Oregon
Theodore R. Kulongoski, Governor

Department of Land Conservation and Development
635 Capitol Street, Suite 150
Salem, OR 97301-2540
(503) 373-0050
Fax (503) 378-5518
www.lcd.state.or.us

NOTICE OF ADOPTED AMENDMENT

May 19, 2008

TO: Subscribers to Notice of Adopted Plan
or Land Use Regulation Amendments

FROM: Mara Ulloa, Plan Amendment Program Specialist

SUBJECT: Clatsop County Plan Amendment
DLCD File Number 008-07

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Due to the size of amended material submitted, a complete copy has not been attached. A copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: June 3, 2008

This amendment was submitted to DLCD for review 45 days prior to adoption. Pursuant to ORS 197.830 (2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

***NOTE:** **THE APPEAL DEADLINE IS BASED UPON THE DATE THE DECISION WAS MAILED BY LOCAL GOVERNMENT. A DECISION MAY HAVE BEEN MAILED TO YOU ON A DIFFERENT DATE THAN IT WAS MAILED TO DLCD. AS A RESULT YOUR APPEAL DEADLINE MAY BE EARLIER THAN THE ABOVE DATE SPECIFIED.**

Cc: Doug White, DLCD Community Services Specialist
Laren Woolley, DLCD Regional Representative
Amanda Punton, DLCD Natural Resource Specialist
Michael Weston, Clatsop County

<paa> ya

FORM 2

DLCD
Notice of Adoption

THIS FORM **MUST BE MAILED** TO DLCD
WITHIN 5 WORKING DAYS AFTER THE FINAL DECISION
PER ORS 197.610, OAR CHAPTER 660 - DIVISION 18

☐ In person ☒ electronic ☐ mailed

DATE STAMP
DEPT OF
MAY 14 2008
LAND CONSERVATION AND DEVELOPMENT
For DLCD Use Only

Jurisdiction: **Clatsop County**
Local file number: **08-04**
Date of Adoption: **4/29/2008**
Date Mailed: **5/12/2008**
Was a Notice of Proposed Amendment (Form 1) mailed to DLCD? **Yes** Date: 10/25/2007

☒ Comprehensive Plan Text Amendment
☒ Comprehensive Plan Map Amendment
☐ Land Use Regulation Amendment
☒ Zoning Map Amendment
☒ New Land Use Regulation
☐ Other:

Summarize the adopted amendment. Do not use technical terms. Do not write "See Attached".

A Zoning Map Amendment from RA-2, AF, & F-80 to QM with a QMO. A Comprehensive Plan Text Amendment to the Goal 5 Element & Background Report adding the Site to the County's List of Significant Quarry Sites, including a Geologic Study, Traffic Impact Study, ESEE, and other supportive documentation.

Does the Adoption differ from proposal? Yes, Please explain below:

Some resrictions were placed on the site decreasing the overall size and utility of the QM Zone.

Plan Map Changed from: **Rural Lands - Cnsv Forest** to: **Conservation Other Resources**
Zone Map Changed from: **AF, F-80, & Ra-2** to: **QM with a QMO**
Location: **T5N, R10W, Sec 14, TL 1203** Acres Involved: **112**
Specify Density: Previous: **N/A** New: **N/A**
Applicable statewide planning goals:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐

Was an Exception Adopted? ☐ YES ☒ NO
Did DLCD receive a Notice of Proposed Amendment...

45-days prior to first evidentiary hearing? ☒ **Yes** ☐ **No**
If no, do the statewide planning goals apply? ☐ **Yes** ☐ **No**
If no, did Emergency Circumstances require immediate adoption? ☐ **Yes** ☐ **No**

DLCD #008-07 (16536)

DLCD file No. _____
Please list all affected State or Federal Agencies, Local Governments or Special Districts:

DLCD, DOGAMI, ODOT, OWRD, DSL, DEQ, CLATSOP COUNTY

Local Contact: **Michael Weston** Phone: **(503) 325-8611** Extension: **1702**

Address: **800 Exchange St** Fax Number: **503-338-3666**

City: **Astoria** Zip: **97103-** E-mail Address: **mweston@co.clatsop.or.us**

ADOPTION SUBMITTAL REQUIREMENTS

This form **must be mailed** to DLCD **within 5 working days after the final decision**
per ORS 197.610, OAR Chapter 660 - Division 18.

1. Send this Form and **TWO Complete Copies** (documents and maps) of the Adopted Amendment to:

ATTENTION: PLAN AMENDMENT SPECIALIST
DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT
635 CAPITOL STREET NE, SUITE 150
SALEM, OREGON 97301-2540

2. Electronic Submittals: At least **one** hard copy must be sent by mail or in person, but you may also submit an electronic copy, by either email or FTP. You may connect to this address to FTP proposals and adoptions: **webserver.lcd.state.or.us**. To obtain our Username and password for FTP, call Mara Ulloa at 503-373-0050 extension 238, or by emailing **mara.ulloa@state.or.us**.

3. Please Note: Adopted materials must be sent to DLCD not later than **FIVE (5) working days** following the date of the final decision on the amendment.

4. Submittal of this Notice of Adoption must include the text of the amendment plus adopted findings and supplementary information.

5. The deadline to appeal will not be extended if you submit this notice of adoption within five working days of the final decision. Appeals to LUBA may be filed within **TWENTY-ONE (21) days** of the date, the Notice of Adoption is sent to DLCD.

6. In addition to sending the Notice of Adoption to DLCD, you must notify persons who participated in the local hearing and requested notice of the final decision.

7. **Need More Copies?** You can now access these forms online at **http://www.lcd.state.or.us/**. Please print on **8-1/2x11 green paper only**. You may also call the DLCD Office at (503) 373-0050; or Fax your request to: (503) 378-5518; or Email your request to **mara.ulloa@state.or.us** - ATTENTION: PLAN AMENDMENT SPECIALIST.

ORDINANCE 08-04

Big River / Ordway

Comprehensive Plan / Zoning Map & Text Amendment

Goal 5 Element and Background Report

- Comprehensive Plan Text Amendment to Goal 5 Element & Background Report

- Comprehensive Zoning Map change to QM with a QMO Overlay

- Detailed Geologic Hazard Report

- Development Permit

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Ordinance #08-04 I

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RECORDED

APR 29 2008

Doc #2008040045

Before the Board of Commissioners
For Clatsop County, Oregon

In the Matter of

AN ORDINANCE AMENDING THE CLATSOP COUNTY COMPREHENSIVE PLAN / ZONING MAP AND TEXT AS ADOPTED BY THE BOARD OF COMMISSIONERS ADOPTING CERTAIN FINDINGS WITH CONDITIONS AND RESCINDING INCONSISTENT PROVISIONS

ORDINANCE # 08-04

Recording Date: 4-29-2008

The Board of Commissioners of Clatsop County, Oregon ordains as follows:

SECTION 1. SHORT TITLE.

This ordinance shall be known as the Big River/Ordway Comprehensive Plan / Zoning Map and Text Amendments.

SECTION 2. RECITALS

The Board of County Commissioners of Clatsop County, Oregon recognizes the need to revise and amend the Clatsop County Comprehensive Plan and Zoning Map and Text. In the interest of the health, safety and welfare of the citizens of Clatsop County and Pursuant to State law, the Board of Commissioners hereby determines the necessity of amending the said Clatsop County Comprehensive Plan/Zoning Map and Land and Water Development and Use Ordinance # 80-14 as amended.

The Board of County Commissioners determines and takes notice that the adoption procedure for this ordinance complies with the Post Acknowledgement rules of the Land Conservation and Development Commission. The County Planning Commission has sought review and comment and has conducted the public hearing process pursuant to the requirements of ORS 215.050 and 215.060. The Planning Commission held three public hearings on the matter; the first was held on January 15th, 2008; the second was held on February 12th, 2008; and the final hearing and date recommendation was rendered on March 11th, 2008. The Board of Commissioners Received and Considered the Planning Commission's recommendations on this request and held a public hearing on this ordinance pursuant to law on April 9th, 2008.

SECTION 3. CONFORMITY WITH THE LAW.

This ordinance shall not substitute for nor eliminate the necessity for conformity with any and all laws or rules of the State of Oregon, or its agencies, or any ordinance, rule or regulation of Clatsop County.

SECTION 4. INCONSITENT PROVISIONS.

This ordinance shall supersede, control and repeal any inconsistent provision of the Clatsop County Land Water Development and Use Ordinance, as amended, or any other ordinance or regulation made by Clatsop County.

SECTION 5. SEPARABILITY.

If any section, subsection, sentence, clause, phrase, or any other portion of this ordinance is for any reason held invalid or unconstitutional by a court of competent jurisdiction, such portion shall be deemed as a separate distinct and independent provision and such holding shall not affect the validity of the remaining portions of this ordinance.

SECTION 6. EFFECTIVE DATE.

This ordinance shall be in full force and effective 30 days following adoption of this ordinance.

SECTION 7. ADOPTION CLAUSE.

The Board of Commissioners hereby adopts the Big River/Ordway Comprehensive Plan and Zoning Map and Text Amendment with conditions as set forth in Exhibit 1 "*Adoption Packet*" recommended for approval by the Planning Commission and attached hereto and by this reference made a part herein of this ordinance in its entirety.

ADOPTED this 23rd day of April 2008.

Board of County Commissioners
For Clatsop County, Oregon

By _____
Patricia Roberts, Chair

Approved as to Form: _____
Clatsop County Counsel

Adopted Conditions of Approval

Ordinance # 08-04

1. Concrete and Asphalt Batch Plants are NOT approved under this land use approval. Within 30 Days of the expiration of all appeal periods of the approval, Big River shall record a deed restriction Prohibiting the Establishment of a Concrete/Asphalt Batch Plant on Tax Lots 1203 & 101.

   The Zone Change granted in this land use proceeding changes the zoning on portions of the affected properties from the County's RA-2, AF & F-80 Zones to the County's QM Zone. Ordinarily the QM Zone would allow Batch Plants as a Type I use. This Approval and Condition specifically override the provisions of the County's QM zone section 3.466§(2).

   In the event an applicant in the future would request a Batch Plant for these properties, such request shall be subject to the County's Type IV procedure and the post acknowledgement Processes of OAR 660-23-0180. However, the applicant would not be required to prove significance (i.e. Quantity, Quality, & Location) for the purposes of supporting the Batch Plant request.

2. Consistent with the Comments of the Oregon Department of Fish and Wildlife, the applicant/operator shall complete any required wetlands corrections resulting from activities and infractions of prior operators. Big River also agrees to voluntarily work with the local watershed council on a previously planned project on its bottomland property. For this purpose, Big River will provide limited access to portions of its property not used for extraction activities (Along Highway 26). Big River's Stormwater plan, required in Condition 6 Below, will include changes in Drainage on Tax Lot 1203 (Near the Existing "Spoils" site) to redirect a portion of water flow onto Big River Property (Tax Lot 1203)

3. Operations will continue to use the existing access point at milepost 2.66, consistent with the current permit from the Oregon Department of Transportation. No increase in the number of Average Daily Vehicle Trips is requested or allowed. No queuing (Lining Up) of truck Traffic on Highway 26 shall be permitted.

4. Should Big River wish to expand operations and increase truck trips, they would be required to pursue the circular alternative access as described in the application (i.e.: "In-Only" at the Existing access point – Mile Post 2.66 and "Out – Only at either mile post 2.50 or Vollmer Creek Road – Mile Post 2.26), such alternative access is allowed by this approval provided that ODOT requirements are met and/or an ODOT permit is granted to the operation for the alternative access. Big River shall initiate the process with ODOT within 30 days of the expiration of all appeal periods for the Land Use Approval.

5. Operator shall obtain, and maintain, a valid Oregon Department of Geology and Mineral Industries permit and shall post and maintain the bond required by DOGAMI. As part of the DOGAMI process the operator shall obtain a Stormwater Discharge permit, and shall comply with all provisions of such permit.

6. Operations shall be permitted year round. Hours of Operations shall be 7 am to 6 pm Monday through Friday, 8 am to 5 pm on Saturday with no operations on Sunday or Normal legal Holidays. Controlled Blasting shall be permitted as part of operations. Blasting Hours shall be 8 am to 5 pm Monday through Friday with no blasting on Weekends or Normal Legal Holidays. Blasting shall use sequential charges to minimize impacts. Owners in the general vicinity (1500

Feet, but including the Edgewater Terrace Subdivision) shall be notified 24 hours in advance of any Blast. Operators shall obtain a list from Clatsop County of the residents that must be notified. No More than 10 Blasting/Drilling sessions are permitted in any calendar year

_____ 7. Operator shall obtain and maintain a Department of Environmental Air Containment Discharge Permit for any crusher used on site. Operator shall comply with all applicable DEQ Standards.

_____ 8. Operator shall minimize dust through the following methods: Sweep the pavement intersection with Highway 26 on a regular Basis; Gravel all internal truck paths; Limit the speed of all vehicles on internal truck paths to 15 MPH or Less; Make a water truck available and moisten internal truck paths as necessary. Within 180 days of the expiration of all appeal periods for the land use approval, Big River shall pave the entrance road from Highway 26 (MP 2.66) to the existing Scale House, a distance of Approximately 250 Feet.

_____ 9. No Division or Parcelization of the Land is approved.

_____ 10. Operator shall follow the provisions of the erosion control and parking plans submitted with the application. Operator shall follow all DOGAMI Rules related to Erosion and Stability.

_____ 11. Operator shall obtain and Maintain Liability Insurance in an amount not less than $500,000 and shall annually provide proof of insurance to the County.

_____ 12. Access to the Quarry shall be gated when not in use.

_____ 13. Operator shall implement noise Mitigation measures as described in the Daly Standlee Noise Report when a Dozer or Rock Drill is in a Direct Line of Sight and within 1400 feet of an existing residence (Excluding Residences on the Site Itself). Specifically, a solid barrier (either a Berm or movable barrier) shall be used for a Rock Drill; a Berm Barrier, Residential Muffler or intermittent operation shall be used for a dozer. In addition, Operator shall, on an ongoing and declining basis, maintain a lip of rock to serve as a natural barrier to the East/Northeast to screen operations and minimize noise impacts.

_____ 14. Operator shall maintain existing vegetation for a distance of 50 feet along Highway 26 to promote screening. 50 Foot setbacks shall be maintained from any riparian area. Excavation shall be maintained from any riparian area. All quarry activities shall be setback 200 feet from any existing residence and Public Road right-of-way, including Excavation and Stockpiles. Sediment ponds shall be setback 25 feet from the perimeter of the site or any public road right-of-way.

_____ 15. A 200 Foot Wide Zoning Buffer strip along Highway 26 (See Attached Map A) shall be retained in the existing zoning (F-80 and RA-2) and within this Buffer strip, only the existing access and potential alternative access points shall be changed to the QM Zone. Access Roads are allowed within the 200-foot Buffer Strip.

_____ 16. A 200 Foot wide Zoning Buffer Strip along portions of the Southerly Boundary of Tax Lot 1203 (In the "Spoils" area) shall be retained in the AF Zone (See attached Map A). Access Roads are allowed within the 200 foot buffer strip. Within this buffer strip on tax lot 1203, Big River shall construct a 10-15 foot high Berm and slope the Stored material so that Run off is directed predominantly toward the Big River Property. Big River will also Plant Conifer vegetation in the 200 foot Buffer area on Tax Lot 1203 to mitigate run off onto adjacent parcels. Big River will also plant native vegetation on the South Hillside of the Existing Quarry.

_____ 17. Big River will make a good faith effort within a three (3) year time frame from the expiration of all appeal periods of the approval to reorient its extraction operations to the backside (westerly side) of the Hill. Big River will move the Crusher to the westerly side of the hill as soon as possible.

ADOPTION PACKET

Comprehensive Plan / Zoning Map & Text Amendment

Goal 5 Element and Background Report

BEFORE THE PLANNING COMMISSION
FOR THE COUNTY OF CLATSOP

In the Matter of

AN ORDINANCE AMENDING THE CLATSOP COUNTY COMPREHENSIVE PLAN / ZONING MAP AND TEXT ADOPTING CERTAIN FINDINGS AND CONDITIONS AND RESCINDING INCONSISTENT PROVISIONS

ORDINANCE # 08-04

RESOLUTION AND ORDER

080203

Recording Date: March 11th, 2008

RECITALS

THE ABOVE ENTITLED MATTER came before the Planning Commission at its regularly scheduled meeting on January 8th, 2008 for public hearing and consideration. The Commission in order to provide fair and reasonable time to review the application and submit additional evidence and testimony ordered the record to remain open until January 25th, 2008; and, allowed the applicants one (1) week from that date to submit additional evidence and rebuttal.

In addition to the afore mentioned order the Commission continued the public hearing to its next regularly scheduled meeting on February 12th, 2008. In accordance with the Commission's directive, Staff compiled and presented the testimony and supplemental evidence to the Commission at its February 12th, 2008 public hearing.

At the February 12th, 2008 hearing the Commission, in order to reach a beneficial outcome for all parties involved, continued the hearing to the next regularly scheduled meeting of March 11th, 2008. In addition the Commission offered all interested parties to enter into a collaborative meeting hosted by Staff on February 28th, 2008. The outcome of the collaborative meeting was an agreement between all parties, the conditions of which have been attached as conditions to this land use decision (*See Conditions*).

The Commission after reviewing the findings of fact in Exhibit "A" *(Executive Summary)* recognizes the need to revise and amend the Clatsop County Comprehensive Pan and Zoning Map and Text. In the interest of the health, safety and welfare of the citizens of Clatsop County and pursuant to State Law, the Commission has determined the proposed changes are consistent with Clatsop County's Comprehensive Plan and Statewide Planning Goals.

THE PLANNING COMMISSION considering all evidence and public testimony provided by the Planning Department Staff, the Applicant, Opposing Parties, and Supporting Parties at the public hearing and on the record, hereby **RECOMMEND THE APPROVAL** OF THE PROPOSED REQUEST FOR A COMPREHENSIVE PLAN / ZONING MAP AND TEXT AMENDMENT AS DESCRIBED IN EXHIBIT "A" *Executive Summary*, attached hereto and by this reference made a part hereof.

WHEREFORE , the Planning Commission finds and Resolves:

To Recommend Adoption of Exhibit "A" and append the findings & proposed conditions to Clatsop County's Comprehensive Plan "Goal 5 Element and Background Report" to the Board of Commissioners.

To Recommend the Comprehensive Plan Zoning Map and Text Amendment representing a change from Agriculture Forestry & Residential Agriculture-2 to Quarry Mining with a Quarry Mining Overlay be adopted as depicted in *Exhibit* "1" – *Map* "A" & "B"; and, recommend the impact area be designated as depicted by the Red on *Exhibit* "1" – *Maps* "C".

To Recommend the Approval of the findings produced in regard to the Detailed Geologic Hazard Report submitted by the Applicant and addressed in the Record as Exhibits "4" & "12" contained in the Applicant's submitted application.

To Recommend the Approval of the Type I development permit to operate Quarry Mining Operations within the Quarry Mining Zone.

SO ORDERED this 11th day of March 2008

THE PLANNING COMMISSION FOR
CLATSOP COUNTY

Bruce Francis, Chairman Clatsop County
Planning Commission

Enclosures:

1) Exhibit "1" Conditions & Maps
    a. Exhibit "A" Executive Summary & Findings
2) Exhibit "2" ESEE Analysis

Coinciding application with evidentiary Findings and Public Comments will be retained in the Record

Conditions For Approval

As recommended by the Planning Commission

March 11th, 2008

1. Concrete and Asphalt Batch Plants are NOT approved under this land use approval. Within 30 Days of the expiration of all appeal periods of the approval, Big River shall record a deed restriction Prohibiting the Establishment of a Concrete/Asphalt Batch Plant on Tax Lots 1203 & 101.

