impacts and truck traffic.
Marginal negative economic effect to new residential development due to added transportation costs for aggregate.

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[55] Public Testimony by Peter Finley Fry (dated October 1, 2002) and Robert Grott (October 7, 2002).
[56] DOGAMI, the Schlicker report and the Throop assessment have estimated the formation to be up to 40 feet thick.

- Farms

The farm impact analysis indicates the potential of economic costs to surrounding farms from existing quarry operations in the form of: 1) increased fencing costs to keep livestock under control when startled by quarry activities or haul trucks; 2) increased feed costs due to the loss of pasture land reserved as a buffer to reduce impacts to livestock; 3) loss of revenue due to adverse impacts to breeding, such as miscarriages; and 4) loss in quality and/or quantity of crop production due to dust impacts. If the quarry operations were to cease and adverse noise impacts and truck traffic were to be eliminated, then these economic costs would be eliminated.

Farms also require aggregate as part of their on-going operations for driveways and access roads. Without a local source, transportation costs to deliver aggregate for these uses will increase.

Result: Positive economic effect to farms due to elimination of adverse noise and truck traffic impacts.
Marginal negative economic effect to farms due to added transportation costs for aggregate.

- Rural Center

At the public meetings and in written testimony, several property owners from Springdale testified about the adverse impacts of truck noise through the community. The minimum front setback in the Rural Center zone is 30 feet and many of the dwellings in Springdale are built close to the roadway. If the quarry operations were to cease and truck traffic were to be eliminated, then property values may increase and the attractiveness of Springdale for commercial development may increase.

Any new development will need aggregate for driveways and access roads. Without a local source, transportation costs to deliver aggregate for these uses will increase.

Result: Marginal negative economic effect to new development due to added transportation costs for aggregate.
Positive economic effects on property values and increased attractiveness for development in the Springdale rural center due to the reduction in truck traffic and related noise impacts.

- Streams

Fishing has positive economic consequences for local businesses and the travel industry. To the extent that prohibiting mining operations benefits the streams and fish habitat, there could be a corresponding positive impact on the local economy.

Result: Possible positive economic effects to local businesses and the travel industry due to increased fishing opportunities.

- Big Game Wintering Habitat

Hunting and outdoor recreation (wildlife watching) have positive economic consequences for local businesses and the travel industry. To the extent that prohibiting mining operations positively affects the quality of the wintering habitat and the quantity of big game, there could be a corresponding positive impact on the local economy.

Result: Possible positive economic effects to local businesses and the travel industry due to increased hunting opportunities.

- Roads

Prohibiting mining of Howard Canyon will reduce truck traffic on local roads and bridges, which could reduce the need for road maintenance and improvement projects.

Result: Positive economic impacts due to reduced road maintenance and improvement costs.

Social Consequences

- Residential

At the public meetings, in the farm survey returns, and written testimony, several property owners from the surrounding area expressed strong opinions about noise impacts and negative effects on the rural quality of life of the existing quarry operations. Elimination of these operations would result in improved of the quality of life.

Result: Positive social impacts from an improvement in the rural quality of life due to elimination of noise and dust impacts from the quarry operations.

- Farms

Possible social effect on farms are addressed either as a noise-related quality of life issue under residential uses (above) or as a safety conflict between trucks and equestrians under roads.

- Rural Center

At the public meetings, in the farm survey returns, and written testimony, several property owners commented about the negative noise impact of truck traffic traveling through Springdale. Elimination of truck traffic from current operations would result in a perceived improvement of the quality of life.

Result: Positive social impacts from a perceived improvement in the rural quality of life due to elimination of truck traffic from existing quarry operations.

- Streams

Many residents enjoy fishing. To the extent that prohibiting mining operations benefits the streams and fish habitat, there could be a corresponding positive social impact due to increased fishing opportunities.

Result: Positive social impacts from increased fishing opportunities.

- Big Game Wintering Habitat

Hunting and outdoor recreation (wildlife watching) are enjoyed by many regional residents. To the extent that prohibiting mining operations positively affect the quality of the wintering habitat and the quantity of big game in Multnomah County, there could be a corresponding positive impact due to increased hunting opportunities.

Result: Positive social impacts from increased outdoor recreation opportunities.

- Roads

At the public meetings, in the farm survey returns, and written testimony, several property owners from the surrounding area expressed concerns about conflicts between truck traffic from the existing quarry operations and pedestrians, bicyclists, and equestrians on the narrow, two-lane local roads. Elimination of truck traffic from the quarry will decrease conflicts with other users.

Result: Positive social impacts from elimination of unsafe conditions for pedestrians, bicyclists, and equestrians due to reduction of truck traffic on narrow local roads.

Environmental Consequences

- Residential

There are no environmental effects on residential dwellings.

- Farms

Environmental effects on farms, primarily due to dust, are addressed as an economic consequence.

- Rural Center

There are no environmental effects on the rural center.

- Streams

The eliminating the existing quarry operations could have positive environmental impacts to the streams due to the elimination of potential runoff, turbidity, and pollutants from the site.

Result: Potential positive environmental impacts to adjacent streams and the Sandy River watershed due to eliminating potential major sources of sedimentation.

- Big Game Wintering Habitat

Prohibiting mining could lessen disruptions and have a positive impact on the wintering habitat.

Result: Potential positive impacts due to fewer disruptions from quarry activities.

- Roads

Decreased truck traffic will decrease the need for maintenance and improvement projects on local roads, which could minimize adverse impacts to riparian areas at the stream crossings.

However, decreased need for road improvement projects could delay improvements to culverts and removal barriers to fish passage.

Result: Positive environmental impact to streams and riparian areas due to fewer road maintenance and improvements projects.
Negative environmental effects to fish habitat if road improvement projects that include culvert replacement and removal of barriers to fish passage are delayed.

Energy Consequences

- Residential

Prohibiting mining is not expected to increase or decrease energy consumption for existing residential uses. Any new residential development may expend more energy in transporting aggregate from outside of the area.

Result: Negative energy effects to new residential development due to increased transportation distances for aggregate.

- Farms

Farms in the area have a need for aggregate for driveways and access roads. Lack of a local supply will increase travel distances required to deliver aggregate where it is needed.

Result: Negative energy effects to farms due to increased travel distances for aggregate.

- Rural Center

Any new development may expend more energy in transporting aggregate from outside of the area.

Result: Negative energy effects to new development due to increased travel distances for aggregate.

- Streams

There is no identified energy effect on streams.

- Big Game Wintering Habitat

There is no identified energy effect on big game wintering habitat.

- Roads

Road maintenance and improvement projects need large quantities of aggregate. Howard Canyon Quarry is the only known source of quality aggregate material east of the Sandy River. Lack of a local supply will increase travel distances required to deliver aggregate where it is needed.

Result: Negative energy effects to road projects due to increased travel distances for aggregate.

Limit Conflicting Uses

Limiting conflicting uses implies more restrictions and mitigations measures on the quarry operations in an attempt to reduce conflicts or impacts on the surrounding area. This scenario assumes a more active role on the part of the County to impose conditions of approval and to monitor and enforce those conditions. It also assumes utilizing higher (or more restrictive) standards, such as DEQ's ambient degradation noise standard. It also assumes a more aggressive monitoring and enforcement role for the County to ensure stormwater runoff does not impact water quality and salmonids in the surrounding streams.

This scenario has three alternatives to explore ways of balancing the conflicts between extraction and the surrounding uses. The variations include mitigation measures that are more restrictive than the minimum state standards and feature decreasing levels of quarry activities, reduced volumes of material and reduced truck traffic. The variations are summarized in Table 9.

1. Base Measures plus Severe Limits on Volume – The scenario includes Base Mitigation Measures for stormwater and noise with strict limits on volume of material to represent continued operation of the quarry at levels similar to the DOGAMI GTE limits.

2. Base Measures plus Limits on Volume of Material – This scenario includes Base Mitigation Measures plus limits extraction to a maximum of 17,500 cubic yards per year.

3. Base Mitigation Measures – This scenario allows extraction up to 35,000 cubic yards per year with the Base Mitigation Measures.

Table 9. Limit Conflicting Uses Variations

	Low Volume	Moderate Volume	Mitigation Measures
Rate of Extraction	5,000 cy/yr	17,500 cy/yr	35,000 cy/yr
Hours of Operation	9am – 4pm	9am – 4pm	9am – 4pm
Max. No. of Trucks Per Day	2	7	14
Number of Blasts per Year L = Low Yield H= High Yield	1H	2L 1H	3L 1H
Drilling per Year	5 days	12 days	20 days
Splitting per Year	50 days	60 days	75 days
Crushing per Year	10 days	20 days	30 days
Loading	0.5 hrs/day	1.5 hrs/day	2.2 hrs/day
Hauling	0.3 hrs/day	0.5 hrs/day	0.8 hrs/day

Note: Estimated extrapolation from Olson Mining Plan (Appendix C).

Mitigation Measures

Noise

Expansion of the quarry will require permits that not been required to date. The expansion will cross parcel lines onto property that was previously unused. Therefore, for the purposes of evaluating the noise impacts, this analysis will use the stricter DEQ standard for New Sources on Previously Unused Sites (Ambient plus 10dBA). Also, the noise impacts include all noises generated or attributable to the quarry, including the off-site impacts of truck traffic.

The Duble Noise Study recommends several modifications to normal quarry operations that could serve to lower noise levels.[57] The noise study shows that rock drill and excavation noise are the major contributors to the noise levels.[58] Noise mitigation recommendations include:

- Hydraulic rock drills should be used with a vinyl plastic 1-psf noise barrier, or a straw bale barrier around the rock drill when operating. This barrier should be at least 2 feet higher than the top of the drill.

- Advance notice of blast events should be publicized to the surrounding community. A qualified registered acoustical engineer should monitor noise at several sites during the first blast event. Adjustments to blasting parameters, such as total charge weight, number of holes and stemming, should be made as necessary to meet the DEQ blast noise standard.

[57] Page 12, Duble Noise Study (Appendix D)
[58] Page 8, Duble Noise Study (Appendix D)

- A 25 to 30 foot rock wall should be maintained to enclose the processing area on at least three sides. The excavation depth should be maximized as much as possible.[59]

- Overburden should be used to establish a 10-foot high berm at the crest of the ridge at each new excavation location.[60]

- Excavation vehicles, such as front loaders and bulldozers, should be fitted with "residential" quality mufflers. This type of muffler should yield an 8dBA reduction for the low frequency exhaust, which is about 5dBA lower than the typical industrial grade muffler normally supplied with these machines. These mufflers are relatively inexpensive ($250-500 per vehicle).

- For crushed rock, conveyor belts, instead of haul trucks, should be used to convey excavated rock to the processing area. Transfer points should be enclosed with 20 gauge steel enclosure lined with 1" inch fiberglass panels. Although expensive, use of conveyors belts could reduce overall noise levels by 6dBA.

- Use of engine "Jake" brakes should be prohibited along the truck route, except in case of emergency to avoid accidents. If these brakes must be used due the extreme down grade of the haul road, the installation of special mufflers to reduce "Jake" brake noise will be required. These mufflers are relatively inexpensive ($250-500 per vehicle). This measure may be difficult to enforce because not all trucks coming to and from the site will be owned and operated by the quarry operator, some will be independent contractors.

- A qualified registered acoustical engineer should conduct semi-annual noise measurements for the first year at three of the closest residential sites to current quarry operations. After the first year, require annual measurements at the same three sites for a period of three years. The engineers' report should be submitted to Multnomah County.

- If a crusher is used, it should be surrounded with 1-psf vinyl plastic panel barriers supported by a suitable steel framework. Such a barrier should extend at least 2 feet over the highest point of the crusher.

- To reduce quality of life impacts, operating hours should be limited to 9 a.m. to 4 p.m., with no operations on Saturday or Sunday.

Table 10 shows that total noise with these mitigation measures is predicted to be below the stricter DEQ ambient noise standard at all sites. In addition to mitigation measures, the noise levels could be up to 5 dBA less due to ground cover and trees.

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[59] This measure is not possible along the hogback ridge due to steep slopes.
[60] This measure is not possible along the hogback ridge due to steep slopes.

Table 10. Predicted Mitigated Noise Levels[61]

Site No.	DEQ Hourly Standard (Ambient plus 10 dBA)	Predicted Noise Level	Difference
1 – Howard Rd.	49dBA	48dBA	-1dBA
2 – Howard Rd.	62dBA	41dBA	-21dBA
3 – Howard Rd.	47dBA	40dBA	-7dBA
4 – Louden Rd.	47dBA	40dBA	-7dBA
5 – Knieriem Rd.	50dBA	49dBA	-1dBA
6 – Salzman Rd.	48dBA	41dBA	-7dBA
7 – Howard Rd.	48dBA	43dBA	-5dBA

The DEQ hourly noise standard does not adequately address the quality of life or annoyance factor for continuous quarry operations all day, every day. However, there is no objective standard to measure or quantify this impact to the quality of life to the surrounding area. These mitigation measures are designed to help to reduce the annoyance and reduce the impact to the quality of life, primarily by prohibiting quarry operations during times when surrounding residents are most likely to be outside (evenings and weekends).

Public comments raised concerns about adequate enforcement of noise standards, and the ability or willingness of the quarry operator to comply with those standards. These scenarios assume a more active role for the County in monitoring and enforcing compliance with the mitigations measures which would be imposed as conditions of approval for any future conditional use permit.

The truck noise level is based on a reference point of 50 feet, a reference speed of 35 mph, and a flat grade. There are houses located closer than 50 feet along the truck route and trucks will need to accelerate from a stop at four intersections, which will create noise louder than the predicted noise levels. These conditions are amplified in the Springdale rural center, where there is a higher density of houses that are closer to the roadway. These conditions are difficult to mitigate, except in regulating the volume of truck traffic along the truck route.

At five trucks per hour, the calculated truck L10 noise level is 51 dBA. The L10 standard (ambient plus 10dBA) for the seven noise receptor sites range from 51-63 dBA, with three sites at 51 or 52 dBA. If the truck volume decreases from five trucks per hour to two per hour, the L10 truck noise would decrease to 43 dBA. Again, the DEQ hourly noise standard does not adequately address the quality of life or annoyance factor for continuous quarry operations all day, every day.

Streams

This scenario includes an aggressive approach to mitigating potential adverse water quality impacts from the quarry. It is imperative that quarry activities do not increase the sediment load in the surrounding creeks. An erosion control plan should include

[61] Page 16, Duble Noise Study (Appendix D)

measures designed to keep turbidity below ambient plus 10 percent conditions, 100 feet downstream from the quarry during a 10-year storm event. The largest source of sediment could originate from haul roads, processing areas, and overburden stockpiles. An erosion control plan should include the following measures:

- Weed-free straw bales and silt fences at the bottom of newly constructed slopes. Whenever straw bales are used, they should be staked and dug into the ground at least 12 cm (5 in);
- Construction of sediment settling basins, where appropriate. Berms shall be constructed, where appropriate, to divert runoff into these basins;
- Temporary plastic sheeting for immediate protection of open areas (where seeding/ mulching are not appropriate);
- Erosion control blankets or heavy duty matting (e.g., jute) should be used on steep unstable slopes;
- Sills or barriers should be placed in drainage ditches along cut slopes and on steep grades to trap sediment and prevent scouring of the ditches. The barriers should be constructed from rock and straw bales and be regularly maintained. Sills or barriers will be necessary in roadside ditches if water bars or cross-ditches are constructed within the haul roads to intercept and direct runoff from a road;
- On the pit or quarry floor, establish a slope that directs turbid water to flow to a low point where it can be collected in a detention pond;
- Biobags, weed-free straw bales and loose straw may be used for temporary erosion control. Temporary erosion and sediment controls should be used on all exposed slopes that could potentially create sediment-laden runoff into the creeks;
- On cut slopes steeper than 1:2 (v:h) where runoff will impact the creeks, a tackified seed mulch should be used so that the seed does not wash away before germination and rooting occurs. In steep locations, a hydro-mulch should be applied at 1.5 times the rate;
- No clearing within 100-feet of the creeks should be allowed unless mitigation is provided.
- Overburden should be removed from limited areas; concurrent or segmental reclamation should be encouraged to limit disturbed areas within the quarry.
- Material removed during excavation shall only be placed in locations where it cannot enter the surrounding creeks or their riparian areas;
- Stockpiles of overburden should be completely protected to ensure that sediment-laden runoff does not enter the adjacent creeks;

- Coir mats and coir logs, filter berms, or porous materials, such as sand and gravel that contains no 200-mesh or smaller material, should be used where appropriate to control erosion;

- All creek crossings should be fish passage friendly and constructed with open bottomed arched culverts or bridges with sufficient water passage capacity to withstand 100-year flood events;[62]

- Excavated areas should be recovered "as you go" so that only 5-10% of the proposed mining area is impacted at any one time.[63]

- Haul roads should be impervious surfaces with adequate erosion control best management practices to prevent sedimentation into adjacent creeks;[64]

- Erosion control devices that are failing should be immediately repaired to ensure that sediment-laden water does not leave the project site and discharge into the surrounding creeks;

- A permanent truck or wheel wash facility should be constructed to ensure that excess dirt and mud is washed off of all truck tires. The design could incorporate a series of railroad rails spaced approximately 2 to 8 inches apart to shake off the excess dirt while the truck is driving through the wheel wash. All water used to clean the trucks should be treated to remove sediment;

- Regular inspections should be made to inspect all erosion control devices; needed repairs and/or replacement should be identified; quarry staff should be provided with written directives to replace and/or update the devices, as needed; field inspections shall be made to ensure repairs and/or replacement of devices has occurred within specific timelines, and;

- Regular inspections with County staff should be made to review all erosion control devices and identify needed corrections and/or enhancements.

Also, water quality is susceptible to chemical contamination from pollutants such as vehicle fuels and maintenance or accidental chemical spills. A pollution control plan should be prepared to prevent point and non-point source pollution, and include the following measures:

- No pollutants of any kind (petroleum products, fresh concrete, silt, blasting material, etc.) shall come in contact with an active flowing stream or its riparian area;

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[62] Email from Gregory Hobart, Habitat Biologist, ODFW to Virginia Bowers, Multnomah County, dated March 29, 2001

[63] Ibid.

[64] Ibid.

- Vehicle maintenance, refueling of vehicles and storage of fuel shall be conducted at designated refueling areas located at least 150 feet from the creeks. The refueling areas should only be used if they are sufficiently contained and present no possibility for contamination;

- No toxicant (including petroleum products) will be stored within 150 feet of the creeks. Fuel and lubricant storage areas should be regularly monitored for leakage. A spill control kit should be maintained onsite at all times, and;

- Flocculants used to clean stormwater discharges or water recycled from rock-washing operations must be non-toxic and not harmful to fish or aquatic organisms. At least two ponds should be used to remove suspended solids. Settling time should be at least eight hours. The ponds should be easily accessible and maintained on a regular basis. Material removed from the ponds should be disposed of in an upland location.

From October to April, the quarry operator shall submit monthly monitoring reports, which includes water quality samples taken 100-feet downstream from the quarry. With these mitigation measures, the quarry may affect, but is not likely to adversely affect species currently listed or candidates proposed for listing under the federal or state ESA.[65]

Big Game Wintering Habitat

In response to the previous conditional use permit application, ODFW proposed the following conditions to minimize impact to wintering deer and elk:[66]

- Crushing and hauling of rock limited to daylight hours only.
- No crushing of rock from November 1 to March 31.

Farm and Forest

Impacts identified through the farm and forest survey and additional public testimony are primarily related to noise and dust from quarry operations and truck traffic. To a great extent, these impacts are addressed by mitigation measures proposed under the stream assessment (dust/sediment) or noise impact study. For example, measures to limit dust and potential sediment into the streams, such as truck washes, will also reduce dust impacts to adjacent farms.

The noise impact study identifies measures to reduce blasting impacts, such as advanced notification and monitoring to adjust charge weights to comply with DEQ noise standards. Advance notification would allow livestock owners the opportunity to move animals into barns or to other locations or to otherwise prepare for any adverse impacts, although this measure would require a change in accepted farming practices.

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[65] Page 25, PHS Biological Assessment (Appendix E)

[66] Email from Gregory Hobart, Habitat Biologist, ODFW to Virginia Bowers, Multnomah County, dated March 29, 2001

Truck traffic impacts are more difficult to address. The proposed noise mitigation measures limit the volume of truck traffic and the route. However, there is evidence that the existing level of truck traffic causes conflicts with livestock. Even the lowest extraction levels (5,000 cy/yr) will result in truck traffic that is equivalent to existing conditions and will not mitigate existing impacts along the proposed route.

Transportation

The 1996 HCRR required a traffic management plan as a conditional of approval in recognition of the inadequacy of Howard Road, Littlepage Road, and possibly other nearby roads to handle increased levels of heavy truck traffic.[67] The traffic management plan should identify improvements to address the following issues:

- Bridge Load Capacities – demonstrate the structural strength of bridge crossings are adequate to handle the expected truck traffic or make structural improvements to bridges and culverts or agree to weight limits for trucks crossing certain bridges.

- Roadway Design – all local roads, rural collectors, and intersections along the truck route between the site and Interstate 84 shall be improved to handle the expected quarry truck traffic. These standards include road width (including shoulders), curve radii, and structural integrity.

- Bikeways – designated bikeway routes along Hurlburt Road and Littlepage Road shall be improved by paving and striping an adequate shoulder area to mitigate the impacts of truck traffic on the bikeway routes.

Based on the results of a traffic management plan, the County Engineer will stipulate a schedule for necessary improvements and/or payments for road improvements.

Economic Consequences

- Region and Countywide

Limits on the quantity of rock extracted will have limited impact on the supply of rock available to the regional market. The net effect of the three variations of the limited scenario is increasing cost of quarry operations, which will reduce the competitive advantage of the site and further limit the minimal influence on the cost of rock in the region.

Result: No or minimal positive economic impacts for the County and the region due to the increasing cost of operations and declining volume of material.

- Local (East of Sandy River)

Based on previous calculations in the Fully Allow scenario, a local source of aggregate could represent a positive economic benefit of $8,000 to $24,000 per year to the local market. The Severely Limit (5,000 cy/yr) alternative assumes that the focus would

[67] Page IV-25, 1996 HCRR

continue to be on decorative columnar basalt with little or no aggregate material production, which would eliminate the economic benefit to the local area.

Result: Minimal positive economic effects in east Multnomah County by reducing the transportation costs for local aggregate needs.

- Quarry Owner and Operator

Under this scenario, the mitigation measures will increase production costs of the quarry, which will reduce profit margins. In addition, limits on the total annual volume of material to be extracted will reduce gross revenues, as calculated in Table 11.

Table 11. Gross Revenue from Quarry Operations

Volume (cubic yards)	Weight (tons) (2.4 tons per cy)	Gross Revenue Decorative: $100/ton Aggregate: $7.25/ton	Total Gross Revenue
5,000 cy per year			**$1.2 million**
Decorative – 100%	12,000 tons	$1.2 million	
Aggregate – 0%	-	-	
17,500 cy per year			**$3.44 million**
Decorative – 80%	33,600 tons	$3.36 million	
Aggregate – 20%	8,400 tons	$0.06 million	
35,000 cy per year			**$5.28 million**
Decorative – 60%	50,400 tons	$5.04 million	
Aggregate – 40%	33,600 tons	$0.24 million	

Result: Reduced, but still positive economic effects to quarry owner and operator.

- Residential

Public testimony from several property owners from the surrounding area expressed strong opinions that their property values are reduced due to impacts associated with the current small-scale quarry operations, and that expansion of the quarry would further reduce their property values. Testimony by Bruce Lockwood, a real estate broker, indicated a negative impact to property values due to noise from the quarry activities, truck traffic, and the PAM overlay zone.[68] Proponents of the quarry have submitted conflicting evidence indicating quarries do not have a negative effect on property values based on photographs, aerial photographs, and tax assessment data for parcels adjacent to operating quarries in Clark County, Washington.[69]

Mitigation measures and reduced operating hours with limits on the level of extraction should lessen the adverse impacts on surrounding properties, and could mitigate any additional negative impact on property values from expanded quarry operations. However, even continuation of the small-scale (5,000 cy/yr) operations will have a continuing negative impact on surrounding property values.

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[68] Letter from Bruce Lockwood, Oregon Realty Co., dated August 20, 2003.
[69] Letter from Tim Ramis, Ramis,Corrigan & Bachrach, dated February 5, 2003.

A protection program to allow full development of the resource may have an economic effect through the application of the County's Protected Aggregate and Mineral Resource (PAM) overlay zone. Application of the PAM overlay zone could limit use or development of property within the impact area, which could have a negative impact on property values. Most of the property within the impact area is zone EFU or CFU, which already carry strict limits on new residential dwelling development. There are 28 vacant parcels within the impact area, 12 of which are in contiguous ownership by the owner of the Howard Canyon Quarry.

Result Decreasing negative economic effects to surrounding property owners as adverse noise impacts and truck traffic are mitigated or reduced.
Possible negative economic effects to surrounding property owners through the application of the PAM overlay zone.

- Farms

As discussed above, the farm impact analysis and public testimony indicates potential increased costs to surrounding farms. Mitigation measures and reduced operating hours and volume limits could lessen the impact from quarry operations on farm practices. Limits on the number of trucks will not mitigate the existing conflicts between trucks and livestock.

Farms also require aggregate as part of their on-going operations for driveways and access roads. A local source will reduce transportation costs to deliver aggregate for these uses.

Result: Decreasing negative economic effects from increased cost of farm practices.
Decreasing positive economic effects from a local source of aggregate for area farms.

- Rural Center

Mitigation measures and limits on the quantity of rock extracted or on truck traffic should reduce truck noise levels and adverse noise impacts, which in turn should lessen potential negative impacts on property values. In addition, a reduced increase in truck traffic could lessen any adverse impact on the attractiveness of Springdale for commercial development. However, even continuation of the small-scale (5,000 cy/yr) operations will have a continuing negative impact on surrounding property values.

Any new development will need for aggregate for driveways and access roads. Howard Canyon Quarry is the only known source of quality aggregate material east of the Sandy River. A local supply will reduce travel distances required to deliver aggregate where it is needed.

Result: Decreasing negative economic effects from possible reduced property values and decreased attractiveness for development due to lower levels of truck traffic.

Decreasing positive economic effects to new development due to increasing costs for aggregate.

- Streams

The mitigation measures should decrease the potential for runoff, turbidity, and pollutants from reaching the streams. These measures should reduce negative economic impacts due to possible increased treatment costs for downstream users. They also should improve the fish habitat in the three creeks and the Sandy River watershed, which in turn will have a positive economic impact due to increased fishing opportunities.

Result: Reduced possible negative economic effects to downstream water users due to improved water quality.
Reduced possible negative economic effects to region due to improved water quality and improved fish habitat.

- Big Game Wintering Habitat

Hunting and outdoor recreation (wildlife watching) have positive economic consequences for local businesses and the travel industry. To the extent that limited mining operations will have decreasing adverse effects on the wintering habitat, there could be a corresponding lessening of the potential adverse impact on the local economy.

Result: Reduction in possible negative economic effects to local businesses and the travel industry due to decreased adverse impacts to wildlife habitat.

- Roads

The mitigation measures include road maintenance and improvement projects, which will mitigate the cost and impact of increased heavy truck traffic. Limits on the quantity of rock extracted or on truck traffic will reduce wear and tear and maintenance costs.

A local source will reduce transportation costs to deliver aggregate for local maintenance and improvement projects.

Result: Decreasing negative economic impacts due to increased road maintenance costs.
Positive economic effects from a local source of aggregate for local projects.

Social Consequences

- Residential

At the public meetings, in the farm survey returns, and in written testimony, several property owners from the surrounding area expressed strong opinions about noise impacts and negative effects on the rural quality of life. Many commented that they choose to live in the area for peace and quiet of a rural area and that the existing small-scale quarry operations were a nuisance.

Mitigation measures and reduced operating hours and level of extraction should lessen the noise impact from quarry operations. However, even continuation of the small-scale

(5,000 cy/yr) operations will have a continuing negative impact on surrounding quality of life.

Result: Decreasing negative impacts on quality of life due to a reduction of noise impacts from the quarry operations and decreasing levels of truck traffic.

- Farms

Possible social effects on farms are addressed either as a noise-related quality of life issue under residential uses or as a safety conflict between trucks and equestrians under roads.

- Rural Center

At the community meeting and in the farm survey returns, several property owners commented about the noise impact of truck traffic traveling through Springdale and a perceived negative impact on the quality of life.

With increasing limits on the quantity of rock extracted and a corresponding decrease in truck traffic, the noise impacts decrease, but are not eliminated.

Result: Decreasing negative social impacts from truck traffic noise.

- Streams

Many residents enjoy fishing; therefore fish and stream habitat are important to the environment and the quality of life. To the extent that limited mining operations have decreasing adverse effects on fish in adjacent streams, there could be a corresponding decrease in adverse social impact on residents due to reduced fishing opportunities.

Result: Decreasing negative social impacts from a reduction in fishing opportunities.

- Big Game Wintering Habitat

Hunting and outdoor recreation (wildlife watching) are enjoyed by many local residents. To the extent that limited mining operations have decreasing adverse effects on the quality of wintering habitat and the quantity of big game in east Multnomah County, there could be a corresponding decrease in the adverse social impact on residents due to reduced hunting opportunities.

Result: Decreasing negative social impacts from a reduction in adverse impacts to wildlife habitat.

- Roads

Many of the local roads are narrow and do not have shoulders, which limit the space for trucks to pass and create unsafe conditions for pedestrians, bicycle and equestrians along the side of the road. Road improvements and limits on truck traffic, especially on weekends during the summer months when recreational use is higher will reduce these conflicts.

Result: Decreasing negative social impacts from unsafe conditions for pedestrians, bicyclists, and equestrians due to reduce truck traffic on narrow local roads.

Environmental Consequences

- Residential

The possible air quality impacts from noise and dust are addressed as a social consequence.

- Farms

Environmental effects on farms, primarily due to dust, are addressed as an economic consequence.

- Rural Center

The possible air quality impacts from noise and dust are addressed as a social consequence.

- Streams

Potential negative environmental impacts to the streams related to a decrease in water quality due to increased runoff, turbidity, sedimentation and pollutants. This scenario includes a more aggressive approach to mitigating potential adverse water quality impacts from the quarry. With proper implementation, the potential adverse water quality impacts should be reduced. Given the mitigation measures are part of all three variations, the consequences are expected to be the same.

Result: Reduced potential negative environmental effects to Sandy River watershed and salmon fishery due measures to protect water quality and reduce sedimentation.

- Big Game Wintering Habitat

Provided that ODFW conditions are implemented, limited mining of Howard Canyon will result in an a marginal increase in quarry activities and truck traffic during the winter, which could limit disturbance to deer and elk in the area.

Result: Reduced possible negative environmental impacts on big game wintering habitat.

- Roads

Decreased truck traffic will reduce the need for maintenance and improvement projects on local roads, which could limit adverse impacts.

However, decreasing truck traffic could reduce need for road improvement projects and delay opportunities to improve culverts, which will remove barriers to fish passage.

Result: Reduced possible negative environmental effects to streams and riparian areas due to decreased need for road maintenance and improvements projects required by decreasing truck traffic.

Reduced possible positive environmental effects to fish habitat if road improvement projects that include culvert replacement and removal of barriers to fish passage are delayed.

Energy Consequences

- Residential

Any new residential development will need for aggregate for driveways and access roads. Howard Canyon Quarry is the only known source of quality aggregate material east of the Sandy River. A local supply will reduce travel distances required to deliver aggregate where it is needed.

Result: Positive energy effects to new residential development due to decreased travel distances for aggregate.

- Farms

Farms in the area have a need for aggregate for driveways and access roads. Howard Canyon Quarry is the only known source of quality aggregate material east of the Sandy River. A local supply will reduce travel distances required to deliver aggregate where it is needed.

Result: Positive energy effects to farms due to decreased travel distances for aggregate.

- Rural Center

Any new development will need for aggregate for driveways and access roads. Howard Canyon Quarry is the only known source of quality aggregate material east of the Sandy River. A local supply will reduce travel distances required to deliver aggregate where it is needed.

Result: Positive energy effects to new development due to decreased travel distances for aggregate.

- Streams

There is no identified energy effect on streams.

- Big Game Wintering Habitat

There is no identified energy effect on big game wintering habitat.

- Roads

Road maintenance and improvement projects need large quantities of aggregate. Howard Canyon Quarry is the only known source of quality aggregate material east of the Sandy River. A local supply will reduce travel distances required to deliver aggregate where it is needed.

Result: Positive energy effects to road projects due to decreased travel distances for aggregate.

Hogback Ridge ESEE Consequences

The hogback ridge that makes up the bulk of the western 1,000 feet of the resource site is distinctly different in character than the rest of the resource site. A separate ESEE analysis is conducted to highlight these conditions and consider the unique impacts related to mining this portion of the resource.

In the western 1,000 feet of the resource area, the basalt formation becomes a narrow hogback ridge with steep slopes on either side. This narrow ridge extends approximately 875 feet to the northwest corner of the property. The location of the basalt formation is identified in Figure 2. The Throop report illustrates the different cross-sections for the flat-topped ridge and hogback ridge (see Figure 3). Also, most of the hogback ridge is forested, whereas the flat-topped ridge has been used as pasture land.

The Olson Engineering mining plans show that the hogback ridge will be mined using a completely separate infrastructure of roads and stormwater control systems from those used to mine the main quarry area along the flat-topped ridge.

A mining plan for the hogback ridge would be subject to DOGAMI's steep-slope review. Removal of a thick layer of overburden that consists of soil and large boulders mixed with tree stumps will be difficult to complete without negative off-site environmental impacts such as rolling boulders and turbid stormwater.[70] While topsoil removal is difficult but possible, stockpiling the removed overburden on steep slopes as shown on the Olson Engineering mining plan is not recommended. A letter from Landslides Technology to Interstate Rock, dated January 25, 2001, recommends no construction of such stockpiles on ground steeper than 2:1.[71] In addition, more overburden will be removed from the hogback ridge than could be stored in the locations identified in the mining plan.

The access road and a major stormwater retention pond are located on the south side of the ridge. The Landslides Technology letter mentions that these south slopes are probably old landslide areas, and should require additional geotechnical mapping before any construction.

The hogback ridge has an estimated geologic reserve of 160,000 tons. This amount is a small fraction of the overall reserve of the main flat-topped ridge, which is in excess of 5 million tons. The narrowness of the hogback ridge is such that excavation is only expected to produce about 210 cubic yards of rock for each yard the quarry excavates along the ridge.[72] This level is about ten percent of the yield of the main quarry area.

Excavation of the hogback ridge brings the quarry operations closer to the surrounding dwellings and farms. At its furthest extent, the quarry operation would be within 400 feet

[70] Page 11, Throop Geologic Assessment (Appendix B)
[71] Letter is attached as Appenix 5 to Throop Geologic Assessment (Appendix B)
[72] Page 12, Throop Geologic Assessment (Appendix B)

and 770 feet of adjacent dwellings. This extension could severely increase noise impacts on adjacent dwellings

Economic Consequences

- Regional, Countywide, and Local Markets

The hogback ridge has an estimated geologic reserve of 160,000 tons. This amount is a small fraction of the overall reserve of the main flat-topped ridge, which is in excess of 5 million tons. The relatively small amount of material will have no impact on the regional or local market for aggregate.

Result: No economic effects on the cost of mineral and aggregate material.

- Quarry Owner and Operator

The hogback ridge has an estimated geologic reserve of 160,000 tons. This amount is a small fraction of the overall reserve of the main flat-topped ridge, which is in excess of 5 million tons. Extraction would require a new haul road and other mitigation measures that will increase costs.

Result: Marginal negative economic effect from forgone revenue due to leaving resource in place.

- Residential

The hogback ridge is the closest portion of the resource site to adjacent residential uses. As such, mining the ridge could increase the negative impacts on property values.

Result: Increased negative economic effects from decreases in property values as quarry operations move closer to surrounding properties.

- Farms

The hogback ridge sits above pastureland on the south side. Quarry operations could have adverse impacts on livestock.

Result: Possible increased negative economic effects as quarry operations move closer to surrounding farms.

- Rural Center

Mining the hogback ridge is expected to yield a marginal amount of rock compared to the main quarry. Therefore, it is not expected to have any additional economic impacts.

- Streams

Overburden stockpiles and stormwater detention facilities will need to be placed on the side of steep and potentially unstable slopes. Failure of these facilities could lead to a major sediment load into adjacent streams. This increased turbidity could lower water quality and could increase treatment costs for downstream users.

Result: Possible negative economic effects to downstream water users due to lower water quality and increased treatment costs.

- Big Game Wintering Habitat

Allowing mining of hogback ridge will increase in quarry activities and truck traffic, which could disturb deer and elk in the area, especially during the winter and reduce hunting opportunities.

Result: Possible negative economic impacts due to reduced hunting opportunities.

- Roads

Mining the hogback ridge is expected to yield a marginal amount of rock compared to the main quarry. Therefore, it is not expected to require additional road improvement projects and is not expected to have any additional economic impacts.

Social Consequences

- Residential

The hogback ridge is the closest portion of the resource site to adjacent residential uses. The Duble Noise Study assumed mining of the ridge in predicting future noise levels. Therefore, it should be possible to mitigate noise impacts to comply with DEQ hourly standards. However, mining the ridge could increase the negative impact on quality of life because the quarry operations would move closer to existing residential uses.

Result: Increased negative social effects from perceived reduction in the rural quality of life as quarry operations move closer to surrounding properties.

- Farms

Possible social effect on farms are addressed either as a noise-related quality of life issue under residential uses.

- Rural Center

Mining the hogback ridge is expected to yield a marginal amount of rock compared to the main quarry. Therefore, it is not expected to have any additional social impacts.

- Streams

Many regional residents enjoy fishing. To the extent that mining the hogback ridge will have an adverse effect on water quality and fish habitat, there could be a corresponding adverse social impact on residents due to reduced fishing opportunities.

Result: Negative social impacts from a reduction in fishing opportunities.

- Big Game Wintering Habitat

Hunting and outdoor recreation (wildlife watching) are enjoyed by many local residents. To the extent that mining the hogback ridge will have an adverse effect on the quality of wintering habitat and the quantity of big game in east Multnomah County, there could be a corresponding adverse social impact on residents due to reduced hunting opportunities.

Result: Negative social impacts from a reduction in outdoor recreation opportunities.

- Roads

Mining the hogback ridge is expected to yield a marginal amount of rock compared to the main quarry. Therefore, it is not expected to have any additional social impacts.

Environmental Consequences

- Residential

Mining the hogback ridge is expected to yield a marginal amount of rock compared to the main quarry. Therefore, it is not expected to have any additional environmental impacts related to noise and dust.

- Farms

Environmental effects on farms, primarily due to dust, are addressed as an economic consequence.

- Rural Center

There are no environmental effects on the rural center.

- Streams

Overburden stockpiles and stormwater detention facilities will need to be placed on the side of steep and potentially unstable slopes. Failure of these facilities could lead to a major sediment load into adjacent streams. This increased turbidity could lower water quality and could negatively impact fish habitat.

Result: Possible negative environmental effects to the Sandy River watershed and fish habitat due to lower water quality and increased turbidity.

- Big Game Wintering Habitat

Allowing mining of hogback ridge will increase in quarry activities and truck traffic, which could disturb deer and elk in the area, especially during the winter.

Result: Possible negative environmental impacts on big game wintering habitat.

- Roads

Mining the hogback ridge is expected to yield a marginal amount of rock compared to the main quarry. Therefore, it is not expected to require additional road improvement projects. Therefore, it is not expected to have any additional environmental impacts.

Energy Consequences

Mining the hogback ridge is expected to yield a marginal amount of rock compared to the main quarry. Therefore, it is not expected to significantly impact travel distances to supply aggregate and is not expected to have any additional energy impacts.

Other Applicable Statewide Planning Goals

OAR 660-16-0005(2) requires the ESEE consequences analysis to consider the applicability and requirements of other Statewide Planning Goals, where appropriate.

Goal 2

Goal 3 – Agricultural Lands

Counties may authorize nonfarm uses on agricultural lands that will not have significant adverse effects on accepted farm or forest practices. Multnomah County has incorporated these requirements into Framework Plan Policy 16 – B (Mineral and Aggregate Resources), Strategy I:

> ***I. To approve a surface mining at a site zone Exclusive Farm Use (EFU) the County shall find, as part of the conditional use approval criteria, that the proposed activity:***
>
> ***1. Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and***
>
> ***2. Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use.***

Public testimony and survey returns from the farm and forest impact assessment indicate that result in changes to farm practices and increased costs to surrounding farms. These changes include increased fencing costs to keep livestock under control when startled by quarry activities or haul trucks; increased feed costs due to the loss of pasture land reserved as a buffer to reduce impacts to livestock; and loss of revenue due to adverse impacts to breeding, such as miscarriages.

The proposed noise mitigation measures reduce potential noise impacts from the quarry operations and limit the volume of truck traffic and the route. However, even the lowest extraction levels (5,000 cy/yr) will result in truck traffic that is equivalent to existing conditions and will not mitigate existing impacts along the route.

Goal 4 – Forest Land

The goal and administrative rule designate mining and processing of mineral and aggregate resources as locationally dependent uses. Such uses may be allowed when it is found that:

- The proposed use will not force a significant change in, or significantly increase the cost of, accepted farming or forest practices on agriculture or forest land.
- The proposed use will not significantly increase fire hazard or significantly increase fire suppression costs or significantly increase risks to fire suppression personnel.

There is no indication that mining activities would force a significant change in, or significantly increase the cost of forest practices on surrounding forest lands. As part of the DOGAMI Grant of Total Exemption, a portion of the existing quarry area has been used for supplying aggregate for forest roads on contiguous parcels. Most of the surrounding properties to the south and east of the quarry have been used for forest resource production without adverse impact. An expanded operation should similarly have no impact. The results of the survey conducted as part of the Farm and Forest

Impact Analysis also did not identify significant impacts to forest practices on forest resource land. Also, most of the quarry operations take place within the confines of the quarry, which limits the potential for an increase fire hazard or the costs and risks associated with fire suppression.

Goal 5 – Open Spaces, Scenic and Historic Areas, and Natural Resources
The ESEE analysis has included impacts to Howard Canyon Creek, Knieriem Creek, and Big Creek, and big game wintering habitat, which have been designated as significant Goal 5 resources. A significant increase in truck traffic could have an adverse impact on the historical character of the Historic Columbia River Scenic Highway, but a more definitive assessment must be made as part of a future conditional use permit application.

Goal 6 – Air, Water and Land Resources
Goal 6 requires "All waste and process discharges from future development, when combined with such discharges from existing developments shall not threaten to violate, or violate applicable state or federal environmental quality statutes, rules, or standards."

With mitigation measures, the quarry operations could meet minimum DEQ standards for noise and stormwater runoff. In the past, DEQ air quality permits were obtained to operate a rock crusher on the site.

Goal 7 – Areas Subject to Natural Disasters and Hazards
Goal 7 requires "Developments subject to damage or that could result in loss of life shall not be planned or located in known areas of natural disasters and hazards without appropriate safeguards."

Steep slopes and potential soil instability on the southern slope, especially along the hogback ridge, are designated as potential development hazard areas on the County's "Slope Hazard Map". A letter from Landslides Technology indicates that the south slopes are probably old landslide areas, and should require additional geotechnical mapping before any construction.

Goal 12 – Transportation
The purpose of Goal 12 is to provide and encourage a safe, convenient and economic transportation system.

Public comments consistently raised the issue of the inadequate existing rural road system to handle the existing truck traffic, nor is it designed to handle an increase in the volume of traffic associated with a significant expansion of the quarry.

The proposed truck route includes local roads that are inadequate to handle increased levels of heavy truck traffic. In order to review specific road impacts, additional information is needed. As part of a conditional use permit, a traffic management plan should demonstrate the adequacy of the existing roads or identify improvements to address the following issues:

- Bridge Load Capacities – demonstrate the structural strength of bridge crossings are adequate to handle the expected truck traffic or make structural improvements to bridges and culverts or agree to weight limits for trucks crossing certain bridges.

- Roadway Design –the truck route between the site and the Historic Columbia River Highway should meet minimum County roads standards, in terms of road width (including shoulders), curve radii, and structural integrity.

- Bikeways – designated bikeway routes along Littlepage Road and Hurlburt Road may need additional shoulder areas to mitigate the impacts of truck traffic on the bikeway routes.

Goal 5 Decision

Decision Framework

The ESEE consequences analysis provides reasons to explain the Goal 5 program decisions for specific resource sites. A jurisdiction is expected to "resolve" conflicts between the resource and any conflicting uses. OAR 660-016-0010 provides three options to resolve the identified conflicts:

1. **Protect the Resource Site.** For mineral and aggregate resources, this option fully allows mining of the resource with the prohibition of conflicting uses. It means that the resource site is of such importance, relative to conflicting uses, and the ESEE consequences of allowing conflicting uses are so great that the resource site should be protected and all conflicting use prohibited on the site and possibly within the identified impact area.

   In order to adopt this option, the County would have to narrowly determine the impacts of the quarry operations in terms of mitigation to meet minimum state standards. For example, noise impacts need only be mitigated to meet DEQ standards of existing noise sources. The County also would have to limit potential conflicting uses through a broad application of the PAM Overlay.

2. **Allow Conflicting Uses Fully**. For mineral and aggregate resources, this option fully allows conflicting uses (e.g. rural residential dwellings) and, essentially, prohibits mining because the impacts to surrounding uses are too great. It means that the conflicting uses are of such importance that they should be allowed fully, not withstanding the possible impacts on the resource site.

   In order to adopt this option, the County would have to determine impacts on surrounding uses cannot be mitigated to minimize adverse impacts. For example, noise impacts on the rural quality of life cannot be mitigated to an acceptable level or the farm impacts will cause a significant change in farm practices or a significant increase in farm costs. Under this option, the quarry would continue to operate under the DOGAMI GTE until the 5-acre disturbance area limit is exceeded.

3. **Limit Conflicting Uses.** For mineral and aggregate resources, this option allows both the mining use and the conflicting uses. It means that both the resource site and the conflicting uses are important relative to each other, and that the ESEE consequences should be "balanced" so as to allow the conflicting use but in a limited way so as to protect the resource site to some desired extent.

   As part of "balancing" the ESEE consequences, the County would limit quarry operations to minimize adverse impacts. This report presents three options to limit the conflicts between the quarry and the surrounding uses.

   1. Base Measures plus Severe Limits on Volume – The scenario includes Base Mitigation Measures for stormwater and noise with strict limits on volume of material to represent continued operation of the quarry at levels similar to the DOGAMI GTE limits.

   2. Base Measures plus Limits on Volume of Material – This scenario includes Base Mitigation Measures plus limits extraction to a maximum of 17,500 cubic yards per year.

   3. Base Mitigation Measures – This scenario allows extraction up to 35,000 cubic yards per year with the Base Mitigation Measures.

Conflict Resolution

Balancing ESEE Consequences

Economic:

- The quarry will have no or minimal impact on the cost of mineral and aggregate rock products in the region or the county, because it represents less than one percent of the estimated regional demand for aggregate. Therefore, the quarry is expected to have minimal influence on the regional price of aggregate.

- The quarry will have minimal impact on the local market area because the demand for aggregate is expected to be low given the surrounding area is rural in character and outside the Urban Growth Boundary with the vast majority of land designated as resource land. One current supplier estimated that local demand is approximately 2,000 tons per year.[73] The potential benefit of a local source of aggregate is reduced transportation costs, however with low volumes and relatively low costs, these savings only amount to an estimated $8,000 to $24,000 per year.

- The quarry may have an adverse impact on the quarry owners by lost income from future extraction opportunities. However, mitigation costs associated with larger scale extraction would be significant and might not result in a net benefit to the owner. In addition, a County determination to allow conflicting uses fully under Goal 5 does not prevent the quarry from continuing to operate under the

[73] Public Testimony by Sherwood Davis (local hauler), Planning Commission Public Hearing, October 7, 2002.

terms of the Department of Geologic and Mineral Industries (DOGAMI) Grant of Total Exemption for a small-scale quarry. The quarry could continue to operate by limiting the physical extent of the quarry area to five acres and mining down into the formation.[74] If the quarry operations are found to have begun prior to July 1, 1975, then they can continue in perpetuity provided they meet the annual limits of 5,000 cubic yards of material and one acre of disturbance. These exemptions allow for the continued operation of the quarry at historic levels, which will mitigate some of the economic impact of prohibiting the full exploitation of the resource.

- The quarry has a negative impact on property values. There is conflicting evidence in the record on this issue. Testimony from neighbors and a real estate broker indicate a loss in property value due to noise impacts and application of the PAM overlay zone.[75] The quarry owners have submitted evidence that, in general, quarries have little or no impact on surrounding property values. However, this information is insufficient because:
    1. It was not assembled by real estate professionals;
    2. Is based on sites surrounded by urban levels of development;
    3. Two of the four sites front onto a state highway, which minimizes the impact of truck traffic; and
    4. The analysis does not adequately explain the orientation of the quarry, which may limit noise or truck impacts.

  Having considered the conflicting evidence, the Planning Commission finds that even with mitigation measures, the quarry negatively impacts property values in the surrounding area.

- The quarry has a significant negative impact on farms, primarily due to conflicts between truck noise and livestock. Noise mitigation measures and limits on the number of trucks will reduce these impacts. However, some measures, such as advance notification of blasting, would require a change in accepted farming practices. In addition, public testimony indicates that there are conflicts with the current operations such that even limiting truck volumes to the current GTE extraction levels (5,000 cubic yards per year), would still have a negative impact on surrounding farms along the truck route.

- Truck traffic from the quarry adversely impacts Springdale, a rural center. There are 16 dwellings with frontage on Hurlburt Road and another 15 dwellings along the Historic Columbia River Highway. Many of these dwellings are closer than the 50-foot setback used in the truck noise calculations. These shorter setback distances increase noise levels and adverse noise impacts, which in turn can decrease property values. In addition, a significant increase in truck traffic could decrease the attractiveness of Springdale for commercial development, which may

[74] DOGAMI, the Schlicker report and the Throop assessment have estimated the formation to be up to 40 feet thick.

[75] Letter from Bruce Lockwood, Oregon Realty Company, dated August 20, 2003

threaten the viability of existing businesses or discourage new businesses from locating in Springdale. Noise mitigation measures, including speed restrictions and prohibiting the use of engine "Jake" brakes, and limits on the number of trucks could reduce these impacts to meet DEQ standards. However, the DEQ standard is an hourly standard and does not adequately account for the continuous operations of the quarry. Even continuation of the small-scale (5,000 cy/yr) operations will have a continuing negative impact on surrounding property values.

- Economic impacts to streams and big game habitat, such as lower water quality and increased treatment costs for downstream users due to increased runoff, turbidity, and pollutants, can be mitigated.

- The Hogback Ridge is relatively small and not extracting aggregate from that area will have marginal loss of economic value for the region, countywide, the local market area, and the quarry owner and operator.

Social:

- Quarry activities can be mitigated to comply with DEQ noise standards.

- Quarry truck traffic can be mitigated to comply with DEQ noise standards.

- DEQ noise standards do not fully account for the extended duration and long-term effects of the quarry activity and truck traffic. These impacts can be reduced during peak periods of outdoor use (evenings and weekends) with measures such as annual limits on the total volume of material to be extracted, limits on the number of trucks (per day or per hour) going to and from the quarry, and limits on the operating hours and days. However, the truck traffic associated with the continuation of the small-scale (5,000 cy/yr) operations will have a continuing negative impact on the quality of life for the surrounding area.

- Potential dust impacts will be mitigated by the terms and conditions of the required DEQ permits and sedimentation control measures (truck wash) required to protect area streams.

- Quarry truck traffic can create conflicts with pedestrians, bicyclists, and equestrians. These conflicts might be mitigated to some extent through road improvements (widen roads and shoulders) and operating restrictions (hours and days) that prohibit truck traffic during peak periods of use (evenings and weekends).

- The Hogback Ridge is the portion of the resource site nearest to residences and farm uses with only a minor amount of aggregate resource and yet the most potential for adverse impacts from noise.

Environmental:

- Potential quarry impacts to streams can be mitigated with erosion control and pollution control plans so that the quarry is not likely to adversely impact water quality or ESA listed salmonid species in local streams.

- Impacts to big game habitat can be minimized.

- The Hogback Ridge has the steepest and potentially unstable slopes that make erosion control measure difficult with increased risk of failure. Therefore, mining of the Hogback Ridge has environmental impacts that cannot be resolved.

Energy:

- The quarry could have a positive impact in supplying a local source of aggregate, which will reduce travel distances and fuel consumption.

Conclusion

The 1996 HCRR ESEE Analysis indicated the consequences of fully protecting the resource (fully allowing extraction without local mitigation measures) and fully allowing the conflicting uses (prohibiting extraction) were too extreme and that an appropriate course of action was to limit the conflicting uses and find an appropriate set of mitigation measures to allow the quarry operations.

This update of the HCRR reaches a different conclusion.

Fully allowing mining with minimal mitigation measures would impose significant negative impacts on the surrounding community, in terms of quality of life, public safety, condition of local roads, streams, and big game habitat.

Allowing mining on a limited basis, with mitigation measures and a more active role for the County in terms of monitoring and enforcement, offers the opportunity to mitigate some of the identified negative impacts. However, as evidenced by the conflicts with the current low level of mining, there will still be significant negative impacts on surrounding rural residential and farm uses. These negative impacts include:

- Noise impacts reduce the quality of life to the surrounding area due to continuous operations of the quarry and truck traffic along local roads for a significant distance (3.9 miles) before reaching a major arterial.

- Noise impacts from existing (low levels) of truck traffic create conflicts with livestock that requires significant changes to farming practices and increased costs to farms along the truck route.

Fully prohibiting mining would resolve many of the negative impacts on the surrounding community but impose a significant negative economic impact on the quarry owner. However, under current Comprehensive Framework Plan policies, the quarry could continue to operate under DOGAMI's Grant of Total Exemption (GTE), which will

mitigate some of these negative impacts. [76] These impacts are balanced by positive impacts to the surrounding area, in terms of increased property values, improved quality of life and decreased costs to farms.

Therefore, the Planning Commission recommendation is to prohibit mining and not protect the Goal 5 resource so as to reduce adverse impacts on the surrounding area and along the truck route.

Program To Achieve Goal Recommendations

The Howard Canyon site is a significant site, but will not be protected and will no longer be included on Multnomah County's list of *Protected Sites* as provided for under the provisions of OAR 660-16-010(2), Allow Conflicting Uses Fully (also referred to a 3B designation).

Determination of Significance

The Howard Canyon site is a significant Goal 5 mineral and aggregate resource, based on the following findings:

- Quantity - The resource site represents a large quantity of basalt material, in excess of 5 million tons.
- Quality - Laboratory testing confirms the basalt meets ODOT standards for air degradation and abrasion and is suitable for aggregate use. In addition, the columnar basalt formations in Howard Canyon are suitable for riprap in road construction as well as decorative rock in landscaping and building construction.
- Location – There are a limited number of mineral and aggregate resource sites in east Multnomah County and adjacent portions of Clackamas County. There are no other known basalt quarries in the region that actively mine columnar basalt.

Level of Protection

The Board of County Commissioners has decided to Allow Conflicting Uses Fully and prohibit expansion of mining under the provisions of OAR 660-16-010(2) (also referred to a 3B designation).

The Howard Canyon site will be removed from Multnomah County's list of *Protected Sites*.

[76] The DOGAMI limits for a Grant of Total Exemption are: less 5,000 cubic yards of material or disturbing less than one acre of land within a period of 12 consecutive months until mining affects five or more acres.

Howard Canyon
Reconciliation Report
October 7, 2004

Multnomah County
Department of Business and Community Services
Land Use and Transportation Program

SUPPORTING DOCUMENTATION OUTSIDE OF THIS REPORT

Appendices

Appendix A	Applicable Rules, Policies and Codes
Appendix B	Geologic Assessment
Appendix C	Olson Engineering Mining Plans
Appendix D	Duble Noise Study
Appendix E	PHS Biological Assessment
Appendix F	Farm and Forest Impact Assessment
Appendix G	Public Comments, May 16, 2002 Open House
Appendix H	County Staff Recommendation, April 2004

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CHAPTER IV

CONFLICT RESOLUTION AND PROTECTION PROGRAM FOR HOWARD CANYON AREA GOAL 5 RESOURCES

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A. INTRODUCTION

1. INTENT OF CHAPTER IV

Preceding Chapters II and III have determined that the Big, Knieriem/Ross, and Howard Canyon Creeks are significant Goal 5 resources and that the Howard Canyon aggregate resource is also a significant Goal 5 resource. Uses that would conflict with these resources have been identified as follows:

Streams (Big, Knieriem, and Howard Canyon Creeks)
Forestry
Residential Uses (homes)
Conditional and Community Service Uses
Agriculture
Transportation Facilities
Mining

Mining of Howard Canyon Aggregate (Conflicts within designated impact area)
Residential Uses (homes, including all residential uses listed in B.3.d. of Chapter III)
Streams

Chapters II and III have also determined the economic, social, environmental, and energy (ESEE) consequences that allowing conflicting uses would have on the significant resources, and the consequences if the conflicting uses were not allowed. Decisions to allow, not allow, or limit conflicting uses must be based upon this analysis of ESEE consequences. However, each of the significant resources does not stand alone as each of the designated impact areas overlap. Any decisions about allowing conflicts must consider the results of the ESEE analysis for both the resources and reconcile any differences.

Section B of this chapter will examine the previously identified ESEE consequences for each conflicting use and reconcile any differences to reach a conclusion as to whether that particular *use* should be allowed, not allowed, or allowed in a limited manner.

Section C of this chapter will then reach a determination as to whether each significant *resource* should be fully protected by not allowing conflicting uses (designate "3-A"), not protected because conflicting uses are of such importance that they should be allowed fully (designate "3-B"), or protected by allowing conflicting uses in a limited manner (designate "3-C").

2. OAR 660-16-010

This OAR 660-16-010 requires, based on the determination of the economic, social, environmental and energy consequences, that a jurisdiction must "develop a program to achieve the Goal." Assuming there is adequate information on the location, quality, and quantity of the resource site as well as on the nature of the conflicting uses and ESEE consequences, a jurisdiction is expected to "resolve" conflicts with specific sites in any of the following three ways:

> *(1) Protect the Resource Site: Based on the analysis of the ESEE consequences, a jurisdiction may determine that the resource site is of such importance, relative to the conflicting uses, and the ESEE consequences of allowing conflicting uses are so great that the resource site should be protected and all conflicting uses prohibited on the site and possibly within the impact area identified in OAR 660-16-000(5)(c). Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision.* (This is a "3-A" designation for the Goal 5 resource.)
>
> *(2) Allow Conflicting Uses Fully: Based on the analysis of ESEE consequences and other Statewide Goals, a jurisdiction may determine that the conflicting use should be allowed fully, not withstanding the possible impacts on the resource site. This approach may be used when the conflicting use for a particular site is of sufficient importance, relative to the resource site. Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision.* (This is a "3-B" designation for the Goal 5 resource.)
>
> *(3) Limit Conflicting Uses: Based on the analysis of ESEE consequences, a jurisdiction may determine that both the resource site and the conflicting use are important relative to each other, and that the ESEE consequences should be balanced so as to allow the conflicting use but in a limited way so as to protect the resource site to some desired extent. To implement this decision, the jurisdiction must designate with certainty what uses and activities are allowed fully, what uses and activities are not allowed at all and which uses are allowed conditionally, and what specific standards or limitations are placed on the permitted and conditional uses and activities for each resource site.*

Whatever mechanisms are used, they must be specific enough so that affected property owners are able to determine what uses and activities are allowed, not allowed, or allowed conditionally and under what clear and objective conditions or standards. Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision. (This is a "3-C" designation for the Goal 5 resource.)

The "goal to be achieved," according to Goal 5, is protection of significant resources for future generations. This does not simply mean that a use which adversely impacts the resource should not be allowed if the ESEE analysis has shown that protection is more important than the conflicting use (a "3-A" designation). The conflict resolution process should also take into consideration whether adverse impacts can be mitigated. If mitigation is possible, the appropriate designation is "3-C," and clear and objective standards should be adopted which will allow the conflicting use in a manner that also protects the resource. If the use of development standards would resolve conflicts by both allowing the use and protecting the resource, then "3-C," limit conflicting uses, is the appropriate Goal 5 level of protection.

B. CONFLICT RESOLUTION

COMPILATION OF CONFLICTS AND THE CONSEQUENCES OF NOT ALLOWING, ALLOWING IN A LIMITED MANNER, OR ALLOWING FULLY THE CONFLICTS

The following is compiled from the Summary subsections of section B, Resource Analysis, in Chapters II and III and is a combined synopsis of all the ESEE consequences.

1. FORESTRY

Forestry activities have been identified as a conflicting use to significant streams. A synopsis of the identified ESEE consequences is as follows:

Consequences if Forestry is not allowed

Economic: Lost jobs, reduced tax revenues, increased transport costs, regulatory burden

Social: Reduced property rights, impact to "timber" lifestyle, no more local sources

Environmental: Insignificant

Energy: More energy use for transporting materials and building infrastructure, shortage of goods

Goal 4: County cannot prohibit forest practices on forest lands

Consequences if Forestry is allowed in a limited manner

Economic: Possible loss of some jobs, tax revenue; regulatory burden
Social: Reduced property rights, impact on "timber" lifestyle, reduced local sources
Environmental: Insignificant
Energy: Some increase in energy use for transporting materials to market, shortage of goods
Goal 4: County cannot limit or regulate forest practices on forest lands

Consequences to Streams if Forestry is allowed fully

Economic: Reduced water quality for use, change in water quantity for use
Social: Loss of flood storage capacity
Environmental: Loss of riparian vegetation, reduced water quality
Energy: Insignificant

DISCUSSION: The significant streams are bordered by lands in three zoning districts, EFU, CFU and RR. Forestry is unlikely to occur on areas zoned EFU (the impacts of agriculture are discussed in a separate section). Four properties adjacent to Big Creek are zoned RR. However, the ESEE analysis showed there would be no impacts to Big Creek if forestry is allowed. Consequently, only the impacts of forestry on CFU zoned lands adjacent to Knieriem Canyon and Howard Canyon streams must be considered.

The Oregon Forest Practices Act (FPA) governs forestry activities on lands zoned CFU. The FPA contains rules to provide for the overall maintenance of water resources, fish, and wildlife by requiring buffer areas along streams, where logging is not allowed. In addition to these protections, ORS 527.722 restricts the county from prohibiting, limiting or regulating forest practices on forest lands.

CONCLUSION: The FPA, if properly enforced, provides some protections to streams from logging activities, and the county cannot regulate or prohibit forestry activities on forest lands. Forestry activities should be allowed fully within the impact area of the significant streams. The conflicting use analysis shows, however, that forest practices, if not carried out in a manner which provides effective buffer areas for streams, can result in significant adverse impacts to streams. Multnomah County should urge the Oregon Department of Forestry to effectively enforce the Forest Practices Act provisions for protection of fish and wildlife habitat in the Howard Canyon area, and work with the Department of Forestry to craft new rules, if necessary, which better protect significant streams in the Howard Canyon area.

2. RESIDENTIAL USES (HOMES)

Residential Uses (new homes) in the mapped aggregate impact area or in the stream riparian impact area have been identified as a conflict to the listed significant streams and mining of the Howard Canyon aggregate resource.

Consequences if Residential Uses are not allowed (in impact areas)

Economic: Lower value of property; less tax revenue; regulatory burden; change in customary practice; protection of aggregate resource

Social: Reduced availability of amenities; loss of opportunity for rural lifestyle

Environmental: Transfer of environmental impacts to another site

Energy: Potentially greater distance between destinations (build further away); increased cost of infrastructure

Consequences if Residential Uses are allowed in a ltd manner (in impact areas)

Economic: Partial loss of property value if required to setback greater distance from stream; regulatory burden; change in customary practice; new homebuilder assumes a portion of the obligation and costs to mitigate conflicts with mining; protection of aggregate resource

Social: Reduced availability of amenities; some potential for additional complaints to any mining operator

Environmental: Transfer of environmental impacts to another location; potential for some increase in soil erosion and fire hazard

Energy: Additional energy in mitigating mining conflicts by new homebuilder

Consequences if Residential Uses are allowed fully (in impact areas)

Economic: Curtailment of area of extraction or the total loss of aggregate resource and associated value from sales, jobs,taxes; increased cost to consumers for aggregate

Social: Increase of complaints to any mining operator

Environmental: Loss of riparian vegetation; loss of water quality; more disturbance of wildlife habitat in riparian vegetation; new homes could be sited as to cause mining operator to violate DEQ noise standards; new homes could be sited on top of or too close to aggregate resource which would result in loss of resource

Energy: New homes could be sited as to cause quarry to alter mining methods which use more energy; increased energy used to transport aggregate from another source to East County area

DISCUSSION: Residential uses pose a significant conflict with the Goal 5 inventoried significant stream resources and the Howard Canyon significant aggregate resource. Due to the low density of permitted dwellings in the rural

zoning districts, the greatest concern for conflict with the resources as is the proximity of the homes to the Goal 5 resources. Only residential uses inside the impact areas would potentially affect the resources.

The impact areas of the streams are the adjacent riparian zones along the streams. The riparian zones are as follows: Big Creek, an area ranging from 80-200 feet of the stream bank; Knieriem/Ross Creek, 0-160 feet of the stream bank; and Howard Canyon Creek, 10-200 feet of the stream bank.

The impact area of the aggregate resource is the area within 1,200 feet of the mapped aggregate resource. Based upon the ESEE analysis there is confidence that outside that distance all DEQ standards for noise and dust from mining activities will be met for new homes.

CONCLUSION: There would be significant adverse consequences to the two Goal 5 resources if residential uses were allowed fully. There would also be adverse consequences to property owners if residential uses were prohibited. A balanced approach which protects the resource while allowing residential uses which are sited to minimize the adverse impacts on the resources is the desired solution to this issue.

The specific limitations on residential development which may be adopted to protect the stream resources and the aggregate resource must be carefully crafted to prevent a total prohibition on the ability to site a residence on any particular lot of record. This is a concern where the individual resource protection measures or the combination of the two resource protection measures might result in too severe restriction of the buildable portion of a property. For example, requiring the siting of a proposed home a certain distance from one of the streams may also overlap into a building prohibited setback area established to protect the aggregate resource.

3. COMMUNITY SERVICE AND CONDITIONAL USES

Community service and conditional uses have been identified as uses that would conflict with significant streams. The identified ESEE impacts are:

Consequences if Community Service and Conditional Uses are not allowed
Economic: Regulatory burden, changes in customary practices
Social: Reduced availability of amenities
Environmental: Transfer of impacts to another site
Energy: Insignificant

Consequences if Community Service and Conditional Uses are allowed in a limited manner
Economic: Regulatory burden, changes in customary practices

Social: Reduced availability of amenities
Environmental: Transfer of impacts to another site
Energy: Insignificant

Consequences to Streams if Community Service and Conditional Uses are allowed fully
Economic: Insignificant
Social: Insignificant
Environmental: Deterioration of water quality, increased disturbance of wildlife
Energy: Insignificant

DISCUSSION: Several factors limit the number and type of community service and conditional uses likely to be allowed, including a lack of public utilities such as sewer and water; no direct access to a collector street as required by Comprehensive Plan Policy 31; and limited population in the area which makes any commercial activity unfeasible. However, there is a potential for a few uses such as utility facilities, campgrounds, or forest or farm processing facilities.

The impacts to streams if community service and conditional uses are allowed fully are environmental in nature, as compared to the economic and social impacts if these uses are not allowed. If the uses are allowed, but in a limited manner that requires protection of riparian vegetation and prevents runoff into streams, the impacts to the significant resources will be minimal. Community service and conditional use approval criteria include a provision that the use "will not adversely affect natural resources" (MCC .7015(B) and .7120(A)(2)). This may be adequate to provide protection to the stream resources.

CONCLUSION: Community service and conditional uses should be allowed in a limited manner by requiring the use to not adversely affect the stream corridor.

4. AGRICULTURE

Identified as a conflict to streams. The synopsis of ESEE consequences is as follows:

Consequences if Agriculture is not allowed
Economic: Lost jobs, reduced tax revenues, increased transport costs
Social: Loss of farming lifestyles, reduced property rights, reduced local sources of farm products
Environmental: Transferring environmental impacts to another site.
Energy: Increase in costs to bring more distant farm products to market, shortage of goods

Consequences if Agriculture is allowed in a limited manner

Economic: Regulatory burden, potential for loss of jobs and tax revenues

Social: Loss of aesthetically pleasing open space, burden of regulation, reduced farm lifestyle, reduced local sources of farm products

Environmental: Transfer of some environmental impacts to another site

Energy: Some increase in energy use for transporting materials to market, shortage of goods

Consequences if Agriculture is allowed fully

Economic: Reduced water quality for use, change in water quantity for use

Social: Insignificant

Environmental: Loss of riparian vegetation, reduced water quality, greater wildlife disturbance

Energy: Insignificant

DISCUSSION: The analysis for significant streams (Chapter II) identifies specific conflicts with agricultural activities, such as misuse of pesticides, degradation of stream quality, and removal of riparian vegetation, which have negative consequences upon streams.

Regulation and restriction of agricultural activities to protect Goal 5 natural resources is theoretically possible for Multnomah County. ORS 215.253 states: *No State Agency, City, County, or Political Subdivision of this state may exercise any of its powers to enact local laws or ordinances or impose restrictions or regulations affecting any farm use land situated within an exclusive farm use zone established under ORS 215.203 ...in a manner which would unreasonably restrict or regulate farm structures or that would unreasonably restrict or regulate accepted farming practices because of noise, dust, odor, or other materials carried in the air or other conditions arising therefrom... ..."Accepted Farming Practice" as used in this subsection shall have the meaning set out in ORS 215.203.*

Nothing in this section is intended to limit or restrict the lawful exercise by any state agency, city, county or political subdivision of its power to protect the health, safety, and welfare of the citizens of this state.

As this language seems to indicate, regulation of agricultural activities by Multnomah County is feasible under state law.

However, it is not desirable or necessary for the County to institute a regulations for agricultural activities or practices, for the following reasons:

1. Regulation of agricultural activities and practices would require a major effort by Multnomah County in order to study and adopt appropriate regulatory mechanisms and would require significant expenditure in order to enforce them.

2. The regulatory burden of mandatory restrictions on agricultural practices would be considered onerous by many if not most farmers.

3. Measures to protect streams are already practiced by many farmers, and are considered to be beneficial not only to the natural resources involved, but also to the agricultural activity or practice.

4. The U.S. Soil and Water Conservation Service and the East Multnomah Soil and Water Conservation District have as one of their primary missions the promotion of sound agricultural practices which protect streams from degradation due to agricultural activities and practices.

CONCLUSION: For the reasons listed above, Multnomah County should not institute a regulatory scheme for agricultural activities. As an alternative, Multnomah County should work cooperatively with the U.S. Soil Conservation Service and the East Multnomah Soil and Water Conservation District to promote agricultural practices which protect streams. Joint programs should promote the following measures:

-- Fencing should be used to keep domestic livestock from degrading streams and adjacent riparian habitat. Design standards for fences could be used which ensure that fences do not block passage for a wide range of wildlife species.

-- Application of fertilizers and pesticides could be limited, especially outside of cultivated farming areas.

-- Uncultivated riparian "buffer" areas should be maintained along streams in order to maintain fish and wildlife habitat values and maintain water quality.

5. TRANSPORTATION/PUBLIC IMPROVEMENTS

Identified as a conflict to streams. The synopsis of ESEE consequences is as follows:

Consequences if Transportation/Public Improvements are not allowed:

Economic: Increased cost of material transport, regulatory burden, changes in practices
Social: Insignificant
Environmental: Insignificant

Energy: Increased energy expenditure on infrastructure

Consequences if Transportation/Public Improvements are allowed in a limited manner:

Economic: Increased cost of material transport, regulatory burden, changes in practices
Social: Insignificant
Environmental: Insignificant
Energy: Increased energy expenditure on infrastructure

Consequences if Transportation/Public Improvements are fully allowed:

Economic: Insignificant
Social: Loss of education & recreation associated with wildlife habitat
Environmental: Loss of riparian vegetation, loss of water quality, more disturbance of wildlife
Energy: Decreased water flow for energy use

DISCUSSION: Transportation facilities and Public Improvements have the potential to adversely impact significant streams wherever such an existing facility is modified or a new facility is constructed within the riparian zone of the stream. The County has no regulatory authority over logging roads constructed in accordance with the Forest Practices Act, and driveways are more appropriately considered under the category of the development they are proposed to serve (residential, community service, etc.). Although no major proposed public improvements, such as utility extensions, or road widenings were identified in the Howard Canyon area, such improvements may be proposed in the future.

Transportation facilities and public improvements which are located within a stream's impact area are too vital in most cases to be prohibited in order to protect the stream. However, such facilities can generally be constructed in a manner which can minimize the impacts to streams.

CONCLUSION: Clearly, there would be significant adverse consequences to Goal 5 resources if transportation facilities and public improvements were allowed fully, and to the community if such uses were prohibited. A balanced approach, which protects the resources while allowing improvements to roads and public facilities which minimizes impacts upon these resources, is the optimal solution for this issue.

6. MINING OF THE MAPPED AGGREGATE RESOURCE

Consequences if Mining is not allowed

Economic: Lost jobs; increased transportation costs for obtaining aggregate; loss of aggregate resource and associated value from sales; increased cost to consumers for aggregate

Social: No local source for aggregate; reduced property rights for aggregate owner; no conflicts from noise and dust from mining activities to noise and dust sensitive uses

Environmental: Insignificant

Energy: Increase in energy expended to transport aggregate to East County

Consequences if Mining is allowed in a limited manner

Economic: Potential for some lost jobs; aggregate available at lower cost; new home builders in impact area assume a portion of the obligation and costs to mitigate conflicts with mining

Social: Reduced amount of local source of aggregate; mining noise and dust conflicts, (to the extent allowed by DEQ standards), will be experienced by residents of the impact area; fewer siting choices for new homes on existing lots in the impact area

Environmental: Noise, dust, and erosion effects, (to the extent allowed by DEQ standards), will occur in the impact area

Energy: Some reduction in energy expended to transport aggregate to East County

Consequences if Mining is allowed fully

Economic: Jobs created for extracting, processing and transporting aggregate; aggregate available at lower cost; new home builders in impact area assume a portion of the obligation and costs to mitigate conflicts with mining

Social: Mining noise and dust conflicts, (to the extent allowed by DEQ standards), will be experienced by residents of the impact area; fewer siting choices for new homes on existing lots in the impact area

Environmental: Noise, dust, and erosion effects, (to the extent allowed by DEQ standards), will occur in the impact area

Energy: Reduction in energy expended to transport aggregate to East County

DISCUSSION: Unregulated mining activities would pose a significant potential conflict with the Goal 5 inventoried significant stream resources and residential uses in the designated impact area. There are significant streams to the north, west and south of the aggregate resource which are within the impact area of the aggregate and which would potentially receive any erosion problems that might occur from mining activities. Also within the aggregate

impact area are 6 existing homes, 1 unexpired approval of a home, and the estimated maximum potential for 14 additional homes which would receive the impacts of noise and dust resulting from aggregate extraction and processing.

The impact areas of the streams are the adjacent riparian zones along the streams and additional lands to a distance of 300 feet from the centerlines of the streams. The riparian zones are: Big Creek, an area ranging from 80 to 200 feet of the stream bank; Knieriem/Ross Creek, 0 to 160 feet of the stream bank; and Howard Canyon Creek, 10 to 200 feet of the stream bank.

The aggregate resource is not located within any of the impact areas of the significant streams and, therefore, impacts from mining on the streams will not be from extraction of aggregate, but from other mining effects. Those effects could potentially include erosion into the streams, construction within the riparian zone of holding ponds to reduce erosion, construction and maintenance of private haul roads, and dust. Of those effects State DEQ standards are in place and compliance by any mining operator is required for the amount of soil erosion and dust that reaches the streams.

The impact area of the aggregate resource is the area within 1,200 feet of the mapped aggregate resource. That distance was based upon both the impacts to residential uses from potential noise and the distance also included the aforementioned streams. Based upon the ESEE analysis, for residential uses there is confidence that outside that distance all DEQ standards for noise and dust from mining activities will be met.

Within that impact area,(and outside the impact area), a mining operation is required by the State of Oregon Department of Geology and Mineral Industries to also meet DEQ standards for impacts to noise and dust sensitive land uses, if those standards are not met then mining does not take place.

CONCLUSION: There would be significant adverse economic consequences if the Goal 5 aggregate resource was not protected (mining not allowed). There would also be adverse consequences to streams and residential uses if mitigating measures were not required of a mining operation to reduce where practicable or necessary. A balanced approach which protects the aggregate resource for mining while requiring a mining operation to minimize adverse effects on the streams and residential uses is the desired solution to this issue.

C. PROTECTION OF RESOURCES

1. STREAMS

a. Designated Level of Protection

The designated level of protection for the three Significant Streams in the Howard Canyon area (Big Creek, Howard Canyon Creek, and Knieriem Creek) is 3.C. -- Limit Conflicting Uses.

b. Conflicting Uses to be allowed fully

(i) Forestry/timber **(however, see discussion under 1.e. below)**
(ii) Farm Use **(however, see discussion under 1.e. below)**

c. Conflicting Uses to be allowed conditionally

(i) Community Service/Commercial Uses

- Wood Processing(limited, sawmills, etc.)
- Wholesale/retail for farm/forest products
- Playgrounds, Churches, Schools
- Parks/Golf Courses
- Dog Kennels
- Aircraft Landing Area
- Cottage Industries
- Rural Service/Commercial
- Other Community Service Uses

(ii) Transportation/Public Improvements

(iii) Residential Uses

- Single-family Residential
- Farm/Forest Worker Housing

(iv) Mining/Geothermal Uses

d. Conflicting Uses not allowed

None

e. Program to achieve the goal

The program comprises land use regulations and non-regulatory measures to assure long-term protection of significant streams in the

Howard Canyon Area. It is applied to the impact area of each stream, which consists of a 300-foot wide area on each side of the stream centerline.