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FIGURE JAN08 A: Zoning on Applicants' Property

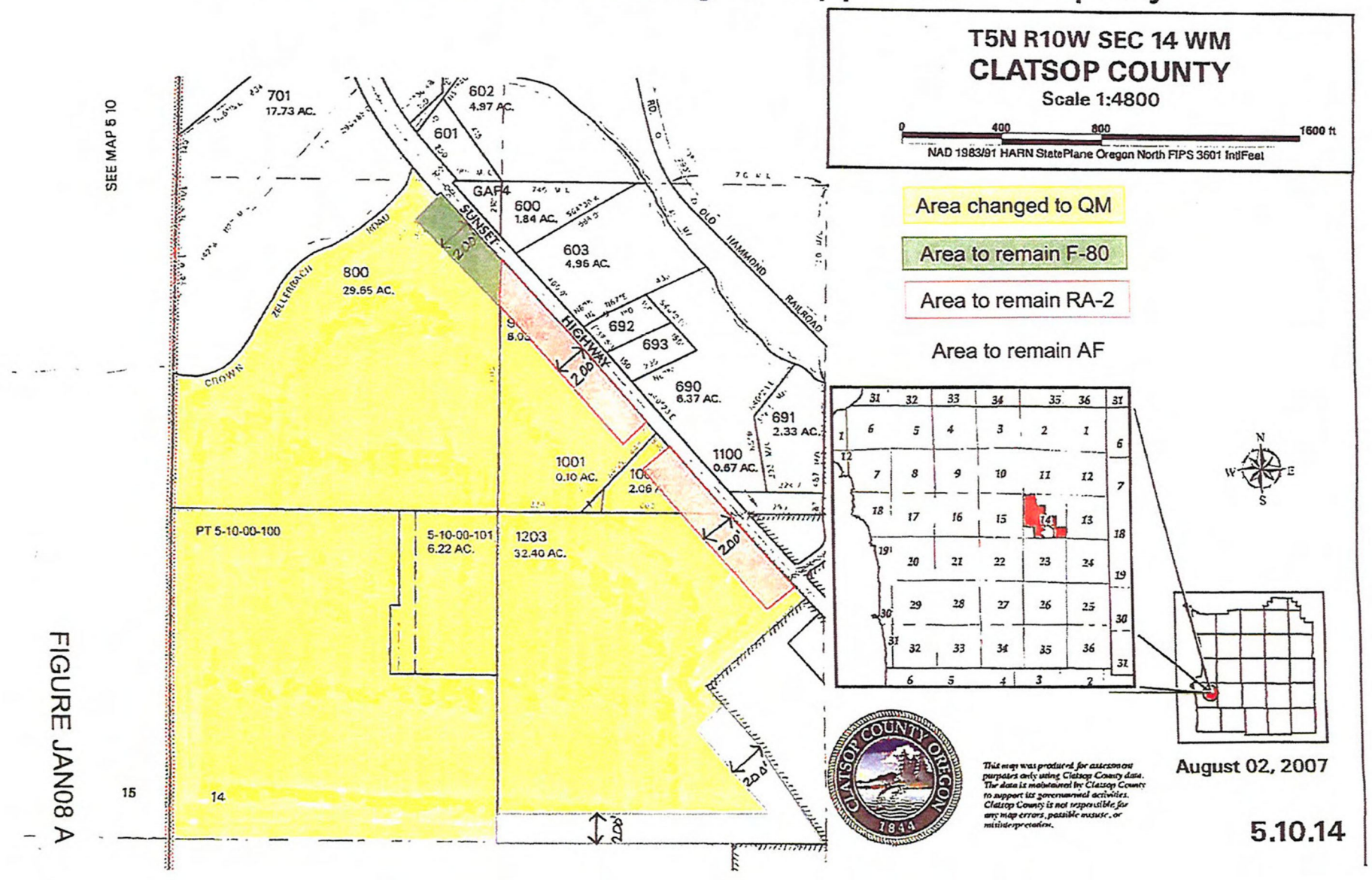


FIGURE JAN08 A

FIGURE JAN08 B: QMO Overlay Area

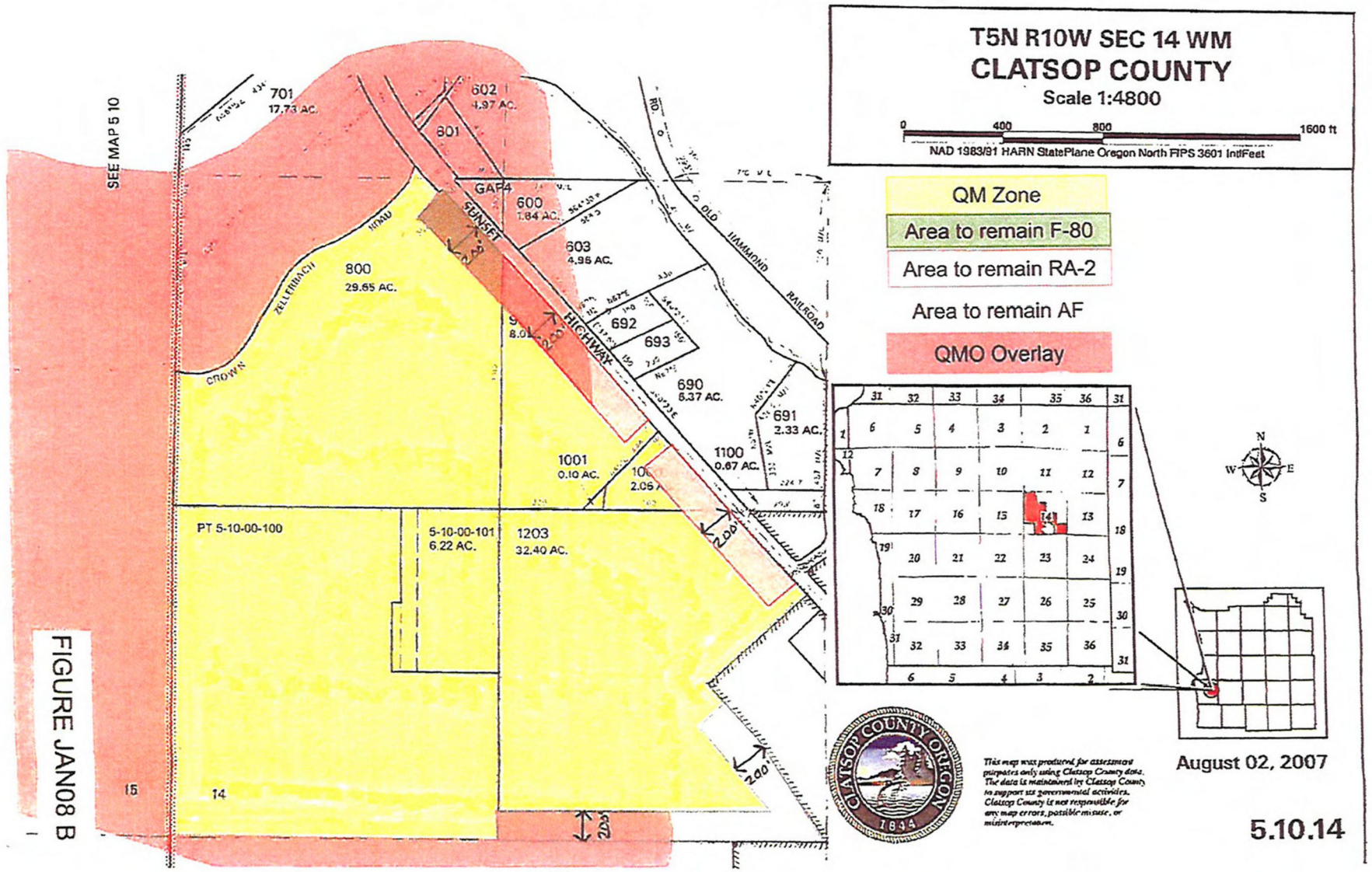


FIGURE JAN08 B

FIGURE JAN08 C: Impact Area

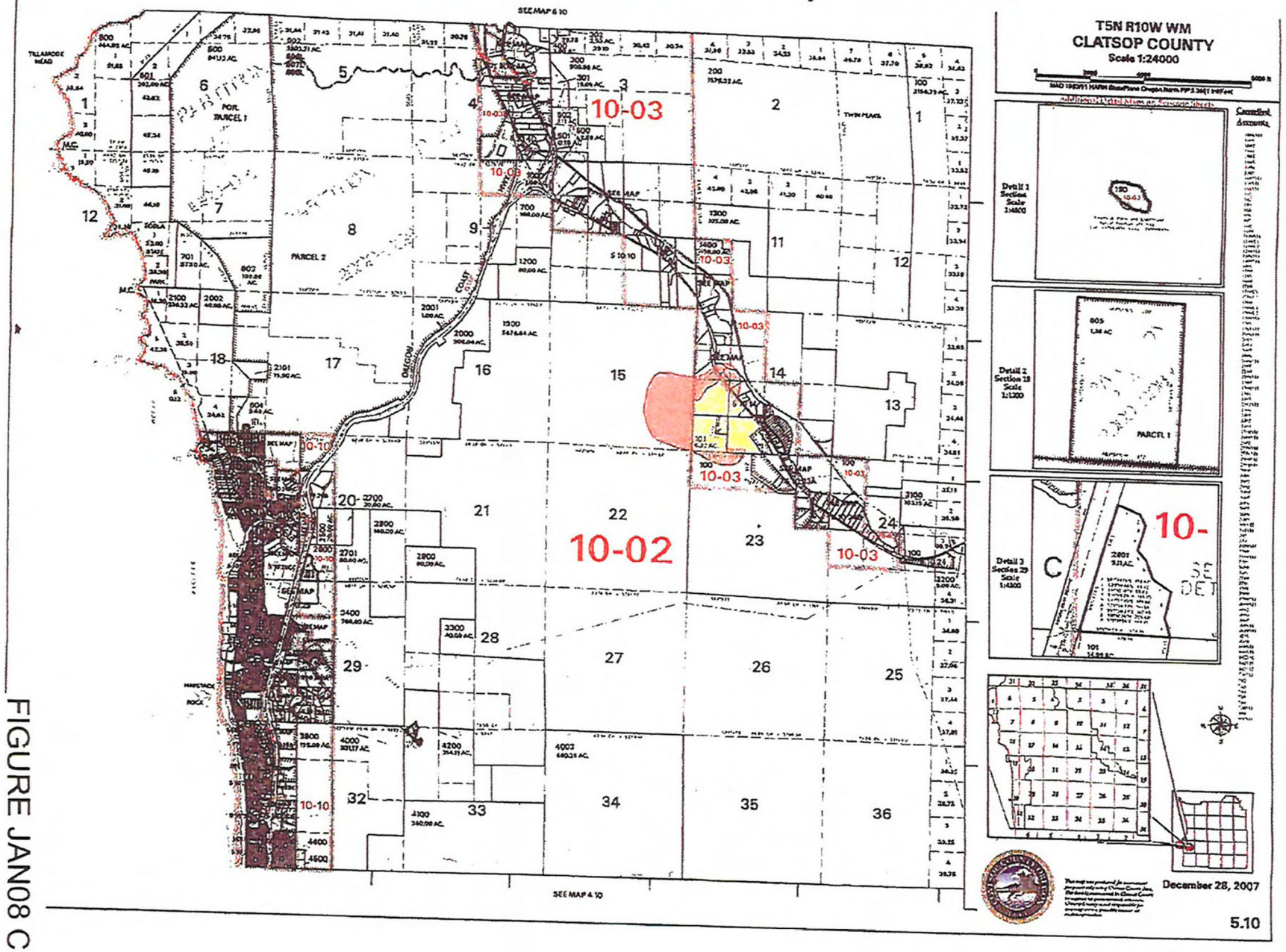
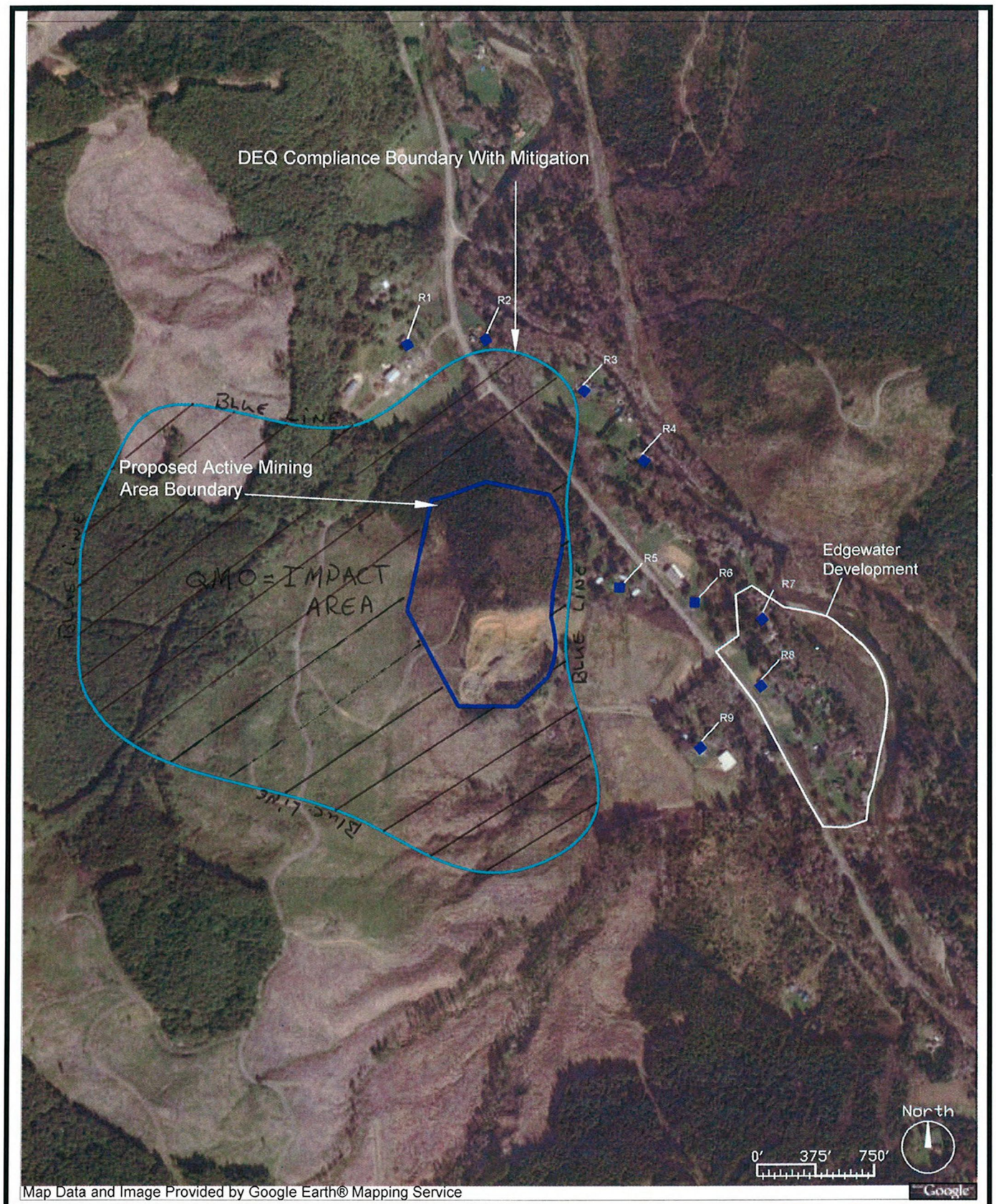


FIGURE JAN08 C

EXHIBIT 1 - MAP 1

EXHIBIT 1 - MAP 2

MAP 3



Daly-Standlee & Associates, Inc. ph: 503-646-4420 fax: 503-646-3385 email: DSA@acoustechgroup.com	Ordway Quarry DEQ Noise Compliance Boundary with Mitigation			
	Project Engineer: PGM	DATE: 10/09/07	PROJECT NO. 215061	FIGURE I

Exhibit 1 - MAP 3

Exhibit I (A).

Executive Summary & Findings

EXECUTIVE SUMMARY

Site History

Big River Holdings Inc. ("Big River") currently operates a rock quarry for the production of crushed basalt rock at the location just southwest of Highway 26, at approximately mile post 2.5. Big River refers to this facility as the Ordway Quarry. Currently, and prior to its acquisition by Big River, Ordway Quarry was operated by Osburn Brothers Rock under a conditional use permit. Mineral extraction activities have occurred on the site for a number of years and the Clatsop County Comprehensive Plan background document has specific references to the Ordway Quarry in the 1980's. In the past few years, the site has provided embankment material and crushed rock for a number of projects, including the Cannon Beach interchange, the South Jetty repair project, and the Cannon Beach wastewater treatment project.

Current and Proposed Operations

The site is currently operated under a conditional use approval granted by Clatsop County. Under the existing conditional use approval, operations may occur year around between the hours of 7:00 a.m. and 6:00 p.m., but crushing is not allowed from January 1 to April 1 of each year. The conditional use does not allow blasting on the site.

Even with these restrictions, the conditional use permit allows Big River to extract rock to meet the need of rock materials in the southern portion of Clatsop County. The County's Comprehensive Plan recognizes that quality mineral and aggregate resources are rare in the county and the Ordway Quarry is one of few operating quarries in the county that is located reasonably close to the growing south county area.

Big River has obtained a lease from the adjoining land owner, Weyerhaeuser Inc., that will allow reconfiguration and expansion of the Ordway Quarry. Big River proposes to modify its excavation plan and reorient quarry operations on the combined Ordway/Weyerhaeuser site. This reorientation will allow Big River to maintain vegetation on the northerly and easterly sides of the excavation area as well as maintain a lip of rock to provide a visual and sonic barrier for Big River's operations on the site. Expansion will allow a rationalization of operations in a way that makes it more efficient for Big River to extract material from the site, while at the same time reducing the visual effects of the site to our neighbors on the east/northeast. The reconfiguration of the mining on the site will also help obscure expanded operations from individuals traveling on Highway 26 and will reduce the operational impacts (such as dust and noise) at the same time. Big River will continue to use its existing ODOT approved entry and exit within the allowable trip limits established by the current access permit. While Big River's plan is to continue to use the existing permitted access, we are open to discussions regarding a circular haul truck route that would designate the existing access way (at approximately mile post 2.66 on Highway 26) as "**in-only.**" To complete a circular haul truck route, exit from the site would be on Weyerhaeuser's existing Vollmer Creek Road through the existing and ODOT-approved access point at approximately mile post 2.26 on Highway 26 or through an existing access owned by Big River at mile post 2.50, just to the west of the existing

access. To effectuate the alternative, Big River would need additional approved average daily deliveries and would need assurances from ODOT that significant access improvements or improvements to Highway 26 would not be required. Big River has had ongoing discussions with ODOT in this regard and we expect ODOT guidance in the planning process.

In addition to the improvements in the layout of the mining operations, this application also requests an expanded window for crushing operations on the site by eliminating the current January 1 to April 1 prohibition on crushing. Big River also requests permission to conduct controlled blasting in conformance with the applicable regulations. At this point in its development, the quarry rock resource can be "ripped" with mechanical equipment and blasting is not necessary. However, our geology report (as indicated below) demonstrates that significant hard and unweathered basalt is present on the site under the more weathered basalt that can be mechanically ripped. After the new site orientation is opened up allowing access from the Weyerhaeuser land, the harder and commercially more valuable basalt resource will be available for mining. While controlled blasting will not occur immediately, we believe it will eventually be necessary to fracture the unweathered basalt to allow it to be extracted from the site. We emphasize that controlled blasting will not be an every day occurrence. Rather, our request is that controlled blasting be allowed from time to time, as needed, to open up new material for the operation. Once the onsite basalt can no longer be ripped, we request that controlled blasting be allowed at the site. The requested year-round crushing will permit Big River to use smaller controlled blasts to loosen the hardened basalt material because smaller batches can be crushed on site as needed. If the seasonal crushing restrictions were to occur, a series of larger controlled blasts might be needed to stockpile material for the January 1 to April 1 period when crushing is not currently allowed.

Big River will not be increasing the truck traffic from the site beyond the allowable threshold established by ODOT's "change in use" rules. The company's ODOT access permit for the existing access site at mile post 2.66, allows 40 truck trips per day, based on an annual average. While the size of the extraction area will increase, the amount of material taken from the site will not increase. The purpose of this application is to protect future rock reserves while generally continuing operations at their existing level, consistent with ODOT's "change of use" rules.

Expert Evidence Required by the Goal 5 Rule (OAR 660-023-0180(8)(a)-(e))

As required by the Goal 5 rule, we have provided a geologic investigation report from Environmental Science Associates which discusses, among other issues, the location, quality and quantity of the mineral and aggregate resource on the Ordway Quarry. Environmental Science Associates estimates that there is more than five million tons of high-quality of mineral and aggregate material that may be extracted from the site. This is in excess of 5 million cubic yards of material using a conservative conversion factor. Reserves, at the existing site (tax lot 101) are estimated to be an additional 2 million tons.

We have also provided a detailed transportation analysis prepared by Associated Transportation Engineering & Planning ("ATEP") demonstrating that access is under the

jurisdiction of ODOT and is currently approved. The transportation analysis also confirms compliance with the transportation planning rules. The transportation analysis also explains the one-way circular haul truck traffic model, in the event ODOT would prefer this scenario, and would provide for additional average daily deliveries by Big Rock. Finally, we have also enclosed a detailed noise study by Daly-Standlee & Associates showing that operations (including blasting) on the Ordway property will meet all DEQ noise standards.

APPLICATION BACKGROUND

Since well before 1980, mineral and aggregate material has been extracted from the Ordway site. Early extraction operations concentrated on embankment material because of the weathered nature of the basalt resource at the surface of the site. However, operations over the years have moved deeper into the hillside, uncovering hard and high-quality basalt. The site was operated for years by Osburn Brothers Rock and purchased in 2006 by Big River. Big River has operated under an existing conditional use permit. However, the shape of the Big River property lines does not follow the actual contours of the mineral and aggregate resource. Accordingly, Big River approached Weyerhaeuser, the property owner to the north and west of the Ordway Quarry, with a proposal to expand the physical size of the quarry.

It is important to note that by using the term "expansion" we do not mean a significant intensification of the use of the site. Rather, we are expanding the boundaries of the site to allow for more efficient and rational operation of the quarry and to allow operational upgrades (i.e., re-oriented mining floor; one way circular haul truck loop, etc.). The additional expansion area will allow for preservation and use of additional rock resources at the site (consistent with the County's Comprehensive Plan), but Big River's operational plan is to maintain activities at the site at current levels of operation and within the truck trip limits established for the Osburn Brothers operation and ODOT's "change of use" regulations.

Big River will continue to use mechanical equipment to rip the rock resource to the greatest extent feasible. However, as the floor of the quarry is lowered and harder rock is encountered, controlled blasting will be necessary to extract the rock resource.

With the incorporation of the Weyerhaeuser property into the operations area, Big River will be able to reconfigure its mining operations and re-orient the quarry floor to mine the site in a generally southwesterly-to-northeasterly direction. This will enable Big River to maintain, ***in situ,*** a lip of the rock resource to screen and buffer properties to the east and northeast. This mining plan will also allow Big River to maintain vegetation on the easterly and northerly sides of the quarry. As the floor is deepened, the rock lip and vegetation will be lowered, consistent with their ongoing screening functions and the requirements of the Department of Geology and Mineral Industries.

As soon as possible, the crusher used on the site will be located on the newly configured mining floor and will be placed behind the natural rock lip that is left in place. This will reduce visual and noise impacts from crushing operations at the site. Again, as the quarry floor is lowered sequentially through ongoing mining operations, the crusher will be lowered to

ensure that it remains behind the ***in situ*** rock lip and vegetation that will be preserved for screening.

The quarry floor will be configured and contoured to direct surface water run-off (from rain) into the quarry floor and, as necessary, it will be directed into areas where it can be controlled in a series of settling ponds. This will generally send storm water run-off to the west and reduce the possibility of sediments entering the flatland area along Highway 26 or entering fish habitat associated with the Necanicum River. In addition, because the focus of operations will shift from the existing Big River property to the Weyerhaeuser property, the flat grassy area between current operations and Highway 26 to the east will not be affected by future mining operations. Big River will explore with conservation groups to see if there are habitat enhancement possibilities for this open area.

APPLICATION REQUEST

With this Post-Acknowledgment Plan Amendment ("PAPA"), Big River requests that the Ordway site (including the Big River property and Weyerhaeuser property) be added to the County's list of "significant" mineral and aggregate resource sites ("Primary Sites Requiring QMO Protection"). In addition, recognizing that good quality aggregate mineral sites are uncommon in Clatsop County and are vital to help the growing economy, Big River requests that a Quarry and Mining zone (QM) as indicated on the site plan map, be placed on Tax Lots 800, 900, 1000, 1001, 1203, 101, 1900 and portions of tax lot 100. While Big River requests the QM zone be placed over whole tax lots (and portions of tax lot 100, see attached map Figure 1), actual mining activity will be limited to the portions of those properties indicated on the site plan maps. A condition to this effect is satisfactory to Big River. The PAPA process will entail a Comprehensive Plan amendment and a zoning map amendment.

We also request a change in crusher operations to eliminate the seasonal operation restriction from January 1 to April 1 of each year. In addition, we request Erosion Control Plan approval, a Geologic Hazard Permit, a Development Permit and any other approvals, including site plan approval, if necessary.

The request will place the QM zone within 500 feet of properties currently zoned RA-1 and RA-2. The QM zone will also be located within 500 feet of some existing residences. However, Big River will not have any active portion of its quarry operations (e.g., extraction, processing, or stockpiling) that will be within 500 feet of a residence that is not owned by the applicant. If deemed necessary, Big River requests a comprehensive plan change to allow the QM overlay to be placed over its own RA zoned property and within 500 feet of any RA zoned property in the area.

Big River requests that controlled blasting be allowed to facilitate mining of the hard basalt resource, provided that such blasting is in conformance with DEQ requirements and is strictly limited to methods using sequential charges to reduce noise and vibration and is subject to the further requirement that Big River notify all property owners in the area at least

24 hours before any blasting activity occurs. A condition to this effect is satisfactory to Big River.

No asphalt or concrete plant approval is requested.

Consistent with the Goal 5 PAPA rule, Big River requests that all County permits be granted in this permit application and no further site plan approvals or incidental county permits be required.

Finally, in the event ODOT would authorize additional average daily deliveries and would require only modest access or road improvements, Big River would request, as part of the application, modification of the access point from the existing in/out at mile post 2.66 to a one-way haul truck loop as described above with entry for haul trucks at mile post 2.66 (the existing Big River access point) and exit for haul trucks at either the existing Vollmer Creek Road access point (mile post 2.26) or at the access at mile post 2.50, pending ODOT input and approval.

APPROVAL REQUIREMENTS UNDER OAR 660-023-0180.

Mineral and aggregate resources are a protected resource under statewide planning Goal 5 and protection for such resources is specifically set forth in Goal 5 Administrative Rule, Section 660-023-0180. Under the rule, local governments are allowed to amend acknowledged inventories and add additional significant sites in response to PAPAs, such as this one submitted by Big River. The Goal 5 rule provides the primary decision mechanism and decision standards under which a local government analyzes an application to designate a rock resource site through the PAPA process.

The Goal 5 rules at Division 23 (OAR 660-23-0000) are applicable to this PAPA and guide the PAPA process. The Division 23 rule specifically states that it replaces the old Division 16 rule (OAR 660-16-0000) except for cultural resources (that are not applicable in this PAPA application) and certain periodic review tasks (that are also not applicable in this application). The Division 23 rule at OAR 660-23-0250(2) affirmatively states that the Division 16 rules apply only to PAPAs initiated before September 1, 1996 and for all other PAPAs (e.g., all of those instituted after September 1, 1996), Division 23 is applicable. The applicability of the Division 23 rule is again made clear in the mineral and aggregate section of Division 23 (OAR 660-023-0180(9)) which mirrors the general rule in 660-023-0250 and makes it clear that for this PAPA, Division 23 applies. Clatsop County has not amended its comprehensive plan and zoning ordinances to reflect Division 23 but the Division 23 rule and state statute (ORS197.646) require the County to apply the new rule directly. There are some references in the County's land use regulations that refer to Division 16 and to an ESEE analysis process that do not perfectly track with the Division 23 rules. However, Big River requests that the County follow the Division 23 process. In the event of final approval of the PAPA, Big River requests permission to write findings which will include parallel findings for Division 16 in the event it would be deemed applicable.

General Requirements of the PAPA Process

The Division 23 Goal 5 rule lays out an orderly mechanism to review applications for mineral and aggregate resource extraction. Generally, the county decision-making body needs to make the following determinations:

1. Significance. The local government must determine that the mineral and aggregate resource is "significant" (OAR 660-023-0180(3) or (4)). As discussed below, "significance" has some subtleties, but generally, a site outside the Willamette Valley that has 500,000 tons of material and that meets the Oregon Department of Transportation (ODOT) specifications for base rock is a significant mineral and aggregate resource that must be inventoried by the County. Because quality mineral and aggregate resources are rare in Clatsop County, the Clatsop County Comprehensive Plan reduces the threshold "significance" amount to 250,000 cubic yards (Comprehensive Plan Goal 5, Policy 6).

2. Impact Area. The local government must determine the "impact area" (OAR 660-023-0180(5)(a)). The impact area is designed to establish the outer boundary where operational characteristics of mineral and aggregate mining may conflict with established land uses in the area (primarily residences). The Goal 5 rule instructs that the impact area shall be limited to 1,500 feet from the external boundaries of the mining area except in those situations where factual information may indicate a significant and potential conflict beyond the 1,500-foot distance.

3. Conflicts. The local government must consider conflicts that could be generated between the mineral and aggregate operation and the existing or approved land uses (OAR 660-023-0180(5)(6)). The Goal 5 rule affirmatively limits the discussion of conflicts to five conflict classifications in Clatsop County:

(a) Conflicts due to noise, dust or other discharges (OAR 660-023-0180(5)(b)(A)).
(b) Potential conflicts to local roads (OAR 660-023-0180(5)(b)(B)).
(c) Safety conflicts with existing public airports due to bird attractants (OAR 660-023-0180(5)(b)(C)) (note that there are no airports within 10,000 feet of the proposed site and this particular provision does not apply to Big River's application).
(d) Conflicts with other acknowledged Goal 5 resources within the impact area (OAR 660-023-0183(5)(b)(D)).
(e) Conflicts with agricultural practices (OAR 660-023-0180(5)(b)(E)).

The PAPA rule may also require consideration of local ordinances that supersede Department of Geology and Mineral Industries (DOGAMI) reclamation regulations. However, this applies only to Columbia County which is the sole county in the state that still regulates mined land reclamation. Clatsop County has turned over mined land reclamation authority to DOGAMI.

4. Minimize Conflicts. If conflicts are identified, the PAPA rule instructs the local government to determine reasonable and practical measures that would minimize the conflicts (OAR 660-023-0180(5)(c)). If reasonable and practical measures are identified, mining shall be allowed. The PAPA rule defines "minimizing a conflict" to mean reducing an identified conflict to a level that is no longer significant. If a purported conflict, such as a noise conflict, can be reduced to meet the appropriate local, state or federal standards (such as Department of Environmental Quality Noise Standards), the conflict is deemed minimized (OAR 660-023-0180(1)(g)).

5. Alternative ESEE. If, and only if, conflicts cannot be minimized, the County must engage in an ESEE (economic, social, environmental and energy) analysis to determine whether the mining should be approved notwithstanding identified conflicts. If conflicts can be minimized, the local government is not required to do an ESEE analysis (OAR 660-023-0180(5)(d)).

6. Post-Mining Uses. The local government is required, when mining is allowed, to determine the post-mining use for the site and provide for that use in the comprehensive plan and land use regulations (OAR 660-023-0180(5)(f)). Local governments typically designate post-mining use as wildlife habitat or forestry uses. In addition, the local government is required to adopt a program to protect the mining site from new off-site conflicting uses. The standard ESEE mechanism is used for this analysis (OAR 660-023-0180(2)(d)).

STEP 1 - SIGNIFICANCE OF THE MINERAL AND AGGREGATE DEPOSIT ON THE ORDWAY SITE (OAR 660-023-0180(3))

Quantity

Big River engaged Environmental Science Associates and Mr. Steve LaFranchi, a Registered Geologist, to identify the location, quality and quantity of the mineral and aggregate materials that underlay the Ordway site. Extensive site work was done, including a review of the geology literature, multiple site visits, analysis of the geology of the existing pit surfaces of the Ordway Quarry, and extensive reconnaissance of the adjoining Weyerhaeuser property. In addition, the Registered Geologist supervised onsite drilling at the Ordway Quarry and monitored review of the testing for quality of the mineral resources on the site. Based on all of the information, the geologist determined that the quantity of quality mineral and aggregate materials exceeds 5 million tons on the Ordway site, not including the current reserves on tax lot 101 (approximately 2 million additional tons). This determination is conservative in that allowances were made for unusable material on the site, as well as for setback and sloping requirements. The estimate of mineral and aggregate material on the site reflects usable mineral and aggregate materials that may be extracted using standard techniques. We also note that the geology report indicates that additional material can be obtained on the Ordway property by digging below the floor depth that was assumed for the purposes of estimating quantity on the site. We believe the engineering geologist's estimate of more than 5 million tons of rock outside tax lot 101 is conservative.

Quality

The PAPA rule also requires the quality of the mineral and aggregate resource to be analyzed. During the test drilling on the Ordway site, the Registered Geologist and his staff collected representative samples of the rock material and preserved those samples for testing. The geologists controlled the chain of custody and submitted the samples to Carlson Testing, a leading mineral and aggregate testing laboratory. The Carlson technical reports are appended to the geologist's report. As summarized in the geologist's report, resource quality at the site meets applicable ODOT standards. The testing laboratory performed Oregon degradation analysis, Los Angeles abrasion analysis and Sodium Sulphate soundness analysis on the representative materials selected by the Registered Geologist. The materials passed all required tests and met all required ODOT testing values. The mineral and aggregate resource at the Ordway site clearly meets both the quality and quantity requirements for significance under the PAPA rule.

Farmland Considerations

The PAPA rule was drafted to assist in the conservation of EFU farmland. The rule does this by requiring special consideration if the proposed mining area consists of certain percentages of Class I, II, and unique soils. Farmland considerations will be addressed in the application. However, the Clatsop County Comprehensive Plan does not consider the AF and RA zones to be EFU zones that are critical to the preservation of farmland. The zones on site are focused on forestry uses in Clatsop County. Of equal importance, there is no Class I, II or unique soil on any portion of the application area that will be used for extraction, processing or other mining related uses.

Conclusion

The Ordway site is significant and should be added to the County's list of significant Goal 5 mineral and aggregate resources.

STEP 2 - IMPACT AREA AT THE ORDWAY SITE (OAR 660-023-0180(5)(a))

After the local government makes a determination that the mineral and aggregate resource is significant, the PAPA rule instructs the local government to determine an impact area for purposes of identifying conflicts with the proposed mining and processing activities. The rule directs that the impact area shall be limited to 1,500 feet from the external boundaries of the mineral mining area, except where factual information indicates a significant potential for conflicts beyond this distance.

In virtually all Goal 5 approved sites across the state of Oregon, the 1,500-foot presumptive impact in the Goal 5 rule (or a smaller area) has been found by local governments to be the appropriate distance to measure the extent of impacts from mineral and aggregate extraction operations. As is shown on the site diagrams, Big River is requesting a QM zone to be placed on all of its property (and Weyerhaeuser property) along Highway 26, including tax lots 800, 900, 1000, 101 and 1203 (in addition to portions of tax lot 100 which does not touch

Highway 26). However, Big River's actual aggregate processing and extraction area is significantly more limited. Within the tax lots for which the QM zone is requested, Big River is separately delineating its extraction and processing area and requests that the 1,500-foot impact area be calculated from the portion of the property which will actually be used for mining and processing purposes. This accomplishes two important goals. First, it provides a full 1,500-foot buffer, if necessary, area to protect the Goal 5 mineral and aggregate resource as required by Goal 5. Second, it allows the operator, Big River, to "self buffer" as much as possible on its own property and limit the amount of the 1,500-foot impact area that may touch other property. This minimizes the need for placing an impact area on adjoining properties while still ensuring those properties are protected from the potential impact acts of the mining operation and, at the same time, adequately protects the Goal 5 resource.

Noise from Goal 5 operations is an important and a "telltale" indicator of the ability to control mining impacts. Where an operation can minimize mining noise impacts to comply with DEQ standards, the operation can, in all cases, minimize all other impacts (dust, storm water runoff, etc.) in a distance that is equal to or less than the setback distance required to mitigate noise impacts.

To assess the potential for noise impacts surrounding the Ordway Quarry, Big River engaged Daly-Standlee & Associates, a leading regional noise and acoustical engineering firm. After analyzing and modeling noise from mining activities on the Ordway property, Daly-Standlee has recommended mitigation measures to ensure that DEQ noise limits can be met at the existing residences closest to the northerly, easterly and southerly boundaries of the Ordway property. The Daly-Standlee report finds no reason why the impact area should be expanded beyond 1,500 feet and the report concludes that potential noise conflicts can be minimized with industry standard mitigation techniques.

We believe there are no other potential conflicts, other than noise, that need to be addressed with regard to expanding the impact area beyond 1,500 feet. For example, Big River has a substantial operating history at the Ordway Quarry demonstrating the company's ability to control dust and other discharges. Crushing operations will continue to be carefully managed under the DEQ Air Contaminant Discharge permit to ensure there is no significant adverse effect from dust. A water truck will continue to be used to control dust impacts during the dry months. During wet months, storm water will be handled on site. We believe there are no external conflict factors that provide justification for extending the impact area beyond the 1,500-foot maximum suggested in the PAPA rule.

STEP 3 - IDENTIFYING CONFLICTING USES AT THE ORDWAY EXPANSION SITE (OAR 660-023-0180(5)(b))

Clatsop County must next determine whether or not there are actual conflicts associated with the gravel mining request. As a necessary first step to the conflict analysis, the County must determine if there are existing or approved land uses within the impact area that could be affected by the proposed mining operation and the potential for the predicted conflicts. Approved land uses are defined by the administrative rule to include dwellings allowed by

residential zones on existing platted lots or other uses for which conditional or final approvals have been granted by the local government. As shown on the site plans and site maps, the only existing and approved uses near the Ordway site are residential uses along Highway 26 to the north, east and southeast of the Ordway Quarry. Forestry uses surrounding the site, particularly to the north, west and south, have similar types of impacts (i.e. noise, dust, run-off, etc.) as would be expected from a quarry operation. Generally, forestry uses are not in conflict with gravel extraction uses. Gravel extraction is a permitted forestry use and the landowner to the north, west and south (Weyerhaeuser) has signed the application and supports the Goal 5 protection of the Ordway site. Accordingly, the only potential conflicts relate to approved land uses in the general vicinity that are residential uses. The Goal 5 rule instructs the County to consider the potential conflicts on these approved land uses within five limited categories.

Conflict Category #1: To Noise, Dust And Other Discharges (OAR 660-023-0180(5)(b)(A))

Noise: As indicated in the impact area analysis, Big River has a multi-year operational history that demonstrates that noise from its operations can be controlled to meet DEQ standards. As indicated in the Daly-Standlee report, operating the site by leaving a lip of natural rock on the north and east sides of the quarry allows a buffer to be maintained that minimizes noise impacts and assures that DEQ noise standards are met at all residences in the area. In limited and short-term instances where equipment would be operated on top of the natural buffer (e.g., rock drill or dozer), Daly-Standlee has recommended several industry-standard mitigation techniques, any one of which fully minimizes noise within the DEQ standard at all residences in the area. Big River will request that our acoustic engineer's recommendations be made conditions of approval to ensure that noise can, and will, be controlled consistent with DEQ regulations. Under the PAPA rule, compliance with DEQ regulations minimizes any noise conflicts.

Dust: If not properly controlled, dust can be a conflict that accompanies mineral and aggregate operations. Again, Big River has operational experience controlling and eliminating fugitive dust from its operations. First, the company has an established entrance for its operations and has paved a portion of the approach at the entrance. Pavement of access roads and regular housekeeping (e.g., sweeping and washing), eliminates the buildup of dust on road surfaces which can be blown onto neighboring properties. Second, the company uses methods to assure that mud is not tracked out to the road that can eventually be converted to dust. Third, the company uses a water truck on site to moisten non-paved travel areas as necessary and minimize dust. The use of a water truck is recognized by the Washington State Department of Ecology as one of the most important mechanisms in reducing dust from industrial operations. In addition, Big River has preserved planted grasses and vegetation on tax lots 900, 1000, 1001 and 1203 to reduce fugitive dust generated by the portions of the sites which are closest to neighboring homes. All these operational requirements will assure that dust from operations on the Ordway property is minimized. If ODOT were to approve a change in truck traffic circulation on the site to allow all incoming traffic to use the existing entrance at mile post 2.66 and allow exiting truck traffic to either travel on Vollmer Creek Road and use the existing and ODOT-approved Weyerhaeuser access to Highway 26 (approximately mile post 2.26) or access Highway 26 at the existing access at mile post 2.50, appropriate steps will be taken to control dust. The access

point of Vollmer Creek Road and Highway 26 is currently paved and Big River is negotiating with Weyerhaeuser and will agree to pave approximately an additional 1,250 feet of the road to assure that there are no dust or mud track-out problems from extraction trucks entering onto Highway 26 from the Vollmer Creek Road exit point. If the alternative exit at mile post 2.50 is used, Big River will make appropriate improvements to minimize dust.

Crusher operations at the Ordway Quarry have been, and will continue to be, run in compliance with the DEQ Air Contaminant Discharge Permit for the crusher. As necessary, the crusher uses industry-standard methods to minimize dust from rock crushing and screening operations. We note that as part of this request, crusher location at the Ordway Quarry will change from time to time as the alignment of the pit faces changes, and the pit floor is dropped through excavation. When it is operating, the crusher will continue to be screened by a lip of the existing hillside and vegetation will be left in place along the edge of the extraction site to assist in eliminating the crusher from view and helping to minimize fugitive emissions. We believe that these steps are appropriate and will ensure that dust conflicts are minimized.

"**Other Discharges:**" As the pit is realigned to take advantage of the Weyerhaeuser property, the pit floor will be shaped so that storm water will be directed internally to the pit floor, or sent to storm retention areas and handled, so that it is clean when it leaves the quarry area. In addition, there is a large buffer area all around the extraction site consisting of densely wooded areas to the west, north and south and a combination of wooded areas and flat grass areas to the east that will allow for the absorption of storm water as part of the natural woodlands filtration process that will prevent turbidity from reaching any water course. The pit orientation proposed with this application will make storm water management easier because there will be a larger floor area to contain storm water run-off. There is also room and appropriate topography for the construction of sediment ponds to the west of the pit if those prove necessary.

The Environmental Science Associate's report indicates no potential for groundwater in the basalt structure that will be mined for rock on site. During test drilling of the site, no groundwater was encountered, and operations as proposed will ensure that extraction operations occur above any groundwater bearing strata in the basalt structure that is being mined. Big River will continue to work closely with DOGAMI to make sure there are no effects on groundwater from its operations at the site.

Conflict Category #2: Potential Conflicts To Local Roads (OAR 660-023-0180(5)(b)(B))

The second potential conflict that must be addressed under the PAPA rule is the effect of the mineral and aggregate operation on local roads. The rule requires that conflicts be based on clear and objective standards and that effects from gravel trucks must be considered on an equal basis with trucks of equivalent size that haul other materials (e.g., logging trucks).

Highway 26 is a State Highway and the Clatsop County Transportation System Plan confirms that ODOT has sole jurisdiction over this State Highway (TSP, Section 2, Pages 1-10). Big River proposes to use the existing and approved ODOT approved access

directly onto Highway 26 at mile post 2.66. To minimize truck issues, the company's predecessor built a deceleration lane on Highway 26 for traffic to safely enter the site at this location. NO local roads are necessary to allow access to the site or exit from the site.

In consultation with our traffic engineer and with ODOT, Big River has searched for ways to improve the dispersal and absorption of haul truck traffic. ODOT has suggested that a one-way haul truck traffic pattern on the site might be beneficial. Big River is willing to consider the circular one-lane haul truck traffic pattern if ODOT will approve approximately five additional haul truck deliveries each day (increasing the approved number of deliveries from 20 to approximately 25 per day) and not require unreasonable conditions. The circular haul truck idea would use the existing access way for haul truck ENTRY only. All haul trucks would, in a one-way circular pattern, enter at the existing access (mile post 2.66) on Highway 26 and pass through the quarry site. Once the truck is loaded, it would return to Highway 26 along one of two routes. Alternative A would be to the west along existing private and gated Weyerhaeuser forest roads and directly to Weyerhaeuser's existing Vollmer Creek Road access point (ODOT approved) at mile post 2.26 on Highway 26. Alternative B would travel downhill to the existing access at mile post 2.50. As we indicate elsewhere in the application, Big River is not requesting an access change nor an increase in the number of approved truck trips at the existing approved access. The PAPA process presents a forum to review these alternative ideas. If Alternative A proves to be workable, exit from the private one-way system will be via an approved ODOT access directly to a State Highway and local roads are not implicated. Vollmer Creek Road is a private forest road and is gated. Big River will work with Weyerhaeuser to maintain the gates to keep unauthorized traffic out of the Weyerhaeuser road system and out of the quarry area. If the Alternative B access is used, the proposed use will still have no effect on local roads as all access will be directly from Big River's property to Highway 26.

Big River engaged the services of Associated Transportation, Engineering & Planning ("ATEP") to analyze transportation-related issues associated with the application. ATEP concludes that Big River has existing and approved access directly to a State Highway for access to the site and that no local roads are implicated by the application. ATEP further concludes that use of the existing access will not have a significant effect on any existing or planned transportation facility, that it does not change the functional classification of any transportation facility, change standards implementing a functional classification system, or, as measured at the end of the planning period, that it does not allow land use levels of development that would result in levels of travel or access that are inconsistent with the functional classification of a transportation facility, reduce the performance of transportation facility below the minimum acceptable performance standard identified in the appropriate transportation system plan, or worsen the performance at any existing or planned transportation facility that is otherwise projected to perform below minimum acceptable performance standards identified in the transportation system plan. ATEP concludes that ongoing use of the existing access meets the requirements of the transportation planning rule of the County's Transportation System Plan.

ATEP was also asked to look at Alternatives A and B in the event that ODOT would agree to increase allowable truck trips by approximately five daily deliveries and allow a different access with reasonable road improvements. ATEP indicates that the proposal to use the

Vollmer Creek exit is consistent with the existing use of that access point by heavy truck traffic. ATEP also concludes that Alternative A provides an acceptable level of service, acceptable delay and acceptable volume to capacity ratio of vehicles expected to use the road.

Conflict Category #3: Safety Conflicts With Existing Public Airports (OAR 660-023-0180(5)(b)(C))

The Goal 5 rules requires the County to analyze mineral and aggregate operations to ensure they do not serve as bird attractants that could interfere with public airports. Under the Department of Transportation rules relating to aviation, water impoundments that are 10,000 feet or closer to a commercial airport come under the state's regulation. There are no existing airports within 10,000 feet of the external boundaries of the Ordway property (OAR 660-013-0018 and ORS 836.623(2)-(b)). The closest airport is the Seaside airport which is more than five miles away by air. In addition, unlike alluvium gravel pits, basalt mining at the Ordway Quarry will not create water impoundments. Accordingly, this particular conflict does not exist at the Ordway site.