2. AGGREGATE RESOURCE

Based upon the findings in Chapter III, particularly the ESEE Consequences parts of the chapter, the decision has been made to not protect the aggregate resource, allow conflicting uses fully (also referred to as a "3B" designation), and prohibit all mining except as permitted under a Department of Geology and Mineral Industries Grant of Total Exemption. *[Deleted and replaced 2004, Ord. 1050 § 1]*

3. CONCLUSION

a. The aggregate resource at the Howard Canyon site is being designated to not be protected, to allow conflicting uses fully (also known as a "3B" designation), and to prohibit all mining that is not done under a Department of Geology and Mineral Industries Grant of Total Exemption with its limitations. *[Deleted and replaced 2004, Ord. 1050 § 1]*

b. The three significant streams in the Howard Canyon area which would be affected by the Howard Canyon quarry operation are being designated to be protected from degradation, subject to the conditions set forth above in subsection 1 of section C, Chapter IV. These limitations involve regulating conflicting uses in the riparian zone of the stream in order to maintain and enhance stream and stream bank economic, educational, public safety, recreational, and fish & wildlife habitat values.

c. *[Deleted 2004, Ord. 1050 § 1]*

Howard Canyon Reconciliation Report

Revised February 2003

Multnomah County
Department of Business and Community Services
Land Use and Transportation Program

Appendices

Appendix A	Applicable Rules, Policies and Codes
Appendix B	Geologic Assessment
Appendix C	Olson Engineering Mining Plans
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Appendix G	Public Comments, May 16, 2002 Open House

Prepared by:

WINTER BROOK COMMUNITY RESOURCE PLANNING

Winterbrook Planning

With:

Pacific Habitat Services
Al Duble, Acoustical Engineer
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Ecotrust

Appendix A

Applicable Rules, Policies and Codes

Oregon Administrative Rule Chapter 660, Division 16

Oregon Administrative Rule Chapter 660, Division 23

Multnomah County Comprehensive Framework Plan Policy #16-B

Multnomah County Code Chapter 35 – East of Sandy River Rural Plan Area (Excerpted)

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LAND CONSERVATION AND DEVELOPMENT DEPARTMENT

DIVISION 16

REQUIREMENTS AND APPLICATION PROCEDURES FOR COMPLYING WITH STATEWIDE GOAL 5

660-016-0000

Inventory Goal 5 Resources

(1) The inventory process for Statewide Planning Goal 5 begins with the collection of available data from as many sources as possible including experts in the field, local citizens and landowners. The local government then analyzes and refines the data and determines whether there is sufficient information on the location, quality and quantity of each resource site to properly complete the Goal 5 process. This analysis also includes whether a particular natural area is "ecologically and scientifically significant", or an open space area is "needed", or a scenic area is "outstanding", as outlined in the Goal. Based on the evidence and local government's analysis of those data, the local government then determines which resource sites are of significance and includes those sites on the final plan inventory.

(2) A "valid" inventory of a Goal 5 resource under subsection (5)(c) of this rule must include a determination of the location, quality, and quantity of each of the resource sites. Some Goal 5 resources (e.g., natural areas, historic sites, mineral and aggregate sites, scenic waterways) are more site-specific than others (e.g., groundwater, energy sources). For site-specific resources, determination of *location* must include a description or map of the boundaries of the resource site and of the impact area to be affected, if different. For non-site-specific resources, determination must be as specific as possible.

(3) The determination of *quality* requires some consideration of the resource site's relative value, as compared to other examples of the same resource in at least the jurisdiction itself. A determination of *quantity* requires consideration of the relative abundance of the resource (of any given quality). The level of detail that is provided will depend on how much information is available or "obtainable".

(4) The inventory completed at the local level, including options in subsections (5)(a), (b), and (c) of this rule, will be adequate for Goal compliance unless it can be shown to be based on inaccurate data, or does not adequately address location, quality or quantity. The issue of adequacy may be raised by the

Department or objectors, but final determination is made by the Commission or the Land Use Board of Appeals as provided by law.

(5) Based on data collected, analyzed and refined by the local government, as outlined above, a jurisdiction has three basic options:

(a) Do Not Include on Inventory: Based on information that is available on location, quality and quantity, the local government might deter mine that a particular resource site is not important enough to warrant inclusion on the plan inventory, or is not required to be included in the inventory based on the specific Goal standards. No further action need be taken with regard to these sites. The local government is not required to justify in its comprehensive plan a decision not to include a particular site in the plan inventory unless challenged by the Department, objectors or the Commission based upon contradictory information;

(b) Delay Goal 5 Process: When some information is available, indicating the possible existence of a resource site, but that information is not adequate to identify with particularity the location, quality and quantity of the resource site, the local government should only include the site on the comprehensive plan inventory as a special category. The local government must express its intent relative to the resource site through a plan policy to address that resource site and proceed through the Goal 5 process in the future. The plan should include a time-frame for this review. Special implementing measures are not appropriate or required for Goal 5 compliance purposes until adequate information is available to enable further review and adoption of such measures. The statement in the plan commits the local government to address the resource site through the Goal 5 process in the post-acknowledgment period. Such future actions could require a plan amendment;

(c) Include on Plan Inventory: When information is available on location, quality and quantity, and the local government has determined a site to be significant or important as a result of the data collection and analysis process, the local government must include the site on its plan inventory and indicate the location, quality and quantity of the resource site (see above). Items included on this inventory must proceed through the remainder of the Goal 5 process.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040
Hist.: LCD 5-1981(Temp), f. & ef. 5-8-81; LCD 7-1981, f. & ef. 6-29-81; LCDC 3-1990, f. & cert. ef. 6-6-90

660-016-0005

Identify Conflicting Uses

It is the responsibility of local government to identify conflicts with inventoried Goal 5 resource sites. This is done primarily by examining the uses allowed in broad zoning districts established by the jurisdiction (e.g., forest and agricultural zones). A conflicting use is one which, if allowed, could negatively impact a Goal 5 resource site. Where conflicting uses have been identified, Goal 5 resource sites may impact those uses. These impacts must be considered in analyzing the economic, social, environmental and energy (ESEE) consequences:

(1) Preserve the Resource Site: If there are no conflicting uses for an identified resource site, the jurisdiction must adopt policies and ordinance pro-visions, as appropriate, which insure preservation of the resource site.

(2) Determine the Economic, Social, Environmental, and Energy Consequences: If conflicting uses are identified, the economic, social, environmental and energy consequences of the conflicting uses must be determined. Both the impacts on the resource site and on the conflicting use must be considered in analyzing the ESEE consequences. The applicability and requirements of other Statewide Planning Goals must also be considered, where appropriate, at this stage of the process. A determination of the ESEE consequences of identified conflicting uses is adequate if it enables a jurisdiction to provide reasons to explain why decisions are made for specific sites.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040
Hist.: LCD 5-1981(Temp), f. & ef. 5-8-81; LCD 7-1981, f. & ef. 6-29-81

660-016-0010

Develop Program to Achieve the Goal

Based on the determination of the economic, social, environmental and energy consequences, a jurisdiction must "develop a program to achieve the Goal". Assuming there is adequate information on the location, quality, and quantity of the resource site as well as on the nature of the conflicting use and ESEE consequences, a jurisdiction is expected to "resolve" conflicts with specific sites in any of the following three ways listed below. Compliance with Goal 5 shall also be based on the plan's overall ability to protect and conserve each Goal 5 resource. The issue of adequacy of the overall program adopted or of decisions made under sections (1), (2) and (3) of this rule may be raised by the Department or objectors, but final determination is made by the Commission, pursuant to usual procedures:

(1) Protect the Resource Site: Based on the analysis of the ESEE consequences, a jurisdiction may determine that the resource site is of such importance, relative to the conflicting uses, and the ESEE consequences of allowing conflicting uses are so great that the resource site should be protected and all conflicting uses prohibited on the site and possibly within the impact area identified in OAR 660-016-0000(5)(c). Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision.

(2) Allow Conflicting Uses Fully: Based on the analysis of ESEE consequences and other Statewide Goals, a jurisdiction may determine that the conflicting use should be allowed fully, not withstanding the possible impacts on the resource site. This approach may be used when the conflicting use for a particular site is of sufficient importance, relative to the resource site. Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision.

(3) Limit Conflicting Uses: Based on the analysis of ESEE consequences, a jurisdiction may determine that both the resource site and the conflicting use are important relative to each other, and that the ESEE consequences should be balanced so as to allow the conflicting use but in a limited way so as to protect the resource site to some desired extent. To implement this decision, the jurisdiction must designate with certainty what uses and activities are allowed fully, what uses and activities are not allowed at all and which uses are allowed conditionally, and what specific standards or limitations are placed on the permitted and conditional uses and activities for each resource site. Whatever mechanisms are used, they must be specific enough so that affected property owners are able to determine what uses and activities are allowed, not allowed, or allowed conditionally and under what clear and objective conditions or standards. Reasons which support this decision must be presented in the comprehensive plan, and plan and zone designations must be consistent with this decision.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040
Hist.: LCD 5-1981(Temp), f. & ef. 5-8-81; LCD 7-1981, f. & ef. 6-29-81

660-016-0015

Post-Acknowledgment Period

(1) All data, findings, and decisions made by a local government prior to acknowledgment may be reviewed by that local government in its periodic update process. This includes decisions made as a result of OAR 660-016-0000(5)(a), 660-016-0005(1), and 660-016-0010. Any changes, additions, or deletions would be made as a plan amendment, again following all Goal 5 steps.

(2) If the local government has included in its plan items under OAR 660-016-0000(5)(b), the local government has committed itself to take certain actions within a certain time frame in the post-acknowledgment period. Within those stated time frames, the local government must address the issue as stated in its plan, and treat the action as a plan amendment.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040
Hist.: LCD 5-1981(Temp), f. & ef. 5-8-81; LCD 7-1981, f. & ef. 6-29-81

660-016-0020

Landowner Involvement

(1) The development of inventory data, identification of conflicting uses and adoption of implementing measures must, under Statewide Planning Goals 1 and 2, provide opportunities for citizen involvement and agency coordination. In addition, the adoption of regulations or plan provisions carries with it basic legal notice requirements. (County or city legal counsel can advise the planning department and governing body of these requirements.) Depending upon the type of action involved, the form and method of landowner notification will vary. State statutes and local charter provisions contain basic notice requirements. Because of the nature of the Goal 5 process as outlined in this paper it is important to provide for notification and involvement of landowners, including public agencies, at the earliest possible opportunity. This will likely avoid problems or disagreements later in the process and improve the local decision-making process in the development of the plan and implementing measures.

(2) As the Goal 5 process progresses and more specificity about the nature of resources, identified conflicting uses, ESEE consequences and implementing measures is known, notice and involvement of affected parties will become more meaningful. Such notice and landowner involvement, although not identified as a Goal 5 requirement is in the opinion of the Commission, imperative.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040
Hist.: LCD 5-1981(Temp), f. & ef. 5-8-81; LCD 7-1981, f. & ef. 6-29-81

660-016-0030

Mineral and Aggregate Resources

(1) When planning for and regulating the development of aggregate resources, local governments shall address ORS 517.750 to 517.900 and OAR Chapter 632, Divisions 1 and 30.

(2) Local governments shall coordinate with the State Department of Geology and Mineral Industries to ensure that requirements for the reclamation of surface mines are incorporated into programs to achieve the Goal developed in accordance with OAR 660-016-0010.

(3) Local governments shall establish procedures designed to ensure that comprehensive plan provisions, land use regulations, and land use permits necessary to authorize mineral and aggregate development are coordinated with the State Department of Geology and Mineral Industries. Local governments shall amend comprehensive plans and land use regulations, as necessary, no later than January 1, 1993.

(4) The provisions of this rule shall be effective immediately.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040
Hist.: LCDC 3-1992, f. & cert. ef. 6-10-92

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LAND CONSERVATION AND DEVELOPMENT DEPARTMENT

DIVISION 23

PROCEDURES AND REQUIREMENTS FOR

COMPLYING WITH GOAL 5

660-023-0000

Purpose and Intent

This division establishes procedures and criteria for inventorying and evaluating Goal 5 resources and for developing land use programs to conserve and protect significant Goal 5 resources. This division explains how local governments apply Goal 5 when conducting periodic review and when amending acknowledged comprehensive plans and land use regulations.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0010

Definitions

As used in this division, unless the context requires otherwise:

(1) "Conflicting use" is a land use, or other activity reasonably and customarily subject to land use regulations, that could adversely affect a significant Goal 5 resource (except as provided in OAR 660-023-0180(1)(b)). Local governments are not required to regard agricultural practices as conflicting uses.

(2) "ESEE consequences" are the positive and negative economic, social, environmental, and energy

(ESEE) consequences that could result from a decision to allow, limit, or prohibit a conflicting use.

(3) "Impact area" is a geographic area within which conflicting uses could adversely affect a significant Goal 5 resource.

(4) "Inventory" is a survey, map, or description of one or more resource sites that is prepared by a local government, state or federal agency, private citizen, or other organization and that includes information about the resource values and features associated with such sites. As a verb, "inventory" means to collect, prepare, compile, or refine information about one or more resource sites. (See resource list.)

(5) "PAPA" is a "post-acknowledgment plan amendment." The term encompasses actions taken in accordance with ORS 197.610 through 197.625, including amendments to an acknowledged comprehensive plan or land use regulation and the adoption of any new plan or land use regulation. The term does not include periodic review actions taken in accordance with ORS 197.628 through 197.650.

(6) "Program" or "program to achieve the goal" is a plan or course of proceedings and action either to prohibit, limit, or allow uses that conflict with significant Goal 5 resources, adopted as part of the comprehensive plan and land use regulations (e.g., zoning standards, easements, cluster developments, preferential assessments, or acquisition of land or development rights).

(7) "Protect," when applied to an individual resource site, means to limit or prohibit uses that conflict with a significant resource site (except as provided in OAR 660-023-0140, 660-023-0180, and 660-023-0190). When applied to a resource category, "protect" means to develop a program consistent with this division.

(8) "Resource category" is any one of the cultural or natural resource groups listed in Goal 5.

(9) "Resource list" includes the description, maps, and other information about significant Goal 5 resource sites within a jurisdiction, adopted by a local government as a part of the comprehensive plan or as a land use regulation. A "plan inventory" adopted under OAR 660-016-0000(5)(c) shall be considered to be a resource list.

(10) "Resource site" or "site" is a particular area where resources are located. A site may consist of a parcel or lot or portion thereof or may include an area consisting of two or more contiguous lots or parcels.

(11) "Safe harbor" has the meaning given to it in OAR 660-023-0020(2).

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & 197.225 - 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0020

Standard and Specific Rules and Safe Harbors

(1) The standard Goal 5 process, OAR 660-023-0030 through 660-023-0050, consists of procedures and requirements to guide local planning for all Goal 5 resource categories. This division also provides

specific rules for each of the fifteen Goal 5 resource categories (see OAR 660-023-0090 through 660-023-0230). In some cases this division indicates that both the standard and the specific rules apply to Goal 5 decisions. In other cases, this division indicates that the specific rules supersede parts or all of the standard process rules (i.e., local governments must follow the specific rules rather than the standard Goal 5 process). In case of conflict, the resource-specific rules set forth in OAR 660-023-0090 through 660-023-0230 shall supersede the standard provisions in OAR 660-023-0030 through 660-023-0050.

(2) A "safe harbor" consists of an optional course of action that satisfies certain requirements under the standard process. Local governments may follow safe harbor requirements rather than addressing certain requirements in the standard Goal 5 process. For example, a jurisdiction may choose to identify "significant" riparian corridors using the safe harbor criteria under OAR 660-023-0090(5) rather than follow the general requirements for determining "significance" in the standard Goal 5 process under OAR 660-023-0030(4). Similarly, a jurisdiction may adopt a wetlands ordinance that meets the requirements of OAR 660-023-0100(4)(b) in lieu of following the ESEE decision process in OAR 660-023-0040.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0030

Inventory Process

(1) Inventories provide the information necessary to locate and evaluate resources and develop programs to protect such resources. The purpose of the inventory process is to compile or update a list of significant Goal 5 resources in a jurisdiction. This rule divides the inventory process into four steps. However, all four steps are not necessarily applicable, depending on the type of Goal 5 resource and the scope of a particular PAPA or periodic review work task. For example, when proceeding under a quasi-judicial PAPA for a particular site, the initial inventory step in section (2) of this rule is not applicable in that a local government may rely on information submitted by applicants and other participants in the local process. The inventory process may be followed for a single site, for sites in a particular geographical area, or for the entire jurisdiction or urban growth boundary (UGB), and a single inventory process may be followed for multiple resource categories that are being considered simultaneously. The standard Goal 5 inventory process consists of the following steps, which are set out in detail in sections (2) through (5) of this rule and further explained in sections (6) and (7) of this rule:

(a) Collect information about Goal 5 resource sites;

(b) Determine the adequacy of the information;

(c) Determine the significance of resource sites; and

(d) Adopt a list of significant resource sites.

(2) Collect information about Goal 5 resource sites: The inventory process begins with the collection of existing and available information, including inventories, surveys, and other applicable data about potential Goal 5 resource sites. If a PAPA or periodic review work task pertains to certain specified

sites, the local government is not required to collect information regarding other resource sites in the jurisdiction. When collecting information about potential Goal 5 sites, local governments shall, at a minimum:

(a) Notify state and federal resource management agencies and request current resource information; and

(b) Consider other information submitted in the local process.

(3) Determine the adequacy of the information: In order to conduct the Goal 5 process, information about each potential site must be adequate. A local government may determine that the information about a site is inadequate to complete the Goal 5 process based on the criteria in this section. This determination shall be clearly indicated in the record of proceedings. The issue of adequacy may be raised by the department or objectors, but final determination is made by the commission or the Land Use Board of Appeals, as provided by law. When local governments determine that information about a site is inadequate, they shall not proceed with the Goal 5 process for such sites unless adequate information is obtained, and they shall not regulate land uses in order to protect such sites. The information about a particular Goal 5 resource site shall be deemed adequate if it provides the location, quality and quantity of the resource, as follows:

(a) Information about location shall include a description or map of the resource area for each site. The information must be sufficient to determine whether a resource exists on a particular site. However, a precise location of the resource for a particular site, such as would be required for building permits, is not necessary at this stage in the process.

(b) Information on quality shall indicate a resource site's value relative to other known examples of the same resource. While a regional comparison is recommended, a comparison with resource sites within the jurisdiction itself is sufficient unless there are no other local examples of the resource. Local governments shall consider any determinations about resource quality provided in available state or federal inventories.

(c) Information on quantity shall include an estimate of the relative abundance or scarcity of the resource.

(4) Determine the significance of resource sites: For sites where information is adequate, local governments shall determine whether the site is significant. This determination shall be adequate if based on the criteria in subsections (a) through (c) of this section, unless challenged by the department, objectors, or the commission based upon contradictory information. The determination of significance shall be based on:

(a) The quality, quantity, and location information;

(b) Supplemental or superseding significance criteria set out in OAR 660-023-0090 through 660-023-0230; and

(c) Any additional criteria adopted by the local government, provided these criteria do not conflict with the requirements of OAR 660-023-0090 through 660-023-0230.

(5) Adopt a list of significant resource sites: When a local government determines that a particular resource site is significant, the local government shall include the site on a list of significant Goal 5 resources adopted as a part of the comprehensive plan or as a land use regulation. Local governments

shall complete the Goal 5 process for all sites included on the resource list except as provided in OAR 660-023-0200(7) for historic resources, and OAR 660-023-0220(3) for open space acquisition areas.

(6) Local governments may determine that a particular resource site is not significant, provided they maintain a record of that determination. Local governments shall not proceed with the Goal 5 process for such sites and shall not regulate land uses in order to protect such sites under Goal 5.

(7) Local governments may adopt limited interim protection measures for those sites that are determined to be significant, provided:

(a) The measures are determined to be necessary because existing development regulations are inadequate to prevent irrevocable harm to the resources on the site during the time necessary to complete the ESEE process and adopt a permanent program to achieve Goal 5; and

(b) The measures shall remain effective only for 120 days from the date they are adopted, or until adoption of a program to achieve Goal 5, whichever occurs first.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0040

ESEE Decision Process

(1) Local governments shall develop a program to achieve Goal 5 for all significant resource sites based on an analysis of the economic, social, environmental, and energy (ESEE) consequences that could result from a decision to allow, limit, or prohibit a conflicting use. This rule describes four steps to be followed in conducting an ESEE analysis, as set out in detail in sections (2) through (5) of this rule. Local governments are not required to follow these steps sequentially, and some steps anticipate a return to a previous step. However, findings shall demonstrate that requirements under each of the steps have been met, regardless of the sequence followed by the local government. The ESEE analysis need not be lengthy or complex, but should enable reviewers to gain a clear understanding of the conflicts and the consequences to be expected. The steps in the standard ESEE process are as follows:

(a) Identify conflicting uses;

(b) Determine the impact area;

(c) Analyze the ESEE consequences; and

(d) Develop a program to achieve Goal 5.

(2) Identify conflicting uses. Local governments shall identify conflicting uses that exist, or could occur, with regard to significant Goal 5 resource sites. To identify these uses, local governments shall examine land uses allowed outright or conditionally within the zones applied to the resource site and in its impact area. Local governments are not required to consider allowed uses that would be unlikely to occur in the impact area because existing permanent uses occupy the site. The following shall also apply in the

identification of conflicting uses:

(a) If no uses conflict with a significant resource site, acknowledged policies and land use regulations may be considered sufficient to protect the resource site. The determination that there are no conflicting uses must be based on the applicable zoning rather than ownership of the site. (Therefore, public ownership of a site does not by itself support a conclusion that there are no conflicting uses.)

(b) A local government may determine that one or more significant Goal 5 resource sites are conflicting uses with another significant resource site. The local government shall determine the level of protection for each significant site using the ESEE process and/or the requirements in OAR 660-023-0090 through 660-023-0230 (see OAR 660-023-0020(1)).

(3) Determine the impact area. Local governments shall determine an impact area for each significant resource site. The impact area shall be drawn to include only the area in which allowed uses could adversely affect the identified resource. The impact area defines the geographic limits within which to conduct an ESEE analysis for the identified significant resource site.

(4) Analyze the ESEE consequences. Local governments shall analyze the ESEE consequences that could result from decisions to allow, limit, or prohibit a conflicting use. The analysis may address each of the identified conflicting uses, or it may address a group of similar conflicting uses. A local government may conduct a single analysis for two or more resource sites that are within the same area or that are similarly situated and subject to the same zoning. The local government may establish a matrix of commonly occurring conflicting uses and apply the matrix to particular resource sites in order to facilitate the analysis. A local government may conduct a single analysis for a site containing more than one significant Goal 5 resource. The ESEE analysis must consider any applicable statewide goal or acknowledged plan requirements, including the requirements of Goal 5. The analyses of the ESEE consequences shall be adopted either as part of the plan or as a land use regulation.

(5) Develop a program to achieve Goal 5. Local governments shall determine whether to allow, limit, or prohibit identified conflicting uses for significant resource sites. This decision shall be based upon and supported by the ESEE analysis. A decision to prohibit or limit conflicting uses protects a resource site. A decision to allow some or all conflicting uses for a particular site may also be consistent with Goal 5, provided it is supported by the ESEE analysis. One of the following determi-nations shall be reached with regard to conflicting uses for a significant resource site:

(a) A local government may decide that a significant resource site is of such importance compared to the conflicting uses, and the ESEE consequences of allowing the conflicting uses are so detrimental to the resource, that the conflicting uses should be prohibited.

(b) A local government may decide that both the resource site and the conflicting uses are important compared to each other, and, based on the ESEE analysis, the conflicting uses should be allowed in a limited way that protects the resource site to a desired extent.

(c) A local government may decide that the conflicting use should be allowed fully, notwithstanding the possible impacts on the resource site. The ESEE analysis must demon-strate that the conflicting use is of sufficient importance relative to the resource site, and must indicate why measures to protect the resource to some extent should not be provided, as per subsection (b) of this section.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245

Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0050

Programs to Achieve Goal 5

(1) For each resource site, local governments shall adopt comprehensive plan provisions and land use regulations to implement the decisions made pursuant to OAR 660-023-0040(5). The plan shall describe the degree of protection intended for each significant resource site. The plan and implementing ordinances shall clearly identify those conflicting uses that are allowed and the specific standards or limitations that apply to the allowed uses. A program to achieve Goal 5 may include zoning measures that partially or fully allow conflicting uses (see OAR 660-023-0040(5)(b) and (c)).

(2) When a local government has decided to protect a resource site under OAR 660-023-0040(5)(b), implementing measures applied to conflicting uses on the resource site and within its impact area shall contain clear and objective standards. For purposes of this division, a standard shall be considered clear and objective if it meets any one of the following criteria:

(a) It is a fixed numerical standard, such as a height limitation of 35 feet or a setback of 50 feet;

(b) It is a nondiscretionary requirement, such as a requirement that grading not occur beneath the dripline of a protected tree; or

(c) It is a performance standard that describes the outcome to be achieved by the design, siting, construction, or operation of the conflicting use, and specifies the objective criteria to be used in evaluating outcome or performance. Different performance standards may be needed for different resource sites. If performance standards are adopted, the local government shall at the same time adopt a process for their application (such as a conditional use, or design review ordinance provision).

(3) In addition to the clear and objective regulations required by section (2) of this rule, except for aggregate resources, local governments may adopt an alternative approval process that includes land use regulations that are not clear and objective (such as a planned unit development ordinance with discretionary performance standards), provided such regulations:

(a) Specify that landowners have the choice of proceeding under either the clear and objective approval process or the alternative regulations; and

(b) Require a level of protection for the resource that meets or exceeds the intended level deter-mined under OAR 660-023-0040(5) and 660-023-0050(1).

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0060

Notice and Land Owner Involvement

Local governments shall provide timely notice to landowners and opportunities for citizen involvement during the inventory and ESEE process. Notification and involvement of landowners, citizens, and public agencies should occur at the earliest possible opportunity whenever a Goal 5 task is undertaken in the periodic review or plan amendment process. A local government shall comply with its acknowledged citizen involvement program, with statewide goal requirements for citizen involvement and coordination, and with other applicable procedures in statutes, rules, or local ordinances.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0070

Buildable Lands Affected by Goal 5 Measures

(1) If measures to protect significant resource sites inside urban growth boundaries affect the inventory of buildable lands in acknowledged plans required by Goals 9, 10 and 14, a local government outside of the Metro UGB, and Metro inside the Metro UGB, prior to or at the next periodic review, shall:

(a) Amend its urban growth boundary to provide additional buildable lands sufficient to compensate for the loss of buildable lands caused by the application of Goal 5;

(b) Redesignate other land to replace identified land needs under Goals 9, 10, and 14 provided such action does not take the plan out of compliance with other statewide goals; or

(c) Adopt a combination of the actions described in subsections (a) and (b) of this section.

(2) If a local government redesignates land for higher density under subsections (1)(b) or (c) of this rule in order to meet identified housing needs, the local government shall ensure that the redesignated land is in locations appropriate for the housing types, and is zoned at density ranges that are likely to be achieved by the housing market.

(3) Where applicable, the requirements of ORS 197.296 shall supersede the requirements of sections (1) and (2) of this rule.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0080

Metro Regional Resources

(1) For purposes of this rule, the following definitions apply:

(a) "Metro" is the Metropolitan Service District organized under ORS Chapter 268, and operating under

the 1992 Metro Charter, for 24 cities and certain urban portions of Multnomah, Clackamas, and Washington counties.

(b) "Regional resource" is a site containing a significant Goal 5 resource, including but not limited to a riparian corridor, wetland, or open space area, which is identified as a regional resource on a map adopted by Metro ordinance.

(2) Local governments shall complete the Goal 5 process in this division for all regional resources prior to or during the first periodic review following Metro's adoption of a regional resources map, unless Metro adopts a regional functional plan by ordinance to establish a uniform time for all local governments to complete the Goal 5 process for particular regional resource sites.

(3) Metro may adopt one or more regional functional plans to address all applicable requirements of Goal 5 and this division for one or more resource categories and to provide time limits for local governments to implement the plan. Such functional plans shall be submitted for acknowledgment under the provisions of ORS 197.251 and 197.274. Upon acknowledgment of Metro's regional resource functional plan, local governments within Metro's jurisdiction shall apply the requirements of the functional plan for regional resources rather than the requirements of this division.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0090

Riparian Corridors

(1) For the purposes of this rule, the following definitions apply:

(a) "Fish habitat" means those areas upon which fish depend in order to meet their requirements for spawning, rearing, food supply, and migration.

(b) "Riparian area" is the area adjacent to a river, lake, or stream, consisting of the area of transition from an aquatic ecosystem to a terrestrial ecosystem.

(c) "Riparian corridor" is a Goal 5 resource that includes the water areas, fish habitat, adjacent riparian areas, and wetlands within the riparian area boundary.

(d) "Riparian corridor boundary" is an imag-inary line that is a certain distance upland from the top bank, for example, as specified in section (5) of this rule.

(e) "Stream" is a channel such as a river or creek that carries flowing surface water, including perennial streams and intermittent streams with defined channels, and excluding man-made irrigation and drainage channels.

(f) "Structure" is a building or other major improvement that is built, constructed, or installed, not including minor improvements, such as fences, utility poles, flagpoles, or irrigation system components, that are not customarily regulated through zoning ordinances.

(g) "Top of bank" shall have the same meaning as "bankfull stage" defined in OAR 141-085-0010(2).

(h) "Water area" is the area between the banks of a lake, pond, river, perennial or fish-bearing intermittent stream, excluding man-made farm ponds.

(2) Local governments shall amend acknowledged plans in order to inventory riparian corridors and provide programs to achieve Goal 5 prior to or at the first periodic review following the effective date of this rule, except as provided in OAR 660-023-0250(5).

(3) Local governments shall inventory and determine significant riparian corridors by following either the safe harbor methodology described in section (5) of this rule or the standard inventory process described in OAR 660-023-0030 as modified by the requirements in section (4) of this rule. The local government may divide the riparian corridor into a series of stream sections (or reaches) and regard these as individual resource sites.

(4) When following the standard inventory process in OAR 660-023-0030, local governments shall collect information regarding all water areas, fish habitat, riparian areas, and wetlands within riparian corridors. Local governments may postpone determination of the precise location of the riparian area on lands designated for farm or forest use until receipt of applications for local permits for uses that would conflict with these resources. Local governments are encouraged, but not required, to conduct field investigations to verify the location, quality, and quantity of resources within the riparian corridor. At a minimum, local governments shall consult the following sources, where available, in order to inventory riparian corridors along rivers, lakes, and streams within the jurisdiction:

(a) Oregon Department of Forestry stream classification maps;

(b) United States Geological Service (USGS) 7.5 minute quadrangle maps;

(c) National Wetlands Inventory maps;

(d) Oregon Department of Fish and Wildlife (ODFW) maps indicating fish habitat;

(e) Federal Emergency Management Agency (FEMA) flood maps; and

(f) Aerial photographs.

(5) As a safe harbor in order to address the requirements under OAR 660-023-0030, a local government may determine the boundaries of significant riparian corridors within its jurisdiction using a standard setback distance from all fish-bearing lakes and streams shown on the documents listed in subsections (a) through (f) of section (4) of this rule, as follows:

(a) Along all streams with average annual stream flow greater than 1,000 cubic feet per second (cfs) the riparian corridor boundary shall be 75 feet upland from the top of each bank.

(b) Along all lakes, and fish-bearing streams with average annual stream flow less than 1,000 cfs, the riparian corridor boundary shall be 50 feet from the top of bank.

(c) Where the riparian corridor includes all or portions of a significant wetland as set out in OAR 660-023-0100, the standard distance to the riparian corridor boundary shall be measured from, and include, the upland edge of the wetland.

(d) In areas where the top of each bank is not clearly defined, or where the predominant terrain consists of steep cliffs, local governments shall apply OAR 660-023-0030 rather than apply the safe harbor provisions of this section.

(6) Local governments shall develop a program to achieve Goal 5 using either the safe harbor described in section (8) of this rule or the standard Goal 5 ESEE process in OAR 660-023-0040 and 660-023-0050 as modified by section (7) of this rule.

(7) When following the standard ESEE process in OAR 660-023-0040 and 660-023-0050, a local government shall comply with Goal 5 if it identifies at least the following activities as conflicting uses in riparian corridors:

(a) The permanent alteration of the riparian corridor by placement of structures or impervious surfaces, except for:

(A) Water-dependent or water-related uses; and

(B) Replacement of existing structures with structures in the same location that do not disturb additional riparian surface area; and

(b) Removal of vegetation in the riparian area, except:

(A) As necessary for restoration activities, such as replacement of vegetation with native riparian species;

(B) As necessary for the development of water-related or water-dependent uses; and

(C) On lands designated for agricultural or forest use outside UGBs.

(8) As a safe harbor in lieu of following the ESEE process requirements of OAR 660-023-0040 and 660-023-0050, a local government may adopt an ordinance to protect a significant riparian corridor as follows:

(a) The ordinance shall prevent permanent alteration of the riparian area by grading or by the placement of structures or impervious surfaces, except for the following uses, provided they are designed and constructed to minimize intrusion into the riparian area:

(A) Streets, roads, and paths;

(B) Drainage facilities, utilities, and irrigation pumps;

(C) Water-related and water-dependent uses; and

(D) Replacement of existing structures with structures in the same location that do not disturb additional riparian surface area.

(b) The ordinance shall contain provisions to control the removal of riparian vegetation, except that the ordinance shall allow:

(A) Removal of non-native vegetation and replacement with native plant species; and

(B) Removal of vegetation necessary for the development of water-related or water-dependent uses;

(c) Notwithstanding subsection (b) of this section, the ordinance need not regulate the removal of vegetation in areas zoned for farm or forest uses pursuant to statewide Goals 3 or 4;

(d) The ordinance shall include a procedure to consider hardship variances, claims of map error, and reduction or removal of the restrictions under subsections (a) and (b) of this section for any existing lot or parcel demonstrated to have been rendered not buildable by application of the ordinance; and

(e) The ordinance may authorize the permanent alteration of the riparian area by placement of structures or impervious surfaces within the riparian corridor boundary established under subsection (5)(a) of this rule upon a demonstration that equal or better protection for identified resources will be ensured through restoration of riparian areas, enhanced buffer treatment, or similar measures. In no case shall such alterations occupy more than 50 percent of the width of the riparian area measured from the upland edge of the corridor.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0100

Wetlands

(1) For purposes of this rule, a "wetland" is an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

(2) Local governments shall amend acknowledged plans and land use regulations prior to or at periodic review to address the requirements of this division, as set out in OAR 660-023-0250(5) through (7). The standard inventory process requirements in OAR 660-023-0030 do not apply to wetlands. Instead, local governments shall follow the requirements of section (3) of this rule in order to inventory and determine significant wetlands.

(3) For areas inside urban growth boundaries (UGBs) and urban unincorporated communities (UUCs), local governments shall:

(a) Conduct a local wetlands inventory (LWI) using the standards and procedures of OAR 141-086-0110 through 141-086-0240 and adopt the LWI as part of the comprehensive plan or as a land use regulation; and

(b) Determine which wetlands on the LWI are "significant wetlands" using the criteria adopted by the Division of State Lands (DSL) pursuant to ORS 197.279(3)(b) and adopt the list of significant wetlands as part of the comprehensive plan or as a land use regulation.

(4) For significant wetlands inside UGBs and UUCs, a local government shall:

(a) Complete the Goal 5 process and adopt a program to achieve the goal following the require-ments of

OAR 660-023-0040 and 660-023-0050; or

(b) Adopt a safe harbor ordinance to protect significant wetlands consistent with this subsection, as follows:

(A) The protection ordinance shall place restrictions on grading, excavation, placement of fill, and vegetation removal other than perimeter mowing and other cutting necessary for hazard prevention; and

(B) The ordinance shall include a variance procedure to consider hardship variances, claims of map error verified by DSL, and reduction or removal of the restrictions under paragraph (A) of this subsection for any lands demonstrated to have been rendered not buildable by application of the ordinance.

(5) For areas outside UGBs and UUCs, local governments shall either adopt the statewide wetland inventory (SWI; see ORS 196.674) as part of the local comprehensive plan or as a land use regulation, or shall use a current version for the purpose of section (7) of this rule.

(6) For areas outside UGBs and UUCs, local governments are not required to amend acknowledged plans and land use regulations in order to determine significant wetlands and complete the Goal 5 process. Local governments that choose to amend acknowledged plans for areas outside UGBs and UUCs in order to inventory and protect significant wetlands shall follow the requirements of sections (3) and (4) of this rule.

(7) All local governments shall adopt land use regulations that require notification of DSL concerning applications for development permits or other land use decisions affecting wetlands on the inventory, as per ORS 227 .350 and 215.418, or on the SWI as provided in section (5) of this rule.

(8) All jurisdictions may inventory and protect wetlands under the procedures and requirements for wetland conservation plans adopted pursuant to ORS 196.668 et seq. A wetlands conservation plan approved by the director of DSL shall be deemed to comply with Goal 5 (ORS 197.279(1)).

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0110

Wildlife Habitat

(1) For purposes of this rule, the following definitions apply:

(a) "Documented" means that an area is shown on a map published or issued by a state or federal agency or by a professional with demonstrated expertise in habitat identification.

(b) "Wildlife habitat" is an area upon which wildlife depend in order to meet their requirements for food, water, shelter, and reproduction. Examples include wildlife migration corridors, big game winter range, and nesting and roosting sites.

(2) Local governments shall conduct the inventory process and determine significant wildlife habitat as

set forth in OAR 660-023-0250(5) by following either the safe harbor methodology described in section (4) of this rule or the standard inventory process described in OAR 660-023-0030.

(3) When gathering information regarding wildlife habitat under the standard inventory process in OAR 660-023-0030(2), local governments shall obtain current habitat inventory information from the Oregon Department of Fish and Wildlife (ODFW), and other state and federal agencies. These inventories shall include at least the following:

(a) Threatened, endangered, and sensitive wildlife species habitat information;

(b) Sensitive bird site inventories; and

(c) Wildlife species of concern and/or habitats of concern identified and mapped by ODFW (e.g., big game winter range and migration corridors, golden eagle and prairie falcon nest sites, and pigeon springs).

(4) Local governments may determine wildlife habitat significance under OAR 660-023-0040 or apply the safe harbor criteria in this section. Under the safe harbor, local governments may determine that "wildlife" does not include fish, and that significant wildlife habitat is only those sites where one or more of the following conditions exist:

(a) The habitat has been documented to perform a life support function for a wildlife species listed by the federal government as a threatened or endangered species or by the state of Oregon as a threatened, endangered, or sensitive species;

(b) The habitat has documented occurrences of more than incidental use by a species described in subsection (a) of this section;

(c) The habitat has been documented as a sensitive bird nesting, roosting, or watering resource site for osprey or great blue herons pursuant to ORS 527.710 (Oregon Forest Practices Act) and OAR 629-024-0700 (Forest Practices Rules);

(d) The habitat has been documented to be essential to achieving policies or population objectives specified in a wildlife species management plan adopted by the Oregon Fish and Wildlife Commission pursuant to ORS Chapter 496; or

(e) The area is identified and mapped by ODFW as habitat for a wildlife species of concern and/or as a habitat of concern (e.g., big game winter range and migration corridors, golden eagle and prairie falcon nest sites, or pigeon springs).

(5) For certain threatened or endangered species sites, publication of location information may increase the threat of habitat or species loss. Pursuant to ORS 192.501(13), local governments may limit publication, display, and availability of location information for such sites. Local governments may adopt inventory maps of these areas, with procedures to allow limited availability to property owners or other specified parties.

(6) As set out in OAR 660-023-0250(5), local governments shall develop programs to protect wildlife habitat following the standard procedures and requirements of OAR 660-023-0040 and 660-023-0050. Local governments shall coordinate with appropriate state and federal agencies when adopting programs intended to protect threatened, endangered, or sensitive species habitat areas.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 297.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0120

Federal Wild and Scenic Rivers

(1) At each periodic review, local governments shall amend acknowledged plans and land use regulations to address any federal Wild and Scenic River (WSR) and associated corridor established by the federal government that is not addressed by the acknowledged plan. The standards and procedures of OAR 660-023-0030 through 660-023-0050 apply to WSRs, except as provided in this rule.

(2) Local governments shall not inventory WSRs using the standard process under OAR 660-023-0030, except that local governments shall follow the requirements of OAR 660-023-0030(5) by designating all WSRs as significant Goal 5 resources.

(3) A local government may delay completion of OAR 660-023-0040 and 660-023-0050 for a WSR until the federal government adopts a management plan for the WSR. Prior to the federal government adoption of a management plan, the local govern-ment shall notify the federal government of proposed development and changes of land use within the interim WSR corridor.

(4) Prior to or at the first periodic review following adoption of a management plan by the federal government for an established WSR, the local government shall adopt a program to protect the WSR and associated corridor by following the ESEE standards and procedures of OAR 660-023-0040 and 660-023-0050. The impact area determined under OAR 660-023-0040(3) shall be the WSR corridor that is established by the federal government. Notwithstanding the provisions of OAR 660-023-0040(5), the local program shall be consistent with the federal management plan.

(5) For any lands in a designated WSR corridor that are also within the impact area of a designated Oregon Scenic Waterway, the local government may apply the requirements of OAR 660-023-0130 rather than the applicable requirements of this rule in order to develop a program to achieve Goal 5.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0130

Oregon Scenic Waterways

(1) At each periodic review, local governments shall amend acknowledged plans and land use regulations to address any Oregon Scenic Waterway (OSW) and associated corridor that is not addressed by the acknowledged plan. The standards and procedures of OAR 660-023-0030 through 660-023-0050 apply to OSWs, except as provided in this rule.

(2) Local governments shall not inventory OSWs following all the steps of the standard inventory process under OAR 660-023-0030. Instead, local governments shall follow only the requirements of OAR 660-023-0030(5) by designating OSWs as significant Goal 5 resources.

(3) A local government may delay completion of the Goal 5 process (OAR 660-023-0040 and 660-023-0050) for an OSW until the Oregon Parks and Recreation Commission (OPRC) adopts a management plan for the OSW. Prior to the OPRC adoption of a management plan for the OSW, the local government shall:

(a) Notify the Oregon Parks and Recreation Department (OPRD) of proposed developments and changes of land use on land within the interim OSW corridor; and

(b) Inform landowners who apply to the local government for development approval or changes of land use within the OSW corridor of their notice obligations under ORS 390.845.

(4) Prior to or at the first periodic review following adoption of a management plan by the OPRC for an established OSW, the local government shall adopt a Goal 5 program for the OSW and associated corridor by following either the ESEE standards and procedures of OAR 660-023-0040 and 660-023-0050 or the safe harbor provisions in section (5) of this rule. The impact area determined under OAR 660-023-0040(3) shall be the scenic waterway and adjacent lands as set forth in ORS 390.805(2) and (3). Notwithstanding the provisions of OAR 660-023-0040(5), the local program for the OSW shall be consistent with the manage-ment plan adopted by OPRC.

(5) As a safe harbor, a local government may adopt only those plan and implementing ordinance provisions necessary to carry out the management plan adopted by OPRC rather than follow the ESEE standards and procedures of OAR 660-023-0040 and 660-023-0050.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0140

Groundwater Resources

(1) For purposes of this rule, the following definitions apply:

(a) "Delineation" is a determination that has been certified by the Oregon Health Division pursuant to OAR 333-061-0057, regarding the extent, orientation, and boundary of a wellhead protection area, considering such factors as geology, aquifer characteristics, well pumping rates, and time of travel.

(b) "Groundwater" is any water, except capillary moisture, beneath the land surface or beneath the bed of any stream, lake, reservoir, or other body of surface water.

(c) "Protect significant groundwater resources" means to adopt land use programs to help ensure that reliable groundwater is available to areas planned for development and to provide a reasonable level of certainty that the carrying capacity of groundwater resources will not be exceeded.

(d) "Public water system" is a system supplying water for human consumption that has four or more service connections, or a system supplying water to a public or commercial establishment that operates a total of at least 60 days per year and that is used by 10 or more individuals per day.

(e) "Wellhead protection area" is the surface and subsurface area surrounding a water well, spring, or wellfield, supplying a public water system, through which contaminants are reason-ably likely to move toward and reach that water well, spring, or wellfield.

(2) Local governments shall amend acknowledged plans prior to or at each periodic review in order to inventory and protect significant groundwater resources under Goal 5 only as provided in sections (3) through (5) of this rule. Goal 5 does not apply to other groundwater areas, although other statewide Goals, especially Goals 2, 6, and 11, apply to land use decisions concerning such groundwater areas. Significant groundwater resources are limited to:

(a) Critical groundwater areas and ground-water-limited areas designated by the Oregon Water Resources Commission (OWRC), subject to the requirements in section (3) of this rule applied in conjunction with the requirements of OAR 660-023-0030 through 660-023-0050; and

(b) Wellhead protection areas, subject to the requirements in sections (4) and (5) of this rule instead of the requirements in OAR 660-023-0030 through 660-023-0050.

(3) Critical groundwater areas and groundwater-limited areas designated by order of the OWRC pursuant to ORS 537.505 et seq. are significant groundwater resources. Following designation by OWRC, and in coordination with the Oregon Water Resources Department (WRD), local plans shall declare such areas as significant groundwater resources as per OAR 660-022-0030(5). Following the requirements of OAR 660-023-0040 and 660-023-0050 and this rule, local governments shall develop programs to protect these significant groundwater resources.

(4) A local government or water provider may delineate a wellhead protection area for wells or wellfields that serve lands within its jurisdiction. For the delineation of wellhead protection areas, the standards and procedures in OAR Chapter 333, Division 61 (Oregon Health Division rules) shall apply rather than the standards and procedures of OAR 660-023-0030.

(5) A wellhead protection area is a significant groundwater resource only if the area has been so delineated and either:

(a) The public water system served by the wellhead area has a service population greater than 10,000 or has more than 3,000 service connections and relies on groundwater from the wellhead area as the primary or secondary source of drinking water; or

(b) The wellhead protection area is determined to be significant under criteria established by a local government, for the portion of the wellhead protection area within the jurisdiction of the local government.

(6) Local governments shall develop programs to resolve conflicts with wellhead protection areas described under section (5) of this rule. In order to resolve conflicts with wellhead protection areas, local governments shall adopt comprehensive plan provisions and land use regulations, consistent with all applicable statewide goals, that:

(a) Reduce the risk of contamination of groundwater, following the standards and requirements of OAR

Chapter 340, Division 40; and

(b) Implement wellhead protection plans certified by the Oregon Department of Environ-mental Quality (DEQ) under OAR 340-040-0180.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0150

Approved Oregon Recreation Trails

(1) For purposes of this rule, "recreation trail" means an Oregon Recreation Trail designated by rule adopted by the Oregon Parks and Recreation Commission (OPRC).

(2) Recreation trails are designated by OPRC in cooperation with local governments and private land owners. Local governments are not required to inventory recreation trails under OAR 660-023-0030. Instead, local governments shall designate all recreation trails designated by OPRC as significant Goal 5 resources. At each periodic review, local governments shall amend acknowledged plans to recognize any recreation trail designated by OPRC subsequent to acknowledgment or a previous periodic review.

(3) Local governments are not required to amend acknowledged plans or land use regulations in order to supplement OPRC protection of recreation trails. If a local government chooses to supplement OPRC protection, it shall follow the requirements of OAR 660-023-0040 and 660-023-0050.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0160

Natural Areas

(1) For purposes of this rule, "natural areas" are areas listed in the Oregon State Register of Natural Heritage Resources.

(2) At periodic review, local governments shall consider information about natural areas not addressed at acknowledgment or in previous periodic reviews. Local governments shall inventory such areas as significant and develop a program to achieve the goal following the standard Goal 5 process in OAR 660-023-0040 and 660-023-0050.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0170

Wilderness Areas

(1) For purposes of this rule, "wilderness areas" are those areas designated as wilderness by the federal government.

(2) Local governments are not required to inventory wilderness areas using the procedures of OAR 660-023-0030, except that local governments shall list all federally designated wilderness areas as significant Goal 5 resources as provided under OAR 660-023-0030(5).

(3) At periodic review, local governments shall amend acknowledged plans to recognize any wilderness areas designated after the last periodic review or acknowledgment.

(4) A local government need not complete the Goal 5 process in OAR 660-023-0040 and 660-023-0050 for wilderness areas unless it chooses to provide additional protection for the wilderness area, such as the regulation of conflicting uses in an impact area adjacent to the wilderness area.

Stat. Auth.: ORS 183 & ORS 197
Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245
Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0180

Mineral and Aggregate Resources

(1) For purposes of this rule, the following definitions apply:

(a) "Aggregate resources" are naturally occurring concentrations of stone, rock, sand and gravel, decomposed granite, lime, pumice, cinders, and other naturally occurring solid materials used in road building.

(b) "Conflicting use" is a use or activity that is subject to land use regulations and that would interfere with, or be adversely affected by, mining or processing activities at a significant mineral or aggregate resource site (as specified in sections 4(b) and (5) of this rule).

(c) "Existing site" is a significant aggregate site that is lawfully operating, or is included on an inventory in an acknowledged plan, on the applicable date of this rule.

(d) "Expansion area" is an aggregate mining area contiguous to an existing site.

(e) "Mining" is the extraction and processing of mineral or aggregate resources, in the manner provided under ORS 215.298(3).

(f) "Minimize a conflict" means to reduce an identified conflict to a level that is no longer significant. For those types of conflicts addressed by local, state, or federal standards (such as the Department of Environmental Quality standards for noise and dust levels) to "minimize a conflict" means to ensure conformance to the applicable standard.

(g) "Mining area" is the area of a site within which mining is permitted or proposed, excluding undisturbed buffer areas or areas on a parcel where mining is not authorized.

(h) "Processing" means the activities described in ORS 517.750(11).

(i) "Protect" means to adopt land use regulations for a significant mineral or aggregate site in order to authorize mining of the site and to limit or prohibit new conflicting uses within the impact area of the site.

(j) "Width of aggregate layer" means the depth of the water-lain deposit of sand, stones, and pebbles of sand-sized fraction or larger, minus the depth of the topsoil and nonaggregate overburden.

(k) "Willamette Valley" means Benton, Clackamas, Columbia, Linn, Marion, Multnomah, Polk, Washington, and Yamhill counties and the portion of Lane County east of the summit of the Coast Range.

(2) Local governments are not required to amend acknowledged inventories or plans with regard to mineral and aggregate resources except in response to an application for a PAPA, or at periodic review as specified in OAR 660-023-0180(7). The requirements of this rule either modify, supplement, or supersede the requirements of the standard Goal 5 process in OAR 660-023-0030 through 660-023-0050, as follows:

(a) A local government may inventory mineral and aggregate resources throughout its jurisdiction, or in a portion of its jurisdiction. When a local government conducts an inventory of mineral and aggregate sites in all or a portion of its jurisdiction, it shall follow the requirements of OAR 660-023-0030 as modified by subsection (b) of this section. When a local government is following the inventory process for a mineral or aggregate resource site filed under a PAPA, it shall follow only the applicable requirements of OAR 660-023-0030, except as provided in sections (3) and (6) of this rule;

(b) Local governments shall apply the criteria in section (3) of this rule rather than OAR 660-023-0030 (4) in determining whether an aggregate resource site is significant;

(c) Local governments shall follow the requirements of section (4) of this rule in deciding whether to authorize the mining of a significant mineral or aggregate resource site; and

(d) For significant mineral and aggregate sites where mining is allowed, local governments shall decide on a program to protect the site from new off-site conflicting uses by following the standard ESEE process in OAR 660-023-0040 and 660-023-0050 with regard to such uses.

(3) An aggregate resource site shall be considered significant if adequate information regarding the quantity, quality, and location of the resource demonstrates that the site meets any one of the criteria in subsections (a) through (c) of this section, except as provided in subsection (d) of this section:

(a) A representative set of samples of aggregate material in the deposit on the site meets Oregon Department of Transportation (ODOT) specifications for base rock for air degradation, abrasion, and sodium sulfate soundness, and the estimated amount of material is more than 2,000,000 tons in the Willamette Valley, or 100,000 tons outside the Willamette Valley;

(b) The material meets local government standards establishing a lower threshold for significance than subsection (a) of this section; or

(c) The aggregate site is on an inventory of significant aggregate sites in an acknowledged plan on the applicable date of this rule.

(d) Notwithstanding subsections (a) through (c) of this section, except for an expansion area of an existing site if the operator of the existing site on March 1, 1996 had an enforceable property interest in the expansion area on that date, an aggregate site is not significant if the criteria in either paragraphs (A) or (B) of this subsection apply:

(A) More than 35 percent of the proposed mining area consists of soil classified as Class I on Natural Resource and Conservation Service (NRCS) maps on the date of this rule; or

(B) More than 35 percent of the proposed mining area consists of soil classified as Class II, or of a combination of Class II and Class I or Unique soil on NRCS maps available on the date of this rule, unless the average width of the aggregate layer within the mining area exceeds:

(i) 60 feet in Washington, Multnomah, Marion, Columbia, and Lane counties;

(ii) 25 feet in Polk, Yamhill, and Clackamas counties; or

(iii) 17 feet in Linn and Benton counties.

(4) For significant mineral and aggregate sites, local governments shall decide whether mining is permitted. For a PAPA application involving a significant aggregate site, the process for this decision is set out in subsections (a) through (g) of this section. For a PAPA involving a significant aggregate site, a local government must complete the process within 180 days after receipt of a complete application that is consistent with section (6) of this rule, or by the earliest date after 180 days allowed by local charter. The process for reaching decisions about aggregate mining is as follows:

(a) The local government shall determine an impact area for the purpose of identifying conflicts with proposed mining and processing activities. The impact area shall be large enough to include uses listed in subsection (b) of this section and shall be limited to 1,500 feet from the boundaries of the mining area, except where factual information indicates significant potential conflicts beyond this distance. For a proposed expansion of an existing aggregate site, the impact area shall be measured from the perimeter of the proposed expansion area rather than the boundaries of the existing aggregate site and shall not include the existing aggregate site.

(b) The local government shall determine existing or approved land uses within the impact area that will be adversely affected by proposed mining operations and shall specify the predicted conflicts. For purposes of this section, "approved land uses" are dwellings allowed by a residential zone on existing platted lots and other uses for which conditional or final approvals have been granted by the local government. For determination of conflicts from proposed mining of a significant aggregate site, the local government shall limit its consideration to the following:

(A) Conflicts due to noise, dust, or other discharges with regard to those existing and approved uses and associated activities (e.g., houses and schools) t

POLICY 16-B: Mineral And Aggregate Resources

It is the County's policy to protect and ensure appropriate use of mineral and aggregate resources of the County, and minimize conflict between surface mining activities and surrounding land uses.

Strategies

A. The County shall protect significant gravel and mineral resources consistent with Statewide Planning Goal 5 and Oregon Administrative Rules Chapter 660, Division 16.

B. As a part of the ongoing planning program the County will maintain an inventory of mineral and aggregate resource sites within the County. The comprehensive plan inventory is to include four classifications of sites:

1. "Potential sites" are sites for which information about the location, quality, and quantity of a resource site is not adequate to allow a determination of significance (Goal 5 Process Flow Chart designation of "1B");
2. "Not significant sites" are sites for which information about the location, quality, and quantity of a resource site shows that the site is not a significant resource (Goal 5 Process Flow Chart designation of "1A");
3. "Protected sites" are significant resource sites which are identified through the Goal 5 process as resources that the County will protect from conflicting uses (Goal 5 Process Flow Chart designations "2A," "3A," and "3C"); and
4. "Not protected sites" are significant resource sites for which the decision of the ESEE analysis is to not protect the resource from conflicting uses (Goal 5 Process Flow Chart designation of "3B").

C. A resource site may include all or portions of a parcel, and may include contiguous parcels in different ownerships.

D. For sites on the "potential sites" inventory, the County shall review available information about aggregate and mineral resources, and if the information on location, quantity, and quality is adequate, determine if the site is significant. Initiation of this process shall occur either:

1. As part of the next scheduled periodic review; or
2. When a record owner or the authorized agent of the record owner submits information concerning the significance of a resource site and applies for a comprehensive plan amendment.

E. The County will judge the significance of mineral and aggregate resources on a case by case basis, under the standards and procedures in LCDC's Goal 5 interpretive rules.

F. For each site determined to be significant, the County shall complete the remainder of the Goal 5 process of identifying conflicting uses, analyzing the Economic, Social, Environmental, and Energy (ESEE) consequences of the conflicting use(s), and designating a level of protection from conflicting uses. If the final decision concerning the site is to preserve fully or partially protect the resource from conflicting uses, the County shall zone the site and the designated ESEE impact area with the Protected Aggregate and Mineral Resources Overlay Zoning Subdistrict (PAM).

G. Mining and the associated processing of aggregate and mineral materials, in excess of the limited exemptions in Subsection H below, may only be allowed at sites included on the "protected sites" inventory. Approval of a mining operation at a "protected site" shall be reviewed as a conditional use. The general conditional use provisions regarding time limits, conditions, restrictions, and approval criteria, (MCC .7110(C), .7110(E), .7115, .7120, .7122, and .7125, October, 1994), shall not apply.

H. Exemptions

1. The following activities are exempt from the approval requirements and development standards of this policy:

   a. Mining auxiliary to forest practices.

b. Lawful mining operating under a DOGAMI "Grant of Total Exemption" on (the effective date of the Ordinance) on property owned or controlled by the operator. Abandonment, restoration, or alteration of this use shall be in compliance with the non-conforming use provisions of MCC .8805 and .8810.

2. Mining less than 1,000 cubic yards of material in conjunction with mining an area of less than one acre is exempt from the approval requirements and development standards of this policy. However, the mining activity shall require approval of a Hillside and Erosion Control permit and any other permits as may be required in any overlay subdistrict.

3. Mining a quantity and area in excess of 2 above, but less than 5,000 cubic yards of material or disturbing less than one acre of land within a period of 12 consecutive months until mining affects five or more acres is exempt from the approval requirements and development standards of this policy which require review by and issuance of an operating permit from DOGAMI. However, mining at this level of activity shall:

   a. Be on a "protected site" as determined by, and subject to restrictions warranted by, the Goal 5 process;

   b. Be approved as a mining conditional use; and

   c. Obtain approval of a Hillside and Erosion Control Permit in conjunction with the mining conditional use approval. The Hillside and Erosion Control permit shall be required in place of all references in the plan and code to obtaining a DOGAMI operating permit in recognition that this level of mining activity is exempted by DOGAMI rules for such a permit.

I. To approve surface mining at a site zoned Exclusive Farm Use (EFU) the County shall find, as part of the conditional use approval criteria, that the proposed activity:

   1. Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and

   2. Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use.

J. To approve surface mining at a site zoned Commercial Forest Use (CFU), the County shall find, as part of the conditional use approval criteria, that:

   1. The proposed mining will not force a significant change in, or significantly increase the cost of, accepted farming or forest practices on agriculture or forest lands;

   2. The proposed mining will not significantly increase fire hazard or significantly increase fire suppression costs or significantly increase risks to fire suppression personnel; and

   3. A written statement recognizing the rights of adjacent and nearby property owners to conduct accepted forest practices has been recorded with the property deed in accordancewith OAR 660-06-025 (1994).

K. The County shall not independently apply the Protected Aggregate and Mineral Resources Overlay Subdistrict (PAM) to land within another County, or within a city or its urban growth boundary. The County shall encourage protection of significant sites through cooperative agreements with another County or a city where the resource or its impact area extends across jurisdictional boundaries.

L. The County shall require increased setbacks, insulation, screening, or similar measures as conditions of approval for any new conflicting use within an impact area surrounding an aggregate or mineral resource site when such measures are necessary to resolve conflicts identified in a site-specific Goal 5 analysis.

M. The County shall impose conditions on surface mining when necessary to lessen conflicts identified as part of a site-specific Goal 5 analysis. Where such conditions conflict with criteria and standards in the Protected Aggregate and Mineral Resources Overlay, the conditions developed through the Goal 5 process shall control.

N. Based upon the Goal 5 ESEE analysis and the existing base zoning district, the County shall determine the appropriate post-mining use of the site.

O. The County recognizes the jurisdiction of the Department of Geology and Mineral Industries (DOGAMI) over mined land reclamation pursuant to ORS 517.750 to 517.900 (1994) and the rules adopted thereunder.

P. Unless specifically determined on a case by case basis, it shall be the policy of the County, that DOGAMI delay its final decision on approval of a reclamation plan and issuance of an operating permit until the County decides all comprehensive plan amendments and/or conditional use approvals. It is also the policy of Multnomah County to participate in and

Q. cooperate with DOGAMI in their review of a permit application to that agency.

R. No surface mining or processing activity, as defined by the zoning ordinance, shall begin without land use approval from the County, and approval of a reclamation plan and issuance of an operating permit by DOGAMI and Department of Environmental Quality.

S. When the aggregate or mineral site has been reclaimed, the County may rezone land to remove the Protected Aggregate and Mineral Resources Overlay Subdistrict (PAM) without revising the ESEE Analysis for the site. Rezoning shall not relieve requirements on the part of the owner or operator to reclaim the site in accordance with ORS 517.750 through 517.900 and the rules adopted thereunder.

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COMMERCIAL FOREST USE (CFU-4) (MCC 35.2200)

§ 35.2215 Uses

No building, structure or land shall be used and no building or structure shall be hereafter erected, altered or enlarged in this district except for the uses listed in MCC 35.2220 through 35.2240 when found to comply with MCC 35.2245 through 35.2310.
(Ord. 982, Amended, 05/16/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.2220 Allowed Uses

(A) The following uses pursuant to the Forest Practices Act and Statewide Planning Goal 4:

(1) Forest operations or forest practices including, but not limited to, reforestation of forest land, road construction and maintenance, harvesting of a forest tree species, application of chemicals, and disposal of slash;

(2) Temporary on site structures which are auxiliary to and used during the term of a particular forest operation; or

(3) Physical alterations to the land auxiliary to forest practices including, but not limited to, those for purposes of exploration, mining, commercial gravel extraction and processing, landfills, dams, reservoirs, road construction or recreational facilities;

(B) A temporary portable facility for the primary processing of forest products;

(C) Farm use, as defined in ORS 215.203;

(D) Alteration, maintenance, or expansion of an existing lawfully established habitable dwelling subject to the following:

(1) The dimensional standards of MCC 35.2260 are satisfied; and

(2) The development standards of MCC 35.2305(A)(5) and (B) are satisfied if the expansion exceeds 400 square feet of ground coverage.

(E) Replacement of an existing lawfully established habitable dwelling on the same lot, subject to the following:

(1) The replacement dwelling will be located within 200 feet of the existing dwelling; and

(2) The existing dwelling is removed, demolished or converted to an allowable nonresidential use within three months of the completion of the replacement dwelling; and

(3) The replacement dwelling shall satisfy the dimensional standards of MCC 35.2260 and the development standards of MCC 35.2305.

(F) Uses to conserve soil, air and water quality and to provide for wildlife and fisheries resources, including a public or private wildlife and fisheries resources conservation area;

(G) An uninhabitable structure accessory to fish and wildlife enhancement;

(H) A caretaker residence for a public park or a fish hatchery;

(I) Local distribution lines (e.g., electric, telephone, natural gas, etc.) and accessory equipment (e.g., electric distribution transformers, poles, meter cabinets, terminal boxes, pedestals), or equipment which provides service hookups, including water service hookups;

(J) Climbing and passing lanes within the right of way existing as of July 1, 1987;

(K) Reconstruction or modification of public roads and highways, not including the addition of vehicular travel lanes, where no removal or displacement of buildings will occur, or no new land parcels result;

(L) Temporary public road and highway detours that will be abandoned and restored to original condition or use at such time as no longer needed;

(M) Minor betterment of existing public roads and highway related facilities such as maintenance yards, weigh stations and rest areas, within a right-of-way existing as of July 1, 1987, and contiguous public-owned property utilized to support the operation and maintenance of public roads and highways;

(N) A lookout tower for forest fire protection;

(0) A water intake facility, canal and distribution lines for farm irrigation and ponds;

(P) A temporary forest labor camp;

(Q) Exploration for mineral and aggregate resources as defined in ORS Chapter 517;

(R) Exploration for geothermal resources;

(S) A site for the disposal of solid waste that has been ordered to be established by the Environmental Quality Commission under ORS 459.049, together with equipment, facilities or buildings necessary for its operation.

(T) Type A home occupations pursuant to the definition and restrictions of MCC 35.0005 (H) (6) (a) and 35.2045. Home occupations as defined by MCC 35.0005 (H) (6) (a) do not allow the level of activity defined in ORS 215.448.

(U) Other structures or uses determined by the Planning Director to be customarily accessory or incidental to any use permitted or approved in this district.

(V) Actions taken in response to an emergency/disaster event as defined in MCC 35.0005 pursuant to the provisions of MCC 35.0535.

(Ord. 982, Amended, 05/16/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.2225 Review Uses

(A) Replacement of an existing lawfully established habitable dwelling on the same lot more than 200 feet from the existing dwelling, subject to the following:

(1) The existing dwelling is removed, demolished or converted to an allowable nonresidential use within three months of the completion of the replacement dwelling; and

(2) The location of the replacement dwelling shall satisfy the dimensional standards of MCC 35.2260 and the development standards of MCC 35.2305.

(B) Restoration or replacement of a lawfully established habitable dwelling on the same lot when the restoration or replacement is made necessary by fire, other casualty or natural disaster, subject to the following:

(1) Restoration or replacement shall be commenced within one year from the occurrence of the fire, casualty or natural disaster; and

(2) A replacement dwelling located more than 200 feet from the prior dwelling location shall satisfy the dimensional standards of MCC 35.2260 and the development standards of MCC 35.2305.

(C) A mobile home, in conjunction with an existing dwelling, upon obtaining an annual Temporary Health Hardship Permit pursuant to MCC 35.0515 and 35.2245.

(D) An asphalt and concrete batch plant accessory to a specific highway project pursuant to 35.2245.

(E) A mobile home for a period not to exceed two years when in conjunction with the construction or reconstruction of a residence allowed under MCC 35.2220(D) or (E), 35.2225(B), or 35.2230(A), (B) or (C) provided that the mobile home is removed, demolished or converted to an allowable nonresidential use which satisfies all applicable dimensional and locational standards within three months of the completion of the dwelling.

(F) Signs, pursuant to the provisions of MCC 35.7400 through 35.7505.

(G) Off-street parking and loading as required by MCC 35.4100 through 35.4220.

(H) Lot Line Adjustment pursuant to the provisions of MCC 35.2270.

(I) Placement of structures necessary for continued public safety, or the protection of essential public services or protection of private or public existing structures, utility facilities, roadways, driveways, accessory uses and exterior improvements damaged during an emergency/disaster event. This includes replacement of temporary structures erected during such events with permanent structures performing an identical or related function. Land use proposals for such structures shall be submitted within 12 months following an emergency/disaster event. Applicants are responsible for all other applicable local, state and federal permitting requirements.

(J) Wireless communications facilities when found to satisfy the requirements of MCC 35.6175 through 35.6188.

(Ord. 982, Amended, 05/16/2002; Ord. 958, Amended, 02/15/2001; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.2230 Conditional Uses

The following uses may be permitted when found by the approval authority to satisfy the applicable standards of this Chapter:

(A) A Large Acreage Dwelling pursuant to the provisions of MCC 35.2235, 35.2245(B) and 35.2305.

(B) A Template Dwelling pursuant to the provisions of MCC 35.2240(A), 35.2245(B) and 35.2305.

(C) A Heritage Tract Dwelling pursuant to the provisions of MCC 35.2240(B), 35.2245(B) and 35.2305.

(D) The following Community Service Uses pursuant to the provisions of MCC 35.2245, 35.2305, 35.6000 through 35.6010, and 35.6100 through 35.6230.

(1) Campground.

(2) Cemetery.

(3) Fire station for rural and forest fire protection.

(4) Aid to navigation and aviation.

(5) Water intake facility, related treatment facility, pumping station, and distribution line.

(6) Reservoir and water impoundment.

(7) New distribution line (e.g., gas, oil, geothermal) with a right-of-way 50 feet or less in width or new electric transmission line with a right-of-way width of up to 100 feet as specified in ORS 772.210.

(8) Forest management research and experimentation facility as defined by ORS 526.215.

(9) Park, including a public or private wildlife and fisheries resources conservation area with accessory structures for educational or instructional use.

(10) Utility facility for the purpose of generating power provided the facility not preclude more than 10 acres from use as a commercial forest operation unless an exception is taken pursuant to OAR 660, Division 4.

(11) Radio and television transmission towers subject to the definitions, restrictions and standards CFU-3 and CFU-4: 35.6015(A)(15) and 35.6100 through 35.6130, and wireless communications facilities when found to satisfy the requirements of 35.6175 through 35.6188.

(12) Refuse dump or sanitary landfill for which the Department of Environmental Quality has granted a permit under ORS 459.245, together with equipment, facilities or buildings necessary for its operation.

(13) Regional Sanitary Landfill for which the Department of Environmental Quality has granted a permit under ORS 459.245, together with equipment, facilities or buildings necessary for its operation subject to the definitions, restrictions and standards in MCC 35.6200 through 35.6230.

(14) Private hunting and fishing operation without any lodging accommodations.

(15) Private seasonal accommodations for a fee hunting operation or fishing, provided:

(a) Accommodations are limited to no more than 15 guest rooms as that term is defined in the Oregon Structural Specialty Code;

(b) Only minor incidental and accessory retail sales are permitted;

(c) Accommodations are occupied temporarily for the purpose of hunting during game bird and big game hunting seasons or fishing during fishing seasons authorized by the Oregon Fish and Wildlife Commission; and

(d) Accommodations for fishing must be located within 1/4 mile of fish bearing Class I waters.

(16) Mining, processing and production of geothermal resources.

(E) The following uses pursuant to the provisions of MCC 35.2245, 35.2305, 35.6300 through 35.6315, 35.6325 through 35.6340, and 35.6500 through 35.6535.

(1) Mining and processing of aggregate and other mineral or subsurface resources as defined in ORS Chapter 517;

(2) Permanent facility for the primary processing of forest products;

(3) Permanent logging equipment repair and storage;

(4) Log scaling and weigh stations;

(5) Construction of additional passing and travel lanes requiring the acquisition of right of way but not resulting in the creation of new land parcels;

(6) Reconstruction or modification of public roads and highways involving the removal or displacement of buildings but not resulting in the creation of new land parcels;

(7) Improvement of public roads and highway related facilities, such as maintenance yards, weigh stations and rest areas, where additional property or right of way is required but not resulting in the creation of new land parcels; and

(8) Expansion of aircraft landing areas auxiliary to forestry practices, notwithstanding the provisions of MCC 35.4010 through 35.4040.

(F) Type B home occupation pursuant to MCC 35.6650 through 35.6660 and provided:

(1) That no sale of merchandise is made from the premise; and

(2) That noise, odor, smoke, gases, fallout, vibration, heat or glare resulting from the activity is not detectable at any property line.

(G) Lots of Exception pursuant to the provisions of MCC 35.2265.

(Ord. 958, Amended, 02/15/2001; Ord. 953 §2, Reorg&Renum, 11/30/2000)

EXCLUSIVE FARM USE (EFU) (MCC 35.2600)

§ 35.2620 Allowed Uses

(A) Farm use, as defined in ORS 215.203.

(B) Buildings other than dwellings customarily provided in conjunction with farm use.

(C) The propagation or harvesting of forest products.

(D) Operations for the exploration for and production of geothermal resources as defined by ORS 522.005 and oil and gas as defined by ORS 520.005, including the placement and operation of compressors, separators and other customary production equipment for an individual well adjacent to the wellhead. Any activities or construction relating to such operations shall not be a basis for an exception under ORS 197.732 (1)(a) or (b).

(E) Operations for the exploration for minerals as defined by ORS 517.750. Any activities or construction relating to such operations shall not be the basis for an exception under ORS 197.732 (1)(a) or (b).

(F) Climbing and passing lanes within the right of way existing as of July 1, 1987.

(G) Reconstruction or modification of public roads and highways, including the placement of utility facilities overhead and subsurface of public roads and highways along the public right-of-way, but not including the addition of travel lanes, where no removal or displacement of buildings will occur, or no new land parcels result.

(H) Temporary public road and highway detours that will be abandoned and restored to original condition or use at such time as no longer needed.

(I) Minor betterment of existing public roads and highway related facilities such as maintenance yards, weigh stations and rest areas within right of way existing as of July 1, 1987, and contiguous public-owned property utilized to support the operation and maintenance of public roads and highways.

(J) A replacement dwelling to be used in conjunction with farm use if the existing dwelling has been listed in a historic property inventory as defined in ORS 358.480 and listed on the National Register of Historic Places.

(K) Creation of, restoration of or enhancement of wetlands.

(L) Alteration, restoration or replacement of a lawfully established habitable dwelling. In the case of a replacement dwelling, the existing dwelling must be removed, demolished or converted to an allowable nonresidential use within three months of the completion of the replacement dwelling.

(M) Replacement of an existing lawfully established single family dwelling on the same lot not more than 200 feet from the original building site when the dwelling was unintentionally destroyed by fire, other casualty or natural disaster. The dwelling may be reestablished only to its previous nature and extent, and the reestablishment shall meet all other building, plumbing, sanitation and other codes, ordinances and permit requirements. A building permit must be obtained within one year from the date of the event that destroyed the dwelling.

(N) Public or private schools, including all buildings essential to the operation of a school wholly within an EFU district may be maintained, enhanced or expanded:

(1) Except that no new use may be authorized within three miles of an urban growth boundary, unless an exception is approved pursuant to ORS 197.732 and OAR 660, Division 4; and

(2) No new use may be authorized on high value farmland; and

(3) Must satisfy the requirements of MCC 35.4100 through MCC 35.4220, MCC 35.6020(A), MCC 35.7000 through MCC 35.7070 and MCC 35.7450.

(4) The maintenance, enhancement or expansion shall not adversely impact the right to farm on surrounding EFU lands.

(O) Churches and cemeteries in conjunction with churches wholly within an EFU district may be maintained, enhanced or expanded:

(1) Except that no new use may be authorized within three miles of an urban growth boundary, unless an exception is approved pursuant to ORS 197.732 and OAR 660, Division 4; and

(2) No new use may be authorized on high value farmland; and

(3) Must satisfy the requirements of MCC 35.4100 through MCC 35.4220, MCC 35.6020(A), MCC 35.7000 through MCC 35.7070 and MCC 35.7450.

(4) The maintenance, enhancement or expansion shall not adversely impact the right to farm on surrounding EFU lands.

(P) Structures such as garages, carports, studios, pergolas, private workshops, barns, loafing sheds, storage buildings, greenhouses or similar structures, whether attached or detached, when in accordance with the yard requirements of this district;

(Q) Structures or fenced runs for the shelter or confinement of poultry or livestock;

(R) Type A home occupation pursuant to the definition and restrictions of MCC 35.0005(H)(6)(a). Home occupations as defined by MCC 35.0005(H)(6)(a) do not allow the level of activity defined in ORS 215.448.

(S) Actions taken in response to an emergency/disaster event as defined in MCC 35.0005 pursuant to the provisions of MCC 35.0535.

(T) Wildlife Habitat Conservation and Management Plan pursuant to ORS 215.800 to 215.802 and ORS 215.806 to 215.808. (Note: A proposed single-family residential dwelling in conjunction with a wildlife habitat conservation and management plan is not authorized by this section.)

(Ord. 982, Amended, 05/16/2002; Ord. 977, Amended, 02/07/2002, eff. 3/9/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.2625 Review Uses

(A) Utility facilities necessary for public service, but not including commercial facilities for the purpose of generating electrical power for public use by sale or transmission towers over 200 feet in height as follows:

(1) Radio and television towers 200 feet and under when found to satisfy the requirements of ORS 215.275 "Utility facilities necessary for public service; criteria; mitigating impact of facility" and MCC 35.6100 through 35.6130.

(2) Wireless communications facilities 200 feet and under when found to satisfy the requirements of MCC 35.6175 through 35.6188.

(3) All other utility facilities and transmission towers 200 feet and under in height subject to the following.

(a) The facility satisfies the requirements of ORS 215.275, "Utility facilities necessary for public service; criteria; mitigating impact of facility"; and

(b) The facility satisfies the requirements of MCC 35.4100 through 35.4220; 35.6020(A); 35.7000 through 35.7070 and 35.7450.

(B) Deleted 2001, Ord. 958 § 1.

(C) A farm help dwelling for a relative on real property used for farm use if the dwelling is:

(1) Located on the same lot or parcel as the dwelling of the farm operator; and is

(2) Occupied by a grandparent, grandchild, parent, child, brother or sister of the farm operator or the farm operator's spouse, and whose assistance in the management of the farm use is or will be required by the farm operator.

(D) A dwelling, including a mobile or modular home, customarily provided in conjunction with a farm use:

(1) On lands identified as high-value farmland, a dwelling may be considered customarily provided in conjunction with farm use if:

(a) The subject tract is currently employed for the farm use, as defined in ORS 215.203, that produced at least $80,000 (1994 dollars) in gross annual income from the sale of farm products in the last two years or three of the last five years; and

(b) Except as permitted in ORS 215.283 (1) (p) (i.e. seasonal farmworker housing), there is no other dwelling on the subject tract; and

(c) The dwelling will be occupied by a person or persons who produced the commodities which grossed the income in subsection (a) of this subsection;

(d) In determining the gross income required by subsection (a) of this subsection, the cost of purchased livestock shall be deducted from the total gross income attributed to the tract.

(2) On land not identified as high-value farmland a dwelling may be considered customarily provided in conjunction with farm use if:

(a) The parcel on which the dwelling will be located is at least 160 acres; and

(b) The subject tract is currently employed for farm use, as defined in ORS 215.203; and

(c) The dwelling will be occupied by a person or persons who will be principally engaged in the farm use of the land, such as planting, harvesting, marketing or caring for livestock, at a commercial scale; and

(d) Except as permitted in ORS 215.283 (1) (p) (i.e. seasonal farm worker housing), there is no other dwelling on the subject tract; or

(3) On land not identified as high-value farmland a dwelling may be considered customarily provided in conjunction with farm use if:

(a) The subject tract is at least as large as the median size of those commercial farm or ranch tracts capable of generating at least $10,000 in annual gross sales that are located within a study area which includes all tracts wholly or partially within one mile from the perimeter of the subject tract [the median size of commercial farm and ranch tracts shall be determined pursuant to OAR 660-33-135(3)]; and

(b) The subject tract is capable of producing at least the median level of annual gross sales of county indicator crops as the same commercial farm or ranch tracts used to calculate the tract size in subsection (a) of this section; and

(c) The subject tract is currently employed for a farm use, as defined in ORS 215.203, at a level capable of producing the annual gross sales required in subsection (b) of this section; and

(d) The subject lot or parcel on which the dwelling is proposed is not less than ten acres; and

(e) Except as permitted in ORS 215.283 (1) (p) (i.e. seasonal farmworker housing), there is no other dwelling on the subject tract; and

(f) If no farm use has been established at the time of application, land use approval shall be subject to a condition that no building permit may be issued prior to the establishment of the farm use required by subsection (c) of this section; or

(4) On land not identified as high-value farmland a dwelling may be considered customarily provided in conjunction with farm use if:

(a) The subject tract is currently employed for the farm use, as defined in ORS 215.203, that produced in the last two years or three of the last five years the lower of the following:

1. At least $40,000 (1994 dollars) in gross annual income from the sale of farm products; or

2. Gross annual income of at least the midpoint of the median income range of gross annual sales for farms in the county with gross annual sales of $10,000 or more according to the 1992 Census of Agriculture, Oregon; and

(b) Except as permitted in ORS 215.283(1)(p) (i.e. seasonal farmworker housing), there is no other dwelling on the subject tract; and

(c) The dwelling will be occupied by a person or persons who produced the commodities which grossed the income in subsection (a) of this subsection;

(d) In determining the gross income required by subsection (a) of this subsection, the cost of purchased livestock shall be deducted from the total gross income attributed to the tract.

(E) An accessory farm help dwelling, including a mobile or modular home customarily provided in conjunction with farm use if:

(1) The accessory farm help dwelling will be occupied by a person or persons who will be principally engaged in the farm use of the land and whose assistance in the management of the farm use is or will be required by the farm operator; and

(2) The accessory help dwelling shall be located:

(a) On the same lot or parcel as the dwelling of the principal farm dwelling; or

(b) On the same tract as the principal farm dwelling when the lot or parcel on which the accessory dwelling will be sited is consolidated into a single parcel with all other contiguous lots and parcels in the tract; or

(c) On a lot or parcel on which the principal farm dwelling is not located, when:

1. The accessory farm dwelling is a manufactured dwelling; and

2. A deed restriction is filed with the county clerk. The deed restriction shall require the manufactured dwelling to be removed when the lot or parcel is conveyed to another party.