Conflict Category #4: Conflicts With Other Significant Acknowledged Goal 5 Resource Sites (OAR 660-023-0180(5)(b)(D))

Big River has reviewed the County's Goal 5 background documents and inventory for other acknowledged and listed Goal 5 resources in the area. The trees in the area are not identified as old growth and the trees covering the site are between 25-50 years old and, therefore, are considered low-priority under the County's Comprehensive Plan background document. Highway 26 is not a Goal 5 inventoried scenic resource. There are no Goal 5 inventoried conservation areas or wetlands in the area. The land along Highway 26 is delineated as "peripheral" big game range due to the proximity to Highway 26 and the greater density of houses along the highway. The existing Ordway Quarry has not affected the use of the property for big game and the property is regularly traversed by elk. The nature of the area will gradually change as the proposed aggregate use expands on the site. However, no barriers will be constructed to prevent elk from using the site and the area will be returned to forest uses that may continue to be used by elk after reclamation. Big River will maintain compliance with DEQ standards with regard to noise and dust and the operation will continue to be compatible with peripheral elk usage as it has for more than 20 years.

The Necanicum River is inventoried as fish habitat. The Necanicum River is a minimum of 450 feet on the northeast side of Highway 26, the opposite side of Highway 26 from the Ordway Quarry. Activities at the quarry over the years have not had any effect on fish and wildlife habitat in the Necanicum River. As indicated in the application, Big River will be able to control run-off and sediment on the site by sloping and through the use of sediment ponds, if needed. Away from the base of the hill to the east of the Quarry along Highway 26, there are areas that may be considered wetlands although they are not inventoried on the County's Comprehensive Plan. However, Big River extraction activities will NOT occur in these areas. In the past, Big River had ongoing discussions with conservation entities related to the wetland areas and the operation of the proposed quarry will have NO effect on these potential wetland

areas. We believe there are no conflicts between the proposed mineral and aggregate resource and other significant Goal 5 resources in the general area.

Conflict Category #5: Conflicts With Agricultural Practices (OAR 660-023-0180(5)(b)(E))

Although the zoning in the area contains AF (Agricultural Forestry) and RA-1 and 2 (rural agriculture zones), there is no significant agricultural activity that occurs in the general area. Forestry is a dominant industry to the southwest of Highway 26 and the area northeast of Highway 26 is characterized by residential uses in the Edgewater subdivision and by intermittent residences along the Necanicum River and Highway 26. These residences may have an isolated fruit tree or some cane berries, but commercial agriculture does not occur in the general vicinity. To the south and east of the property is a horse barn and Big River works with the owners to accept manure from the barn and use it as a soil amendment on Big River property. We do not believe that there are any conflicts with any agricultural use in the area and we believe that our ongoing operational history demonstrates that there will be no conflict with agricultural practices from our operations at the Ordway Quarry.

STEP 4- IDENTIFY REASONABLE AND PRACTICAL MEASURES THAT WILL ASSIST IN MINIMIZING ANY POTENTIAL CONFLICTS (OAR 660-023-0180(5)(c))

Big River's current operation at the Ordway Quarry uses reasonable and practical measures that minimize conflicts that might arise from our operations. These elements of our operations will continue, and Big River is proposing additional changes in operations that will allow further minimization of conflicts. These existing and proposed elements include:

1. Paved access apron at the entrance on Highway 26 (mile post 2.66). This minimizes potential dust and traffic problems related with mud track-out. It also reduces truck noise.

2. Reorienting the mining face of the quarry. This will allow mineral and aggregate material to be mined from the Weyerhaeuser property and minimize the view of the site from Highway 26 and neighboring residences. In addition to reducing visual affects, the revised mining plan will allow Big River to leave a lip of the existing rock resource in place as a screen and buffer to reduce dust and noise impacts. It will also allow the company to maintain natural vegetation along the northeasterly side of the quarry (along Highway 26).

3. All crushing operations on the site are conducted under an Air Contaminant Discharge permit for the crushing unit. Any and all future crushing will be done in compliance with the appropriate DEQ Air Contaminate Discharge permit.

4. Big River uses, and will continue to use, a water truck onsite to moisten roads and extraction areas to minimize potential dust conflicts.

5. Big River will maintain a gravel surface for all internal roads. Studies from the State of Washington and New Zealand demonstrate that maintaining a gravel surface on haul roads greatly reduces the amount of dust.

6. Truck speed at the entrance, exit or haul roads, and on the quarry floor will be limited to no more than 15 miles per hour. Again, studies from the State of Washington and New Zealand show that reduced truck speed (keeping it at 15 miles per hour or less) is one of the single largest operational characteristics that allows for minimization of dust.

7. Big River will obtain and maintain a storm water discharge permit. This will minimize "other discharge" conflicts such as storm water run-off. Additional excavating activity into the pit floor will allow onsite handlings of storm water. There is ample room to the west side of the mining area for the placement of sedimentation ponds, as necessary. On the east/southeast side of the pit, there are significant flat areas which will greatly assist in the storm water control function.

8. As indicated in the report of Daly Standlee & Associates, operations will be run in full compliance with state noise standards. This will minimize potential noise conflicts. Noise mitigation measures recommended by Daly-Standlee will be requested as conditions of approval for the operation.

9. Big River will coordinate with DOGAMI with regard to site reclamation requirements. Reorientation of the pit face will add significant flexibility to reclamation efforts to return the area to forest and habitat uses. There will be sufficient overburden available for reclamation uses.

10. Big River will maintain an active "housekeeping" program for ensuring dust is minimized by operation on its internal truck paths and to ensure that dust and mud are not tracked out to Highway 26 at the access road intersections. In addition, a portion of the access road is paved to assist housekeeping in this regard.

11. Big River will maintain the level of truck traffic on the site below ODOT's change of use threshold. ODOT confirms that the current Big River access at mile post 2.66 is approved for 40 truck movements per day on an annual average basis (20 incoming trucks and 20 outgoing trucks). If ODOT allows additional trips and does not require unreasonable road improvements, a circular haul truck scheme using alternative exit points may be possible.

12. Overburden on the site is generally thin, but there are sufficient overburden soils for future reclamation purposes. Overburdened that is stripped for purposes of opening up a new mining area will be preserved and seeded to prevent erosion and "other conflicts" associated with the stockpile and topsoil materials.

13. Big River will continue to follow the current hours of operation mandated for the Ordway Quarry, 7 a.m. to 6 p.m., Monday through Friday, 8 a.m. to 5 p.m. on Saturday, and no operations on Sundays or normal holidays. This prevents early morning activities or late

evening activities that could potentially increase noise impacts on neighboring residences. As noted above, Big River requests that it be allowed the ability to run crushing operations year-round. Under the current conditional use permit, there is a three-month period (January 1 to April 1) of each year where the crusher cannot be run at the Ordway Quarry. Big River requests that the ability to run the crusher year-round occur ONLY after the pit floor has been reoriented so that crushing operations may remain blocked from view and noise from crushing operations is minimized. Until the pit realignment is completed, Big River will follow the seasonal crushing limitation.

14. Big River will limit the speed of haul trucks in the entrance and exit areas and the quarry operations area to minimize potential dust and noise from truck traffic operations.

15. Big River will engage in ongoing reclamation processes. We believe that this will minimize storm water issues and will allow rational use of overburden in the reclamation process.

An important component of Big River's strategy to minimize operational conflicts is the reorientation of extraction activities at the pit. Because of the shape of the current Big River property and its odd orientation to the mineral deposit, extraction activities necessarily expose portions of the pit to the southeast where most of the residences are located. By using the Weyerhaeuser property to reorient the quarry operations, Big River will be able to efficiently mine the aggregate resource as well as maintain a natural lip of rock to serve as an ongoing buffer between extraction operations and homes located generally to the east near Highway 26. This reorientation will take time and it will not occur immediately. However, upon approval of the proposed application, Big River will begin the reorientation process by extracting material on the Weyerhaeuser property to bring additional area down to the current quarry floor level. Once this is accomplished, additional mining activities will have the benefit of natural screening. This screening will be sequentially reduced as mining proceeds and the quarry floor is deepened, but the screening will remain above the mine floor as the mining depth at the quarry floor increases. With time, the quarry floor will be lowered along with the natural buffers will isolate operations from Highway 26 and our neighbors to the east. However, the natural buffers (rock lip with vegetation) will always remain higher than the quarry floor to ensure screening.

Big River has voluntarily rethought its mining plan and over time, the new mining plan will significantly reduce visual and other conflicts. We believe that reoriented mining operations will allow a "win-win" for the company, the County and residents in the area; it will preserve a valuable and rare aggregate resource which is needed in the growing south Clatsop County area while at the same time improving the compatibility of quarry operations with neighbors. At all times during the process, including the reorientation operations, Big River will maintain compliance with DEQ noise and dust regulations. We expect, however, after reorientation is accomplished, there will be significant benefits for our neighbors in the area as well as for our mining operations.

APPLICABLE APPROVAL CRITERIA.

The County Code criteria for approving this request are contained in the Clatsop County Land and Water Development and Use Ordinance ("LWDUO")(codified as of May 10, 2004), the Clatsop County Comprehensive Plan Goals and Policies (dated May 2004), and the Clatsop County Standards Document ("SD")(including amendments through July 1, 2005). In the discussion below, the applicant identifies what it believes are the applicable approval criteria and describes how those approval criteria are met:

LAND AND WATER DEVELOPMENT AND USE ORDINANCE

Approval Criterion: Section 3.030 Special Purpose Districts

A special purpose district is an overlay district which may be combined with any portion of any zone as appropriate to the purpose of the district. The regulations of a special purpose district consists of additional sections of this Ordinance and additional standards. Some of these regulations are supplementary and other preempt the regulations of the underlying zone, and the regulations of the special purpose district and the zone shall all apply. Where these regulations conflict, the regulations that are more restrictive shall control the boundaries of special purpose districts, except as indicated below are shown on the Clatsop County Land and Water Development Map and Columbia River Estuary Resource Base Maps (sic).

Findings: See the Findings for the QM zone and S3.509, below. Mineral and aggregate extraction and processing are allowed conditional uses in the F-80, AF and RA-2 Zones subject to the standards of S3.509 (addressed below). The PAPA process does not require a conditional use application, but rather alters the County's Comprehensive Plan to directly place the QM zone on areas requested. Compliance with the PAPA regulations and a change to the QM zone changes the requirements of the underlying zone to those of the QM zone. As demonstrated by the findings below, the requirements of the QM zone are met.

Quarry and Mining Zone (LWDUO Section 3.460)

Approval Criterion: Section 3.462. Purpose.

The intent of this zone is to protect aggregate and other mineral sites from incompatible uses where such material is needed for primarily non-forest uses. Good quality aggregate and mineral sites are uncommon in the County and are vital to a healthy and growing economy. These sites should be protected from conflicting uses, primarily structures which would preempt an extractive resource use.

Findings: The applicant, through this application, is requesting a Comprehensive Plan and Zone Change to zone the subject property with a QM zone overlay to protect and allow prudent use of the valuable aggregate resource on the property in a manner that recognizes the existing uses in the area and avoids increasing conflicts in the future. This is exactly the purpose of this zone. This criterion is met.

Approval Criterion: Section 3.464. Application.

> The QM zone applies to sites shown by a "QM" letter designation on the County zoning map and described on a list in the Department of Community Development. Generally, sites are located to the nearest quarter section, although some sites are listed only by section, as per State Department of Geology and Mineral Industries permits. The QM District applies only to that portion of the listed section upon which the rock resource is located. There are a number of existing and potential rock pits and stockpile sites which are not designated on the County map due to lack of adequate information concerning the sites. It is anticipated that many of those sites will be designated QM upon further information and a Goal 5 analysis and Comprehensive Plan amendment.

Findings: The subject property is designated in the Comprehensive Plan inventory as the Ordway site, which was a "Primary Site Requiring Conditional Use Approval." Sites with this designation were viewed as "potential sites" "for which sufficient information concerning the location, quality, and quantity of a resource site is not adequate so as to allow the County to make a determination of significance." (Policy 3.b.) The applicant's current application provides the additional information needed to allow the County to make a determination of significance and a decision about appropriate Goal 5 protection and the designation of the property with the Quarry and Mining zone, exactly as contemplated by this criterion. Because this application is providing the information needed to allow the County to make an appropriate decision on the application of the Quarry and Mining zone to the property, this criterion is met.

Approval Criterion: Section 3.466. Development and Use Permitted.

> The following developments and uses and their accessory developments and uses are permitted under a Type I procedure subject to applicable development standards.
>
> **(1)** Surface or subsurface mining.
>
> **(2)** Concrete, ready-mix, or asphalt batching plant accessory to and on the same site as an existing or approved surface or subsurface mining operation, and subject to the standards in the Light Industrial (LI) zone Section 3.448(3).

(3) Offices, warehouses and maintenance buildings appropriate to uses permitted in the district.
(4) Forestry.
(5) Farm use.
(6) Low-intensity recreation.
(7) Rock crushing subject to standards in Section 3.470.
(8) Property line adjustment.

Findings: The applicant is requesting approval to mine, crush, and stockpile rock on the site, and to use the site for uses accessory to that. Applicant does NOT request concrete, ready mix or asphalt batch plants at the site. The requested uses fall within the uses permitted by this Section. This criterion is met.

Approval Criterion: Section 3.470(1). Development and Use Standards.

(1) Lot size shall be based upon:
  (A) The site need of the proposed use,
  (B) The nature of the proposed use in relation to its impact on nearby properties, and
  (C) Consideration of state sanitation and other requirements, local setback and other criteria and standards of the Ordinance.

Findings: The applicant is not requesting any changes to the lot configuration of the subject property. This criterion does not apply to this application. The Big River property, together with the Weyerhaeuser property under lease, provides sufficient room to efficiently extract the rock resource, minimize conflicts, stage all processing uses (e.g. crusher, stockpiles and scale) and prepare for reclamation. This criterion is met.

Approval Criterion: Section 3.470(2). Development and Use Standards.

(2) Setbacks:
  (A) Excavation shall not be conducted closer than 100 feet to any residence or residential district.
  (B) Equipment and structures shall not be built or located closer than 50' from the perimeter boundary or the right-of-way of an existing road, except when such boundary adjoins a residence or residentially zoned district, in which case such setback shall be 100'.
  (C) Stockpiling of sand and gravel and sedimentation ponds shall be located no closer than 25' to the perimeter boundary or the right-of-way of an existing road.

Findings: As shown on the site plan submitted as part of this application, all excavation areas will be at least 500 feet away from any residence and at least 100 feet from any residential district not owned by the applicant. All stockpile areas and sedimentation ponds (if necessary) will be located at least 25 feet from the perimeter boundary or right-of-way of an existing road. This criterion is met.

Approval Criterion: Section 3.470(3). Development and Use Standards.

(3) Screen Landscape. Existing trees and natural vegetation shall be preserved along a public road or adjoining a residential district for a width of 50' or within the minimum setback, whichever is less.

Findings: As shown on the site plan submitted as part of this application, the existing trees and vegetation along Highway 26 shall be preserved for at least 100 feet from the excavation area (twice the distance required by the Standard). This criterion is met.

Approval Criterion: Section 3.470(4). Development and Use Standards.

(4) Road Conditions. All private access and service roads shall be maintained in a dust-free condition during intensive operations.

Findings: The internal road system will consist of a paved apron in the vicinity of the access point with Highway 26, and gravel roads in the interior of the site. These will be watered as necessary during dry periods to control dust. Some additional paving may occur on Vollmer Creek Road if that option is approved by ODOT. Under these circumstances, this criterion is met.

Approval Criterion: Section 3.470(5). Development and Use Standards.

(5) Safety Fencing. Prior to operations which will result in open excavation with a depth of ten feet or more and a slope steeper than one vertical foot to two horizontal feet and which is located within 100' of a residentially occupied structure, a fence shall be erected at least ten feet outside the edge of the excavation at least four feet in height, to control access to such excavation.

Findings: There will be no excavation within 100 feet of a residentially occupied structure, so this criterion does not apply to this application.

Approval Criterion: Section 3.470(6). Development and Use Standards.

(6) Setbacks from Waterways. No mining or structural improvements shall occur within the riparian setbacks as specified in S4.500. In no case, however, shall the minimum setback from a waterway be less than 25'.

Findings: As shown on the site plan submitted as part of this application, all mining or structural improvements will be at least 100 feet from Highway 26 to the east of the site and 100 feet from Vollmer Creek Road, on the west of the site. The site is separated from the Necanicum River by Highway 26 and from Vollmer Creek by the Weyerhaeuser Road. A more comprchensive discussion of this situation is discussed in the Findings for S4.500, below. Based upon the above, and the Findings for S4.500, this criterion is met.

Approval Criterion: Section 3.470(7). Development and Use Standards.

(7) Screening Vegetation. Any new mining or stockpile site which fronts on a public roadway shall be screened from such roadway by a line of vegetation sufficient to substantially block view of the site from the road. The vegetation shall be either native vegetation which is maintained or vegetation which is planted at the time of permit issuance and maintained for the life of the operation.

Findings: As shown on the site plan submitted as part of this application, there is an existing strip of trees that already substantially screens the subject property along its border with Highway 26. These trees will be maintained. As the quarry floor is reoriented, additional opportunities will be available to plant screening along the south side of the extraction area. As indicated in the general mining plan, a rock lip and vegetation will be left on the easterly side of the quarry as operations proceed. This will substantially screen the site from Highway 26. This criterion is met.

Approval Criterion: Section 3.470(8). Development and Use Standards.

(8) Rock Crushing. The crusher shall be licensed by the Department of Environmental Quality.

Findings: The applicant has used a crusher which has a valid DEQ permit. This permit will be maintained, and if the crusher is changed, any other crusher used on the site will also have and maintain such a permit. This criterion is met.

Approval Criterion: Section 3.470(9). Development and Use Standards.

(9) Other Applicable Standards. State and federal standards regarding air, water and noise discharges and reclamation

of the site shall be followed as well as any other applicable state, federal or local standards.

Findings: We incorporate by reference the finding related to Goal 6, below. This standard is met.

Approval Criterion: Section 3.472. State and Federal Permits Standards.

If any state or federal permit is required for a development or use, an applicant, prior to issuance of a development permit or action, shall submit to the Planning Department a copy of the state or federal permit.

Findings: Applicant already has a valid ODOT access permit for the existing access. Prior to operation, applicant will obtain the appropriate DOGAMI permit and post the necessary bond. A storm water permit will be obtained as part of the DOGAMI process. The crusher has a valid DEQ permit. All necessary county permits are requested through this PAPA application. This standard is met.

Approval Criterion: Section 4.000. Flood Hazard Overlay District.

The purpose of the flood hazard overlay district is to identify those areas of the County subject to the hazards of periodic flooding and establish standards and regulations to reduce flood damage or loss of life in those areas. This district applies to all areas of special flood hazards within the unincorporated areas of Clatsop County as identified on Flood Insurance Rate Maps (FIRM) and Flood Boundary and Floodway Maps.

Findings: A small portion of the tax lots 900 and 1000 (immediately adjacent to Highway 26) are located within the flood plain of the Necanicum River. These areas are outside the extraction area and no activities related to the mining operation are planned in these areas. We incorporate our finding for Goal 7 herein by reference. To the extent these flood hazard standards apply to this application, they are met.

Approval Criterion: Section 4.040. Geologic Hazards Overlay District.

The intent of the geologic hazards overlay is to minimize building hazards and threats to life and property that may be created by landslides, ocean flooding and erosion, weak foundation soils, and other hazards as identified and mapped by the County, including DOGAMI landslide topography. This purpose is achieved by basing County decisions on accurate geologic and soils information prepared by qualified professionals.

Findings: We incorporate by reference our findings under Goal 7 and our findings under S3.700. As indicated in the geology report of Environmental Science Associates, the proposed activities on the extraction area are consistent with, and appropriate for, the geology on the site. The underlying geologic structure is stable basalt and mining activities will not cause adverse geologic hazards at the site. Appropriate slopes will be maintained in compliance with DOGAMI regulations and overburden will be stored and stabilized for reclamation purposes. Based on these findings, this standard is met. Applicant requests the issuance of a county geologic hazard permit as part of the PAPA process.

NOTE: Big River is not requesting a conditional use for the site. While the quarry uses are allowed conditionally in the underlying zones, Big River is requesting a comprehensive plan amendment through the PAPA process to place the site on the County significant Goal 5 resource inventory and permit quarry operations through the PAPA process. Accordingly, the conditional use standards (Section 5000) of the LWDUO are not applicable.

Section 5.300 Site Plans.

Approval Criterion: Section 5.302. Site Plan Review Requirements.

Section 5.302. Site Plan Review Requirements. Before a permit can be issued for development in a special purpose district, for a conditional development and use, or a development and use permitted with review, a site plan for the total parcel and development must be approved by the Planning Director or Planning Commission. Information on the proposed development shall include sketches or other explanatory information the Director may require or the applicant may offer that present facts and evidence sufficient to establish compliance with Sections 1.040, 1.050, and the requirements of this Section.

Section 1.040. Scope and Compliance. The provisions of this Ordinance shall apply to all unincorporated areas of Clatsop County, Oregon that are not within the urban growth boundary of an incorporated city or town. The procedural provisions of this ordinance will continue to be utilized for unincorporated areas within urban growth boundaries. A parcel of land or water area may be used, developed by land division or otherwise, and a structure may be used or developed by construction, reconstruction, alteration, occupancy, or otherwise only as this Ordinance permits. In addition to complying with the criteria and other provisions within this Ordinance, each development shall comply with the applicable standards set forth in County Development and Use Standards Document. The requirements of this Ordinance apply to the person undertaking a development or

the user of a development and to the person's successors-in-interest.

Section 1.050. Consistency with Comprehensive Plan. Actions initiated under this Ordinance shall be consistent with the Clatsop County Comprehensive Plan as adopted or hereafter amended. Where a provision of this Ordinance is in conflict with the Comprehensive Plan, the Comprehensive Plan shall apply. A provision of this Ordinance that is in addition to another requirement is not in conflict.