(d) An accessory farm dwelling approved pursuant to this rule may not be occupied by a person or persons who will not be principally engaged in the farm use of the land and whose assistance in the management of the farm use is not or will not be required by the farm operator. The manufactured dwelling may remain if it is reapproved; and

(3) There is no other dwelling on the lands designated for exclusive farm use owned by the farm operator that is vacant or currently occupied by persons not working on the subject farm or ranch and that could reasonably be used as an accessory farm dwelling; and

(4) The principal farm dwelling to which the proposed dwelling would be accessory, meets one of the following:

(a) On land not identified as high-value farmland, the principal farm dwelling is located on a farm or ranch operation that is currently employed for farm use, as defined in ORS 215.203, and produced in the last two years or three of the last five years the lower of the following:

1. At least $40,000 (1994 dollars) in gross annual income from the sale of farm products. In determining the gross income, the cost of purchased livestock shall be deducted from the total gross income attributed to the tract; or

2. Gross annual income of at least the midpoint of the median income range of gross annual sales for farms in the county with the gross annual sales of $10,000 or more according to the 1992 Census of Agriculture, Oregon. In determining the gross income, the cost of purchased livestock shall be deducted from the total gross income attributed to the tract; or

(b) On land identified as high-value farmland, the principal farm dwelling is located on a farm or ranch operation that is currently employed for farm use, as defined in ORS 215.203, and produced at least $80,000 (1994 dollars) in gross annual income from the sale of farm products in the last two years or three of the last five years. In determining the gross income, the cost of purchased livestock shall be deducted from the total gross income attributed to the tract.

The approval authority shall not approve any proposed division of a lot or parcel for an accessory farm dwelling approved pursuant to this section. If it is determined that an accessory farm dwelling satisfies the requirements of MCC 35.2625(D), a parcel may be created consistent with the minimum parcel size requirements in MCC 35.2660.

(F) Notwithstanding the same ownership grouping requirements of the Lot of Record section, a single family heritage tract dwelling may be allowed on land not identified as high-value farmland when:

(1) The lot or parcel meets the following requirements:

(a) A deed or other instrument creating the lot or parcel was recorded with the Department of General Services, or was in recordable form prior to January 1, 1985; and

(b) The lot or parcel satisfies all applicable laws when the lot or parcel was created; and

(c) The lot or parcel is held under the same ownership and which was acquired by the present owner prior to January 1, 1985; and

(2) The tract on which the dwelling will be sited does not include a dwelling; and

(3) The proposed dwelling is not prohibited by, and will comply with, the requirements of the Comprehensive Plan, land use regulations, and other provisions of law; and

(4) The lot or parcel on which the dwelling will be sited does not lie within an area designated by the Comprehensive Plan as a Big Game habitat area; and

(5) The lot or parcel on which the dwelling will be sited is part of a tract, the remaining portions of the tract shall be consolidated into a single parcel when the dwelling is allowed; and

(6) The County Assessor shall be notified when the permit is approved.

(7) Approval of the dwelling would not:

(a) Exceed the facilities and service capabilities of the area; and

(b) Materially alter the stability of the overall land use pattern of the area; and

(c) Create conditions or circumstances that are found to be contrary to the purpose or intent of the Comprehensive Plan or MCC Chapter 35.

(8) For purposes of this subsection, and of dwellings considered under MCC 35.2630(O) and (P), the following definitions apply:

(a) Owner includes a person who acquired the lot or parcel by devise or intestate succession from a person who acquired the lot or parcel prior to January 1, 1985.

(b) Date of Creation and Existence. When a lot, parcel or tract is reconfigured pursuant to applicable law after November 4, 1993, the effect of which is to qualify a lot, parcel or tract for the siting of a dwelling, the date of the reconfiguration is the date of creation or existence. Reconfigured means any change in the boundary of the lot, parcel or tract.

(G) Seasonal farmworker housing as defined in ORS 197.675 when found to meet the following requirements:

(1) The housing will be occupied by a person or persons who will be principally engaged in the farm use of the land and whose assistance in the management of the farm use is or will be required by the farm operator; and

(2) The seasonal farmworker housing is located on the same parcel, lot or tract as the principal farm dwelling which houses the farm operator; and

(3) The principal farm dwelling is located on a farm or ranch operation that is currently employed for farm use, as defined in ORS 215.203, and produced at least $80,000 (1994 dollars) in gross annual income from the sale of farm products in the last two years or three of the last five years; and

(4) The seasonal farmworker housing can only be occupied for 273 days per calendar year.

(H) Facilities wholly within an EFU district used for the breeding, kenneling and training of greyhounds for racing may be maintained, enhanced or expanded except no new facilities may be authorized on high value farmland and provided that the following requirements are satisfied:

(1) MCC 35.6420 (A) and (B); and

(2) MCC 35.7450; and

(3) MCC 35.7000 through MCC 35.7070; and

(4) Minimum Dimensional standards:

(a) Area: Two acres.

(b) Width: Two hundred fifty feet.

(c) Depth: Two hundred fifty feet.

(d) Setback from all lot lines: One hundred feet.

(I) Farm Stands when found that:

(1) The structures are designed and used for the sale of farm crops and livestock grown on farms in the local agricultural area, including the sale of retail incidental items, if the sales of the incidental items make up no more than 25 percent of the total sales of the farm stand; and

(2) The farm stand does not include structures designed for occupancy as a residence or for activities other than the sale of farm crops and livestock and does not include structures for banquets, public gatherings or public entertainment.

(J) On-site filming and activities accessory to on-site filming if the activity would involve no more than 45 days on any site within any one-year period or does not involve erection of sets that would remain in place for longer than any 45-day period. On-site filming and activities accessory to on-site filming may be considered to include office administrative functions such as payroll and scheduling, and the use of campers, truck trailers or similar temporary facilities.

Temporary facilities may be used as temporary housing for security personnel.

"On-site filming and activities accessory to on-site filming" includes: filming and site preparation, construction of sets, staging, makeup and support services customarily provided for on-site filming and production of advertisements, documentaries, feature film, television services and other film productions that rely on the rural qualities of an exclusive farm use zone in more than an incidental way. On-site filming and activities accessory to on-site filming" does not include: facilities for marketing, editing and other such activities that are allowed only as a home occupation or construction of new structures that requires a building permit.

(K) A winery, as described in ORS 215.452.

(L) Signs, pursuant to the provisions of MCC 35.7400 through 35.7505.

(M) Off-street parking and loading pursuant to MCC 35.4100 through 35.4220.

(N) Lot Line Adjustment pursuant to the provisions of MCC 35.2670.

(O) Placement of Structures necessary for continued public safety, or the protection of essential public services or protection of private or public existing structures, utility facilities, roadways, driveways, accessory uses and exterior improvements damaged during an emergency/disaster event. This includes replacement of temporary structures erected during such events with permanent structures performing an identical or related function. Land use proposals for such structures shall be submitted within 12 months following an emergency/disaster event. Applicants are responsible for all other applicable local, state and federal permitting requirements.

(Ord. 982, Amended, 05/16/2002; Ord. 958, Amended, 02/15/2001; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.2630 Conditional Uses

The following uses may be permitted when approved by the Hearings Officer pursuant to the provisions of MCC 35.6300 to 35.6335:

(A) Commercial activities that are in conjunction with a farm use.

(B) Operations conducted for:

(1) Mining and processing of geothermal resources as defined by ORS 522.005 and oil and gas as defined by ORS 520.005 not otherwise permitted under this section; and

(2) Mining, crushing or stockpiling of aggregate and other mineral and other subsurface resources subject to ORS 215.298.

(C) Residential home as defined in ORS 197.660, in existing dwellings.

(D) Private parks, playgrounds, hunting and fishing preserves, campgrounds and, parks, playgrounds or community centers owned and operated by a nonprofit community organization. Existing facilities wholly within an EFU district may be maintained, enhanced or expanded. New facilities may be allowed but not on high value lands. Campgrounds authorized by this provision shall not include intensively developed recreational uses such as swimming pools, tennis courts, retail stores or gas stations.

(E) Parks, playgrounds or community centers owned and operated by a governmental agency.

(F) Type B home occupation as provided for in MCC 35.6650 and provided:

(1) That no sale of merchandise is made from the premise; and

(2) That noise, odor, smoke, gases, fallout, vibration, heat or glare resulting from the activity is not detectable at any property line.

A home occupation located on high-value farmland may employ only residents of the home.

(G) A facility for the primary processing of forest products, provided that such facility and is compatible with farm uses described in ORS 215.203 (2). Such a facility may be approved for a one-year period which is renewable. These facilities are intended to be only portable or temporary in nature.

The primary processing of a forest product, as used in this section, means the use of a portable chipper or stud mill or other similar methods of initial treatment of a forest product in order to enable its shipment to market.

Forest products, as used in this section, means timber grown upon a parcel of land or contiguous land where the primary processing facility is located.

(H) One manufactured dwelling in conjunction with an existing dwelling as a temporary use for the term of a hardship suffered by the existing resident or a relative of the resident. A manufactured dwelling allowed under this provision is a temporary use for the term of the hardship suffered by the existing resident or relative as defined in ORS Chapter 215. The manufactured dwelling shall use the same subsurface sewage disposal system used by the existing dwelling, if that disposal system is adequate to accommodate the additional dwelling. If the manufactured home will use a public sanitary sewer system, such condition will not be required. The Planning Director shall review the permit authorizing such manufactured homes every two years. When the hardships end, the Planning Director shall require the removal of such manufactured homes. Oregon Department of Environmental Quality review and removal requirements also apply. As used in this subsection "hardship" means a medical hardship or hardship for the care of an aged or infirm person or persons.

(I) Transmission towers over 200 feet in height, except as follows: .

(1) Radio and television towers if found to satisfy the requirements of MCC 35.6100 through 35.6130; and

(2) Wireless communications facilities 200 feet and over are not allowed.

(J) Dog kennels not described in section MCC 35.2625 (H). Existing facilities wholly within an EFU district may be maintained, enhanced or expanded, subject to other requirements of law. New facilities may be allowed only on non-high-value lands.

(K) The propagation, cultivation, maintenance and harvesting of aquatic species.

(L) Reconstruction or modification of public roads and highways involving the removal or displacement of buildings but not resulting in the creation of new land parcels.

(M) Improvement of public road and highway related facilities, such as maintenance yards, weigh stations and rest areas, where additional property or right of way is required but not resulting in the creation of new land parcels.

(N) Parking of seven or fewer log trucks.

(O) Notwithstanding the same ownership grouping requirements of the Lot of Record section, a single family heritage tract dwelling may be allowed on land identified as high-value farmland when:

(Note: MCC 35.6315 Conditional Use Approval Criteria does not apply)

(1) The lot or parcel meets the requirements of MCC 35.2625 (F) (1) through (8); and

(2) The lot or parcel cannot practicably be managed for farm use by itself or in conjunction with other land due to extraordinary circumstances inherent in the land or its physical setting that do not apply generally to other land in the vicinity; and

(3) The dwelling will not:

(a) Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest; or

(b) Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use; and

(4) The dwelling will not materially alter the stability of the overall land use pattern of the area.

(P) Notwithstanding the same ownership grouping requirements of the Lot of Record section, a single family heritage tract dwelling may be allowed on land identified as high-value farmland when:

(Note: 35.6315 Conditional Use Approval Criteria does not apply)

(1) The lot or parcel meets the requirements of 35.2625 (F) (1) through (8); and

(2) The tract on which the dwelling will be sited is:

(a) Not composed predominately of irrigated or non-irrigated soils classified prime, unique, Class I or Class II; and

(b) Less than twenty-one acres in size; and

(c) Is bordered on at least 67% of its perimeter by tracts that are smaller than 21 acres, and at least two such tracts had dwellings on January 1, 1993; or

(d) Is bordered on at least 25% of its perimeter by tracts that are smaller than 21 acres, and at least four dwellings existed on January 1, 1993, within one-quarter mile of the center of the subject tract. Up to two of the four dwellings may lie within an urban growth boundary, but only if the subject tract abuts an urban growth boundary.

(Ord. 982, Amended, 05/16/2002; Ord. 958, Amended, 02/15/2001; Ord. 953 §2, Reorg&Renum, 11/30/2000)

MULTIPLE USE AGRICULTURE (MUA-20) (MCC 35.2800)

§ 35.2820 Allowed Uses

(A) Farm uses, as defined in ORS 215.203 (2) (a) for the following purposes only:

(1) Raising and harvesting of crops;

(2) Raising of livestock and honeybees; or,

(3) Any other agricultural or horticultural purpose or animal husbandry purpose or combination thereof, except as provided in MCC 35.2830 (B);

(B) The propagation or harvesting of forest products;

(C) Residential use consisting of a single family dwelling constructed on a Lot of Record;

(D) Public and private conservation areas and structures for the protection of water, soil, open space, forest and wildlife resources;

(E) Type A home occupations pursuant to the definition and restrictions of MCC 35.0005(H)(6)(a);

(F) Other structures or uses customarily accessory or incidental to any use permitted or approved in this district;

(G) Family Day Care;

(H) Actions taken in response to an emergency/disaster event as defined in MCC 35.0005 pursuant to the provisions of MCC 35.0535.

(Ord. 982, Amended, 05/16/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.2825 Review Uses

(A) Residential use, consisting of a single family dwelling constructed off-site, including a mobile or modular home placed on a Lot of Record, subject to the following conditions:

(1) Construction shall comply with the standards of the Building Code or as prescribed in ORS 446.002 through 446.200, relating to mobile homes.

(2) The dwelling shall be attached to a foundation for which a building permit has been obtained.

(3) The dwelling shall have a minimum floor area of 600 square feet.

(B) Temporary uses when approved pursuant to MCC 35.0510 and 35.0515.

(C) Wholesale or retail sales of farm or forest products raised or grown on the premises or in the immediate vicinity, subject to the following condition:

The location and design of any building, stand or sign in conjunction with wholesale or retail sales shall be subject to approval of the Planning Director on a finding that the location and design are compatible with the character of the area; provided that the decision of the Planning Director may be appealed to the approval authority, pursuant to MCC 35.0785 and 35.0790.

(D) Signs, pursuant to the provisions of MCC 35.7400 through 35.7505.

(E) Off-street parking and loading.

(F) Property Line Adjustment pursuant to the provisions of MCC 35.2860.

(G) Placement of structures necessary for continued public safety, or the protection of essential public services or protection of private or public existing structures, utility facilities, roadways, driveways, accessory uses and exterior improvements damaged during an emergency/disaster event. This includes replacement of temporary structures erected during such events with permanent structures performing an identical or related function. Land use proposals for such structures shall be submitted within 12 months following an emergency/disaster event. Applicants are responsible for all other applicable local, state and federal permitting requirements.

(Ord. 982, Amended, 05/16/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.2830 Conditional Uses

The following uses may be permitted when found by the approval authority to satisfy the applicable ordinance standards:

(A) Community Service Uses pursuant to the provisions of MCC 35.6000 through 35.6230;

(B) The following Conditional Uses pursuant to the provisions of MCC 35.6300 through 35.6660:

(1) Operations conducted for the mining and processing of geothermal resources as defined by ORS 522.005; or exploration, mining and processing of aggregate and other mineral or subsurface resources;

(2) Commercial processing of agricultural products primarily raised or grown in the region;

(3) Raising any type of fowl or processing the by-products thereof for sale at wholesale or retail;

(4) Feed lots;

(5) Raising of four or more swine over four months of age;

(6) Raising of fur bearing animals for sale at wholesale or retail;

(7) Commercial dog kennels; and

(8) Commercial processing of forest products primarily grown in the region.

(C) The following Conditional Uses may be permitted on lands not predominantly of Agricultural Capability Class I, II, or III soils:

(1) Planned Development for single family residences, as provided in MCC 35.4300 through 35.4360 and the applicable current "planned unit developments" standards within the Oregon Administrative Rules Chapter 660, Division 004;

(2) Pursuant to the provisions of MCC 35.6300 through 35.6350:

(a) Cottage industries,

(b) Limited rural service commercial uses such as local stores, shops, offices, repair services and similar uses, and

(c) Tourist commercial uses such as restaurants, gas stations, motels, guest ranches and similar uses.

(D) Type B home occupation as provided for in MCC 35.6650 through 35.6660.

(E) Large Fills as provided for in MCC 35.6700 through 35.6720.

(F) Lots of Exception pursuant to the provisions of MCC 35.2860.

(Ord. 982, Amended, 05/16/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

RURAL RESIDENTIAL (RR) (MCC 35.3100)

§ 35.3120 Allowed Uses

(A) Farm use, as defined in ORS 215.203 (2) (a) for the following purposes only:

(1) Raising and harvesting of crops;

(2) Raising of livestock and honeybees; or

(3) Any other agricultural or horticultural purpose or animal husbandry purpose or combination thereof, except as provided in MCC 35.3130 (B).

(B) The propagation or harvesting of forest products;

(C) Residential use consisting of a single family dwelling constructed on a Lot of Record;

(D) Public and private conservation areas and structures for the protection of water, soil, open space, forest and wildlife resources;

(E) Type A home occupations pursuant to the definition and restrictions of MCC 35.0005(H)(6)(a);

(F) Other structures or uses customarily accessory or incidental to any use permitted or approved in this district;

(G) Family Day Care;

(H) Actions taken in response to an emergency/disaster event as defined in MCC 35.0005 pursuant to the provisions of MCC 35.0535.

(Ord. 982, Amended, 05/16/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.3125 Review Uses

(A) Residential use, consisting of a single family dwelling constructed off-site, including a mobile or modular home placed on a Lot of Record, subject to the following conditions:

(1) Construction shall comply with the standards of the Building Code or as prescribed in ORS 446.002 through 446.200, relating to mobile homes.

(2) The dwelling shall be attached to a foundation for which a building permit has been obtained.

(3) The dwelling shall have a minimum floor area of 600 square feet.

(B) Temporary uses when approved pursuant to MCC 35.0510 and 35.0515.

(C) Wholesale or retail sales, limited to those products raised or grown on the premises, subject to the following condition:

The location and design of any building, stand or sign in conjunction with wholesale or retail sales shall be subject to approval of the Planning Director on a finding that the location and design are compatible with the character of the area; provided that the decision of the Director may be appealed to the Hearings Officer pursuant to MCC 35.0785 and 35.0790.

(D) Signs, pursuant to the provisions of MCC 35.7400 through 35.7505.

(E) Off-street parking and loading.

(F) Property Line Adjustment pursuant to the provisions of MCC 35.3160.

(G) Placement of Structures necessary for continued public safety, or the protection of essential public services or protection of private or public existing structures, utility facilities, roadways, driveways, accessory uses and exterior improvements damaged during an emergency/disaster event. This includes replacement of temporary structures erected during such events with permanent structures performing an identical or related function. Land use proposals for such structures shall be submitted within 12 months following an emergency/disaster event. Applicants are responsible for all other applicable local, state and federal permitting requirements.

(Ord. 982, Amended, 05/16/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.3130 Conditional Uses

The following uses may be permitted when found by the Hearings Officer to satisfy the applicable Ordinance standards:

(A) Community Service Uses under the provisions of MCC 35.6000 through 35.6230;

(B) The following Conditional Uses under the provisions of MCC 35.6300 through 35.6660:

(1) Operations conducted for the mining and processing of geothermal resources as defined by ORS 522.005 or exploration, mining and processing of aggregate and other mineral or subsurface resources;

(2) Commercial processing of agricultural products, primarily raised or grown in the region;

(3) Raising of any type of fowl, or processing the by-products thereof, for sale at wholesale or retail;

(4) Feed lots;

(5) Raising of four or more swine more than four months of age;

(6) Raising of fur-bearing animals for sale at wholesale or retail;

(7) Commercial dog kennels;

(8) Planned Development for single family residences as provided in MCC 35.4300 through 35.44360 and the applicable current "planned unit developments" standards within the Oregon Administrative Rules Chapter 660, Division 004;

(9) Cottage industries, under the provisions of MCC 35.6300 through 35.6350.

(10) Limited rural service commercial uses, such as local stores, shops, offices, repair services and similar uses.

(C) Type B home occupation as provided for in MCC 35.6650 through 35.6660.

(D) Large Fills as provided for in MCC 35.6700 through 35.6720.

(E) Lots of Exception pursuant to the provisions of MCC 35.3160.

(Ord. 982, Amended, 05/16/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

RURAL CENTER (RC) (MCC § 35.3300)

§ 35.3320 Allowed Uses

(A) Farm use, as defined in ORS 215.203(2)(a), for the following purposes only:

(1) Raising and harvesting of crops;

(2) Raising of livestock and honeybees; or

(3) Any other agricultural or horticultural purpose or animal husbandry purpose or combination thereof, except as provided in MCC 35.3330. This subsection does not permit the raising of fowl or fur-bearing animals for sale, the keeping of swine, or a feed lot.

(B) The propagation or harvesting of forest products.

(C) Residential use consisting of a single family dwelling constructed on a Lot of Record.

(D) Public and private conservation areas and structures for the protection of water, soil, open space, forest and wildlife resources.

(E) Type A home occupations pursuant to the definition and restrictions of MCC 35.0005(H)(6)(a).

(F) Other structures or uses customarily accessory or incidental to any use permitted or approved in this district.

(G) Family Day Care.

(H) Actions taken in response to an emergency/disaster event as defined in MCC 35.0005 pursuant to the provisions of MCC 35.0535.

(Ord. 982, Amended, 05/16/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.3325 Review Uses

(A) Residential use, consisting of a single family dwelling constructed off-site, including a mobile or modular home placed on a Lot of Record, subject to the following conditions:

(1) Construction shall comply with the standards of the Building Code or as prescribed in ORS 446.002 through 446.200, relating to mobile homes.

(2) The dwelling shall be attached to a foundation for which a building permit has been obtained.

(3) The dwelling shall have a minimum floor area of 600 square feet.

(B) Temporary uses when approved pursuant to MCC 35.0510 and 35.0515.

(C) Wholesale or retails sales, limited to those products raised or grown on the premises, subject to the following condition:

The location and design of any building, stand, or sign in conjunction with wholesale or retail sales shall be subject to approval of the Planning Director on a finding that the location and design are compatible with the character of the area; provided that the decision of the Planning Director may be appealed to the approval authority pursuant to MCC 35.0785 and 35.0790.

(D) Signs pursuant to the provisions of MCC 35.7400 through 35.7505;

(E) Off-street parking and loading;

(F) Property Line Adjustment pursuant to the provisions of MCC 35.3360.

(G) Placement of Structures necessary for continued public safety, or the protection of essential public services or protection of private or public existing structures, utility facilities, roadways, driveways, accessory uses and exterior improvements damaged during an emergency/disaster event. This includes replacement of temporary structures erected during such events with permanent structures performing an identical or related function. Land use proposals for such structures shall be submitted within 12 months following an emergency/disaster event. Applicants are responsible for all other applicable local, state and federal permitting requirements.

(Ord. 982, Amended, 05/16/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.3330 Conditional Uses

The following uses may be permitted when found by the approval authority to satisfy the applicable ordinance standards:

(A) Community Service Uses pursuant to the provisions of MCC 35.6000 through 35.6230.

(B) The following Conditional Uses pursuant to the provisions of MCC 35.6300 through 35.6660:

(1) Limited rural service commercial uses such as local stores, shops, offices, repair shops, and similar uses;

(2) Tourist commercial uses such as restaurants, taverns, gas stations, motels, guest ranches, and similar uses;

(3) The following Light Manufacturing Uses conducted within an enclosed building which require the daily employment of twenty or fewer persons;

(a) The manufacture, compounding, processing, packaging, treatment, storage or wholesale distribution of such products as bakery goods, fruits, vegetables, sea foods, dairy products, candy, confections, beverages including brewing and bottling, miscellaneous food products, ice and cold storage plant, drugs, pharmaceuticals, perfumes, toilet soaps, toiletries, barber and beauty supplies, and similar items, but not sauerkraut, vinegar or pickles manufacture;

(b) The manufacture, compounding, assembling, treatment, storage or wholesale distribution of articles or merchandise from previously prepared materials such as bone, cellophane, canvas, cloth, cork, feathers, felt, fur, glass, hair, foam, lacquer, leather (but not tanning), paper or paperboard, plastics, precious or semi-precious metals or stones, shell, textiles, tobacco, wood (except as provided in the GM and HM districts), yarns and paints;

(c) The manufacture, assembly, packaging, repair, storage or wholesale distribution of articles such as electrical appliances, lighting and communication equipment, electronic, radio or television equipment, parts or accessories, professional, scientific, optical, photographic or controlling instruments, amusement devices, small parts assembly, jewelry, musical instruments, toys, sporting goods, novelties, rubber or metal stamps;

(d) The manufacture, finishing, refinishing, repair, storage or wholesale distribution of furniture, office or store fixtures, small boats, upholstery, cabinets, office, computing or accounting machines, electric and neon signs, billboards and other signs;

(e) Business, professional, executive, administrative, wholesale, contractor or similar office, clinic, service or studio, trade, business or commercial school, research, experimental or testing laboratory;

(f) Printing, publishing, bookbinding, graphic or photographic reproduction, blueprinting, or photo processing;

(g) Building, building maintenance, plumbing, electrical, heating, roofing, glass, landscaping, painting or similar contractor's office, shop, warehouse, equipment sales or maintenance;

(h) Retail or wholesale lumber, building materials, garden supplies sales and tools, or small equipment sales, rental, repair or servicing;

(i) Laundry for carpets, uniforms, linens, rags, rugs and similar items, dyeing plant, dry cleaning not using explosive or inflammable materials;

(j) Automobile, light truck, motorcycle and recreational vehicle repair or maintenance, body and fender work, painting, parts and glass replacement, upholstery, engine, radiator or battery rebuilding, tire recapping, commercial, industrial or fleet vehicle parking and auto detailing;

(k) Metal or sheet metal shop, ornamental iron works, welding, blacksmithing, electroplating, tool and hardware manufacture, machine shop not using a drop hammer or large capacity punch press;

(l) Warehouse, furniture and household goods storage, moving equipment rental, distribution plant, parcel delivery, wholesaling of durable and non-durable goods, light and heavy equipment sales, rental or repair, fuel and ice distribution;

(m) Manufacture of non-structural clay products, ornamental clay, concrete, plaster or plastics casting, stone and purchased-glass products cutting, polishing or installation; and

(n) Collection, recycling, sorting, baling or processing of previously used materials such as rags, paper, metals, glass or plastics;

(4) Commercial processing of agricultural or forestry products primarily grown in the vicinity.

(C) Planned Development pursuant to the provisions of MCC 35.4300 through 35.4360. If the property is outside of an "acknowledged unincorporated community", then the applicable current "planned unit developments" standards within the Oregon Administrative Rules Chapter 660, Division 004 shall also be satisfied.

(D) Existing light industrial uses permitted by MCC 35.3330 (B) (3) may be expanded up to a daily total of 40 employees, based on findings that:

(1) The proposed expansion is a result of normal growth of the existing use and not required as a result of diversification of the business;

(2) The use provides a public benefit to the rural center by employing primarily persons who reside within the rural center or surrounding rural area, and this same employment pattern will continue with the proposed expansion;

(3) The proposed expansion satisfies the applicable elements of Comprehensive Framework Plan Policies:

(a) No. 20 – Arrangement of Land Uses;

(b) No.30 – Industrial Location (Isolated Light Industrial);

(c) No. 36 – Transportation System Development Requirements;

(d) No. 37 – Utilities; and

(e) No. 38 – Facilities.

(4) The proposed expansion satisfies the Design Review provisions of MCC 35.7000 through 35.7070.

(E) Type B home occupation as provided for in MCC 35.6650.

(F) Large Fills as provided for in MCC 35.6700. through 35.6720.

(G) Lots of Exception pursuant to the provisions of MCC 35.3360.

(Ord. 982, Amended, 05/16/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.5700* PROTECTED AGGREGATE AND MINERAL SITES PAM

§ 35.5700- Purposes

The purposes of the Protected Aggregate and Mineral Resources Overlay Subdistrict are:

(A) To provide a mechanism to identify and, where appropriate, protect significant aggregate and mineral resource sites;

(B) To allow surface mining subject to uniform operating standards; and

(C) To regulate conflicts with surface mining activities.
(Ord. 997, Repealed and Replaced, 10/31/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.5705 Area Affected

This subsection shall apply to those lands designated PAM on the Multnomah County Zoning Map. On the Zoning Map shall also be a reference to the relevant site-specific Comprehensive Plan documents.

Exemption activities as described in MCC 35.5710 (A) and (B) are allowed in all districts, not only those designated PAM.
(Ord. 997, Repealed and Replaced, 10/31/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.5710 Exemptions

(A) The following activities are exempt from the requirements of MCC 35.5700 through 35.5745 and 35.6500 through 35.6535. Operators or land owners have the burden of qualifying for any exemption.

(1) Mining on forest lands auxiliary to forestry operations occurring in compliance with the Forest Practices Act as administered by the Oregon Department of Forestry.

(2) Lawful mining operating under a DOGAMI "Grant of Total Exemption" on December 3, 1994 on property owned or controlled by the operator. Abandonment, restoration, or alteration of this use shall be in compliance with the non-conforming use provisions of MCC 35.7200 through 35.7215.

(B) Mining less than 1,000 cubic yards of material in conjunction with mining an area of less than one acre is exempt from the requirements of MCC 35.5700 through 35.5745 and 35.6500 through 35.6535, but shall require the approval of a Hillside and Erosion Control Permit and any other permits as may be required in any overlay subdistrict.

(C) Mining a quantity in excess of (B), but mining less than 5,000 cubic yards of material or disturbing less than one acre of land within a period of 12 consecutive months until mining

affects five or more acres is exempt from the requirement in MCC 35.6520 and 35.6525 to obtain a DOGAMI operating permit. However, mining at this level of activity shall:

(1) Be on a "protected site" as determined by, and subject to restrictions warranted by, the Goal 5 process;

(2) Be approved as a mining conditional use pursuant to the provisions and requirements of MCC 35.6500 through 35.6535; and

(3) Obtain approval of a Hillside and Erosion Control Permit in conjunction with the mining conditional use approval. The Hillside and Erosion Control permit shall be required in place of all references in the plan and MCC Chapter 35 to obtaining a DOGAMI operating permit in recognition that this level of mining activity is exempted by DOGAMI rules for such a permit.

(Ord. 997, Repealed and Replaced, 10/31/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.5715 Definitions

As used in this subdistrict and MCC 35.6500 through 35.6535, unless otherwise noted, the following words and their derivations shall have the following meanings:

(A) *Conflicting Use* – A use authorized in the underlying zone which, if allowed, could adversely affect operations at a protected aggregate and mineral resource site. As used in this subsection, a *conflicting use* is also another inventoried significant Goal 5 resource located on or adjacent to a protected aggregate or mineral site if that resource could force a change in mining or processing at the site.

(B) *Dust Sensitive Use* – A *conflicting use* which is primarily used for habitation. Residential structures, churches, hospitals, schools, public libraries, and campgrounds are considered dust sensitive uses during their period of use. Forest uses and farm uses are not *dust sensitive uses* unless determined through the *Goal 5 process*.

(C) *ESEE Analysis* – The analysis of Economic, Social, Environmental and Energy consequences of allowing mining at a *significant site*, and allowing *conflicting uses* to displace mining at a *significant site*. The *ESEE analysis* is the basis for determining the level of protection to be given the resource.

(D) *Extraction Area* – The area of a *protected* aggregate and mineral resource site in which mining and associated processing is permitted.

(E) *Goal 5 Process* – The planning process required by Oregon Administrative Rules Chapter 660, Division 16. The *Goal 5 process* involves identifying resource sites, determining their significance, identifying conflicting uses, analyzing the economic, social, environmental and energy consequences of *conflicting uses*, determining the level of protection given to a resource site, and implementing a program to protect *significant sites*.

(F) *Impact Area* – The area where uses may occur that could adversely affect the resource site or be adversely affected by use of the resource site.

(G) *Mining* – The excavation of sand, aggregate (gravel), clay, rock, or other similar surface or subsurface resources. *Mining* does not include:

(1) Excavations conducted by a landowner or tenant on the landowner or tenant's property for the primary purpose of reconstructing or maintaining access roads,

(2) Excavation or grading conducted in the process of farm or cemetery operations,

(3) Excavation or grading conducted within a road right-of-way or other easement for the primary purpose of road construction, reconstruction or maintenance, or

(4) Removal, for compensation, of materials resulting from on-site construction for which a development permit and a construction time schedule have been approved by the county.

(H) *Noise Sensitive Use* – A *conflicting use* which is primarily used for habitation. Residential structures, churches, hospitals, schools, public libraries, and campgrounds are considered *noise sensitive uses* during their period of use. Forest uses and farm uses are not *noise sensitive uses* unless determined through the *Goal 5 process*.

(I) *PAM Overlay Subdistrict* – A special purpose zoning designation for the purposes of MCC 35.5700 that is placed on a zoning map over a base zoning district (ie. CFU). The provisions of the PAM subdistrict shall apply to land uses as specified, notwithstanding the provisions of the underlying zone district.

(J) *Processing* – The washing, crushing, screening, and handling of aggregate and mineral resources. Batching and blending of asphalt or portland cement concrete are included in the definition of processing.

(K) *Protected Site* – *Significant* resource sites which are identified through the *Goal 5 Process* as resources that the county will protect from *conflicting uses*. The special district designation Protected Aggregate and Mineral Resources (PAM) shall only be applied to *protected sites*.

(L) *Restrictive Covenant* – An enforceable promise, given by the owner of a parcel whose use and enjoyment of that parcel may be restricted in some fashion by mining occurring on another parcel, not to object to the terms of a permit issued by a local government, state agency or federal agency. The restrictive covenant shall bc recorded in the real property records of the county, shall run with the land, and is binding upon the heirs and successors of the parties. The covenant shall state that obligations imposed by the covenant shall be released when the site has been mined and reclamation has been completed.

(M) *Significant Site* – A site containing either significant aggregate resources or significant mineral resources. The county will judge the significance of mineral and aggregate resources on a case by case basis, under the standards and procedures in LCDC's Goal 5 interpretive rules.

(Ord. 997, Repealed and Replaced, 10/31/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.5720 PAM Overlay Special Subdistricts

The Protected Aggregate and Mineral Resource Subdistrict (PAM) comprises two areas, the *Extraction Area* (PAM-EA) and the *Impact Area* (PAM-IA).

(A) The *Extraction Area* shall be applied to the portion of *protected sites* where mining and associated processing is to occur. The *Extraction Area* may consist of one or more parcels or portions of parcels, and may be applied to contiguous properties under different ownership. The *Extraction Area* boundary may be modified through the *Goal 5 process* to reduce conflicts with *conflicting uses* existing when the overlay is applied. The *Extraction Area* shall be shown on the zoning map with the designation PAM-EA.

(B) The *Impact Area* shall be applied to parcels or portions of parcels adjacent to the *Extraction Area* and within the *Impact Area* deemed appropriate through the *Goal 5 process*. The *Impact Area* shall be shown on the zoning map with the designation PAM-IA.

(Ord. 997, Repealed and Replaced, 10/31/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.5725 Procedure For Applying The PAM Subdistrict

(A) A PAM subdistrict shall be established by amendment of the Comprehensive Framework Plan and Zoning Map. The relevant factors for the establishment of the subdistrict are within the Oregon Administrative Rules Chapter 660, Division 16; Comprehensive Plan Policy 16-B and the applicable provisions of MCC Chapter 37.

(B) Under the applicable provisions of OAR Chapter 660, Division 16 and Comprehensive Plan Policy 16-B and based upon the analysis of information about the location, quality, and quantity of the aggregate and mineral resource, the county shall make the following determinations regarding the inventory status of the resource site and, if appropriate, continuation of the *Goal 5 process*:

(1) If the information about the location, quality, and quantity of a resource site is not adequate to allow a determination of significance, the site shall be placed on a plan inventory of "potential sites" and shall remain on that inventory until information is available to determine whether or not the site is *significant*, or

(2) If the resource site does not meet the definition of a *significant site*, the site shall be placed on a plan inventory of "not significant sites", or

(3) If the resource site meets the definition of a *significant site*, the *Goal 5 process* shall be continued.

(C) Under the applicable provisions of OAR Chapter 660, Division 16 and Comprehensive Plan Policy 16-B and based upon the *ESEE analysis*, the county shall determine the amount of protection to be given each *significant* site. Each determination shall be incorporated into the comprehensive plan, and shall be reflected on the zoning maps. One of the following determinations shall be made:

(1) Protect the site fully and allow surface mining as a conditional use. The county shall place the site on the *Protected Sites* inventory, apply the Protected Aggregate and Mineral Resources Subdistrict, specify the planned use of the site following reclamation,

and prohibit the establishment of *conflicting uses* within the *Extraction Area* and the *Impact Area*. Conditional use approval of surface mining shall be pursuant to MCC 35.6500 through 35.6535 and shall not be subject to the conditional use provisions of MCC 35.6305 (C), 35.6315, and 35.6325.

(2) Balance protection of the site and conflicting uses, allow surface mining as a conditional use. The county shall place the site on the *Protected Sites* inventory, apply the Protected Aggregate and Mineral Resources Subdistrict, specify the planned use of the site following reclamation, and identify which uses in the underlying zone are allowed outright, allowed conditionally, or prohibited. Conditional use approval of surface mining shall be pursuant to any site-specific requirements developed through the *Goal 5 process* and MCC 35.6500 through 35.6535. Review criteria and conditions shall not include the conditional use provisions of MCC 35.6305 (C), 35.6315, and 35.6325. Site-specific requirements developed through the *Goal 5 process*, MCC 35.5730, and 35.5735 shall govern development of *conflicting uses*.

(3) Allow *conflicting uses* fully and do not allow surface mining except as exempted in MCC 35.5710. The county shall then place the site on the "Not Protected Sites" inventory in accordance with Framework Plan Policy 16-B, not apply the Protected Aggregate and Mineral Resource Subdistrict, and not protect the site from *conflicting uses*.

(Ord. 997, Repealed and Replaced, 10/31/2002; Ord. 992, Amended, 09/26/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.5730 Extraction Area (PAM-EA) -- Allowed Uses

Notwithstanding the use provisions of the underlying district, the following use provisions shall apply in the PAM-EA Subdistrict:

(A) Primary Uses, Uses Permitted Outright, Uses Permitted Under Prescribed Conditions, and Conditional Uses allowed in the underlying district may be permitted subject to the underlying district provisions and criteria of approval, except as provided for in this subsection.

(1) Uses identified through the *Goal 5 process* to be prohibited within the *Extraction Area* shall not be permitted.

(2) *Noise* or *dust sensitive* uses not prohibited in (1) may be permitted under the conditional use procedural provisions of MCC 35.6300 through 35.6350 when found by the Hearing Authority to satisfy the approval criteria of MCC 35.5740 and the approval criteria of the underlying district.

(3) *Conflicting uses* required by the *Goal 5 process* to be conditionally approved may be permitted under the procedural provisions of MCC 35.6300 through 35.6350 when found by the Hearing Authority to satisfy the approval criteria of MCC 35.5740 and the approval criteria of the underlying district.

(B) The following uses may be permitted subject to a finding by the Hearing Authority that all standards adopted as part of the *Goal 5 process* and the provisions of MCC 35.6500 through 35.6535 are met. Review by the Hearing Authority shall be under the procedural provisions of MCC 35.6300; 35.6305 (A) and (B); and 35.6335.

(1) Mining;

(2) *Processing*, except the batching or blending of aggregate and mineral materials into asphalt concrete within two miles of a planted commercial vineyard existing on the date of conditional use approval;

(3) Stockpiling of aggregate and mineral materials;

(4) Sale of mineral products excavated and processed on-site;

(5) Storage of equipment or vehicles used in on-site mining or processing;

(6) Buildings, structures, and activities necessary and accessory to mining or reclaiming aggregate or mineral resources.

(Ord. 997, Repealed and Replaced, 10/31/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.5735 Impact Area (PAM-IA) -- Allowed Uses

Notwithstanding the use provisions of the underlying district, the following use provisions shall apply in the PAM-IA Subdistrict. Primary Uses, Uses Permitted Outright, Uses Permitted Under Prescribed Conditions, and Conditional Uses allowed in the underlying district may be permitted subject to the underlying district provisions and criteria of approval, except as follows:

(A) Uses identified through the *Goal 5 process* to be prohibited within the *Impact Area* shall not be permitted;

(B) *Noise* or *dust sensitive* uses not prohibited in (A) may be permitted under the conditional use procedural provisions of MCC 35.6300 through 35.6350 when found by the Hearing Authority to satisfy the approval criteria of MCC 35.5740 and the approval criteria of the underlying district; and

(C) *Conflicting uses* required by the *Goal 5 process* to be conditionally approved may be permitted under the procedural provisions of MCC 35.6300 through 35.6350 when found by the Hearing Authority to satisfy the approval criteria of MCC 35.5740 and the approval criteria of the underlying district.

(Ord. 997, Repealed and Replaced, 10/31/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.5740 Use Approval Criteria

(A) In acting to approve a Conditional Use subject to these provisions, the Hearing Authority shall find that:

(1) The proposed use will not interfere with or cause an adverse impact on lawfully established and lawfully operating mining operations;

(2) The proposed use will not cause or threaten to cause the mining operation to violate any applicable standards of this chapter, or the terms of a state agency permit. The

applicant for a new *noise sensitive use* shall submit an analysis prepared by an engineer or other qualified person, showing that applicable DEQ noise control standards are met or can be met by a specified date by the nearby mining operation; and

(3) Any setbacks or other requirements imposed through the *Goal 5 process* have been met, or can be met by a specified date.

(B) Approval Conditions.

(1) Compliance with the use approval criteria may be satisfied through the imposition of clear and objective conditions of approval.

(2) Approval of any *conflicting use* in the *extraction area* or *impact area* shall be conditioned upon execution of a *restrictive covenant* in favor of the mining operator. The *restrictive covenant* shall incorporate all approval conditions, and an agreement not to object to the conduct of lawful operations conducted at the nearby surface mine.

(Ord. 997, Repealed and Replaced, 10/31/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

§ 35.5745 Termination of the Protected Aggregate and Mineral Resources Subdistrict

When the aggregate or mineral site has been reclaimed, the county may rezone land to remove the Protected Aggregate and Mineral Resources Overlay Subdistrict (PAM) without revising the ESEE Analysis for the site. Rezoning shall not relieve requirements on the part of the owner or operator to reclaim the site in accordance with ORS 517.750 through 517.900 and the rules adopted thereunder.

(Ord. 997, Repealed and Replaced, 10/31/2002; Ord. 953 §2, Reorg&Renum, 11/30/2000)

Appendix B

Geologic Assessment

Throop Report (May 31, 2002)

Schlicker Report (January 9, 1989)

Addendum to Schlicker Report (March 29, 1989)

A Geologic Assessment of the Rock Resources of the western portion of Interstate Rock's Howard Canyon Quarry Multnomah County, Oregon

By: Allen H. Throop RG 817
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541 753-1804
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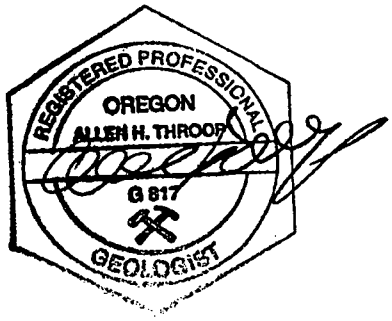
May 31, 2002



Summary

This report was prepared at the request of Multnomah County to determine the location, quality, and quantity of any rock resource in the western portion of the Howard Canyon Quarry property, which is currently being mined by Interstate Rock Products, Inc. The aggregate resource site is located in eastern Multnomah County, approximately 2 miles southeast of Corbett school as shown on figure 1. Specifically, the study is focused on the westerly 1,000 feet of the N1/2, Sec.1, T1S, R4E (figure 2). The basalt in the study area is an extension of the rock to the east but the shape of the resource in the two areas are distinctly different.

The rock underlying the prominent ridge through the study are is expected to be of a quality similar to that of the area to the east. Due to changes in the shape of basalt resource, mining in the study are is expected to yield for each yard that the quarry face is advanced approximately $1/8^{th}$ of the material that will be produced per yard of advance of the quarry east of the study area.

The conceptual mine plan reviewed for this report contains numerous environmental concerns.

Scope of work and background

The purpose of this study is to evaluate the location, quality and quantity of the aggregate resources and to review the potential environmental impacts of the proposed mining in the western 1,000 feet of the designated aggregate resource area.

In 1989, H. G. Schlicker and Associates completed a geological assessment of the Howard Canyon Quarry (Appendix 1). The Schlicker report was used as a basis for a finding by Multnomah County that the site should be designated as a significant aggregate resource under Oregon's Statewide Planning Goal 5. The Schlicker report did not define the extent of the resource but test pits were dug on a grassy flat-topped ridge that is mostly east of the 1000-foot study area (figure 2). The focus of this assessment is the prominent tree-covered sharp, steep-sided hogback ridge shown in figure 2 and figure 5. The transition from the bog-backed ridge to the flat-topped ridge is about 840 feet east of the western boundary of the property.

Multnomah County has accepted the entire site, including the area covered by the Schlicker report and the present study area, as a significant aggregate resource. Multnomah County's acknowledged comprehensive plan references Oregon Administrative Rule (OAR) 660-016 for determining the significance of an aggregate site. This rule contains no set standards for the quality or quantity of rock needed to make a determination of site significance. The Oregon Department of Land Conservation and Development (DLCD) has adopted more stringent requirements for significance (OAR 660-023-180 (3)) but they are not applicable in Multnomah County.

Methodology and background data available

The estimated extent, quantity and quality of the basalt resource shown in this report was determined after:

- a site visit on January 18, 2002,
- a review of the Schlicker report (Appendix 1),
- examination of stereo-pair aerial photos of the site taken by Spencer B Gross Inc. taken in 1999 and by WAC Corp taken in 2000 (Appendix 2),
- review of two rock quality test results run by ODOT (Appendix 3) on samples collected during the site visit,
- examination of the 1983 Multnomah County soil survey by the US Soil Conservation Service (SCS),
- evaluation of a petrographic study by Dick M.Glasheen on samples collected during the site visit. (Appendix 4) and
- review of a 2001 letter from Landslide Technologies to Interstate Rock Products, Inc. (appendix 5).
- Review of sheets 1 through 8 of a quarry development plan drawn by Olson Land Surveyors and Engineers for Interstate Rock Products and dated April 9, 2002.

A portion of sheet 3 of 8 of the 2002 Olson plan is used as a base map for figures 2 and 3 to make clear the relationship between the areas referred to in this report and those used by Interstate Rock Products. The areas of phases 6 and 7, which are referred to throughout this report, are the last two areas scheduled for mining on the Olson sheets. The area of phase 7 approximates the outline of the rock resource within the study area

According to the Schlicker report, the basalt is approximately 40 feet thick in the area of the two existing quarries, which are about 1,500 to 2,000 feet east of the study area. Additional information about rock thickness under the flat-topped ridge may have been collected during exploratory drilling done after completion of the Schlicker report. The drilling program is mentioned in the Schlicker report and was mentioned by a landowner during the visit but no information from that drilling program has been made available for this report.

According to the Schlicker report, the rock that is the focus of this study is a basalt flow that filled a valley cut into unconsolidated or semi-consolidated sediments. Since the basalt filled the valley, erosion has removed the hills of sediments that once existed to the north and south of the now buried canyon. Now, Knieriem Creek flows to the north of the ridge and Howard Creek to the south (figure 1). According to the Schlicker report, the basalt is Boring Lava and the underlying sediments are in the Troutdale formation.

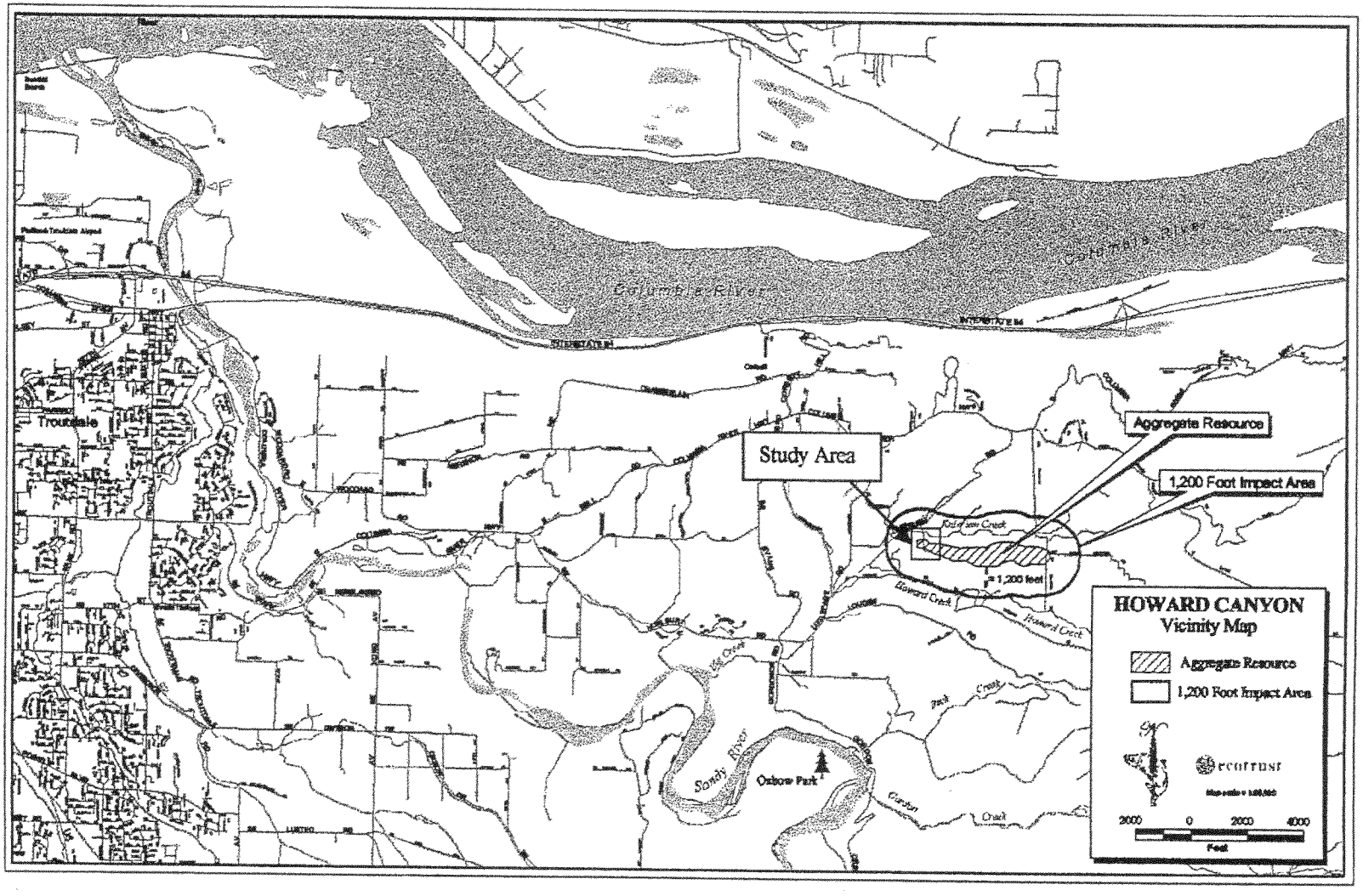

Columbia River
Columbia River
Troutdale
Study Area
Aggregate Resource
1,200 Foot Impact Area
Howard Creek
Howard Creek
Howard Creek
Sandy River
Oxbow Park
Oxbow Park
Creek
Creek
1,200 feet
HOWARD CANYON
Vicinity Map
Aggregate Resource
1,200 Foot Impact Area
ecotrust
2000
0
2000
4000
Feet

Figure 1

Site Investigations

A site visit was conducted on January 18, 2002. I was accompanied on the visit by Glennda McLucas, a geologist representing Interstate Rock Products, Inc.; Leroy Smith and Raymond Smith (in part), landowners; Kim Peoples and Adam Barber, Multnomah County Planning Department; and two laborers from Interstate Rock.

During the visit, we inspected the existing quarries and walked or drove over most of the flat-topped ridge east of the study area, walked down the farm road that goes down the south side of the ridge in the phase 6 area and walked along the top of the hog-backed ridge of phase 7. One bulk sample for rock quality testing was collected from the two existing quarries. A second sample was collected from the unweathered rocks mixed in the soil along the hog-backed ridge and along the farm road south of phase 6. The sample collection traverses are shown on figure 2. McLucas collected the four samples that are described in the petrographic analysis by Glasheen
(Appendix 4). Sample 1 west and Sample 2 west were collected during the traverse.

The nearest place to phase 7 where the thickness of the basalt could be determined was in the cutbank of the farm road south of phase 6. The road was cut across the side of the slope south of the phase 6 to allow the landowner easy access from the grazing areas above and below the slope. The road cut is approximately 5 feet high. Large basalt boulders, mixed with soil, are abundant in the cutbank near the top of the ridge. There is no evidence that solid rock was encountered as the road was constructed. McLucas, Barber and I agreed upon the location that seemed to be lowest elevation where basalt boulders were abundant in the road cut. This elevation was assumed to represent the bottom of the basalt. I saw no definite outcrop but the concentration of basalt below that point was distinctly lower.

Using a hand level, Barber and I determined that the bottom of the basalt was approximately 40 feet below the highest basalt exposed at the upper end of the farm road. The Schlicker report states that the basalt is also about 40 feet thick in the existing quarries to the east.

After walking over the flat upland portion of the site, I have little doubt that basalt underlies the fields of phase 6. A layer of silt (loess according to Schlicker report) underlies the fields of phase 6 and therefore overlies the basalt. In a few areas of phase 6, basalt outcrops along the break in slope at the edge of the field. A few basalt boulders are on the surface near the edges of the field. The Schlicker report contains results of backhoe tests over the entire flat-topped area, which confirm the existence basalt under the silt. Schlicker's backhoe test holes 7 and 8, which were in the western-most pits hit "medium hard rock" at 4 and 5.5 feet below ground level, respectively. The approximate locations of these two holes, which are within the study area, are shown in figure 2.

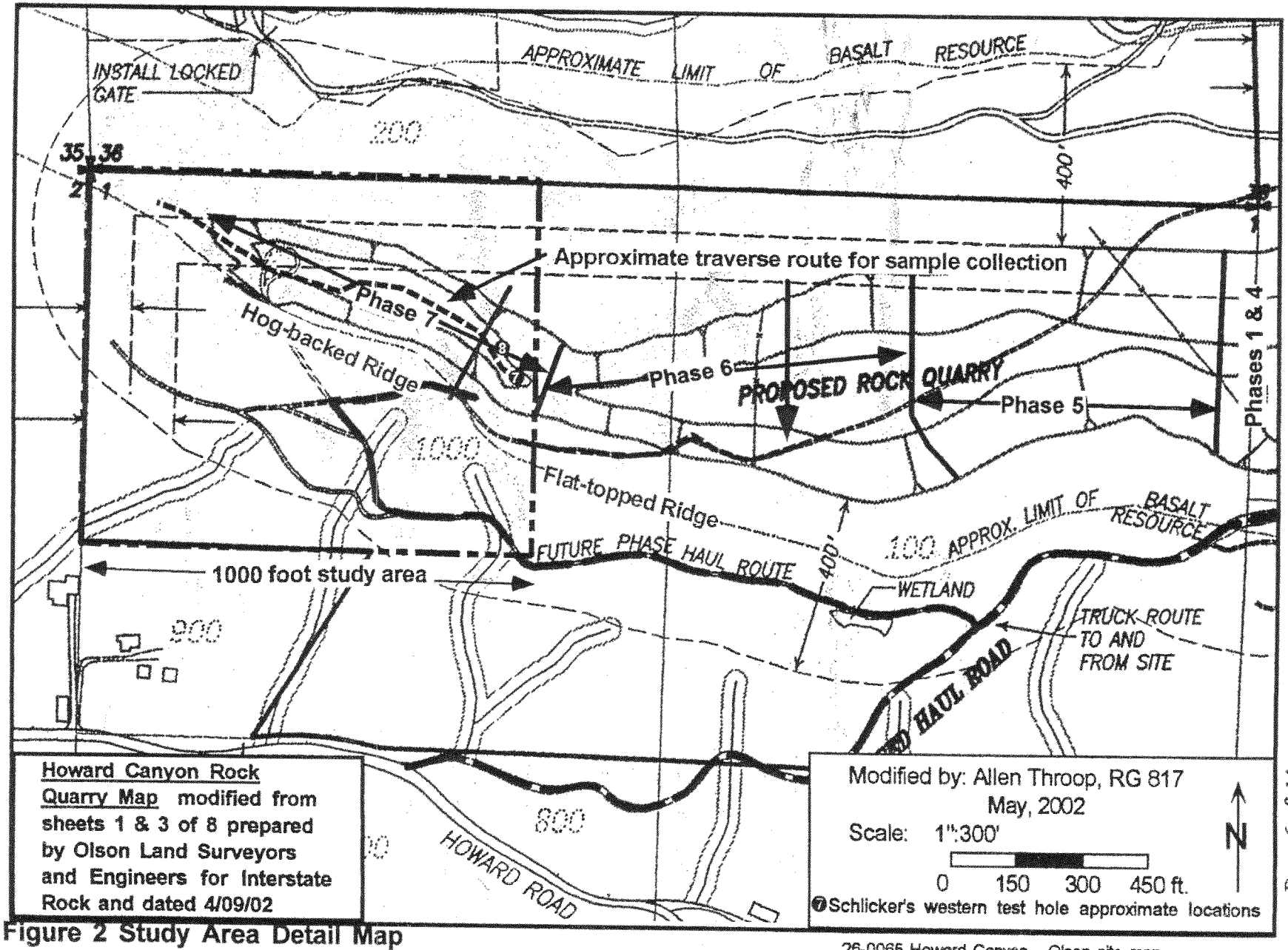


Figure 2 Study Area Detail Map

26-0065 Howard Canyon - Olson site map

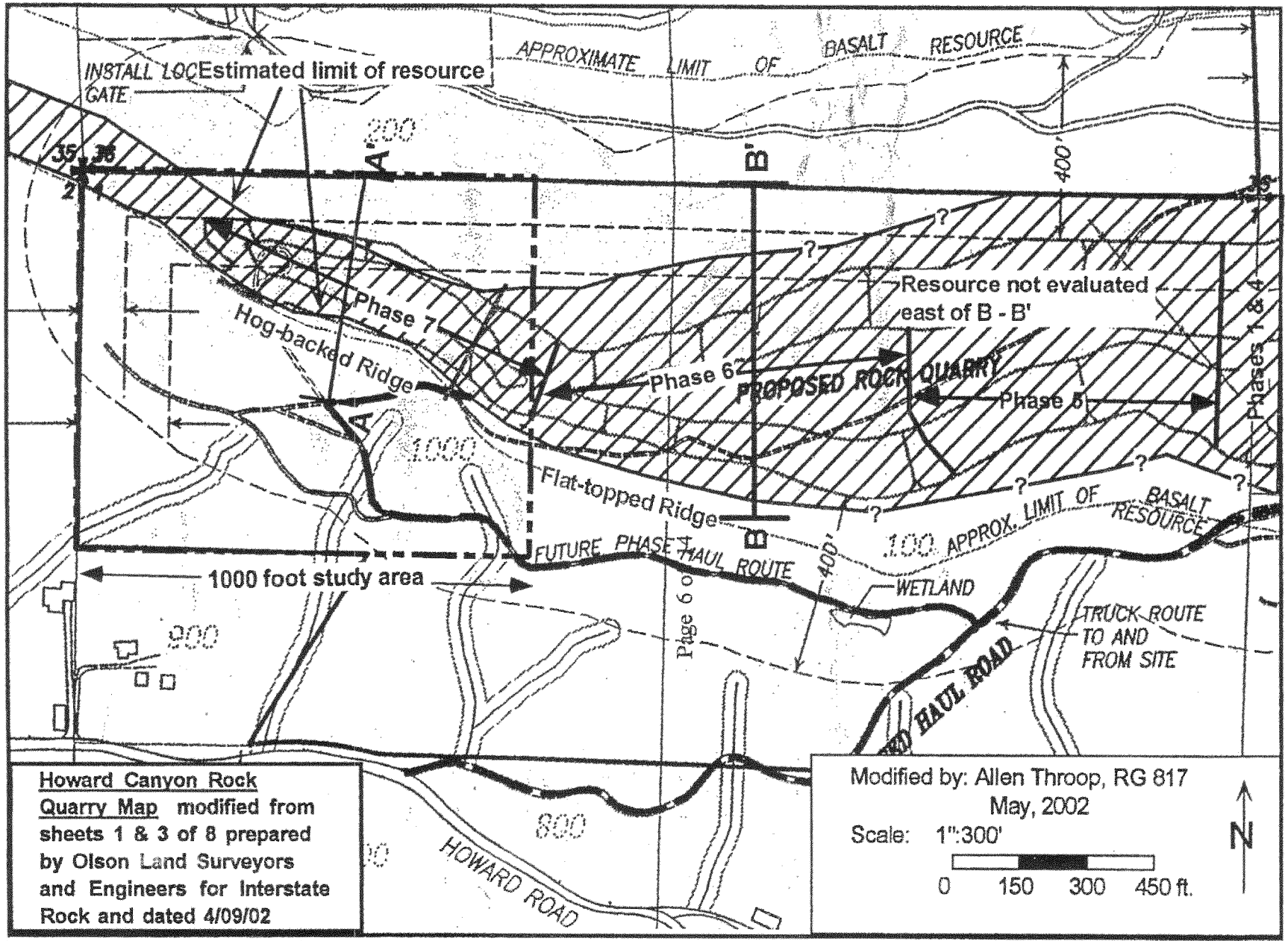


Figure 3 Resource outline within study area

26-0065 Howard Canyon - Olson site map - geology layer

Aerial photography and the existing soil survey of the area were also used to attempt to define the bottom of the basalt flow. Stereo pair photos by Spencer B. Gross taken in 1999 and by WAC Corp. taken in 2000 (Appendix 2) both show very well the break in slope between the flat-topped ridge and the slopes to the north and south and break in slope at the bottom of the ridges. I have seen no evidence to suggest that the change in rock type can be identified, to the accuracy required for rock reserve delineation, via aerial photo interpretation.

A petrographic analysis by Dick M.Glasheen (appendix 5) compares two rock samples from the study area with another two from the active quarries. The petrographer's conclusion is that the rocks are from the same unit. This conclusion strengthens the argument that a good quality basalt unit underlies the phase 7 area.

A review of the Multnomah County Soil Survey (1983) produced by the Soil Conservation Service (now the Natural Resources Conservation Service) shows that the soil units in the area are defined by slope steepness. Therefore the soil survey is not useful in defining the extent of the basalt.

As mentioned previously, Multnomah County does not require the rock from significant sites to meet any specific quality or quantity standards. The basalt at this site does meet DLCD's quality and quantity standards as defined in OAR 660-023. To meet DLCD's current standards for a significant aggregate site the rock must be meet ODOT's degradation and abrasion standards for base rock and the site must contain at least 2 million tons of rock. The figures in Table 1 indicate that the rock quality of this site meets the quality standards. The Schlicker calculation of more than 2 million yards of basalt on the entire property means that the rock resource defined in that report could qualify as a significant resource under OAR 660-023.

Based on the field review, the petrographic comparisons, the ODOT analytical work and the Olson topographic map (sheet 3), I conclude that the phase 7 area contains a geologic resource of approximately 140,000 cubic yards or more of basalt. The geologic reserve goes to the property line; the mineable resource will be smaller. My estimate of the aerial extent of the basalt is shown on figure 3. The resource volume is based on the conservative assumptions that the basalt was 40 feet thick in the phase 7 area as it is to the east and that the top 10 feet have weathered into the mixture of basalt boulders and soil that now overlies the solid rock (figure 4). The 10 feet of overburden that forms the top and sides of the phase 7 area would need to be stripped and stockpiled. Volume calculations are shown in table 2. For comparison purposes, I have made a similar calculation of the geologic resource of the Olson phase 6 area. The important item to note from the comparison is that for each average yard along the length of phase 6, about 2000 cubic yards of resource would be found. In the phase 7 area, each yard along the axis of the deposit contains only about 210 cubic yards of resource. Therefore each yard of advance in the phase 6 area yields at least 8 times as much rock as would a similar advance in the phase 7 area.

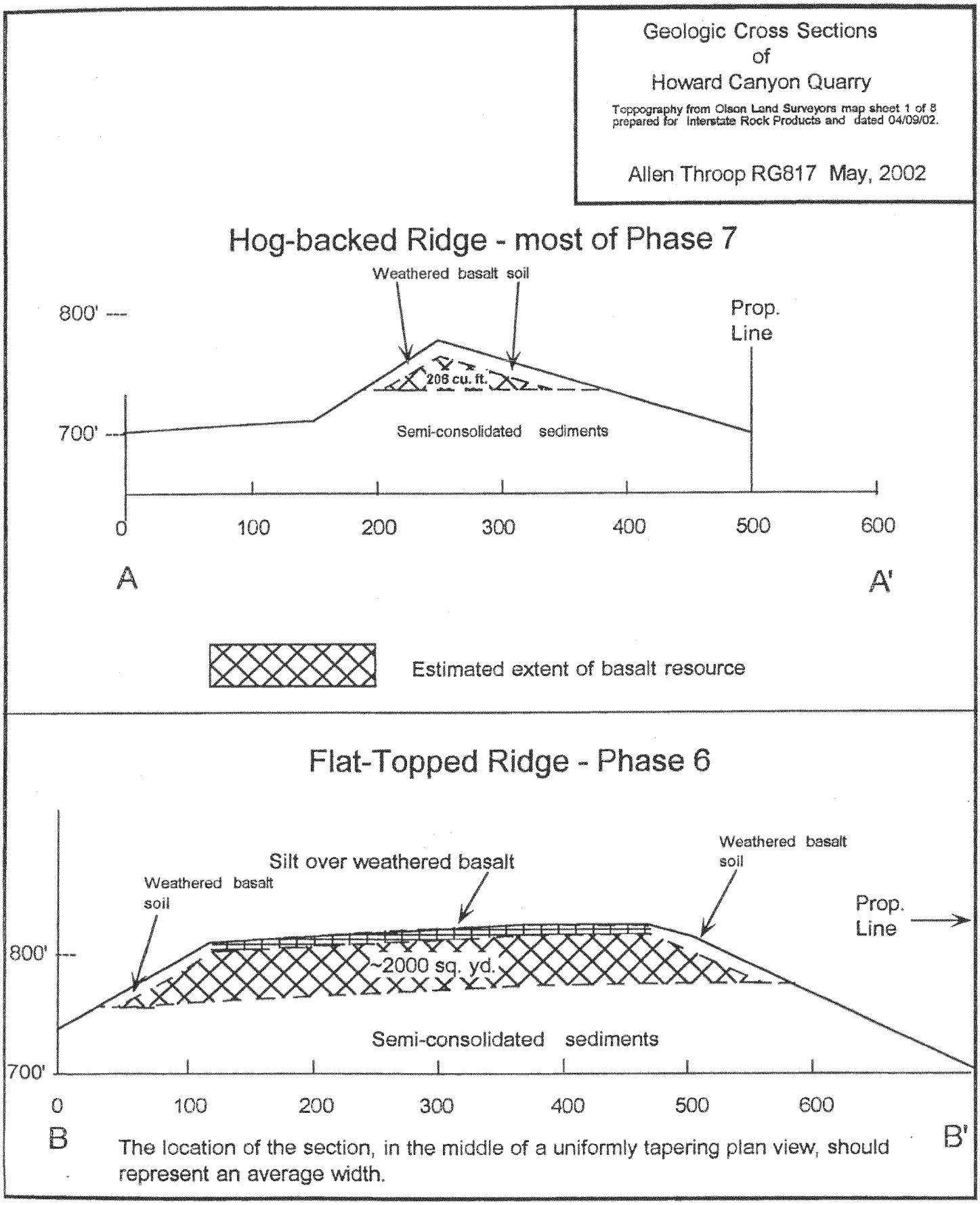


Figure 4 - Cross sections

TABLE 1 ODOT Rock Quality test results

Lab No. & source	Test date	Coarse degradation		Abrasion	Apparent gravity
		850 sieve	Sediment height		
	Standards:	30.0% max.	75 mm max.	Maximum: 35.0%	No standard
02-000145 Study area	01-29-02	21.9%	15 mm	30.2%	2.857
02-000188 Existing quarries	01-31-02	19.4%	12 mm	30.4%	2.832

Mine Plan Review

The Olson mining plans show that the hogback ridge (phase 7) will be mined using a completely separate infrastructure of roads and stormwater control systems from that used in phases 1 through 6 to the east. This is appropriate considering the differences between the topography, overburden, and vegetation in the two areas. The mining plans in the Olson report for phase 7 raise numerous environmental issues that will be discussed next and are summarize in table 3.

If more detailed geological information was used in the formation of the Olson sheets than what is presented in the preceding section, that information was not submitted for this review. The geological information is adequate to determine if a resource is present or not but it is not adequate for detailed mining plans. On the other hand, phase 7 mining is not scheduled for 40 years. As mining approaches the phase 7 area, information gathered from the advancing quarry face will be greatly superior to what would be gathered now with a few drill holes or seismic lines. Furthermore, mining equipment and practices can be expected to change considerably in the intervening years. Neither detailed mining reserve calculations nor detailed mining plans are appropriate for phase 7 at this time.

The issues discussed are meant to address the concepts presented in the phase 7 mining plan rather than addressing details that surely will change. Therefore the design details of sediment collection basin and other data included in some of the Olson sheets are not included in this review.

All mine plan that affect steep slopes such as those of phase 7 are subject to the Department of Geology and Mineral Industries (DOGAMI) steep-slope review. Removal of a thick overburden

from a long steep slope that consists of soil and large boulders mixed with tree stumps will be very difficult to complete without negative off-site environmental impacts such as rolling boulders and turbid stormwater. This should not be done without very detailed planning scheduling and execution.

While topsoil removal is difficult but possible, stockpiling the removed overburden on steep slopes as shown on figure 2. is an approach that should not be approved by DOGAMI A letter from Landslides Technology to Interstate Rock dated January 25, 2001 (Appendix 5) recommends no construction of such stockpiles on ground steeper than 2H:1V.

Table 2 Howard Canyon Rock Resource Calculations

		Phase 6 Geological reserve	Phase 7 Geological reserve
Cross section area	sq. ft.	17627	1859
Cross section area – rounded	sq. yd.	2000	210
Length of area	ft.	830	1000
Length of area	yd.	280	330
Vol. Formula		V= (X.Sec. Area)* length	V= (X.Sec. Area)* length
Vol. Calc.	Cu. Yd.	560,000	69,000
Weight of rock	Tons	1,312,416	161,708
Weight of rock – rounded	Tons	1,300,000	160,000
Ratio rock per yd along the axis -	phase 6:phase 7		8:1

Constants used:

Specific Gravity	2.8 from ODOT test
Weight of a cubic yard of water	1674 pounds

More overburden will be removed from the phase 7 area than could be stored in the locations shown on the Olson plans (figure 2). The phase 7 mining area is roughly 800 feet long and roughly 180 feet wide. Assuming a flat surface and only 6 feet of overburden, phase 7 will have 860,000 cubic feet or 32,000 cubic yards of overburden, without applying any expansion factor. The two overburden storage areas shown for phase 7 on figure 5 total about 700 feet in length with a width of perhaps 35 feet. Such storage, if built on a flat area with the piles constructed with 1:1 slopes would have a height of 18 feet and therefore a volume of 220,000 cubic feet or 8,000 cubic yards. (Stockpile slopes of 3:1 are generally required by DOGAMI.) Obviously more stockpile room is necessary.

Access and stormwater control of phase 7 mining requires entirely different facilities from those of phases 1 through 6. The location of the road and a major retention pond are shown on Olson map 3 south of phase 6 and 7. The proposed dam for stormwater retention is located south of

phase 7 at an elevation of approximately 650. The road is located between 650 and 700 feet. he letter from Landslide Technology (appendix 5) mentions that the benched south slopes between 625 and 725 feet are probably old landslide areas. Very specific geotechnical mapping should be done before construction of a road and especially a water retention structure south of the ridge.

Table 3 Comparisons of the physical settings of the flat-topped ridge and hog-backed ridge areas

Item	Flat-topped Ridge	Hog-backed Ridge
Over-burden	Mapped as clayey silt in the 1989 Slicker report. Material removal with scrapers should be routine. Material depth well documented in the Schlicker report.	Mixture of deeply weathered basalt soils (clay and silt) and large boulders (up to six feet in diameter) on a 1 ¼ (H):1 (v) slope. Material removal will be extremely difficult. Overburden depth unknown. The nearest analogous site (the farm road cuts south of phase 6) suggests a minimum of 10 feet.
Vegetation	The flat surface is in pasture. Soil layers can easily be segregated for optimum revegetation.	The steep hillsides are covered with trees and blackberries. Trees would need to be cut and removed. Stumps would need to be segregated from the soil and the large rocks for proper disposal. Again this is on a steep hillside.
Over-burden storage	Overburden can be easily stored, as shown, within the cell being currently mined or in a previous one.	Overburden cannot be accommodated in the areas shown on the 2002 Olson sheets since the hillsides are too steep and the volume of material produced could not be accommodated in the areas shown even if it was on flat ground.
Crusher location	One location for phases 1 through 6.	A new, unspecified location is required
Access	Phases 1 through 6 all use the same access.	An entirely new access road is needed. The route shown on the 2002 Olson sheets traverses unstable areas defined in the 2001 Landslide Technology letter.
Storm water control	Water from Phases 1 through 6 will exit via the one storm water control system.	An entirely new storm water control system for the access road and for the phase 7 quarry must be established. The retention pond location shown on the 2002 Olson sheets is within the unstable area defined in the 2001 Landslide Technology letter.
Rock resource	All indications point towards a resource of quality rock that should yield .2000 cubic yards or more of rock for each yard that the face progresses.	The same basalt unit underlies the hogback that underlies the flat-topped ridge. Indications are that a quarry in the phase 7 area would produce only about 210 cubic yards of rock for each yard the face progresses..

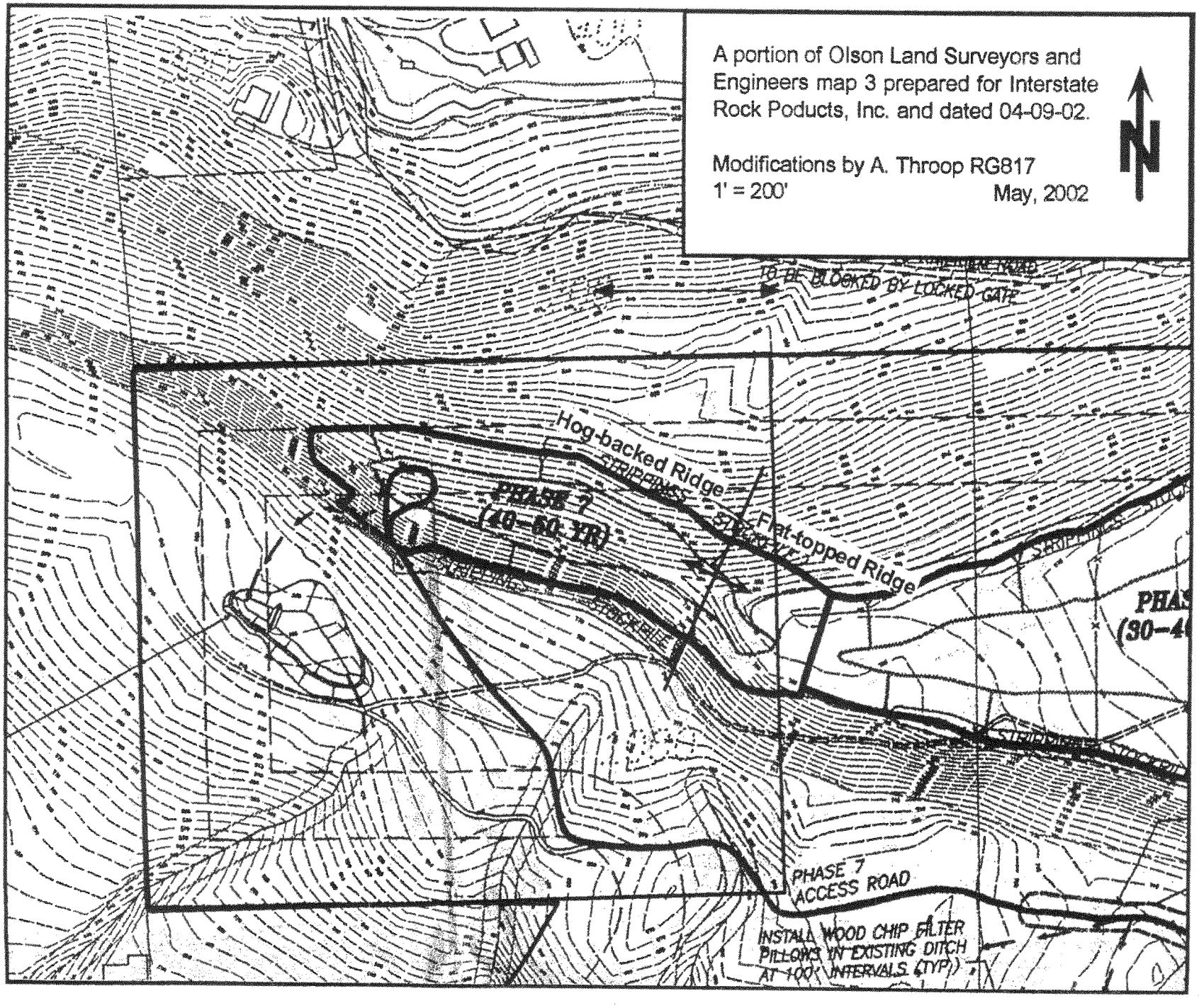

A portion of Olson Land Surveyors and Engineers map 3 prepared for Interstate Rock Poducts, Inc. and dated 04-09-02.
Modifications by A. Throop RG817
1' = 200'
May, 2002
N
TO BE BLOCKED BY LOCKED GATE
Hog-backed Ridge
Flat-topped Ridge
PHASE 7
(40-60 YR)
PHASE 7
ACCESS ROAD
INSTALL WOOD CHIP FILTER
PILLOWS IN EXISTING DITCH
AT 100' INTERVALS (TYP.)

Figure 5

List of Appendixes:

1. H.G. Schlicker & Associates report of project #88-416 dated January 9, 1989
2. Aerial photograph references
3. Oregon Department of Transportation materials laboratory reports 02-000145 and 02-000188
4. Petrographic report by Dick Glasheen
5. Howard Canyon Quarry Geologic Hazard Assessment by Landslide Technology dated January 25, 2001.
6. Resume for Allen H. Throop, Geologist

GEOLOGIC RECONNAISSANCE
HOWARD CANYON QUARRY
EAST MULTNOMAH COUNTY, OREGON

for

Mr. Raymond Smith
P.O. Box 183
Corbett, OR 97019

Project #88-416

January 9, 1989

H.G. Schlicker & Associates, Inc.

H.G. Schlicker & Associates, Inc.
235 N.E. 122nd Avenue, Suite 315 • Portland, Oregon 97230
(503) 257-9666
Geologists • Engineers

Project #88-416

January 9, 1989

Mr. Raymond Smith
P.O. Box 183
Corbett, OR 97019

Dear Mr. Smith:

We are pleased to present this geologic reconnaissance of the Howard Canyon Quarry and a rock resource evaluation of East Multnomah County. Thank you for the opportunity of assisting you regarding the Howard Canyon quarry.