Findings: The applicant has submitted a Site Plan, this application narrative, and accompanying information that is sufficient to demonstrate compliance with Sections 1.040 and 1.050 and the requirements of Section 5.302. Section 1.040 requires that development comply with this Ordinance and with the Standards Document. Compliance with this Ordinance is demonstrated by the findings in this application narrative and the evidence submitted with the application. Compliance with the Standards Document is demonstrated by the findings for the applicable Approval Criteria in this application narrative. Section 1.050 requires that development be consistent with the County Comprehensive Plan. Compliance with the Comprehensive Plan is demonstrated by the findings in this application narrative. Based upon the Site Plan and other information submitted in the application narrative and with the application, this criterion is met.

Section 5.350 Transportation System Impact Review

Approval Criterion: Section 5.352 Traffic Impact Study

The purpose of this section of the code is to implement Section 660-012-0045(2)(e) of the State Transportation Planning Rule that requires the County to adopt a process to apply conditions to development proposals in order to minimize adverse impacts to and protect transportation facilities. This section establishes the standards for when a proposal must be reviewed for potential traffic impacts; when a Traffic Impact Study must be submitted with a development application in order to determine whether conditions are needed to minimize impacts to and protect transportation facilities; what must be in a Traffic Impact Study; and who is qualified to prepare the Study.

Findings: A Traffic Impact Study may be required to be submitted to the County with a land use application in a number of situations and the PAPA rule requires submission of a traffic study. In compliance with the PAPA rule (and Section 3 of the standard), a Traffic Impact Study was prepared by ATEP. The authors are Mr. Dick Woelk and Mr. Karl Birky, both Registered Engineers. As indicated in the ATEP report, the operation has valid existing access approval to Highway 26 and does not increase traffic above ODOT's change in use designations.

It does not propose any altered land use action that will have operational or safety concerns on the state highways. Big River's proposal will have no effect on currently existing traffic conditions on Highway 26. The traffic study includes impact analysis, field measurements, oral accounts, site observations and crash history. Standard methodologies, including the Institute of Transportation Engineers Trip Generation manual were used in the preparation of the study. As indicated in the ATEP report, the proposed use does not increase site traffic volume by 500 ADT or more, nor does it increase ADT hour volume of a particular movement to and from the state highway by 20% or more. In addition, there will be no use of adjacent streets. All truck traffic will use private roads to assure safety. Because all traffic will travel on internal truck ways or private roads gated and not open to the public, use of adjacent streets and changes to internal traffic patterns are not implicated by this application. Access is directly to Highway 26 and the one-way haul truck traffic pattern internally will use private roads to assure safety. The ATEP study recognizes the mitigation measures proposed by Big River and recommends additional mitigation measures.

Approval Criterion: Section 5.352(4)

(A) Criteria. When a Traffic Impact Study is required, approval of the development proposal requires satisfaction of the following criteria, in addition to other criteria applicable to the proposal:
1) The proposed site design and traffic and circulation design and facilities, for all transportation modes, including any mitigation measures, are designed to:
(a) Have the least negative impact on all applicable transportation facilities; and
(b) Accommodate and encourage non-motor vehicular modes of transportation to the extent practicable; and
(c) Make the most efficient use of land and public facilities as practicable; and
(d) Provide the most direct, safe and convenient routes practicable between on-site destinations, and between on-site and off-site destinations; and
(e) Otherwise comply with applicable requirements of the Clatsop County Land and Water Development Use Ordinance and the Standards Document.

Findings: The ATEP Traffic Impact Study specifically addresses the approval criteria in this section. First, the Traffic Impact Study recognizes that the proposed use is served by a valid access point approved for quarry uses. The report confirms that there will be no increase in truck traffic from this application and confirms that the County and statewide transportation planning rules are complied with because the proposed use does not significantly affect a transportation facility. ATEP concludes that the existing access is valid and functioning and that alternative access points, while not specifically requested by Big River, might provide opportunities for shifting impacts. In addition, ATEP points out that gravel pit extraction processing and transportation requires motor vehicle modes of transportation. Aggregate mining

is generally inconsistent with non-motor vehicle transportation modes. However, ATEP notes that the traffic plan provided by Big River does not adversely affect other modes of transportation and therefore accommodates and encourages such modes of transportation to the extent practicable. The ATEP report also demonstrates that the existing access is an efficient use of the land and also allows efficient use of Highway 26, the appropriate public facility, to the greatest extent practicable and provides a direct, equally safe and convenient access to Highway 26. The direct access to Highway 26 provides the trucks with the most practicable routes between internal (on-site) destinations and between on-site and off-site destinations. ATEP demonstrates that the traffic pattern proposed by Big River is an efficient, equally safe and convenient way to move rock from the Ordway Quarry to the market areas in Clatsop County.

Approval Criterion: Section 5.354 Amendments Affecting the Transportation System

(1) Review of Applications for Effect on Transportation Facilities.
When a development application includes a proposed comprehensive plan amendment, zone change or land use regulation change, the proposal shall be reviewed to determine whether it significantly affects a transportation facility. An amendment significantly affects a transportation facility if it would:
(A) Change the functional classification of an existing or planned transportation facility. This would occur, for example, when a proposal causes future traffic to exceed the capacity of "collector" street classification, requiring a change in the classification to an "arterial" street, as identified by the Clatsop County Transportation System Plan ("TSP"); or
(B) Changes standards implementing a functional classification system; or
(C) Allows types or levels of land use that would result in levels of travel or access that are inconsistent with the functional classification of a transportation facility; or
(D) Reduce the performance standards of the facility below the minimum acceptable level identified in the Transportation System Plan.

(2) Amendments That Affect Transportation Facilities.
Amendments to the comprehensive plan, zoning map and land use regulations which significantly affect a transportation facility shall assure that allowed land uses are consistent with the function, capacity, and level of service of the facility identified in the TSP. This shall be accomplished by one of the following:
(A) Amending the TSP to ensure that existing, improved, or new transportation facilities are adequate to support the proposed land

uses consistent with the requirements of the Transportation Planning Rule (TPR); or,
(B) Altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes of transportation; or
(C) Limiting allowed land uses to be consistent with the planned function of the transportation facility; or
(D) Amending the TSP to modify the planned function, capacity and performance standards, as needed to accept greater motor vehicle congestion to promote mixed use, pedestrian friendly development where multimodal travel choices are provided.

Findings: We incorporate by reference our findings under Goal 12 and our findings with regard to Section 5.352(4). As set forth in the ATEP Traffic Study and the application narrative, Big River proposes to use its existing and ODOT-approved access with the existing and approved number of trips. The application does not significantly affect transportation facility. First, it does not change any functional classification for an existing or planned transportation facility (such as changing a collector street to an arterial). Rather, access is directly to a state highway and no functional classification change is created by the proposed application. In addition, the application does not change any standard that implements a functional classification system. In addition, the application does not allow levels or types of land use that would result in levels of travel or access that are inconsistent with the functional classification of the transportation facility. In this case, Highway 26 is a state highway/major arterial and the proposed traffic for the Big River application will be within the approved access limits of ODOT's change of use regulations. Finally, the application will not reduce the performance standards of any facility, specifically Highway 26, below a minimum acceptable level identified in the County's Transportation System Plan. The application is using approved truck numbers at the access and exit and not adding additional trips to the transportation system. Accordingly, there is no possibility that the proposed use can reduce performance standards on Highway 26. Because the application does not significantly affect the transportation facility, Big River does not request, and the county is not required, to amend its transportation system plan, alter its designations or limit allowed land uses. Accordingly, this standard is met.

Section 5.400 Zone Changes.

Approval Criterion: Section 5.410. Purpose.

This section provides the criteria for amending the boundaries of any base zone or overlay district delineated on the official Clatsop County "Comprehensive Plan/Zoning Map." A change in a base zone or overlay district may be made according to the criteria set forth in Section 5.412. The process for changing a zone designation shall be a Type IV procedure initiated by the governing body, Planning Commission, or by petition of a majority of property owners in the area proposed for change. Mailed notice

of the hearing shall include the owners of property within (250) feet of the area proposed for change. If the change involves a Goal 5 resource, a Plan amendment must also be requested and the Goal 5 Administrative Rule used to justify the decision.

Findings: With this application the applicant, in cooperation with Weyerhaeuser (the sole owners of the subject property) is requesting a Comprehensive Plan amendment and zone change pursuant to the Goal 5 administrative rule (OAR 660-23-0180) to apply the Quarry and Mining zone to the subject property for protection as a Goal 5 significant resource. In light of this, and the Type IV procedures that the County will follow in considering this PAPA application, this criterion is met.

Approval Criterion: Section 5.412. Zone Change Criteria.

The governing body shall approve a non-legislative zone designation change if it finds compliance with Section 1.040, and all of the following criteria:

(1) The proposed change is consistent with the policies of the Clatsop County Comprehensive Plan.

(2) The proposed change is consistent with the statewide planning goals (ORS 197).

(3) The property in the affected area will be provided with adequate public facilities and services including, but not limited to:

(A) Parks, schools and recreational facilities

(B) Police and fire protection and emergency medical service

(C) Solid waste collection

(D) Water and wastewater facilities

(4) The proposed change will insure that an adequate and safe transportation network exists to support the proposed zoning and will not cause undue traffic congestion or hazards.

(5) The proposed change will not result in over-intensive use of the land, will give reasonable consideration to the character of the area, and will be compatible with the overall zoning pattern.

(6) The proposed change gives reasonable consideration to peculiar suitability of the property for particular uses.

(7) The proposed change will encourage the most appropriate use of land throughout Clatsop County.

(8) The proposed change will not be detrimental to the health, safety and general welfare of Clatsop County.

Findings: The applicant demonstrates compliance with Section 1.040 based upon the Findings for Section 5.302, above. The applicant demonstrates compliance with the remainder of this criterion based upon the following: (1) The proposed change is consistent with the policies of the Comprehensive Plan as demonstrated in the Findings related to Comprehensive Plan Standards below. (2) The proposed change is consistent with the statewide planning goals as is demonstrated in the findings for Statewide Goals, below. (3) The subject property will only have a limited need for public facilities and services. Since it is not a residential use, it will not need parks, schools and recreational facilities. It will have minimal needs for police, fire protection and emergency medical services and will not require any change in those services. The operation will handle its own solid waste by porta-potty and commercial waste services, and will manage storm water by directing it to onsite water detention ponds. There are no other public facilities that either will not be available at adequate levels or will not be provided by the applicant. (4) The proposed change will not cause undue traffic congestion or hazards as the existing ODOT-approved access will be used and no truck trips above the ODOT-approved average daily trip allowance will be created. The traffic volume will not increase at any of the access points over the ODOT change in access threshold. (5) The proposed change will not result in over-intensive use of the land, will give reasonable consideration to the character of the area, and will be compatible with the overall zoning pattern because (a) the mining use is a use that is allowed in the three zones that currently attach to the subject properties – the RA-2, AF-20 and F-80 zones; (b) portions of the property are already being used for mining, so that the proposed use is not a new use, merely an expansion of an existing use, (c) the current proposal has been designed to consider and mitigate the impacts on adjacent properties while at the same time providing Goal 5 protection for a valuable Goal 5 resource, and (d) the use is compatible with the commercial forestry uses that predominate on the surrounding properties to the north, south and west. (6) The proposed change gives reasonable consideration to the peculiar suitability of the property for particular uses, because it recognizes the unique character of this site to provide a significant aggregate resource for use in the County at an already developed and active quarry area. (7) The proposed change will encourage the most appropriate use of land throughout Clatsop County because it protects and promotes the use of a site whose potential as a significant aggregate resource is already recognized in the Comprehensive Plan, and that is currently actively used for mineral and aggregate operations. (8) The proposed change will not be detrimental to the health, safety and general welfare of Clatsop County because it meets all applicable DEQ standards (including noise), has ODOT-approved access and is in compliance with the requirements of the County's land use planning documents. In addition, the Goal 5 rule provides a balancing process that considers and mitigates for impacts on nearby properties. For all the above reasons, this criterion is met.

COMPREHENSIVE PLAN

The applicant has reviewed the Clatsop County Comprehensive Plan Goals and Policies document dated May 2004. Based upon that review, the applicant believes that the only Comprehensive Plan provisions, goals, or policies that apply to this application are those addressed below.

Goal 1. Citizen Involvement

Consistent with Statewide Goal 1, the Goal 5 PAPA process actively involves citizens in the land use planning process in Clatsop County. We incorporate the discussion of statewide Goals 1 and 2 below. This application will receive public notice, and consideration by the Planning Commission with final decision by the Board of Commissioners of Clatsop County. Accordingly, the goal of citizen involvement is met.

Goal 2. Land Use Planning

Consistent with Statewide Goal 2, this county goal requires coordinated land use planning process and a framework to establish the basis for all land use decisions. We incorporate our analysis of Goal 1 above. The process will provide public notice and multiple hearings. A request for a PAPA proper application is a Comprehensive Plan application to protect a Goal 5 mineral and aggregate source that the County Comprehensive Plan specifically recognizes to be rare in Clatsop County and deserving of protection. The PAPA application is consistent with the existing designation of the Ordway Quarry. To the extent that the County's Goal 5 inventory classification for mineral and aggregate sites requires the Ordway Quarry to be placed within the "primary sites" category, a change in the inventory is requested through this application. Such change is appropriate as demonstrated in the findings and supporting materials. For all of these reasons, Goal 2 of the County Comprehensive Plan is met.

Goal 3. Agricultural Land

As indicated in the application, there is no land dedicated to agricultural production in the area. We incorporate the discussion of Statewide Goal 3 below. This standard is met.

Goal 4. Forest Lands

Consistent with Statewide Goal 4, Clatsop County's Goal 4 mandates conservation and maintenance of the state's forest land base and directs that the forest lands be preserved for forest uses. Forest uses include mineral and aggregate extraction. The principal land owner of the extraction area, Weyerhaeuser, is a commercial forestry company, and it has consented to the development of the Ordway Quarry, consistent with its ongoing forest uses. The reclamation plan for the site is to return the area to forest and wildlife habitat uses consistent with ongoing mining, under the direction of DOGAMI. No division or parcelization of forest land is contemplated by this application. Elk currently traverse the property and there will be no barriers constructed (i.e., fences) to prohibit future use of the area by wildlife. The applicant has maintained significant setbacks from Vollmer Creek Road and from Highway 26. Both Vollmer Creek Road and Highway 26 separate the extraction and project area from nearby waterways. Wetland areas near Highway 26 will not be part of the excavation and operational portions of the Big River project. No new forest roads are required and access to the forest areas will remain gated as is currently the case. Based on all of these factors, the County's Goal 4 provisions are met.

Goal 5. Open Space, Scenic and Historic Areas and Natural Resources.

Mineral and Aggregate Resources.

Approval Criterion: Policy 1.

The County shall protect significant mineral and aggregate resources consistent with Statewide Planning Goal 5 and the process for complying with the Goal specified in Oregon Administrative Rules Chapter 660, Division 16.

Findings: The County inventoried and identified significant sites for mineral and aggregate resources as part of the Goal 5 process it completed at the time of the adoption of its Comprehensive Plan. The applicant's site was at that time included on the Comprehensive Plan inventory as a "Primary Site Requiring Conditional Use Approval." The applicant's site was not designated a significant site at that time, nor given any special protection under Goal 5. The County's Comprehensive Plan has been acknowledged as in compliance with the Statewide Planning Goals by the Land Conservation and Development Commission. As is discussed more fully below, "Primary Sites Requiring Conditional Use Approval" were considered "potential sites" for which sufficient information concerning the location, quality, and quantity of a resources site is not adequate, and were considered sites which could be considered for Goal 5 protection when additional information about a site was derived and a determination was made through a Goal 5 process. That is the exact request that is being made in this application. To the extent that a specific request would need to be made to move the Ordway site from the "Primary Sites Requiring Conditional Use Approval" category to the "Primary Sites Requiring QMO Protection", that request is made part of this application.

We incorporate by reference the findings under statewide Goal 5, below. The applicant is following the required PAPA process, providing information to show that the quality and quantity of material exceeds the 500,000 cubic yard threshold in the PAPA rule and the lower 250,000 cubic yard threshold in the Clatsop County Comprehensive Plan. This application discusses and demonstrates the significance of the resource. It also demonstrates that the site should be appropriately designated with a QM zone through the PAPA process. There are no conflicting inventoried Goal 5 resources on the site. There is a Goal 5 resource at the Necanicum River. As demonstrated in the application, the mineral and aggregate operation is separated from Necanicum River by Highway 26 and a significant buffer zone to the east/northeast of Highway 26. The flat areas immediately west of Highway 26 and between Highway 26 and the rock resource will not be used as part of excavation operations. This provides a significant buffer that will project resource values along the Necanicum River. This criterion is met.

Approval Criterion: Policy 2.

In making a decision whether to protect a significant mineral or aggregate site from conflicting uses, the County shall recognize that Goal 5 requires the protection of natural resources for future generations, and that the requirements of other applicable Statewide Planning Goals must be considered in any analysis of conflicting uses.

Findings: The applicant is asking the County to determine, through the State Goal 5 PAPA process, that the subject property already on the County's Goal 5 inventory contains a mineral and aggregate resource that is significant and worthy of protection from future conflicting uses. The significance determination is a recognition not only that the resource is available, but that it is available in a location, quantity, and quality that will provide a valuable product for use in the area and for the benefit of the citizens of the County for years to come. Recognizing that such protection must be balanced by recognition of other priorities, this application also considers the other Statewide planning goals in balancing needs through this Comprehensive Plan Amendment and Goal 5 process, as is discussed more fully in the findings below. This criterion is met.

Approval Criterion: Policy 3.

The County shall maintain an inventory of mineral and aggregate resources sites. The Comprehensive Plan inventory shall consist of three parts:

a. An inventory of "significant sites" identified through the Goal 5 process as important resources that will be protected from conflicting uses;

b. An inventory of "potential sites" for which sufficient information concerning the location, quality, and quantity of a resources site is not adequate so as to allow the County to make a determination of significance;

c. An inventory of "other sites" for which available information demonstrates that the site is not a significant resource to be protected.

Findings: The County completed its inventory and included it in the Comprehensive Plan. The categories used were: Primary Sites Requiring QMO Protection; Primary Sites Requiring Conditional Use Approval; and Other Sites. These three categories correlate to the references in this Policy to Significant Sites, Potential Sites, and Other Sites. The applicant's site was designated on the County inventory in the Comprehensive Plan as a Primary Site Requiring Conditional Use Approval. No determination was made in the Comprehensive Plan as to this site's significance and no decision was made to protect this site under Goal 5. The Comprehensive Plan did allow the site to operate subject to compliance with conditional use standards, which is the basis of a current operation on a portion of the subject property. The Comprehensive Plan also provided that additional information could be provided for potential sites as a basis for the County considering a site for protection under Goal 5. However, with regard to this criterion, the inventory required by this Policy was designated when the County adopted its Comprehensive Plan. The applicant's site was on that inventory. This Policy does not create an approval criterion that applies to this application. In any event, applicant is asking for a Goal 5 "significant site" inventory designation for the extraction area through this PAPA request. This criterion is met.

Approval Criterion: Policy 4.

The location of a mineral or aggregate resource shall be identified as the site of a recoverable source of material. A resource site may consist of all or portions of a parcel, and may comprise contiguous parcels in different ownerships. Identification of a resource site need not include mineral and aggregate reserves that are irrevocably committed to other land uses that are incompatible with surface mining.

Findings: Policy 4 was considered at the time the applicant's site was placed on the Comprehensive Plan inventory. This site was designated on the inventory as "George Ordway," with an indication of the location by section and the mineral present (basalt). This current application is consistent with the Comprehensive Plan identification, in that it relates to continuous material (a single hummock) on contiguous parcels, which now are in two ownerships. This Policy creates requirements relating to placing a mineral or aggregate site on the County inventory. The applicant's site is already on the County inventory. This Policy does not create an approval criterion that applies to this application. In any event, applicant is asking for a Goal 5 "significant site" inventory designation for the extraction area through this PAPA request.

Approval Criterion: Policy 5.

For an aggregate site to be determined significant, the resource must meet Oregon Department of Transportation specifications for base aggregate rock. It is the County's policy to protect the highest quality rock for future use.

Findings: The resource on the subject property meets the ODOT standards, as is demonstrated in the report of the applicant's geologist accompanying this application narrative. This criterion is met.

Approval Criterion: Policy 6.

For an aggregate site to be determined significant, the site must possess a minimum of 250,000 cubic yards of minable reserves. It is the policy of the County to protect a variety of large reserves in order to serve the regional market.

Findings: The resource on the expansion property contains over 5 million tons of reserves, as is demonstrated in the report of the applicant's geologist accompanying this application narrative. This is more than 3 million cubic yards (estimated conservatively). This criterion is met.

Approval Criterion: Policy 9.

The County shall recognize existing surface mining operations as significant resources pursuant to Goal 5, and shall allow existing operations to continue for two years without conforming to the performance standards in the zoning ordinance. Expansion beyond the limits of an existing site shall be in accordance with County zoning regulations.

Findings: As demonstrated on this application narrative, the proposed Ordway Quarry complies with all the applicable approval criteria. Big River is requesting the expansion through the PAPA process, as allowed under state law.

Approval Criterion: Policy 10.

The scope of an existing or "grandfathered" aggregate operation shall be established by:

a. Authorization by a County land use approval; or

b. The extent of the area disturbed by mining on the effective date of this ordinance; or

c. The continuous pursuit of a specific mining plan by an operator for not less than five years.

Findings: This criterion is not applicable.

Approval Criterion: Policy 11.

In order to maintain the right to continue an existing surface mining operation and bring the County's inventory of mineral and aggregate resources into compliance with Goal 5, an analysis of economic, social, environmental, and energy ("ESEE") consequences performed for an existing site shall only consider the consequences of potential conflicting uses upon current or future operations, and the consequences of mine expansion on existing or potential conflicting uses.

Findings: This Policy was intended to cover mineral and aggregate sites like the subject property that were existing sites at the time the Comprehensive Plan was adopted, but for which information was not adequate to designate the site as significant or insignificant. These existing sites were considered "Potential Sites" and included on the Comprehensive Plan inventory as "Primary Sites Requiring Conditional Use Approval." These sites had the option to be considered in the future for protection as significant Goal 5 sites. (See, e.g., Policy 13.) This Policy 11 was designed to provide that when an existing site was considered for protection under Goal 5, the ESEE analysis conducted as part of that consideration only needed to consider the consequences of potential (not existing) conflicting uses upon current or future mining operations, and the consequences of mine expansion (not the existing mining operation) on existing or potential conflicting uses. This limit on the ESEE analysis was created in recognition of the existing status of these sites at the time of the adoption of the Comprehensive Plan, and the desire to not penalize these sites because of the inadequacy of the information about them at the time of the adoption of the Plan. This Policy, however, was only intended to apply when these existing sites were considered for Goal 5 significance and protection. As set forth in the application materials, applicant's proposal meets all requirements for the PAPA approval in that all conflicts can be minimized. In addition, under the controlling statewide Goal 5 PAPA rule, an ESEE analysis is only required if identifying conflicting uses cannot be minimized. (See discussion Statewide Goal 5 below.) In this instance, all conflicts identified by the PAPA rule

can be minimized and an "overall" ESEE is not required. (See OAR 660-023-0180(4)(d)). However, the current PAPA rule also requires local government, once it has made a determination to allow the aggregate mining, to use the ESEE process to determine whether the county will allow, limit or prevent new conflicting uses within the impact area of the significant mineral resource site. (See OAR 660-023-0180(5)). This ESEE analysis will be performed as part of the final findings document. To the extent it is applicable, the criteria is met.

Approval Criterion: Policy 12.

Sites on the "other sites" inventory shall not be protected pursuant to Goal 5.

Findings: This criterion is not applicable.

Approval Criterion: Policy 13.

For sites on the "potential sites" inventory, the County shall review available information about mineral and aggregate resources, and if the information is sufficient, determine the site to be significant when one of the following conditions exists:

a. As part of the next scheduled periodic review;

b. When a landowner or operator submits information concerning the potential significance of a resource site and requests a Comprehensive Plan amendment;

c. When resolution of the status of a potential resource is necessary to advance another planning objective.

Findings: The applicant's site is on the "Potential Sites" list. By this application, the property owners are submitting information concerning the significance of the site and requesting a Comprehensive Plan amendment to protect the aggregate resource on the site under Goal 5. This meets the second trigger for the County to determine the site's significance. This criterion is met.

Approval Criterion: Policy 14.

For each site determined to be significant, the County shall complete the remainder of the Goal 5 process of identifying conflicting uses, analyzing the 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 fully preserve or partially protect the resource from conflicting uses, the site shall be zoned with the Mineral and Aggregate Resources Overlay.

Findings: The County is considering this application pursuant to the Goal 5 process, and will make the decisions required by this criterion as part of its decision on this application. As noted in the findings above, the state Goal 5 rule which controls has altered the ESEE requirements to the extent that if all conflicts can be minimized, an initial ESEE analysis

is not required. The post-decision ESEE analysis related to allowing, eliminating or preventing conflicting uses within the impact area must still be performed. The County may also implement the QM zone instead of the QM overlay because the QM zone also protects the Goal 5 resource. Based upon that process, and the decisions the County will make on this application, this criterion will be met.

Approval Criterion: Policy 15.

When analyzing the ESEE consequences of potential conflicts between a significant mineral or aggregate resource and another significant Goal 5 resource, the County shall consider the protection program adopted for the conflicting resource. Conflicts with other natural resources shall not be the basis for mining restrictions unless the County has included the conflicting resource on the inventory of significant Goal 5 resources, and adopted a resource protection program.

Findings: As demonstrated in the application materials, there are no conflicts with other inventoried Goal 5 uses. To the extent it is applicable, this standard is met.

Approval Criterion: Policy 16.

The County may consider the effects of surface mining operations on public roads and traffic. Consideration may include review of proposed routes, site distances at access points, roadway width and alignment, and level of service. The County may impose conditions or restrictions directly related to the impact created by surface mining; however, any conditions or restrictions shall not be approval criteria, and shall be applied uniformly to all road users in a manner consistent with the County's transportation plan.

Findings: We incorporate by reference our findings under Goal 12 below, and the County's transportation policies above. This standard is met.

Approval Criterion: Policy 17.

In order to approve surface mining at a site zoned for exclusive farm or forestry use, the County shall find, as part of the ESEE analysis, that the proposed activity will not: (1) force a significant change in, or significantly increase the cost of, accepted farming or forestry practices on surrounding lands; and (2) will not significantly increase fire hazard, significantly increase fire suppression costs, or significantly increase risks to fire suppression personnel.

Findings: The findings for statewide Goals 3 and 4 which are incorporated herein by reference. Based upon these findings, this criterion is met.

Approval Criterion: Policy 19.

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 a mineral or aggregate resource site when such measures are deemed necessary to resolve conflicts identified in a site-specific Goal 5 analysis.

Findings: As shown in the application materials, setbacks and screening will be maintained. The 1,500 impact area crosses Highway 26 to the east. However, applicant controls all relevant property to the west of Highway 26. Any impacts (e.g., noise) will be minimized and will not exceed DEQ standards at any properties to the east of Highway 26. The County has discretion under the PAPA process to place limits on properties to the east of Highway 26, but given the operational parameters proposed by Big River, may not be required to do so to protect the mineral and aggregate resource.

Approval Criterion: Policy 20.

The County may establish and impose conditions on operation of a surface mine when deemed necessary as a result of a site-specific Goal 5 analysis. Where such conditions conflict with criteria and standards in the Mineral and Aggregate Resources Overlay, the conditions developed through the Goal [5] analysis shall control.

Findings: We have provided the County with a list of requested conditions to ensure the Goal 5 requirements are met. Additional conditions may be developed through the hearing process. Again, the County may implement the QM zone in place of the QM overlay to protect the Goal 5 resource. The conditions of approval developed through the Goal 5 process will control if either the QM zone or the QM overlay is used.

Approval Criterion: Policy 21.

As part of the ESEE analysis and decision on the level of protection to be afforded significant mineral and aggregate resource sites, the County shall determine the appropriate post-mining use of the site.

Findings: We have suggested reclamation to forestry/habitat uses, consistent with the forestry zoning of the site, consistent with the requirements under PAPA rule and consistent with the uses in the area and the underlying zones.

Approval Criterion: Policy 22.

The County recognizes the jurisdiction of the Department of Geology and Mineral Industries for the purpose of the mined land reclamation pursuant to ORS 517.750 to 517.900 and the rules adopted thereunder.

Findings: The applicant can and will comply with all applicable DOGAMI requirements. The applicant has a currently valid DOGAMI permit for its existing operations. With a condition of approval requiring such, this criterion is met.

Approval Criterion: Policy 23.

Unless specifically determined on a case-by-case basis, it shall be the policy of the County, pursuant to ORS 517.830(3), that DOGAMI delay its final decision

on approval of a reclamation plan and issuance of an operating permit, as those terms are defined by statute and administrative rule, until all issues concerning local land use approval have been adjudicated by the County.

Findings: Applicant will apply to modify its current DOGAMI permit after County land use approval is final.

Approval Criterion: Policy 24.

No surface mining or processing activity, as defined by the zoning ordinance, shall commence without land use approval from the County, and approval of a reclamation plan and issuance of an operating permit by DOGAMI.

Findings: The applicant is seeking, through this application, to allow mining of the site under a Goal 5 protection program and a Quarry and Mining zone designation. Approval of this application will constitute the approval required by this Policy. The applicant has a DOGAMI operations permit and reclamation plan for an existing approved operation under a County conditional use permit, and will amend that DOGAMI permit and reclamation plan once it has received County approval for the proposed expansion of the quarry operations. DOGAMI is aware of the applicant's intention to seek approval to expand the mining operation and we expect approval from DOGAMI for the expanded operation. A condition of approval can be added to the approval of this application, requiring issuance of the amended DOGAMI permit prior to any expanded use under the County conditional use approval. This criterion is, or with the imposition of a condition of approval, will be met.

(Fish and Wildlife Areas and Habitats).

Approval Criterion: Policy 2.

2. To ensure that future development does not unduly conflict with Peripheral Big Game Range, the County shall:

a. require that review and conditional uses in the AF-20 zone be allowed only if they are found to be consistent with the maintenance of big game range;

b. require that review of conditional uses in the AF-20 zone be subject to clustering and siting criteria;

c. submit proposed review and conditional use applications to the Oregon Department of Fish and Wildlife for their comments on consistency with Peripheral Big Game Range and recommendations on appropriate siting criteria to minimize any conflict.

Findings: The applicant's site is within Peripheral Big Game Range as designated in the Comprehensive Plan. The ordinance has an AF-zone approval criterion (Section 3.522(5)) that requires that proposed development in the AF zone be consistent with the maintenance of big game range. Since the proposed mining expansion does not involve residential development, clustering and siting criteria do not apply. The County will submit the proposed expansion to the Oregon Department of Fish and Wildlife for their comments, which will be considered as part of the review process. The 1984 conditional use application determined that there would be minimal impact on wildlife (deer and elk) habitat. This expansion will not materially change the impacts of the already approved existing mining operation. Subject to a consideration of any comments made by the Oregon Department of Fish and Wildlife, this criterion is met.

Approval Criterion: Policy 4.

> 4. To protect riparian vegetation along streams and lakes not covered by the Forest Practices Act, the County shall require a setback for nonwater dependent uses.

Findings: There are two water courses on the applicant's property. One is in the southeasterly corner near the entrance to the site (which is not affected by the proposed expansion). A second intermittent and perennial stream runs seasonally from the westerly part of tax lot 1203 in a northerly direction to a pipe crossing under Highway 26 on tax lot 900. As is shown in the Site Plan, both streams will be protected because they are not in the extraction or general operation area and 50-foot setbacks will protect riparian vegetation. This criterion is met.

Goal 6. Air, Water and Land Quality.

Approval Criterion: Policy 12.

> The District Conservationist shall be used for technical evaluation of all development activities that could create erosion and sedimentation problems with his/her recommendations incorporated into planning approvals.

Findings: There is a general potential for erosion due to the steepness of the slope of the mined hillside, the road that accesses the mining activity, and the berms and stockpiles that are proposed. However, applicant's geologist indicates the steep slopes are stable due to the underlying basalt and all erosion sources can be controlled. Comments from the District Conservationist may be requested to confirm the geology report. This criterion is met.

Approval Criterion: Policy 13.

> Any development of land, or change in designation of use of land, shall not occur until it is assured that such change or development complies with applicable state and federal environmental quality statutes, rules, or standards.

Findings: The applicant believes that the only applicable state and federal environmental quality requirements that relate to the proposed mining operation are the requirements imposed by DOGAMI regarding mining, reclamation, and erosion control and the requirements of DEQ relating to storm water, noise control, and air quality as it relates to the use of a crusher. As is discussed above in the findings, DOGAMI is aware the applicant's proposed operation has expressed no obstacles to amending the current mining permit to incorporate the proposed operation. That permit amendment will also include any state permitting required for storm water control (DOGAMI implements DEQ's storm water permitting program for mining operations). Applicable DEQ noise requirements can be met, as documented in the report prepared by Daly-Standlee, the applicant's acoustical engineering firm. The only air quality issue concerns the operation of the portable crusher. The owner of the crusher, not the owner of the site at which the crusher is used, must maintain the permit needed to operate the crusher. The crusher the applicant expects to use (either Big River owned or third party owned) has an existing permit for the use of the crusher, a copy of which is included in the application. Based upon the above, the applicant and the proposed development can comply with this criterion. This criterion is met.

Goal 7. Natural Hazards.

Flood Hazard Policies.

Approval Criterion: Policies 1 - 11 address development in a Floodplain.

Findings: The only area of the applicant's property that has any flood hazard designation is an approximately 100 foot to 175 foot wide area adjacent to Highway 26 on tax lot 900, which is designated as a floodplain. It runs for a length of approximately 450 feet. None of this area will be disturbed as part of the excavation area for the mining operation. Therefore, none of the Flood Hazard Policies are applicable to this application.

General Mass Movement Policies.

Approval Criterion: Policy 5.

Projects that include plans for modifying the topography of sloping areas or established drainage patterns shall be evaluated in terms of the effect these changes would have on slope stability.

Findings: We incorporate our Goal 7 findings and the findings for Standards Document.S3.700 by reference herein. The only part of the proposed expanded mining operation that will change the topography of existing slopes or established drainage patterns affecting slope stability relates to changes that will be made as part of the extraction of the mineral resource. DOGAMI regulates this as part of its regulation of the mining operation, including the effects on slope stability. DOGAMI has approved the slope stability of the applicant's current operation and will review changes to the operation as they affect slope stability in the future. The report of applicant's registered geologist confirms slope stability on the site. This is a matter for DOGAMI regulation as part of its oversight of the mining operation. Other than the

modification of the hillside for the mining operation, no change in topography on the site will affect slope stability. Therefore, to the extent this criterion applies to this application, it is met.

Development Policies for Areas of Mass Movement.

Approval Criterion: Policy 2.

Access roads and driveways shall follow slope contours to reduce the need for grading and filling, reduce erosion, and prevent the rapid discharge of runoff into natural drainageways.

Findings: All roads used at the site follow, or will follow to the extent appropriate, slope contours to avoid exceeding grades for haul trucks and to reduce erosion. The existing access point at Highway 26 is flat. Applicant will make improvements as necessary to maintain slope stability. Storm water will be controlled onsite. This criterion is met.

Approval Criterion: Policy 3.

Loss of ground cover for moderately to steeply sloping lands may cause land slippage and erosion problems by increasing runoff velocity. Development on moderate to steep slopes should generally leave the natural topography of the site intact. Existing vegetation, particularly trees, should be retained on the site.

Findings: Interior quarry slopes must be benched pursuant to DOGAMI requirements to assure stability. The underlying basalt at this site is stable. Consistent with the mining plan, vegetation will be retained on external slopes to assist with screening and to limit erosion. Overburden will be saved for reclamation per DOGAMI requirements. This criterion is met.

Approval Criterion: Policy 4.

The County shall require a preliminary slope stability investigation in the following hazard areas:

a. Where detailed soils maps exist, in hazardous soils areas listed in Table 2;

b. Where no detailed soil maps exist, all areas which have slopes in excess of 25 percent.

Where the preliminary slope stability investigation indicates mass movement hazards on the site, a detailed site investigation report shall be prepared. The detailed report shall indicate the severity of the hazard and any recommended techniques that could be used to alleviate the hazard before structures, roads, and septic tanks are allowed in noncommercial forest lands.

Findings: Applicant's geologist has carefully examined the site and has determined that slope stability can be maintained throughout the mining process. We incorporate our findings from Standards Document Criteria S3.700 below. The site must be reclaimed to DOGAMI standards. This criterion is met.

Goal 12. Transportation.

Approval Criterion: **Policy 16.**

16. Roads in Clatsop County shall be designed, constructed, and maintained to:

a. Streets and roads in Clatsop County, excluding State highways, should be capable of ensuring unrestricted travel to and from a property.

b. Provide adequate, safe, and legal access with minimal public cost.

c. Place the burden of the costs on the benefited person(s).

d. Provide access for fire protection, ambulance, police, mail, school bus, public transit, and garbage services.

e. Provide for drainage ways and utility services.

f. Minimize, within the constraints of reasonable engineering practices and costs, the creation of roads within lands designated for Exclusive Farm Use, Forest Resource, Rural, and Rural Service Areas designated by the Clatsop County Comprehensive Plan.

g. Ensure that the new road will minimize interference with forest management or harvesting practices.

h. Minimize within the constraints of reasonable engineering practices and costs the loss of productive agricultural or forest land, and be located on that portion of such land that is least suitable for timber or agricultural production, taking into consideration, but not limited to, the following: topography, soil capability or classification, erosion potential, and the size and resultant configuration of the affected tracts.

i. Minimize the loss of important wildlife habitat, such as sensitive deer and elk range, identified natural areas, and other significant natural features.

Findings: The onsite haul truck routes will be entirely on private roads. Roads will be maintained, including graveling as necessary, to ensure that they are appropriate for heavy truck travel. Legal and ODOT-approved access is established at the site's current entry. Unrestricted travel to and from the property by the general public is prohibited. Existing and approved legal access is available at no cost to the public. As is currently the case, adequate access and travel lanes exist for fire protection, ambulance, police, mail and other services. There will be no school buses or public transport on the site. All the elements of an onsite haul truck system are in place and modifications will occur as the mining footprint changes due to ongoing operations. Road construction and maintenance will not interfere with forest management or harvesting practices and in fact, the transportation system depends on the upkeep and maintenance of forest harvest roads. No productive agricultural or forest lands will be lost to new roads on the site. Applicant's preferred alternative does not require any road construction and, therefore, there will be no loss of wildlife habitat or identified natural areas or any other significant natural features. These criteria are met.

STANDARDS DOCUMENT.

S2.012 Clear Vision Area.

This provision provides for a clear vision area (with no plantings, fence or structures) at the corners of all property, at the intersection of two streets, or the intersection of a street and a railroad. There is no intersection of two streets or a street and a railroad on the site and this standard does not apply.

S2.200 Off-Street Parking Required.

Sections 2.200 through 2.212 involve parking space and loading requirements. There is no specific level of parking required for a quarry operation. The closest category of use is an industrialized type of development that requires one parking space per employee on the largest shift. At peak operation, Big River estimates the largest shift at the Ordway Quarry to be five workers. Parking areas with at least five parking spaces will be designated near the existing scale house and the quarry floor, as necessary. Parking spaces are located strategically onsite and are not shared by other users. Parking spaces are not located in any required front or side yard setback area abutting a public street. Parking areas will not be used for storage or display of vehicles and materials. An onsite parking plan is submitted with the application. Parking spaces will have adequate aisles and turnaround space for all vehicles, including emergency vehicles. Parking spaces will be designed and constructed to facilitate the flow of traffic on and off the site. All parking areas will be graveled and adequately maintained for all-weather use and to allow percolation of storm water and elimination of sheet flows. Parking spaces will be permanently marked with signs, if required by the County in an active quarry area. Wheel stops and bumper guards are not appropriate for a quarry use because of the need for vehicles to drive through and maneuver. Any artificial lighting on the site will be directed away from adjoining dwellings and living units. Because loading of rock is integral to the operation of a quarry, there will also be designated loading areas onsite that are well in excess of the loading facilities requirements in the Standards Document. The parking and loading standards are met.

S2.300 Sign Requirements.

This portion of the standards document discusses guidelines and restrictions on additional signage. The current Big River quarry operation has a sign that complies with the requirements of this section. The sign will not be changed or altered with the proposed expanded use. *This standard is met.*

S2.503 Erosion Control Plan.

Approval Criterion:

S2.503(1) An Erosion Control Plan shall be required for land disturbing activities, in conjunction with a development permit.

Findings: An erosion control plan is attached. We request erosion control approval as part of this application.

Clatsop County Standards Document Sections S2.503 and S2.504 lay out the requirements for erosion control plans in the design and operations standards and requirements for erosion control plans. Big River has prepared and submitted an erosion control narrative and erosion control plan map as part of the PAPA application. In general terms, the erosion control plan calls for retention of vegetation along the easterly, northerly and westerly boundaries of the site. In addition, the plan will rely on the stable nature of the basaltic rock and interior benching to control erosion on the interior portions of the quarry proper. As indicated in the geologist's report and again on the erosion control map, there are sufficient areas in the western portions of the site for storm water control basins to control erosion and run-off. The primary method of controlling erosion will be to direct water from interior quarry operations into the quarry pit for appropriate disposal either through fracturing the base of the quarry to facilitate percolation or through removal into sedimentation ponds as necessary. In no circumstances will any sediment, storm water or erosion material enter any of the water courses in the general area, including Vollmer Creek or the Necanicum River. As indicated on the erosion control map, significant vegetative buffers exist on all sides of the extraction area and provide a sufficient buffer for elimination of erosion.

As further indicated in the report of the Registered Geologist, the quarry area is underlain by a hard basalt which is resistant to erosion. Hard rock minimizes sedimentation issues. Overburden piles will be stored and vegetated as necessary to ensure that erosion occurs and storm water does not leave the site. The application area is not within a beach or dune area.

In addition, in compliance with standard DOGAMI operating procedures, the vegetative cover currently in place on the site will remain in place on a declining basis as the project progresses over the years. Retention of this vegetation greatly reduces the possibility for erosion and sedimentation. Big River will obtain the appropriate water quality permit for storm water run-off at the site. Erosion control measures, including the retention of buffers, internal direction of storm water and sediment basins, will ensure that storm water, sediment and erosion do not affect adjacent properties. Consistent with reclamation requirements at DOGAMI, upon

the completion of quarry operations, the stockpiled overburden will be broadcast over the site and the area will be replanted. At this time, Big River does not see the need for the installation of filter barriers, filter fences, straw bales, or equivalent control measures. However, these measures are available on a spot basis as needed to ensure that erosion and sedimentation do not occur. All of the internal haul truck roads will be graveled which will allow for percolation of precipitation and reduce mud, dirt and other sediment. The lip of the existing access is paved to ensure there is no track-out of mud or other sediment onto Highway 26. We note that one of the County's erosion standard requires that "storage piles" containing more than 10 cubic yards of material should be covered with a sediment blanket. This is impracticable for a quarry operation which could potentially have storage stockpiles of several hundred yards of crushed material that are actively worked and replenished. As these storage piles are part of the core business of the quarry, a blanket or other impervious cover is inappropriate. However, Big River will situate stockpiles in areas where any run-off may be controlled so erosion and sedimentation will be minimized.

Sedimentation and erosion control is an active process at the Ordway Quarry for Big River. During the rainy season, the company frequently inspects and takes corrective action as needed. This can include hay bales, sediment fencing, mulching, seeding and removal of sediment build-up behind barriers. The design and operations standards of the LWDUO related to erosion control are met by this application.

S3.509. Not Force Significant Change.

Approval Criterion: Section S3.509.

Certain uses in the F-80, AF, and EFU zones may only be approved subject to these standards:

1. A use proposed on agricultural land requiring compliance with this section may be approved only where the County finds that the use will not:

(a) Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; or

(b) Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.

A use proposed on forest land requiring compliance with this section may be approved only where the County finds that the use will not:

Force a significant change in, or significantly increase the cost of, accepted farm or forest practices on agriculture or forest lands; or

Significantly increase fire hazard, significantly increase fire suppression costs, or significantly increase risks of fire suppression personnel.

An applicant for a use requiring compliance with subsection (1) may demonstrate that the standards for approval set forth in subsection (1) of this section will be satisfied through the imposition of conditions. Any conditions so imposed shall be clear and objective.