We will provide the additional drilling information as an addendum when it becomes available. Please contact us if you have any questions concerning this report.

Sincerely,

H.G. SCHLICKER AND ASSOCIATES, INC.

Herbert G. Schlicker

Herbert G. Schlicker, P.G., C.E.G.
President

HGS:kh

Herbert G. Schlicker, P.G., C.E.G., President
John A. Talbott, P.E., Vice President
Mark E. Shaffer, P.E., P.G.
J. Douglas Gless, P.G., C.E.G.

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  Test Pit Logs
- Maps: Site Geologic, Multnomah County
  Test Pit Locations
  Rock Materials of Multnomah County
- Resume for Herbert G. Schlicker

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Project #88-416

January 9, 1989

Mr. Raymond Smith
P.O. Box 183
Corbett, OR 97019

Subject: Expansion - Howard Canyon Quarry

Location: SE 1/4 Section 36, T. 1N., R.4E, WM &
N 1/2 Section 1, T. 1S., R.4E, WM

Dear Mr. Smith:

This report presents our geologic study of the rock resource at the location described above.

INTRODUCTION

The site was investigated using a backhoe to excavate 31 testpits to determine the thickness of the overburden. Fourteen testpits were done for this study and 17 were previously done by Mr. Raymond Smith. The overburden averaged 7.2 feet in the 14 recently dug test pits located west of the 1/4 section line. About 1 to 2 feet of weathered rock appeared to be present. East of the 1/4 section line 17 previously dug test pits indicated similar conditions.

Local commercial rock is scarce or not available. As a consequence the price of rock delivered to the local area is excessive due to the long haul costs. Mr. Smith desires to produce rock at the Howard Canyon site for the commercial sector.

SITE CONDITIONS

The site is located on a broad ridge which runs along the entire section line between section 36 and section 1. The ridge is more than 500 feet wide and is entirely underlain by basalt lava. The ground surface is nearly level with gentle rolling topography and ranges between 780 and 860 feet elevation.

Access is available from both Howard Canyon on the south and Big Creek Canyon on the north. The site is about 3 miles by road to Highway 30 and less than 5 miles to interstate 84.

Herbert G. Schlicker, P.G., C.E.G., President
John A. Talbott, P.E., Vice President
Mark E. Shaffer, P.E., P.G.
J. Douglas Gless, P.G., C.E.G.
Russell J. Rolls, P.G.

GEOLOGY

General

The site is located in the western foothills of the Cascade Range 18 miles east of Portland and less than 2 miles by direct line south of the Columbia River. The quarry produces rock from the Boring Lava Formation which caps the ridge between the canyon of Big Creek on the north and Howard Canyon on the south. The basalt overlies the Troutdale Formation which is exposed in the canyon walls beneath the Boring Lava.

Troutdale Formation

The Troutdale Formation is composed mainly of sandstone and conglomerate and was named for exposures in cliffs along the Sandy River near Troutdale. The Formation is wide spread in occurrence and was deposited as a great piedmont from the west flank of the Cascade mountains. The underlying Columbia River Basalt Formation which underlies the Troutdale elsewhere is not exposed locally.

Boring Lava Formation

Boring Lava overlies the Troutdale Formation. About 2 million ears ago Boring vents in the Portland area erupted both basalt lava and pyroclastics. The Boring Lava typically flowed into existing stream valleys.

The occurrence of the Boring Lava along the ridge tops in this area was brought about by a sequence of geologic events. First, streams carved canyons in the existing Troutdale terrain. Secondly, the canyons were filled by basalt lava which erupted from the Boring vents. Thirdly, streams cut new channels in the softer Troutdale sediments that was left exposed between the lava filled canyons. This resulted in inverted topography with the former basalt filled canyons now the basalt crested ridge tops.

The Boring Lava is composed of a light gray olivine basalt with expanded texture. The pyroclastics known as the Boring Agglomerate consists of fragments and boulders of lava mixed with ash. The ash is often weathered to a red clay soil. The agglomerate is not used for rock sources. For this reason only select areas mapped as the Boring Formation can be used for crushed rock. The Howard Canyon quarry is the only site known to be available to produce rock in the area east of the Sandy River.

The Boring basalt is frequently massively jointed and oversize material can occur from blasting operations. Large rock has use for rip-rap and building stone described later under "Rock esource".

Loess

The thin Loess, or sandy silt soil which caps the ridges south of the Columbia River in this region, is a deposit carried by the wind from the Columbia River floodplain sometime during final stages of the glacial period. It is composed of minor sand and glacial silt originally deposited over a broad Columbia River floodplain. Strong winds blowing south from the ice sheet somewhere south of the Tacoma Washington area carried the sediments south from the Columbia River. At the site these soils average about 6 feet thick.

ROCK RESOURCE

Quantity

The basalt occupies the upper 50 feet or more of the ridgecrest except for the thin Loess overburden. The ridge rock deposit is more than 4200 feet long and 350 feet wide and contains at least 33 acres of ground. The volume of rock in place is then (4200' x 350' x 40')/27 = 2,177,778 cu yards. When rock is crushed it expands about 25% therefore the deposit will produce more than 2.7 million tons of crushed basalt.

Because the lava is believed to occupy an old stream valley and the center of the valley should be much deeper, the deposit should be thicker than it appears and an estimate of an additional 30% of rock is not unreasonable. This additional rock would bring the total to 3.5 million tons. Drilling is underway to determine the actual thickness of the deposit and the results will be presented as an addendum to this report.

Quality

Exposures in the existing quarry face show the basalt to be columnar jointed and thinly weathered. Beneath the thin weathering scale the rock is hard and fresh. The top 2 feet of the basalt appears to be highly weathered and is considered as overburden in this report. Tests show the partially weathered rock to make satisfactory base rock. The harder fresh rock can be used for oil and topping.

The overburden is conservatively assumed to be about 10 feet thick and includes about 2 feet of weathered basalt. This overburden is easily mined and requires no processing and it is a marketable commodity.

Overburden can be used for fill and topsoil and both are in demand.

In addition to crushed rock, the site can produce high quality rip-rap. This material is scarce and after major floods is in short demand.

Mr. Smith has had preliminary conversation concerning possible use of the quarry rock for building stone. Many of the historic building in the area were built from Boring Basalt.

ROCK RESOURCES IN EAST MULTNOMAH COUNTY

East Multnomah County area includes all of Multnomah County east of Troutdale to the crest of the Cascade Range. Our records show that this area contains 22 quarries and/or gravel pits. At the present time none of these sites is available for commercial use. Four are owned by the Oregon Highway Division, fourteen by the United States Forest Service and four are privately owned. Eleven of the Forest Service quarries are located within the Bull Run watershed, four Highway Division sites and three of the four privately owned sites have been eliminated because they are within the Columbia River Scenic area. Only one site, the Howard Canyon quarry is available for use as a commercial rock source. No other sites which could produce commercial rock are known within the area.

ROAD CONDITIONS

We understand that the county has shown concern regarding the haul roads within Howard Canyon beginning at its junction with Littlepage Road. The concerns are restricted sight distance at 2 curves and ability of the road to hold up under truck traffic.

It is reported that the road contains 9 inches of rock and capped by 2 inches of built up asphalt. Logging trucks have been using this road without difficulty and with no apparent unusual road damage. Rock trucks are not likely to cause greater stress than logging trucks.

There are two areas along Littlepage Road that may have marginal sight distance. These two areas have roadcuts at the inside of the turn along the south side of the road.

The site distance could be improved by cutting away several feet of bank near the center of the curves, an estimated 5 feet or so. If necessary the speeds could be specified through the curve areas.

Troutdale sandstone is of sufficient strength to stand vertically and could be easily dressed back to provide more sight distance. The excavation will not cause any instability of the slopes.

CONCLUSIONS AND RECOMMENDATIONS

At the present time, there are no commercial quarries located in East Multnomah County. Unless rock from the Howard Canyon quarry is made commercially available there will be a continuing hardship to any potential users of rock, both government and private.

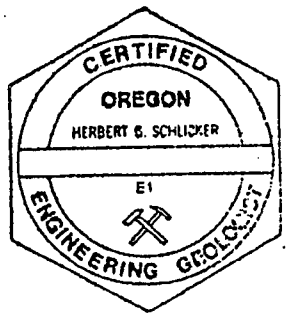
We recommend that the Howard Canyon Quarry owned by Mr. Raymond Smith be granted the privilege of selling rock commercially.

LIMITATIONS

Our investigation was based on geological reconnaissance and available published information. The data and recommendations presented in this report are believed to be representative. The conclusions and recommendations herein are professional opinions derived in accordance with current standards of professional practice and no warranty is expressed or implied. It has been our pleasure to serve you. If you have any questions concerning this report of the site, please contact us.

Respectfully submitted,

H.G. SCHLICKER AND ASSOCIATES, INC.



Herbert G. Schlicker, P.G., C.E.G.
President

HGS:kh

APPENDIX

ROCK MATERIALS OF MULTNOMAH COUNTY, OREGON
Plate 3, Special Paper 3, Oregon Dept. of Geology

Quarry No.	Ownership	Location	Past Prod.	Rock	Reserves Thousand cy
27	C.T. Howell	NW 1/4 Sec 31, 1N,4E	100	Boring Lava	150
28	Hershel McGriff	NW 1/4 Sec 22, 1N,5E	50	Columbia River Basalt	100
29	OSHD	SW 1/4 Sec 14, 1N,5E	500	Columbia River Basalt	3
30	Raymond Smith	NE 1/4 Sec 27, 1N,5E	75	Boring	25
31	OSHD	SE 1/4 Sec 7, 1N,5E	50	Columbia River	200
32	OSHD	NW 1/4 Sec 1, 1N,6E	0	Columbia River Basalt	5000
33	USFS	SW 1/4 Sec 33; 1N,6E	2	?	?
4a	OSHD	NE 1/4 Sec 3; 2N,7E	225	Columbia River Basalt	2000
34	USFS	SE 1/4 Sec 24; 1N,6E	5	?	?
35	USFS	Sec 20; 1N,7E	3	?	?
45	USFS	SE 1/4; 1S,5E	2	?	?
46	USFS	SW 1/4 Sec 1; 1S,6E	3	?	?
47	USFS	SE 1/4 Sec 10; 1S,6E	17	?	?
48	USFS	NE Sec 10; 1S,6E	6	?	?
49	USFS	SW Sec 11; 1S,6E	2	?	?
50	USFS	NW Sec 21; 1S,6E	8	?	?
51	USFS	Sec 3; 1S,7E	5	?	?

Rock Materials of Multnomah County, Oregon (continued)

Quarry No.	Ownership	Location	Past Prod.	Rock	Reserves Thousand cy
52	USFS	SW Sec 22; 1S,7E	1	?	?
53	USFS	NW Sec 24; 1S,7E	3	?	?
54	USFS	SE Sec 19; 1S,8E	2	?	?
55	USFS	SW Sec 20; 1S,8E	1	?	?

See map for locations.

TEST PIT LOGS

TP-2	0 - 6"	Topsoil
	6"-10'	Clayey Silt
	10'-11'	Weathered Rock

TP-2	0 - 6"	Topsoil
	6"- 5'	Brown Silty Clay
	5'- 7'	Gray Clayey Silt
	7'-11'	Red Brown Clayey Silt
	11'-12'	Weathered Rock

TP-3	0 - 6"	Topsoil
	6"- 5'	Clayey Silt
	5'-6.5'	Weathered Rock
	6.5'-	Medium Hard Rock

TP-4	0 - 6"	Topsoil
	6"- 7'	Clayey Silt
	7'- 9'	Weathered Rock
	9'-10'	Medium Hard Rock

TP-5	0 - 6"	Topsoil
	6"-4.5'	Clayey Silt
	4.5'-	Medium Hard Rock

TP-6	0 - 6"	Topsoil
	6"- 7'	Clayey Silt
	7'-7.5	Weathered Rock

TP-7	0 - 6"	Topsoil
	6"-5.5'	Clayey Silt
	5.5'- 6'	Medium Hard Rock

TP-8	0 - 4'	Fill
	4'-	Medium Hard Rock

TP-9	0 - 6"	Topsoil
	6"-6.5'	Soft Rock
	6.5'-7'	Medium Hard Rock

TP-10	0 - 6"	Topsoil
	6"- 7'	Clayey Silt
	7'-7.5'	Soft Rock

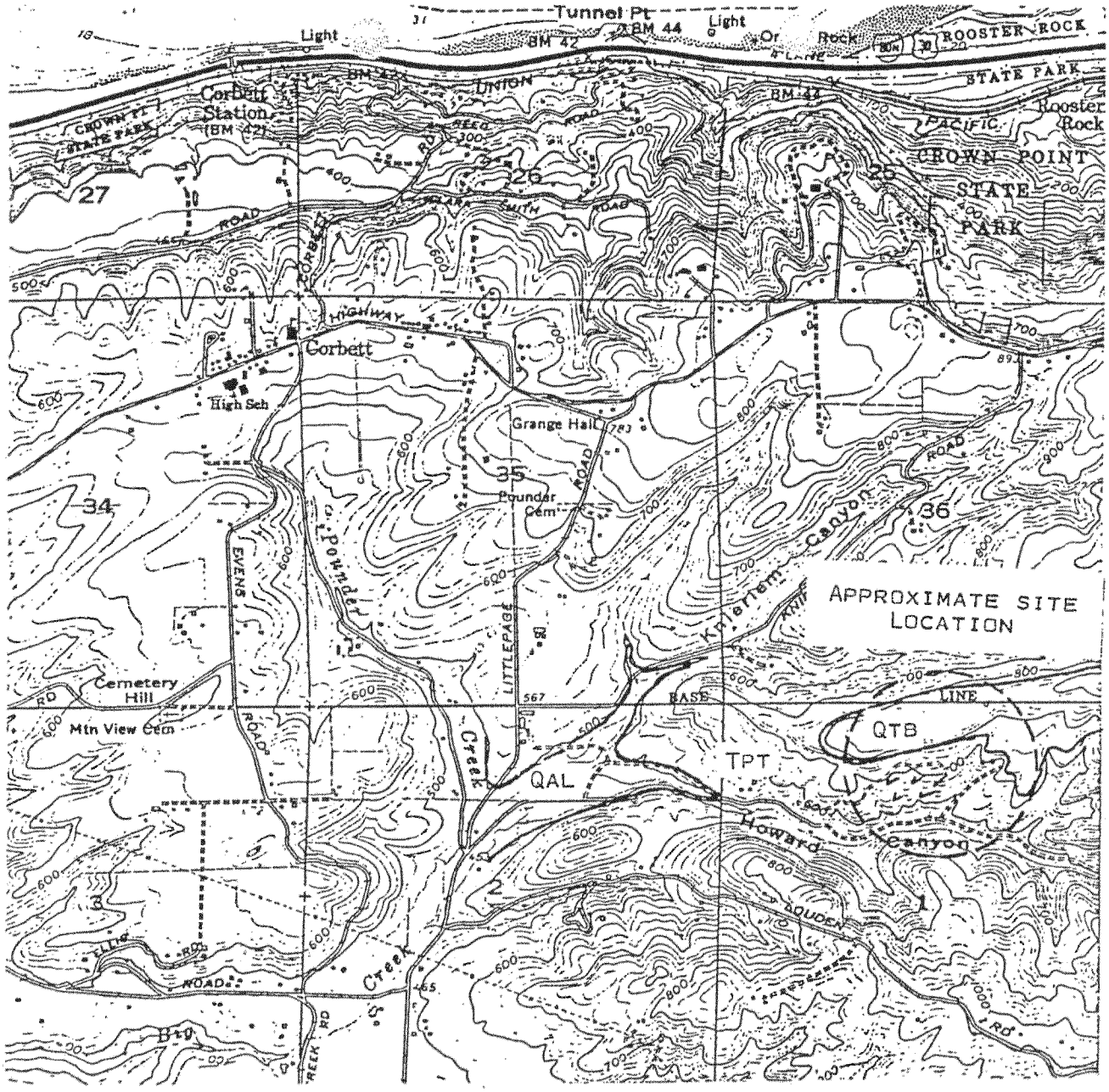
TP-11	0 - 6"	Topsoil
	6"- 7'	Clayey Silt
	7'-8.5'	Soft Rock

TP-12	0 - 6"	Topsoil
	6"- 7'	Clayey Silt
	7'- 8'	Soft Rock

Test Pit Logs (continued)

TP-13	0 - 6"	Topsoil
	6"- 2'	Brown Clayey Silt
	2'-7.5'	Light Brown Clayey Silt
	7.5'-8'	Soft Rock

TP-14	0 - 6"	Topsoil
	6"- 9'	Clayey Silt
	9'-10'	Soft Rock

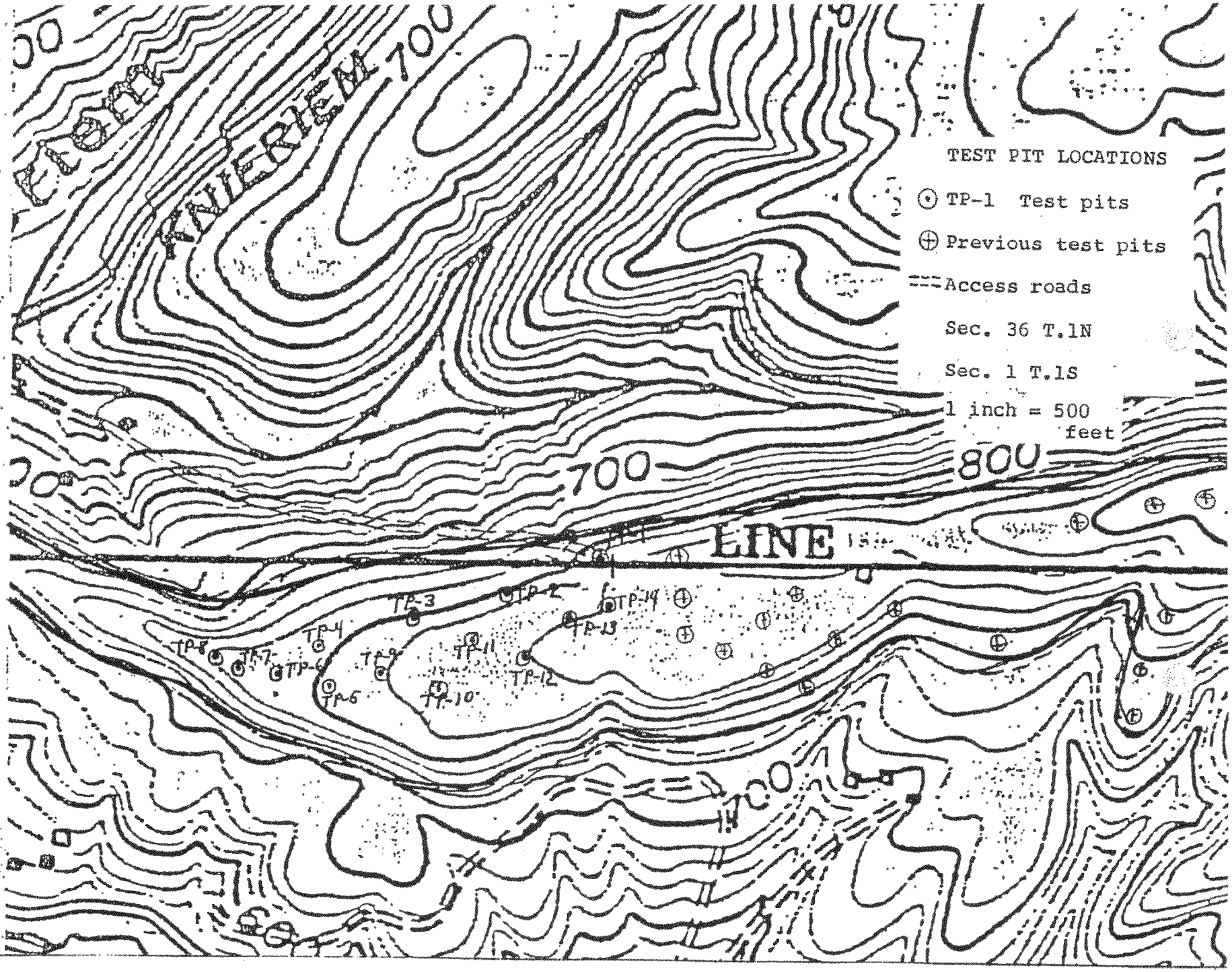


SITE GEOLOGIC MAP

PROPOSED HOWARD CANYON QUARRY SITE
MULTNOMAH COUNTY OREGON

QAL	QUATERNARY ALLUVIUM, RECENT STREAM SEDIMENTS
QTB	COLUMNAR BASALT, WITH BISCUIT WEATHERING ON OUTCROP
TPT	TROUTDALE FORMATION, SANDY GRAVEL AND SILTY SAND BEDS
✓✓	SLOPE MOVEMENT

BASE: A portion of Washougal, Wash.-Oreg.
U.S.G.S. 7½ min. Quad Sheet
Photo revised 1970 Scale 1"=2000'


TEST PIT LOCATIONS
TP-1 Test pits
Previous test pits
Access roads
Sec. 36 T.1N
Sec. 1 T.1S
1 inch = 500 feet
700
800
LINE
TP-1
TP-2
TP-3
TP-4
TP-5
TP-6
TP-7
TP-8
TP-9
TP-10
TP-11
TP-12
TP-13
TP-14

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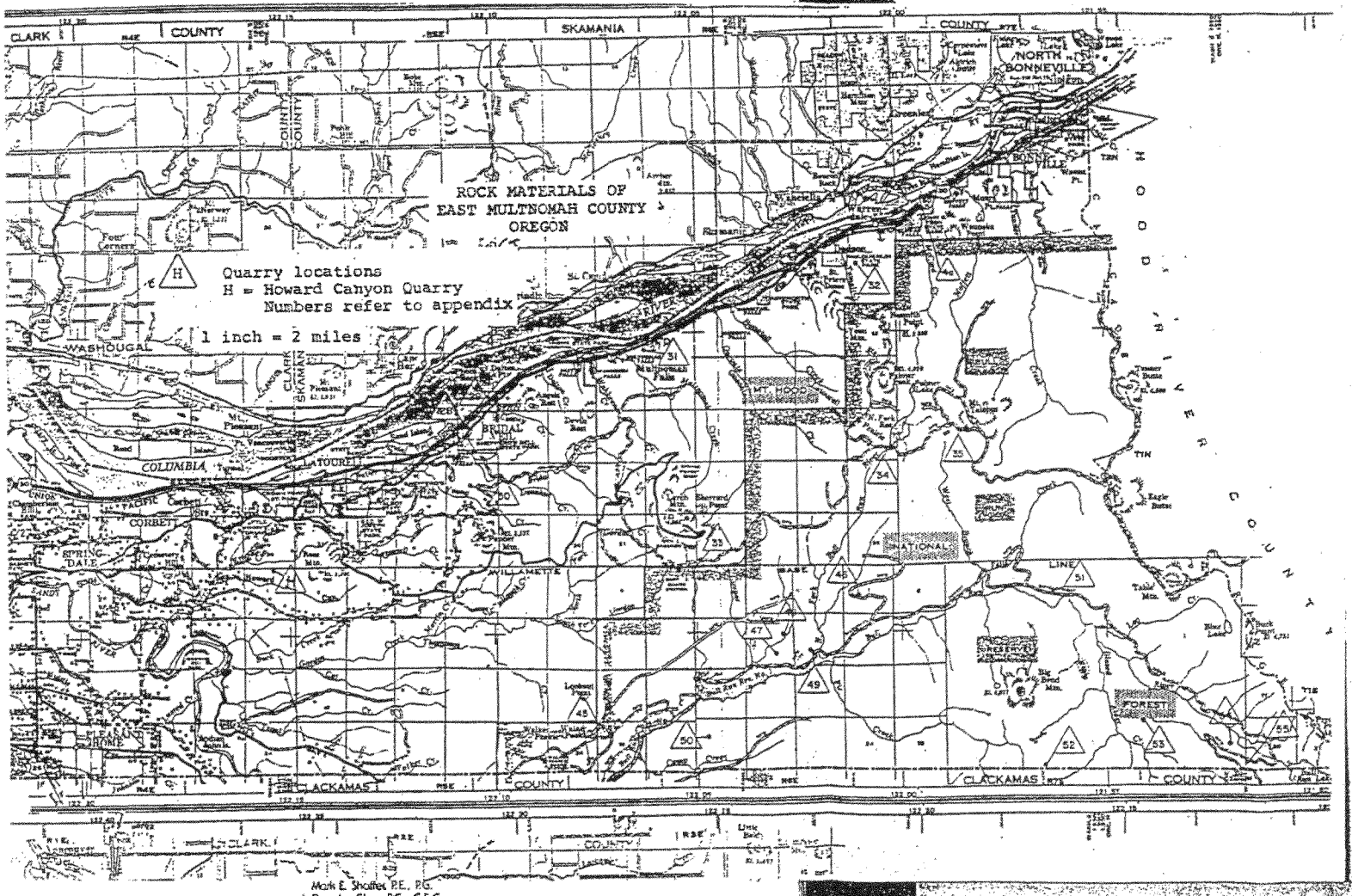

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HERBERT G. SCHLICKER
President, H. G. SCHLICKER & ASSOCIATES
Principal Geologist

EDUCATION

B.S. 1950. Geology, Oregon State University
M.S. 1953. Stratigraphy, Oregon State University

REGISTRATION

Engineering Geologist, Oregon, License No. E-1 and Idaho, No. 491
Certified Professional Geologist, American Institute of Professional Geologists, CPG-392

SUMMARY OF EXPERIENCE

Mr. Schlicker has more than 30 years of experience in Geology. He has worked as a subsurface geologist in Louisiana for a major oil company, and for 24 years as an engineering geologist for the Oregon Department of Geology and Mineral Industries. He is principal author of numerous geologic publications. Presently, he is a consulting geologist specializing in engineering geology, mineral and oil and gas and expert witness.

1980 - present	President, H. G. Schlicker & Associates, Consulting Geologists and Engineers
1955 - 1980	Geologist, State of Oregon, Department of Geology & Mineral Industries, Project Manager for geologic mapping projects and rock materials resource studies resulting in major publications. Engineering geologic consultant for state agencies.
(1974 - 1979)	Professor of Geology, Oregon State University, Corvallis, Oregon, courtesy appointment.
1953 - 1955	Subsurface Geologist, The Texas Company, New Orleans, Louisiana
1952 - 1953	Assistant Soils Engineer, Oregon Highway Department, Salem, Oregon

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Russell J. Rolls, P.G.

SUMMARY OF EXPERIENCE, continued

1946 - 1952	Oregon State University, Bachelors and Masters programs

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American Institute of professional Geologists, CPG 392
Association of Engineering Geologists

OFFICES HELD

Chairman, Geology Section, Oregon Academy of Science
Chairman, Engineering Geologists of Oregon
Chairman and Treasurer, Oregon Section AIPG
Chairman, Board of Geologist Examiners, Oregon
Member of Advisory Committee AEG
Member of Hazards Committee AIPG

LIST OF PUBLICATIONS
Herbert G. Schlicker

PRINCIPAL AUTHORSHIP

1. Schlicker, H. G. and Finlayson, C. T. Engineering Geology and Hazards of Northwestern Clackamas County, Oregon: Oregon Department of Geol. and Mineral Indus., Bulletin 99, 1979.

2. Schlicker, H. G. Preliminary Geologic Hazards Report for Yoncalla, Sutherlin, Winston and Canyonville, Douglas County, Oregon, 1978.

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5. Schlicker, H. G., Schmuck, R. A., and Gray, J. G. Rock Material Resources of Umatilla County, Oregon. Short paper #26, Dept. of Geol. and Mineral Indus., 57 pp., maps, 1976.

6. Schlicker, H. G., and Brooks, H. G. Engineering Geology of the John Day area, Oregon: Oregon Dept. of Geology and Mineral Indust. in cooperation with the City of John Day and Grant County, 43 pp., fig. and maps, 1975.

7. Schlicker, H. G., Schmuck, R. A. and Pescador, Pedro. Aggregate Resources of Josephine County, Oregon: Oregon Dept. of Geol. and Mineral Indus., 40 pp., 30 maps, 1975.

8. Schlicker, H. G., Deacon, R. J. Engineering geology of the La Grande Area, Union County, Oregon: Oregon Dept. Geol. and Mineral Indus., in cooperation with the City of La Grande and Union County, Oregon, 16 pp., geologic map, 1971.

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CO-AUTHOR

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H.G. Schlicker & Associates, Inc.
205 N.E. 122nd Avenue, Suite 315 • Portland, Oregon 97230
(503) 257-9666
Geologists • Engineers

Project #88-416 March 29, 1989

Subject: Addendum to Report

To: Mr. Raymond Smith
P.O. Box 187
Corbett, OR 97019

Dear Mr. Smith:

This letter is an addendum to our report 88-416 dated January 9, 1989. We are presenting our analysis of your resource reserves based on additional subsurface information.

At the time of our report we recommended that you have the site drilled to determine the bottom elevation of the rock. In our opinion the rock could be thicker than it appeared to be from surface exposures. Our reason for thinking this was that a stream valley, which became filled with lavas could be a deep "V" shaped valley rather than a wide flat bottomed canyon.

Our report of January 9 assumed basalt to be 40 feet thick. An analysis of the drilling indicates a minimum thickness 51.5 feet of hard basalt. Many of the holes did not penetrate the total thickness of basalt and it could be more than 51.5 feet thick, however, we used the drilled thickness only to make our calculations.

CALCULATIONS

33 acres x 4,840 sq. yd./ac. x 17.2 yds. deep = 2,744,818 cu. yd.
2.74 million cy x crush swell 1.3 = 3.57 million cubic yards
3.57 million cy x 1.5 tons/cy = 5.35 million tons of crushed rock

The minimum quantity of rock available at the Howard Canyon quarry is 3.57 million cubic yards or 5.35 million tons of crushed rock.

There is no other known site in Multnomah County east of the Troutdale-Gresham area that can supply commercial rock. Sites are either depleted, in the Columbia River Gorge restricted area, or on government land that is remote or not available.

It should also be understood that even if a deposit might be found, its economics will depend on availability, access, minimal overburden, and subsurface exploration. All of these factors have been evaluated at the Howard Canyon Quarry.

Herbert G. Schlicker, R.G., C.E.G., President
John A. Talbot, P.E., Vice President
Mark E. Shaffer, P.E., P.G.
J. Douglas Gless, R.G., C.E.G.
Russell J. Rails, P.G.

The drilling logs and reports from Boulder Creek Construction Co. are enclosed.

We trust that this report will be useful to you. If you have any questions concerning this report or the site, do not hesitate to contact us.

Respectfully submitted,

H.G. SCHLICKER AND ASSOCIATES, INC.

Herbert G. Schlicker, P.G., C.E.G.
President

HGS:kh

4 of 5

TEST PIT LOGS

TEST HOLE NO. 1:
Drilled 1/11/89 - 11:30 A.M.

0' - 11' Overburden-low area collecting surface water-wet
11'- 68' Rock-very consistent-gray basalt-hard
68'- ? Troutdale formations-cobbles

TEST HOLE NO. 2:
Drilled 1/11/89 - 2:30 P.M.

0' - 16' Overburden
16'- 33' Rock-gray basalt-hard rock
33'- 51' Rock-brown colored basalt-hard & consistent
51'- 68' Rock-consistent
68'- Troutdale Formation-cobbles

TEST HOLE NO. 3:
Drilled 1/11/89 - 3:35 P.M.

0' - 9' Overburden
9' - 30' Rock-soft gray basalt
30'- 70' Rock-hard gray basalt-consistent-
Stopped drilling at 70'

TEST HOLE NO. 4:
Drilled 1/11/89 - 4:30 P.M.

0' - 9' Overburden
9' - 50' Rock-gray basalt-hard-very consistent
50'- 56' Rock-gray basalt-seamy or blocky
Stopped drilling at 56'

TEST HOLE NO. 5:
Drilled 1/12/89 - 8:45 A.M.

0' - 7' Overburden-very dry
7' - 62' Rock-gray basalt-very consistent
62'- 65' Rock-gravelly
Stopped drilling at 65'

TEST HOLE NO. 6:
Drilled 1/12/89 - 9:40 A.M.

0' - 8' Overburden-dry
8' - 65' Rock-gray basalt-very hard-consistent
Stopped drilling at 65'

Test Pit Logs Continued

TEST HOLE NO. 7:
Drilled 1/12/89 - 10:35 A.M.

0' - 17' Overburden-moist to dry
17'- 27' Rock-soft weathered basalt
27'- 72' Rock-gray basalt-semi-hard
Stopped drilling at 72'

TEST HOLE NO. 8:
Drilled 1/12/89 - 11:40 A.M.

0' - 12' Overburden-dry
12'- 20' Rock-soft weathered basalt
20'- 40' Dirt-inconsistent
Stopped drilling at 40'

TEST HOLE NO. 9:
Drilled 1/12/89 - 1:05 P.M.

0' - 8' Overburden-dry
8' - 80' Rock-gray basalt-very hard-consistent
Stopped drilling at 80'

TEST HOLE NO. 10:
Drilled 1/12/89 - 1:40 P.M.

0' - 7' Overburden-dry
7' - 49' Rock-gray basalt-very hard
Stopped drilling at 49'

Reference: Meagher, Terry W. November, 1983, Raymond Smith Quarry Site, Corbett, Oregon, Report, Drill logs and sketch map.

BOULDER CREEK
CONSTRUCTION, INC.
7606 N.E. 11th Portland, Oregon 97211 (503) 289-5265

RE: RAYMOND SMITH QUARRY SITE
CORBETT, OR

Test drilling took place on the Raymond Smith property located between Howard Rd. and Krieriem Rd. on January 11th and 12th, 1999. A total of ten holes were drilled using a Joy Air Trac equipped with a VCR 360 drill hammer. Hole diameter was 3 1/2". The drilling of these test holes was to determine the amount and/or depth of overburden and the amount and/or depth of rock in an area laid out by a geologist. In this report, a map has been included to show approximate area of where these test holes were drilled and are numbered to correspond with the following pages of drill results. I do not claim to to be a geologist. My experience covers twelve (12) years drilling in this area. It is my opinion, after drilling this area, that a quanity of at least 4.5 million yards of gray basalt lies within. Underneath this layer lies the Troutdale formation which consists of rock cobbles and that quanity would be endless for the purpose of producing pit rock, as is most prominent in most of all East County quarries.

Submitted By:

Terry W. Meagher

Terry W. Meagher
President
Boulder Creek Construction, Inc.

Appendix 2 - Aerial photograph references

From Spencer B. Gross, Inc. Portland, OR
Photographs taken on 2-03-99
SBG-M99_004 1-1
SBG-M99_004 1-2
SBG-M99_004 1-3

From WAC Corp., Eugene, OR
Photographs taken 6-27-00
WAC-OO-WV 8-98
WAC-OO-WV 8-99

MATERIALS LABORATORY
800 AIRPORT RD. SE SALEM, OR 97301-4798
(503)986-3100
FAX(503)986-3096

Contract No.: EA No.: MCLUCAS & ASSOC. Lab No.: 02-000188
Project: PRIVATE TESTING - MCLUCAS & ASSOC - CORBETT QUARRY
Highway: County: Data Sheet No.: None
Contractor: FA No.:
Project Manager: Org Unit: Bid Item No.: NA
Submitted By: GLENDA MCLUCAS Org Unit: Sample No.: 2002-2
Material Source: CORBETT Qty Represented: SOURCE QUALITY
Sampled At: EAST END OF QUARRY Sampled By: Witnessed By:
DATE-Sampled: Received: 02/ 1/24 Tested: 02/ 1/31 Date Reported:
Class/Type: COMPLIANCE Use: QUARRY ROCK

Q or G: QUARRY AGGREGATE LABORATORY REPORT - QUARRY Size: QUARRY CHUNK

Sieve	% Passing
100 mm	
90	
75	
63	
50	
37.5	
25.0	
19.0	
16.0	
12.5	
9.5	
6.3	
4.75	
2.00	
425 µm	
150	
75	

	Mfg.	As Rec'd
TM 101 Sand Equivalent		
TM 102 Liquid Limit		
TM 103 Plastic Index		
TM 202 Fine Bulk Gravity		
S.S.D.		
Apparent		
Absorption (%)		
TM 203 Coarse Bulk Gravity	2.632	
S.S.D.	2.703	
Apparent	2.832	
Absorption (%)	2.68 %	
TM 208a Coarse Degrade Ht	12 mm	
P20	19.4 %	
TM 208b Fine Degrade Ht		
P20		

TM 206 Sodium Sulfate Loss
37.5 - 19.0: 3.3 %
19.0 - 9.5: 2.9 %
9.5 - 4.75: 3.5 % CA: 3.0 %
4.75 - 2.36: 7.4 %
2.36 - 1.18: 8.5 %
1.18 - 600 µm: 9.4 %
600 - 300 µm: 9.7 % FA: 9.0 %

TM 221 Friables
Weighted Avg.:
37.5 - 19.0:
19.0 - 9.5:
9.5 - 4.75:
4.75 - 1.18:
TM 222 Lightweight Pcs
Coarse: Fine:

TM 211 Abrasion
Type A 30.4 %

TM 225 Woodwaste:
TM 226 Dust/Clay:
TM 227 Cleanness:
TM 229 Elong Pcs:

1 @ 203 =$ 45.00
7 @ 206 = 29.00
1 @ 208A = 74.00
1 @ 211 = 97.00

NSM = Not Sufficient Material
REMARKS:
INFORMATIONAL

NOTE HIGH ABRASION LOSS.

TOTAL CHARGES: $ 419.00

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF THIS LABORATORY.

C: FILES ; GLENDA MCLUCAS - MCLUCAS & ASSOCIATES ; RAMIS, CREW, CORRIGAN & BACHRACH

OREGON DEPARTMENT OF TRANSPORTATION
MATERIALS LABORATORY
800 AIRPORT RD, SE SALEM, OR 97301-4798

(503)986-3100
FAX(503)986-3096

Contract No.: EA No.: MCLUCAS & ASSOC. Lab No.: 02-000145
Project: PRIVATE TESTING - MCLUCAS & ASSOC - CORBETT QUARRY
Highway: County: Data Sheet No.: None
Contractor: FA No.:
Project Manager: Org Unit: Bid Item No.: NA
Submitted By: GLENDA MCLUCAS Org Unit: Sample No.: 2002-1
Material Source: CORBETT Qty Represented: SOURCE QUALITY
Sampled At: WESTERN 1000' OF QUARRY Sampled By: Witnessed By:
DATE-Sampled: Received: 02/ 1/22 Tested: 02/ 1/29 Date Reported: JAN 3 0 2002
Class/Type: COMPLIANCE Use: QUARRY ROCK

Q or G: QUARRY

AGGREGATE LABORATORY REPORT - QUARAG

Size: QUARRY CHUNK

Sieve	% Passing
100 mm	
90	
75	
63	
50	
37.5	
25.0	
19.0	
16.0	
12.5	
9.5	
6.3	
4.75	
2.00	
425 µm	
150	
75	

	Mfg.	As Rec'd
TM 101 Sand Equivalent		
TM 102 Liquid Limit		
TM 103 Plastic Index		
TM 202 Fine Bulk Gravity		
S.S.D.		
Apparent		
Absorption (%)		
TM 203 Coarse Bulk Gravity	2.624	
S.S.D.	2.705	
Apparent	2.857	
Absorption (%)	3.11 %	
TM 208a Coarse Degrade Ht	15 mm	
P20	21.9 %	
TM 208b Fine Degrade Ht		
P20		

TM 206 Sodium Sulfate Loss
37.5 - 19.0: 3.4 %
19.0 - 9.5: 3.5 %
9.5 - 4.75: 5.8 % CA: 4.0 %
4.75 - 2.36: 12.1 %
2.36 - 1.18: 18.3 %
1.18 - 600 µm: 19.8 %
600 - 300 µm: 19.5 % FA: 17.0 %

TM 221 Friables
Weighted Avg.:
37.5 - 19.0:
19.0 - 9.5:
9.5 - 4.75:
4.75 - 1.18:
TM 222 Lightweight Pcs
Coarse: Fine:

TM 211 Abrasion
Type A 30.2 %

TM 225 Woodwaste:
TM 226 Dust/Clay:
TM 227 Cleanness:
TM 229 Elong Pcs:

This lab report is not a billing. It is for your information only. An invoice will be mailed to you. If you are not already in the ODOT financial system, you will be called for your FID number so that an invoice can be created for you.

1 @ 203	=$ 45.00
7 @ 206	= 29.00
1 @ 208A	= 74.00
1 @ 211	= 97.00

NSM = Not Sufficient Material

TOTAL CHARGES: $ 419.00

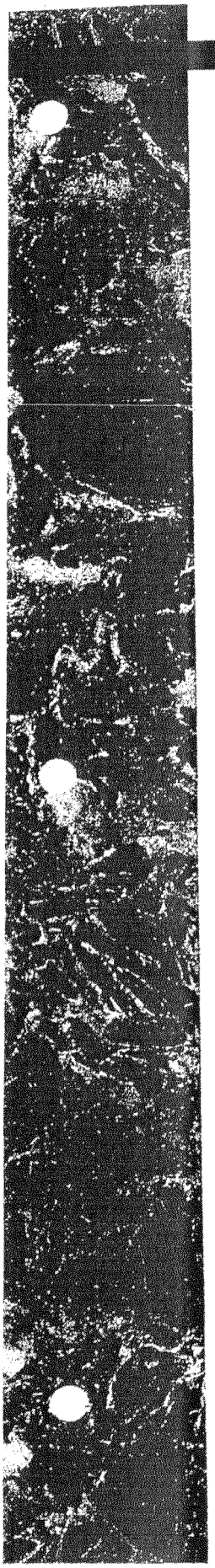
REMARKS:
INFORMATIONAL

NOTE HIGH LOSSES ON THE FINE SULFATES AND LAR ABRASION.

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF THIS LABORATORY.

C: FILES ; GLENDA MCLUCAS - MCLUCAS & ASSOCIATES ; RAMIS, CREW, CORRIGAN & BACHRACH

Kenneth L. Stone



February 7, 2002

Mr. Timothy V. Ramis
Ramis Crew Corrigan & Bachrach LLP
1727 N.W. Hoyt Street
Portland, OR 97209

Re: Petrographic Examination of Rocks - ASTM C295

Project: Corbett Quarry
Corbett, Oregon

Dear Mr. Ramis:

Enclosed is our Petrographic Services Report which contains results of our examination of the rock samples we received from McLucas and Associates on January 24, 2002.

All samples are saved for three months than discarded unless prior arrangements have been made. Prepared sections become a permanent part of our research library and are available for additional examination at any time.

Please call or E-mail us if you have any questions concerning this report.

Regards,

Dick M. Glasheen

Dick M. Glasheen, R.P.G.
Consulting Petrographer

DMG/ng
DL #681
Enclosure: Petrographic Services Report

Appendix 4

1104 Evergreen Drive, Newberg, OR 97132-1119 DominionLabs@aol.com Tel: 503-554-8925 Fax: 503-554-8958

DOMINION LABS
PETROGRAPHY FOR CONCRETE PRODUCTS & EARTH MATERIALS

PETROGRAPHIC SERVICES REPORT

Client: Ramis Crew Corrigan & Bachrach	**Date: February 7, 2002**
Client W.O. No.: 1/21/02 Letter	**Purpose: Classification/Characterization**
D.L. W.O. No.: 681	**Location: Corbett Quarry**
Petrographer: D. Glasheen	**Corbett, Oregon**

PETROGRAPHIC EXAMINATION OF ROCKS

Background

McLucas and Associates, Inc collected samples of rocks from a site in Howard Canyon southeast of Corbett, Oregon as part of a possible county permit extension request. Mrs. Glennda McLucas, R.P.G., requested the samples be classified based on mineralogy and texture (Tables 1 & 2). In addition, Mrs. McLucas also requested the rocks be characterized with respect to certain petrographical features affecting standard engineering tests (Table 3).

We understand that the pieces identified as "West 1000 feet" were collected from float (loose surface material) and the sample identified as "East 1000 feet" is shotrock. ODOT Materials Laboratory test results (summary in Table 4), sample photographs, and a copy of the Colorado School of Mines Classification System for igneous rocks are included in the Appendix.

Petrographic Methods

The rock samples were prepared and examined in general accordance with ASTM C295 (Standard Guide for Petrographic Examination of Aggregates for Concrete – Section 11 Ledge Rock). Longitudinal slabs were sawn and studied using a 10X hand-lens and stereo-zoom microscope (16-80X) to note overall rock fabric, weathering, and generally mineralogy. Thin-sections were prepared from representative parts of the slabs and used to perform point-counts and confirm mineralogy with a polarizing microscope at 100 magnification. Volume percentage of minerals obtained through point-counts (300 points) and rock texture were used to classify the samples following the Colorado School of Mines System (Appendix).

Summary of Rock Classification

Table No. 1

Location and Sample Type	Classification
#1 West 1000 feet (float)	Light-gray, fine-grained, pilotaxitic, olivine basalt porphyry
#2 West 1000 feet (float)	Gray, fine-grained, pilo-diktytaxitic olivine basalt porphyry
#1 East 1000 feet (shotrock)	Gray, fine-grained, diktytaxitic olivine basalt porphyry
#2 East 1000 feet (shotrock)	Light-gray, fine-grained, diktytaxitic olivine basalt porphyry

1104 Evergreen Drive, Newberg, OR 97132-1119 Dominionlabs@aol.com Tel: 503-554-8925 Fax: 503-554-8958

Description of Rocks Examined

West 1000 feet Samples

The two float pieces examined are light-gray to gray, fine-grained, olivine basalt porphyries with textures ranging from pilotaxitic to diktytaxitic. Phenocrysts consist of partially iddingsitized olivine typically ranging from 0.3mm to 0.5mm in length with a few reaching 1mm in dimension. The groundmass is predominantly plagioclase feldspar microlites ranging in composition from bytownite to labradorite. Intergranular pyroxene and iron ore grains are randomly distributed throughout the groundmass. Phenocrysts are generally euhedral and plagioclase microlites range from euhedral to subhedral.

East 1000 Feet Samples

The two shotrock pieces analyzed are light-gray to gray, fine-grained, olivine basalt porphyries with dominantly diktytaxitic texture. Phenocrysts consist of partially iddingsitized olivine typically 0.2mm to 0.3mm in length with a few reaching 0.5mm in dimension. The groundmass is predominantly plagioclase feldspar microlites ranging in composition from bytownite to labradorite. Pyroxene and iron ore grains are randomly distributed throughout the groundmass. Phenocrysts are generally euhedral and laths of plagioclase range from euhedral to subhedral.

Petrographic Comparison of Samples

All the samples are relatively similar in mineralogy, texture, and observed physical properties. Olivine phenocrysts in the West 1000 feet rock may be slightly more weathered overall than in the East 1000 feet rock. This difference in degree of weathering may be due to the type of available sample: float rock versus shotrock. The East 1000 feet rock generally shows more of an open-grained texture (diktytaxitic) than the westerly samples.

Petrographic Observations and ODOT Test Results

Scratch testing using minerals from Mohs Scale showed relative hardness (4½-5) to be similar in all the rock samples. This appears to correlate well with the narrow range of LAR and OAD test results (Table 4). A diktytaxitic texture of plagioclase microlites around irregular-shaped gas voids looks like a microscopic "log jam" (Fig. 8). Abrasion, impact, and grinding during testing might "collapse" some of the "bridged" crystals into the gas voids producing overall smaller pieces without true attrition. It should be noted that fresh plagioclase feldspar and olivine have a hardness of 6-6½ and 6½-7, respectively (Mohs Scale).

The sodium sulfate test attempts to simulate freeze/thaw action. High losses in the fine aggregate size might be due in part to the relatively abundant microscopic voids (diktytaxitic texture) that could hasten ingress of fluids. Capillary testing showed some areas within the rocks to be highly absorptive of water drops and most fresh surfaces to be at least moderately absorptive. In addition, slight to moderately weathered crystals in these rocks provide less resistance to tensile stresses than rocks containing fresh crystals.

Table No. 2 – Rock Classification (after Colorado School of Mines)

	Primary Minerals			Secondary Minerals	
		Accessory Minerals		Altered Primary &	
Rock Name (Location)	**Essential Minerals** (%)	**Characterizing** (%)	**Minor** (%)	Post-solidification Minerals (%)	**Glass & Voids** (%)
Light Gray Olivine Basalt (#1 West 1000 ft)	Plagioclase (calcic) = 55 Feldspathoids = tr Plagioclase (sodic) = 4 Potash Feldspar = 2 Quartz = tr	Olivine = 15 Pyroxene = 5	Iron Ore = 3	Uralite = 1 Sericite = 1 Iddingsite = 4 Clay = 1	Glass = 0 Voids = 9
Light Gray Olivine Basalt (#2 West 1000 ft)	Plagioclase (calcic) = 57 Feldspathoids = tr Plagioclase (sodic) = 4 Potash Feldspar = 1 Quartz = tr	Olivine = 13 Pyroxene = 6	Iron Ore = 4	Uralite = tr Sericite = 1 Iddingsite = 5 Clay = 1	Glass = tr Voids = 8
Light Gray Olivine Basalt (#1 East 1000 ft)	Plagioclase (calcic) = 58 Feldspathoids = tr Plagioclase (sodic) = 3 Potash Feldspar = 1 Quartz = tr	Olivine = 14 Pyroxene = 4	Iron Ore = 5	Uralite = tr Sericite = 1 Iddingsite = 3 Clay = 1	Glass = 0 Voids = 10
Light Gray Olivine Basalt (#2 East 1000 ft)	Plagioclase (calcic)= 62 Feldspathoids=1 Plagioclase (sodic) = 4 Potash Feldspar = 1 Quartz = 0	Olivine = 10 Pyroxene = 4	Iron Ore = 4	Uralite = tr Sericite = tr Iddingsite = 2 Clay = tr	Glass = tr Voids = 12

1104 Evergreen Drive, Newberg, OR 97132-1119 Dominionlabs@aol.com Tel: 503-554-8925 Fax: 503-554-8958

Table No. 3 – Petrographic Characterization of Rocks

Sampling Location	Rock Name	Scratch Hardness	Relative Hardness	Capillarity (water drop)	Texture[1]	Shape[2]	Secondary Minerals[3]	Micro-cracks[4]	Grain Size	Porosity/ Packing
#1 West 1000 ft	Olivine Basalt	4½ -5 (Mohs)	R2-R3 (ODOT)	Rapid absorption	Rough	Angular	7%	Trace	Fine grained Small phenocrysts	Mostly Pilotaxitic
#2 West 1000 ft	Olivine Basalt	5 (Mohs)	R3 (ODOT)	Rapid-Mod. absorption	Rough	Angular	7%	Trace	Fine grained Small phenocrysts	Mixed Pilo-Diktytaxitic
#1 East 1000 ft	Olivine Basalt	5 (Mohs)	R3 (ODOT)	Moderate absorption	Rough	Angular	5%	Trace	Fine grained Small phenocrysts	Diktytaxitic
#2 East 1000 ft	Olivine Basalt	4½ -5 (Mohs)	R2-R3 (ODOT)	Moderate absorption	Rough	Angular	2%	Trace	Fine grained Small phenocrysts	Diktytaxitic

1-Texture refers to smoothness of a freshly broken surface. 2-Shape of a freshly broken piece. 3-Secondary Minerals include altered primary minerals and natural glass content. 4-Includes microcracks and joints. Some cracks may be due to hammer impact or blasting.

Table No. 4 – Summary of ODOT Soundness and Durability Testing

Sampling Location	Sample Size	Degradation[1] by abrasion, impact, grinding (LAR-TM 211)	Degradation[2] by abrasion (OAD-TM208a)	Porosity (Absorption-TM 203)	Soundness[3] by simulation of freeze/thaw action (Na_2SO_4-TM 206)
West 1000 ft	Quarry Chunk	30.2%	21.9% Ht = 15mm Coarse	3.11% Coarse	4.0% CA 17.0% FA
East 1000 ft	Quarry Chunk	30.4%	19.4% Ht = 12mm Coarse	2.68% Coarse	3.0% CA 9.0% FA

1-LAR maximum loss is 30.0%. 2-OAD maximum loss is 30.0% and maximum sediment height is 75mm. 3-Soundness maximum loss for CA is 12% and FA is 10%.

The above observations specifically apply to the samples as received for examination and analysis. This report may be copied only in its entirety without prior written approval from this office.

1104 Evergreen Drive, Newberg, OR 97132-1119 E-mail: Dominionlabs@aol.com Tel: 503-554-8925 Fax: 503-554-8958

RECEIVED
01 JAN 29 PM 2:31
MULT. COUNTY
PLANNING SECTION

LANDSLIDE TECHNOLOGY
10250 S.W. Greenburg Road, Suite 111
Portland, Oregon 97223
Phone 503/452-1200 Fax 503/452-1528

Interstate Rock Products, Inc. 1339
10019 NE 72nd Avenue
Vancouver, WA 98686 January 25, 2001

Attn: Mr. Jerry Cates

Howard Canyon Quarry
Geologic Hazard Assessment
Corbett, Oregon

Dear Mr. Cates:

Following the request of Mike Pauletto, we have completed a geologic hazard assessment for the Howard Canyon Quarry. This letter-report is a summary of our assessment.

Background

The site is currently being operated as a quarry that produces decorative rock and building stone. The site is located on a broad ridge approximately three miles southeast of Corbett, Oregon. We understand that Interstate Rock Products, Inc., is considering expansion of the quarry operation.

Prior to the site visit, published topographic and geologic maps and available reports were reviewed for information on the project area. The available reports and maps included the following:

- Final Reclamation Map for Interstate Rock Corbett Quarry (Olson Engineering, sheets 1 through 5)
- Geologic Reconnaissance, Howard Canyon Quarry (H.G. Schlicker & Associates, January 9, 1989, letter to Raymond Smith)
- USGS Washougal, WA-OR and Bridal Veil, OR-WA 7.5 min. Quadrangle Maps
- Geologic and Engineering Slope-Hazard Studies, Unincorporated Multnomah County, Oregon (Shannon and Wilson, 1978)
- Landslide Locations and Zones of High Landslide Potential in the Portland

Appendix 5

1339

Site Visit

An engineering geologist from our firm performed a brief site visit on January 24, 2001, accompanied by Mr. Michael Cates. The haul roads located on the north and south sides of the project site were traversed and the quarry operations area was observed. The top of the ridge, excluding the quarry operation area, is nearly flat with gentle rolling topography that is currently being utilized as pasture. The flanks of the ridge consist of steep slopes (approximately 25° to 45°) covered with deciduous trees, scattered fir trees and moderate to heavy undergrowth. Less steeply sloping benches are located approximately half way down the south side of the ridge. The two haul roads appear to have been constructed using cut and cast methods.

Geologic Conditions

The top of the ridge is capped by basalt rock from the Boring Lava Formation. This is the material that is being mined. A relatively thin layer of sandy silt with trace clay soil, or loess, overlies the Boring Lava. At the base of the Boring Lava is the Troutdale Formation. This unit consists of silty sand and gravelly sand. Clayey zones were observed in the upper portion of this unit. These clayey layers, similar to others found in the Troutdale Formation throughout the region, are susceptible to sliding. Where present, this material significantly reduces the strength and stability of the unit. The benched slopes, located between elevations 725 and 625 feet on the south side of the ridge, have a general appearance that, in our opinion, is due to ancient slope movement. These features are common throughout the surrounding area, which have similar slope steepness and subsurface geologic conditions. Also, a large landslide occurring in the same geologic material has previously been mapped about ½-mile to the east of the quarry on the north side of the ridge.

Geologic Hazards

No active slope movement was observed within the quarry or along the haul roads. Minor slumping was observed along the road running parallel to Howard Canyon Creek, south of the project site. Hummocky and irregular topography, observed at the project site, is indicative of ancient landslide activity. As stated above, these features are common throughout the surrounding area where slopes have similar steepness and subsurface geologic conditions.

Based on our reconnaissance, no slumping or sliding is anticipated in the quarry rock that is being mined. Fill, overburden and rock stockpiles should not be

1339

located on or near slopes that are steeper than 2H to 1V. We recommend that placement of these materials should be confined to the quarry rock floor as much as possible. When quarry operations are expanded, concentrated runoff is expected to increase. Increased concentration and quantity of water flowing onto the slopes below the quarry and natural drainage swales could cause erosion and possible saturation or undercutting of local slopes, and have a negative impact on local slope stability. Storm runoff retention ponds can locally increase groundwater levels, which would also have a negative impact on slope stability.

Conclusion

No active slope movement was observed within the Howard Canyon Quarry or along the haul roads. Suspect ancient landslide terrain that is associated with specific geologic conditions common throughout the region is present in the project area. Based on the occurrence of these geologic conditions, the development of stockpiles adjacent to steep slopes, and retention ponds and concentrated runoff on the slopes below the ridges basalt cap, should be evaluated for their impact on slope stability on a site-specific basis.

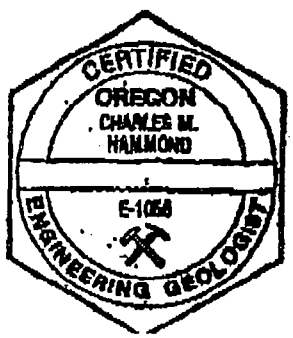
We trust this letter-report is sufficient for your requirements. Please call if you have any questions or concerns.

Sincerely,

LANDSLIDE TECHNOLOGY

By
Brent A. Black, C.E.G.
Project Geologist

By
Charles M. Hammond, C.E.G.
Senior Associate Geologist



Allen H. Throop
Geologist

Allen H. Throop
2340 NW Arthur Ave.
Corvallis, OR 97330

541 753-1804
e-mail: throopa@peak.org

Professional employment

1996 – Present	Adjunct Professor – Linfield College – various geology related subjects
1999 – Present	Consultant in mined land reclamation, storm water control and geology Clients include: US Forest Service, Mid-Valley Gravel, S2F Corporation and the Oregon Department of Geology and Mineral Industries
1980 – 1999	Oregon Department of Geology and Mineral Industries (DOGAMI), Mined Land Reclamation Program – reclamationist and geologist
1995 – Present	Linn Benton Community College – Benton Center – part-time instructor
1977 – 1979	Otisca Limited - manager of an experimental coal cleaning facility
1970 – 1976	Electrolytic Zinc Company of Australasia Ltd – exploration and mining geologist
1968 – 1970	Inspiration Consolidated Copper Company – mine and exploration geologist
1969 – 1970	Pinal Junior College, Miami, AZ – part-time instructor of geology

Education

1976	Diploma of Education – State College of Victoria at Hawthorn, Australia. This was a one-year graduate level program similar to the MAT programs in this country.
1970	Master of Science in geology – Arizona State University, Tempe, AZ
1966	Bachelor of Arts in geology – Colby College, Waterville, ME

Professional qualifications

Registered geologist in Oregon

Relevant publications

1991	Should the Pits be Filled? *Geotimes*, v. 38, no.11, pgs. 20-22.
1989	Cyanide in Mining, *Oregon Geology*, v.1, no. 1, pg. 9-11
1981	The Rock Material Resources of Polk, Yamhill, Marion, and Linn counties, Oregon, Dept. of Geology and Mineral Industries, open files report O-81-7. Numerous papers and talks to professional and non-professional groups on mining and reclamation.

During my years with DOGAMI, I helped write numerous revisions to the rules relating to mined land reclamation. My main assignment while with DOGAMI was implementation of those rules. One of my last assignments was overseeing DOGAMI's takeover of DEQ's storm water requirements at aggregate mine sites throughout Oregon.

Appendix C

Olson Engineering Mining Plans

OLSON ENGINEERING INC.

LAND SURVEYORS
ENGINEERS

1111 Broadway
Vancouver, WA 98660
FAX (360) 695-1385
PHONE (360) 695-1385

LETTER OF TRANSMITTAL

DATE 4/9/02 JOB NO.: 6521.00.01
RE: Interstate Rock Corbett Quarry

TO: Winterbrook Planning
310 SW Fourth Ave., Suite 1000
Portland, OR 97204

ATTN.: Tom Armstrong

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via _____ the following items.

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change Order ☒ federal express

COPIES	DATE	NO.	DESCRIPTION
1	4/9/02		Signed Eng plans, sheets 1-8
1	4/4/02		Rock Pit Alternatives

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19 _____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS: Attached are the plans you requested. Please do not hesitate to call with any questions.

RECEIVED
APR 1 0 2002
BY:_____

COPY TO:

SIGNED Todd Johnson

If enclosures are not as noted, kindly notify us at once.

Corbett Rock Pit Alternatives

	Extraction Per Year (cy)					
	0	5000	35000	50000	75000	200000
A. IMPACT AREA / TRANSPORTATION						
1. Overall Mine Impact Area	-	24AC	24AC	24AC	24AC	24AC
2. Total area impacted at any time	-	5AC	5AC	5AC	5AC	5-10AC
3. Total available cubic yards of rock	-	2M	2M	2M	2M	2M
4. Decorative / Crushed Rock Split		80/20	60/40	40/60	30/70	0/100
5. Total Extraction Period	-	400 Yrs	60 Yrs	40 yrs	30 yrs	10 yrs
6. Amount of Rock to I-84	-	←	Up to extr. Amount specified for total yrs.			→
7. Truck Route	-	none defined	Howard Canyon - Littlepage- Hurlburt- Columbia River Hwy I-84			
8. Av. No. Trucks/Day to Pit	-	2	14	20	30	80
B. MINE PROCESS						
1. Blasting Per Year L=Low H=High Yield	-	1H	3L 1H	4L 1H	6L 3H	8L 5H
2. Drilling	-	1 wk	4 wks	5 wks	8 wks	20wks
3. Rock Splitting	-	50 days	75 days	75 days	75 days	-
4. Rock Crushing	-	10 days	30 days	60 days	100 days	200 days
5. Rock Loading	-	0.5 hr/day	2.2 hr/day	2.6 hr/day	3.2 hr/day	5.0 hr/day
6. Rock Hauling	-	0.3 hr/day	0.8 hr/day	1.2 hr/day	1.5 hr/day	3 hr/day
7. Hours of Operation	-	7am - 5pm	7am - 5pm	7am - 5pm	7am - 5pm	7am - 5pm
C. IMPACT MITIGATION						
1. STORMWATER						
a) Buffers	-	No	Yes	Yes	Yes	Yes
b) Sediment Control	-	Yes	Yes	Yes	Yes	Yes
c) Truck Washdown	-	No	Yes	Yes	Yes	Yes
d) Quantity Control	-	No	Yes	Yes	Yes	Yes
e) Maintain Creek Flows	-	No	Yes	Yes	Yes	Yes
f) E. C. Disturbed Area	-	Yes	Yes	Yes	Yes	Yes
2. SOUND						
a) Berms	-	Natural Berms Provide all req. mitigation after "x" years				
b) Sound Walls	-	←	Only needed for first "x" years			→
- period of "x" years	-	5	1	1	1	1
3. TRAFFIC						
a) Maint. Fund ($/cy. Extracted)	-	None	(35000 x)$	(50000 x)$	(75000 x)$	(200000 x)$
D. WESTERLY 1000'						
1. Addt'l area to be added to overall impact area	-	7.0 AC	7.0 AC	7.0 AC	7.0 AC	7.0 AC
2. Total extra yds. Available	-	400,000	400,000	400,000	400,000	400,000
3. Total extra years of extraction	-	80	12	8	6	2
4. Extra sound mitigation	-	Minimal natural berms so sound walls would be needed				
5. Watershed impacts	-	Impacts to knieriem creek watershed - req. extra mitigation				
6. Access / Haul roads	-	Probably need haul/access roads external of pit				

z:/6000/6500/6521 Corbett Rock Pit Alternatives.doc 4/9/02
TRJ/nsk

Corbett Rock Pit Alternatives

Equipment:

Excavators - 42,000 - 74,000 Pound Machines / On the average a 48,000 - 54,000 Pound Machine will be used.

Loaders - 16,000 - 105,900 Pound Machines / On the average a 35,000 - 45,000 Pound Machine will be used.

Forklift - 6,000 - 15,000 Pound Machines / Average 6,000 -8,000 Pound Machine will be used.

Dozers - 40,000 - 100,000 Pound Machines / Average 100,000 Pound D8 will be used to clear out mine.

Blasting:

Under .25 (1.4 pound) pounds of powder will be used per yard.

A seismograph will be used.

The shot will not exceed 1.2 on the seismograph 100 foot away from the shot.

z:/6000/6500/6521 Corbett Rock Pit Alternatives.doc 4/9/02
TRJ/nsk

SITE MINING PLAN
CORBETT ROCK QUARRY

LOCATED IN SECTION 1 T1S R4EWM, AND SECTION 36 T1N, R4EWM
MULTNOMAH COUNTY, OREGON

STORM SEWER NOTES:

1) ALL STORM SEWER PIPE SHALL BE ASTM M-18 DOUBLE WALL, SMOOTH INTERIOR PIPE OR APPROVED EQUAL. PIPE SHALL BE INSTALLED WITH WATER TIGHT JOINTS AND AS PER THE MANUFACTURER'S RECOMMENDATIONS.

2) PIPE AND FITTINGS SHALL BE MADE OF POLYETHYLENE (PE) COMPOUNDED WHICH CONFORM TO THE REQUIREMENTS OF CELL CLASS 324420C (MIN) AS DEFINED AND SPECIFIED IN ASTM D3350, EXCEPT THAT THE CARBON BLACK SHALL NOT EXCEED 3 PERCENT.

3) THE PIPE AND FITTINGS SHALL BE FREE OF FOREIGN INCLUSIONS AND VISIBLE DEFECTS. FITTINGS SUPPLIED BY MANUFACTURERS OTHER THAN THE SUPPLIER OF THE PIPE SHALL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE PROJECT ENGINEER. THE ENDS OF THE PIPE SHALL BE CUT SQUARELY AND CLEANLY SO AS NOT TO HORIZONTALLY DISTORT JOINING.

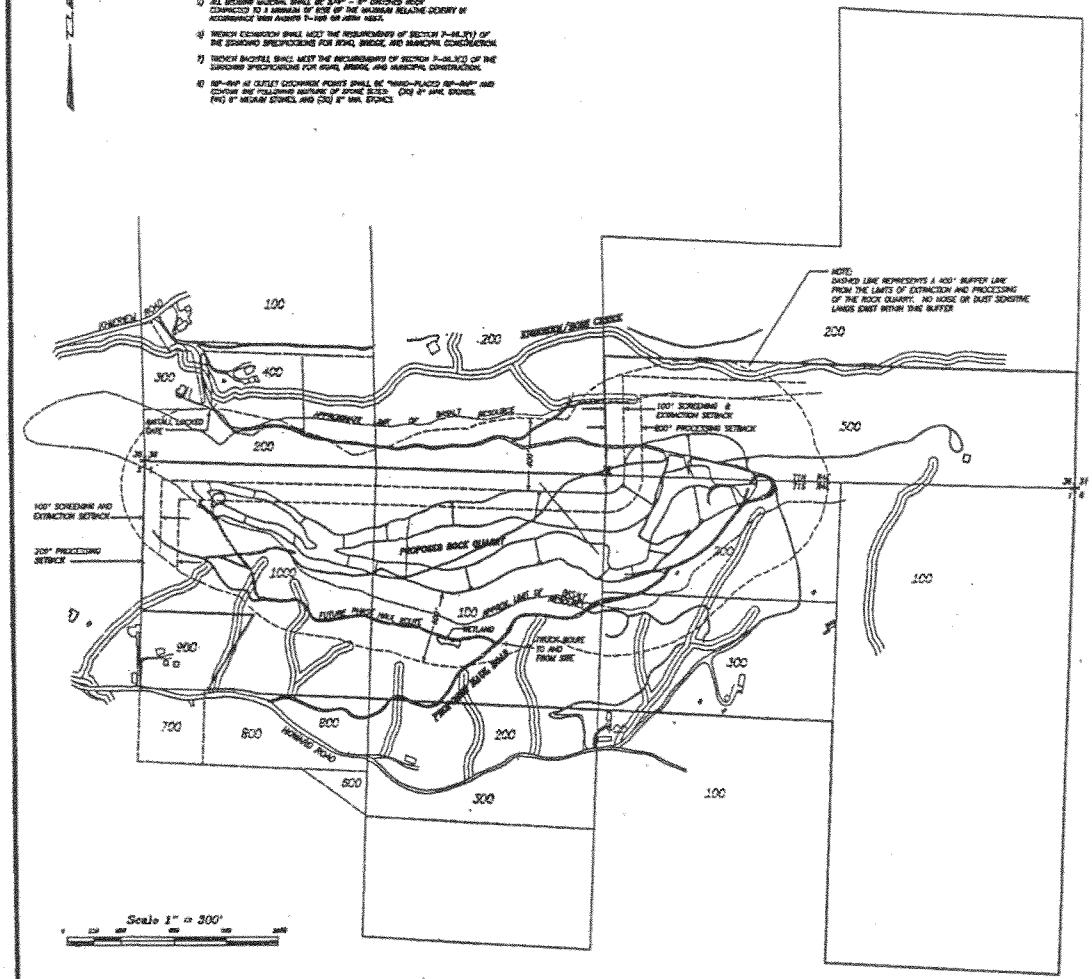
4) ALL JOINTS SHALL BE RUBBER-MOLDED PVC WITH RUBBER GASKET OR WINDSORE LOCK JOINT MEETING THE PIPE MATERIAL.

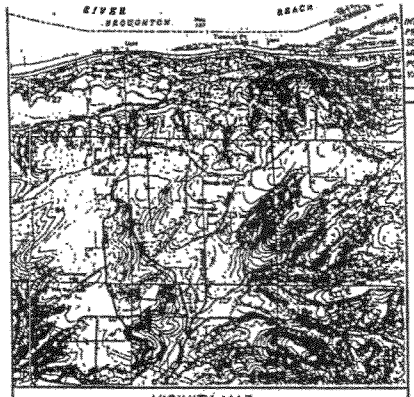
5) ALL BEDDING MATERIAL SHALL BE 3/4" - 1" CRUSHED ROCK COMPACTED TO A MINIMUM OF 90% OF THE MAXIMUM RELATIVE DENSITY IN ACCORDANCE WITH AASHTO T-180 OR ASTM D698.

6) TRENCH EXCAVATION SHALL MEET THE REQUIREMENTS OF SECTION 7-08.3(1) OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.

7) TRENCH BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 7-08.3(2) OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.

8) RIP-RAP AT OUTLET DISCHARGE POINTS SHALL BE "HAND-PLACED RIP-RAP" AND CONSIST OF THE FOLLOWING MIXTURE OF STONE SIZES: (20%) 3" MINUS STONES, (40%) 8" MINUS STONES, AND (30%) 12" MIN. STONES.





VICINITY MAP
NTS

GENERAL NOTES:

1) EXISTING VEGETATION CONSISTS OF PASTURE GRASS AND BLACKBERRY BUSHES, ADJACENT VEGETATION CONSISTS OF ALDER, BIGLEAF MAPLE, VINE MAPLE, WILLOWS, AND BIG LEAF MAPLE. POST-RECLAMATION USE WILL BE PASTURE LAND AND/OR NON-FORESTRY.

2) TOPSOIL AND OVERBURDEN WILL BE REMOVED IN PHASES AND STOCKPILED FOR FUTURE RECLAMATION. THE STOCKPILED MATERIAL SHALL BE ENCOMPASSED TO PREVENT EROSION.

3) FINISHED SLOPES SHALL BE GRADED AT 2:1 OR GENTLER. FINISHED SLOPE TO BE COVERED WITH SOIL FROM STOCKPILES PLACED BY TRACTED EQUIPMENT AS NEAR ANGLED TO THE CONTOURS. HYDROSEEDED FINISHED SLOPES TO PREVENT EROSION.

4) NATURAL TOPOGRAPHY AND VEGETATION PROVIDES VISUAL SCREENING TO THE NORTH, EAST AND WEST. TO THE SOUTH, A CONSTRUCTION BERM 20 FEET TALL (MIN.) WITH A 2:1 SIDE SLOPE'S WILL HELP PROVIDE VISUAL AND SOUND SCREENING.

5) A FIFTY-FIVE (25) FOOT BUFFER SHALL BE MAINTAINED ALONG STREAMS AND NATURAL DRAINAGE CHANNELS. BUFFERS SHALL BE ESTABLISHED BY PLACING SELF FORCE ON THE BUFFER LIMITS OR CHANNELS FROM THE HIGHEST AREA.

6) SETBACKS FROM PROPERTY LINES ARE AS FOLLOWED:

SCREENING AND EXTRACTION - 100 FEET
PROCESSING - 400 FEET
NOISE & DUST SENSITIVE LANDS - 400 FEET

7) OPERATING HOURS AND BLASTING SHALL FOLLOW THE GUIDELINES SET FORTH IN THE FORMAT CANYON RECLAMATION REPORT. SPECIFIC ZONE EXCEPTIONS MAY BE APPROVED PURSUANT TO THE PROVISIONS OF MCLUC 11.15.6705 - MULTNOMAH COUNTY CODE.

8) SEDIMENTS OF THE PERMIT AREA WILL BE RECLAIMED AT TIMES AREAS ARE DEPLETED OF ROCK, OVERBURDEN AND TOPSOIL WILL BE GRADED IN THE AREAS SHOWN WITHIN THAT PLAN SET. THIS MATERIAL SHALL BE STOCKPILED AND HYDROSEEDED WITHIN THE FIRST SEASON PRIOR TO MINING PHASE.

9) QUARRY BLUFFS WILL BE GRADED TO A SLOPE OF NOT STEEPER THAN 2:1, AS RECOMMED BY COOMA. FOUR FEET OF COMPOSITE OVERBURDEN, REJECTS, AND TOPSOIL SHALL BE PLACED IN RECLAIMED AREAS INTENDED TO BE USED AS PASTURE, AND A 12" THICK LAYER TO BE PLACED IN RECLAIMED AREAS TO BE USED AS PASTURE.

10) THE QUARRY FLOOR IS TO BE GRADED TO A MINIMUM SLOPE OF 1% TOWARD THE SOUTHEASTERN PORTION OF THE SITE. THE WESTERN QUARRY FLOOR SHALL BE GRADED TOWARD THE WESTERN END OF THE SITE.

STORMWATER NOTES:

1) STORMWATER RUNOFF WILL BE ROUTED THROUGH STORM INLETS AND TWO SEDIMENT PONDS. IN ACCORDANCE WITH COOMA RECOMMENDATIONS, THE STORMWATER FACILITIES ARE DESIGNED TO HANDLE THE 25 YEAR STORM.

SHEET INDEX:

1) COVER SHEET
2) EXISTING CONDITIONS PLAN
3) ONSITE PHASING PLAN
4) PHASE 1-4 STORM SYSTEM PLAN
5) PHASE 5-6 STORM SYSTEM PLAN
6) PHASE 7 STORM SYSTEM PLAN
7) FINAL RECLAMATION PLANTING PLAN
8) STORMWATER DETAIL SHEET

MULTNOMAH COUNTY

APPROVED: _____
DIRECTOR OF PUBLIC WORKS — DATE

INTERSTATE ROCK PRODUCTS, INC.
SECTION 1, T1S, R4E, W.M.,
MULTNOMAH COUNTY, OREGON
PO BOX 3936
VANCOUVER, WA 98663

COVER SHEET FOR:
INTERSTATE ROCK CORBETT QUARRY

OLSON ENGINEERING INC.
LAND SURVEYORS
ENGINEERS
1111 BROADWAY, VANCOUVER, WA 98660

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 14, 1978
MICHAEL J. OLSON
EXPIRES: 6-30-02

CHANGES / REVISIONS

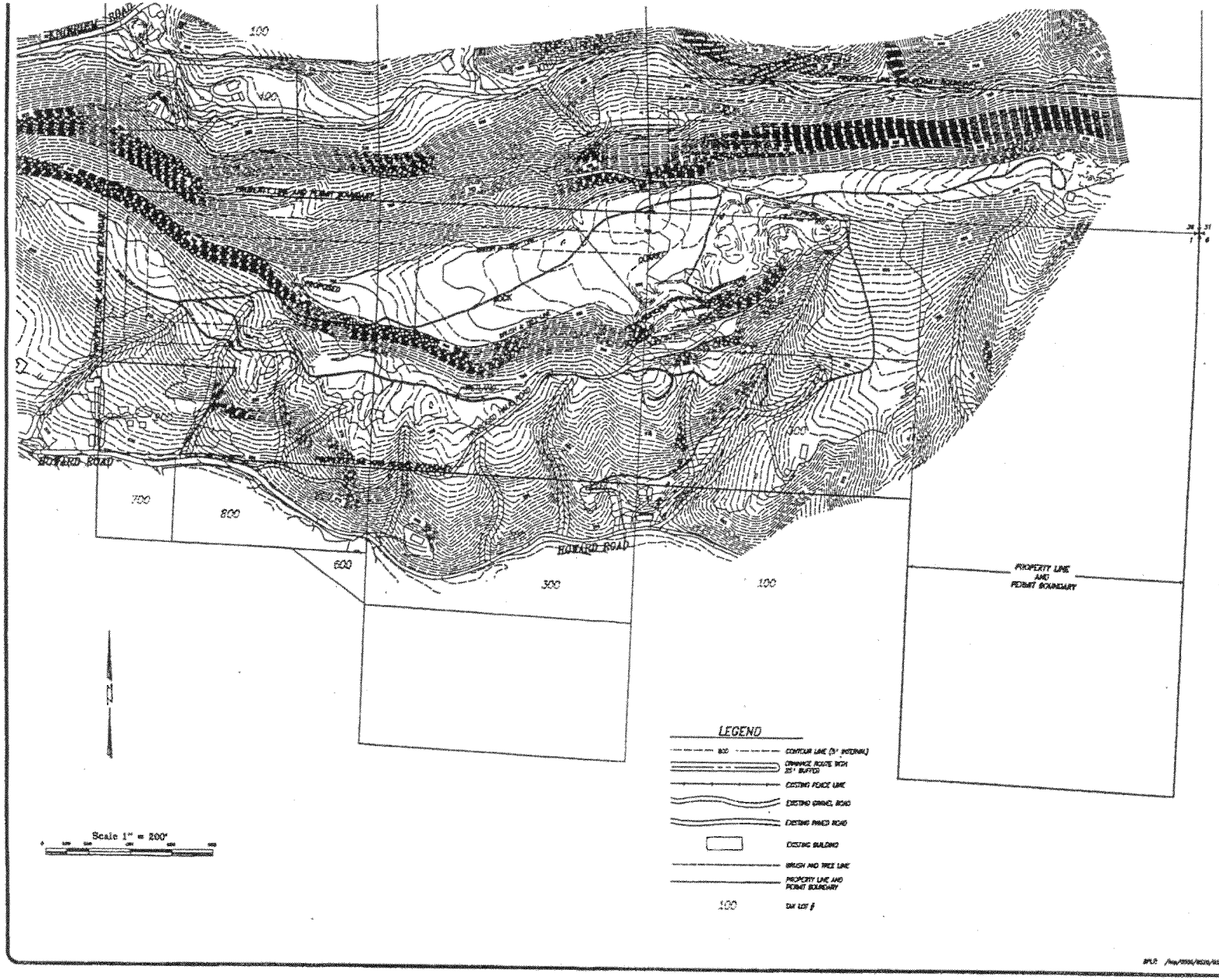
DESCRIPTION	DATE

DESIGNED: MJO
DRAWN: DDT
CHECKED: PAT
DATE: FEBRUARY 2002
SCALE: AS 1" = 300'

COPYRIGHT 2002, OLSON ENGINEERING, INC.

INTERSTATE ROCK CORBETT QUARRY
JOB NO. 9521.07.01

SHEET
1 of 8



INTERSTATE ROCK PRODUCTS, INC.
SECTION 1, T1S, R4E, W.M.
MULTNOMAH COUNTY, OREGON
PO BOX 3936
VANCOUVER, WA 98662

EXISTING CONDITIONS PLAN FOR:

INTERSTATE ROCK CORBETT QUARRY

OLSON ENGINEERING, INC.
LAND SURVEYORS
ENGINEERS
1111 BROADWAY, VANCOUVER, WA 98660

EXP. DATE: 6-30-02

4/24/02

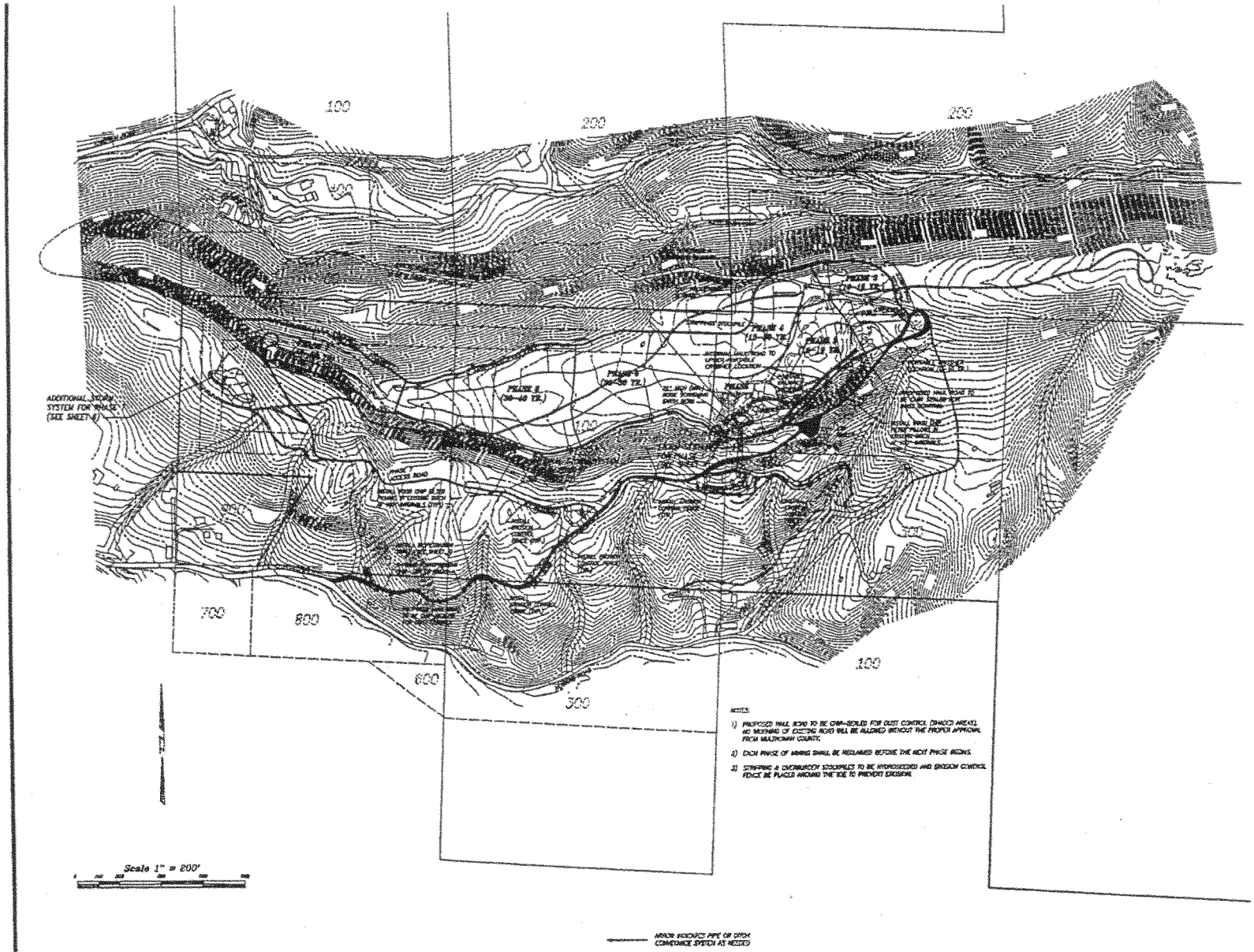
COMMENTS / REVISIONS	
DESCRIPTION	DATE

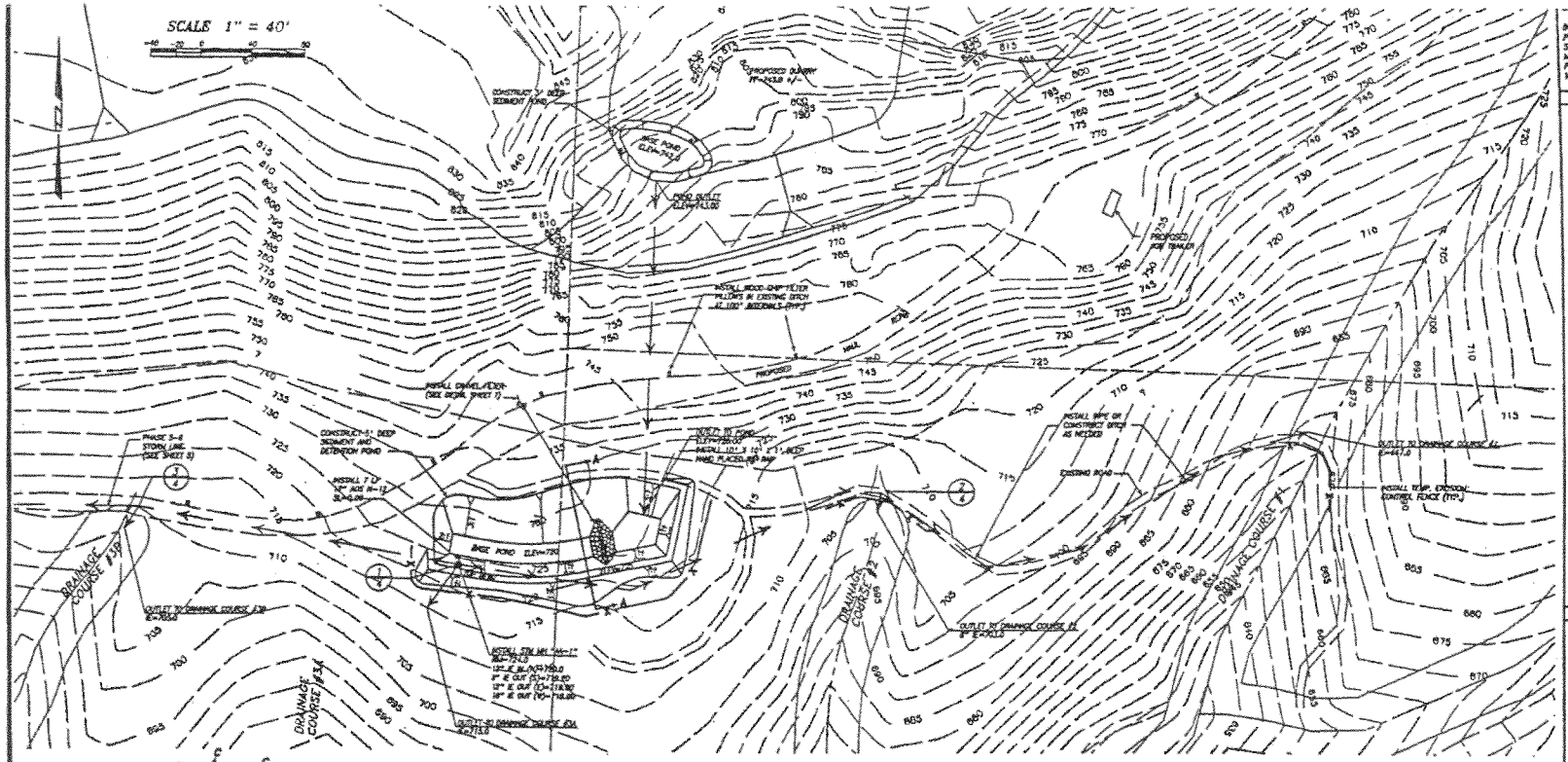
DESIGNED: MDC
DRAWN: CRT
CHECKED: PHT
DATE: FEBRUARY 2002
SCALE: H: 1" = 200'
V:
COPYRIGHT 2002, OLSON ENGINEERING, INC.

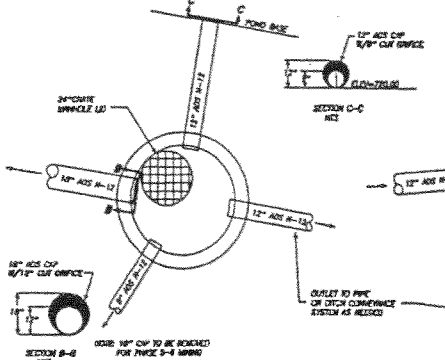
INTERSTATE ROCK
CORBETT QUARRY

JOB NO. 4531.01.01

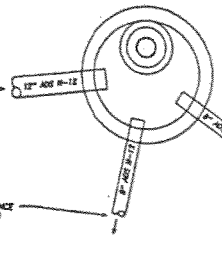
SHEET
2 of 8


100
200
200
700
800
600
300
100
ADDITIONAL STORM SYSTEM FOR PHASE 7 (SEE SHEET 4)
PHASE 6 (30-40 YR.)
PHASE 7 (30-40 YR.)
PHASE 8 (30-40 YR.)
PHASE 9 (30-40 YR.)
PHASE 10 (30-40 YR.)
PHASE 11 (30-40 YR.)
PHASE 12 (30-40 YR.)
PHASE 13 (30-40 YR.)
PHASE 14 (30-40 YR.)
PHASE 15 (30-40 YR.)
PHASE

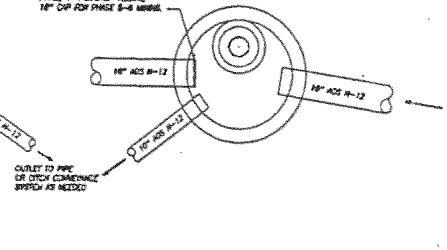




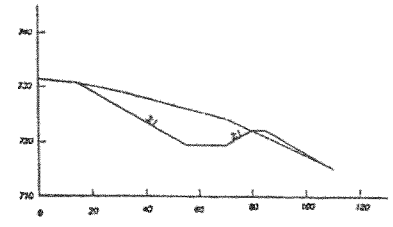
1/4 STORM MANHOLE "AA-1"
NTS



2/4 STORM MANHOLE "AA-4"
NTS



3/4 STORM MANHOLE "BB-1"
NTS



SECTION A-A
SEDIMENT/DETENTION POND
SCALE: 1"=30'
1"=10'

INTERSTATE ROCK PRODUCT, INC.
SECTION 1, T1S, R4E, W.M.,
MULTNOMAH COUNTY, OREGON
P.O. BOX 3938
VANCOUVER, WA 98662

PHASE 1-4 STORM SYSTEM PLAN FOR:
INTERSTATE ROCK CORBETT QUARRY

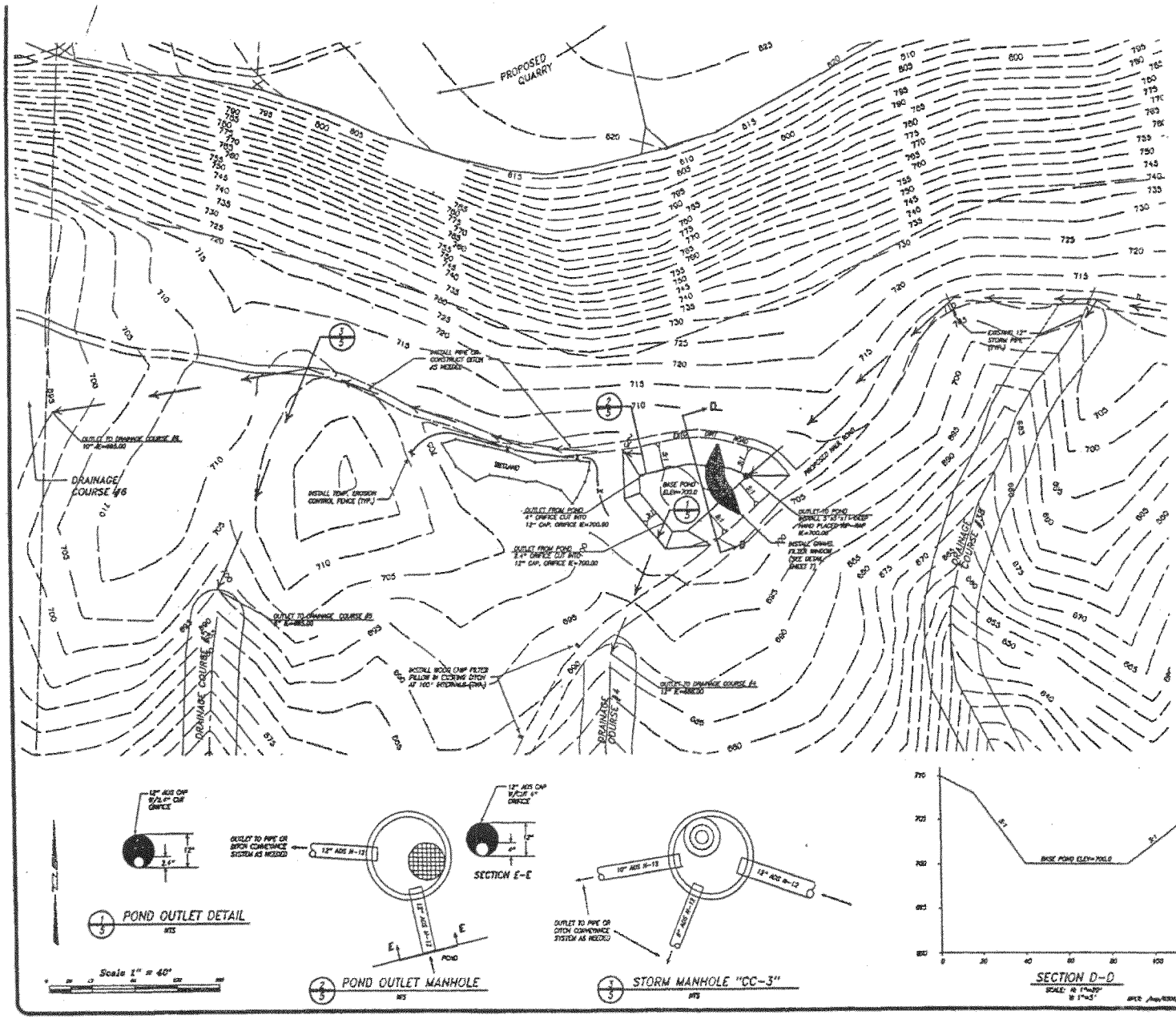
GLSCW LAND SURVEYORS ENGINEERS
ENGINEERING INC. 1111 BROADWAY, VANCOUVER, WA 98660

EXPIRES: 6-30-02

CHANGES / REVISIONS	
DESCRIPTION	DATE

DESIGNED: MDC
DRAWN: EKF
CHECKED: PAT
DATE: FEBRUARY 2002
SCALE: H: 1" = 40'
V:
SEPHENS ENG, GLSCW ENGINEERING, INC.
INTERSTATE ROCK CORBETT QUARRY
JOB NO. 9331.04.01

SHEET
4 of 8



1/5 POND OUTLET DETAIL
NTS

2/5 POND OUTLET MANHOLE
NTS

3/5 STORM MANHOLE "CC-3"
NTS

SECTION D-D
SCALE: H: 1"=40'
V: 1"=2'

INTERSTATE ROCK PRODUCT, INC.
SECTION 1, T1S, R1E, W.M.
MULTNOMAH COUNTY, OREGON
P.O. BOX 1936
VANCOUVER, WA 98668

PHASE 5-6 STORM SYSTEM PLAN FOR:

INTERSTATE ROCK CORBETT QUARRY

OLSON ENGINEERING INC.
LAND SURVEYORS
ENGINEERS
1111 BROADWAY, VANCOUVER, WA 98660

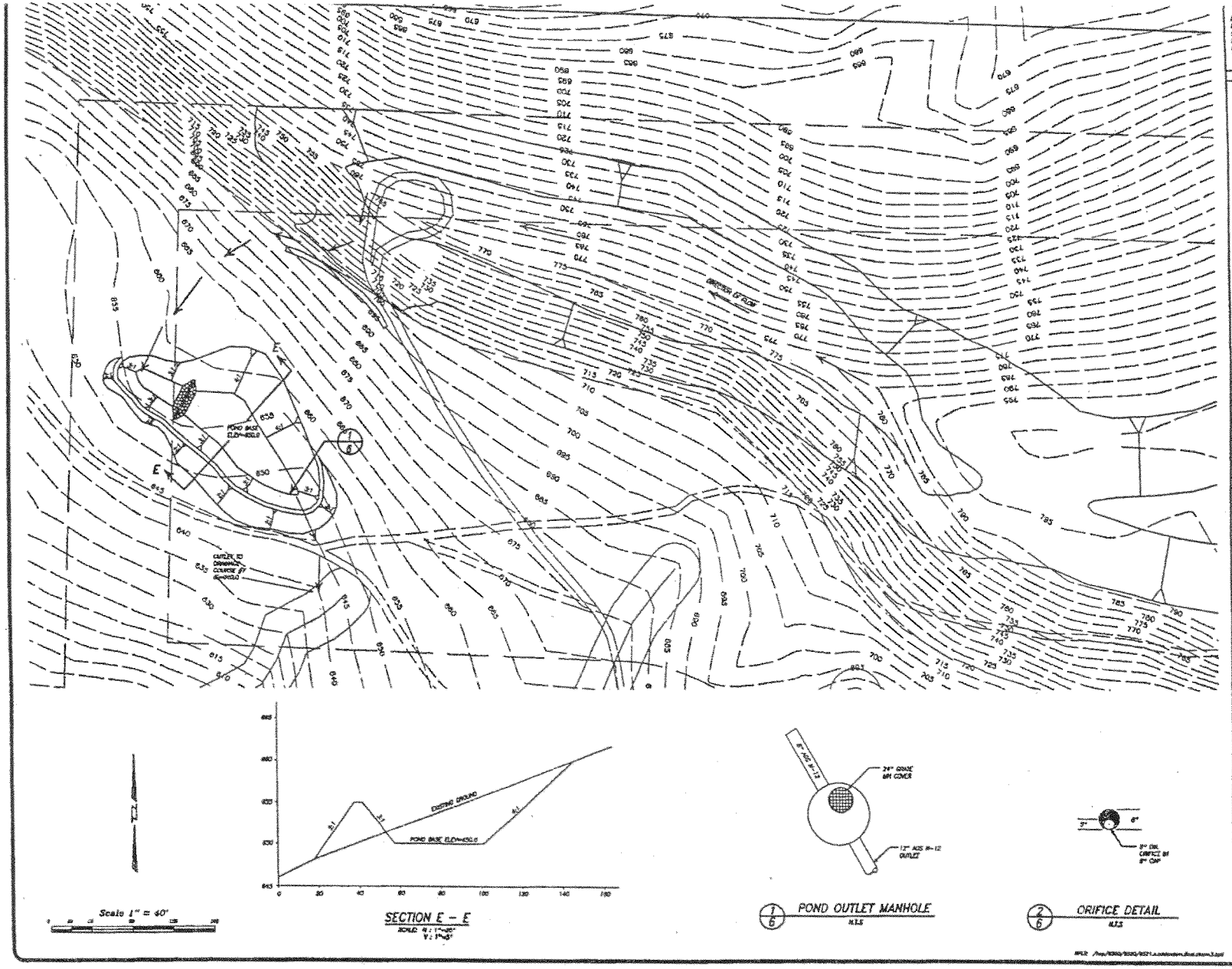
EXPIRES: 6-30-03

CHANGES / REVISIONS

DESCRIPTION	INIT.

DESIGNED: MDC
DRAWN: DGT
CHECKED: PMT
DATE: FEBRUARY 2002
SCALE: H: 1" = 40'
V:
JOB NO. 6521.01.01

SHEET
5 of 8



Scale 1" = 40'

SECTION E – E

1/6 POND OUTLET MANHOLE

N.T.S.

2/6 ORIFICE DETAIL

N.T.S.

INTERSTATE ROCK PRODUCT, INC.
SECTION 1, T1S, R4E, W.M.,
MULTNOMAH COUNTY, OREGON
P.O. BOX 1936
VANCOUVER, WA 98663

PHASE 5-6 STORM SYSTEM PLAN FOR:

INTERSTATE ROCK CORBETT QUARRY

CLSON ENGINEERING INC.
LAND SURVEYORS
ENGINEERS
1111 BROADWAY, VANCOUVER, WA 98660

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 11, 1974
PETER J. LINDY
EXPIRES: 6-30-02

6/19/02

CHANGES / REVISIONS

DESCRIPTION	DATE

DESIGNED: MDC
DRAWN: DKF
CHECKED: PJL
DATE: FEBRUARY 2002
SCALE: AS 1" = 40'

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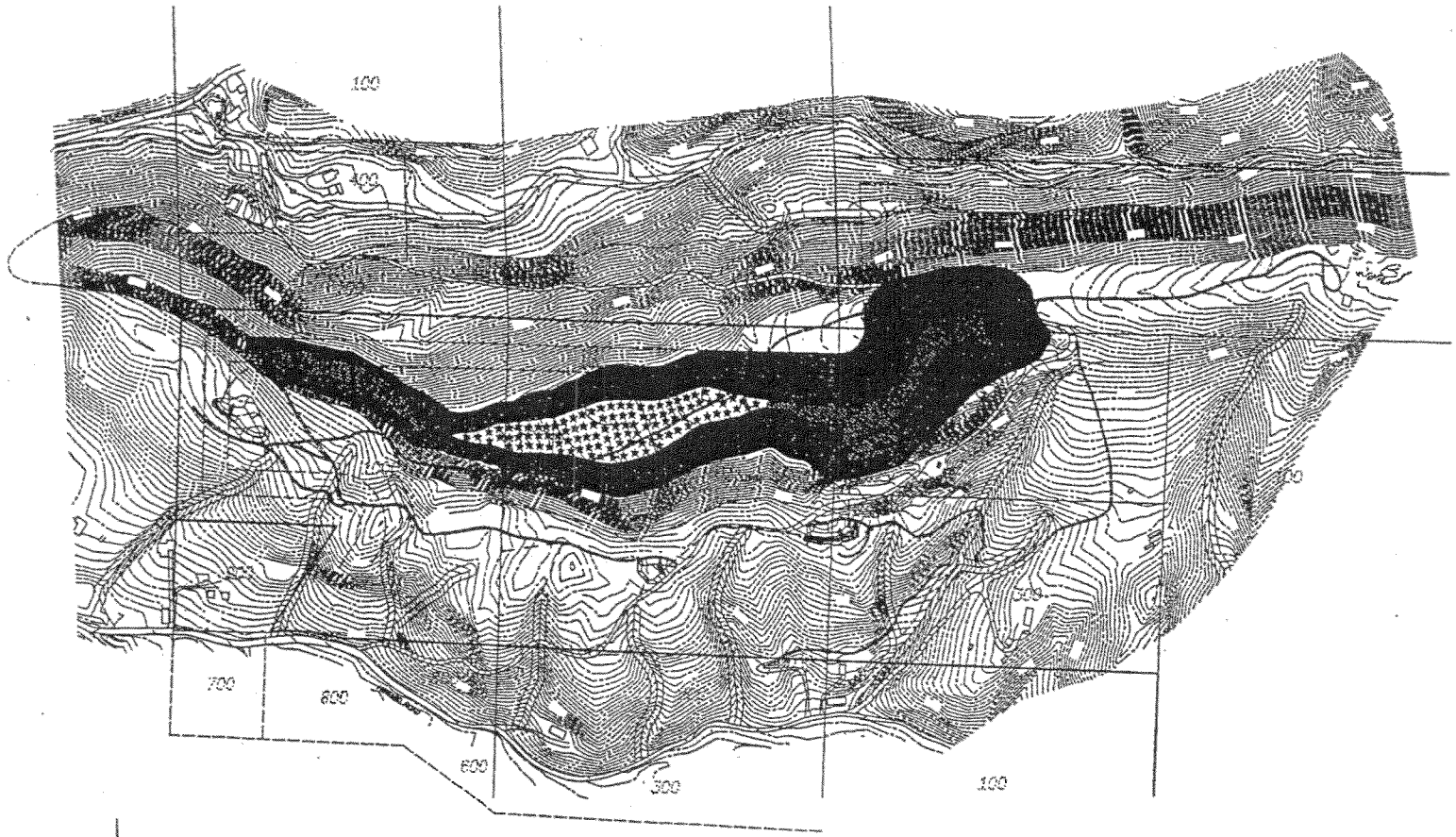
INTERSTATE ROCK CORBETT QUARRY

JOB NO. 6521.04.01

SHEET

6 of 8



Scale 1" = 200'

NOTES

1) STORM PONDS AND CONVEYANCE SYSTEM SHALL REMAIN IN-PLACE AND BE PERIODICALLY MAINTAINED SO THAT THE NATURAL HYDROLOGY OF THE AREA WILL NOT BE ADVERSELY AFFECTED.

2) AREAS TO BE RECLAIMED SHALL FOLLOW THE PHASING SHOWN ON SHEET 3. THE PREVIOUS PHASE SHALL BE RECLAIMED PRIOR TO MINING OF THE NEXT PHASE.

PLANTING LEGEND

AREAS TO BE PLANTED WITH NATIVE FOREST SPECIES INCLUDING ALDER, FIR, VINE MAPLE, WILLOWS, AND BIG LEAF MAPLE.

AREA TO BE PLANTED WITH GRASSES FOR PASTURE

AREA TO BE PLANTED WITH CHRISTMAS TREES

INTERSTATE ROCK PRODUCT, INC.
SECTION 1, T1S, R4E, W.M.
MULTNOMAH COUNTY, OREGON
PO BOX 3838
VANCOUVER, WA 98662

FINAL RECLAMATION MAP FOR:

INTERSTATE ROCK CORBETT QUARRY

OLSON ENGINEERING INC.
LAND SURVEYORS
ENGINEERS
1111 BROADWAY, VANCOUVER, WA 98660

EXP. [illegible]

CHANGES / REVISIONS

DESCRIPTION	DATE

DESIGNED: MDC
DRAWN: SKP
CHECKED: PAT
DATE: FEBRUARY 2002
SCALE: H 1" = 200'
V

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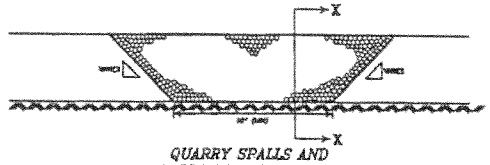
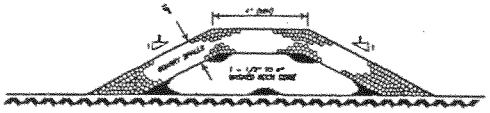
INTERSTATE ROCK CORBETT QUARRY
JOB NO. 8021.01.01

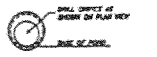
SHEET
7 of 8



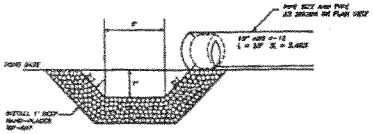
QUARRY SPALLS AND
GRAVEL FILTER "WINDOW"



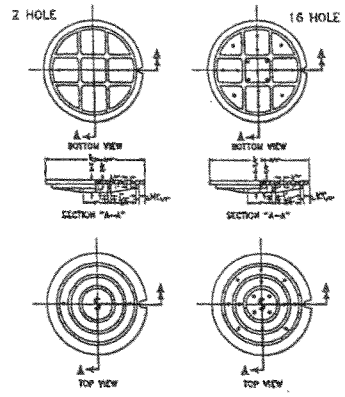
SECTION X-X



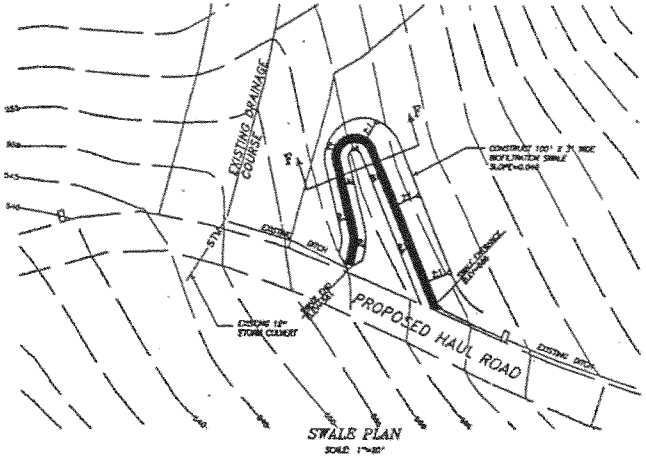
TYPICAL ORIFICE DETAIL



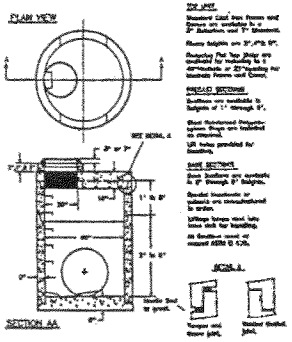
ORIFICE/SEDIMENT TRAP DETAIL
PIPE OUTLET DETAIL



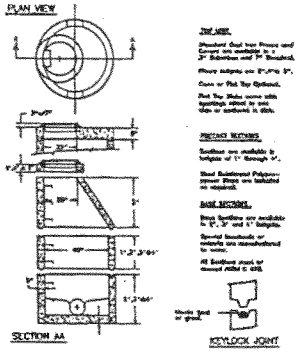
MANHOLE COVERS



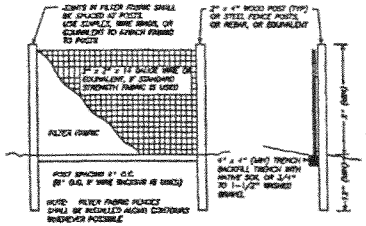
SWALE PLAN
SCALE: 1"=50'



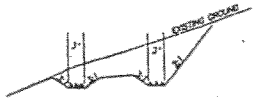
60" MANHOLE



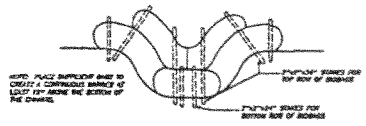
48" KEYLOCK MANHOLE



EROSION CONTROL FENCE



SWALE SECTION F-F



BIOFILTER BAG PLACEMENT DETAIL

INTERSTATE ROCK PRODUCT, INC.
SECTION 1, T1S, R4E, W.M.
MULTNOMAH COUNTY, OREGON
P.O. BOX 1936
VANCOUVER, WA 98662

SHEET FOR:
INTERSTATE ROCK CORBETT QUARRY

OLSON LAND SURVEYORS ENGINEERS
ENGINEERING INC. 1111 BROADWAY, VANCOUVER, WA 98660

EXPIRES: 6-30-08

OWNER / MANAGER	
DESCRIPTION	DATE
DESIGNED	MDC
DRAWN	MDC
CHECKED	PAT
DATE	FEBRUARY 2007
SCALE	AS 1" = 20'
DEPOSIT SHT. BOOK DICKSON, PC.	
INTERSTATE ROCK CORBETT QUARRY	
JOB NO. 1031.01.01	

SHEET
8 of 8

OLSON
ENGINEERING INC.
Practical expertise. Exceptional results.

Civil Engineering
Surveying
Planning
Landscape Design
Forestry

February 26, 2002

Mr. Timothy V. Ramis
Ramis Crew Corrigan & Bachrach, LLP
1727 N.W. Hoyt Street
Portland, OR 97209

WBSTB

Re: Interstate Rock Corbett Quarry
OE #6521

Dear Mr. Ramis:

As requested, Olson Engineering Inc. (OEI) has prepared the following summaries:

1. Mining process and equipment used to extract rock from the Corbett Quarry.
2. Stormwater and erosion control methods used to protect the environment.

The following information was compiled through discussions with the mine operator, acoustic consultant, various site visits and internal calculations and design.

1. Mining Process and Equipment:

The mining process begins by loosening the raw product from the working face using explosives. The blast is intended to lightly loosen the raw material without damaging or spreading the rock. Once loosened, the rock is sorted by quality into three categories including split rock, wall rock, and decorative landscape boulders.

The split rock is loaded into a quarry truck and transported to an adjacent pad to be broken down by a manual splitting process. Splitting is accomplished by using a 30lb air drill to bore 7/8" holes in a row across the grain of the rock. Steel feathers and wedges are then pounded into the holes using 12 lb sledgehammers until the rock is split into a uniform block. This block is then "trimmed" using a smaller 3 lb hammer to remove any rough edges and create a final product.

Wall rock is processed to size using a hydraulic rock hammer mounted on the arm of an excavator. The wall rock is processed into high quality block wall rock (Louie Rock), standard wall rock, and class 100 riprap. Each product is then transported to its respective stockpile by a front-end loader.

After stockpiling, the material is loaded into dump trucks for transportation offsite. Approximately 1 truck per hour is loaded for transportation offsite, and 1 truck per

PAT/kb
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hour is loaded to move material within the pit boundary. This internal truck transportation is used when material is moved a reasonable distance, however, the majority of internal transportation is moved over a short distance and is accomplished using a dozer and/or a front end loader. Approximately 50% of the trucks are loaded with an excavator that sets delicate rock into the dump trucks. The remaining 50% of the trucks are loaded with a front-end loader.

The equipment used during the mining process includes: dozer, front-end loader, excavator, hydraulic rock hammer, jackhammers, portable crushing and screening plant, diesel generator set, pneumatic rock drill, and haul trucks. All equipment is typical of what would be used for general rock mining.

2. Stormwater and Erosion Control Methods:

As with all land disturbing activity, stormwater runoff and its potentially negative impact to the surrounding environment is paramount importance. As part of the plan to mine rock from this Quarry, OEI has studied each aspect of the stormwater runoff and designed a system to minimize the potential for erosion and overall negative environmental impact.

A. Quantity Control. Impacted areas within the mine will create a concentration and increase in runoff from the site. To mitigate for this, the runoff will be collected and routed to a stormwater detention pond(s), where the flows will be reduced to match the historic levels of the 25-year storm and significantly reduce flows in all other storm events. In addition, the discharges from the pond will be split, and the correct flows routed to the individual watercourses so as to maintain their historic flows. Therefore, there will be no increase in the potential impact to the environment by the mining operation due to storm flow.

B. Erosion Control. A major concern with any land disturbance is the potential it causes for erosion. To reduce this potential, the following mitigation methods and practices have been included in the mining plan:

1. Sedimentation Ponds. All runoff from disturbed areas will be collected and routed to a system of sedimentation ponds. The system has been designed using a combination of ponds and gravel filters to remove any sediment picked up in the stormwater runoff and, therefore, discharge clean water to the streams.

2. Wash Down Areas. Vehicle traffic leaving construction sites is another area with a potential to introduce sediment to the environment. To mitigate this, a dry weather and wet weather wash down is proposed as part of the mining plan. This will consist of a rock exit constructed of 4" quarry spalls to dislodge any material on truck tires for dry weather and a shallow concrete drive-through basin to wash tires during wet weather.

3. Reduction in Disturbed Areas. One of the best and cheapest ways to reduce the potential for erosion is to minimize the total area impacted at any one time. Therefore as part of the mining plan, only 5 acres of area is proposed to be impacted at any time with previously impacted areas being reclaimed as the mining is completed.

4. Disturbed Area Stabilization. Overburden stockpiles and other non rock slopes have a greater potential for producing sediment-laden runoff, therefore, these areas will be stabilized with either geo-textiles mulch, plastic, or vegetation depending on the period of time they are likely to remain disturbed. In addition to stabilizing the ground, silt fence will be used where it is deemed necessary further reducing any erosion potential.

5. Buffers. All sensitive areas will be clearly delineated and protected by vegetated buffers and silt fence.

6. Dust. Dust will be controlled from leaving the site by chip-sealing the access road to the mining area. In addition, a water truck will be used on site during the summer to reduce the development of dust.

7. Existing & Proposed Slopes. As can be seen from the tops, the existing site has a large amount of steep slopes. Runoff from these areas have the potential for high velocities and erosion. However, with the development, the vertical drop will be within the project boundary and the storm and erosion control system located prior to discharge. This reduces velocities and the erosive potential. Therefore, the historic runoff is likely to have a considerably higher erosive potential than in the developed state.

We trust the above summaries meet your requirements. If you should have any questions or comments, please feel free to contact me at 695-1385.

Sincerely,

Peter A. Tuck, P.E.

PAT/kb
Z:\6000\6500\6520\6521.eng.mining process & equipment.doc

Corbett Rock Pit Alternatives
OE Job #6521
January 11, 2002

Descriptions

A2) Total area impacted at any time - *The working area of the operation will cover a 5-acre area. As the operation disturbs new area, completed mine area will be reclaimed resulting in approximately 5 acres of disturned area at any time.*

A4) *The split given is based on the need for 20,000 CY of decorative rock per year. At 5,000 CY, it was assumed that 20% of the rock would be unsuitable for decorative rock and crushed for gravel. For 200,000 CY, only crushed rock will be processed as this is the base amount of removal to make a viable project. The 200,000 CY/YR alternative has been proposed as this is the base amount of crushed rock removal to make a viable project with no decorative rock.*

B1) Blasting - *Blasts per year based on approximately 10,000 CY of material per blast. For decorative rock, a low-yield blast is used resulting in larger fractured rock. Conversely for rock to be crushed, a high-yield blast is used resulting in smaller fractured rock.*

B2) Drilling - *On average, approximately one week of drilling is required per blast.*

B3) Rock Splitting - *Most rock splitting is done by hand, however, large rocks are split using a hydro hammer. This is only done when a sufficient quantity of large rock has been stockpiled. For the 5,000 CY/YR scenario, the small size of the operation creates an inefficiency of scale. Therefore, on the larger scale operations, the use of the hydro hammer only increases by about 50%.*

B4) Rock Crushing - *Crushing time will be related to area available to stock pile rock. This time will reduce as the available area increases. For this purpose, it assumes 2 acres available for crusher operation.*

On average, portable crushers have capacity to crush up to 1500 tons of rock per day. For this analysis, a crusher rate of 1200 tons/day was used. This equates to approximately 500 CY of in-place rock per day based on 2.4 tons per CY in-place rock. For 200,000 CY/YR, a crusher rate of 1000 CY of in-place rock per day is assumed.

B5) Rock Loading - *Loading times for the different types of rock are as follows:*

Decorative Rock - 10 to 25 minutes per truck
Crushed Rock- 5 minutes per truck

B6) Rock Hauling - *Rock hauling from the working face to stockpile areas will be done using front end loaders and dozers. The distance between these 2 areas is small and, therefore, trucks will not generally be used.*

C1a) Buffer - *No impact areas adjacent to streams on site will be determined.*

C1b) Sediment Control - *Multi stage sediment pond system designed to remove all sediment from storm runoff.*

C1c) Truck Washdown - *Wash pond installed to enable truck wheels to be washed prior to leaving site. This would only be used during wet weather.*

C1d) Quantity Control and C1e) Maintain Creek Flows - *Detention pond designed to reduce runoff flows to historic rates. Release from pond routed to existing drainage ways split to match historic flows.*

C1f) Erosion Control - *Erosion control system designed using Best Management Practices (BMPs) to reduce potential of any erosion to acceptable level.*

C2b) Sound Walls - *Designed to reduce sound levels to below required limits.*

C3a) Maintenance Fund - *Propose a monetary donation for road maintenance based on a dollar amount per CY of rock removed.*

D1-3) *Extraction area determined by extending limit of rock based on bore locations from Schlicker report. Depth of rock assumed to be 70 feet. Area currently being evaluated by geologists. Extraction area and volume will be refined after report received from geologists.*

D4) Extra Sound Mitigation - *As the operation extends to the West, the natural berm diminishes until the use of sound walls in addition to the berm will be required to meet sound standards.*

D5) Watershed Impacts - *As the operation extends to the West, runoff will begin to be routed to Kniertem Creek. This runoff will be treated with same mitigation as the flow to Howard Creek.*

D6) Access Haul Roads - *New haul road for westerly end would probably use existing onsite road to this area. Offsite haul route would stay same as for previous phases.*

These alternatives were developed over a short period of time. Due to the short time period available to prepare these documents, we were not able to perform extensive research and had to use existing information to develop some criteria contained in the alternatives. Further research may cause some revisions.

Tom Armstrong

From: Todd Johnson [todd@olsonengr.com]
Sent: Tuesday, April 16, 2002 5:15 PM
To: Tom Armstrong
Subject: Re: Howard Canyon mining methods

Tom:

1. Truck route - Just to clarify, the plan is to use Howard Road for ingress and egress, and not to use Knierem Road for access. Are you going to use the same route (Howard - Littlepage - Hurlburt - Columbia River Hwy) for ingress(empty trucks)? Or, will empty trucks use I-84 to Corbett Hill Road to Columbia River Hwy to Littlepage?

The proposed haul route will be used for ingress and egress. Knierem Road will not be used for access. The same route will be used for empty trucks.

2. Eastern portion of resource site - Are there any plans to mine tax lots 500 or 100 (east of the existing haul road)?

The current proposal includes portions of tax lots 100 and 500. The extent of mining is shown on the plans we sent. Mining is not proposed east of the existing haul road on tax lot 100. mining is proposed north of the existing haul road on tax lot 500.

I hope this helps. Please do not hesitate to call with any further questions.

Todd Johnson
Olson Engineering Inc.

----- Original Message -----
From: Tom Armstrong
To: Todd Johnson
Cc: Kim Peoples ; Greg Winterowd ; Tim Ramis
Sent: Monday, April 15, 2002 10:24 AM
Subject: Howard Canyon mining methods

A couple of follow-up questions:

1. Truck route - Just to clarify, the plan is to use Howard Road for ingress and egress, and not to use Knierem Road for access. Are you going to use the same route (Howard - Littlepage - Hurlburt - Columbia River Hwy) for ingress(empty trucks)? Or, will empty trucks use I-84 to Corbett Hill Road to Columbia River Hwy to Littlepage?

2. Eastern portion of resource site - Are there any plans to mine tax lots 500 or 100 (east of the existing haul road)?

Tom Armstrong, AICP
Senior Planner
Winterbrook Planning
310 SW Fourth Avenue, Suite 1000
Portland, OR 97204
(503) 827-4422, ext. 106
(503) 827-4350 - fax

-----Original Message-----

From: Todd Johnson [mailto:todd@olsonengr.com]
Sent: Tuesday, April 09, 2002 3:30 PM
To: tom@winterbrookplanning.com
Subject: Re: Howard Canyon mining methods
Importance: High

Tom:

I am sending you copies of revised plans with the added information you requested. Also below is a summary of how the items have been addressed. Please feel free to call with any questions.

1. Please send me the electronic file of your original extraction alternatives table.

Attached is a current copy of the extraction alternatives table in Microsoft Excel format.

2. I have a copy of the site plans for the CUP applications. The aggregate resource area appears to extend east of the existing haul road. Under your alternatives, will you be extracting this area? If so, can you define the quarry area, specifically so we can identify loading and crushing areas and evaluate potential stormwater/stream impacts. Is this eastern area included in your volume estimates?

The existing haul road to the east is not proposed to be utilized as a haul road and will be removed as shown on the mining plans. All mining will be on the south side of the ridge. Stormwater in this area will be routed to the facility as is shown on the mining plans. No stream impacts are proposed for this area. This area was included in our volume estimates.

3. What are your assumptions regarding the westerly 1,000 feet (the narrow ridge) extending from the previously proposed quarry area? What will be the extraction methods?

The western 1000 feet will be mined as shown on the revised mining plans. Extraction methods will be similar to what is proposed for other portions of the quarry.

4. We need more specific information on the blasting. The previous table referred to high and low yield blasts. For the noise analysis, we need information on charge weights. Also, for the higher volumes, do you know how many blasts of each type? For example, under the 35,000cy per year alternative, you indicate 4 blasts. Are blasts 2 high and 2 low? Or, 3 and 1?

The attached Extraction Alternatives Table has been updated to address this question.

5. It would be helpful to have more specific information on the equipment, especially in terms of makes and models. Al Duble has taken actual measurements on the existing hammers and loaders. Without the specific information, we will have to use averages for the other equipment. Our intent is coming out of this process is to create performance standards or thresholds that will become approval criteria for the conditional use permit. So the more information we have, the more accurate we can be.

We have included this additional information on the Extraction Alternatives Table.

6. The stormwater methods still need more detail, especially in terms of operating and maintenance procedures. However, this information can wait until later in our process when we discuss mitigation measures.

This will be provided at a later date. If you could provide specific questions you would like to see addressed, it would aid us in providing this information.

Appendix D

Duble Noise Study

NOISE IMPACT STUDY

HOWARD CANYON QUARRY

MULTNOMAH COUNTY

OREGON

FOR

WINTER BROOK PLANNING

AND

MULTNOMAH COUNTY LAND USE

PLANNING DIVISION

JULY 16, 2002

By

Albert G. Duble, P.E. Inc.
Newberg, Oregon 97132

NOISE IMPACT STUDY **JULY 2002**

HOWARD CANYON ROCK QUARRY
MULTNOMAH COUNTY, OREGON

INTRODUCTION

In February and March, 2002, a study of the noise impacts of a proposed expansion of the Howard Canyon Rock Quarry, owned by Interstate Rock Products of Washougal, Washington, was completed. Ambient noise was measured at seven residential sites near the existing and proposed expansion areas. The noise of rock extraction and processing sources were also measured. Estimated future noise of these sources was calculated with the aid of a computer propagation program, and the results were compared to ambient noise and the State DEQ noise standard. Finally, noise impacts were described based on the DEQ standard, and on a livability standard based on increases of proposed quarry activities above ambient noise.

EXECUTIVE SUMMARY

Oregon Department of Environmental Quality (DEQ) noise standards (OAR 340, Division 35) are used as the baseline standards for this analysis. The stricter ambient degradation standard (ambient plus 10 dBA) is used because the Howard canyon Quarry does not have an operating permit so it could be considered a "new use" and Multnomah County has the flexibility under OAR 660, Division 16 to apply a stricter standard to address concerns raised by residents in the surrounding area.

Ambient noise levels were measured at seven residential sites surrounding the proposed quarry. Noise sources from quarry activities were measured or estimated using file data. Future noise levels are predicted and four out of seven sites meet the DEQ L50 hourly standard without mitigation measures. Proposed mitigation measures are predicted to bring noise levels below the DEQ standard for all seven sites. Truck noise is predicted to meet the DEQ L10 hourly standard for five trucks per hour or 10 round trips. Blasting noise was estimated using the Kamperman method. Only one site is predicted to exceed the standard, but it is probable that berms, barriers or a reduction in charge weight will lower noise levels below the DEQ blast noise standard of 98 dBC slow meter response time.

The DEQ hourly standards may not adequately address long-term impacts of continuous quarry activities. There is no objective livability noise standard to evaluate the nuisance factor for the surrounding residents. However, restricting operating hours may alleviate some of the nuisance factor.

Noise impacts of the proposed quarry expansion meet the State DEQ standards at 4 out of 7 sites. It may be possible to meet the standards at the other 3 sites if some advanced noise controls are designed and used. Livability at residential sites around the quarry may be affected if increases above ambient noise cannot be.

AMBIENT NOISE MEASUREMENTS

Ambient noise was measured over the operating hours of the proposed quarry expansion project at the residential sites listed below, and shown by Figure 1 attached. Also attached are Figure 2, a general area map and Figure 3 with the proposed haul truck routes.

Site-1 Residence at 39203 Howard Canyon Road, located at the end the road, south east of and within sight of the existing rock extraction site at a distance of 750 feet. Overall L50 noise level here was 40 dBA. The lowest L50 hourly noise was 39 dBA.

Site-2 Residence at 38100 Howard Canyon Road, south of the road and the proposed extraction area at a distance of 1400 feet to the proposed future rock extraction boundary. This site has a running creek along the south side of Howard Canyon Road. The microphone was placed on the uphill side of the property, near the garage, as far away from the creek as possible to limit noise from the creek. Overall L50 noise level was 64 dBA. The lowest L50 hourly noise level was 62 dBA. This site has access to Howard Canyon Creek.

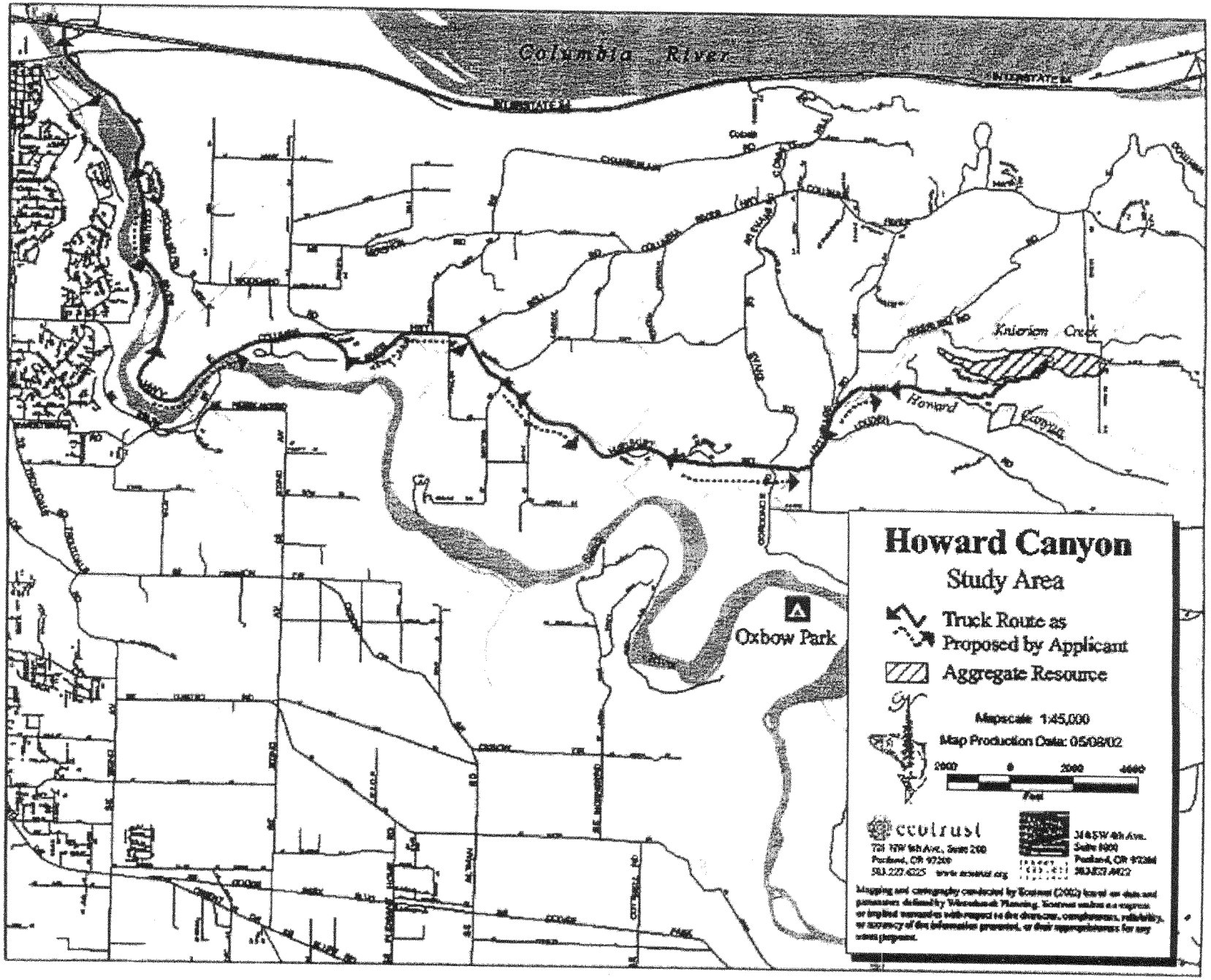
Site-3 Dawes residence at 37737 Howard Canyon Road, southwest of the proposed expansion area and below it at an approximate elevation of 500 feet, on the north side of the road. Overall L50 noise level at this site was 38 dBA and the lowest L50 was 37 dBA in the 2 PM hour.

Site-4 Residence at 38800 SE O'Regan Road, near the intersection of Louden and O'Regan Roads, southwest of the existing extraction area and within 2750 feet of the proposed rock extraction area. This location has the highest elevation, slightly above the existing extraction area at 800 feet. The overall L50 noise level was 38 dBA and the lowest L50 noise was 36 dBA in the 1 PM hour.

Site-5 Kribbs residence, a manufactured home at 210 East Knieriem Road, approximately 125 feet west of the north side rock haul road, at the foot of the hill which rises steeply to the proposed mining expansion area above. Overall noise was 40 dBA here and the lowest L50 noise level was also 40 dBA in the 2 PM hour.

Site-6 Diebert residence at 201 N.E. Salzman Road, at approximately the same elevation as the existing rock processing area, and within line-of-sight of the north side rock haul road. Overall L50 noise level was 38 dBA and the lowest L50 was also 38 dBA in the 2 PM hour.

Site-7 The Anderson residence at 37935 Howard Canyon Road, near the Site 3 residence but higher at an approximate elevation of 520 feet. This site is located at the foot of the hill leading up to the west end of the proposed rock extraction and expansion area. Overall L50 noise level was 38 at this site


Columbia River
Interstate 84
Interstate 84
Columbia River Hwy
Columbia River Hwy
Historic Columbia River Hwy
Historic Columbia River Hwy
Evans Rd
Evans Rd
Kelly Rd
Kelly Rd
Sandy River
Sandy River
Sandy River

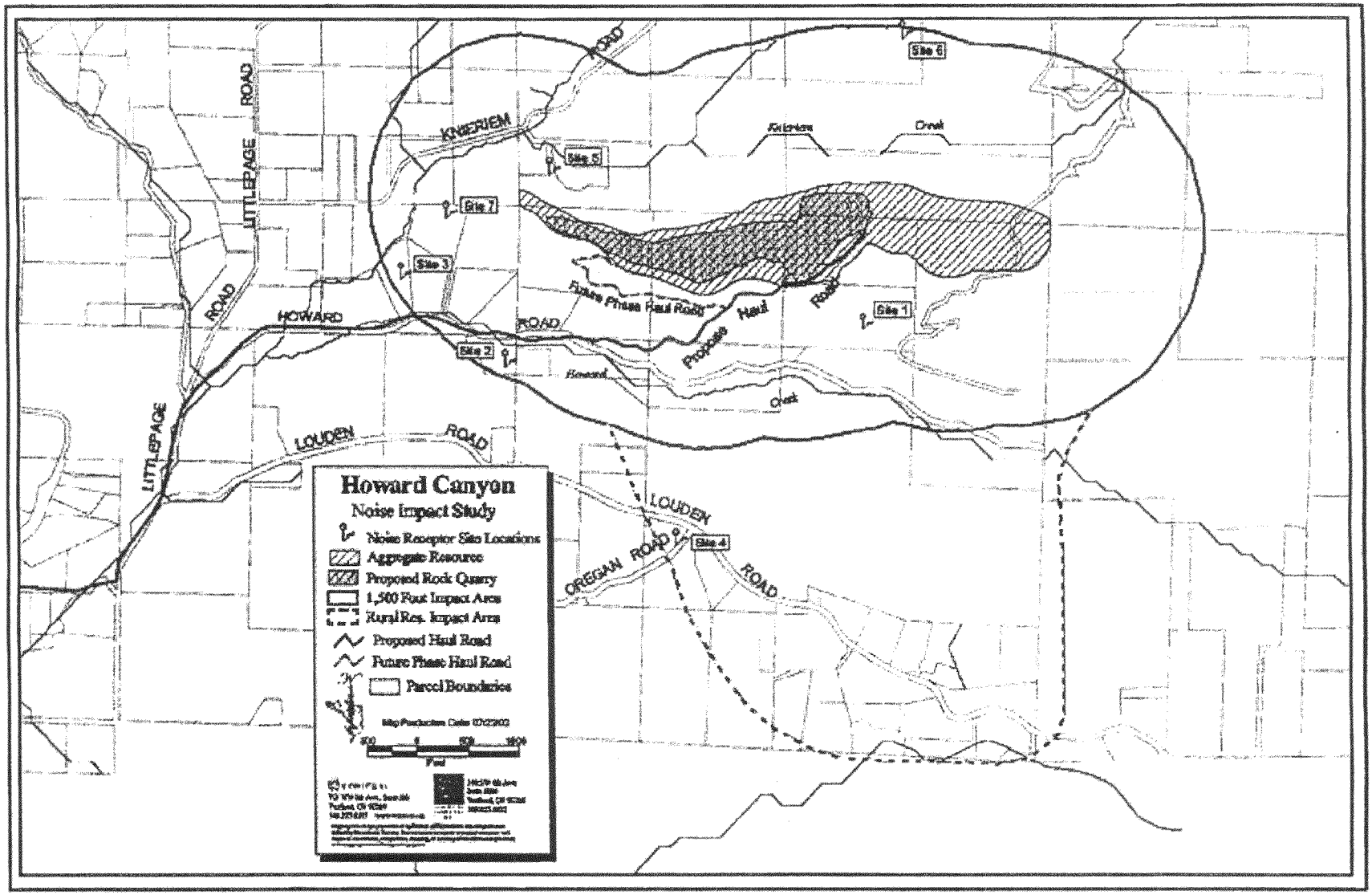

Howard Canyon
Noise Impact Study
Noise Receptor Site Locations
Aggregate Resource
Proposed Rock Quarry
1,500 Foot Impact Area
Rural Res. Impact Area
Proposed Haul Road
Future Phase Haul Road
Parcel Boundaries
Site 1
Site 2
Site 3
Site 4
Site 5
Site 6
Site 7
HOWARD ROAD
LOUDEN ROAD
LITTLEPAGE ROAD
KNEERIEM ROAD
OREGAN ROAD
Future Phase Haul Road
Proposed Haul Road
Howard
Creek
Knierim
Orwil

Table 1 below shows the A-weighted residential site noise levels for the quietest hours of the proposed quarry expansion operating daytime hours of 7 a.m. to 5 p.m. The State DEQ daytime L50 ambient degradation noise standard is shown for comparison. This represents the lowest hourly L50 plus 10 dBA for the proposed operating hours.

Table 1

SITE N0.	QUIETEST HOUR L50, dBA	STATE DEQ AMBIENT NOISE CRITERIA
1	39	49
2	62	62
3	37	47
4	37	47
5	40	50
6	38	48
7	38	48

Table 1 shows that all Sites except Site 2 are below the State DEQ L50, daytime 55 dBA noise standard. Noise at Site 2 was evidently influenced by the creek near the residence. Ambient noise at the other Sites was mainly due to distant traffic, aircraft, and bird and animal noise.

There are many domestic livestock animals in this area, but they are not a serious noise source. The Interstate Rock Howard Canyon Quarry production facilities were not operating during the ambient noise measurements.

On March 28, a small contractors dump truck was seen entering the upper quarry area about 11 a.m. and it is apparent some hand loading of rock took place. This intrusion was unknown to the Interstate Rock Products dispatcher who stated that the truck should not have been there. However, examination of the ambient noise data at Site 6, showed no unusual noise excursions in the L50 and L10 noise data between 11 a.m. and 1 p.m. The peak levels were high between 10 a.m. and 12 p.m., but these short-term signals do not affect the L50 data, and they could have been farm animals. The lowest level however was chosen, and this occurred in the 2 p.m. hour when other parameters were normal.

SOURCE NOISE LEVELS

Noise sources, both existing and future were measured at the existing extraction and processing areas at the Howard Canyon Quarry. The only sources that could not be measured were jaw crusher and blasting noise. These will be estimated using consultants file data and well-known references on blasting noise. Noise sources were as follows;

1. Extraction: Samsung Model MX292/LC front loader with a 2 yard bucket loading rock into a 10 yard dump truck; measured on-site March 2, 2002; (data sheet attached).

2. Extraction: The same front loader with a hydraulic hammer attached to the front of the machine. (Same March 2, 2002 measurements; data attached).

3. Processing: Hand-operated pneumatic hammers at both the Washugal and the Howard Canyon Quarry sites, breaking rock into smaller pieces. Same March 2, 2002 measurements – data used was the sum of both hammers - attached).

4. Jaw type rock crusher breaking large rock into 3 inch minus rock; this data is an octave-band average of five jaw crushers recorded between 1988 and 1997 in the State of Oregon. Sources and noise levels listed in attached appendix A-1.

5. Rock drill used to drill holes for blasting. This data was taken from site measurements by two professional acoustical engineers and was in octave-bands. Measurements taken Feb. 17, 1998. Source levels are listed in attached appendix).

6. Haul/Dump Truck – hand measured at two main sites in the State of Oregon over the last ten years, at Pacific Rock Products, Canby. OR., and Winco Food Products Warehouse, Salem, OR. Source levels listed in appendix.

Noise sources were measured using a precision Type 1 sound level meter driving a computer based octave-band analysis program. This was done to provide octave band frequency data which will be used to predict future noise levels at the residential sites listed above. Handheld noise data was also recorded using a Bruel & Kjaer Model 2231

Type 1 precision sound level meter. Statistical levels in dBA were also recorded for some sources using a Larson Davis-Labs Model 700 noise analyzer. The acoustic measurement system was calibrated using a Bruel & Kjaer Model 4230, 94 decibel, 1000 Hz field calibrator attached to the microphone of the sound level meters.

The computer generated data sheets are attached in the appendix, and the A-weighted data is listed below for each source at a distance of 50 feet;

Source	Noise Level, dBA
Front Loader & Truck	96 dBA at 50 Feet, L1
Mobile Hydraulic Hammer	89 dBA at 50 Feet, L10
Hand Hydraulic Hammers	86 dBA at 50 Feet
Jaw Crusher	87 dBA at 50 Feet
Rock Drill	91 dBA at 50 Feet
Haul/Dump Truck	82 dBA at 50 feet at 35 mph

Octave-band noise levels for all of the above sources except haul trucks were used to generate future equipment operating noise levels at all sites.

NOISE STANDARDS AND CRITERIA

The noise standard that applies to this project is the State Department of Environmental Quality noise standard OAR 340-35. Noise levels for this standard are listed below in Table 2. They are never to be exceeded.

Table 2

DEQ Noise Standards, dBA

Time	L1	L10	L50
0700 to 2200 (Daytime)	**75**	**60**	**55**
2200 to 0700 (Nighttime)	**60**	**55**	**50**

Table 3 below compares the allowable daytime DEQ L10 and L50 noise standards, with the ambient-plus-10 dBA ambient degradation standards. Whenever the ambient-+-10 dBA level exceeds the maximum allowable l10 and L50 DEQ level;, it must be dropped back to that level. The only exception is when the ambient noise is already above the DEQ daytime standard such as at Site 2.

Table 3

DEQ Daytime Noise Standards at Sites

Site	L10 Std	L10 Amb+10	L50 Std	L50 Amb+10
1	60	56	55	49
2	60	73(63)	55	72(62)
3	60	55	55	47
4	60	56	55	47
5	60	52	55	50
6	60	52	55	48
7	60	51	55	48

Note: Ambient noise at Site 2 is 63 L10 and 62 L50 noise level.

These are called the statistical noise levels, are related to time in that the number after the letter refers to percent of a standard measurement hour. The L1 refers to 1 percent of a standard measurement hour or 36 seconds; the L10 refers to 10 percent or 6 minutes of any measurement hour; and the L50 refers to 50 percent or 30 minutes of an hour.

The noise levels in the hour are cumulative in that they do not have to occur together. The standard is an hourly standard, and the ambient noise data attached is recorded in hourly increments. The L1 is heavily influenced by very short time events (impact sounds) such as car door slams or bird calls, and is therefore not used for normal environmental noise.

The L50 is the lowest level standard, and if it can be met, the L10 is also normally met. The L10 level would be influenced by low volume truck traffic on rural roads such as Howard Canyon Road. The L50 would be influenced by longer term noises such as processing noise at a rock quarry.

For this project and its expansion into an unused area for more rock production, another DEQ standard applies. This is called the "ambient degradation clause" of the standard. This clause states that the lowest hourly existing ambient noise cannot be exceeded by more than 10 dBA.

Thus, the ambient levels listed in Tables 1 above are increased by 10 dBA for future rock processing and extraction activities. This would include truck traffic on the haul roads out of the quarry area.

FUTURE NOISE LEVELS

Future processing and extraction noise levels were predicted using a popular computer sound propagation program called "Noisecalc" also known as the "New York Program" developed by the State of New York Department of the Environment. The program takes into account source octave-band levels, inverse square law spreading, atmospheric attenuation, distance between sources and receivers, and the elevation of each. Calibration of the program has shown that it is accurate within 2 dBA of actual noise levels.

The site map shown by Figure 1 (attached) shows the ambient noise measurement sites which are also the sites for future noise prediction. Table 4 below shows the noise sites with the distances to the closest future rock extraction and processing locations. It is assumed that rock extraction activities such as overburden removal, blasting and rock extraction will take place at a setback distance of 50 feet from the property line shown in yellow. Future rock processing activities such as crushing are assumed to take place where they do now, in the sheltered area at the top of the eastern section of activity. This area is protected by a rock wall 25 to 30 feet high around three sides of the area. The processing area does not however have this high barrier protection to the northeast. This will be discussed more under the "recommendations" section ahead in this report.

Processing in this area in the future would require that either long rock conveyors or haul trucks would be used to bring pit-run rock to the processing area.

Table 4
Processing and Extraction Distances

Site	Processing Distance	Future Extraction Distance
1	1025	1025
2	3625	1400
3	4600	1375
4	3550	2750
5	3100	400
6	2075	1565
7	4065	770

Truck Noise

Truck noise was calculated by hand using the dBA level because there are reliable octave-band levels for these heavy vehicles when moving at a speed of 35 mph, 50 feet from a residence. A simple equation shown below for each hourly truck volume was used;

$$DL = \frac{(60 \text{ minutes} \times (\text{Percentile}) \times S}{T \times C}$$

Where DL = the distance to the moving truck where noise is just equal to the percentile (L10, L50 etc); percentile is in the decimal form of percent (L10 = 0.1); and T = hourly feet per minute. The DL distance is then related to the **reference truck noise level of 82 dBA at 35 mph at 50 feet** using the inverse square law of acoustics, or dBA = 20 Log (base 10) x ratio of the distances.* The DL distance is good for any site location as long as the site has a clear view of the truck in both directions and there are no unusual conditions such as a background noise higher than the truck statistical noise level.

According to the project traffic engineer, the maximum hourly truck volume that can be expected with the higher cubic yard rock production in a future year is 40 trucks per day or approximately 5 trucks per hour. This is the truck volume T used in the noise equation above. It can be assumed that truck noise level is approximately the same coming or going, or within 2 dBA, and the statistical nature of traffic noise tends to even out these differences. Calculated truck L10 noise level is 48 dBA for each site and is compared with the State DEQ L10 ambient degradation noise level for each site in Table 5 below;

The DL distance for the L10 level is 1848 feet, and the adjusted noise level is 51 dBA.

If trucks travel faster than 35 mph, or are closer than 50 feet from the roadway, noise will increase. The calculation assumes a level grade, and a rising grade will increase noise. If the distance decreases from 50 feet to 25 feet, noise would increase 6 dBA.

- Footnote: Calculated from Federal Highway Program Manual PPM 7-7-3, August 1982, Transmittal 348; dBA = 24.6 Log Speed (km/hr) + 38.5. This formula was checked and found to be in close agreement with actual truck noise measurements made by this author.

Table 5
L10 Truck Noise vs DEQ Standard

Site	L10 Truck Noise dBA	DEQ L10 Standard dBA
1	51	56
2	51	63
3	51	55
4	51	56
5	51	52
6	51	52
7	51	51

The truck noise data in Table 5 above meets the State DEQ L10 noise standard for five trucks per hour or 10 round trips. The L10 noise standard at each site is the measured ambient L10 level plus 10 dBA. At Site 2, the standard is the actual measured L10 level because it is higher than the State DEQ standard daytime L10 of 60 dBA. If the truck volume decreases from 5 trucks per hour to 2 per hour, L10 truck noise would decrease to 43 dBA for a reduction of 8 dBA.

The use of Jacobs (Jake) engine brakes on trucks can lead to noise levels 20 dBA over normal transmission brake-down on down-hill runs. Using the new engine mufflers specifically designed for Jacobs brake operation can reduce this increase to 10 dBA. Down-hill runs with loaded trucks may therefore increase noise for short periods of time, usually less than 20 seconds, by 10 to 20 dBA at some sites nearest the haul roads.

Table 5 below shows predicted noise levels for the six sites for both processing and extraction noise. Noise data for a hydraulic rock drill was used to predict rock drill noise. This unit is quieter than pneumatic types. The L1 statistical noise level of 89 dBA was used for rock drill noise calculation as a worse case condition. (Since the rock drill runs for more than 30 minutes at a time, use of the L50 drill noise level of 87 dBA would result in a drill noise level 2 dBA less than that shown in Table 6 below). Even though excavation noise is almost as high as rock drill noise, drill noise could last from one to three days depending on the blast conditions. Therefore the rock drill becomes important as a semi-continuous noise source for which there are mitigation measures.

Table 6

Predicted L50 Noise Levels For Sources Compared to DEQ Standard

SITE	HAMMER NOISE	EXCAVATION NOISE	JAW CRUSHER	ROCK DRILL	TOTAL NOISE	DEQ AMB STANDARD
1	34	47	42	48	51	49
2	20	40	31	42	44	62
3	17	39	28	41	43	47
4	21	39	32	23	40	47
5	21	49	32	50	53	50
6	26	18	39	47	48	48
7	17	42	29	43	47	48

Total noise meets the State DEQ ambient degradation noise standard at all Sites except Sites 1 and 5. Noise at Site 6 equals the noise standard. Barriers were located 50 feet from the equipment which is a common measurement distance.

Because rock drill noise is relatively short term (two to 3 days twice a year, when compared to the daily rock processing, it is interesting to compare total noise without the rock drill. Table 7 below does this.

Table 7

Predicted L50 Noise Levels For Sources Compared to DEQ Standard

Without Rock Drill Noise

SITE	HAMMER NOISE	EXCAVATION NOISE	JAW CRUSHER	TOTAL NOISE	DEQ AMB STANDARD
1	34	47	42	48	49
2	20	40	31	41	62
3	17	39	28	39	47
4	21	39	32	40	47
5	21	49	32	49	50
6	26	18	39	39	48
7	17	42	29	42	48

Table 7 above shows that normal processing and excavation noise without the rock drill decreases noise by a considerable amount at all sites except Site 4 where noise does not change. At the other sites, noise decreases between 3 and 9 dBA which is a significant change. Total future noise in this case still meets the DEQ standard.

Equipment elevations used for noise calculations were 4 feet above grade for the hand-held pneumatic hammers, and 8 feet for the loader-mounted front excavator. The jaw crusher height was assumed to be 6 feet above grade. For excavation, the nearest point to a site 50 feet inside the yellow mining line shown on the map of Figure 2 was used. (The applicant proposes a 100 foot setback distance, but the 50 feet used in this report is conservative). It was also assumed that a D8 Caterpillar bulldozer with ripper attached would be used to remove overburden and push it up to build a berm 10 feet high all around the yellow mining line at the crest of the hill. This berm building operation is exempted from the State DEQ noise standard, and not calculations were done for this machine. It should however be fitted with a "residential" quality muffler, and its operation should be limited to the daytime hours between 7 a.m. and 5 p.m. (See section on Mitigation Measures).

For Sites 1, 5 and 6 where predicted future noise lies over or at the standard, it is probable that operating distances could be increased or that berm elevations could be increased enough to place the site into compliance with the controlling source. Other suggested controls are listed ahead in this report.

Excavator noise caused by the dumping of large rock into dump trucks is a difficult source to control because of the equipment height. This as measured with a noise analyzer to be 89 dBA at 50 feet. Other than those comments listed in item 8 under Noise Mitigation ahead, there are no feasible noise controls available in this writes experience.

Blasting Noise Impacts

Blasting noise was estimated using George W. Kampermans' study of 1980 called "Human Response to Blasting Noise and Vibration" presented at InterNoise 80 in Miami, Florida in December 1980. This method is widely accepted by acoustical engineers as a very good noise predictor, and it can be used also for sonic booms, showing that it correlates well with the low frequency "boom" sounds of blasting. The method calculates the scaled distance which is the distance in feet to the receiver, divided by the square root of the average explosive charge weight per delay, or per hole. The charge weight per delay is the total charge weight divided by the number of holes. For blasting in rock quarries in Oregon, an average charge weight of 150 pounds per hole of ANFO fertilizer explosive is used for blast areas near residences. Using this charge weight and the distances between each site and the extraction area with a minimum 50 feet setback from the yellow mining line of Figure 2, the values of scaled distance were calculated and the noise level in dBC (decibels "C" weighting network") was read from Kampermans' graph. A copy of this graph is included in the appendix of this report. Table 8 below shows the data and the dBC noise level compared to the State DEQ blast noise standard;

Table 8
Blasting Estimates Per Kamperman

SITE NO.	DISTANCE FEET	SCALED DISTANCE	dBC	STATE DEQ BLAST STANDARD dBC
1	575	47	96	98
2	1400	114	83	98
3	1375	112	82	98
4	2750	224	71	98
5	450	37	99	98
6	1565	128	84	98
7	770	63	94	98

The dBC blast noise level is different (usually higher) than the environmental dBA levels described throughout this report, and cannot be compared or converted directly without knowing the frequency spectrum of each noise. This is why blast noise cannot be compared with "a"-weighted ambient noise directly.

Table 8 above shows that only one site (Site 5) lies over the State DEQ blast noise standard of 98 dBC. These estimates are for straight line-of-sight between the blast center and the receiver. It is probable that berms or barriers, or a reduction in charge weight might lower radiated blast noise levels. Increasing the number of holes while maintaining the total charge weight of explosive would also lower noise by decreasing the charge weight per hole. The U.S. Bureau of Mines has determined that a time delay between holes of approximately 17 milliseconds is ideal for most noise sensitive cases.

Livability Noise Criteria

There are no livability noise criteria in existence in our country today. It is this consultants belief that livability in relation to the noise environment should be tied to increases above ambient noise.

NOISE IMPACT CLASSIFICATION

Decibel Increase	Probable Impact
0	None
1 to 5	Minimal - Few Complaints
5 to 10	Moderate – Some Complaints
10 to 15	Major – Threats of Legal Action

Table 9 below compares the lowest L50 ambient noise during proposed quarry operating hours with the predicted levels of total noise. Truck noise is listed separately in Table 9 because it is an L10 noise level;

Table 9

Lowest Ambient Noise Compared to Total Quarry Noise

SITE NO.	QUIETEST HOUR L50, dBA	TOTAL QUARRY NOISE	INCREASE	NOISE IMPACT
1	39	51	12	MAJOR
2	62	44	0	NONE
3	37	43	6	MODERATE
4	37	40	3	MINIMAL
5	40	53	13	MAJOR
6	38	48	10	MODERATE
7	38	47	9	MODERATE

Table 9 above shows serious noise impacts at Sites 1 and 5, with moderate impacts at Sites 3, 6 and 7. These classifications are based on increases above existing ambient noise and not on the DEQ standards. The State DEQ determined. when they wrote their noise standard, that they would allow an increase of 10 dBA above ambient noise for properties to be developed that had not been used before for the particular land use. Some persons feel that the 10 dBA increase is too high, while others do not.

The DEQ staff at the time explained the allowable increase was to protect the environment adequately while not stifling development altogether. They believed that most people could tolerate an increase of 10 dBA, at least during daytime hours, as most noisy businesses do not operate at night. For those that do operate at night, it is necessary to get them to shut down long enough to measure the absolute background noise at the receiver locations.

It should be noted here that just because a noise meets the DEQ standard does not necessarily mean that a resident will not hear the noise. Audibility depends on background noise conditions, wind velocity and direction. Wind in the trees can tend to mask downwind sound reinforcement to lesson its effect. Examination of the statistical wind data from the NOAA at the Portland airport shows a mean annual wind speed and direction of about 8 mph from the southwest. The meteorological data for 2001 (data sheets attached) show that an easterly wind shows up in November through March, and shifts to the south-west for the months of April through October. The 2 minute data shows approximately the same wind directions at higher wind speeds.

It is probable that at some time, quarry activities and wind direction will coincide and cause some downwind sound reinforcement. However, this is highly variable, and noise standards cannot be written to include wind effects. They definitely can affect livability however.

The existing State DEQ hourly noise standard may not adequately predict resident's annoyance for continuous quarry production activities spread out over a ten-hour day. While there is no subjective-to-objective way to predict annoyance based on hourly L50 predicted noise levels, one can look at the hourly Leq levels. (The Leq is used by the FAA and USHUD to calculate the 24 hour Ldn or DNL level to regulate noise for airports and HUD sponsored living units. This unit however tends to smooth over the hourly variations frequently seen near these sites). The measured ambient lowest hourly L50 levels at the seven sites are lower than the hourly Leq energy average levels except at Site 2 where they are equal. However, adding 10 dBA to the lowest L50 levels per the DEQ ambient degradation standard brings the L50 levels above each hourly Leq. The writer believes that the hourly L50 level is the better method to compare predicted future noise with ambient noise as explained above.

NOISE MITIGATION METHODS

It is possible that modifications to normal quarry excavation and blasting conditions could serve to lower radiated noise. Table 6 above shows that the rock drill controls the noise environment at Sites 1, 5 and 6 when it is in use for a possible two to three days of drilling. (A hydraulic operated rock drill with an integral power supply was used for the noise source within 50 feet of the berm at the crest of the hill). Hydraulic rock drill data is included in the noise source section of the attached appendix. Recommendations for noise mitigation for this project are summarized below;

1. Require blasters and drillers to use hydraulic rock drills. Install a vinyl plastic 1-psf noise barrier, or a straw bale barrier around the rock drill when operating near Sites 1, 5 and 6. This barrier should be at least 2 feet higher than the top of the drill.

2. Require blasters to monitor noise at several sites during the first blast events. Make adjustments to blasting parameters such as total charge weight, number of holes and stemming as necessary to meet the DEQ blast noise standard or reduce annoyance. Advance notice of blast events should be publicized to the surrounding community.

3. Require applicant to maintain a 25 to 30 foot rock wall enclosing the processing area on three sides.

4. Require applicant to push up overburden to establish a 10 foot high berm at the crest of the hill at each new excavation location. (Machine noise due to building of berms is excluded from the DEQ noise standards). It should also be short term noise.

5. Require applicant to use conveyor belts to convey excavated rock to the present easterly processing area if the excavation process for crushed rock becomes continuous on a daily 8 to 10 hour basis. (instead of noisier haul trucks - noise reduction in the L10 could be 6 dBA quieter using conveyors). Conveyors will not be required for excavation of the larger decorative boulders used at this quarry. If conveyors are used, enclose conveyor elevation change-over transfer points with 20 gauge steel enclosure lined with 1" inch fiberglass panels.

6. Prohibit the use of engine "jake" brakes at any point on the haul roads except in the case of dire emergency to avoid accidents. If these brakes must be used due the extreme down grade of the haul road, require the installation of the special silencer called the "Donaldson Silent Partner" developed for "jake" brake noise reduction. See cut sheet attached. (Air Flow Systems Inc. of Milwaukie, OR., see item 9 below).