Findings: As indicated in this application, none of the properties in the general area are used for directed agricultural purposes. Some properties in the area may have an occasional fruit tree or cane berry patch, but there is no commercial agriculture in any of the surrounding properties. On the property immediately to the south, there is a barn that is used for horses. Practices associated with these small non-commercial agricultural activities would include pruning, harvesting, occasional spraying and mowing. Practices associated with keeping horses would include feeding, exercise and manure disposal. As indicated previously, Big River works with the horse property owner to accept excess horse manure that is used as a soil amendment on the Big River property. We are aware of no portion of our activities which causes problems or difficulties with keeping horses on the neighboring property. The ongoing mineral and aggregate extraction activities on the site have not forced any change in the accepted practices related to horses on the adjoining property. In addition, Big River's practice of accepting excess manure as a soil amendment helps decrease the cost of maintaining horses on the property as the manure would have to be disposed of in some other manner and transferred a greater distance. Accordingly, to the extent there are any farm uses or farm practices on adjoining properties, continuing mineral and aggregate activities on the Big River site will not force a significant change in any accepted farm practices on surrounding lands devoted to farm use nor will mineral and aggregate extraction significantly increase the cost of accepted farm practices on surrounding lands devoted to farm uses. We incorporate our finding under county and statewide Goals 3 and 4.

The land generally north, south and west of the proposed extraction and processing area is zoned F-80, and is owned by Weyerhaeuser and managed for timber production. Timber practices in the area include harvesting, thinning, application of fertilizers, application of herbicides, construction of roads, extraction of rock for roads, skidding, bucking, piling and transporting of raw forest materials to offsite processing mills. The proposed operation will not significantly change the basic nature of the current forestry operations in the general area and, for that reason, will not force a significant change in accepted forest practices or significantly increase the cost of accepted forest practices, fire hazards, or suppression costs. Moreover, mining in general, and the uses accessory to mining, are not incompatible with forest practices. First, mining is part of normal forestry practices and essential to constructing forestry

roads. Second, mining is not a sensitive use (such as residential use) that might be adversely impacted by the impacts of forest operations. Conversely, the types of activities associated with mining operations (types of machinery used, noise associated with such use, movement of soil and earth, and trucks, etc.) are virtually the same types of activities associated with timber operations. Because of the similarity of the types of activities associated with forestry and mining uses, and the fact that this application expands an existing mining operation, the proposed use will not force a significant change in, or significantly increase the cost of, accepted forest practices, nor will it increase fire hazard, fire suppression costs, or significantly increase risks to fire suppression personnel. With regard to fire hazards, Big River will necessarily clear extraction areas of combustible materials as part of its mining operations. The extraction area will serve as a firebreak. In addition, Big River will have heavy equipment on the site, including a water truck, that can aid in fire suppression if required. This criterion is met.

S3.516. Mining in EFU and AF Zones.

Approval Criterion: S3.516 1.

A land use permit is required for mining more than 1,000 cubic yards of material or excavation preparatory to mining of a surface area of more than one acre. The County may set standards for a lower volume or smaller surface area than that set forth in this subsection.

Findings: The proposed operation will involve mining more than 1,000 cubic yards of material, so this criterion applies. However, upon the approval of this application, this criterion will be met.

Approval Criterion: S3.516 2.

A permit for mining of aggregate shall be issued only for a site included on an inventory in an acknowledged Comprehensive Plan.

Findings: This site is included on the Clatsop County Comprehensive Plan Aggregate Site Inventory as a "Primary Use Subject to Conditional Use Approval." The Comprehensive Plan is acknowledged by the State Land Conservation and Development Commission. As part of this application, the site will be transferred to the County's significant sites inventory. This criterion is met.

S3.517. Standards for Uses in the F-80, AF and EFU Zones in Areas of Major or Peripheral Big Game Range.

Approval Criterion: Section S3.517(2).

To ensure that future development does not unduly conflict with Peripheral Big Game Range, the County shall:

(A) Conditional uses in the AF zone may be allowed only if they are found to be consistent with the maintenance of big game range;

(B) Proposed Review and Conditional Use applications shall be submitted to the Oregon Department of Fish and Wildlife for their comments on consistency with Major Big Game habitat and recommendations on appropriate siting criteria to minimize any conflicts; and

(C) All proposed Plan and zone changes of land zoned F-80, EFU or AF to a more intensive zone shall be submitted to the Oregon Department of Fish and Wildlife for a determination of possible conflicts with big game habitat requirements. If the Department identified conflicts, the County will consider recommendations for resolving these conflicts.

Findings: The applicant's property is within the Peripheral Big Game Habitat. The approval of the conditional use on tax lot 101 in 1984 considered the impact on big game and concluded that the operation was compatible with the big game habitat. The operation proposed in this application will affect the AF-20 zoned portion of tax lot 1203, where associated operations will occur. However, quarry activities will still be consistent with maintenance of the peripheral big game range, as is more fully discussed in the findings for Statewide Goal 8 below. In light of the fact that the proposed activity is not materially different than the existing approved mining operation, the proposed additional operations will not change the current impacts on peripheral big game habitat and the use is not inconsistent with the maintenance of that habitat. No fences or dwelling to interfere with big game movement will be constructed. Big game currently traverses the quarry site and will continue to do so in the future. ODF&W input will be requested as part of this application. This criterion is met.

S3.700. Geologic Hazard Requirements.

Findings: Section 3.700 of the Clatsop County Standards Document provides detailed requirements for addressing potential geologic hazards. Among other things, the Standards Document requires a detailed site investigation for geologic hazard areas prepared by a registered geologist and addressing numerous standards including time spent investigating, topography and geology, site history and the relationship of soil and vegetation on the site. This standard requires a topographic map of the site with detail showing unusual features related to geology and geologic hazards. The provisions also require a subsurface analysis, stabilization program, description of potential safeguards, related geologic hazards and information related to groundwater. (See Standards Document, S3.701 through S3.708.) As part of the geology report of Environmental Science Associates, a detailed geologic hazard analysis is provided for the site. The geologic report notes that the entire general area where the quarry is located is classified by DOGAMI as a geologic hazard area with potential slide areas enumerated as well.

Applicant's geology report reflects that a registered geologist spent over 100 man hours in the quarry area and performing a significant amount of drilling through the geologic structure on the site. The registered geologist also reviewed aerial photographs, maps and the existing face of the Ordway Quarry. Based on all this information, the registered geologist

provides a detailed review of the geology of the area and is able to eliminate concern with regard to geologic hazards and slides. It is the registered geologist's opinion that the steep slopes on portions of the site automatically generated the DOGAMI geologic hazard and slide overlays and that no individual from DOGAMI specifically reviewed the underlying geology for stability. The Registered Geologist's opinion is that the weathered and unweathered basalt underneath the site is stable and not subject to erosion, slide or geologic hazard. The Clatsop County Comprehensive Plan recognizes that mineral and aggregate resources are rare in the county and this is one of the rare areas with a stable geologic foundation that, notwithstanding steep slopes on portions of the site, is inconsistent with geologic hazards or slides. Accordingly, all of the criteria in S3.700 related to the geologic hazards are met by this application.

S4.011. **Approval Criterion**: Standards for Area Protection Conditions.

When the imposition of discretionary standards is authorized to avoid detrimental impacts to the public, the standards should be designed to:

(1) Designate the size, number, location and nature of vehicle access points.

(2) Increase the amount of street dedication, roadway width or improvements within the street right-of-way.

(3) Protect vegetation, water resource, wildlife habitat or another significant natural resource.

Findings: Conditions may be added to the PAPA approval to ensure that quarry activities meet the requirements for area protections. As indicated in the application narrative, Big River has designated an ODOT-approved access at the existing Big River access point at mile post 2.66. If average daily truck deliveries can be slightly increased, an option may be possible for a circular one-way haul truck route with an alternative exit at the existing Weyerhaeuser access at Vollmer Creek Road (mile post 2.26) or alternative exit at mile post 2.50. No additional street width dedication, roadway or improvements in street right-of-way are necessary given the ODOT-approved existing quarry access. Big River commits to take significant steps to protect vegetation, particularly in the buffer areas along Highway 26 and Vollmer Creek Road. The protection of this vegetation will ensure that water resources (e.g., the Necanicum River and Vollmer Creek) are protected. Vegetated areas on the site will be maintained, consistent with mining activities, to continue to provide corridor areas for wildlife habitat. In addition, Big River requests protection for the significant Goal 5 mineral and aggregate resource on the site. To the extent this criterion are approval criterion, they are met by the application.

S4.400. Rock and Mineral Resource Use.

Approval Criterion: S4.401.

Purpose. Development Standards--Extraction Area. A development plan shall be submitted to the County Planning Department for any activity allowed as a conditional use. The development plan shall provide the necessary documents, permits, and maps to demonstrate compliance with the following standards and requirements.

Findings: The applicant has submitted, in this application narrative and the documents accompanying it, maps, site plans, and other documents sufficient to show that the applicable approval criteria for the proposed expansion of the existing approved mining operation are met. As indicated above, no conditional use is necessary or requested through this PAPA process. This criterion has been met.

S4.401 (1). Screening and Fencing.

> **Approval Criterion**: S4.401 (1)(A). An earthen berm and buffer of existing or planted trees or vegetation shall be maintained to fully screen the view of any mineral and aggregate activity and all related equipment from any public road, public park, or residence within 1,000 feet. Where screening is shown to be impractical because of topography or other physical characteristics of the site, the screening requirements may be waived by the Community Development Director.

Findings: The site is generally screened from Highway 26 and the residential areas to the east/north by trees along Highway 26. As part of the operational plan for the quarry, the quarry operations will be reoriented. As the quarry floor is lowered, this will allow the operator to use the existing contour of the land to screen uses to the east/northeast by retaining a lip of the mineral deposit. This will also allow for the retention of the existing vegetation on the undisturbed areas of the site. Because of the southeast orientation of past quarrying activities, it is not fully possible to screen the southeast corner of existing quarry operations from westbound traffic on Highway 26. The entrance to the property provides a break which allows passing cars to see the southeast corner of the existing quarry operation. There is a row of trees at the access (mile post 2.66) and this row of trees assists in screening the southeast corner but cannot completely hide quarry operations. As such, the physical characteristics of the site prevent it from being entirely screened from Highway 26. However, as the mining plan advances and orientation of the quarry is reset, future operations will begin to be screened by the contours of the retained rock lip on the east side of the expansion area. Retention of existing vegetation will maximize screening. This standard is met.

> **Approval Criterion**: S4.401 (1) (B). Screening and Fencing. Sight obscuring fencing or approved barrier type shrubs shall be required to eliminate any safety hazards that use of the site may create. Fencing, if required, shall be sight obscuring and a minimum of six feet high.

Findings: Because the operator owns buffer areas between Highway 26 and the quarry and there are significant Weyerhaeuser buffers to the west, fences will not be necessary. All the access points to the quarry are behind locked road gates. Fences are also incompatible with wildlife use. Based upon the above, no fencing is required and this criterion has been met.

S4.401 (2). Access.

Approval Criterion: S4.401 (2)(A). All private access roads from mineral and aggregate sites to public roads shall be paved or graveled. If graveled, the access road shall be graded and maintained as needed to minimize dust.

Findings: All internal roads are graveled. The gravel portion of the access road is checked regularly and graded as appropriate to assure that it is adequately maintained as safe and convenient for vehicular use. During dry periods, the graveled roads are watered as needed to minimize dust leaving the site. This criterion has been met.

Approval Criterion: S4.401 (2)(B). [Improvement Fees]

Findings: Traffic on the roads from mining activity will be insufficient to warrant offsite improvements. As indicated in the application, Big River will not increase its truck traffic from the site above the ODOT-approved access criteria. Accordingly, no improvements or fees will be necessary. To the extent this standard is applicable, it is met.

Approval Criterion: S4.401 (2)(C). Any internal road at a mineral and aggregate site within 250 feet of a Sensitive Use shall be paved or graveled, and shall be maintained at all times to reduce noise and dust in accordance with County or DEQ standards specified in the ESEE analysis.

Findings: The access road, as it approaches Highway 26, is the only internal road within 250 feet of a sensitive use. Gravel roads on site are no closer than 300 feet from any residence. As discussed in these findings, the graveled portion of the access road will be maintained to reduce dust. In addition, the speed of the trucks on portion of the site will be limited to a maximum of 15 mph to reduce noise and dust. Because noise and dust are minimized under Goal 5, no ESEE initial conflict analysis is necessary. The existing quarry access is gated. This criterion has been met.

Approval Criterion: S4.401 (2) (D). An effective vehicular barrier or gate shall be required at all access points to the site.

Findings: There is a gate across the existing access road. If the Vollmer Creek Road exit option is used, Vollmer Creek Road is gated. If the mile post 2.50 option is used, a gate will be constructed. This criterion is met.

S4.401 (3). Hours of Operation.

Approval Criterion: S4.401 (3)(A). Blasting shall be restricted to the hours of 8 a.m. to 5 p.m. Monday through Friday. No blasting shall occur on Saturdays, Sundays, or any recognized legal holiday.

Findings: The applicant has requested authorization to do controlled blasting. If it is allowed, the controlled blasting will be restricted to the specified hours. 24-hour notice will be provided to all neighbors before any controlled blast. This criterion is met.

> **Approval Criterion**: S4.401 (3)(B). Mineral and aggregate extraction, drilling, processing, and equipment operation located within 1,000 feet of a Sensitive Use is restricted to the hours of 7 a.m. to 6 p.m. Monday through Friday, and 8 a.m. to 5 p.m. Saturday. All other sites are limited to operating hours of 7 a.m. to 10 p.m. Monday through Saturday. No operation shall occur on Sundays or recognized legal holidays.

Findings: There are residences (Sensitive Uses) within 1,000 feet of the site. The applicant agrees to limit the hours of operation for the expanded use to the hours of 7 a.m. to 6 p.m. Monday through Friday and 8 a.m. to 5 p.m. on Saturdays with no operations on Sundays or recognized legal holidays. This criterion is met.

> **Approval Criterion**: S4.401 (3) (C). An increase in operating time limits shall be granted for all activities except blasting if:
>
> 1) There are no Sensitive Uses within 1,000 feet of the mining site; or if
>
> 2) There are Sensitive Uses within 1,000 feet, the increased activity will not exceed noise standards established by the County or DEQ; and
>
> 3) The operator shall notify the owners and occupants of all Sensitive Uses within 1,000 feet by first-class mail, which is mailed at least 96 hours prior to the date and approximate time of the activity for which the operator receives an exception.

Findings: As indicated in the criterion above, applicant will comply with general hours of operation restrictions contained in the Clatsop County Standards Document at Section S4.401 (3)(B). This particular criteria anticipates that there may be emergency situations or special situations that arise (e.g., night-time roadwork, around-the-clock emergency response for flood or hazard situations) that might give rise to a special need for extended hours. As indicated in the noise study of Daly-Standlee, the proposed operations at the Ordway Quarry will meet all DEQ standards at all residences in the area. If Big River were called upon to participate in emergency response operations or other special situations that required an extension of hours of operation, Big River would follow the provisions of this section. This criterion is not applicable to this application and if special situations were to arise, this section can and would be met by Big River. Accordingly, to the extent this standard applies, it is met.

S4.401 (4). Environmental Standards.

Approval Criterion: S4.401 (4)(A). DEQ Standards. Mineral and aggregate extraction, processing and other operations shall conform to all applicable environmental standards of the County and State. Any crusher, asphalt, concrete, ready-mix, or other machinery shall submit an approved DEQ permit(s) at the time of development plan application.

Findings: We incorporate our findings under Goal 6 by reference herein. The applicant has an existing storm water permit and DOGAMI permit. The applicant will use its own crusher or will contract with a crusher operator when crushing is needed. The appropriate DEQ air quality permit for the crusher will be in place at all times. Asphalt and concrete plants are not requested. This criterion is met.

Approval Criterion: S4.401 (4)(B). DOGAMI Standards. Mineral and aggregate extraction, processing, other operations and site reclamation shall conform to the requirements of the Department of Geology and Mineral Industries (DOGAMI).

Findings: The applicant has a valid DOGAMI permit for the existing operation. The applicant has advised DOGAMI of its intent to expand the operation, and DOGAMI has stated that the current permit will have to be amended to mine in the expanded area after County approval has been obtained. DOGAMI has not identified any reason why an amendment to expand the mining area would not be granted. Subject to a condition of approval that requires the applicant to obtain a DOGAMI permit for the expansion before beginning operation in the expanded area requested by this application, this criterion has been met.

Approval Criterion: S4.401 (4)(C). Permits Required. Mining shall not commence until all applicable State and Federal permits, if any, are provided to the County.

Findings: Applicant will have all necessary permits before operations on the expanded area commence. As indicated above, applicant will apply to revise its DOGAMI permit after County land use approval is final. This criterion has been or will be met.

Approval Criterion: S4.401 (5). Equipment Removal. All surface mining equipment, machinery, vehicles, buildings, man-made debris, and other material related to the mineral and aggregate activity shall be removed from the site within 30 days of completion of all mining, processing, and reclamation, except for structures which are permitted uses in the underlying zone.

Findings: This standard is not yet applicable. The mining of this site will continue many more years. When mining does cease, applicant will comply with this requirement. If appropriate, a condition of approval can be added to the decision on this

application to require this. DOGAMI also requires equipment removal as part of reclamation. This criterion can and will be met.

> **Approval Criterion**: S4.401 (6)(A). The operator of a mineral and aggregate site shall provide the County with annual notification of DOGAMI permits.

Findings: The applicant will provide the County with annual notification of DOGAMI permits as it has in the past. A condition of approval can be added to the decision on this application to require this. This criterion can and will be met.

> **Approval Criterion**: S4.401 (6)(B). Mineral and aggregate operations shall be insured for $500,000 against liability and tort arising from production activities or operations incidental thereto conducted or carried on by virtue of any law, ordinance or condition, and such insurance shall be kept in full force and effect during the period of such operations. A prepaid policy of such insurance which is effective for a period of one year shall be deposited with the County prior to commencing any mineral and aggregate operations. The owner or operator shall annually provide the County with evidence that the policy has been renewed.

Findings: Insurance in the amount of $1,000,000 per incident and $2,000,000 total is currently maintained by the applicant, and will continue to be maintained. The County will be provided evidence of this insurance on an annual basis. A condition of approval can be added to the decision on this application to require this. This criterion can and will be met.

> **Approval Criterion**: S4.401 (7). Significant Resource Area Protection. Conflicts between inventoried mineral and aggregate resource sites and significant fish and wildlife habitat, riparian areas and wetlands, and ecologically and scientifically significant natural areas and scenic areas protected by Clatsop Plains Community Plan or other provision of the County Comprehensive Plan, shall be addressed in the application and findings for the conditional use.

Findings: The area is not located in the Clatsop Plains. There are no protected and identified riparian areas, wetlands, ecologically and scientifically significant natural areas or scenic areas in the vicinity of this application. The Necanicum River has significant fish and wildlife habitat. The quarry is classified as peripheral big game habitat. As we discussed in this application narrative and the findings herein, fish habitat in the Necanicum River is fully protected by a significant buffer, and all quarry activities will be conducted on the opposite side of Highway 26 from the Necanicum River. In addition, Big River will maintain setbacks on the east side of Highway 26 to ensure there are no effects on the Necanicum River. The existing quarry operations are ongoing and do not have an adverse effect on big game habitat in the area. Elk regularly traverse the quarry. Expanded quarry operations will have no effect on the peripheral game habitat. These issues have been addressed in the application and the findings related to this criterion in the application document. To the extent that this criterion has a substantive approval criterion, it can and will be met by the application.

Approval Criterion: S4.401 (8). Site Reclamation. A reclamation plan shall be submitted concurrently with the development plan required in Section 4.418. The reclamation plan shall include a schedule showing the planned order and sequence of reclamation, shall assure that the site will be restored or rehabilitated for the land uses anticipated after the quarry operation, and shall meet DOGAMI requirements.

Findings: Applicant's proposed preliminary reclamation plan narrative is attached as part of this application. In Clatsop County, reclamation is under the exclusive control of DOGAMI. Pursuant to the requirements of the County land use planning documents, DOGAMI may not consider its reclamation permit application until after the County has made a final land use decision. As such, we have provided a preliminary reclamation plan with conceptual ideas on how reclamation will occur. A final reclamation plan will be submitted to DOGAMI for its approval. DOGAMI will bond the site to ensure that reclamation will occur. Big River may not proceed on the expansion area until a DOGAMI permit is obtained, and a condition to this effect is requested. This standard is met.

Approval Criterion: S4.401 (9)(A). Surface water shall be managed in a manner that meets all applicable DEQ, DOGAMI, and ODFW water quality standards. Approval may be conditioned upon meeting such standards by a specified date. Discharge across public roads shall be prohibited. Existing natural drainages on the site shall not be changed in a manner which substantially interferes with drainage patterns on adjoining property, or which drains waste materials or waste water onto adjoining property or perennial streams. Where the mineral and aggregate operation abuts a lake, river, or perennial stream, all existing vegetation within 100 feet of the mean high water mark shall be retained unless otherwise authorized in accordance with the ESEE analysis and the development plan.

Findings: The applicant has an approved storm water permit for its existing operation, and will amend that permit as needed for the expanded operation. DOGAMI coordinates with DEQ on the issuance of that permit. A condition of approval can be added to the decision on this application to require that any permit amendment needed for the expanded activity be obtained as required by the permitting agency at the time the DOGAMI reclamation permit is requested. The applicant's expanded activity will not discharge any surface water across public roads. All water will be handled onsite, with any excess run-off from the mined area directed into the quarry floor area or supplemental to settlement ponds. The extraction operations do not abut any lake, river or perennial stream, but vegetation buffers will be preserved onsite around the extraction area. The existing natural drainage will not be changed in a manner that affects other property or drains waste material into other properties or perennial streams. This criterion can and will be met.

Approval Criterion: S4.401 (9)(B). All water required for the mineral and aggregate operation, including dust control, landscaping and processing of material, shall be legally available and appropriated for such use. The applicant

shall provide written documentation of water rights from the State Department of Water Resources and/or local water district prior to any site operation.

Findings: Big River has analyzed its need for water on the site for all purposes, including dust suppression. Because of the small size of the site and because of the relatively small volume of material generated at the site, our average water usage over the years has been significantly less than 5,000 gallons per day on an annual average. Because of the relatively small size of the operation, Big River has easily met all water requirements for dust control and other uses on the site through the use of a water truck which obtains water from commercially available sources. Big River will continue this aspect of its operation. However, if required, Big River may obtain sufficient water for its entire operation (up to 5,000 gallons per day) through an onsite exempt use well. Oregon statute (ORS 537.545(1)(f)) provides that a registration, certificate of registration, application for a permit, permit, certificate of completion or groundwater rights certificate is not required for the use of groundwater for any single industrial or commercial purpose in an amount not to exceed 5,000 gallons per day. This exemption is available and allows Big River, without a permit from the Water Resources Department, to drill a well and provide onsite water in sufficient quantities to meet all dust control and operational purposes. Accordingly, this standard is met.