7. Require the applicant to hire a qualified registered acoustical engineer to conduct semi-annual noise measurements for the first year, at three of the closest sites after startup of the properly permitted quarry operation. After the first year, require annual measurements at the same three sites for a period of three years. The engineers' report should be presented to the Multnomah County Planning Department for approval.

8. There are no simple noise reduction techniques for the hand-held pneumatic hammers presently being used to break rock, or for the hydraulic hammer mounted at the front of the excavator. The 25 to 30 foot high rock walls around the processing area should serve to reduce hand-operated processing a significant amount, to the levels shown in Table 6. The hydraulic excavator bucket mounted at the front of the large excavator machine is more difficult to control. Berms and barriers can be effective however the required height may make them infeasible. If jaw crusher noise is annoying at Sites 1 and 6, it should be feasible to surround the crusher with 1-psf vinyl plastic panel barriers supported by a suitable steel framework. Such a barrier should extend at least 2 feet over the highest point of the crusher.

9. The Caterpillar dozer used for pushing up berms and removing overburden should be fitted with a "residential" quality exhaust muffler available from Air Flow Systems Inc. of Milwaukie, OR at 503-659-9120. This muffler should yield about 8 decibels more reduction for the low frequency exhaust component, and about 5 dBA noise reduction over the typical industrial grade muffler normally supplied with these diesel machines. These mufflers are relatively inexpensive.

10. To improve livability, operating hours should be limited to 8 a.m. to 5 p.m., with no operation between May and October on Saturdays or Sundays.

NOISE WITH ROCK DRILL MITIGATION

Total noise with use of a straw bale temporary noise barrier shows a minimum reduction of 10 dBA for the rock drill The results of this reduction are shown below in Table 10;

Table 10

Predicted L50 Noise Levels For Sources Compared to DEQ Standard With Hydraulic Rock Drill & Close Barrier

SITE	HAMMER NOISE	EXCAVATION NOISE	JAW CRUSHER	ROCK DRILL	TOTAL NOISE	DEQ AMB STANDARD
1	34	47	42	38	48	49
2	20	40	31	32	41	62
3	17	39	28	31	40	47
4	21	39	32	13	40	47
5	21	49	32	40	49	50
6	26	18	39	37	41	48
7	17	42	29	33	43	48

Table 10 shows that total noise now meets the DEQ ambient noise standard at all Sites. Since no excess attenuation due to ground cover or forest land, where available was used in the future noise calculations, it is likely that total noise will be about 5 dBA less at some sites depending on the distance between the sources and receivers. Ground cover was not used in order to be conservative in noise estimates. Table 11 below shows total quarry noise with the quieter hydraulic rock drill compared to the quietest hour background during daylight operating hours for a new assessment of livability;

Table 11
Lowest Ambient Noise Compared to Total Quarry Noise
With Hydraulic Rock Drill

SITE NO.	QUIETEST HOUR L50, dBA	TOTAL QUARRY NOISE	INCREASE	NOISE IMPACT
1	39	48	9	MODERATE
2	62	41	0	NONE
3	37	40	3	MINIMAL
4	37	40	3	MINIMAL
5	40	49	9	MODERATE
6	38	41	3	MINIMAL
7	38	43	5	MINIMAL

The table above shows changes in the expected annoyance from Major to moderate at Sites 1 and 5; and to Minimal at Sites 3, 6 and 7, with no Major impacts at any Site. This is a major improvement and should help to limit annoyance.

Respectively Submitted April 8, 2002

Albert G. Duble, P.E.
Acoustical Engineer
Mem. INCE

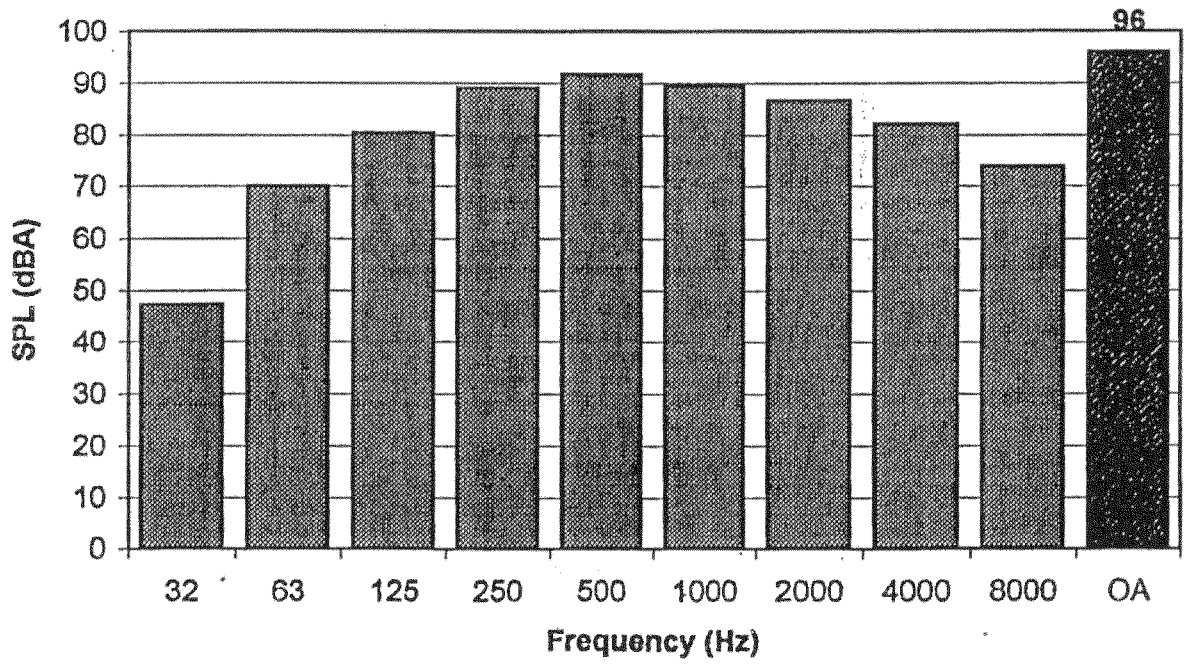
SPL Measurement Data

Subject: L_{01} - Dump truck being loaded at Corbett Quarry - 1st dump
Project: 134011
Date Measured: Oct-25-2001
WAV File: 130011-1.WAV
Msmt.Distance: 50 ft to center of excavator/rock hammer head
Description: Dump truck being loaded with rock from side by front end loader at Corbett Quarry. Measured at 50 ft to side of line between loader and truck. This spectrum represents the first load when the truck is empty Derived from measured WAV file and scaled to L_{01} SPL
Averaging Type: Linear
Freq. Weighting: A

Octave Band SPL Data

Frequency (Hz)	32	63	125	250	500	1000	2000	4000	8000	OA
SPL @ 50 ft (dBA)	47.3	70.0	80.4	89.2	91.8	89.4	86.7	82.1	73.9	96.0
SPL @ 50 ft (dB-Lin)	86.7	96.2	96.5	97.8	95.0	89.4	85.5	81.1	75.0	102.9

SPL Spectrum at 50 ft



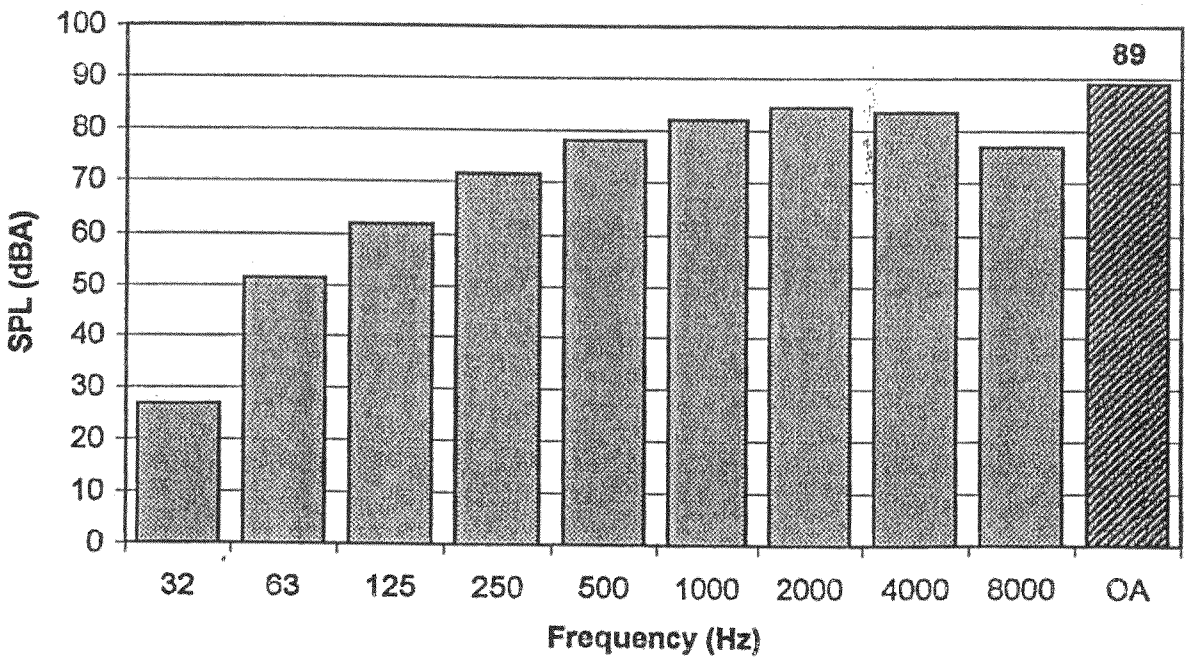
SPL Measurement Data

Subject: L_{10} - Rock Breaker Rammer 10X on Samsung MX292 Tracked Excavator
Project: 134011
Date Measured: Oct-25-2001
WAV File: 130011-1.WAV
Msmt.Distance: 50 ft to center of excavator/rock hammer head
Description: Rock breaker head mounted on tracked excavator used to break rock at Corbett Quarry. Measured at 50 ft to side of line between excavator and head. This spectrum represents individual impacts (L_{10} SPL) Derived from spectra of individual impacts scaled to L_{10} SPL
Averaging Type: Linear
Freq. Weighting: A

Octave Band SPL Data

Frequency (Hz)	32	63	125	250	500	1000	2000	4000	8000	OA
SPL @ 50 ft (dBA)	26.8	51.4	61.9	71.5	78.1	82.0	84.5	83.5	76.9	89.0
SPL @ 50 ft (dB-Lin)	66.2	77.6	78.0	80.1	81.3	82.0	83.3	82.5	78.0	89.9

SPL Spectrum at 50 ft



Summary of Statistical SPL Data Measured at Corbett Quarry @ 50 ft distance							
Rammer 10X Rock Breaker on Samsung MX292 Tracked Excavator							
	Statistical SPL (dBA)						
Measurement Details	L_{80}	L_{10}	L_{01}				
Measured 10/25/2001	77.5	89.0	93.0				
Measured 03/02/2002	77.0	86.0	90.5				

77 88 L_{10}

L_{80} @ 50'

Summary of SPL Spectra from Jackhammers Measured at Corbett Quarry @ 50 ft distance											
	Freq. (Hz)	31.5	63	125	250	500	1000	2000	4000	8000	OA
Newer unit (#1) 03/02/2002	SPL (dB)	34.9	48.1	59.8	75.6	72.0	74.6	73.5	76.3	77.2	83.0
Older unit (#2) 03/02/2002	SPL (dB)	44.5	54.1	63.1	78.3	75.6	77.0	77.9	81.5	81.6	87.0
Unit Measured 06/29/2001	SPL (dB)	37.8	49.5	67.0	81.1	70.8	78.6	78.9	79.7	80.6	87.0
Energy Average		40.9	51.4	64.3	78.9	73.3	77.0	77.3	79.6	80.1	86.0

APPENDIX

A-1

JAW CRUSHER NOISE DATA

SOURCE	FEET	dBA	31	63	125	250	500	1000	2000	4000	8000	16000
Riverbend S & G ;3-97	50	82	82	80	80	77	80	92	84	82	77	65
Warm Springs 4-91	50	82		81	81	83	84	89	85	81	62	
Bayview Transit 5-88	50	89	80	84	86	82	84	84	83	78	70	57
Brock Pit Scio 6-95	50	87	78	82	85	85	85	82	80	74	68	58
Johnson & Sons-Seaside 9-92	50	90	84	78	79	77	77	79	84	85	83	75
Energy Average	50	87	81	81	83	82	83	85	83	87	77	69

ROCK DRILL NOISE DATA - PNEUMATIC

SOURCE	FEET	dBA	31	63	125	250	500	1000	2000	4000	8000	16000
Ingersol-Rand 1-90	50	91	84	78	79	77	77	79	84	85	83	75
G & G Rock-Scio 1-89	50	91		912	90	82	86	85	83	84	82	
Starr Quarry-Amity 6-94	50	89	80	84	85	83	83	84	84	79	70	56
Johnson & Sons Seaside 9-92	50	93	85	81	90	87	88	90	86	80	69	59
Energy Average	50	91	83	92	88	84	85	86	84	83	80	70

APPENDIX A-2

HYDRAULIC ROCK DRILL NOISE DATA

Model C-700 Chicago Pneumatic Co. – Recorded Feb 7, by Mr. Bill Holliday, Registered Acoustical Engineer, at Parkin Quarry (West Side Rock);
Sound Level Meter: Type I Larson-Davis Labs with octave-band filter attachment.

Frequency:	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**dBA**
Noise Level Decibels	**73**	**79**	**84**	**80**	**81**	**83**	**80**	**72**	**68**	**89**

Appendix E

PHS Biological Assessment

BIOLOGICAL ASSESSMENT

Assessing Impacts to Chinook Salmon, Cutthroat Trout and Steelhead Trout

Prepared for:

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July 24, 2002

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1.0 INTRODUCTION

This Biological Assessment (BA) addresses the potential effects of expanding the existing Howard Canyon Quarry currently operating in rural east Multnomah County on species currently listed or candidates proposed for listing under the federal Endangered Species Act (ESA) and the State of Oregon's ESA. The quarry is within an approximately 33-acre property on the border of the watersheds of Howard Canyon Creek and Knieriem Creek/Ross. The property is south of Knieriem Road, east of Littlepage Road, and north of Louden Road and is illustrated on Figure 1.

Knieriem Creek and Howard Canyon Creek converge east of Littlepage Road to form Big Creek. Big Creek continues to flow to the west for approximately 4,000 feet where it plunges over an approximately 80-foot high water fall and joins the Sandy River. The drainage area of all of three creeks, which are designated by the Oregon Department of Fish and Wildlife (ODFW) as Class 1 streams, is approximately 4,134 acres.

A list of the species potentially affected by the quarry expansion is included in Table 1.

Table 1. Federal ESA Status of Species Found in the vicinity of the proposed Howard Canyon Expansion area

Species*	Scientific Name	Evolutionary Significant Unit (ESU)	ESA Listing Status**	Listing Decision Date
Steelhead Trout	*Oncorhynchus mykiss*	Lower Columbia River	Threatened	March 13, 1998
Coastal Cutthroat Trout	*Oncorhynchus clarki clarki*	Southwest WA/Columbia River	None***	
Chinook Salmon	*Oncorhynchus tshawytscha*	Lower Columbia River	Threatened	March 16, 1999
Coho Salmon	*Oncorhynchus kisutch*	Lower Columbia River/Southwest WA	Candidate to Propose as Threatened	July, 1995

* Steelhead and coho salmon are under the jurisdiction of the NMFS. Coastal cutthroat trout are under the jurisdiction of the US Fish and Wildlife Service (USFWS).

** The state of Oregon has classified steelhead trout stocks, coastal cutthroat trout, and lower Columbia River coho salmon as Sensitive Species of Critical Concern under the Oregon ESA.

*** On June 26, 2002, the US Fish and Wildlife Service determined that the southwestern Washington/Columbia River population of coastal cutthroat trout does not need ESA protection. This determination was based on a review of population data that showed that in a large portion of the southwestern Washington/Columbia River area cutthroat trout populations are relatively robust and the offspring of freshwater populations are likely able to become anadromous. Consequently, the US Fish and Wildlife Service concluded that coastal cutthroat trout in this population segment are not likely to become endangered in the foreseeable future.

The 80-foot high waterfall in Big Creek precludes passage by Chinook salmon and steelhead trout from the Sandy River. As such, these species do not inhabit Big Creek, Howard Canyon Creek or Knieriem Creek. However, these creeks do provide habitat for resident cutthroat trout.

Although the waterfall restricts anadromous fish from entering the three creeks, the quality of water in the creeks still influences the quality of anadromous salmonid habitat in the Sandy River. For example, downstream of the confluence of the Sandy River and Big Creek are spawning gravels. These gravels could be negatively effected by changes in water quality stemming from riparian degradation or instream impacts to the three creeks. If the degradation of spawning gravels is directly associated with activities stemming from the operation of the quarry, the NMFS could view the action as a "take," as defined within the ESA. The impacts to the spawning gravels may be perceived as significantly modifying or impairing essential behavioral patterns (e.g. spawning). Section 9 of the ESA makes it unlawful to "take" a protected species.

Although no specific mining plan was reviewed for this BA, an assessment of the potential effects of mining within the watersheds was conducted. This report includes an assessment of the current quality and quantity of riparian habitat along the three creeks and an assessment of the in-stream habitat and fish presence within the three creeks. This information was used to determine the environmental baseline of the watershed. Potential impacts from expanding the proposed quarry were weighed against how the environmental baseline could be affected by the mining operation. Proposed conservation measures to ensure that the environmental baseline is not adversely affected are included.

2.0 PROJECT BACKGROUND

In 1996, Multnomah County completed the Howard Canyon Reconciliation Report (HCRR), which addressed natural resource, residential farm, and transportation impacts of a mining operation in the Howard Canyon Quarry. The HCRR assessed and evaluated the Economic, Social, Environmental and Energy consequences (ESEE analysis) of a small-scale aggregate rock mining operation in the quarry. Based on the best available information at the time, the County's ESEE analysis concluded that the impacts from such a mining operation were acceptable and that the quarry should be designated as a protected resource for extraction.

The HCRR assesses three natural streams that surround and drain the Howard Canyon Quarry site: Big Creek, Knieriem Creek and Howard Canyon Creek. Knieriem Creek and Howard Canyon are the closest streams to the mine and join to form Big Creek, which flows into the Sandy River. All three streams have been designated by Oregon Department of Fish and Wildlife as Class 1 "significant" streams. Multnomah County has designated these streams as significant Goal 5 resources. The final conclusion of the HCRR was that all three streams were or could be adequately protected from impacts from the proposed quarry operations.

In 1998, the National Marine Fisheries Service (NMFS) declared the Lower Columbia River Steelhead as a threatened species under the federal Endangered Species Act (ESA). The listing included populations inhabiting east Multnomah County living in the Sandy River.

In 1999, NMFS listed as threatened eight additional salmon populations under the ESA, including fall run Chinook Salmon, which inhabits east Multnomah County including the Sandy River. Soon thereafter, NMFS identified and officially designated the critical habitat that was required for the long-term survival for these species. In early 2002, the NMFS withdrew the critical habitat designation for 19 salmon and steelhead populations (including those in the Sandy River) pending a review of the economic impacts on affected businesses, communities, and individuals. However, salmon and steelhead trout habitat remains protected by the essential fish habitat provisions of the Magnusson-Stevens Act. The designation of the designation of fish stocks under the ESA and through the Magnusson-Stevens Act gives federal protection to these species and the habitat upon which they depend to live, feed and reproduce. The Sandy River basin, consisting of the Sandy River mainstem and its larger, fish-bearing tributaries, were included in this critical habitat designation for the endangered Steelhead and fall Chinook Salmon.

In response to changes in the assumption about the size and methods of the quarry operations and to the ESA listing for the Sandy River, Multnomah County is up-dating the HCRR. This update will result in an amendment to the County's Comprehensive Plan policies as they apply to this site.

3.0 EVALUATION METHODS

The information presented in this BA is based on site visits, a review of the proposed mining concept, discussions with the ODFW, the County, and a literature review.

Factors considered in the preparation of this BA include the species' dependence on specific habitat components that could possibly be removed or modified, the abundance and distribution of habitat and habitat components in the vicinity of the quarry, distribution and population levels of the species (if known), the degree of current impact to habitat, and the potential to mitigate or avoid any adverse effects of the mining operation.

The methods outlined in *Making Endangered Species Act Determinations of Effect for Individual or Grouped Actions at the Watershed Scale* (NMFS 1996) were used to analyze the potential for quarry expansion on water quality and instream and riparian habitat quality. The strategy outlined in this document is to determine the environmental baseline for the watershed, discuss how the proposed action (i.e. quarry expansion) would affect the environmental baseline, and then use that information to determine the potential effect of the expansion on listed species.

4.0 FISH PRESENCE WITHIN THE SANDY RIVER AND ITS TRIBUTARIES

The quarry falls within the boundaries of the Lower Columbia ESUs (Evolutionary Significant Units) for Chinook salmon (*Oncorhynchus tshawytscha)*, coho salmon, chum salmon and steelhead trout (*Oncorhynchus mykiss*) and the SW Washington/Columbia River ESU for coastal cutthroat trout (*Oncorhynchus clarki clarki*). Chinook salmon, coho salmon, chum salmon, and steelhead trout are under the jurisdiction of NMFS. Coastal cutthroat trout is

under the jurisdiction of USFWS. Since chum habitat is not considered available in the Sandy River (NMFS, Federal Register), they will not be considered in this report. The state of Oregon has classified steelhead trout stocks, coastal cutthroat trout, and the lower Columbia River runs of Chinook and coho salmon as Sensitive Species of Critical Concern.

4.1 Documented fish within the Sandy River and its tributaries

The Sandy River mainstem and its fish-bearing tributaries are known to provide habitat for Lower Columbia River (LCR) Evolutionarily Significant Unit (ESU) of steelhead trout and Chinook salmon, both listed as threatened by the NMFS (FR 63(53):13347, FR 64(56):14308), the LCR/Southwest Washington (LCR/SW) ESU of coho salmon (candidate species since 1995, FR 60(142): 38011), and the Southwestern Washington/Columbia River (SWCR) ESU of the coastal cutthroat trout, which has been proposed for listing as threatened since March, 1999 (FR 64(64):16397).

The LCR steelhead and Chinook ESUs include the Sandy and Hood River basins and the Lower Willamette (to Willamette Falls). LCR/SW coho salmon range from the Deschutes basin and the Lower Willamette (to Willamette Falls) to Pt. Grenville on the Washington Coast. The SWCR coastal cutthroat trout ESU encompasses the Columbia River and its tributaries downstream from Fifteenmile Creek, and the Willamette River downstream of the Willamette River Falls.

Previous surveys for fish by the ODFW indicate that resident rainbow trout (*Oncorhynchus mykiss*) and mountain whitefish (*Prosopium williamsoni*) presently also occur in the Sandy River mainstem (Murtagh, 1997). Other fish found in the lower mainstem include the American shad (*Alosa sapidissima*), and Eulachon (*Thaleichths pacificus*).

4.2 Results of fish survey within the Howard Canyon Creek, Knieriem Creek and Big Creek

Where property access was granted, a backpack electroshocker (Permit No. OR2002-400 issued by the ODFW) was used to assess the presence of fish in Knieriem Creek, Howard Canyon Creek, and Big Creek. The survey was conducted in a downstream direction. The upper reaches of Knieriem Creek and Howard Canyon Creek were assessed first. Big Creek near Littlepage Road was surveyed last. The survey was conducted in February 2002, in cool weather (approximately 50°F) between the hours of approximately 9am to 3pm. The survey determined that only two fish taxa: cutthroat trout and a sculpin species tentatively identified as the reticulate sculpin (*Cottus perplexus*), reside in the three creeks. A Pacific Giant salamander (*Dicamptodon tenebrosus*) was also collected.

Multiage classes (based upon length relationships) of both cutthroat trout and sculpins were found in Howard Canyon Creek and Big Creek. Only sculpins were found in lower Knieriem Creek. The numbers of fish found through the survey were relatively low. All fish appeared in good health with no obvious anomalies including sores, fin rot, or parasites. Collected fish were revived in buckets, identified, enumerated, measured and returned to the streams.

5.0 SALMONID LIFE HISTORIES

5.1 Coho Salmon

Coho naturally exist along the Pacific Coast from Monterey Bay, California northward to Point Hope, Alaska. (Scott and Crossman, 1973). Historically, coho were probably found in most coastal streams. The species is also found in northeast Asia from the Anadyr River south to Hokkaido, Japan.

Coho salmon, like other Pacific salmon, spawn in freshwater, migrate to the ocean as juveniles, and feed until reaching sexual maturity. The fish then return to their natal stream to spawn and die. Adults typically initiate their freshwater spawning migration in late summer to early fall, and spawn by midwinter. Spawned out adults die soon afterward. Specific upriver migration and spawning times vary by river and stock (groups of fish that are genetically self-sustaining and reproductively isolated either geographically or temporarily). Incubation of the eggs in redds (nests made in gravel that consist of a depression dug by the spawning adult fish for egg deposition and then filled to take on a hummocky appearance) takes 1.5 to 4 months depending upon stream temperature. Hatched out alevins, with yolk sac still present, remain in the interstitial gravel space until the yolk sac is absorbed. These juveniles emerge from the gravel and begin to feed for the next 15 months. As juveniles begin the physiological transformation of smolting in preparation for existence in saltwater, they migrate downstream to the ocean. They spend two growing seasons in the ocean before returning as adults to spawn. A small number of early maturing males, (jacks), return after a single season (six months) at sea.

Coho stocks returning to the Sandy River and its tributaries form two runs in the basin. There is an early run hatchery stock and a wild run of coho salmon. Sandy River early run hatchery coho are developed from native Sandy River stock and are released into the river from the Sandy hatchery near river mile (RM) 22. The wild fish, a late returning stock, historically migrated into the Sandy River from October to February with spawning occurring from November to February. However, hatchery influences appear to have influenced run timing and fish now return primarily in September and October. After analysis of coho run size, migration timing at Marmot dam (RM 30), which is upstream of the project site, and spawning ground surveys and scale analysis, ODFW biologists determined that a stable but depressed wild coho population still exists that continues to reproduce naturally in the basin (Murtagh, 1997).

5.2 Chinook Salmon

Chinook salmon have much more diverse life histories than do coho salmon (Groot and Margolis, 1991). The fish are divided into two races, including spring and fall run races, also called runs or stocks, which are distinguished by river entry time. Stocks heading far upstream tend to arrive earlier than coastal run stocks. Within a race, further life history variation occurs, which spreads the risk of an environmental event threatening the existence of the species. For example, juveniles of a given year class may smolt immediately and go to the ocean, while other juveniles may spend 2 to 3 years living in freshwater before smolting.

In Oregon, fry generally spend a few weeks before heading to the ocean though a small percentage is known to overwinter before heading to the ocean. Sub-adults may spend 6 months to 5 years maturing in the ocean before returning to their natal river to spawn. If a catastrophic flood were to dislodge and destroy all eggs of a particular stock one year, the spreading of risk through life history variation would allow fish of that stock born in previous years to continue the existence of that stock.

Both spring and fall run Chinook salmon exist in the Sandy River. Spring run fish enter the river in the spring, while fall run Chinook enter the river during the late summer. Egg incubation typically occurs from November through February. During the spring, fry emerge from the gravel. Historically, between 8,000 to 10,000 wild spring Chinook may have once returned to the Sandy basin (Mattson 1955 in Murtagh 1997). Presently, management goals are to maintain an escapement of 2000 fish, including a minimum of 300 wild fish (Murtagh 1997), at Marmot dam which is upstream of the project site.

Indigenous fall Chinook can be divided into two groups (early maturing and later maturing Sandy stock). The later maturing stock, returns from December to early February, but in recent years the run has all but disappeared. The early-run fall Chinook return to the river from August until November.

Most fall Chinook juveniles emerge from the gravel in the spring and soon begin their gradual migration to the ocean, feeding in side channels and other food rich areas along the way. A very small percentage are thought to have a life history of overwintering like coho before heading to the ocean. Those that do overwinter utilize backwater habitats off the mainstem river during the winter to avoid the current of flood flows. Spring Chinook juveniles typically overwinter and migrate as 1+ (one year plus) individuals.

5.3 Cutthroat Trout

Coastal cutthroat trout (*O. clarki clarki*) are found within the entire Sandy River basin, and are the most common trout species in the basin (Murtagh, 1997). They have a generalized life history similar to other salmonids. Spawning occurs in the late winter to early spring. They are typically predacious, have long life spans (up to 10 years), and like cutthroat trout in general, are vulnerable to overexploitation by angling (Behnke, 1992). The species is also considered to be highly vulnerable to the consequences of logging activities (Behnke, 1992). Thus, increased sedimentation, reduced cover, and greater maximum water temperatures are all factors that may depress cutthroat trout populations. Both anadromous and resident forms exist in the Sandy River basin. Anadromous runs numbers are presently very low (Murtagh, 1997) just as they are for other lower Columbia River tributaries.

5.3.1 Coastal Cutthroat Trout

Coastal cutthroat trout (both migratory and resident forms) in the Big Creek/Howard Canyon watershed are part of the Southwest Washington/Lower Columbia River ESU. This ESU was proposed for listing as threatened under the Federal Endangered Species Act in April 1999 (64 FR 16397). A final listing decision was due in April 2000 but was postponed for 6 months

to allow the USFWS time to obtain and review new scientific data to resolve disagreement about the status of the population (65 FR 20123). The USFWS planned to issue a decision on the proposed listing in October 2000; however, no ruling on the proposed listing has yet been made.

Coastal cutthroat populations exhibit four life history types. These various types represent the most complex life histories of any salmonid in Oregon. Resident (non-migratory) cutthroat trout occur in small headwater streams and exhibit little instream movement. Fluvial populations undergo in-river migrations between small spawning tributaries and mainstem rivers sections downstream, similar to ocean migrations of sea-run cutthroat trout. Adfluvial populations migrate between spawning tributaries and lakes. Anadromous or sea-run populations generally migrate to the ocean (or estuary) for less than a year before returning to freshwater. The migratory form does not typically over-winter in the ocean, and forays to the sea appear only rarely to include traversing long distances. Most cutthroat remain within 10 kilometers (6 miles) of the coast. A few have been found up to 80 kilometers (50 miles) offshore (64 FR 16397). Anadromous cutthroat trout either spawn during the first winter or spring after their return, or they undergo a second migration before maturing and spawning in freshwater.

ODFW and Washington Department of Fish and Wildlife have presented evidence that non-migratory forms of this species can produce migratory offspring (64 FR 16397). However, while the occurrence of this recruitment may buffer declines in migratory populations, it has not demonstrated the ability to offset them. Reductions in migratory populations threaten to isolate genetic stocks and increase the extinction potential of the species.

5.4 Steelhead Trout

Steelhead (*Oncorhynchus mykiss*) in the Sandy River watershed are part of the Lower Columbia River ESU that was listed as threatened in March (63 FR 13347). Adult winter steelhead in this ESU typically enter the river systems starting in November through the end of March; peak entry is January and February. The adults spawn soon after entering. The fry emerge from April through July, and then rear in fresh water for one to three years (Busby et al. 1996). The fish smolt in the spring and emigrate downstream from March through June during high spring flows.

Steelhead trout, *Oncorhynchus mykiss,* have two distinct life histories, anadromous (steelhead) and freshwater resident (rainbow or redband trout). Anadromous juveniles rear in freshwater and then migrate to marine waters for a period of growth after which they return to freshwater to spawn. Resident life history types spend their entire lives in freshwater. The following life history description focuses on the anadromous life history form. Freshwater habitat requirements are similar for both anadromous and resident life history types.

Anadromous steelhead can be divided into two reproductive ecotypes, based on the adults' levels of sexual maturity at the time of freshwater entry and duration of their spawning migration. These two ecotypes are termed "stream maturing" or "summer" steelhead and "ocean maturing" or "winter" steelhead. Summer steelhead enter freshwater as sexual immatures during the summer months and require several months of maturation prior to

spawning. Winter steelhead enter freshwater ready to spawn in late winter or early spring (NMFS 1996). In the Sandy, winter fish are native and summer steelhead have been introduced from Skamania River stock (Murtagh 1997). It is debated that there may have been a small native summer run present.

Winter steelhead begin migrating to the Columbia River and their natal tributary streams in December and January. Summer steelhead begin their migration and entry into freshwater during June or July, overwintering in freshwater until they spawn in late winter to early spring. In the lower Columbia River ESU, most steelhead spawning occurs from March through May (WDF *et al.* 1993).

Unlike most species of *Oncorhynchus*, steelhead are capable of spawning multiple times (NMFS 1996). Preferable spawning habitat includes streams with cool, clear, and well oxygenated water. Water depths typically range from 10 to 137 cm (4 to 54 in); with water velocities ranging from 5 to 13 cm/s (2 to 5 ft) per second. Optimal gravel sizes range from 0.6 to 23 cm (0.25 to 5 in) in diameter (Barnhart 1991). After spawning, spent steelhead (kelts) that have survived the process outmigrate back to ocean waters. For steelhead populations north of Oregon, repeat spawning is relatively uncommon, and more than two spawning migrations are rare. In Oregon and California, the frequency of two spawning migrations is higher (up to 10%), but more than two spawning migrations is unusual (NMFS 1996).

Steelhead eggs hatch in about four to seven weeks depending on the water temperature (Scott and Crossman 1973). The young alevins remain in the gravel until their yolk sac is depleted (usually from two to five weeks). Upon emergence from the gravel, steelhead fry form schools and inhabit the margins of the stream until they become stronger swimmers (Barnhart 1991). Natural rearing of steelhead typically lasts two years prior to ocean migration, although some juveniles smolt after only one year or as much as seven years (Busby et al. 1996). Summer rearing is typically spent within riffle habitat, whereas pools are preferred during winter months. (Wydoski and Whitney 1979).

Steelhead smolts begin their outmigration in late April through June, typically with spring "runoff". In the Sandy river, smolt outmigration occurs from April through June with a peak in May (Murtagh et al. 1997) Outmigrants typically measure between 120-180 mm in length and can take as long as two to three months to move downstream to the estuary (Wydoski and Whitney 1979).

Not much is known about the saltwater phase of steelhead development. Due to their extensive freshwater residence, steelhead smolts do not spend an appreciable amount of time in the estuarine areas, but rather move directly into deeper, open water. In the ocean, steelhead feed heavily on a variety of organisms, especially juvenile greening, squids, and amphipods. They are in turn preyed upon by other fish and marine mammals (Barnhart 1991). Steelhead predominantly spend 2 years at sea before returning to spawn in fresh water but may spend anywhere from 1-5 years at sea before returning to spawn (Emmett et al. 1991, Behnke 1992, Busby et al. 1996.) During surveys for salmon, Washington and Oregon steelhead have been scattered westward as far north as 160° W to the Gulf of Alaska, and westward along the Aleutians to 175° W (Wydoski and Whitney 1979).

6.0 ENVIRONMENTAL BASELINE

6.1 Geologic Setting

The quarry is located on a Boring high-alumina olivine basalt flow underlain by sediments of the Troutdale Formation. The facies of Troutdale in this area is a vitric sandstone consisting largely of yellowish variously hydrated basaltic glass grains (Tolan and Beeson 1984). The principal bedload for Howard Canyon Creek, in addition to colluvial cobbles of the Boring basalt, are reworked sediments of the Troutdale Formation. Stream morphology is determined in large part by the structural properties of these sedimentary deposits underlain by older tholeitic basalt flows. Structural properties of these older basalts probably determine the morphology of the stream channels. Uplift through the last several million years has undoubtedly caused some fracturing of the Troutdale sediments which determines the drainage patterns.

The headwaters of Howard Canyon Creek and Knieriem Creek lie in the Troutdale Formation and form a series of small steep tributaries draining south from the quarry area. The northern slope from the quarry area into Knieriem Creek is relatively undissected by drainages; suggesting that most of the surface and ground water from the quarry area goes south to Howard Canyon Creek. Howard Canyon Creek, which lies approximately 1300 feet south of the quarry area, has a gradient of approximately 2%. Tributary drainages to the creek from the quarry area have a variable spacing and strike with an average spacing of 370 feet. The gradient of these small tributary channels varies from 15% to 25% (6.66:1 to 4:1).

The moderately well drained haplumbrept soils mapped for the slope south of the quarry by the Natural Resources Conservation Service are developed on loess and old alluvium. Mershon silt loam (fine-silty, mixed, superactive, mesic Aquic Humic Dystrudept) typically has a very hard and very firm 2C horizon at 40 to 60 inches depth. This horizon may keep a significant portion of the surface water above this depth. The runoff curve number class C for this soil is the result of moderately easy infiltration into the surface horizons of the soil. The permeability is 0.6 – 2.0 inches/hour above 15 inches and 0.2 – 0.6 inches/hour below 15 inches. The top 3 feet of these soils typically contain 2% pebbles and deeper parts of the soil profile contain 15% gravel and cobbles.

6.2 Instream Habitat

A common feature of the creeks within the vicinity of the quarry is the general lack of complex instream habitat, which primarily stems from the lack of large woody debris (LWD) within the streams. Logging, agricultural activities, and other local land use practices have reduced LWD recruitment in the watersheds. It also appears that several landowners within the area keep their streams and banks "clean". One landowner offered that he thought he was helping the stream and fish by removing LWD.

A general pattern for the creeks is the change from canopied streams, with better quality riparian habitat, stable banks and better LWD recruitment, to less complex, increasingly channelized and exposed streams lower in the watershed. This was demonstrated when the width to depth (W/D) ratio of the streams was estimated. Streams are generally considered properly functioning if the W/D ratio is 10 or less.

Upstream of the pastures and the existing quarry on Howard Canyon Creek, the W/D ratio at two survey locations was 10.67 and 7.69, indicating the stream was close to properly functioning for this condition. Downstream near the confluence with Big Creek, the ratio had increased to an average of 20, indicating the decrease in quality of the stream lower in the watershed. In this area, stream structure was poor, banks were eroding, woody debris was absent, substrate was mostly embedded and not diverse, riparian vegetation was virtually nonexistent and the stream was almost entirely glide/run versus defined pools and riffles.

The range of W/D ratios were similar on Knieriem Creek. Upstream, where the riparian areas are more intact, the W/D ratio was 7. In this portion of the channel, the creek flows primarily with minimal human influence. This was apparent in the quality of the substrate and instream habitat. Large woody debris was present in and over the channel and large riparian trees, such as western red cedar, are stabilizing banks and creating overhanging banks and pools. This section of the stream was significantly different than the downstream sections of stream influenced by yards and pastures. In this downstream area, the W/D ratio was 37.

The W/D ratios for Big Creek ranged from 6.5 to 11.9. However, these results were not representative of stream conditions and were skewed by property access. Observations made from adjacent roads and properties appeared to indicate that W/D ratios were averaged higher than those measured.

6.3 Water Quality

Water quality was not directly measured during field visits. Therefore, the environmental baseline for water quality can only be indirectly addressed. Water temperature averaged 42.5°F in the streams during the February field visits.

Upstream of the quarry where human influence is minimal, the water quality of Howard Canyon Creek, Knieriem Creek and its small tributary Ross Creek appeared very good. Canopy cover is good which maintains lower temperatures during the summer. Chemical influences and sedimentation are likely not a problem. Though it was raining during one site visit, all streams ran clear. Downstream, where the streams run through yards and pastures, it is likely that nutrients and fecal coliform from livestock and septic tanks enter the streams. Chemicals leaching into the stream systems likely occurs where there are insufficient buffers from roads (hydrocarbons) and when the creeks flow through pastures or yards (herbicides, fertilizers). Additionally, the streams probably become slightly more turbid due to the unstable and failing banks.

Although the quality of the water degrades in all of the streams lower in the watershed, the quality does not appear to be sufficiently poor to inhibit populations of cutthroat trout and sculpin from persisting along the entire stream network even during the summer. Indirect evidence for this stems from the presence of multi-age class fish populations.

6.4 Riparian Habitat

Existing riparian conditions were assessed within the Howard Canyon, Knieriem Creek and Big Creek watersheds. The assessment included determining actual and potential riparian area widths and assessing the existing functions of riparian reaches within the watersheds in order to establish a baseline condition.

6.4.1 Riparian Assessment Methodology

Riparian Width

The Urban Riparian Inventory and Assessment Guide (Riparian Guide) (Pacific Habitat Services 1996) was used for establishing the baseline riparian conditions. The Riparian Guide depends on a combination of best available knowledge, field observations, and best professional judgment. The first step in the riparian inventory is to divide the study area into watersheds and then into riparian reaches. Land use and/or vegetation communities typically distinguish reaches. A Riparian Characterization Form and riparian assessment is then completed for each reach. The forms provide information on the physical and biological characteristics of the riparian area, such as vegetation, slope, adjacent land uses, and degree of disturbance. The dominant riparian tree species within 100 feet of the water resource is determined, which establishes the potential riparian width, based on potential tree height (PTH). PTH is used as the potential riparian width because it represents a distance in which a tree can still affect the water resource (e.g. shade, organic material).

The riparian width is measured from the edge of the water resource, typically either the top of a streambank or the outer edge of an adjacent wetland, lake, or pond. Riparian areas on both sides of a stream channel are assigned separate widths. Right and left widths are not combined and do not include the channel.

Where riparian area trees have been eliminated by land-use activities or natural causes, such as development, land slides, or logging, it may be necessary to extrapolate tree heights from a reference site. The reference site should be similar in character and landscape position and should be located as close as possible to the riparian reach. If a reference site is used, it is noted on the Width Determination Form. If a reference site cannot be located, field observations and reference materials must be used to establish PTH.

Although the riparian width will never exceed the PTH, it may be less than the PTH if impervious surfaces or permanent structures (e.g. buildings or roads) are inventoried within the riparian area. Therefore, on the Riparian Width Determination form, the first width represents the PTH and the second width represents the actual width as determined in the field and during review of aerial photographs.

Riparian Functional Assessment

Riparian areas provide numerous and complex functions that affect both aquatic and terrestrial systems. Many ecological functions of riparian areas are also provided by wetlands, floodplains, and vegetated upland areas.

The Riparian Function Assessment evaluates the ability of the riparian area to provide water quality, flood management, thermal regulation, and wildlife habitat functions. The results indicate whether the functions of each reach are intact, degraded, or severely impacted. The assessment is completed by answering a series of questions. Most of the questions are intended to be answered using data from the Riparian Characterization Form.

Because certain elements or characteristics of a riparian area are more critical to its function, the answers are "weighted." The points are then totaled for each side and for each function. Based on the score, the riparian function will be assessed as high, medium or low.

The results of the Riparian Function Assessment for all of the riparian areas within the inventory study area are then transferred to a Riparian Function Assessment Summary Table.

Riparian Functions

Water Quality

Riparian areas can enhance water quality in many ways. Undisturbed densely vegetated riparian areas trap sediments, inhibit erosion and filter runoff originating from impervious surfaces, lawns, golf courses, etc. Sedimentation and erosion, although natural processes, are accelerated in urban areas by increased impervious surfaces. Impervious surfaces also inhibit infiltration. Sediment within a riparian area can be from erosion of poorly vegetated uplands, runoff from impervious surfaces, or floods from an adjacent water resource. Sediments often carry nutrients (e.g. phosphates and nitrates) and pollutants (e.g. heavy metals, hydrocarbons) to water resources, altering water chemistry, burying spawning gravels and impacting fish and wildlife habitat. Excessive concentration of nutrients in the water can trigger algal blooms, depleting the water of oxygen required by fish and other aquatic organisms.

The ability of a riparian area to resist erosion is related to slope, soil type, type of vegetation, vegetation cover, landscape position, and degree of human disturbance.

Flood Management

Riparian areas and associated wetlands and floodplains provide a valuable flood management function by reducing the force and volume of floodwaters. Floodwaters flowing into a vegetated flood prone riparian area can be slowed or temporarily stored, reducing peak flows and flooding downstream. Woody vegetation, in particular, resists floodwaters and reduces its velocity. Topographic features, such as swales and depressions, can enhance a riparian area's ability to manage flood flows. Reducing the velocity of floodwaters in the riparian area allows infiltration of water into the soil. Water entering the soil is slowly released into the main channel, delaying its movement downstream.

Thermal Regulation

Water temperature affects the ability of a stream to support viable populations of certain aquatic organisms. Riparian shade, especially forest canopy, moderates temperature within and adjacent to a water resource. Although stream temperatures are important throughout the year, summer temperature is generally more critical for fish species such as salmonids. High water temperatures and sunlight are factors that can promote algal blooms, reducing dissolved oxygen required by anadromous fish and other cold-water dependent organisms.

The aspect or orientation of the water resource and the height of the adjacent riparian vegetation play important roles in how effective riparian vegetation is in providing shade.

Wildlife Habitat

Riparian areas provide valuable habitat for wildlife and influence fish habitat. The highest quality wildlife habitat in urban areas has a variety of plant species and layers, a perennial water source, and some degree of protection or buffering from disturbance.

Riparian areas are particularly important migration corridors between upland and aquatic systems for a wide variety of species. It has been reported that the majority of Oregon's major wildlife species, including amphibians and reptiles, use wetlands or riparian areas during some portion of their life cycle.

6.4.2 Riparian Area and Distribution

Seven (7) riparian reaches were assessed as representative of the existing riparian conditions in the watersheds. Each riparian area was assigned a code and a modifier for right or left side, and a watershed code (e.g. R-HC-2L, R-HC-2R). A data sheet was compiled which documents the existing riparian characteristics and establishes the riparian width based on potential tree height (PTH) and actual site conditions (Appendix A). The majority of the assessments were based on on-site observations from private properties where permission to access was granted. Off-site assessments were based on observation from an off-site vantage point or review of maps and aerial photos.

Potential tree heights were generally based on either Douglas fir (120-foot PTH), western red cedar (120-foot PTH), or red alder (65-foot PTH). Riparian areas on steep slopes were generally forested or potentially forested with coniferous trees. Early successional trees such as red alder generally dominated riparian areas in flatter topographic areas. Figures 3A-3E show the location of the riparian assessments, the riparian reaches, and the width of the riparian areas. The following table summarizes the riparian area widths, lengths and potential tree heights.

Table 2. Riparian Corridors and Their Widths for the Howard Canyon Project

RIPARIAN AREA CODE	Potential Tree Height (PTH) (ft)	Actual Riparian width (ft)	Riparian Area length (ft)
HC-1	120	120	
HC-2	65	65	
HC-3 (L)	120	120	
HC-3 (R)	65	20-65	
BC-1	65	65	
BC-2	120	50-120	
KC-1	65	20-65	
KC-2	65	65	

As the table shows, the majority of riparian widths are based on the PTH of Douglas fir, western red cedar, or red alder. In addition, many existing riparian areas are narrower than the PTH, indicating that development and land use practices have encroached on many of the riparian areas.

6.4.3 Riparian Assessment Results

An assessment of four riparian functions, water quality, flood management, thermal regulation, and wildlife habitat, was conducted for each of the riparian areas. The questions and answer sheets for the riparian assessment are included in Appendix B.

Answering a series of questions relating to the riparian functions completes the riparian assessment. Each answer is assigned a score that reflects its overall importance to the function. Questions that were answered "a" received a higher score than "c" answers. After the score was totaled for each function, it was assigned a rating of high (H), medium (M), or low (L) according to the results. Table 3 summarizes the results of the riparian functional assessment.

Table 3. Summary of Riparian Functional Assessments

Riparian Code	Water Quality	Flood Management	Thermal Regulation	Wildlife Habitat
HC-1	H	H	H	H
HC-2	H	H	M	M
HC-3	H	M	M	M
BC-1	H	H	H	H
BC-2	H	H	H	M
KC-1	H	M	H	H
KC-2	H	H	H	M

H = High M = Medium L = Low

In general, the riparian areas were relatively intact. All of the riparian areas received at least one high score and all received high rankings for water quality function due to a dominance of woody trees and shrubs in the riparian areas and minimal impervious surfaces. Thermal regulation and flood management functions were also generally assessed with a high functional integrity due to an east-west stream orientation and woody vegetation near the edge of the stream. The wildlife habitat category had more reaches receiving a medium ranking due to lack of a variety of vegetation strata in some reaches and lack of large woody debris in others.

6.4.4 Riparian Discussion

Riparian areas within the Howard Canyon Creek, Knieriem Creek, and Big Creek watersheds have been affected by logging, residential development, grazing, and roads. Although the results of the riparian assessment indicate that many of the riparian functions area high, these results likely reflect the rural nature of the area and the fact that the Riparian Guide is intended for more urban areas where impervious surfaces are high. In the watersheds assessed for this study, the riparian areas of the creeks have been impacted by grazing, agricultural activities, rural road construction, and landscaped areas associated with residential construction.

In general, and as discussed in the sections above, the upper reaches of Howard Canyon Creek and Knieriem Creek both have undisturbed sections of riparian vegetation and human influences are minimal. The lower ends of the drainages have already been altered. There are significant impacts to riparian widths and conditions from roads, development of rural residential houses and yards, and livestock access to the stream. Near the confluence of Knieriem Creek and Big Creek, tree cover is entirely lacking from the riparian areas.

In general, Big Creek's riparian areas have been impacted by adjacent roads, culverts, clearing and residential development. However, areas below Hurlburt Road appear to have an undisturbed riparian cover extending through Oxbow Park and to the Sandy River.

Except through the indirect impact of road construction and maintenance, riparian areas have not been impacted by the existing quarry operation.

6.5 Wetlands

In general, wetlands in the watersheds are generally directly associated with the three creeks. Overflow channels and low flood-prone benches are present. The National Wetlands Inventory (NWI) has mapped both riverine and palustrine wetlands within the watersheds. With the exception of a small pond, all the mapped wetlands are coincidental with the streams. Howard Canyon Creek, Knieriem Creek, and Big Creek are all mapped as riverine, upper perennial, unconsolidated bottom, permanently flooded (R3UBH) bodies of water. A small stretch of palustrine scrub shrub, seasonally flooded wetland (PSSC) is mapped along Knieriem Creek.

6.6 Fish Passage

There is no anadromous fish passage from the Sandy River into Big Creek, Howard Canyon, Creek and Knieriem Creek. A large natural 80 foot waterfall exists on Big Creek just above the confluence with the Sandy River (Shapiro 1994). PHS was unable to gain property access to view this barrier. The cutthroat trout that exist upstream of the barrier are not prevented from travelling downstream and may add to the genetic diversity of cutthroat trout in the Sandy River. No steelhead trout, coho or Chinook salmon or other fish can ascend the barrier. Upstream of this natural barrier, a number of culverts provide difficult or impossible barriers to upstream migration of juvenile and adult cutthroat on Big Creek, Howard Canyon Creek, and Knieriem Creek. The barriers result from the long length of several culverts, the steep slope of several culverts, and eroded outfalls creating jump barriers greater than 6 inches high.

7.0 PROPOSED MINING PLAN

The current mining operation extracts approximately 5,000 cubic yards of aggregate from the quarry annually. The proposed expansion would increase this amount up to approximately 75,000 cubic yards, though less may be extracted. The mining area would affect an approximately 24-acre area, though the specific footprint of the site has not yet been determined. Within the 24-acres, five acres is proposed to be impacted at any one time.

The information reviewed for this BA indicates that if the quarry continues with its limited extraction of up to 5,000 cubic yards per year, the quarry operator will not install erosion control devices, provide buffers from adjacent creeks, or implement other conservation measures that would ensure protection of natural resources and the quality of water in the Sandy River downstream.

If, however, the extraction is increased, the quarry operator would be required to implement additional conservation measures. A summary of the measures proposed by the quarry operator is included in Table 4.

Table 4. Proposed extraction quantities per year and conservation measures currently offered by the quarry operator.

Proposed Conservation Measures	Extraction Quantity Per Year (cubic yards)		
	5,000	35,000	75,000
Buffers	No	Yes	Yes
Sediment control	Yes	Yes	Yes
Truck washdown	No	Yes	Yes
Quantity (runoff) control	No	Yes	Yes
Maintain stream flows	No	Yes	Yes
Erosion control in disturbed areas	Yes	Yes	Yes

No description of off-site construction activity associated with the quarry expansion has been provided. Off-site construction could include the construction of new roads, improvements to existing roads, or the construction and siting of new utilities to serve the quarry.

8.0 POTENTIAL EFFECTS OF EXPANDING THE QUARRY ON THE ENVIRONMENTAL BASELINE

Expanding the quarry from 5,000 cubic yards per year to a maximum of 75,000 cubic yards per year may have an effect on the environmental baseline of the watersheds. However, whether the effect is sufficient to adversely affect the continued survival and recovery of salmonid populations within the watersheds and within the Sandy River is dependent on numerous parameters of watershed health. This section discusses the possible effects of expanding the quarry on these parameters.

The list of functional parameters is taken from *Making Endangered Species Act Determinations of Effect for Individual or Grouped Actions at the Watershed Scale* (NMFS 1996). These parameters include: temperature, turbidity, chemical contaminants/nutrients, physical barriers, substrate, large woody material, percent pool area, pool quality, pool frequency, off-channel habitat, refugia, width/depth ratio, streambank condition, floodplain connectivity, peak/base flows, drainage network increase, road density/location, disturbance history, and riparian reserves.

As no specific mining plan is available, impacts to the environmental baseline of the watersheds from the expansion of the quarry must be inferred from the likely location and type of mining.

Water Quality

Temperature: Water temperatures in Howard Canyon Creek and Knieriem Creek are considered **functioning properly, but at risk.**

An elevation of water temperatures could occur if the current riparian cover surrounding the creeks is impacted by the quarry expansion or if runoff from future on-site water quality facilities is not sufficiently moderated before flowing into the surrounding creeks.

It is unlikely that the expansion of the quarry will impact riparian vegetation along the creeks, though vegetation at stream crossings may be impacted if surrounding roads are required to be improved.

It is also unlikely that runoff from the expansion site will adversely impact water temperatures of the surrounding streams. This is based on the fact that much of the water draining from the site will be during the wettest portions of the year when ambient temperatures are cooler. During the summer when ambient temperatures are warmer, off-site flow will be severely reduced, or more likely, virtually absent, and should not influence the water temperatures of Howard Canyon Creek and consequently the Sandy River. The lack of adverse impact can be facilitated by ensuring that runoff from future on-site water quality facilities flows through a dense canopy before flowing into Howard Canyon Creek. This is currently the situation with the existing water quality pond (**maintain**).

Turbidity: Based upon field data determinations, fine sediment bedload in the system appears to be high. In the lower sections of all the creeks embeddedness was generally higher than 50%. Percent embeddedness increased in each of the creeks going downstream. The sediment parameter is considered **not functioning properly.**

The existing pastures and other human disturbance (e.g. riparian vegetation removal) along Knieriem Creek, Big Creek and lower Howard Canyon Creek will continue to keep banks unstable and result in the delivery of large amounts of fine sediment within the system.

The quarry expansion could also become a very large sediment source if removed overburden is stockpiled onsite where it could be washed downhill and into Howard Canyon Creek. Conservation measures must require the overburden be stockpiled away from drainage areas and sufficiently protected from being deposited off-site.

Sufficient control of water quality leaving the site is also imperative. With the implementation of conservation measures and proper use and maintenance of sediment retention/detention facilities, the impact of the quarry expansion is not expected to alter the present status of sediment delivery to Howard Canyon Creek, Big Creek, and consequently the Sandy River. Since the project site is situated away from the creeks, attention to sediment retention before it enters Howard Canyon Creek will greatly diminish the potential for fine sediment transport.

Increased truck traffic on adjacent roads may also contribute to sediment entering the system. However, road improvements will likely be required and proper measures to control stormwater runoff from new impervious surfaces must be required. With the implementation of strict conservation measures, impacts from increased sediment are not expected to occur **(maintain)**.

Chemical /Nutrients.

The current condition for this parameter is **not properly functioning**. The large number of pastures and residences abutting the creeks results in this parameter being at risk for the watersheds. Manicured lawns down to the creek banks, grazed pastures and nearby septic tanks result in chemical additions to the creeks. Livestock is allowed into the creek in many locations for watering, and a barn with adjacent stockyard is located immediately adjacent to Howard Canyon Creek. Though algae growth was not apparent during the winter sampling period and water temperatures were good, it is expected that there are elevated nutrient and other detectable chemicals in all three creeks.

Expansion of the quarry will require conservation measures to control vehicle refueling, water quality treatment, and accidental chemical spills. As such, the expansion of the quarry is not expected to adversely change the environmental baseline **(maintain)**.

Habitat Access

Physical Barriers: Presently there is no passage for listed anadromous salmonids from the Sandy River up Big Creek toward the project site. An approximately 80-foot high waterfall/barrier exists just upstream of the Big Creek confluence with Sandy River. A number of other culverts on Howard Canyon Creek, Knieriem Creek, and Big Creeks prevent unrestricted upstream migration for cutthroat trout adults and juveniles. Passage, therefore, is considered **not properly functioning**.

All road improvements that affect stream crossings should be constructed following the ODFW recommended designs to ensure fish passage for juvenile salmonids. No other impacts to fish passage is expected from the expansion of the quarry. Therefore, there is no change to the environmental baseline (**maintain**).

Habitat Elements

Substrate: This indicator is considered to be **at risk** due to the fine sediments entering the creeks. Better than adequate gravels exists in portions of Howard Canyon, Ross Creek (tributary to Knieriem Creek) and Big Creek for successful spawning by cutthroat trout. Due to the geology of the basin, gravels appear plentiful. The quarry will be mining a basalt bedrock lens. Bedload does not appear to be dominated by this material and other geologic formations appear to be providing the gravel to the creeks. In Knieriem Creek, the bedload consists entirely of fines, except for an area immediately adjacent with the confluence to Ross Creek.

The quarry will not influence the recruitment of gravel and thus will not alter the environmental baseline (**maintain**).

Large Woody Material: The LWM indicator is **not properly functioning**. Except for a few sections of a Howard Canyon Creek, virtually no LWM was found in the streams. It is apparent that humans are clearing the streams along their properties and that fallen trees are being dragged out rather than being left in the streams (likely a way to alleviate the threat of flooding). Even in areas of good LWM recruitment potential, the habitat was distinguished by the lack of LWM providing instream structure.

The existing environmental baseline for LWM for the watershed will be maintained since the project will have no direct effects upon LWM recruitment. (**maintain**).

Pool frequency: Pool frequency in Big Creek and it's tributaries is considered **not properly functioning** due to human caused channel straightening and the lack of LWM. An upper reach of Howard Canyon creek just above the small unnamed tributary that drains the existing water quality facility has the best pool forming features. A complex channel exists due to large woody debris in the channel, and a large cedar on the bank has created a lateral scour pool. Exposed bedrock was only observed once and is not a dominant channel structure feature. There will likely be no impact to this parameter from expansion of the quarry (**maintain**).

Pool Quality: Pools are infrequent except for the upper portions of Ross Creek and Howard Canyon Creek. Large pool forming features are rare. Since so little large woody debris is present, and banks are generally unstable, few quality pools exist. This parameter is considered to be **at risk.**

The quarry project will not likely influence the quality of existing pools unless heavy sedimentation occurs and fills the few existing pools downstream. As mentioned before, conservation measures will ensure that future degradation of pool quality does not occur **(maintain).**

Off-Channel Habitat: Very little off channel habitat was observed on any of the creeks. Howard Canyon Creek had a side channel just above the confluence with the tributary draining the existing quarry. Due to the simplified channel structure, little complex habitat exists in these streams either in-channel or off-channel. This indicator is **not properly functioning.**

Placement of the LWM in the channel could create additional off-channel habitat, though the proposed project is not altering riparian habitat. It is recommended that ODFW work with the quarry operators to obtain some of the trees removed with the overburden and place them in the creeks. The quarry project will not alter the existing off channel habitat **(maintain).**

Refugia: Due to the lack of LWM, off channel habitat, undercut banks and other backwater types of habitat, there is little refugia along much of the creeks for fish. Only the upper portions of Ross Creek and Howard Canyon Creek contain structure in the stream offering refugia from predators and high flows. Consequently, this indicator is considered **not properly functioning.**

As there will be no direct impacts to the creeks, refugia will not be decreased by the proposed action **(maintain).**

Channel Condition and Dynamics

Width/Depth Ratio: this parameter is considered **not properly functioning** for the watershed as a whole. W/D ratios increase in a downstream direction due to bank disturbance by landowners and from past land use practices. With well-maintained conservation measures, sediment delivery to Howard Canyon Creek and Big Creek will not increase. The proposed project should not alter existing width to depth ratios **(maintain).**

Streambank Condition: The current streambank condition along all the streams except Ross creek is poor. Riparian vegetation has been removed and many banks are eroding. There are few trees or shrubs to provide stabilizing root structure in many of the reaches observed. In several of the reaches, disturbance and the open canopy has allowed the invasive Himalayan blackberry (*Rubus discolor*) to establish. This woody vine does little to stabilize banks. This parameter is **not properly functioning.**

The proposed project will not alter existing conditions since it is not directly in contact with the streams. In addition, flows to Howard Canyon Creek should not increase to a point that will influence streambank condition if strict conservation measures are imposed (**maintain**).

Floodplain Connectivity: The floodplain of the watersheds has been directly and indirectly affected by channelizing and riparian management practices. The resultant incision along the downstream portions of the creeks has disconnected the floodplain from the creeks in many places. Floodplain connectivity is considered **not properly functioning.**

The proposed expansion will occur well away from the creeks and will not alter floodplain connectivity.(**maintain**).

Flow/Hydrology

Peak/Base Flows: Actively eroding banks and W/D ratios indicate that peak/base flows are **not properly functioning.**

The increased exposure of impervious surface in the expanded quarry has the potential to exacerbate peak/base flows. Some local impact to the groundwater table due to excavation will occur. However, the impact should be minor, as the quarry is located on a ridge and any existing ground water flow will become surface water as the pit is expanded. The collected water will flow into the natural tributary running south from the site and into Howard Canyon Creek. Methods to detain water on-site should be implemented (**maintain**)

Drainage Network Increase: No data on the drainage network were obtained; however, given the generally low amount of urban development in the watershed, this parameter is determined to be **properly functioning** but at risk.

The environmental baseline for the watershed will not be altered; though increased truck traffic may require the widening of roads. There will be a minor, localized increase in the drainage network within the quarry. It is unlikely that new roads will be built and that all new roads will control stormwater runoff **(maintain).**

Watershed Conditions

Road Density and Location: The watershed is rural residential with valley bottom roads paralleling portions of the creeks. Road density is a parameter considered placing the streams **at risk.**

As new roads will likely not be constructed to facilitate truck traffic, the existing environmental baseline of the watershed will not be changed (**maintain**).

Disturbance History: Disturbances within the Howard Canyon Creek, Knieriem Creek and Big Creek watersheds include minor commercial, moderate residential, and moderate agricultural "pasture" development. Portions of Howard Canyon Creek, Ross Creek and Knieriem Creeks have been logged recently. The degree of riparian disturbance from the pastures along much of the creek banks forces a **not properly functioning** determination.

The expansion of the quarry will impact approximately 24 acres. In addition, there may be disturbance related to the improvement of local roads. However, the expansion area is relatively small from a watershed perspective and should not significantly influence the existing watershed disturbance history **(maintain)**.

Riparian Reserves: There is no riparian reserve system for the area. Riparian reserves are determined to be **not properly functioning** since much of the riparian areas have been significantly modified.

The proposed quarry expansion is on a ridge above the creeks and will not decrease riparian reserves **(maintain)**.

9.0 SUGGESTED CONSERVATION MEASURES

Expanding the quarry will have to be accomplished in an environmentally sensitive manner to ensure that it will not adversely affect the environmental baseline of the watersheds and impact salmonid populations or their habitat. To ensure that impacts are avoided and where necessary minimized and even mitigated, a series of conservation measures will need to be implemented. A description of each of these conservation measures is included below.

Erosion Control Functional Parameter(s): *Turbidity, Chemical Contaminants/ Nutrients;*

- Strict erosion control measures should be instituted throughout the life of the quarry. It is imperative that extraction activities do not increase the sediment load within the surrounding creeks. Increasing the sediment load decreases the viability of the cutthroat trout populations, many of which are isolated to certain reaches of the creeks by substandard culverts that do not allow fish passage and, therefore, escape from impaired water quality conditions. Impacts to water quality can have a detrimental effect on fish populations within the Sandy River. Pro-active implementation of an Erosion Control Plan (ECP) should be a priority. At a minimum erosion control measures should be designed to keep turbidity below 10% ambient (background) conditions, 30 m (100 ft) downstream from the quarry at all times. The largest source of sediment could originate from haul roads, processing areas at the site, and stockpiles of overburden. Specific measures that could be implemented to reduce erosion include:

    - Weed-free straw bales and silt fences at the bottom of newly constructed slopes. Whenever straw bales are used, they should be staked and dug into the ground at least 12 cm (5 in);

- Construction of sediment settling basins, where appropriate. Berms should be constructed where appropriate, to divert runoff into these basins;
- Temporary plastic sheeting for immediate protection of open areas (where seeding/ mulching are not appropriate);
- Erosion control blankets or heavy duty matting (e.g., jute) can be used on steep unstable slopes;
- Sills or barriers may be placed in drainage ditches along cut slopes and on steep grades to trap sediment and prevent scouring of the ditches. The barriers should be constructed from rock and straw bales and be regularly maintained. Sills or barriers will be necessary in roadside ditches if water bars or cross-ditches are constructed within the haul roads to intercept and direct runoff from a road;
- On the pit or quarry floor, establish a slope that directs turbid water to flow to a low point where it can be collected in a detention pond;
- Biobags, weed-free straw bales and loose straw may be used for temporary erosion control. Temporary erosion and sediment controls should be used on all exposed slopes that could potentially create sediment-laden runoff into the creeks;
- On cut slopes steeper than 1:2 (v:h) where runoff may impact the creeks, a tackified seed mulch should be used so that the seed does not wash away before germination and rooting occurs. In steep locations, a hydro-mulch should be applied at 1.5 times the rate;
- Material removed during excavation should only be placed in locations where it cannot enter the surrounding creeks or their riparian areas;
- Stockpiles of overburden should be completely protected to ensure that sediment-laden runoff does not enter the adjacent creeks;
- Coir mats and coir logs or filter berms built or porous materials, such as sand and gravel that contains no 200-mesh or smaller material, should be used where appropriate to control erosion;
- Erosion control devices that are failing should be immediately repaired to ensure that sediment-laden water does not leave the project site and discharge into the surrounding creeks;
- A permanent truck wash or wheel wash facility should be constructed to ensure that excess dirt and mud is washed off of all truck tires. The design could incorporate a series of railroad rails spaced approximately 2 to 8 inches apart to shake off the excess dirt while the truck is driving through the wheel wash. All water used to clean the trucks should be treated to remove sediment;

- Regular inspections should be made to inspect all erosion control devices; needed repairs and/or replacement should be identified; quarry staff should be provided with written directives to replace and/or update the devices, as needed; field inspections shall be made to ensure repairs and/or replacement of devices has occurred within specific timelines, and;
- Regular inspections with County staff should be made to review all erosion control devices and identify needed corrections and/or enhancements.

Water Quality / Hazardous material Functional Parameter(s) *Turbidity, Chemical Contaminants/ Nutrients, Substrate, Off-channel habitat*

- A Pollution Control Plan (PCP) should be prepared by the quarry operator to prevent point and non-point-source pollution.
- No pollutants of any kind (petroleum products, fresh concrete, silt, blasting material, etc.) shall come in contact with an active flowing stream or its riparian area;
- Vehicle maintenance, refueling of vehicles and storage of fuel should be conducted at designated refueling areas located at least 150 feet from the creeks. The refueling areas should only be used if they are sufficiently contained and present no possibility for contamination;
- No toxicant (including petroleum products) should be stored within 150 feet of the creeks. Fuel and lubricant storage areas should be regularly monitored for leakage. A spill control kit should be maintained onsite at all times, and;
- Flocculants used to clean stormwater discharges or water recycled from rock-washing operations must be non-toxic and not harmful to fish or aquatic organisms. At least two ponds should be used to remove suspended solids. Settling time should be at least eight hours. The ponds should be easily accessible and maintained on a regular basis. Material removed from the ponds should be disposed of in an upland location.

Clearing, grubbing and reclamation Functional Parameter(s) *Turbidity; Temperature, Large Woody Material*

- No clearing and grubbing within the 100-feet of the creeks should be allowed unless mitigation is provided;
- Overburden should be removed from limited areas; concurrent or segmental reclamation should be encouraged to limit the disturbed areas within the quarry[1].

[1] Concurrent (progressive or continuous) reclamation occurs as minerals are removed; overburden and soil are immediately replaced. Segmental reclamation occurs following depletion of minerals in a sector of the mine (Washington Department of Natural Resources, 1997).

10.0 FINDINGS OF EFFECT

Four salmonid species with distributions potentially overlapping the expanded quarry project area have been listed or are proposed for listing under the federal and state Endangered Species Acts. An evaluation of the potential affect of the project on each species has been conducted.

10.1 Federally-Listed Species

National Marine Fisheries Service

The expansion of the quarry described herein will likely result in a more than negligible probability of adverse effects to **Chinook salmon** in the **Lower Columbia River ESU** listed as threatened under the federal ESA. Chinook salmon do not occur in the Big Creek watershed and are not within in the project area; nevertheless, the determination of **may affect, not likely to adversely affect** with regard to this ESU is appropriate given the fact that a spawning gravel bar is located just downstream of the mouth of Big Creek. This gravel bar could be detrimentally influenced by an increase in sediment deposition resulting from the proposed quarry expansion. The potential for direct impact to Chinook salmon is extremely low unless a large-scale failure occurs in the storage of overburden. With a large scale failure, sediment movement downstream would end up influencing any spawning beds in the mainstem Sandy River below the confluence with Big Creek.

The proposed action described herein will result in more than a negligible probability of adverse effects to **steelhead trout** in the **Lower Columbia River ESU**. Therefore, we make a determination of **may affect, likely to adversely affect** with regard to this ESU. Both summer and winter steelhead exist in the Sandy River and both juveniles and adults are present in sections of the river nearly all year long. If steelhead also spawn in the gravel bar just downstream of Big Creek on the Sandy River, there is the potential for sedimentation impacts upon juvenile to fry stages of the species.

The proposed action **may affect, but is not likely to adversely modify** the critical habitat of **Chinook salmon** or **steelhead trout** in the **Lower Columbia River ESU**. As stated above, NMFS has recently withdrawn this designation pending a review of its economic effects. The determination of the project's effects on critical habitat in this report is based on the possibility of this designation being reinstated. It is anticipated that conservation measures will be implemented during the life of the quarry to contain any project-related effects to critical habitat. All impacts associated with the project are not expected to degrade existing baseline conditions. The quarry expansion should not directly affect the riparian areas of Knieriem Creek and Howard Canyon Creek. Changes in water delivery to Howard Canyon Creek are expected to be insignificant as the project site rests on a ridge rather than intercepting ground water farther down the slope. Increases in impervious surfaces will be minimal and will be addressed by treating and detaining runoff. Conservation measures will likely include sediment fencing, straw bales, no touch zones, grass seeding, jute mats, log check dams, and coir.

U. S. Fish and Wildlife Service

The proposed action described herein will result in more than a negligible probability of adverse effects to **coastal cutthroat trout** in the **Southwest Washington/Columbia River ESU**. Therefore, we make a determination of **may affect, not likely to adversely affect** with regard to this ESU. As stated above, the US Fish and Wildlife Service has decided to not designate cutthroat trout under the ESA at this time. However, the population within the project site remains very vulnerable to water quality impacts from adjacent landuses. The ability of the population to withstand a catastrophic event (e.g. fuel spill) or longterm water quality degradation (e.g. increased sediment levels that could decrease egg to fry survival) is limited by the fact that the population is isolated from the Sandy River and that our data collection appears to indicate the population is small. As such, although presently there is no ESA status afforded to cutthroat trout, the population is likely to be negatively impacted unless conservation measures are closely followed.

No determination has been made on the affect of the project on critical habitat for coastal cutthroat trout because USFWS has not designated critical habitat for coastal cutthroat trout in the Southwest Washington/Columbia River ESU. Nevertheless, the affect of the project on cutthroat trout habitat is likely to be similar to that expected for Chinook salmon and steelhead trout habitat.

10.2 State-Listed Species

The proposed action described herein will result in a negligible probability of adverse effects to **coho salmon** listed as endangered under Oregon's Endangered Species Act. Therefore, we make a determination of **not likely to adversely affect** with regard to this species. Coho salmon are within the Sandy River watershed and some juveniles may rear for short periods of time during spring outmigration in the lower portion of Big Creek below the falls. During the winter high flows, juveniles washed downstream may also escape the Sandy River and retreat up Big Creek. It is not expected that any increases in sediment transport that may result from the expanded quarry would adversely affect coho spawning and juvenile survival.

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Appendix F

Farm and Forest Impact Assessment

WINTER BROOK
COMMUNITY RESOURCE PLANNING

MEMORANDUM

To: Kim Peoples, Multnomah County

From: Tom Armstrong

Date: July 7, 2002

Re: **Howard Canyon Reconciliation Report**
Farm and Forest Impact Assessment

PURPOSE

The purpose of this report is to establish the nature and extent of farm and forest impacts on surrounding lands within the impact area of the Howard Canyon rock quarry per Multnomah County Framework Plan Policy 16 – B (Mineral and Aggregate Resources), Strategies I and J:

I. To approve a surface mining at a site zone Exclusive Farm Use (EFU) the County shall find, as part of the conditional use approval criteria, that the proposed activity:

   1. Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and

   2. Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use.

J. To approve a surface mining at a site zone Commercial Forest Use (CFU) the County shall find, as part of the conditional use approval criteria, that:

   1. The proposed mining will not force a significant change in, or significantly increase the cost of, accepted farming or forest practices on agriculture or forest lands;

The Howard Canyon Quarry is located on land zoned EFU and CFU.

Although the Framework Plan policies require findings as part of conditional use approval, this impact assessment was conducted to incorporate the findings as part of the conflicting use analysis for the ESEE analysis and to ensure the program to achieve the goal includes clear and objective conditions of approval.

ASSESSMENT METHODS

Farm and forest uses are allowed uses in all zoning districts in Multnomah County. Therefore, the quarry impact area was defined as

1. All parcels within 1,200 feet of the aggregate resource area

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Portland, OR 97204
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tom@winterbrookplanning.com

2. All parcels along the proposed truck route.

A windshield survey of the impact area and truck route was conducted to observe and note different farm and forest practices.

An impact survey was mailed to all property owners within the impact area and along the truck route to identify potential conflicts between the quarry operations and existing farm and forest practices. (The cover letter and impact survey are attached.) A few weeks after the impact survey was sent out, a reminder postcard was sent asking property owners to return the surveys.

48 surveys were returned. Not all survey returns were from farm or forest property owners. Some were from rural residential owners with no farm or forest activity. Some addressed traffic and other quality of life impacts unrelated to farm or forest impacts. The survey results are summarized in an attached memo and form the basis for the following farm and forest impact findings.

FINDINGS

Current Farm and Forest Practices

In general, agricultural practices within the impact area and along the truck routes are a mix of small-scale farms, primarily raising livestock (horses, cattle, sheep, goats, llamas, and alpacas) with pastures for grazing or growing hay. There are a few farms that grow crops (vegetables and berries) or nursery stock.

Commercial forest lands are located primarily to the east of the quarry site. There are few small-scale wood lots located along the truck route.

Potential Changes to Farm and Forest Practices

Many of the survey respondents did not identify any impacts from the existing quarry or potential changes from an expansion.

Some respondents identified negative impacts to livestock related to blasting and truck traffic. These noise impacts scare animals, causing them to panic, breakdown fences and get loose. These respondents indicated a need to be more cautious with handling livestock, such as creating buffer zones and keeping them away from the edge of the road.

A few respondents indicated breeding problems such as miscarriages or animals too nervous to breed.

One respondent indicated negative impacts, especially from truck traffic, on their show horse. The trucks distract and otherwise make the show horse too nervous to training properly. They said increased operating hours and truck traffic would limit their training time.

One respondent indicated the need to wear masks and other protective measures to mitigate dust impacts while cutting and bailing hay.

A few respondents indicated that it might be necessary to change hauling hours during harvest time to avoid heavy truck traffic.

None of the forest property owners indicated a potential impact to their practices from the proposed quarry operations.

Potential Cost Increases to Farm and Forest Practices

A couple of respondents indicated increased feed costs due to the loss of pasture land as they try to create a buffer zone by moving livestock away from the truck traffic.

A few respondents indicated added costs for fence improvements including adding additional rails or hot wires. One cost estimate was $1,500 to $2,000.

One respondent indicated they would have added costs to plant additional landscaping (trees and shrubs) along truck route to mitigate noise and dust. They estimated costs at $4,600.

One respondent indicated they would have increased hauling and handling costs if they changed their harvesting and hauling times to off peak hours to avoid truck traffic.

In the case of the show horse, the respondent indicated that there would be additional costs to transport the horse to an alternative training grounds or added lighting costs to be able to train at night. These costs were estimated at $600 per month.

CONCLUSION

Impacts identified through the survey are primarily related to noise and dust. To a great extent, these impacts are addressed by mitigation measures proposed under the stream assessment (dust) or noise impact study. For example, measures to limit dust and potential sediment into the streams, such as truck washes or covered loads, will also reduce the impact to adjacent farms.

A majority of the survey respondents did not indicate any conflicts with the quarry operations. For those that did identify impacts, the largest impacts are caused by blasting and truck traffic.

The noise impact study identifies measures to reduce blasting impacts, such as advanced notification and monitoring to adjust charge weights to comply with noise standards. Advance notification would allow livestock owners the opportunity to move animals into barns or to other locations or to otherwise prepare for any adverse impacts. These measures should be sufficient to ensure blasting does not cause a significant change in farming practices or increased costs.

Truck traffic impacts are more difficult to address. Existing traffic on area roads includes a mix of gravel trucks from the existing operations, logging trucks from commercial timber operations, and farm trucks and equipments. There is evidence that the existing level of truck traffic does cause problems for some (6 out 20 responses) farms, but it is difficult to directly relate those impacts to the quarry operations as opposed to other types of trucks. It also is not clear that such problems are causing a significant change in farming practices or significant increases in costs at

this time. It is reasonable to assume that a small increase (10-20%) in truck traffic could be accommodated without triggering a significant change in farming practices or increased costs.

With respect to fencing costs, all livestock owners must maintain their fences as part of their on-going farm practices. Upgrades such as adding rails or electrified fences do not appear to be a significant change or added cost.

Therefore, with the proposed mitigation measures, the proposed quarry operations should not cause a significant change to or significantly increase costs for farm and forest practices in the impact area and along the truck route.

WINTER BROOK
COMMUNITY RESOURCE PLANNING

MEMORANDUM

To: Kim Peoples

From: Tom Armstrong

Date: July 7, 2002

Re: **Howard Canyon – Farm and Forest Impact Survey Results**

As part of the farm and forest impact analysis, a farm and forest impact survey was mailed out to all property owners within the quarry impact area (within 1,200 feet of aggregate resource area) and along the proposed truck route.

To date, 48 surveys have been returned. The following table summarizes the comments from the surveys.

No. of Comments	Type of Comment
FARMS	
14	No impact to livestock (horses, cattle, sheep, goats, llamas)
6	Negative impact to livestock Scare/startle/panic animals with blasting or trucks Unable to use pastures (buffer zone), breeding/birthing problems
1	Increased dust in growing/cutting hay
3	No impact to growing crops
2	Positive benefit with local supply of gravel
FOREST	
10	No impact to forest practices

A number of surveys addressed issues unrelated to farm and forest impacts, including:

TRUCKS	
12	Concerns about safety – speed, road design, narrow shoulders
12	Concerns about noise and negative impact to rural quality of life
5	Comments about deteriorating roads and maintenance issues
OTHER	
1	Elk herd spotted in Howard Canyon
1	Difficulty enforcing conditions of approval
1	Steep slopes on western end of geologic resource area

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MULTNOMAH COUNTY
LAND USE PLANNING DIVISION
1600 SE 190TH Avenue, Portland, OR 97233
503- 988-3043 FAX: 503- 988 -3389
http://www.co.multnomah.or.us/dscd/landuse

SUBJECT: **Howard Canyon Farm Impact Analysis**

Dear Property Owner:

Multnomah County is updating the Howard Canyon Quarry Reconciliation Report. The Board of Commissioners has directed County staff to take a closer look at impacts from the quarry on surrounding farms.

The farm impact survey is part of a larger study to assess the impact of the Howard Canyon Quarry. Multnomah County also is conducting a noise study and a stream assessment of Howard, Knieriem and Big Creeks. All of this information will be presented to the community later this spring. An updated Howard Canyon Reconciliation Report will be the subject of public hearings before the County Planning Commission and Board of Commissioners this summer.

The farm impact analysis will look at existing and potential impacts of the quarry operations on surrounding farms, including noise, dust, and truck traffic. The analysis will be used to determine if expanded quarry operations will force a significant change or significantly increase costs for surrounding farms. In order to make this determination, we need information about farms in the area.

The enclosed survey is designed to get basic information about the different farming activities and practices in the area and to identify impacts from the existing quarry operations and any potential impacts if the quarry operations were to expand. The County will use this information to document potential impacts and identify possible mitigation measures to lessen the impacts. The mitigation measures might include restrictions on the hours of operation, restrictions on blasting, requiring advance notice of blasting, sound walls or berms, or washing trucks and watering roads to control dust.

The following table describes the quarry operations for the current use (5,000 cubic yards per year) and possible quarry expansion alternatives. Please use this information to consider potential impacts to your farm. For example, would increased truck traffic have an impact on your farm? The attached map identifies the proposed truck route between the site and the Columbia River Highway.

	Quarry Alternatives		
	5,000 cubic yards/yr	35,000 cubic yards/yr	75,000 cubic yards/yr
Hours of Operation	7am – 5pm	7am – 5pm	7am – 5pm
Average Number of Trucks Per Day	2	14	30
Number of Blasts per Year	1	4	8
Rock Splitting per Year	50 days	75 days	75 days
Rock Crushing per Year	10 days	30 days	100 days

Please help us gather complete and accurate information on farm impacts by completing the enclosed survey form as soon as possible.

Please include your name and telephone number so we can conduct follow-up interviews if we need more details about impacts to your farm practices. Please return the survey in the enclosed pre-paid self-addressed envelop within 7 days to Multnomah County, Land Use Planning. If you have any questions or concerns about this survey or the project, please contact me at 503-988-3043.

Thank you for your time, cooperation and assistance.

Sincerely,

Kim Peoples
Multnomah County

Name: _____
Phone: _____

Multnomah County
Howard Canyon Rock Quarry
Farm/Forest Impact Survey

The purpose of this survey is to identify farm and forest land that may be impacted by the Howard Canyon Rock Quarry. These impacts may include changes in farming and forest practices or increases in costs. Please take the time to fill out the survey and return in the enclosed envelope or fax it to:
Kim Peoples, Land Use Planning Division, Fax: (503) 988-3389.

General Description of Your Farm/Forest

Which parcel or parcels do you farm or manage as forest land in the area?

Give site address or tax lot number.

How many acres are in farm or forest use?

If multiple parcels, please note the size for each parcel.

If a farm, what do you grow or raise?

Please describe specific crops or livestock. If you rotate crops, please include the rotation cycle to identify the different types of crops.

Describe your farm or forest practices.

Please include details about the time of year for key events (e.g. planting, harvesting, calving); time of day for operations; trucks and other equipment.

-over-

Impact of the Howard Canyon Rock Quarry

Does the existing rock quarry affect your farm or forest?

Describe impacts such as noise, dust, truck traffic. Please be as detailed and specific as possible.

How would an expansion of the rock quarry would this affect your farm or forest?

For example, increased operating hours, number of blasts per year, number of trucks per day. Please be as detailed as possible.

With a possible expansion, would you have to change any of your farm or forest practices? If so, how?

With a possible expansion, would your operating costs significantly increase? If so, why?

Please return the survey to:

Kim Peoples
Land Use Planning Division
Multnomah County
1600 SE 190th Avenue
Portland, OR 97233
Fax: (503) 988-3389

Appendix G

Public Comments, May 16, 2002 Open House

DEPARTMENT OF BUSINESS AND COMMUNITY SERVICES
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Howard Canyon Quarry Open House Public Comments

Open House - May 16, 2002
Corbett School
Attendance: 32

The format for the meeting was an informal open house with five stations on various topics, including: aggregate resources, stream corridor assessment, noise impacts, farm and forest impacts, and transportation. Each station presented preliminary findings with opportunities to discuss the issues with County staff and consultants. Comments were recorded on flip charts at each station in addition to written feedback questionnaires.

Aggregate Resources

- Howard Canyon Reconciliation Report was based on aggregate mining vs. decorative rock extraction
- Question as to significance under state law and whether decorative rock is a protected resource under Goal 5.
- Aggregate is not exported from the quarry
- Dust impact will harm allergies
    - Can mitigate by watering the crushed rock, tarp the load, and water the road
- Aggregate is sometimes exported by a local independent contractor depending on variable circumstances
- Don't mine the hogback-
    - Very little volume of rock.
    - Tax lot 16 - this area is EFU land. Forty to fifty head of cattle grazing on that land
    - Impact is lessened if hogback is not mined
    - Unstable slopes
    - Noise
- How will reclamation plan impact creek, ground water flows, and surface water runoff especially if there is a failure of any sediment pond?
- How can County monitor and enforce activity?
- Quarry has exceeded it's exemption parameters
- This review must deal with fundamental concept of resource protection under Goal 5. All discussions of significance must based on the rock crushed as aggregate. Decorative rock violates the concept of protection under the intent of Goal 5 and should be prohibited.

Stream Corridor Assessment

- How do impacts from the quarry on water quality during low activity affect assessment?
- Has efforts to protect Sandy River been figured into the impact from quarry?
- Mitigation- They should re-forest the surrounding parts of the property
- Need to mitigate offsite – Quarry could lead / organize voluntary rehab of area streams
- How to implement assessment of stream conditions over time & monitoring
- Will runoff increase as operation continues? Need to take into account water quality.
- Haul Roads run to close to creek in some places.
- Mitigation – monitoring – enforcement critical issue. Trustworthiness of operator is questionable.
- Improve the entire watershed.
    - Re-forest quarry property not planned for mining.
    - Larger culverts at stream crossings.
    - Fence livestock out of streams and reforest.
- No impact as long as there is adequate sediment ponds.
- Trucks throw of a great deal of debris which gets into the streams
- Pave the haul roads

Noise Impacts

- Problem w/study because little quarry activity at the time of the sampling
    - How can "actual" noise be measured accurately?
- Noise levels seem low
    - When dropping rocks into trucks sounds like an explosion or gunshots
    - Jackhammer noise sounds as if in back yard of Noise receptor site #4
- Noise is worse in the summer when demand is higher
- Since the quarry is on a low ridge and sound travels, mitigate by high berms
- Mitigate by restricting hours of operation
    - Now quarry activity begins @ 6:30 a.m. Starting at 8:30 would be better
    - In winter activity stops @ 4:30 – Summer activity continues to 6:30 pm but should not
    - Should not operate on Saturday
- Resale value would be negatively affected
- Amphitheatre effect if due south
- Peaks are more important than ambient
- Back up beeping noise is very noticeable
- Eliminate use of air brakes on trucks – often used unnecessarily
    - Fines
    - Use must be justified e.g. steep slopes
- Monitoring and enforcement must be linked
- There was no noise receptor site to the east toward Louden – Very audible now in that direction

- Is 5 trucks per hour one way or two way?
- One person bought a house farther away because of noise in this area - rather than one for sale on Howard Rd.
- Was the crushing of gravel adequately accounted for in noise study?
- Did the study model accurately reflect the equipment that will be used?
- Did the test for truck noise measure difference when stopping and starting at stop signs and lights? (Hurlburt/Evans – Hurlburt/Scenic highway)
- Truck noise will occur all along truck route not just at mine site
- Noise and safety issues could be reduced with a lower speed limit
- Primary noise heard now is the "hammer", adding a crusher would be much worse
- Noise from independent trucks is more problematic than state operated trucks
- Springdale will be impacted
    - Houses along the road
    - Culvert near Big Market – already vibrates
    - If road is widened, houses along the road will lose front yards
- Mining the western ridge will reduce the natural berm thereby causing increased noise levels to those areas
- Were the strong winds factored in to the study – noise is carried even further
- Home occupation is noise sensitive – testing of microphones
- Now no other major truck traffic
    - Logging is short term
    - Mining is long term, persistent, day in and day out
- Long term cumulative impacts
    - Depression – psychological effects
    - Interruption of nature
    - Frustration & Stress
    - Its there when one wakes up in the morning and it's there at the end of the day
- Profanities can be heard from the quarry site - sound travels
- Effective notification is needed for blasting
- Wildlife impacts
    - Sensitive to low frequency
    - Blue Heron rookery on Howard Rd.
- Truck noise and vibration on roads.
- Noise study is questionable
    - Less than full cooperation of the operator
    - Estimates from file data and references
- Use smaller trucks with no trailers
- How will notice of blasting be implemented?
    - One evening several neighbors called 911 regarding gunshots, which turned out to be quarry blasting at 7:30 p.m.
- The study is quite weak. Comparables to other sites assume production for aggregate. Also, some of the more disturbing noises are short-duration spikes, such as dumping a larger boulder into an empty truck.

- Restricted hours are necessary to protect the residential quality of life in the area. Sound-reducing mitigation measures should be required to demonstrate actual noise reductions, not just theoretical reductions.
- The noise study does measure the noise levels that continue day after day, month after month, year after year. Homeowners are subjected to the noise on a continuing basis. Noise study was limited when the quarry was not operating at a peak production time.
- Noise impacts decrease property values.
- No noise levels were measured east on Loudon Road, where most of the noise complaints have been made.
- Need restricted hours. Late spring and summer are when residents are outside the most. No mining before 9 a.m. and ending at 3:30 p.m. and NO Saturdays or Sundays. Citizens who live in Corbett have moved specifically to Corbett for the peace and quite of rural living.
- 20 ft. berms around the drilling and mining site are not sufficient when residents are located at a much higher elevation. Sound mitigation measures need to make the noise almost non-existent to surrounding neighbors – or do not mine!
- The Hurlburt Road truck route will impact a large number of residential properties. Several sections of the route are fairly dense. It is hilly and when truck climb grades they change gears and apply power.
- The intersection of Hurlburt and Evans is a four-way stop. A west-bound truck (loaded) will have to accelerate from 0 mph while climbing a grade. There are several residences at this location.
- The noise report should include data on noise levels from a loaded truck starting from a stop and accelerating to 25 mph.
- Limit the noise level allowed.
- Limit the size of load. No trailers.
- Blasting should be regulated to cause the least amount of community disturbance. Blasting only from 1:00 to 3:00 p.m. on 1 or 2 days per week.

Farm and Forest Impacts

- Dust from trucks on hay
  - Control blast to keep dust down
  - Tarp the loads
- Dust from crushers
- Allergies from dust
- Maps not large enough
- Increased number of trucks due to landscape rocks not aggregate
- Limit number of trucks not the tonnage
- If limit number of trucks then trucks will be overloaded
  - Safety
  - Road weight impact
- How to monitor & enforce weight limit?

- Farm equipment on road – smaller acreages tend to use the road more often to move equipment around.
- Trucks damage the road causing damage to farm equipment due to pot holes
- Staging of livestock moving from field to field incompatible with truck traffic creates a risk assessment
- Along the haul route there are mainly sheep, horses and cattle. All are skittish when large fast vehicles whipping by. One neighbor claimed her llama miscarried because of gravel trucks.
- Howard Road has blind corners. Widening shoulders is not an option with the canyon walls on one side and the creek on the other. Can the trucks slow down?

Transportation

- Put cost burden of road improvements & maintenance on operator
- Dangerous intersection @ Hurlburt & Historical Columbia Highway
- Sight distance problems along entire route
- Traffic studies should be done in tourist season – summer
    - Make note of camps e.g. Gordon Creek, Numanu, Outdoor School
- Don't allow quarry to operate during summer
- Intersection at Evans and Hurlburt: non-compliance w/ flashing light are already a problem – accident history
- Concern about enforcement:
    - How to keep them to the proposed route?
    - How to keep them to the single truckloads?
    - How to keep them to the weight limit?
- Put scale on site to weigh all loads
- Roads are not currently wide enough to handle trucks with other uses safely
- Hurlburt and local roads are used by have bicycles, children, horses and riders, walkers (both from the area & from outside) during the week and weekends.
    - Mitigate by adding shoulders (accessible to horses)
    - Problem: Wider roads or shoulders entices people to drive faster & may affect the rural character of the area
- Blind corners at Hurlburt and Kimberley
- Recreational groups/tours – Including motorcycle traffic on weekends
- Non-compliance with speed limits along entire route and crossing centerline
- Historic Columbia River Highway – trucks will conflict with special events – car rallies, bicycle groups etc.
- Safety of proposed haul road; too steep, a truck has overturned on it
- Burden of proof should be on operator
- Volume of truck traffic is too high already
- Two to five trucks equates to 5 to 10 trips per day
- Springdale already has hazardous conditions; store parking requires backing out onto roadway, pedestrian traffic along the road and other businesses, speeding along straight stretches

    - Mitigate by moving parking away from the road
- Culverts in the area can't handle the weight of the trucks
- Corbett water supply & phone lines in the right-of-way are not deep – concern about disruption
- Back entrance to Oxbow park is used by horseback riders (Hurlburt to Gordon Creek) could cause conflicts
- Make sure trucks can use the route without breaking the law (crossing center line) before a permit is issued
- Bike path should be required along route (Hurlburt / Historic Columbia River Highway to address safety concerns
- Reynolds High School students walk along Hwy. To the Natural Resource School
- Truck traffic causes vibrations
- Must protect the quality of life – rural values including property values
- Is truck staging is currently allowed at Lewis and Clark allowed?
- Curve on HCRH were built by the Job Corp and are too narrow now for two cars.
- Widening would be to difficult; creek on one side, rock face on the other, but it would nevertheless be needed for a truck route
- School buses from Corbett and Reynolds school district operate on proposed truck route
- Proposal is too much for road structure and safety issues
- Sharp turns to ingress and egress quarry already cause safety issues
- Should give property owners early notice if roads are going to be blocked
- Increased truck traffic will add to traffic, noise, and risks to safety throughout the community.
- Springdale is the most hazardous area. ¾ of travelers from Corbett go through Springdale. Market does not have adequate parking with cars backing out onto the highway. Increased truck traffic with increase hazardous conditions.
- Enforcement is the issue. If there isn't monitoring and enforcement, then the public process is meaningless and a waste of taxpayers time and money.
- The truck route on Hurlburt will concentrate impact, especially if two trucks and a bicycle or horse all try to pass at once.
- Local roads are heavily used by pedestrians, horse riders, and bicycle riders and do not have adequate shoulders or are minimal when present.
- For Corbett residents, the access to horse trails on the north side of Oxbow Park is via Littlepage and/or Hurlburt.
- The Historic Columbia River Highway is heavily traveled by those unfamiliar with the road and its sharp turns. The safety risks associated with the projected truck volume are substantial and frightening.
- No truck activity should be allowed on weekends.
- The roads on the truck route are usually paved yearly, due to the influence of the quarry. That is a lot of tar and asphalt. It must certainly affect the environment.
- Trucks should be limited to 4 per hour and restricted to 8:00 a.m. to 4:30 p.m.
- Road maintenance and improvement costs should on the quarry operator, not the taxpayer.

- Greatest concern is truck traffic on roads frequented by bike riders, joggers, horse riders, walkers. Shoulders are inadequate. Some areas along Hurlburt and the Scenic Highway beg the questions of compatibility of these uses.
- 8 foot shoulder, unpaved, on Hurlburt is needed for bicycles, horses, joggers and walkers.

#2

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4-26-07

SUBJECT: Measure 37 case files TI-06-087 & TI-06-124

AGENDA NUMBER OR TOPIC: _____

FOR: _____ AGAINST: X THE ABOVE AGENDA ITEM

NAME: Gloria Wiemann

ADDRESS: 39857 SE Louden Rd

CITY/STATE/ZIP: Corbett OR 97019

PHONE: DAYS: 503 695-3350 EVES: _____

EMAIL: _____ FAX: _____

SPECIFIC ISSUE: Environmental issues

WRITTEN TESTIMONY: _____

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

April 26, 2007

Ted Wheeler, Chair
Maria Rojo de Steffey, Dist. 1
Jeff Cogen, Dist. 2
Lisa Naito, Dist. 3
Lonnie Roberts, Dist. 4

Comments concerning Measure 37 case files: TI-06-087 and TI-06-124 (Cases concerning mining, timber harvest and housing sub-divisions in Howard Canyon.)

Dear Commissioners,

We would like to address the environmental degradation regarding these activities. Howard Creek is a small tributary of the Sandy River. Logging the riparian buffer of this small stream will cause serious degradation to it, and thus degrade the Sandy River as well. In addition, increasing the magnitude of the open pit mining will certainly cause additional harmful run off.

The construction of 175 – 216 addition homes in this small canyon will prevent the creek from ever recovering from the mining and clearcutting. Public water resources in Corbett are already strained. Therefore a Howard Canyon subdivision would probably need to rely on water from wells, which would surely depress the water table, diminishing Howard Creek. The septic systems and runoff from 200 homes in this small canyon will also destroy the water quality.

In light of these serious environmental considerations in addition to the legal problems regarding these claims, we hope that you will deny them.

Thank you for your consideration.

Sincerely,

Thomas & Gloria Wiemann
39857 SE Louden Road
P.O. Box 276
Corbett, OR
97019-0276

#3

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4/24/07

SUBJECT: PH-3 & PH-4 M37 Claims by G R Smith

AGENDA NUMBER OR TOPIC: PH-3 PH-4

FOR: _____ AGAINST: X THE ABOVE AGENDA ITEM

NAME: Dr. Gordon J. Fulks

ADDRESS: 28812 E Woodard Road

CITY/STATE/ZIP: Troutdale OR 97060

PHONE: DAYS: 971 404 0350 EVES: Same

EMAIL: gordonfulks@yahoo.com FAX: Same

SPECIFIC ISSUE: Water + Many others

WRITTEN TESTIMONY: Please see my letter regarding the Winters M37 claim which covers several of the general issues.

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

#4

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: APRIL 26, 2007

SUBJECT: Measure 37 Claims
T1-06-087 & T1-06-124

AGENDA NUMBER OR TOPIC: Measure 37 claims PH3 PH4

FOR: _____ AGAINST: ✓ THE ABOVE AGENDA ITEM

NAME: DENNIS WIANCKO

ADDRESS: (PO Box 246) 42338 E Larch Mtn Road

CITY/STATE/ZIP: CORBETT OR 97019

PHONE: DAYS: 503 695-5568 EVES: 695-5568

EMAIL: WIANCKO@EASTSTREET.COM FAX: 695-5577

SPECIFIC ISSUE:

WRITTEN TESTIMONY:

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

To: Multnomah County Board of Comissioners April 26, 2007
Re: Case Files T1-06-087 and T1-06-124

My name is Dennis Wiancko. I live at 42338 East Larch Mountain Road in Corbett. I own and manage forested acreage that shares a mile and 1/4 of common border with the claimants.

I urge the board to adopt the recommendations of planning staff. A second option would be to table these claims until the Oregon legislature completes its process of clarifying the uncertainties of Measure 37.

If, however, the board goes on to consider claims for compensation, I ask you to scrutinize claimants' methods for arriving at their figures, and also to remember that these properties, like my own, have long been compensated by a favorable tax structure, including substantial deferments not available to residential property.

With regards to subdivision, under proposed guidelines now before the Land Use Fairness Committee, claimants could pursue a conditional path to establish a potential maximum of ten homes (per claim).

If the board were to choose to waive land use regulations, I would contend that even twenty homes for these two claims exceed what would be appropriate for the canyon and the community, especially given the safety issues around water supply and infrastructure.

A dozen or so homes, grouped in clusters of small lots on the west and south west portions of claimants' properties, could possibly be accomplished in a responsible fashion.

Claimants' holdings are substantial, and they have long profited from the forest practices allowed outright under the prevailing Commercial Forest Usage zone. Much of the claimants' property is steep, moist and unsuitable for development. Allowing scattered development across the landscape would severely compromise the ecological integrity of the watershed and obstruct the ongoing practice of responsible forestry. Wildlife habitat and migration routes would be destroyed, and the rich diversity of native plants would suffer as a result of clearing, road building, and the escalating onslaught of invasive exotics.

A sober look into the future reveals growing crises on many fronts. This is not the time to add unnecessary burdens to our infrastructures and natural resources, or to allow irresponsible destruction of healthy, diverse forests that provide priceless services such as carbon sequestering and the moderation of water cycles.

Esteemed commissioners, I ask you, by your thoughtful actions on these matters before you, to help us believe in the real possibility of a positive, healthy future.

Thank You,

R. Dennis Wiancko

R. Dennis Wiancko
PO Box 246
Corbett, Oregon 97019
(503) 695-5568
(503) 695-5577 fax
wiancko@easystreet.com

#5

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4/26/07

SUBJECT: Measure 37

AGENDA NUMBER OR TOPIC: TI-06-087 TI-06-124

FOR: _____ AGAINST: X THE ABOVE AGENDA ITEM

NAME: Steve Dixon

ADDRESS: 32950 Bell Rd

CITY/STATE/ZIP: Corbett Or 97019

PHONE: DAYS: 503 695-6139 EVES: Same

EMAIL: _____ FAX: 503 695-5252

SPECIFIC ISSUE: Howard Canyon Measure 37 claim

WRITTEN TESTIMONY:

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

#6

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4/26/07

SUBJECT: Howard Canyon development

AGENDA NUMBER OR TOPIC: Case file T1-06-124

FOR: _____ AGAINST: XXX THE ABOVE AGENDA ITEM

NAME: LORI HANSEN

ADDRESS: 37777 E. KNIERIEM RD.

CITY/STATE/ZIP: CORBETT, OR. 97019

PHONE: DAYS (503)494-4170 EVES: _____

EMAIL: hansenl@ohsu.edu FAX: _____

SPECIFIC ISSUE: _____

WRITTEN TESTIMONY: _____

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

#7

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: April 26, 2007

SUBJECT: TI-06-087 TI-06124

George Raymond Smith

AGENDA NUMBER OR TOPIC: TI-06-087 TI-06-124

FOR: X AGAINST: _____ THE ABOVE AGENDA ITEM

NAME: Bernard C Gaunker

ADDRESS: 42719 SE. Hogue Mill Rd

CITY/STATE/ZIP: Corbett OR 97019

PHONE: DAYS: (503) 695-2855 EVES: Same

EMAIL: — FAX: (503) 695-6355

SPECIFIC ISSUE: _____

WRITTEN TESTIMONY: It is time for Changes in the laws and let People have the rights we paid for.

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

#8

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4-26-07

SUBJECT: PH 3, PH 4 (Howard canyon)

AGENDA NUMBER OR TOPIC: PH 3. PH 4

FOR: _____ AGAINST: ✓ THE ABOVE AGENDA ITEM

NAME: Klaus Heyne

ADDRESS: 41101 SE London Rd.

CITY/STATE/ZIP: Corbett. OR. 97019

PHONE: DAYS: 503. 655-3412 EVES: _____

EMAIL: _____ FAX: _____

SPECIFIC ISSUE: Subdivision, → bad!
Quarry expansion → bad!

WRITTEN TESTIMONY: Deny both claims!
This would finish off the urban growth
boundary, and kill the heart of rural East
Multnomah County!

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

Ross Mountain
M37 - 087
M37 - 124
M37 - 087
Louden Road
124
087
Quarry
M37 - 124
M37 - 087
Howard Road
Howard Creek
Louden Road

#9

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4-24-07

SUBJECT: PHB PH 4

AGENDA NUMBER OR TOPIC:

FOR: _____ AGAINST: ✓ THE ABOVE AGENDA ITEM

NAME: Robert Grutt

ADDRESS: Powder Rd

CITY/STATE/ZIP: Corbett OR 97019

PHONE: DAYS: 984-7144 EVES: ~~tel~~

EMAIL: FAX:

SPECIFIC ISSUE: Sub division / rock Quarry

WRITTEN TESTIMONY:

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
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4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

#10

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4/26/07

SUBJECT: measure 37 claims case files T1-06-124 & T1-06-087 should be denied.

AGENDA NUMBER OR TOPIC: PH-3 & PH-4 case files T1-06-087 T1-06-124

FOR: _____ AGAINST: ✓ THE ABOVE AGENDA ITEM

NAME: Tyler Morrison

ADDRESS: 432 NE Salzman Rd

CITY/STATE/ZIP: Corbett OR 97019

PHONE: DAYS: 503 695 3276 EVES: Same

EMAIL: _____ FAX: _____

SPECIFIC ISSUE: measure 37 claims (above) should be denied. Different owner. ~~water~~

WRITTEN TESTIMONY: Different owner. Corbett Water dept. cannot handle 20% increase in load. Corbett Volunteer fire dept would be overloaded as well. ~400 more cars commuting would require traffic control signals (at least 3) which are expensive.

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

#11

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: April 26, 2007

SUBJECT: Measure 37 claims

AGENDA NUMBER OR TOPIC: PH3 - PH.4

FOR: _____ AGAINST: X THE ABOVE AGENDA ITEM

NAME: Linden Burk

ADDRESS: 260 SE Pounder Rd

CITY/STATE/ZIP: Corbett, OR 97019

PHONE: DAYS: 503.695-5881 EVES: same

EMAIL: _____ FAX: _____

SPECIFIC ISSUE: Protection of the exsisting balance

WRITTEN TESTIMONY: Imperative to develope Stronger Protections.

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

#12

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: April 26, 2007

SUBJECT: Measure 37 Claims T1-06-087 & T1-06-124

AGENDA NUMBER OR TOPIC: PH 3 & PH 4

FOR: _____ AGAINST: X THE ABOVE AGENDA ITEM

NAME: Teresa A Wrightson & (Stephen L. Garvin (not here))

ADDRESS: 31141 NE HURT RD, ~~TROUTDALE OR 97060~~

CITY/STATE/ZIP: TROUTDALE OR 97060

PHONE: DAYS: 503-251-0652 Post Office EVES: 503-695-3419

EMAIL: tisaw1@juno.com FAX: _____

SPECIFIC ISSUE: Object to use of Measure 37 to log riparian buffer to override limits to quarry & large subdivision of properties.

WRITTEN TESTIMONY: Attached. In a nutshell: the infrastructure of this area & water resources do not support the development of this area for as many homes as they wish to build. This area was never intended for this heavy an impact. Needs to be preserved & protected for future generation & ~~wildlife~~ wildlife. Concern about runoff into streams.

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

April 26, 2007

to: Multnomah County Land Use & Transportation Prgm.
RE: Measure 37 claims T1-06-087 & T1-06-124

I, Teresa Wrightson, am a resident of Multnomah Cty. I've lived in the gorge area since 1991.

Development of the Smith properties violates the spirit of why people voted for Measure 37. The voters' intent was NOT for large development in areas that cannot support the impact. The transportation infrastructure and water resources cannot bear the impact of such intensive development. This area already struggles to provide enough water in summer months for existing farms & residents. Am I supposed to be victim of water shortage because of the large influx of people this development would bring? Am I expected to deal with the added traffic pollution this "out of place" housing would cause in daily commutes? Am I to remain silent while the riparian buffers are logged resulting in erosion & runoff into Howard Crk? Am I expected to quietly pay for repair/construction of roads not built for support of heavy trucks hauling from the quarry? I think NOT.

Teresa A. Wrightson
31141 NE Hurt Rd, Troutdale, OR 97060

April 26, 2007

to: Multnomah County Land Use & Transportation Prgm.
Re: Measure 37 claims T1-06-087 & T1-06-124

I, Teresa Wrightson, am a resident of Multnomah County, a tax paying resident since 1973.

I want to reiterate my opposition to the Smith claims to further mine their property & then to subdivide & develop.

I feel like a victim of blackmail. I, as a taxpayer, am being told to either hand over the money or they get to do whatever they want with the properties regardless of impact to existing transportation infrastructure, water resources, neighbors, environment, restrictions imposed on the area for good reason.

Measure 37 should not be an excuse for speculative greed. This land was already mined for profit of its resources & should not be partitioned. This is bringing suburban sprawl where it doesn't belong ever.

Thank you.

Teresa A. Wrightson
31141 NE Hurt Rd, Troutdale, OR 97060

April 26, 2001

TO: Multnomah County,

I do not Approve of Loop holes like MEASURE 37. TO MEASURE A LOSS And to SEEK compensATION based on speculation! Is to count chicks before they hatch.

The Long term impact is never fully realized until it is too Late. People CAME to Oregon for A fresh start And to Leave the troubles behind. To try to preserve, the LANDS And Resources of the Gorge, is to SAVE, what WAS, for others to SEE, AND FOR others to Appreciate!

IN taxation A boon is granted for Agricultural or timber LANDS. Every year that savings is Experienced by the property owner IN Reduced property tax.

That Reduced tax is A bird in the hand. The Residential development of previous tax sheltered LANDS, Does Not consider the true impact of increased population on limited Resources. I.E. WATER & roads.

THE Corbett Area does NOT need to turn into the diaster of DAMASCUS.

Stephen Garvin

Stephen L. Garvin
31141 NE Hurt Rd.
Troutdale, OR 97060-9382

#13

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 7/26/07

SUBJECT: Case files T1-06-087
T1-06-124

AGENDA NUMBER OR TOPIC: " "

FOR: _____ AGAINST: _____ THE ABOVE AGENDA ITEM

NAME: Candace Bonner

ADDRESS: 44095 Trout Creek Rd

CITY/STATE/ZIP: Corbett, OR 97019

PHONE: DAYS: 503 695-2992 EVES: _____

EMAIL: Candace.bonner@kp.org FAX: _____

SPECIFIC ISSUE: Measure 37 claims for development of rural, agricultural, forestry acreage, & to ignore riparian buffers

WRITTEN TESTIMONY: Typed testimony submitted

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

April 20, 2007

To: Multnomah County Board of Commissioners
RE: Measure 37 claims T1-06-087 andT1-06-124

As a resident of Corbett, I am strongly opposed to the granting of these two Measure 37 claims. There will be a tremendous cost to the taxpayer if these claims are settled financially or settled by waiving current land zoning limitations on use. If the proposed developments are permitted, there will be a significant negative impact on quality of life for other Corbett residents. It is inappropriate for taxpayers to pay the cost of granting multimillionaire status to these individuals. The following points should be considered:

The properties in question were purchased at prices consistent with their currently zoned use as agriculture, forestry and rural residential. The Smiths have already achieved significant return on their investments with logging and gravel sales ETC, so have not been "cheated' by the limitations of land zoning out of appropriate return on their investments. Taxpayers should not have to pay because they want an exorbitant return by inappropriate development. If the Smiths sincerely believe in the multimillion dollar valuation they are placing on their Measure 37 claims, they should be willing to pay the difference in property taxes based on this valuation, from the time of purchase to the present, adjusted for inflation. Many of us in Corbett own acreage with limited use by zoning, and we do not expect to have the taxpayers grant us multimillionaire status by letting us create subdivisions. When someone buys one hundred acres in a rural or forest area, he or she does not expect the land to have the same use or same value as one hundred acres within urban Portland.

The areas in question are inappropriate for higher density, suburban type development. This development would over-stress our Corbett school system and our exemplary volunteer fire department. Our water district is already over-stressed. In a recent discussion with the Water Master, I learned that no new water rights for tapping springs, etc, are being granted in the Sandy River watershed due to stress on our water supply. If these new homes were required to have wells, rather than use the already over-stressed city water, the impact on the local water table would affect the rest of us rural residents who are dependent on wells and springs for our home water. This development also would have a significant impact on road use and congestion. The costs of all these factors, along with the costs of other community services, would not be recouped by the new property taxes, and would be paid by us, the taxpayers.

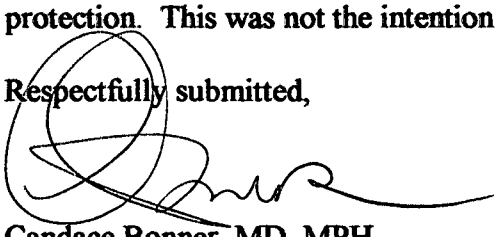
With the current greater appreciation of the need to protect our watershed and riparian systems for salmon recovery, I am surprised that the Smiths are requesting to log the already inadequate riparian buffer zone of Howard Creek and its tributaries. In the interest of the values of the greater community, we would do well to strengthen the rules regarding riparian buffer zones rather than waive them. The federal rules are much more stringent than the current rules for State owned and privately owned lands. I do not see how we can justify waiving the current riparian buffer protection.

Subdivisions destroy the watershed and "carbon sinks" we need to preserve the water supply and air quality of northwest Oregon. Continuing this land in forest and agriculture supplies this essential function. We must preserve a certain percent of our land in green use in order to do this, and our zoning laws are designed to accomplish just this. We cannot allow Oregon to be completely covered in subdivisions if we want clean drinking water, salmon in our streams, and clean air to breathe.

I voted against Measure 37 because I knew such abuses of its intention as these claims so typically represent were likely to occur within the legal definitions of this measure. If the measure had clearly limited zoning exceptions to allowing owners of large acreage to put up one additional house for a family member or caretaker, to have someone nearby to help them as they grew older, I would have voted in favor. Everyone I know who voted for Measure 37 had this in mind, and none of them support the measure being used to allow subdivisions in rural, agricultural, or forest zoned areas. It is time we looked at the intention of the voters and limited this measure to what our voters actually intended.

Oregon is rated one of the best places to live in our country. This is because our land use planning laws have protected our quality of life. I grew up on Oahu, a beautiful island jewel, whose beauty and quality of life were destroyed by greedy development and lack of land use planning. Southern California has gone the same route. Why do persons all over the United States want to move to Oregon? Because we stand out as one of the few states with the foresight to implement land use planning and protect our quality of life. It is unfair to the many to use this measure to make a few rich while destroying this protection. This was not the intention of the voters of Oregon.

Respectfully submitted,



Candace Bonner, MD, MPH

#14

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: April 26, 2007

SUBJECT: Measure 37 T1-06-124
T1-06-087

AGENDA NUMBER OR TOPIC: Smith and Lenske claims PH3 & PH4

FOR: _____ AGAINST: X THE ABOVE AGENDA ITEM

NAME: Barbara Adams

ADDRESS: 34444 SE Kimbley Rd.

CITY/STATE/ZIP: Corbett, OR 97019

PHONE: DAYS: 503-695-3399 EVES: same

EMAIL: badamsdac@cascadeaccess.com FAX: -

SPECIFIC ISSUE: Loss of Farm & Forest
No water available. Cost of infrastructure

WRITTEN TESTIMONY: ~~Will turn~~ Will turn in.
1. Farm & Forest do not mix well.
2. Who pays for infrastucture?
3. Do we really want more food from China?

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

April 26, 2007

TO: Multnomah County Board of Commissioners
FROM: Barbara Adams, 34444 SE Kimbley Rd. Corbett, OR 97019
Third term member of Corbett Water District Budget Committee
RE: Measure 37 case files: T1-06-124 and T1-06-087

Below is information from a Corbett Water District Board meeting held July 18, 2006

Page 6 of the minutes, report from Frank Sterziner, District Manager concerning water flow:

The Treatment Plant is functioning well and water quality is excellent. The flow at the South Fork intake is so low it will not reach the intake basin. The flow at the North Fork intake is 40% of normal and the temperature has risen which means this is not a temporary drop in flow. The demand from the community during the hot weather exceeded the flow capabilities of the Treatment Plant. With the current North Fork intake flow the District is only able to run a max of 860 gpm through the Treatment Plant and the community demand reached 1400 gpm.

Water is in short supply this year and Frank believes that reduced water use may become a requirement. Notices asking folks to conserve water will be posted will be posted in the community.

Based on future weather patterns, historic data and field observation, Frank believes the Corbett Water District must act soon to secure an alternative water source. At this time consideration must be given to limiting any new customer hook-ups to the system until source issues can be taken care of.

#15

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4/26/07

SUBJECT: Measure 37 claims

AGENDA NUMBER OR TOPIC: Howard Canyon M37 claims, Corbett, OR

FOR: _____ AGAINST: X THE ABOVE AGENDA ITEM

NAME: Daniel Prince

ADDRESS: 41029 SE Louden Road, PO Box 237, Corbett, OR 97019

CITY/STATE/ZIP: Corbett, OR 97019

PHONE: DAYS: 503-312-7192 EVES: 503-695-2978

EMAIL: fourprinces@cascadeaccess.com FAX: _____

SPECIFIC ISSUE: _____

WRITTEN TESTIMONY: attached

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

April 26, 2007

To: Multnomah County Board of Commissioners

Re: Measure 37 Claims in Howard Canyon, Corbett, Oregon

Good day Commissioners. Thank you for the opportunity to share on this issue.

I'm not sure when the word "plan" became a four-letter word in Oregon. Growing up I was taught that planning for the future in a thoughtful way was a responsible way to live. Yet, property rights activists have recently created a climate in which planning for the common good is somehow considered tyrannical and evil. I find it ironic that in Oregon, the state that has led the nation in visionary policy that protects quality of life, the divisive and reactionary Measure 37 has found fertile ground. Of course now that most Oregonians are recognizing this law for what it really is, an invasive, destructive weed, we are struggling with how to deal with it. It's like a bad case of Himalayan blackberries or English ivy.

In Oregon, Measure 37 has become the poster child for colossally bad ideas. The Howard Canyon claims in Corbett are, in turn, a colossally bad idea unleashed on our community.

I'd like to share my thoughts on these claims from a practical standpoint, and then from a more general point of view. From a practical point of view, these are my concerns:

With Oregon state law prohibiting local governments from charging development fees to developers for public infrastructure capital projects, the bill for these projects comes due in the mailboxes of all community members. And necessary these projects will be when a new 200 home subdivision is built in our rural community. School buildings in which to teach the children who live there, water systems to water their lawns, new roads engineered, built and maintained for their cars, firefighting and public safety will all need to be paid for.

I am not an anti-tax activist, but I find it disturbing that taxpayers must effectively subsidize a development that we do not support and that negatively impacts our community.

The unsuitability of this proposed subdivision for this location is also a matter of concern. Logging steep hillsides and riparian zones of creeks that feed the salmon-bearing Sandy River can cause long-term damage to a precious resource. And these hillsides are steep. It's called Howard Canyon for a reason. In just the past month we have witnessed the other serious consequences of developing on steep hillsides in this area, with major mudslides along Highway 26 and the Columbia River Scenic Highway.

I don't believe this claim has any validity, but if it did, it seems that it would be far cheaper to pay the relief the claimant has requested than to have to later pay all of the costs associated with a 200 home subdivision in Howard Canyon.

This brings me to the more general perspective I have on these claims. It is very important to my wife and I that we raise our young sons in a caring, healthy, rural community. I am so grateful that I am fortunate enough to have that chance.

But it is an unfortunate tyranny when a single landowner has free reign to change our rural community into a suburb. Installing a subdivision in Corbett effectively forces all the members of our rural community to live somewhere we do not want to live. It is

undemocratic for one landowner to determine the character of a community. Undemocratic and un-American.

I have always believed that it is government's job to look after the common good, and that no individual has the right to sacrifice the common good for personal profit. I am confident that the board of commissioners will decide thoughtfully and appropriately to deny these Howard Canyon measure 37 claims. Thank you in advance for respecting and protecting the legacy that makes Multnomah County and Oregon different from the rest of the country: looking forward and planning for the future of our communities.

Sincerely,

Daniel Prince
41029 SE Louden Road
PO Box 237
Corbett, OR 97019

#16

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4/26/07

SUBJECT: Howard Canyon, Measure 37 claim, Smith claim

AGENDA NUMBER OR TOPIC: _____

FOR: _____ AGAINST: ✓ THE ABOVE AGENDA ITEM

NAME: Debbie Schneider

ADDRESS: 821 SE Powder Rd.

CITY/STATE/ZIP: Corbett, OR

PHONE: DAYS: 503-695-5182 EVES: 503-695-5182

EMAIL: — FAX: —

SPECIFIC ISSUE: Smith Claim

WRITTEN TESTIMONY: I am opposed to granting waiver for this claim. The local infra-structure will not support mutti-home developments of this size.

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
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4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

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2. Written testimony will be entered into the official record.

#17

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4/26/07

SUBJECT: Swirea Lovease M37 Claim

AGENDA NUMBER OR TOPIC: _____

FOR: _____ AGAINST: _____ THE ABOVE AGENDA ITEM

NAME: Michelle Gregory

ADDRESS: 940 NE LITTLEPAGE RD

CITY/STATE/ZIP: CORBETT, OR 97019

PHONE: DAYS: 503.753.4976 EVES: _____

EMAIL: SoapBoxant@comcast.net FAX: _____

SPECIFIC ISSUE: Traffic; Environmental; Health; Safety Impacts of Quarry Expansion Possibility

WRITTEN TESTIMONY: _____

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
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4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

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2. Written testimony will be entered into the official record.

#18

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4-26-07

SUBJECT: measure 37 claims PH3 & PH4

AGENDA NUMBER OR TOPIC:

FOR: _____ AGAINST: ✓ THE ABOVE AGENDA ITEM

NAME: Susan Fry

ADDRESS: 123 NE Littlepage

CITY/STATE/ZIP: Corbett Or 97019

PHONE: DAYS: 503-695-3393 EVES: Same

EMAIL: ✓ FAX: ✓

SPECIFIC ISSUE:

WRITTEN TESTIMONY: Please no subdivisions or expansion of Rock Quarry

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
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4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

written only

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4/26/07

SUBJECT: Measure 37 claims #T1-06-087 and T1-06-124

AGENDA NUMBER OR TOPIC: PH3 and PH4 - Smith and Lemske claims

FOR: _____ AGAINST: X THE ABOVE AGENDA ITEM

NAME: Mary Blankenoort

ADDRESS: 31330 NE Hurt Rd

CITY/STATE/ZIP: Troutdale OR 97060

PHONE: DAYS: 503-703-1232 EVES: 503-695-5558

EMAIL: blansieft@cascadeaccess.com FAX: _____

SPECIFIC ISSUE: Objection to increased rock quarry activity and ultimate subdivision and development of said properties,

Wr. Test only

WRITTEN TESTIMONY: These claims place undue pressure on existing infrastructure and resources; taxpayers will be forced to pick up the tab for infrastructural improvements to accomodate increased traffic, road use, and water depletion. Ecosystems and wildlife negatively impacted. Depletion of farm and forest not acceptible in light of concerns re. global warming and local food production.

IF YOU WISH TO ADDRESS THE BOARD:

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4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

Written Handout/Testimony Only

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: April 26, 07

SUBJECT: Howard Canyon

AGENDA NUMBER OR TOPIC: PH-3 & PH-4

FOR: _____ AGAINST: X THE ABOVE AGENDA ITEM

NAME: Sara Brigsby

ADDRESS: P.O. Box 146

CITY/STATE/ZIP: Corbett OR 97019

PHONE: DAYS: 503-695-5678 EVES: _____

EMAIL: sara@healthy systems.net FAX: _____

SPECIFIC ISSUE: _____

WRITTEN TESTIMONY: Attached from John Christeson and also a photo journal from me

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

April 23, 2007

To: Multnomah County Commissioners
Re: Case Files T1-06-124 and T1-06-087

Dear Commissioners:

I am sending this in lieu of public testimony at your April 26 hearing, since I will be out of town. It is vital to the Corbett community and our well-being that you not approve these claims by Raymond Smith, Shirlee Lenske, the Raymond Smith, LLC, and Lenske Properties, LLC.

I have participated in countless public hearings over the last several years, in which the Corbett community has clearly expressed its concern regarding aggregate extraction at the Howard Canyon quarry. We believed that issue had been put to rest with the final vote of the Commissioners limiting operation of this quarry. Of deep concern to residents were the impact of truck traffic, noise pollution with its associated health effects, and other nuisance factors. We ask you not to reverse your previous promise to our community.

Of equal concern in these claims is the proposed subdivision of approximately 200 home sites. Subdivisions of this scale are inconsistent with the rural character of the area east of the Sandy River. Ten years ago the Corbett community participated in a lengthy process of updating the East of Sandy Rural Area Plan. The Preamble to that plan, which is in the official county document, clearly articulates the vision of our community for land use 40 years into the future (see attached). Approval of these claims would fly in the face of our community's expressed wishes.

Our concerns about parcelization of rural land are numerous. The loss of forest and farmland to housing subdivisions would unravel the fabric of the natural world that forms the context of our community. Wildlife and fish habitat would be disrupted. Review the studies done by Multnomah County in the 1990's on the major streams that flow through the east of Sandy region. Subdivisions would run counter to the recommendations for stream restoration made by studies you commissioned. Opening the door to urban sprawl in the Corbett community has numerous deleterious effects. The Centers for Disease Control links urban and suburban sprawl to the growing problems of obesity, cardiovascular disease, and type 2 diabetes as people spend more time in their cars traveling from remote housing developments to the places where they shop and work. Traffic congestion on our rural roads would add to this problem. The increase in greenhouse gases from more vehicle emissions would be compounded with the loss of carbon sinks in the clearing of forest land. There are major concerns about the impact of this many additional houses on the Corbett Water District's ability to provide adequate clean water to current residents. In areas that are on well systems, the potential impact on underground aquifers is alarming.

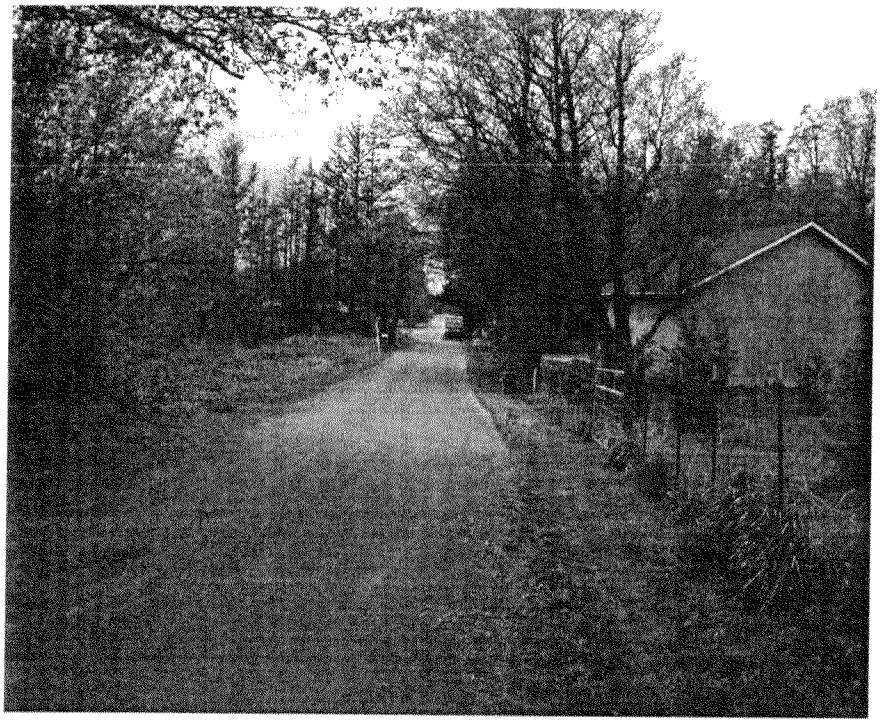
I find it ironic that these claims are being rushed through at a time when the Oregon legislature is trying to develop legislation to fix the worst elements of Measure 37. In fact Patti Smith, the state representative from Corbett, is related by marriage to one of the claimants. She knows full well that one provision of the proposed bill before the Land Use Fairness Committee, of which she is a member, would place a greater burden of proof to demonstrate losses seeking compensation on claims for subdivisions over three houses. She knows that the claims before you would not be allowed on the fast track once that bill becomes law. I ask at least that you table this claim until the Oregon legislature comes up with a viable solution.

You as County Commissioners are ultimately the stewards of the land that forms the fabric of our community and nourishes the human spirit of everyone, whether we live in urban or rural areas. Generations of Multnomah county residents into the future will look back on the decisions you make now and either mourn your lack of vision or applaud your courage to protect the land and the rural character of our community.

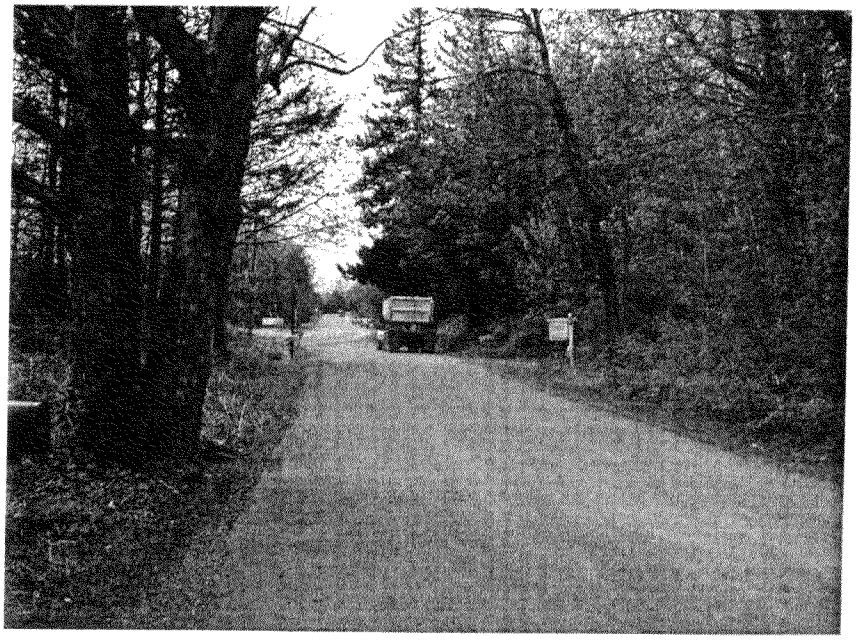
Sincerely,

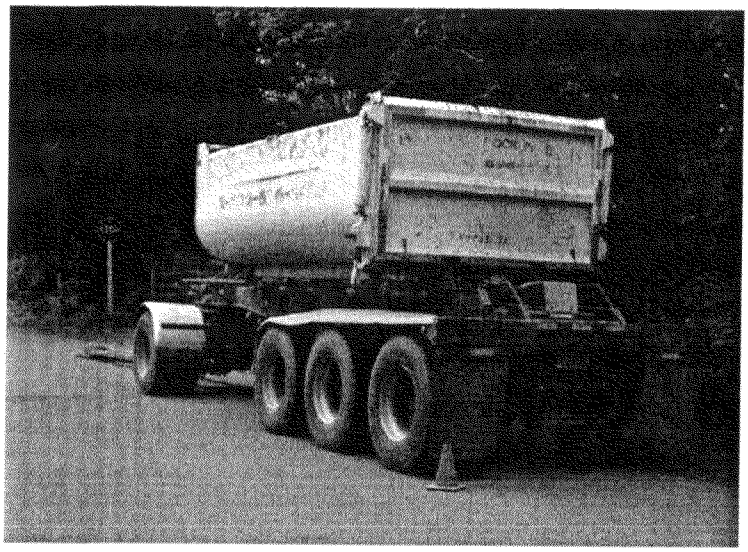
John F. Christensen
39825 Gordon Creek Rd.
Corbett, OR 97019
(503) 695-2474
Nagarkot247@gmail.com

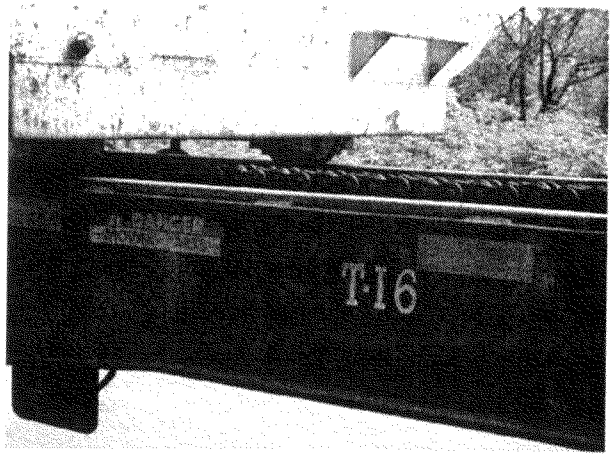
Wednesday April 25, 2007 Started writing this at 5:03 PM just after walking back from the end of Benfield Rd where it meets the Historic Hwy at the Bell property.



At about 3:00-ish I was working in the front yard and a rock truck pulling another hitch behind it (two truckload size) drove past my house from the east entrance to Benfield and parked in front of the Bell property, put out 2 safety cones and unhitched the back rig and drove away.

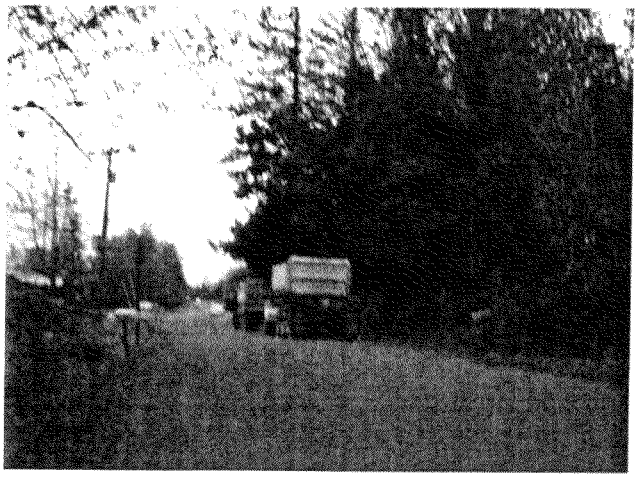


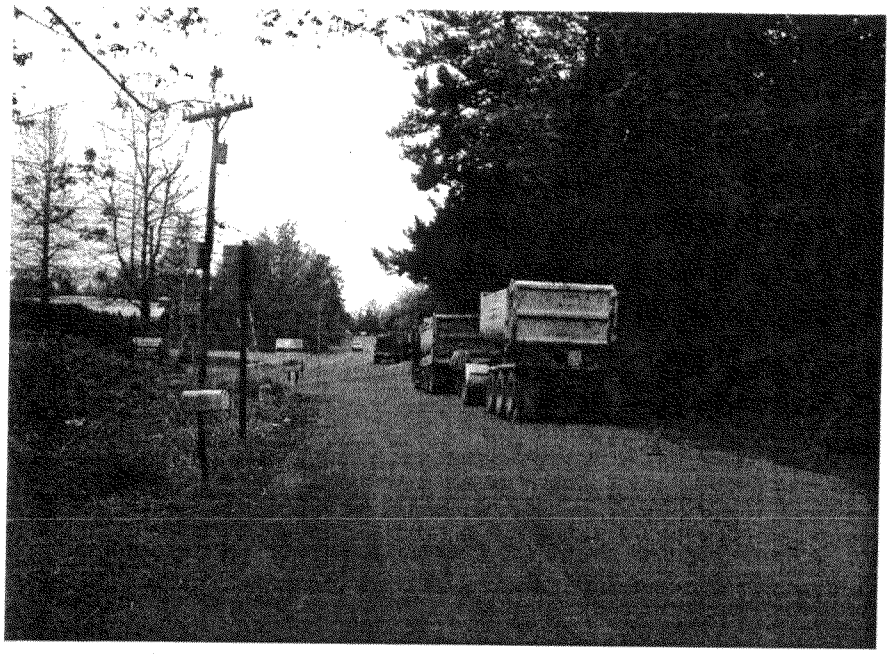




About 45 minutes – ish later that same truck came past again to the end of Benfield, and I went down to the street to watch from a distance. The driver saw me but ignored me. He appeared to be off-loading something onto the parked rig (pup?) and then drove away again. At that point I got the camera and took the first set of photos.

I stayed outside working with camera nearby. At about 4:55 I heard a truck at the west end of Benfield (Bell and cones end) and saw t hat the trucker was likely trying to avoid my eye and was backing up where the Scenic Hwy meets Benfield without coming down the road past my house.

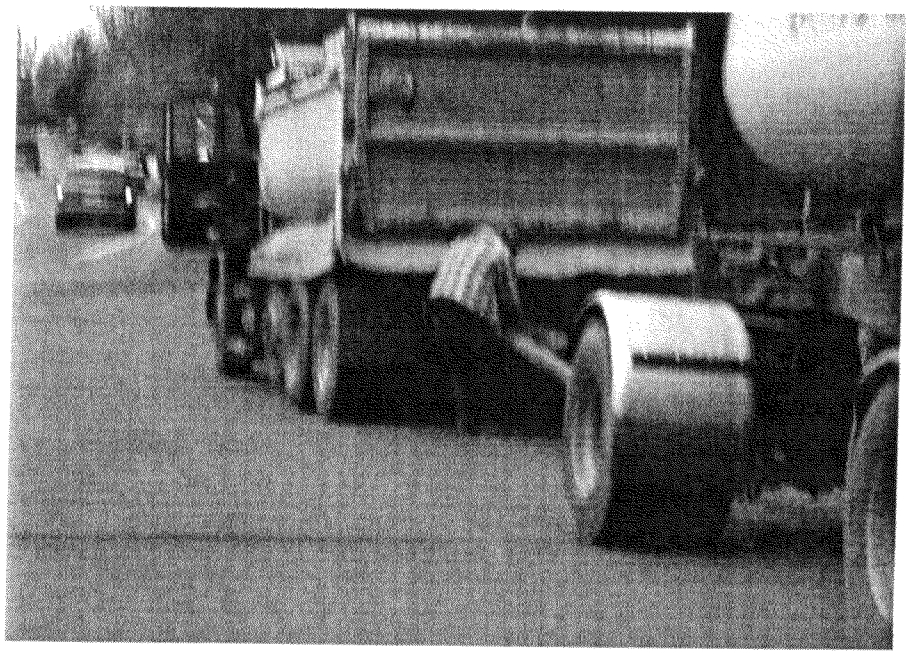




So I ran down the street, took photos and said, "Excuse me" and he ignored my as he was reconnecting his rig. I said it again and added, "Can you tell me what you are doing?" Loading my rig."
"Why are you parked here on the side of Benfield" I said and he said, "Because there's no room to park up there." I said, "Do you mean the Canyon?" and he looked at me and said, "Oh, you mean the quarry, yeah."
"Don't you need a permit?" I said and he said, "No, not as long as I put out cones...but it's just a one time thing...just a one time thing." And then he parted.

If Howard Canyon quarry is approved to take rock out at a faster rate, what should we expect on our streets and neighborhood roads?

This was not the first time trucks have pulled down my road. I also see them pulled over along the Scenic Hwy.



had to LEAVE

MULTNOMAH COUNTY BOARD OF COMMISSIONERS
PUBLIC TESTIMONY SIGN-UP

Please complete this form and return to the Board Clerk
*****This form is a public record*****

MEETING DATE: 4/26/07

SUBJECT: Measure 37 claim by Raymond Smith LLC

AGENDA NUMBER OR TOPIC: PH-3 & PH-4

FOR: _____ AGAINST: V THE ABOVE AGENDA ITEM

NAME: Rachel Ahmann

ADDRESS: POB 430

CITY/STATE/ZIP: Corbett 97019

PHONE: DAYS: (503)695-2660 EVES: _____

EMAIL: _____ FAX: _____

SPECIFIC ISSUE: Concern over the impact on the Corbett Community of this claim

WRITTEN TESTIMONY: I am seriously concerned about the impact of this claim on our community, including but not limited to our schools, our roads, our water capacity, and our volunteer fire department and environmental resources.

IF YOU WISH TO ADDRESS THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Address the County Commissioners from the presenter table microphones. Please limit your comments to **3 minutes.**
3. State your name for the official record.
4. If written documentation is presented, please furnish one copy to the Board Clerk.

IF YOU WISH TO SUBMIT WRITTEN COMMENTS TO THE BOARD:

1. Please complete this form and return to the Board Clerk.
2. Written testimony will be entered into the official record.

1/2

A.L. STOKES (503)695-5883
GREEN ACRES FARMS
38025 S.E. HOWARD ROAD
CORBETT, OR 97019-9707

April 22, - 07

Multnomah Co. Board of Commissioners
Multnomah Bldg, Portland, Oregon

Attention:
Ted Wheeler -Chair
Commissioners:
Lonnie Roberts
Maria Rojo de Steffey
Jeff Cogen
Lisa Naito
Agness Sowle - Co. Counsel

Re: File T1 -06-124
Removal of EFU Lands from
West End of Resource Inventory

Dear Commissioners & Staff,

See Boundry Map (Attached)

Also see Farm Impact survey Attached

See pgs. 14, 82 & 83 HCRR report (attached)

My name is Alan L Stokes - I have continually resided in Corbett for 31 years. My Home (Tax Lot # 64)is Zoned EFU as is also my neighbors West & North of my Residence on Howard Road.

In particular I object to the PAM Mining Overlay being Placed on My Property due to Mining Activity on the East Border of same. Specificaly the Execution of a 'Restrictive Covenant' in Favor of the Mining Operator placed on my Property. This 'Restrictive Covenant' & PAM Overlay in addition to the Mining Operation Itself is a direct Devaluation of My Property & others in the area.

These Actions could lead to further Measure 37 Claims

Please see the next page (& pages with Attachments) for a suggested Solution to the Above Objections Listed.

cc's to:
Deborah Bogstad - Board Clerk
Derrick I. Tokos Staff Planner
Chuck Beasley Staff Planner

2/2

A.L. STOKES (503)695-5883
GREEN ACRES FARMS
38025 S.E. HOWARD ROAD
CORBETT, OR 97019-9707
April 22 -07 Continued

These comments & Suggestions Will express the feasibility & show new evidence for the remaval of EFU Lands in the resource area that are 'High Value Farmlands' due soils classified as 'Prime Grazing & Farmlands'.

See ORS 215.243 attached.

The original EFU Law as passed by the Legislature is intended to 'Preserve & Protect Agricultural Land for the future Food Production & to encourage Owners to hold such lands in EFU Zones' (See copy attached). Since the Laws inception many amendments have been added to allow for the Exploration & Mining of Minerals & Rock Productes etc. These amendments actually Encourage the conversion of EFU Lands for mining purposes & do not uphold the Original Intent of the EFU Law. Many of these amendments have originated as Administrative Rules By various State Comissions & Agencies which do not always consider other State laws & Rules that May Apply.

Also See Goal 3 Agricultural Lands Implementation & Guidelines Attac. Also see 'Boundry Map' attached as Mentioned Below

One example is ORS 215.283 which allows mining but does not consider the effect on the EFU Land that is directly removed from EFU Production (See copy attached).

ORS 215.283 Attached (Sec. 2)

Some of these discrepancyies could be avoided if all the Conditions of ORS 197.230 were considered (Goals Compliance) (See Highlighted Sections) One example is Sec (1) Sub.P.(2)Line (J) to give consideration to Agricultural Land) This has not been done when no consideration is given to the EFU Land directy removed from EFU Production.

See ORS 197.230 (Highlighted Sec. attached)

At present there are 3 Or 4 Tax lots in the resource area Zoned EFU (These are at the West end of the Resource area) and were in the formerly proposed extraction area.(See Boundry Map Attached). The revised HCRR has tenatively ? proposed the removal of the last 1000' of this area due to steep terrain & the difficulty of Mining. This still leaves approx 320' of 'High Value-Prime Farmland' which will be mined in the future. (See HCRR Goal 5 Resource area Map attached) In the future when the end of the resource area is reached the HCRR could be reopened to allow Mining the rest of the area (1000') and thus the rest of EFU 'High Value' Farmland would not be preserved for future EFU use. (See map HCRR Quarry Impact Area Attached)

Goal 5 Resource Area attached Map

Also HCRR Map Impact area Attached

USDA Map & Explanation Att.

4 Pgs. Photos Attached

These 'High Value Farmlands' are shown & explained on a Map & Cover page attached from USDA Natural Resources Conservation Service. Also see Photos (4 Pgs.) of Mine Area & Cattle Grazing on 'Prime Farmland'. The only to preserve these EFU Prime Farmlands for future use is to Remove them from the'Resource Inventory' by Submission of a 'PAPA' or 'Post Acknowledment Plan Amendment' to DLCD or LCDC for approval I strongly urege you to consider & Implement this course of action.

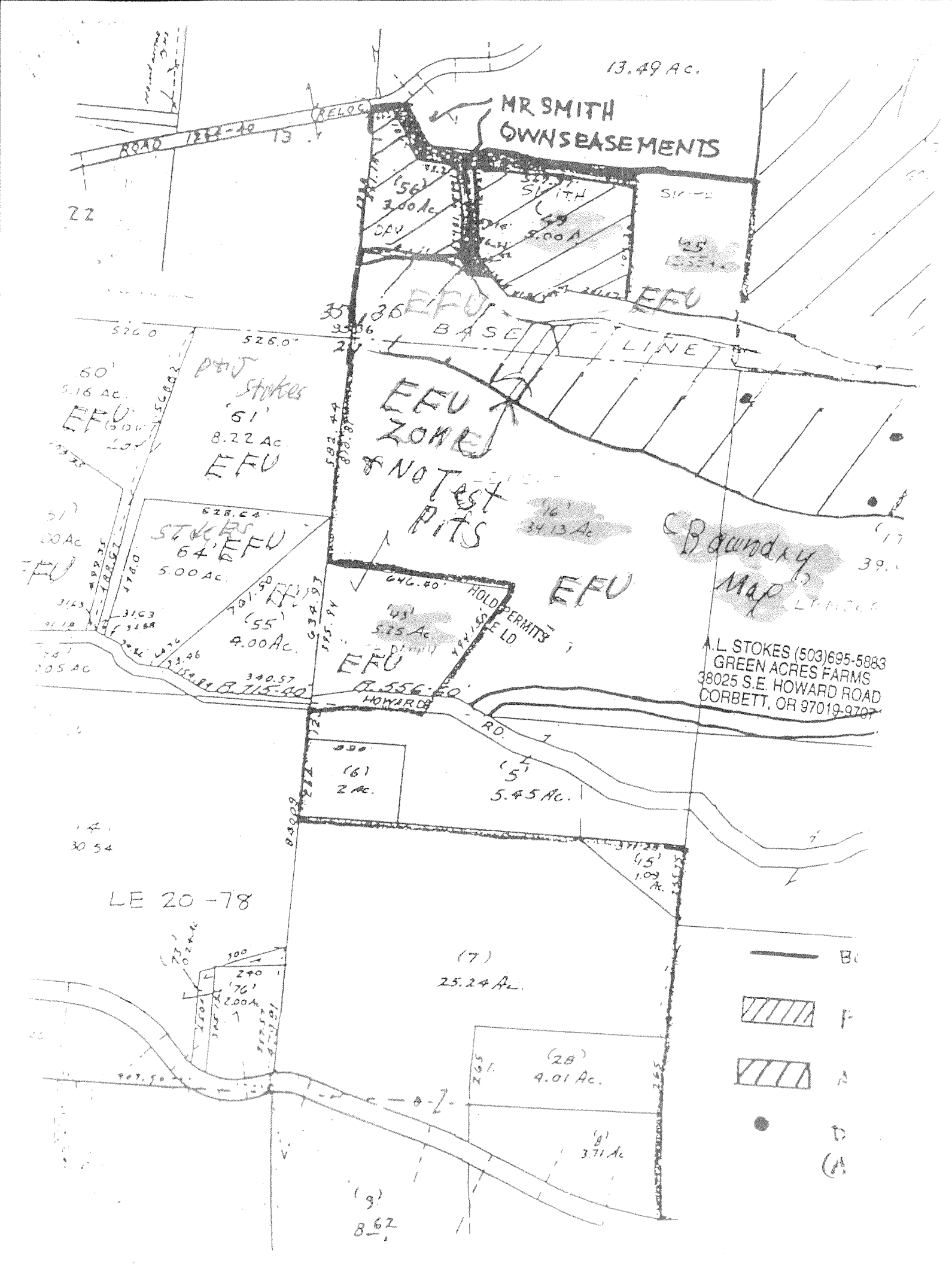
See explanation of 'PAPA' & sample form Attc.

Also see ORS 197.225 (197.225) Attached. Above

Sincerely,

Alan L. Stokes

Alan L. Stokes


13.49 Ac.
MR SMITH OWNS EASEMENTS
ROAD
RELOC.
22
(56)
3.00 Ac.
DFU
SMITH
(59)
9.00 Ac.
25' EASE.
EFU
35
36
BASE LINE
526.0'
60'
5.16 Ac.
EFU
P&J Stokes
'61'
8.22 Ac.
EFU
EFU ZONE
NO TEST PITS
'16'
34.13 Ac.
Boundary Map
628.64'
STOKES
64' EFU
5.00 Ac.
646.40'
HOLD PERMITS SEE LD
'43'
5.25 Ac.
EFU
(55)
4.00 Ac.
340.57'
BUS-40
HOWARD
RD.
(6)
2 Ac.
'5'
5.45 Ac.
'4'
30.54
LE 20-78
'76'
2.00 Ac.
(7)
25.24 Ac.
(28)
4.01 Ac.
(8)
3.71 Ac.
(9)
8.62
'45'
1.09 Ac.
T.L. STOKES (503)695-5883
GREEN ACRES FARMS
38025 S.E. HOWARD ROAD
CORBETT, OR 97019-9707

Both Sides 1/2

Statement Regarding Howard Canyon Quarry Farm Impact

A.L. STOKES (503)695-5883
GREEN ACRES FARMS
38025 S.E. HOWARD ROAD
CORBETT, OR 97019-9707

I, Alan L. Stokes, have resided at 38025 S. E. Howard Road, Corbett, Oregon for 25 years. I own Green Acres Farms on which I have continuously ranched cattle and harvested crops. Specifically, my farm is operated on several land parcels and it includes harvesting grass hay in July and August, calving during February through April, and grazing all year round on rotation. As part of both hay harvest and cattle grazing activities, I frequently utilize Howard Road to move mowing and baling equipment, transport hay back to my barn with a truck and trailer and move cattle with truck and trailer.

My specific concerns regarding the impact of the proposed expansion of the Howard Canyon Quarry operation on my Farm (EFU zone) are as follows:

1. Moving my farm equipment and livestock on rural Howard Road is challenging due to its narrow width and blind corners. The proposed expansion of the Howard Canyon Quarry operation, and the resulting increase in commercial truck traffic, will escalate the hazards to my family and property to unacceptable levels.

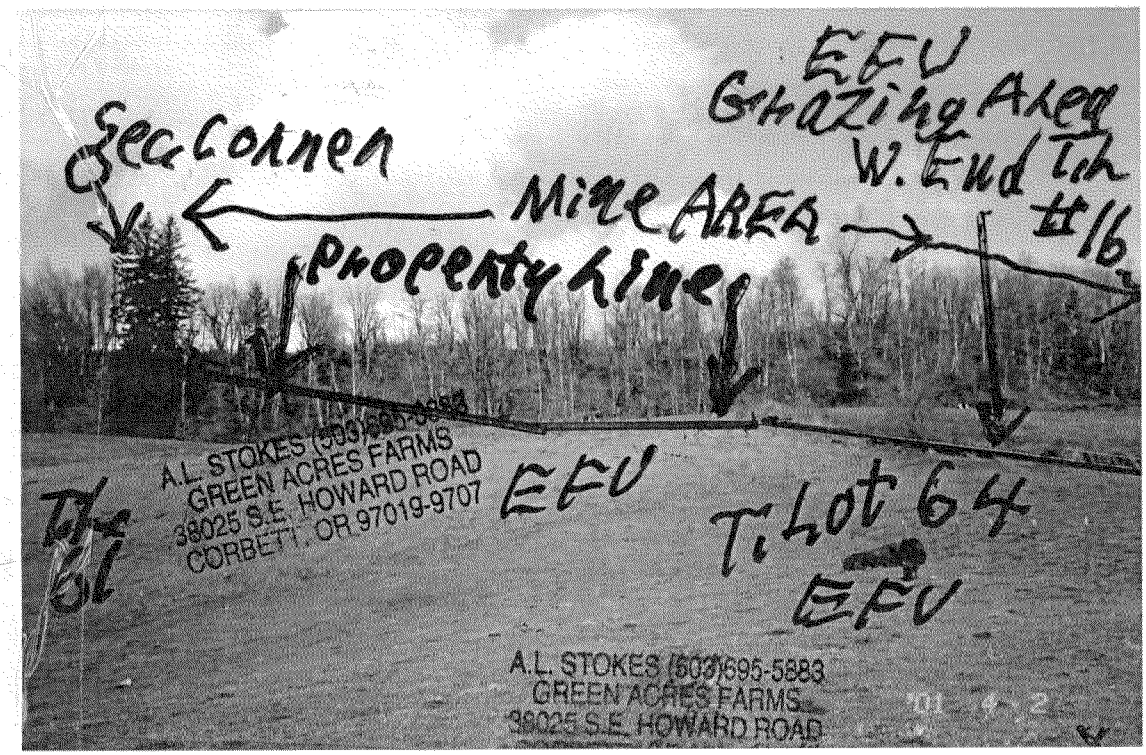
2. I anticipate that during harvest time it will be necessary to significantly change my harvesting and hauling hours to avoid heavy truck traffic on Howard Road. This will result in increased costs for my hay harvest, hauling and handling due to being forced to use off-peak traffic hours.

3. The current Quarry "extraction area" is behind and below a natural ridge on the west side. If the Quarry operation is expanded farther to the west as proposed, the protective ridge that currently screens some of the noise of blasting, crushing and loading rocks will be broken through. The northeast corner of my farm property will then be only 300 feet from the new extraction area, and the noise from the Quarry will be excessive. In particular, the activity of blasting rock above my farming area will panic the cattle, causing stampedes through fences and miscarriages at calving time. If a calf is lost due to miscarriage, the immediate loss is $240-250 (including disposal fee). The unrealized profit from the sale of a calf that had been fed, raised, and then sold at maturity would be $700-800. In response to the excessive noise from the Quarry, I will have to move cattle away from my north and east property lines during calving time. Faced with fewer areas for grazing cattle, I will have to purchase additional hay for feed. The above significant negative economic impacts to my farm also have the effect of restricting my use of the land for ranching and farming.

4. Due to the steep slopes (50% or more) above and adjacent to my farming areas, and the unstable condition of the underlying formation, there will be a potential hazard from falling rocks or landslides if the Quarry operation expands. See picture showing EFU lots Farmed by me bordering mine area & EFU TL #16 (mine area) to be directly removed from EFU production w/expansion

5. Also the following impacts should be considered: If the future haul routes are changed (See letter to planning commission from Jerry Cates Feb.5, 03 Quotes "Although there will be some additional Truck Traffic if Mining is increased, the impact will be minimal beyond the immediate area of the quarry as our Trucks will have several routes to choose from.") This has also been demonstrated in the past as trucks do not always stay on the assigned routes as planned or stated. Therfore if & when the trucks use N.E. Littlepage Road to gain access or egress to Howard Canyon it would definitely impact my farm operation as I store farm machinery in a barn at 101 N.E. Littlepage Rd. Since this barn sits at the bottom of a very steep hill & just below a blind corner it would be very hazardous to move farm machinery off & on the road.

I certify that the above Statements are true to the best of my knowledge, information & belief. Sincerely, Alan L. Stokes Alan L. Stokes



site. The County must then develop a "program to achieve the goal" of protecting the resource from actual and potential conflicts.

Under the State Goal 5 planning rules, if the County decides to offer limited protection to the quarry, then it must be protected from new conflicting uses that could inhibit future operations. For example, new houses should not be built so close to the quarry that it would cause the quarry to violate applicable noise standards. The limits are in the form of a performance standard which requires a proposed use (such as a new house) to demonstrate that it will not create a conflict with the quarry. The Protected Aggregate and Mineral overlay (PAM) is the required method used to provide notice to surrounding properties of the limitations on conflicting uses. Also, without this mapped overlay there would be no notice to existing and potential neighbors to the quarry of the designated limitations developed through the ESEE Goal 5 process. The 1996 HCRR determined that a 1,200 foot impact area was adequate based on a previous noise study conducted in 1990 (page III-14 of the 1996 report). The impact area was expanded to a 1,500 feet radius for the 2003 Draft HCRR but is applied only to the proposed quarry area.

ISSUE #8 (DEFINITIONS AND PROCESS)

The following individuals provided testimony involving their views on conflicting definitions and appropriate review processes. The comments have been grouped by subject matter and are presented below:

Tom Wieman, Resident
Dan Kearns, Attorney
Lynne Romans, Resident

- Decorative and ornamental rock production is not a resource that can be protected under Goal 5. Any approval or protection for mining should specifically prohibit decorative/ornamental rock production. Decorative/ornamental rock is not a recognized Goal 5 resource in the 1996 Howard Canyon Reconciliation Report and has never been recognized as a protected Goal 5 resource anywhere in Oregon. We should not designate decorative/ornamental rock as a Goal 5 resource in the quarry.

Staff: Staff agrees that OAR 660.23.180(1)(a) is silent on the issue of whether decorative rock meets the definition of "aggregate resource". Analysis of the differences of extraction methods and associated impacts and the practicality of monitoring the end use of the material, led Staff to conclude that focus should remain on extraction of rock and related mitigation of the associated impacts. One difficulty with the argument that landscape rock does not meet the definition of "aggregate resources" which on the whole contemplates the protection of the resource for "road building" purposes, is that large pieces of "naturally occurring solid pieces" of rock, such as rip rap, are used for road building. The

are no other basalt quarries in the region that actively mine decorative columnar basalt.

The recommendation for the Howard Canyon site is protection under the provisions of OAR 660-16-010(3), Limit Conflicting Uses (also referred to a 3C designation).

The Howard Canyon site will continue to be included on Multnomah County's list of *Protected Sites*.

Protected SiteArea

The Protected Site is limited to the proposed quarry (extraction area) as identified in Figure 8. In order to limit conflicts identified in the ESEE analysis, the hogback ridge and the areas east of the existing haul road are not protected under this Goal 5 decision and are prohibited from future mining activities. The reasons for limiting the protected area include:

- The hogback ridge has social and environmental impacts that are difficult to mitigate, and which outweigh the small economic benefits (that would result from mining.
- The area east of the existing haul road has steep, south facing slopes. Noise impacts from mining on Louden Road residents would be difficult to mitigate, and the potential for soil erosion on steep slopes would be severe. The economic benefit resulting from mining in the East Area is outweighed by potential adverse social and environmental impacts.

Protected Aggregate and Mineral Resources (PAM) Overlay Subdistrict

Based on the ESEE analysis, the PAM Overlay will apply to land within 1,500 feet of the protected quarry and within 100 feet of the truck route, where conflicting uses allowed by underlying are likely to have the greatest adverse impact on mining. The PAM Overlay is shown on Figure 8. The PAM overlay will not be applied to the entire resource site impact area, so that restrictions to neighboring property owners are limited to the minimum necessary to protect the Goal 5 resource. Thus, the ~~is~~ smaller PAM Overlay will not impose undue restrictions on parcels that lie farther away from the proposed quarry, such as the Louden Road rural residential area, for which it is already possible to comply with applicable DEQ noise control standards (see Dublé Noise Report, Appendix D).

Primary Uses, Uses Permitted Outright, Uses Permitted Under Prescribed Conditions, and Conditional Uses allowed in the underlying district may be permitted subject to the underlying district provisions and criteria of approval, except that the use must meet the following criteria:

(1) The proposed use will not interfere with or cause an adverse impact on lawfully established and lawfully operating mining operations;

(2) The proposed use will not cause or threaten to cause the mining operation to violate any applicable standards of this chapter, or the terms of a state agency permit. The applicant for a new noise sensitive use shall submit an analysis prepared by an engineer or other qualified person, showing that applicable DEQ noise control standards are met or can be met by a specified date by the nearby mining operation; and

(3) Along the truck route, any new habitable structures shall be setback 50 feet from the edge of the roadway pavement.

The proposed use shall be conditioned upon execution of a restrictive covenant in favor of the mining operator. The restrictive covenant shall incorporate all approval conditions, and an agreement not to object to the conduct of lawful operations conducted at the Howard Canyon quarry.

Mitigation Measures

The following mitigation measures are adopted as part of this Goal 5 process as conditions of approval for any Conditional Use Permit to authorize the quarry activities.

Limits on Extraction Volumes and Truck Traffic

Limits on the amount of material and associated truck traffic shall be phased in order to ensure compliance with the mitigation measures and the construction of necessary road improvements. The quarry owner and operator may increase activity levels to the next phase after demonstrating compliance with mitigation measures and the completion of road improvements as required by the Traffic Management Plan. Table 11 outlines the restrictions for each phase

Table 11. Limits on Extraction Volumes and Truck Traffic

	Low Volume	Moderate Volume	Maximum Volume
Rate of Extraction	10,000 cy/yr	17,500 cy/yr	35,000 cy/yr
Avg. No. of Trucks Per Day	4	7	14
Max. No. of Trucks Per Day	6	10	20
Max. No. of Trucks Per Hour	2	4	5
Number of Blasts per Year L = Low Yield H= High Yield	2H	2L 1H	3L 1H

Each truck represents two trips – one inbound (empty) and one outbound (full). A full truck is assumed to carry a 10-ton load of material.

Average Number of Trucks Per Day – this standard is based on 250 operating days per year (5 days per week, 50 weeks per year) to reach the designate volume limit.
Maximum Number of Trucks Per Day – this standard recognized the quarry will not operate at full capacity, all year round. The maximum number of trucks is designed to

uous lot or parcel, it constitutes a qualifying parcel.

(6) When the owner of a lot or parcel upon which the establishment of a dwelling has been tentatively approved notifies the county assessor that the lot or parcel is no longer being used as farmland and requests disqualification of the lot or parcel for special assessment at value for farm use, the county assessor shall:

(a) Disqualify the lot or parcel for special assessment at value for farm use under ORS 308A.050 to 308A.128 or other special assessment by removing the special assessment;

(b) Provide the owner of the lot or parcel with written notice of the disqualification; and

(c) Impose the additional tax, if any, provided by statute upon disqualification.

(7) The Department of Consumer and Business Services, a building official, as defined in ORS 455.715 (1), or any other agency or official responsible for the administration and enforcement of the state building code, as defined in ORS 455.010, may not issue a building permit for the construction of a dwelling on a lot or parcel in an exclusive farm use zone without evidence that the owner of the lot or parcel upon which the dwelling is proposed to be constructed has paid the additional tax, if any, imposed by the county assessor under subsection (6)(c) of this section. [1981 c.748 §46; 1983 c.462 §14; 1983 c.570 §6; 1983 c.826 §23; 1985 c.717 §6; 1985 c.811 §6; 1987 c.305 §5; 1987 c.414 §147; 1991 c.459 §346; 1993 c.792 §27; 1993 c.801 §36a; 1999 c.314 §58; 2001 c.704 §7]

215.240 [Repealed by 1963 c.619 §16]

215.243 Agricultural land use policy. The Legislative Assembly finds and declares that:

(1) Open land used for agricultural use is an efficient means of conserving natural resources that constitute an important physical, social, aesthetic and economic asset to all of the people of this state, whether living in rural, urban or metropolitan areas of the state.

(2) The preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the state's economic resources and the preservation of such land in large blocks is necessary in maintaining the agricultural economy of the state and for the assurance of adequate, healthful and nutritious food for the people of this state and nation.

(3) Expansion of urban development into rural areas is a matter of public concern because of the unnecessary increases in costs of community services, conflicts between farm and urban activities and the loss of open space and natural beauty around urban centers occurring as the result of such expansion.

(4) Exclusive farm use zoning as provided by law, substantially limits alternatives to the use of rural land and, with the importance of rural lands to the public, justifies incentives and privileges offered to encourage owners of rural lands to hold such lands in exclusive farm use zones. [1973 c.503 §1]

215.246 Approval of land application of biosolids; subsequent use of tract of land; consideration of alternatives. (1) The uses allowed under ORS 215.213 (1)(bb) and 215.283 (1)(y):

(a) Require a determination by the Department of Environmental Quality, in conjunction with the department's review of a license, permit or approval, that the application rates and site management practices for the land application of reclaimed water, agricultural or industrial process water or biosolids ensure continued agricultural, horticultural or silvicultural production and do not reduce the productivity of the tract.

(b) Are not subject to other provisions of ORS 215.213 or 215.283 or to the provisions of ORS 215.275 or 215.296.

(2) The use of a tract of land on which the land application of reclaimed water, agricultural or industrial process water or biosolids has occurred under this section may not be changed to allow a different use unless:

(a) The tract is included within an acknowledged urban growth boundary;

(b) The tract is rezoned to a zone other than an exclusive farm use zone;

(c) The different use of the tract is a farm use as defined in ORS 215.203; or

(d) The different use of the tract is a use allowed under:

(A) ORS 215.213 (1)(c), (e) to (g), (k), (m) to (q), (s) to (u), (x), (z) or (aa);

(B) ORS 215.213 (2)(a) to (c), (i), (m) or (p) to (r);

(C) ORS 215.283 (1)(c), (e), (f), (k) to (o), (q) to (s), (u), (w) or (x); or

(D) ORS 215.283 (2)(a), (j), (L) or (p) to (s).

(3) When a state agency or a local government makes a land use decision relating to the land application of reclaimed water, agricultural or industrial process water or biosolids under a license, permit or approval by the Department of Environmental Quality, the applicant shall explain in writing how alternatives identified in public comments on the land use decision were considered and, if the alternatives are not used, explain in writing the reasons for not using the alter-

GOAL 3: AGRICULTURAL LANDS

To preserve and maintain agricultural lands.

Agricultural lands shall be preserved and maintained for farm use, consistent with existing and future needs for agricultural products, forest and open space and with the state's agricultural land use policy expressed in ORS 215.243 and 215.700.

USES

Counties may authorize farm uses and those nonfarm uses defined by commission rule that will not have significant adverse effects on accepted farm or forest practices.

IMPLEMENTATION

Zoning applied to agricultural land shall limit uses which can have significant adverse effects on agricultural and forest land, farm and forest uses or accepted farming or forest practices.

Counties shall establish minimum sizes for new lots or parcels in each agricultural land designation. The minimum parcel size established for farm uses in farmland zones shall be consistent with applicable statutes. If a county proposes a minimum lot or parcel size less than 80 acres, or 160 acres for rangeland, the minimum shall be appropriate to maintain the existing commercial agricultural enterprise within the area and meet the requirements of ORS 215.243.

Counties authorized by ORS 215.316 may designate agricultural land as marginal land and allow those uses and land divisions on the designated marginal land as allowed by law.

LCDC shall review and approve plan designations and revisions to land use regulations in the manner provided by ORS Chapter 197.

DEFINITIONS

Agricultural Land — in western Oregon is land of predominantly Class I, II, III and IV soils and in eastern Oregon is land of predominantly Class I, II, III, IV, V and VI soils as identified in the Soil Capability Classification System of the United States Soil Conservation Service, and other lands which are suitable for farm use taking into consideration soil fertility, suitability for grazing, climatic conditions, existing and future availability of water for farm irrigation purposes, existing land-use patterns, technological and energy inputs required, or accepted farming practices. Lands in other classes which are necessary to permit farm practices to be undertaken on adjacent or nearby lands, shall be included as agricultural land in any event.

More detailed soil data to define agricultural land may be utilized by local governments if such data permits achievement of this goal.

Agricultural land does not include land within acknowledged urban growth boundaries or land within acknowledged exceptions to Goals 3 or 4.

Farm Use – is as set forth in ORS 215.203.

High-Value Farmlands – are areas of agricultural land as defined by statute and Commission rule.

GUIDELINES

A. PLANNING

1. Urban growth should be separated from agricultural lands by buffer or transitional areas of open space.
2. Plans providing for the preservation and maintenance of farm land for farm use, should consider as a major determinant the carrying capacity of the air, land and water resources of the planning area. The land conservation and development actions provided for by such plans should not exceed the carrying capacity of such resources.

B. IMPLEMENTATION

1. Non-farm uses permitted within farm use zones under ORS 215.213(2) and (3) and 215.283(2) and (3) should be minimized to allow for maximum agricultural productivity.
2. Extension of services, such as sewer and water supplies into rural areas should be appropriate for the needs of agriculture, farm use and non-farm uses established under ORS 215.213 and 215.283.
3. Services that need to pass through agricultural lands should not be connected with any use that is not allowed under ORS 215.203, 215.213, and 215.283, should not be assessed as part of the farm unit and should be limited in capacity to serve specific service areas and identified needs.
4. Forest and open space uses should be permitted on agricultural land that is being preserved for future agricultural growth. The interchange of such lands should not be subject to tax penalties. ❖

(v) Fire service facilities providing rural fire protection services.

(w) Irrigation canals, delivery lines and those structures and accessory operational facilities associated with a district as defined in ORS 540.505.

(x) Utility facility service lines. Utility facility service lines are utility lines and accessory facilities or structures that end at the point where the utility service is received by the customer and that are located on one or more of the following:

(A) A public right of way;

(B) Land immediately adjacent to a public right of way, provided the written consent of all adjacent property owners has been obtained; or

(C) The property to be served by the utility.

(y) Subject to the issuance of a license, permit or other approval by the Department of Environmental Quality under ORS 454.695, 459.205, 468B.050, 468B.053 or 468B.055, or in compliance with rules adopted under ORS 468B.095, and as provided in ORS 215.246 to 215.251, the land application of reclaimed water, agricultural or industrial process water or biosolids for agricultural, horticultural or silvicultural production, or for irrigation in connection with a use allowed in an exclusive farm use zone under this chapter.

(2) The following nonfarm uses may be established, subject to the approval of the governing body or its designee in any area zoned for exclusive farm use subject to ORS 215.296. Enclosed

(a) Commercial activities that are in conjunction with farm use but not including the processing of farm crops as described in subsection (1)(u) of this section.

(b) Operations conducted for:

(A) Mining and processing of geothermal resources as defined by ORS 522.005 and oil and gas as defined by ORS 520.005 not otherwise permitted under subsection (1)(g) of this section;

(B) Mining, crushing or stockpiling of aggregate and other mineral and other subsurface resources subject to ORS 215.298;

(C) Processing, as defined by ORS 517.750, of aggregate into asphalt or portland cement; and

(D) Processing of other mineral resources and other subsurface resources.

(c) Private parks, playgrounds, hunting and fishing preserves and campgrounds. Subject to the approval of the county governing body or its designee, a private campground may provide yurts for overnight camping. No more than one-third or a maximum of 10 campsites, whichever is smaller, may include a yurt. The yurt shall be located on the ground or on a wood floor with no permanent foundation. Upon request of a county governing body, the Land Conservation and Development Commission may provide by rule for an increase in the number of yurts allowed on all or a portion of the campgrounds in a county if the commission determines that the increase will comply with the standards described in ORS 215.296 (1). As used in this paragraph, "yurt" means a round, domed shelter of cloth or canvas on a collapsible frame with no plumbing, sewage disposal hookup or internal cooking appliance.

(d) Parks and playgrounds. A public park may be established consistent with the provisions of ORS 195.120.

(e) Community centers owned by a governmental agency or a nonprofit community organization and operated primarily by and for residents of the local rural community.

(f) Golf courses.

(g) Commercial utility facilities for the purpose of generating power for public use by sale.

(h) Personal-use airports for airplanes and helicopter pads, including associated hangar, maintenance and service facilities. A personal-use airport, as used in this section, means an airstrip restricted, except for aircraft emergencies, to use by the owner, and, on an infrequent and occasional basis, by invited guests, and by commercial aviation activities in connection with agricultural operations. No aircraft may be based on a personal-use airport other than those owned or controlled by the owner of the airstrip. Exceptions to the activities permitted under this definition may be granted through waiver action by the Oregon Department of Aviation in specific instances. A personal-use airport lawfully existing as of September 13, 1975, shall continue to be permitted subject to any applicable rules of the Oregon Department of Aviation.

(i) Home occupations as provided in ORS 215.448.

(j) A facility for the primary processing of forest products, provided that such facility is found to not seriously interfere with accepted farming practices and is compatible with farm uses described in ORS 215.203 (2). Such a facility may be approved for a one-year period which is renewable. These facilities are intended to be only portable or temporary in nature. The primary processing of a forest product, as used in this section, means the use of a portable chipper or stud mill or other similar methods of initial treatment of a forest product in order to en-

adopt the plan as a refinement plan under this section.

(4) A local government shall apply the procedures for expedited land divisions described in ORS 197.360 to 197.380 to all applications for land division and site or design review located in any area subject to an acknowledged refinement plan. The review shall include:

(a) All elements of a local government comprehensive plan and land use regulations that must be applied in order to approve or deny any such application; and

(b) Any planned unit development standards and any procedures designed to regulate:

(A) The physical characteristics of permitted uses;

(B) The dimensions of the lots to be created; or

(C) Transportation, sewer, water, drainage and other facilities or services necessary for the proposed development.

(5) Any decision made on a refinement plan described in subsection (3) of this section shall be appealed only as provided for appeals of expedited land division decisions in ORS 197.375.

(6) Refinement plans and implementing ordinances may be adopted through the post-acknowledgment or periodic review process. [1995 c.595 §15]

GOALS COMPLIANCE

197.225 Preparation; adoption. The Department of Land Conservation and Development shall prepare and the Land Conservation and Development Commission shall adopt goals and guidelines for use by state agencies, local governments and special districts in preparing, adopting, amending and implementing existing and future comprehensive plans. [1973 c.80 §33; 1981 c.748 §27a]

197.230 Considerations; finding of need required for adoption or amendment of goal. (1) In preparing, adopting and amending goals and guidelines, the Department of Land Conservation and Development and the Land Conservation and Development Commission shall:

(a) Assess:

(A) What economic and property interests will be, or are likely to be, affected by the proposed goal or guideline;

(B) The likely degree of economic impact on identified property and economic interests; and

(C) Whether alternative actions are available that would achieve the underlying lawful governmental objective and would have a lesser economic impact.

(b) Consider the existing comprehensive plans of local governments and the plans and programs affecting land use of state agencies and special districts in order to preserve functional and local aspects of land conservation and development.

(c) Give consideration to the following areas and activities:

(A) Lands adjacent to freeway interchanges;

(B) Estuarine areas;

(C) Tide, marsh and wetland areas;

(D) Lakes and lakeshore areas;

(E) Wilderness, recreational and outstanding scenic areas;

(F) Beaches, dunes, coastal headlands and related areas;

(G) Wild and scenic rivers and related lands;

(H) Flood plains and areas of geologic hazard;

(I) Unique wildlife habitats; and

(J) Agricultural land.

(d) Make a finding of statewide need for the adoption of any new goal or the amendment of any existing goal.

(e) Design goals to allow a reasonable degree of flexibility in the application of goals by state agencies, cities, counties and special districts.

(2) Goals shall not be land management regulations for specified geographic areas established through designation of an area of critical state concern under ORS 197.405.

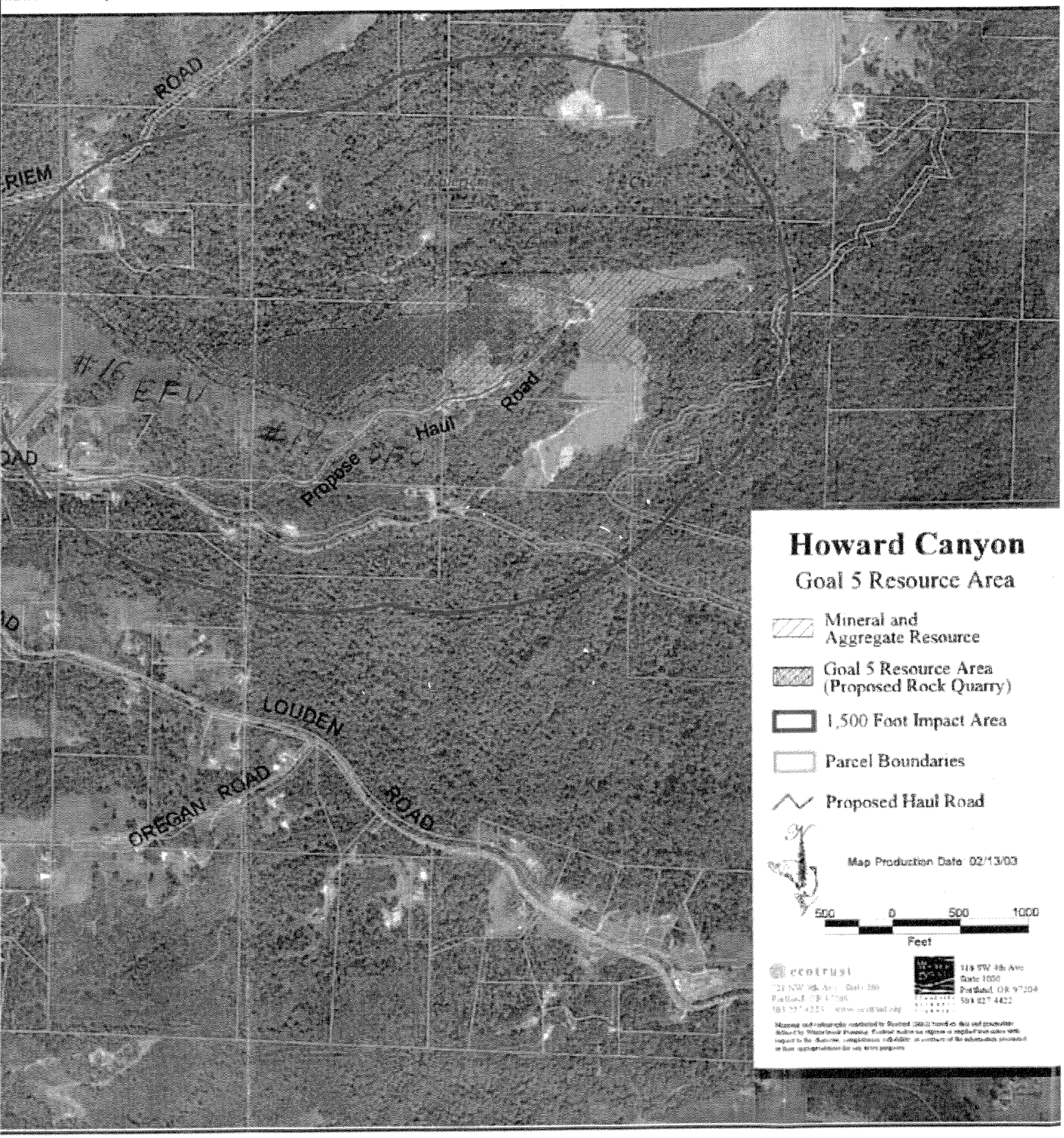
(3) The requirements of subsection (1)(a) of this section shall not be interpreted as requiring an assessment for each lot or parcel that could be affected by the proposed rule.

(4) The commission may exempt cities with a population less than 10,000, or those areas of a county inside an urban growth boundary that contain a population less than 10,000, from all or any part of land use planning goals, guidelines and administrative rules that relate to transportation planning. [1973 c.80 §34; 1977 c.664 §17; 1981 c.748 §17; 1983 c.740 §50; 1995 c.299 §2; 1999 c.784 §1]

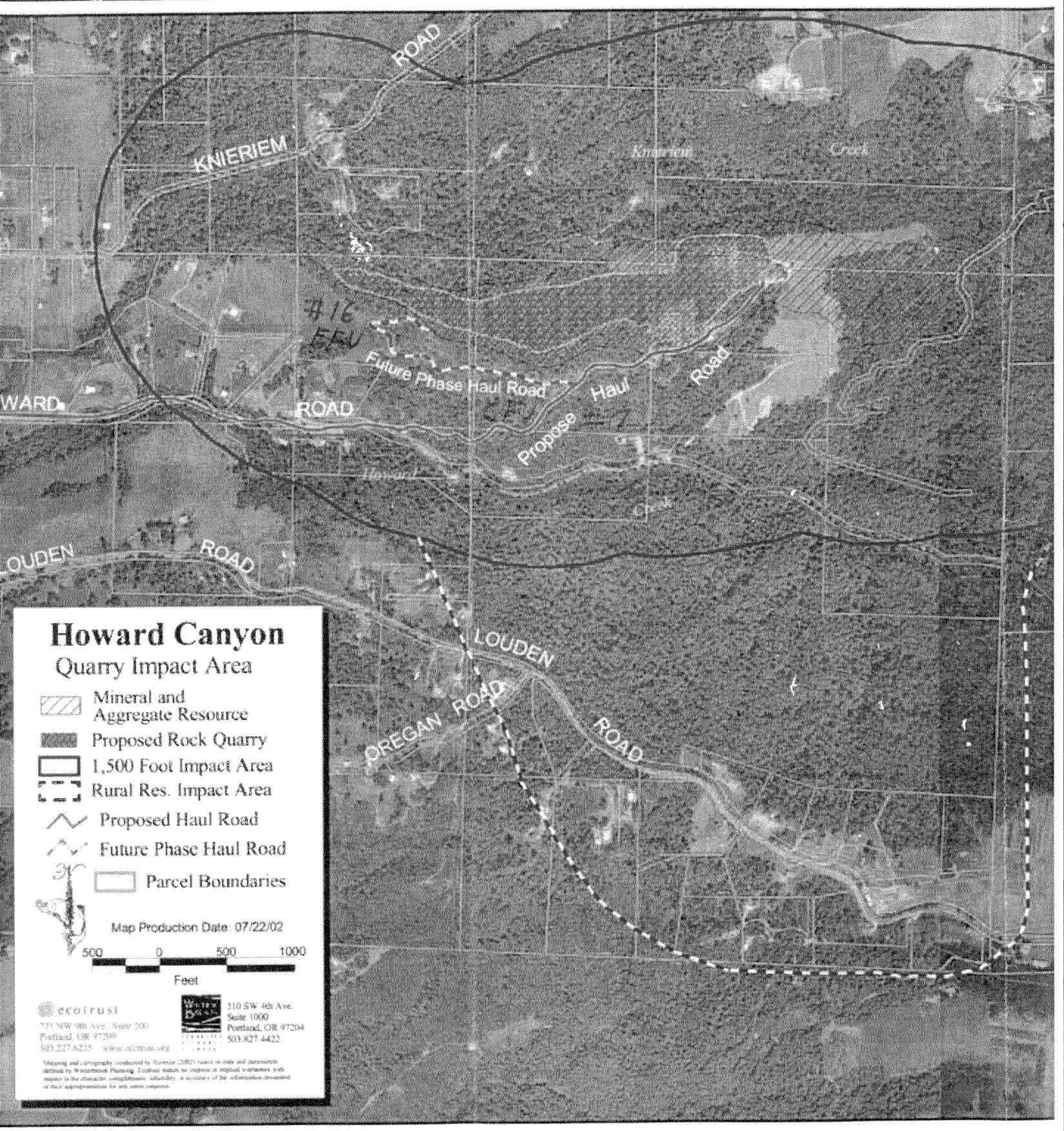
Note: Section 1, chapter 859, Oregon Laws 2001, provides:

Sec. 1. Dredging in estuaries. In conjunction with affected local governments and state and federal agencies that have jurisdiction over lands with estuaries, activities in estuaries and flood mitigation, the Land Conservation and Development Commission shall evaluate whether dredging of material from estuaries to mitigate flooding should be authorized and report the results of the evaluation to the Seventy-second Legislative Assembly no later than January 3, 2003. [2001 c.859 §1]

Although the Mining area has been scaled back 1,000' it still includes 320' of Prime Pastureland & thusly all of EFU TL # 16 Should Be removed from the resource by submission of "PAPA" to LCDC to preserve this Prime Farmland for the Future



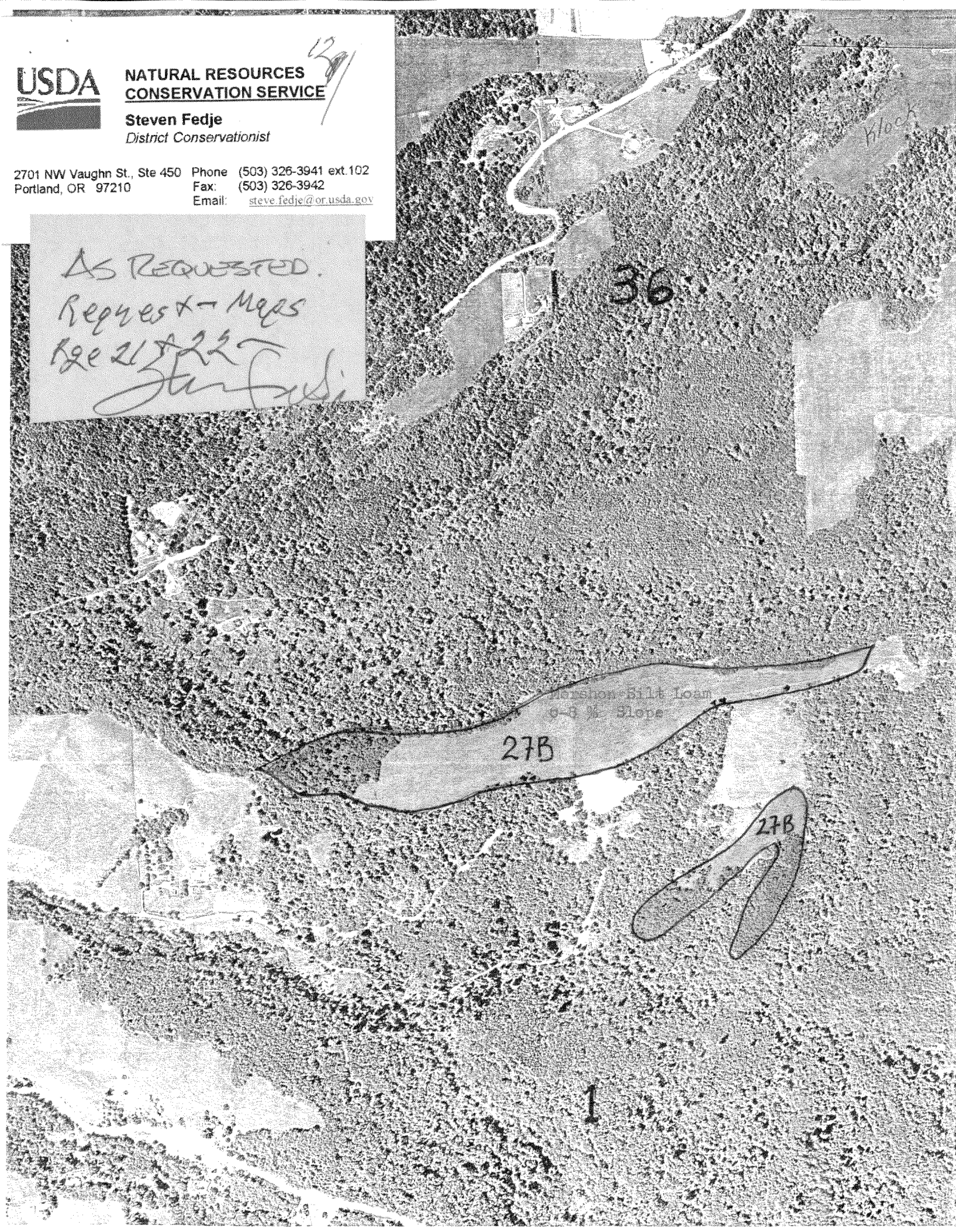
This is the original resource including all of EFU TL #16 Prime Pastureland & in the future when scaled back mining is exausted all of TL #16 could be reopened for mining. Please remove this possibility b y submitting a 'PAPA' to LCDC to preserve this prime Farmland for Future use. 8/4



USDA
NATURAL RESOURCES CONSERVATION SERVICE
Steven Fedje
District Conservationist

2701 NW Vaughn St., Ste 450 Phone (503) 326-3941 ext.102
Portland, OR 97210 Fax: (503) 326-3942
Email: steve.fedje@or.usda.gov

AS REQUESTED.
Request - Maps
Re 21 & 22



Final Rule, Prime and Unique Farmlands (Exhibit 622-1)

Federal Register, Volume 43, No. 21, January 31, 1978.

Part 657 - Prime and Unique Farmlands

Subpart A - Important Farmlands Inventory

Section 657.1 Purpose.
Section 657.2 Policy.
Section 657.3 Applicability.
Section 657.4 NRCS Responsibilities.
Section 657.5 Identification of important farmlands.

Authority: 16 U.S.C. 590a-f, q; 7 CFR 2.62; Pub. L. 95-87; 42 U.S.C. 4321 et seq.

657.1 Purpose.

NRCS is concerned about any action that tends to impair the productive capacity of American agriculture. The Nation needs to know the extent and location of the best land for producing food, feed, fiber, forage, and oilseed crops. In addition to prime and unique farmlands, farmlands that are of statewide and local importance for producing these crops also need to be identified.

657.2 Policy.

It is NRCS policy to make and keep current an inventory of the prime farmland and unique farmland of the Nation. This inventory is to be carried out in cooperation with other interested agencies at the National, State, and local levels of government. The objective of the inventory is to identify the extent and location of important rural lands needed to produce food, feed, fiber, forage, and oilseed crops.

657.3 Applicability.

Inventories made under this memorandum do not constitute a designation of any land area to a specific land use. Such designations are the responsibility of appropriate local and State officials.

657.5 Identification of important farmlands.

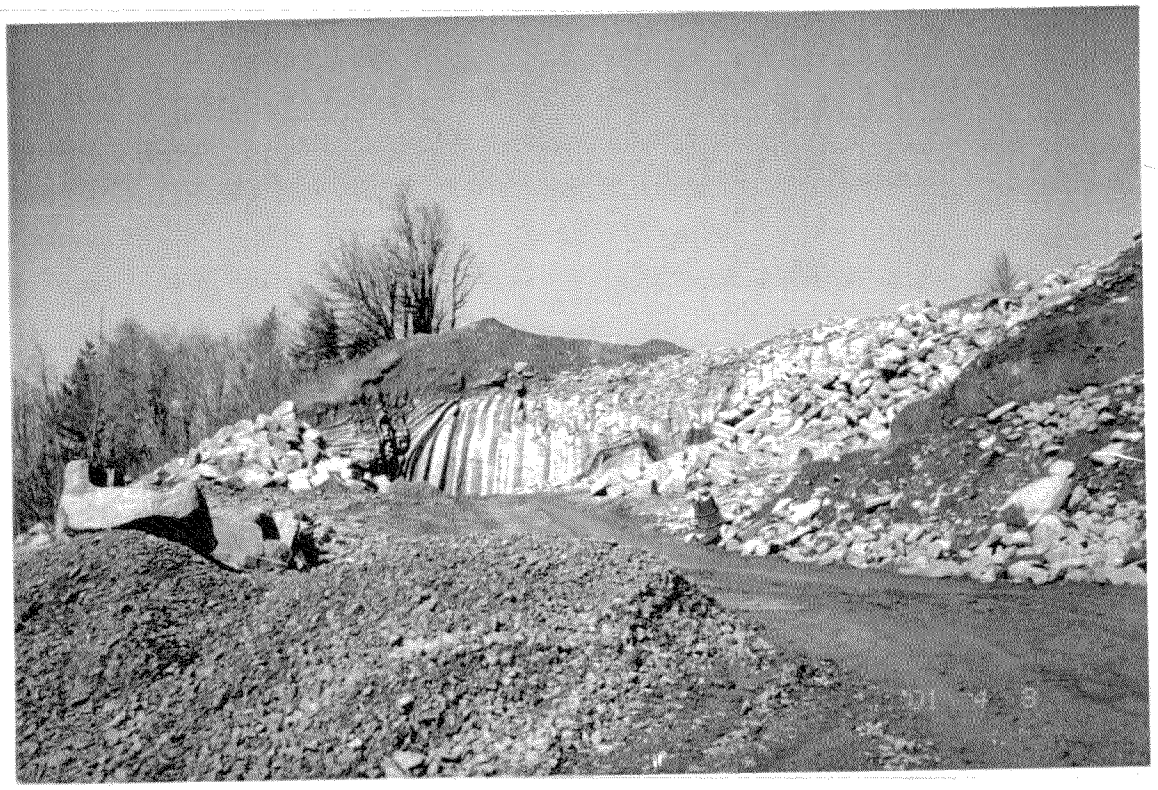
(a) Prime farmlands.

(1) General. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land but not urban or built-up land or water areas). It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops in an economic manner when treated and managed, including water, according to acceptable farming methods. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable levels of acidity or alkalinity, an acceptable content of salt and sodium, and few or no rocks. They have soils that are permeable to water and air. Prime farmland is not excessively erodible or saturated with water for a long period of time, and it either does not flood frequently or is protected from flooding. Examples of soils that qualify as prime farmland are Palouse silt loam, O to 7 percent slopes; Brookston silty clay loam, drained; and Tama silty clay loam, O to 5 percent slopes.

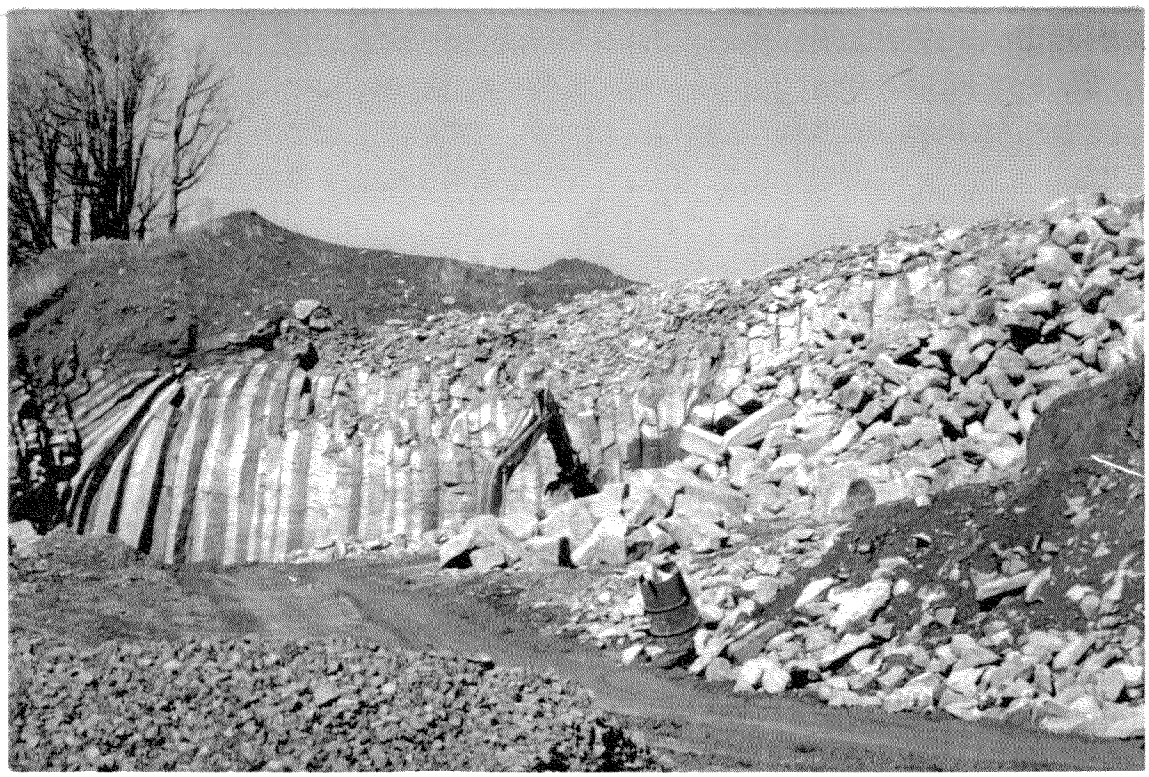
14 1/4

A.L. STOKES (503)695-5883
GREEN ACRES FARMS
38025 S.E. HOWARD ROAD
CORBETT, OR 97019-9707

Excavation Area - With Slag & Derbis
in Foreground



Close Up Excavation Area
Showing Excavator in Pit Below



A.L. STOKES (503)695-5883
GREEN ACRES FARMS
38025 S.E. HOWARD ROAD
CORBETT, OR 97019-9707

Mine Loading Area Looking Across Howard C an yon Creek to Louden Road

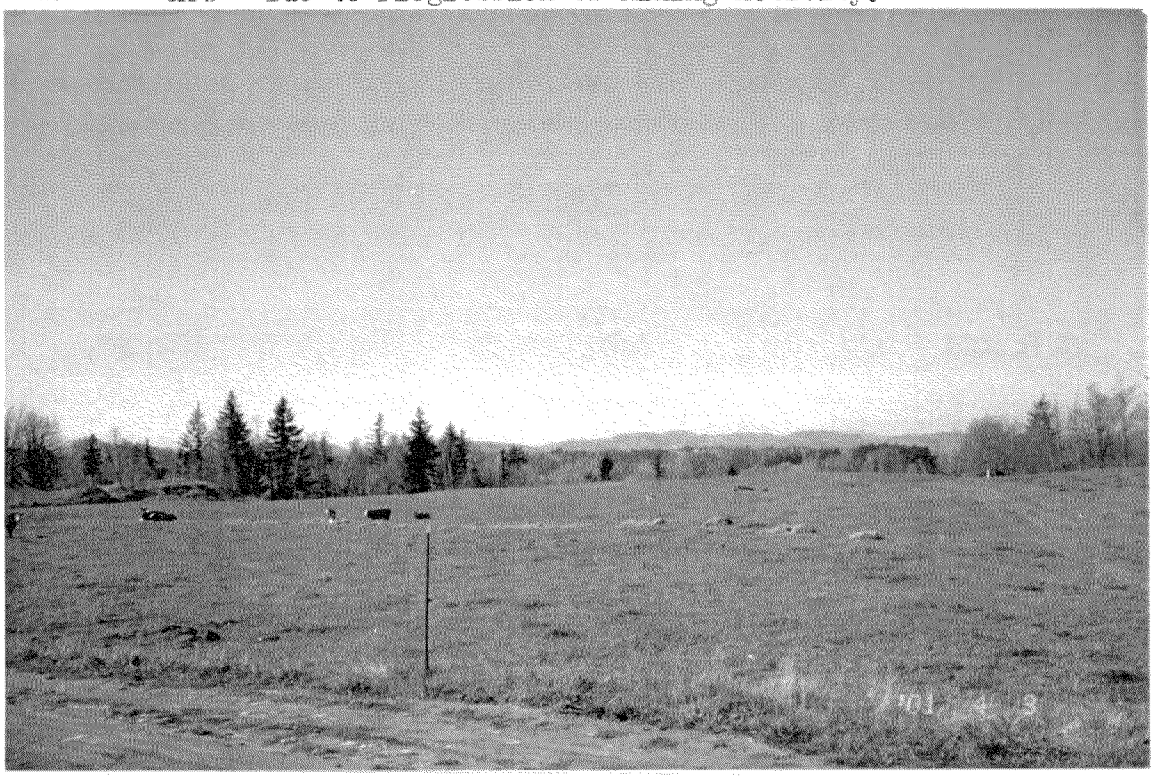
A.L. STOKES (503)695-5883
GREEN ACRES FARMS
38025 S.E. HOWARD ROAD
CORBETT, OR 97019-9707

Top of Mine Area Prime Farm Pasture Land is just abov● Rim of Mine

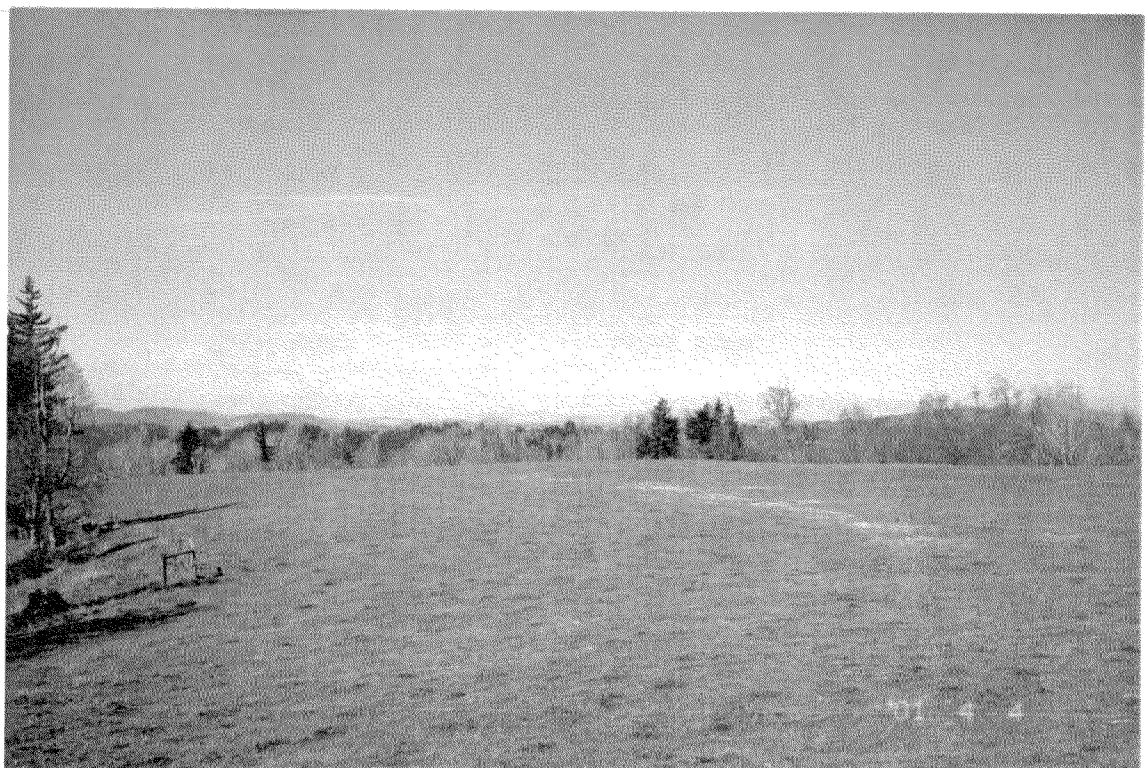
3/4

A.L. STOKES (503)695-5883
GREEN ACRES FARMS
38025 S.E. HOWARD ROAD
CORBETT, OR 97019-9707

Just Above Rim of Mine Prime Farm Pasture Land Showing C attle Grazing in foreground - EFU Tax lot #16 in Background Fence has Probably been Torn Down now - Due to Progression of Mining Activity.



Looking West from rim of Mine Showing Prime Farm Pastureland. EFU Tax lot # 16 in background.



4/4

A.L. STOKES (503)695-5883
GREEN ACRES FARMS
38025 S.E. HOWARD ROAD
CORBETT, OR 97019-9707

Looking Northwest -showing Cattle Grazing on Prime Farm Pastureland. EFU Tax lot #16 in Background.

Close Up showing a portion of 50 to 60 head of Cattle & Calves that Customarily Graze on this Prime Farm Pastureland. EFU Tax lot # 16 in background.

Department of Land Conservation and Development
OAR Chapter 660

DIVISION 023
PROCEDURES AND REQUIREMENTS FOR COMPLYING WITH GOAL 5

660-023-0000

Purpose and Intent

This division establishes procedures and criteria for inventorying and evaluating Goal 5 resources and for developing land use programs to conserve and protect significant Goal 5 resources. This division explains how local governments apply Goal 5 when conducting periodic review and when amending acknowledged comprehensive plans and land use regulations.

Stat. Auth.: ORS 183 & ORS 197

Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245

Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

660-023-0010

Definitions

As used in this division, unless the context requires otherwise:

(1) "Conflicting use" is a land use, or other activity reasonably and customarily subject to land use regulations, that could adversely affect a significant Goal 5 resource (except as provided in OAR 660-023-0180(1)(b)). Local governments are not required to regard agricultural practices as conflicting uses.

(2) "ESEE consequences" are the positive and negative economic, social, environmental, and energy (ESEE) consequences that could result from a decision to allow, limit, or prohibit a conflicting use.

(3) "Impact area" is a geographic area within which conflicting uses could adversely affect a significant Goal 5 resource.

(4) "Inventory" is a survey, map, or description of one or more resource sites that is prepared by a local government, state or federal agency, private citizen, or other organization and that includes information about the resource values and features associated with such sites. As a verb, "inventory" means to collect, prepare, compile, or refine information about one or more resource sites. (See resource list.)

(5) "PAPA" is a "post-acknowledgment plan amendment." The term encompasses actions taken in accordance with ORS 197.610 through 197.625, including amendments to an acknowledged comprehensive plan or land use regulation and the adoption of any new plan or land use regulation. The term does not include periodic review actions taken in accordance with ORS 197.628 through 197.650.

(6) "Program" or "program to achieve the goal" is a plan or course of proceedings and action either to prohibit, limit, or allow uses that conflict with significant Goal 5

FORM 1

16

D L C D NOTICE OF PROPOSED AMENDMENT

This form must be received by DLCD at least 45 days prior to the first evidentiary hearing per ORS 197.610, OAR Chapter 660 - Division 18 and Senate Bill 543 and effective on June 30, 1999.
(See reverse side for submittal requirements)

SAMPLE only

Jurisdiction: _____ Local File No.: M-522
(If no number, use none)

Date of First Evidentiary Hearing: _____ Date of Final Hearing: _____
(Must be filled in) (Must be filled in)

Date this proposal was sent or mailed: _____
(Date mailed or sent to DLCD)

Has this proposal previously been submitted to DLCD? Yes: ___ No: ___ Date: _____

___ Comprehensive Plan Text Amendment
___ Land Use Regulation Amendment
___ New Land Use Regulation
_X_ Comprehensive Plan Map Amendment
___ Zoning Map Amendment
___ Other: _____
(Please Specify Type of Action)

Briefly summarize the proposal. Do not use technical terms. Do not write "See Attached."

Remove from the 'Resource Inventory' all EFU Tax Lots in Sec 1 , T1S - R 4E & Sec 36 T-1N R- 4E. These EFU Tax Lots are all Classified as 'Prime Farmland' under USDA Natural Resources Conservation Service Class 27 B (Mershon Silt Loam) - 0-8% Slopes. This is the West End 1320' of the Inventory and an Insignificant Portion of the total Resource -Presently Used for Cattle Grazing

Plan Map Changed from : _____ to _____

Zone Map Changed from: _____ to _____

Location: _____ Acres Involved: _____

Specified Change in Density: Current: _____ Proposed: _____

Applicable Statewide Planning Goals: _____

Is an Exception Proposed? Yes: ___ No: ___

Affected State or Federal Agencies, Local Governments or Special Districts: _____

_____

Local Contact: _____ Area Code + Phone Number: _____

Address: _____

City: _____ Zip Code + 4: _____

DLCD No.: _____

April 21, 2007

Multnomah County
Land Use and Transportation Program
1600 SE 190th Avenue
Portland, Oregon 97233

To Whom It May Concern:

This letter is in response to the recent Notice of Public Hearing regarding the Measure 37 Claim, case files T1-06-124 and T1-06-087.

First let it be known that we find it unconscionable that this hearing will take place at a time and in a place that is most inconvenient for many of the citizens of Corbett who would like to be heard. Why isn't this hearing being held in the Corbett area (or even at Gresham City Hall) and preferably at an evening hour when most people are not at work??

Since we cannot attend this hearing, please accept this letter as a formal comment opposing the approval of this claim. The areas involved with this claim are zoned as follows: Exclusive Farm Use (EFU), Commercial Forest Use (CFU-4), Significant Environmental Concern (SEC-s streams), and Hillside Development (HD). All of these should preclude you from accepting this claim since the proposed mining and property development would violate each one of these zoning codes.

The proposed property development especially violates SEC-s and HD. Howard Creek and its tributaries feed into the Sandy River. Are these not protected under Oregon laws for wetlands and streams? Logging riparian buffers makes no sense whatsoever – ***buffers*** are designated to ***protect*** the wetlands, rivers and streams – why do these claimants wish to destroy the buffers? What will be the impact on federally protected fish species and other wildlife that inhabit this forested land and the streams and rivers?

The area along Howard Canyon is incredibly steep. Any homes allowed to be built here would be in extreme danger of landslides, especially as the land would first be forested, therefore losing even more stability. There are already too many homes and buildings in Oregon sliding downhill because greedy developers ignored the geography of the land and somehow bypassed any Hillside Development zoning regulations. Quoting from the zoning regulations, HD zoning is: *"to protect human life, to protect property and structures, and to minimize the expenditure for rescue/relief efforts associated with earth movement failures."* Relief from the land use regulations as requested by this claim MUST be DENIED!

Increasing the extraction rates from Howard Canyon quarry beyond current county restrictions is also unacceptable. The noise from this extraction is already too excessive for surrounding neighbors and the current rock hauling has affected transportation in the area. Are the claimants willing to pay for the road repair, re-grading, and culvert improvements needed for any increase – let alone for the damages already done? The roads in the area were designed for light duty, not the constant hauling of heavy loads of rock, and certainly no further increase in this commercial hauling.

In addition, these Measure 37 claims present a serious water supply concern for the residents of Corbett. The creation of up to 200 or more build-able lots for single family dwellings would be a tremendous surge in the water demands for the district. This significant, additional development will overtax the current watershed and distribution system, jeopardizing water supplies as well as affecting the local fire department's ability to protect homes and buildings.

Finally, the compensation amount requested is obscene! How can the amount demanded by these claims – approximately $28.8 million - be justifiable under Measure 37? It is obvious that this is a windfall increase in value and the demand is artificially high, representing only a theoretical amount the claimants hope to realize with a development monopoly. The entire Corbett area has always consisted of farm and forest lands, so it seems hardly possible that there have been any zoning regulation changes since 1975 which may have reduced the value of these properties to the extend claimed by these case files. Therefore, we request that there be no relief of any land use regulations to allow development and no further increase in mining and that if there is any compensation it should only be the "just compensation" deserved.

Sincerely,

Diane W. Peterson

William Lee Carter

April 21, 2007

Multnomah County
Land Use and Transportation Program
1600 SE 190th Avenue
Portland, Oregon 97233

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Sincerely,

Diane W. Peterson

William Lee Carter

TOKOS Derrick I

From: FARMER Stuart L
Sent: Wednesday, April 25, 2007 11:23 AM
To: TOKOS Derrick I; BARBER Adam T; BEASLEY Charles
Subject: FW: Customer Comments

FYI

-----Original Message-----
From: Multnomah County Form Email [mailto:Multnomah_County_Form_Email]
Sent: Wednesday, April 25, 2007 11:13 AM
To: FARMER Stuart L
Subject: Customer Comments

COMMENTS:Please type your suggestions here. (Include your e-mail address if you would like a return response.)

This e-mail is about Case Files T1-06-087 and T1-06-124 that is being heard today, April 26, 2007 at 1:30 pm.

Dear Multnomah County Board of Commissioners,
I live at 37915 SE Howard Rd. My wife and 4 kids moved there in June of 2005 to have the country life. We picked the area because of the acrage and the fact that Howard Rd was a single lane,dead end road and only about 20 houses there. We knew there was a rock quarry just down the road, but people told us that there was limited mining going on and the trucks only ran certain times of the day. On a few occasions we do have to share the road. When this happens, we have to drive on the edge of the road almost going into the ditch.

Our driveway enters Howard Rd on a S-curve that is only 15 feet wide. To enter our driveway we have to come to a stop and peer around the corner, to make sure it is safe to turn into it. There are times when a dump truck is coming down the middle of the road that makes it dangerous. On one side of the road is Howard Creek that our driveway crosses and on the other side is a 20 ft bank of hillside. There is little room for error. Both the creek and the hillside parallel Howard for almost 200 ft. This section of Howard Rd could not take the traffic that Mr. Smith is planning with the possible 200 housing units.

The amount of development that Mr. Smith is requesting would require major road construction to widen Howard and then movement of the hillside across from my driveway, that will weaken the stability of the houses that back up to this section on Louden Rd. I can not even imagen the damage that will be done to Howard creek. These land use laws were set up to protect the habitat and keep the farming lifestyle.

Most individuals who live on Howard either raise horses or cattle. How can a 1 acre unit raise livestock? We ourselves have 5 acres and have 5 cows. This is why we moved out to the Corbett area, to have the country life and be able to see the stars. With 200 housing units down the road that quality of life will be destroyed. Please keep the zoning laws as is and do not let Mr. Smith develop his land into this huge housing development.

Sincerely,
Reginald L. Wardle

phone:503-695-6633

email:rkwardle@cascadeaccess.com

Submit:Submit

Multnomah Co. Land Use Planning
1600 SE 190th Ave.
Portland, Ore. 97233

Lori Hansen and family
37777 E. Knieriem Rd.
Corbett, Or. 97019
April 21, 2007

Re: Ongoing debacle that is Howard Canyon, presently Case File T1-06-124

Dear Multnomah Co. Board of Commissioners,

WARNING: This letter is from a totally and completely devastated and exhausted and pissed off neighbor of the Howard Canyon in Corbett:

Regarding the Howard Canyon/Raymond Smith continued expansion of the quarry in the guise of Measure 37; ARE YOU KIDDING ME??? This marks OVER A DECADE we, the poor neighbors, have been fighting to protect our land, water and way of life from these people!!! We are screaming. We are begging for you to listen to us, yet again.

Why in the world are there Multnomah Co. zoning laws?? That the rest of us have to abide by?? What a frustrating and very cruel joke.

I bought a measly five acres right across the street and it took THREE YEARS, yes, THREE YEARS and countless dollars to satisfy the stringent conditional use permit requirements to build a single family residence here. Granting a request for HUNDREDS of homes here makes a mockery of that process and frankly, makes a mockery of me and my family.

So, what this says to my family and to all our concerned Corbett neighbors is that in Multnomah Co., laws and permits mean NOTHING if you have money and more importantly, lots of lawyers. Devastating the land by logging, destroying the riparian buffers, polluting Howard Creek and the Sandy River, is a given. BLAH< BLAH< BLAH!!!!!!!!!! We've said it ALL before, over and over again, year after year, decade after decade. Please stop this absolute insanity.

Do the right thing and deny this heinous request. Put our irritating, greedy, bad neightbors to rest once and for all. This is all about greed, unfairness and privilege. And frankly, we must admit, a HUGE conflict of interest with Patti Smith, who stands to be rewarded handsomely by inheriting millions from this convenient little transaction.

Thank you for listening, Lori Hansen

TOKOS Derrick I

From: SCHILLING Karen C
Sent: Monday, April 23, 2007 11:46 AM
To: TOKOS Derrick I
Subject: FW: Case File: T1-06-124 Howard Canyon 37 Claim

Derrick,
The commissioners received this email and it seems like we should mention it on Thursday as public comment.
Karen

-----Original Message-----
From: Brian & Cynthia Winter [mailto:winter@cascadeaccess.com]
Sent: Sunday, April 22, 2007 12:39 PM
To: Multnomah County Chair; District2; ROBERTS Lonnie J; District3; District1
Subject: Case File: T1-06-124 Howard Canyon 37 Claim

Dear County Commissioners,
Due to our work schedules we will not be able to attend Thursday's hearing on the Howard Canyon Measure 37 claim in our community. We would however like to express our concerns regarding the negative impact this large subdivision will have on our community.

Beyond the aesthetes and impact on a rural community large development like this has, we are more concerned about safety. A few years back, the Corbett Fire department ran out of water trying to fight a fire at the old elementary school. We have a limited and fragile water shed in Corbett. The addition of 200 homes stresses this system even more. 200 Homes also means approximately 400 additional cars and trucks on rural roads and jeopardizes the safety of the many cyclists and horseback riders on our rural roads not to mention the infrastructure of the roads themselves.

As you consider this claim, we also ask that you consider the safety of those of us who live near this large development and the amount of increased demands our rural infrastructure can handle.

Sincerely,
Brian & Cynthia Winter
P. O. Box 198
Corbett OR 97019
503-695-6556
winter@cascadeaccess.com

Daniel Lee Stokes
PO Box 441
Corbett, OR 97019

23 April 2007

Multnomah County
Land Use and Transportation Program
1600 SE 190th Ave
Portland, OR 97233

Re: Case File T1-06-124 and Case File T1-06-087

Please present this letter to the hearing scheduled Thursday, April 26, 2007 at 1:30 as I will be unable to attend.

I own Tax Lot 61, immediately adjacent to the West of the properties addressed in the above case files. I also own Tax Lot 59, on Howard Road. I have concerns over what the proposed development may mean to my properties.

I believe my concerns should be voiced whether or not the proposed development was within context of a Measure 37 claim. **I don't believe interpretation of Measure 37 should allow owners to develop at the expense of their neighbors. Specifically, my concerns are these:**

T1-06-124 – allow mining of all economically viable sources of gravel.

1. As a property owner adjacent the proposed mining, **I am very concerned over the noise, dust, and affect on my land and its value**. I would urge the planning commission to retain the current buffer on the adjacent lot to protect my Tax Lot 61. This burden should be borne by the developer, and placed on his property, not mine. I believe this buffer is now 1500 feet, and should be retained regardless of whether or not Measure 37 had passed.

2. **I encourage retaining the current annual limits on mining extraction**. Removing the current limit of 5,000 cubic yards per year and expanding current annual mining extraction activities will significantly increase the large dump-truck vehicular traffic on Howard Canyon Road. This would present a significant safety hazard to those who live near and travel on that road. This concern, likewise, is still valid regardless of whether or not Measure 37 had passed.

3. The North end of my property, and the North end of the Western portion of the proposed property have significant slopes. **I am concerned that mining up to and into these slopes would cause significant erosion or instability affecting my property**. This concern is still valid regardless of whether or not Measure 37 had passed.

T1-06-087 – allow the claimant to develop properties (90-104 lots) – also to log riparian buffers along Howard Creek and a tributary.

4. **I am concerned about whether or not sufficient infrastructure exists in Corbett for this growth.** Specifically, water, fire services, security, road capacity, school capacity. Part of the costs of ensuring sufficient infrastructure services may or may not need to be born by the developer per applicable codes and guidelines. This concern would still be valid regardless of whether or not Measure 37 had passed. Please keep this in mind as you make your decision.

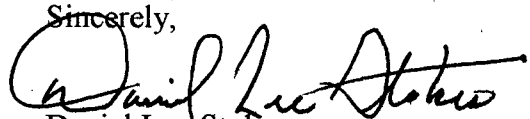
5. I am concerned about my property, Tax Lot 59 which borders on Howard Creek and has Big Creek flowing through it. **Unrestricted logging, up to and including riparian buffers along Howard Creek and a tributary will affect downstream waters and riparian areas.**

6. **Fairness and Equal Treatment**: Affecting riparian areas was the exact reason why last year, in 1996, the County said I was unable to replace my existing structure on Howard Road and had to build on Littlepage Road instead.

Since I have complied with County restrictions in placing my home away from Big Creek and Knierem Creek, my **concern is that logging and how it affects riparian areas, likewise, should be applied equitably regardless of whether or not Measure 37 had passed.**

Finally, within the context of Measure 37, I would urge the Planning Commission to review actual dates of acquisition of the subject properties by Smith, Smith LLC, and Raymond Smith Trusts under the guidelines of the measure. Although some of the properties may have been owned during a time when no restrictions applied, it is my understanding that a significant portion of this land may have been acquired in the 1980s. In that case, restrictions that were in effect during initial acquisition would be in order.

Sincerely,



Daniel Lee Stokes

Multnomah County Land Use Planning
1600 SE 190th Ave
Portland, Oregon 97233

Kerrie Okada
PO Box 67
37925 E. Knieriem Rd.
Corbett, Oregon 97019

COPY

Re: Case File T1-06-087

Hello,

Measure 37 was not passed to allow development such as this that bypasses all environmental, land use, zoning and federal laws. This area has been contested for the further development of the quarry and many impacts have already been noted in those hearings. Those issues include the overload on the transportation infrastructure, the environmental impact on the streams and wildlife with the erosion and deforestation that will undoubtedly take place with that amount of homes. There were further issues on noise and the effects on the quality of rural life. Please refer to the insights from those previous hearings.

Included now are some issues of Corbett infrastructure with the limited Corbett water district that would need to be expanded to meet the needs of these homes. The school district would have difficulty providing for this type of influx. Also, the volunteer Fire Department would have to be developed to cover the expanse of such an area.

Is this area outside of the protected Columbia Scenic Gorge? If it is, it is by less than a mile. The run-off into the streams flow into the protected Sandy River. These areas are protected for a reason. We want to preserve the beauty of the area and not compromise for the greed of the outlandish amount of homes in the proposal.

As was the case in the quarry hearings there was a great need to limit the amount of development of this property. I had to follow a template when I built my house. Only a certain amount of homes were allowed in a specified acreage. Shouldn't that template be followed here? And should building be allowed that close to a quarry that is blasting, using noisy machinery, creating a huge dusty area Is that safe?.

I object to this proposal and I feel that these folks need to follow the zoning laws like everyone else.

Thank you,

Kerrie Okada

Multnomah Co. Land Use Planning
1600 SE 190th Ave.
Portland, Ore. 97233

COPY

Lori Hansen and family
37777 E. Knieriem Rd.
Corbett, Or. 97019
April 21, 2007

Re: Ongoing debacle that is Howard Canyon, presently Case File T1-06-124

Dear Multnomah Co. Board of Commissioners,

WARNING: This letter is from a totally and completely devastated and exhausted and pissed off neighbor of the Howard Canyon in Corbett:

Regarding the Howard Canyon/Raymond Smith continued expansion of the quarry in the guise of Measure 37; ARE YOU KIDDING ME??? This marks OVER A DECADE we, the poor neighbors, have been fighting to protect our land, water and way of life from these people!!! We are screaming. We are begging for you to listen to us, yet again.

Why in the world are there Multnomah Co. zoning laws?? That the rest of us have to abide by?? What a frustrating and very cruel joke.

I bought a measly five acres right across the street and it took THREE YEARS, yes, THREE YEARS and countless dollars to satisfy the stringent conditional use permit requirements to build a single family residence here. Granting a request for HUNDREDS of homes here makes a mockery of that process and frankly, makes a mockery of me and my family.

So, what this says to my family and to all our concerned Corbett neighbors is that in Multnomah Co., laws and permits mean NOTHING if you have money and more importantly, lots of lawyers. Devastating the land by logging, destroying the riparian buffers, polluting Howard Creek and the Sandy River, is a given. BLAH< BLAH< BLAH!!!!!!!!!! We've said it ALL before, over and over again, year after year, decade after decade. Please stop this absolute insanity.

Do the right thing and deny this heinous request. Put our irritating, greedy, bad neightbors to rest once and for all. This is all about greed, unfairness and privilege. And frankly, we must admit, a HUGE conflict of interest with Patti Smith, who stands to be rewarded handsomely by inheriting millions from this convenient little transaction.

Thank you for listening, Lori Hansen

Lori Hansen
37777 E Kuiersen Rd
Corbett, OR 97019

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23 APR 2007 PM 3 T

Mult. Co. Land Use Planning
Go Public Hearing Comments 11-06-087
1600 SE 190th Ave
Portland, Ore. 97233

97233+5510

Daniel Lee Stokes
PO Box 441
Corbett, OR 97019

23 April 2007

Multnomah County
Land Use and Transportation Program
1600 SE 190th Ave
Portland, OR 97233

Re: Case File T1-06-124 and Case File T1-06-087

Please present this letter to the hearing scheduled Thursday, April 26, 2007 at 1:30 as I will be unable to attend.

I own Tax Lot 61, immediately adjacent to the West of the properties addressed in the above case files. I also own Tax Lot 59, on Howard Road. I have concerns over what the proposed development may mean to my properties.

I believe my concerns should be voiced whether or not the proposed development was within context of a Measure 37 claim. **I don't believe interpretation of Measure 37 should allow owners to develop at the expense of their neighbors. Specifically, my concerns are these:**

T1-06-124 – allow mining of all economically viable sources of gravel.

1. As a property owner adjacent the proposed mining, **I am very concerned over the noise, dust, and affect on my land and its value**. I would urge the planning commission to retain the current buffer on the adjacent lot to protect my Tax Lot 61. This burden should be borne by the developer, and placed on his property, not mine. I believe this buffer is now 1500 feet, and should be retained regardless of whether or not Measure 37 had passed.

2. **I encourage retaining the current annual limits on mining extraction**. Removing the current limit of 5,000 cubic yards per year and expanding current annual mining extraction activities will significantly increase the large dump-truck vehicular traffic on Howard Canyon Road. This would present a significant safety hazard to those who live near and travel on that road. This concern, likewise, is still valid regardless of whether or not Measure 37 had passed.

3. The North end of my property, and the North end of the Western portion of the proposed property have significant slopes. **I am concerned that mining up to and into these slopes would cause significant erosion or instability affecting my property**. This concern is still valid regardless of whether or not Measure 37 had passed.

T1-06-087 – allow the claimant to develop properties (90-104 lots) – also to log riparian buffers along Howard Creek and a tributary.

4. **I am concerned about whether or not sufficient infrastructure exists in Corbett for this growth.** Specifically, water, fire services, security, road capacity, school capacity. Part of the costs of ensuring sufficient infrastructure services may or may not need to be born by the developer per applicable codes and guidelines. This concern would still be valid regardless of whether or not Measure 37 had passed. Please keep this in mind as you make your decision.

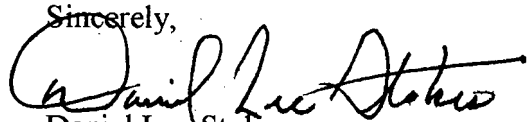
5. I am concerned about my property, Tax Lot 59 which borders on Howard Creek and has Big Creek flowing through it. **Unrestricted logging, up to and including riparian buffers along Howard Creek and a tributary will affect downstream waters and riparian areas.**

6. **Fairness and Equal Treatment**: Affecting riparian areas was the exact reason why last year, in 1996, the County said I was unable to replace my existing structure on Howard Road and had to build on Littlepage Road instead.

Since I have complied with County restrictions in placing my home away from Big Creek and Knierem Creek, my **concern is that logging and how it affects riparian areas, likewise, should be applied equitably regardless of whether or not Measure 37 had passed.**

Finally, within the context of Measure 37, I would urge the Planning Commission to review actual dates of acquisition of the subject properties by Smith, Smith LLC, and Raymond Smith Trusts under the guidelines of the measure. Although some of the properties may have been owned during a time when no restrictions applied, it is my understanding that a significant portion of this land may have been acquired in the 1980s. In that case, restrictions that were in effect during initial acquisition would be in order.

Sincerely,



Daniel Lee Stokes

April 25, 2007

To: Multnomah County Land Use & Transportation Program
1600 SE 190th Ave.
Portland OR 97233

Hearing: April 26, 2007, 1:30 p.m.
Commissioners Boardroom
501 SE Hawthorne Blvd., Rm 100
Portland OR 97214

From: Victoria Cloud Sears
Environmental Technician II
41401 SE Louden Rd.
Corbett, OR 97019

Case File: Measure 37, T1-06-087, and T1-06-124
Opposition to relief from land use regulations

Hearings Officer(s),

I wish to oppose the two applications for relief from land use regulations, and oppose approval of proposed land uses.

BACKGROUND:
When I moved to Corbett in 1979, I was told by a number of folks that Raymond Smith and his family were the kind of people that - if there was one last tree, would argue over which one got to cut it down; and if there was one last elk, would compete to see who could shoot it. I chuckled over this, and thought that it was undoubtedly an overstatement. Unfortunately, as I got to know the Smith family, this no longer seemed to be an overstatement. For instance, in about 1980 Raymond Smith was cited for driving heavy equipment through Howard Creek at the above property. He was so angry at being told what he could or could not do, that as a spiteful action, he took his heavy equipment back to the creek, and drove back and forth through it. I have no confidence that any protection of resources on these properties would be followed during any development.

Smith and Lenske harvest rock from a quarry (very unpopular use due to noise, interference with wildlife, impact to roads and public safety, etc.) and perform commercial forest use, logging it heavily for firewood. Unfortunately, the notion that forest is a renewable resource, and that the renewing takes an investment in time is not compatible with their thinking. Nor was there ever concern for State Goals. However, the land has served as a major wildlife corridor, and significant habitat.

Never in all these years did I ever hear any discussion from the Smiths indicating any intent to use the land for housing development. Smiths are an old logging family, and they intended to continue that way. There is no loss of use for any of these lands, and no unfair burden by any land use regulations. The intent to develop the land came opportunistically after Raymond Smith's daughter-in-law Patti Smith became a State Representative. Patti was and is funded by Oregonians in Action, which is a group opposed to any land use constraints, and who sponsored Measure 37. Patti Smith stands to inherit from Raymond Smith (92 yrs old), and to profit heavily from the four Smith Measure 37 land use claims. Patti Smith is on the State Joint Land use Fairness Committee to decide the fate and guidelines of Measure 37. In spite of this conflict of interest, she has not reclused herself! At committee she has successfully stalled any agreement on the measure at the state level, thereby bouncing the land use decisions on Smith lands to the county level. The stalled bill would have prohibited conversion of forest and aggregate lands to subdivisions. You have to give it to her, she is clever. This is purely and tactically about greed, not loss of use. You, however, can make that decision to prohibit conversion of forest and aggregate lands to subdivisions.

The board must have the brevity to protect us from inappropriate use. Sometimes this means the board must protect us from the greed of others, and sometimes protect us from our own greed. You must also protect Multnomah County from inevitably and inadvertently violating local, state and federal goals and regulations as a result of an approval of the proposed use.

The county must also not become liable for causing the community to subsidize supportive infrastructure to support development (additional schools, sewer system and treatment plant, purchasing and pumping water from the City of Portland, widening roads for traffic capacity, etc.) It would not be Smith and Lenske who paid for these, but the current citizens of Corbett if the development were allowed. That would be an unfair burden! And let us not forget that noise echos up the canyon, becoming very loud at properties such as mine. Noise pollution of this magnitude should be prohibited.

INCOMPATIBILITY WITH STATE LAND USE GOALS (OARs):

Goal 4 Forest Lands
Allowable uses are for (1) support of forest operations to assure lands will be available now and in the future for growth and harvest of trees (not to defoliate and replace with housing developments), and (2) to conserve soil, air, water and fish resources. Logging in the riparian buffer area and housing development would threaten these. More housing would increase air emissions from wood stoves and automobiles, potable water is already maxed out, erosion and increased temperatures in Howard Creek from logging threaten water quality and fish.

Goal 5 Natural Resources, Scenic and Historic Areas, and Open Spaces
Local governments [Multnomah County] shall adopt programs to protect natural resources and conserve resources for present and future generations, to promote a healthy

environment and natural landscape that contributes to livability, including riparian areas, wildlife corridors, and scenic views. Logging, over-mining and replacing open space with houses would permanently disrupt wildlife corridors, ruin scenic views and devastate riparian areas.

Goal 6 Air,Water and Land Resources Quality
To maintain and improve the quality of air, water and land resources of the state. Use (1) shall not exceed carrying capacity; or (2) degrade such resources; or (3) threaten availability of such resources. Increased vehicle use, and wood stoves in the Howard Creek Canyon would jeopardize air quality. Erosion from construction and logging would devastate the stream with sedimentation, increased water temperatures (increased bacteria and algal growth, reduced oxygen supply to fish and benthic creatures, deplete hydrologic flow due to evaporation) from lack of cover and insufficient root stabilization; and pollute the waterway from residential runoff of fertilizers, herbicides, hydrocarbons and miscellaneous other contributions. Septic system setbacks are insufficient, and would also threaten water quality of Howard Creek.

Goal 7 Areas Subject to Natural Hazards
To protect people and property from natural hazards [landslides]. Heavy development would destabilize slopped soils and has a serious potential to increase the frequency and severity of landslides, and threaten property as well as the water quality of Howard Creek.

Goal 11 Public Facilities and Services
To plan and develop efficient arrangement of public facilities and services to serve as a framework for rural development in unincorporated communities outside the urban growth boundaries. These rocky rural forest lands are(1) unsuitable for multiple septic systems. Much of the land is too sloped, and too close to Howard Creek for septic systems. There would be insufficient setbacks to the stream and pose a public health hazard. Should Corbett have to develop a wastewater treatment plant for Smith and Lenske? No. (2) The Corbett water supply has dried up in the summer in previous years, hardly able to support the existing populations. We would have to buy in water at a great expense, if we could find a source. The social consequences are too great to allow this. (3) The schools are not large enough to manage a large influx of density. Existing Corbett citizens would have to build new schools, then also pay for all those kids to attend. The social consequences by exceeding the carrying capacity is too great a burden. The financial costs are also too severe.

INCOMPATIBLITY WITH FEDERAL REGULATIONS:

Endangered Species Act (ESA) and Clean Water Act (CWA)
Protects anadromodous fish, and protects water quality in Howard Creek. Logging the stream buffer would threaten endangered species due to erosion, removal of root stabilization of soils, increased heat due to removal of stream cover, and from removal of a vegetative buffer that could protect the creek by absorbing pollutant runoff. Soil compaction from the weight of logging equipment would reduce viability in the re-

growth of vegetation. Dense housing introduces pollution from multiple sources (see argument for State Goal 6).

ALTERNATIVE RECOMMENDATION:

Instead of approving the Smith Lenske proposed land use that I recommend that METRO purchase these properties for open space, thereby relieving the burden of land management from Smith and Lenske, and enhancing the natural resource benefit of all of Multnomah County.

Debby & Gary Simone
600 S.E. Pounder Road
P.O. Box 347
Corbett, OR 97019-0347
Phone/FAX: (503) 695-2658

TO: Chuck Beasley + Derrick Tokos

FAX #: 503-988-3389

Company: Multnomah County Land Use + Transportation Program

Regarding: Today's Hearing Case# T1-06-087 + T1-06-124

FROM: Debby + Gary Simone

DATE: 4-26-07 TIME: NUMBER OF PAGES (including Cover): 3

PAGE SIZE: STD LEGAL

PLEASE ADVISE IF NOT RECEIVED CLEARLY OR IF ANY PAGES ARE MISSING.

COMMENTS:

Please include the attached 2 pages in the public comment packet that will be provided to Commissioners for today's public hearing at 1:30 p.m.

Thank you for your assistance.

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you received this communication in error, please notify us at the above address, via the U.S. Postal Service.

April 25, 2007

Multnomah County Board of Commissioners
Ted Wheeler, Chair
Maria Rojo de Steffey, District 1
Jeff Cogen, District 2
Lisa Naito, District 3
Lonnie Roberts, District 4

Honorable Commissioners,

As residents of Corbett at 600 S.E. Pounder Road, we are writing to you regarding the April 26 Hearings scheduled to consider Cases T1-06-087 and T1-06-124. The proposed development of over 200 home sites is entirely out of scope for the nature of our rural area, and negates the intent of the East of Sandy River Rural Area Plan. We object to these claims made under Measure 37 due their significant, long-term negative impact as outlined below:

Infrastructure
Roads that were not engineered to carry an increased load of residential and commercial traffic surround the subject properties. There is ample evidence on file with the County regarding the lack of a transportation infrastructure to support this higher number and frequency of Howard Canyon Quarry heavy haulers on our local roads.

The Corbett Water District struggles daily to meet the water needs of its current customers. Even with its careful long-range planning and fiscal accountability, the Water District has limited resources. The imposition of 200 additional residences will place an unnecessary burden on supply and distribution systems, and result in a reduction of quality water for existing homes and businesses. With increased water demand, our Corbett Volunteer Fire Department will be overtaxed to maintain the safety of our properties. Drilling wells as an alternative to extending water supply is unacceptable. So many new wells will severely draw down streams defined by Multnomah County as "significant."

Environment
The claim to "seek relief to log riparian buffers along Howard Creek and a tributary" (T1-06-087) will result in deforestation and loss of natural vegetation, which currently supports wildlife including fish species. Multnomah County has defined Howard Creek as "significant" and requiring protection; it flows into Big Creek and ultimately the Sandy River. Extensive residential site development would result in a level of disturbance to forest, farmland and streams that can never be mitigated.

Safety

A proposed increase in the level of the Howard Quarry operation with the intent of "mining all economically viable sources of gravel followed by subdivision..."(T1-06-124) implies mining on a fast track—at a level exceeding that previously established by the County. This increased extraction would negatively affect not only those residents adjacent to the extraction areas, but those along the haul routes as well. We are particularly concerned for the safety of pedestrians, bicyclists, and equestrians who utilize our scenic roads daily.

As residents of Multnomah County, we are acutely aware of the economic constraints under which our government operates. There is not currently, nor will there be in the future, any way of enforcing any County-imposed traffic management or safety-related restrictions on the Quarry operation or on the vehicles generated by the density of planned residential subdivisions. The Sheriff's Office will not be able to respond to the increased demand for service.

Quality of Life

As residents of Corbett, we have a reasonable expectation that our quality of life in our rural area will continue. We purchased farm property for a specific purpose and have made an investment and reinvestment in our property. We will experience loss of property value and quality of rural life if these two Measure 37 claims are granted. The scale of the residential subdivisions in the planned locations is incompatible with local land uses.

In conclusion, we respectfully request that the Multnomah County Commission support the long-term vision of the East of the Sandy River Rural Area Plan to maintain agriculture and open space; specifically by minimizing the incontrovertible negative impacts on our local infrastructure, farm and forest lands, safety, and quality of life inherent in these two Measure 37 claims. Thank you for your consideration.

Sincerely,

Debby L. Simone

Debby L. Simone

Gary W. Simone

Gary W. Simone

600 SE Pounder Road (PO Box 347)
Corbett, OR 97019-0347
503-695-2658

ROBERT OVERY
35032 SE HURLBURT Rd.
CORBETT OR.

MR. TED WHEELER
LAND USE AND TRANSPORTATION PROGRAM:

DEAR MR. WHEELER:

I'D LIKE TO COMMENT CONCERNING MEASURE 37 CASES T1-026-124 AND T1-04-087.

I DO NOT WANT TO SEE THESE CLAIMS RELEASED FROM COUNTY LAND USE REGULATIONS.

I BELIEVE THE IMPACT ON THE WILDLIFE IN THE AREA WOULD BE GREATLY DETRIMENTAL. I KNOW THERE IS A ELK HERD THAT WINTERS IN AND AROUND HOWARD CANYON.

I AM ON CORBETT WATER DISTRICT AND MY WATER PRESSURE IS OFTEN VERY LOW IN SUMMER MONTHS. WE SURLEY DO NOT NEED LOG AND GRAVEL TRUCKS ON HURLBURT Rd.

THIS IS A BEAUTIFUL AND WILD AREA BUT WHEN ITS GONE ITS GONE FOREVER.

THANKS FOR YOUR TIME

Bob Overy

37 YEARS SAME Address