Approval Criterion: S4.401 (10). Floodplain. Any quarry operation located wholly or in part in a Special Flood Hazard Area is shown on the Federal Insurance Rate Map (FIRM) shall receive approval in accordance with Section 4.000 of this Ordinance prior to any site operation.

Findings: As indicated in this narrative, the County's flood maps indicate that there are small portions of Big River's property to the immediate west of Highway 26 that are considered to be within the flood plain. However, these areas are not within the quarry operational area. Big River has deliberately planned its operation to ensure that any of the flood plain areas are in a setback and that quarry and mining operations will not occur in a flood plain area. Section 4000 of the LWDUO primarily relates to residential or commercial construction in the flood plain. (See General Standards Section 4.028.) There will be no subdivision or residential building anywhere in the flood plain and, therefore, there is no requirement to consider foundation protections, flood elevation restrictions, anchoring of manufactured homes or the provisions of Section 4000 of the LWDUO. The Ordway Quarry is not in a coastal high-hazard area. Accordingly, this standard, to the extent it is applicable, is met.

Approval Criterion: S4.500. Protection of Riparian Vegetation.

Findings: The standards development document, S4.501 and S.4.504 provide general guidelines and specific development standards for protection of riparian vegetation. In general, lakes, reservoirs and river segments outside the estuarine or coastal shoreline areas require a 50-foot wide riparian vegetation zone. Wetlands receive the same treatment under the standards document. Development standards include locating all structures outside the riparian zone and standards on how to maintain riparian vegetation. The provisions specifically do not apply to actions covered by the Oregon Forest Practices Act. As indicated in the application

document, the main riparian zones in the area are separated from the site by significant roads. The Necanicum River to the north and east is separated from the site by Highway 26 and significant buffers on both the westerly and easterly sides of Highway 26. Vollmer Creek is separated from the site by Vollmer Creek Road and, again, there are significant buffer zones on both the westerly and easterly sides of Vollmer Creek Road. As indicated on the site plan map, the actual extraction area is elevated on a hillside and is separated entirely from any water course, riparian areas, or other water feature by significant vegetative buffers. To the extent that these criteria are applicable, they are met by the proposed application.

> **Approval Criterion:** Chapter 5. Vehicle Access Control and Circulation. S5.030 through S5.041 provide the County's general guidance and standards for vehicle access control and circulation, as well as for pedestrian and bicycle access and circulation.

Findings: These standards are generally directed to residential uses and residential developments, such as subdivisions, which are not involved in this land use application. Access from the site will be directly to a state highway and ODOT has sole jurisdiction over all the proposed access points in the application per the County's Transportation System Plan. As indicated in the materials in the traffic study, the quarry has ODOT-approved access and will operate within the parameters of this approved access. To the extent that the County's access and pedestrian standards are applicable, they are met by the proposed application. As indicated in the application, pedestrian and bicycle access are inconsistent with ongoing quarry operations due to safety concerns, but the quarry will have no effect on the ability to address pedestrian and bicycle issues along Highway 26 in the future. To the extent these standards are applicable, they are met.

> **Approval Criterion:** Chapter 6. Road Standard Specifications for Design and Construction.

Findings: Chapter 6 of the County's Standards Document discusses road standards and specifications for design and construction of roads. These road standards are heavily weighted to subdivision developments and new developments when new roads or access points are created to ensure there is safe access, that the roads can provide access for residential services and to provide guidelines for proper improvements. In addition, the standards seek to minimize, within constraints of reasonable engineering practices and costs, the creation of roads and lands within forest resource areas designated by the Clatsop County Comprehensive Plan. The application for the Ordway Quarry provides no subdivision or any type of land partition or urban, commercial or residential development. Even if ODOT allows the alternative one-way circular haul truck option, no new roads will need to be constructed to serve the quarry operations. Existing private (locked and gated) forest roads and existing access points to Highway 26 will be used. ODOT has direct jurisdiction over the access points to Highway 26 and Big River (and/or Weyerhaeuser if the alternative is an option) will retain jurisdiction over the private road network. As discussed elsewhere in the application, the roads will be graveled and maintained to allow efficient operation and reduce impacts such as noise and dust. In the event the alternative access point at mile post 2.50 is used, a connecting road will be a dedicated

private road designed to accommodate one-way heavy truck traffic and minimize erosion. Using the existing access as proposed, or under either access alternative, the road system serving the Ordway Quarry will be capable of providing unrestricted travel to and from the property, provide safe, adequate and legal access, ample and adequate access for fire protection, and other emergency services such as ambulance and police, as well as nonemergency services such as mail and garbage services. There will be no school buses or public transportation allowed on the site. To the extent they are applicable, these standards are met by the proposed application.

Applicable Criterion: Chapter 7. State and Federal Requirements Section.

Findings: The Clatsop County Standards Document refers to a number of state and federal requirements which may have general applicability through general County policy guidelines. Some of the policy guidelines are clearly not applicable to the project (e.g., agriculture, policy, 20.1, # 3, estuarine construction, policy 20.8, # 5, minimum stream flows for fish and wildlife habitat, shallow-draft ports and marinas, aquaculture standards, industrial ports and facilities, log dump sort and storage, navigational structures, residential uses, solid waste disposal, utilities, dike structures, dredging-related policies, and shoreline stabilization). Other aspirational policies have peripheral impact and require a brief explanation. The Riparian Environment policy (policy 20.10, #6) states that through a number of federal and state laws and entities, riparian environments are to be protected from development pressure. As indicated in the application, all riparian areas will be protected by significant setbacks that are vegetated. The forest and forest products industry standards (policy 20.12, # 3) are specifically related to water quality and habitat related restoration from logging practices. Although timber will be removed from the site prior to excavation on the site (as described more fully herein on a phased basis), there will generally not be any forest practices directly associated with the mining and none of the mining activities will affect any water quality or stream habitat issues. There are no identified significant natural areas or significant scientific or historical, cultural or archaeological resources on the site. The resource that will be extracted is a weathered and hardened basalt and current activities have indicated no special significant attributes related to any of these factors related to the policies in this section. Water quality maintenance standards (policy 20.12, #1) address non-point pollutant discharges. The only identified pollutant discharge that is possible from the site, as indicated in the application, is erosion and sedimentation runoff. This will be controlled by internal sloping in the quarry proper or by onsite sedimentation basics, as necessary. In addition, there are vegetated buffers that surround the site to prevent sedimentation. The mining/mineral extraction provisions in this section are primarily oil and gas related and are not applicable. None of these Chapter 7 policies are affirmative approval policies and none of them apply to the proposed application.

CONCLUSION.

As demonstrated by the above application narrative and the accompanying submissions by the applicant, all relevant criteria of the County Comprehensive Plan LWDUO and Standards Document are met and the applicant requests approval of the application.

STATEWIDE PLANNING GOALS

As part of the Goal 5 analysis and Comprehensive Plan amendment process, the applicability and requirements of the 19 statewide planning goals must be assessed. Discussion of the statewide planning goals has two purposes. First, goals must be addressed when a Comprehensive Plan change is requested. We are requesting the addition of the Big River and Weyerhaeuser property to the County's significant sites inventory in the Comprehensive Plan, and we must address the goals. Second, as an independent part of the Goal 5 process, statewide planning goals must be taken into consideration.

Statewide Goal 1

Goal 1 requires the development of a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process.

Findings: The Clatsop County Land and Water Development and Use Ordinance and Comprehensive Plan provides specific mechanisms for notice and citizen involvement both on a group and individual basis. This particular application will require hearings before the Clatsop County Planning Commission and the Clatsop County Board of Commissioners. Such hearings will be announced to the public with appropriate notice to citizens, agencies, neighbors and other interested parties. The County's procedures in evaluating Big River's PAPA request will provide ample opportunity for citizen involvement in all phases of this application and will ensure compliance with Statewide Goal 1.

Statewide Goal 2

Goal 2 requires the land use planning process and framework be established as the basis for all decisions and actions related to use of the land and also requires that there be an adequate factual basis for decisions and actions in the land use planning process.

Findings: The Goal 5 administrative rule provides the process and policy framework for post-acknowledgment plan amendments for the consideration of mineral and aggregate land use applications. The requirements of Oregon Administrative Rules Chapter 616, Division 23 control the process and provide detailed guidelines for decision making. The Oregon Administrative Rules ensure that there will be detailed information placed in the record and evaluated as part of the PAPA process. The Goal 5 Administrative Rule provides Clatsop County with an established land use planning process as the basis for its decision. That process ensures full collection of information, the opportunity to be heard by all parties and interested persons, and a mechanism for evaluating the evidence and determining the significance of the mineral and aggregate resource and the level of protection it will be afforded. Because the proposed mineral and aggregate use is consistent with agricultural-forestry lands and the underlying zoning will not change, an exception under Statewide Goal 2 is not required. Clatsop County's process meets all of the requirements of Statewide Goal 2 related to planning processes and policy frameworks.

Statewide Goal 3

The purpose of Goal 3 is to preserve and maintain agricultural lands.

Findings: The zoning on the site and surrounding areas does not contain an EFU agricultural exclusive zone. Much of the zoning on the Weyerhaeuser property is F-80 forest and the other zoning is AF (agricultural forestry) and RA (residential agriculture), which are not EFU zones under the Clatsop County Comprehensive Plan. In addition, we have reviewed uses in the area to determine if there are any ongoing farming activities. There are some small individually owned fruit trees and berries growing in individual house gardens in the general area. These are uses incident to rural residential activity and not farm uses. If they were considered farm uses, standard farming practices would be planting, watering, spraying with insecticides and harvesting. There is a possibility of small pasture uses which include farm uses such as grazing, mowing and potentially irrigation and fertilizing. In addition, there is one residence with horses in the southeast. We believe that this is incidental to rural residential use but if it were to be considered to be an agricultural use, agricultural practices related to this use would be grazing, feeding, exercising the horses, foaling and removal of manure.

The predominant use in this area of Clatsop County is forestry uses. All of the Weyerhaeuser land to the west, north and south of the existing Big River property is dedicated ongoing commercial forestry. Aerial photographs show that the general area has been logged. The site on which the Ordway Quarry expansion will occur is stocked with trees that are 25 and 50 years old, as a result of prior logging and replanting. Both the AF and the RA zone in Clatsop County encourage ongoing forestry. The extraction activities requested by Big River are allowed (conditional uses) in the F80, AF and RA zones in Clatsop County.

Big River has provided evidence that the area proposed for the mineral and aggregate extraction activity contains more than 2 million tons of high-quality mineral and aggregate material and meets ODOT specifications for base rock. The evidence also demonstrates a thickness layer of aggregate material that exceeds 60 feet. The actual extraction area contains no Class I, Class II or unique soil types, as classified by the National Soil Conservation Service. Accordingly, the extraction site requested by Big River qualifies as "significant" under the Goal 5 rule. Big River requests that it be placed on the County's inventory of significant mineral and aggregate sites and that is appropriate given the significant nature of the Ordway Quarry resource and the overall scarcity of quality mineral and aggregate sites in Clatsop County. Oregon case law provides that an applicant can concurrently request the listing of a property on the significant mineral and aggregate inventory, and at the same time, seek approval for mining operations on the same property.

With regard to Goal 3 and its application to this particular project, ORS 215.296 sets the appropriate standards for approval of mineral and aggregate uses and Exclusive Farm Use (EFU) zones. As indicated above, the F80, AF and RA zones are not EFU zones but to the extent that Goal 3 considerations might be deemed applicable, we will address provisions of ORS 215.296. This particular statutory provision provides that local government may designate and approve a request for mineral and aggregate operations if the proposed use will not force a

significant change in accepted farm or forest practices on surrounded land devoted to farm or forest use, nor significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use Forestry uses in the area include timber propagation and harvest, habitat protection and mining of mineral aggregate resources. Forestry practices associated with these forest uses include select harvesting, clear-cutting, replanting, fertilizing, herbicide application, thinning, road building, set-backs (for stream sites and habitat areas), blasting, crushing, heavy equipment operation, truck hauling and raw material distribution. Through the years, Big River and predecessors at the Ordway Quarry, have operated the site in the manner that does not adversely affect in any significant way farm or forestry practices on its surrounding lands. Operations have controlled dust, storm water run-off and noise within DEQ standards. Existing and approved ODOT access ensures that there is no adverse effect on farm or forest traffic. In addition, mineral extraction activities are forestry practices in and of themselves in Clatsop County as rock is necessary to construct forest roads. The compatibility of mineral extraction uses with accepted forestry uses and practices, the minimal nature of farm uses in the area and the overall compatibility of the mineral and aggregate extraction activities to accepted farming practices demonstrate that the requested mineral and aggregate extraction activities from this application will not adversely affect nor force a significant change in accepted farm or forest practices on surrounding land nor significantly increase the cost of accepted farm or forest practices on surrounding land.

We also point out that once the mineral and aggregate resources are extracted, the property will be reclaimed consistent with the forestry nature of the area. Overburden will be reserved for this purpose and will be sufficient to allow the regrowth of vegetation. The length of time of mineral and aggregate extraction will be dependent on market forces, but it is clear that mineral and aggregate use is not, and cannot be, a permanent use. Mineral and aggregate extraction by its very nature is extractive and consumptive and cannot continue indefinitely on a single parcel of land. Recognizing this, Big River has proposed to reclaim the property for forestry uses (including, necessarily, forest-related habitat uses) that are specifically allowed and encouraged in both farm and forest zones within the State of Oregon. Big River will continue to stockpile and use overburden as part of the reclamation process. Goal 3 is fully met with the proposed use set out in this PAPA application.

Statewide Goal 4

Goal 4 directs the conservation and maintenance of the State's forest land base and the State's forest economy and provides for conservation of forest land to make economically efficient forest practices possible, to ensure that growing and harvesting of tree species is the leading use on land consistent with management of soil, water, air and wildlife resources, and to provide for recreational opportunities and agriculture.

Findings: As indicated in the discussion of statewide Goal 3 above, mineral and aggregate extraction uses and their associated practices including, blasting, extraction, crushing, processing, stockpiling, transportation and distribution to points of use, are normal and accepted forest practices in Clatsop County. The proposed use directly contributes the conservation and maintenance of the state's forest land base by providing rock that is available for forestry and

other uses. The rock resource on forest lands also allows forestry owners to achieve a reasonable rate of return on resources located on their forestry land. Big River will continue to manage and save overburden for reclamation purposes, will manage water to ensure water quality, and control dust with use of a water truck in compliance with DEQ permits. Big River will not fence or otherwise restrict wildlife access across the property. Because the proposed use is a basic forest use and external effects of the use will be minimized, the proposed use is consistent and meets the requirements of Goal 4

Statewide Goal 5

Goal 5 requires the protection of natural resources and the conservation of scenic areas, historic resources and open spaces.

Findings: Mineral and aggregate resources are a listed Goal 5 resource and the Goal 5 rule (OAR 660, Division 23) provides a comprehensive mechanism for analyzing the significance of mineral and aggregate resources, listing the mineral and aggregate resources on the appropriate Clatsop County inventory, identifying an impact area for the mineral and aggregate resources, identifying conflicts with the Goal 5 mineral and aggregate resources, identifying strategies to minimize any conflicts associated with mineral and aggregate resources, and ultimately protecting the resource under Goal 5. Goal 5 applies to resources other than mineral and aggregate resources, but the Ordway Quarry extraction area contains none of the 12 potential resources that can be identified or inventoried under Goal 5. We note that the Necanicum River to the east-northeast is a significant Goal 5 resource, but the river resource is buffered from the Ordway property by Highway 26 and residential uses to the northeast. In addition, the Clatsop County background document indicates that peripheral elk habitat parallels Highway 26. Quarry operations are ongoing on the site and, over the years, have not adversely affected elk in the area. Elk traverse on the site and operations will not add any fences or additional barriers to big game usage of the quarry site.

As demonstrated by the evidence submitted with the application, there is sufficient information with regard to the location, quality and quantity of mineral and aggregate resource at the Ordway Quarry to determine that it is a significant resource. We have also provided received substantial evidence to demonstrate that any potential adverse conflicts that might be presented by extraction of the mineral and aggregate resource on the Ordway property can be minimized as required by the Goal 5 rule. Accordingly, the record supports a decision listing the Ordway property as a significant Goal 5 mineral and aggregate resource, establishment of an impact area no greater than 1,500 feet, and approval of the full mineral and aggregate extraction that is requested on the site. Goal 5 is met.

Statewide Goal 6

Statewide planning Goal 6 seeks to maintain and improve the quality of air, water and land resources of the state.

Findings: With regard to air quality, Big River will continue to maintain its crushing unit, screening and processing operations in compliance with the appropriate DEQ air quality permit. In addition, portions of access and exit areas have already been paved or graveled to reduce dust and track-out. Truck speeds will continue to be limited and a water truck will continue to be available to water internal truck paths to reduce, mitigate and eliminate dust associated with mineral and aggregate operations. We are requesting a condition of approval that requires continuance of these housekeeping procedures to minimize, mitigate and eliminate dust from operations at the Ordway Quarry. We note that on an average annual basis, approximately 5,000 gallons of water per day is necessary for control of dust on the Ordway site. This amount has been determined to be adequate by Big River over the years at its ongoing operations at the site and Big River believes there will be no need for additional water for dust suppression at the site. Big River has two ways to obtain the necessary for dust suppression on the site in an uninterrupted fashion. First, we may install an onsite exempt commercial/industrial well that is allowed to take 5,000 gallons per day (see ORS 537.545(1)(f)). No permit is needed for this exempt use. Second, we may continue to truck water in, as necessary, from available commercial water sources in the area for dust control purposes. Each of these water sources is technically possible and permissible within the bounds of the statutory mechanism that controls water use in the State of Oregon.

With regard to protecting the quality of water resources, there are two issues: water quality and water quantity. With regard to water quality, Big River will continue to handle all storm water drainage onsite. Our DOGAMI/DEQ permit will be updated to include the expanded operations at the site. This will ensure that no water quality problems will arise related to surface water issues.

With regard to water quantity and groundwater, the analysis of our geologist is that the mineral extraction on the site is above the ground water table and our activities will not have any adverse effect on the ground water in the area. In addition, we note that it is possible, as part of ongoing operations, to fracture the floor of the quarry to assist in groundwater recharge if such activity is deemed beneficial by DOGAMI. Finally, we have additional room for storage ponds to control storm water which will allow storm water to infiltrate at a natural pace into the groundwater system just like any other rain water in the natural environment. Ongoing operation of the site will ensure that the quality of water resources in the State

With regard to noise, Big River has carefully analyzed noise with regard to the quarry operations. Based on the recommendations of Daly-Standlee & Associates (noise engineers), natural berms will be strategically maintained around the contour of the exterior on the east and north sides of the property. Other steps, as necessary, will be taken to ensure compliance with DEQ standards. Compliance with DEQ standards will ensure that noise from extraction operations on the property is minimized. Compliance with noise standards will ensure that the noise environment will be maintained or improved through consistency with state regulations and statutes.

With regard to the land resources of the state, Big River has agreed, and requested a condition of approval, to obtain a DOGAMI reclamation permit that will guide reclamation of

the property to the forestry/habitat uses which we have requested for a final identified use. The forestry/habitat use is consistent with the overall land uses in the general vicinity and with the continuing F-80, AF and RA zone designations on the property. Compliance with DOGAMI reclamation standards and guidelines will maintain and improve the land resources of the state.

Compliance with applicable DEQ/DOGAMI standards, together with compliance with the requested conditions of approval, will ensure that discharges from the site, if any, will not exceed the carrying capacity of resources in the area considering long range needs, will not, within allowable regulatory and statutory standards, degrade air, water or land resources nor threaten the availability of any such resources for other uses in the area. For these reasons, the proposed PAPA application meets the requirements of statewide land use planning Goal 6.

Statewide Goal 7

Goal 7 requires that life and property be protected from natural hazards.

Findings: Portions of the property are mapped by Clatsop County with a geologic hazard overlay and a DOGAMI slide area overlay. We note that much of the mapped DOGAMI slide area is generally on the northern portions of the property which will be preserved as part of the natural buffer and not be mined. We further note that the applicant's geologist has indicated that the site may be safely and appropriately mined, notwithstanding the geologic hazard overlay in particular because of the stability of the high-quality of the basalt material that underlies the site. The geologist further indicates that overburden will be saved for reclamation purposes and managed in stable stockpiles that are erosion-controlled. Finally, we point out that activities at the Ordway Quarry may not occur without a DOGAMI permit. In the DOGAMI permitting process, slides and geology hazards will be completely and fully addressed and conditions will be put into place to ensure stability of the site.

County flood maps indicate that there is a small portion of tax lots 900 and 1000 that may be in the Necanicum flood plain, notwithstanding that they are to the west of Highway 26. No extraction or process-related operations will be conducted in these flood prone areas. We believe that the PAPA application for the Ordway property is in full compliance of Goal 7 and nothing in the application will adversely affect life or property with regard to natural disasters or hazards. Accordingly, the proposed use protects life and property from natural hazards and Goal 7 is met.

Statewide Goal 8

Goal 8 requires that the recreational needs of the citizens of the state and visitors be satisfied and, where appropriate, to provide for the siting of necessary recreational facilities, including destination resorts.

Findings: There are no destination resorts located or proposed for the area. The main recreational asset in the area is the Necanicum River to the east of the existing Ordway Quarry. The Necanicum River is separated from the site by Highway 26 and multiple

residences. In addition, on the east side of the site, there are many flat vegetated areas that serve as a buffer zone between activities on the Ordway Quarry site and the river. The activities on the site will not have any effect on the use of the Necanicum River for recreation purposes. In addition, there is peripheral elk habitat along Highway 26 in the area of the site. Activities on the site will not restrict the travel or migration patterns of elk and other big game that use the property and will continue to use the property in the future. No residences will be built. As the requested activities continue to protect the Necanicum River and peripheral big game habitat, the requirements of Goal 8 are satisfied

Statewide Goal 9

Goal 9 requires that adequate opportunities throughout the state be provided for a variety of economic activities vital to the health, welfare and prosperity of the state's citizens.

Findings: Mineral and aggregate resources are generally scarce and the quality rock resources found at the Ordway property are needed in Clatsop County to help with construction, infrastructure development and economic growth. Mineral and aggregate resources are an essential building block for the county and state economies. Rock is necessary for infrastructure projects (streets, roads, sewers, etc.) and is an essential construction material for the residential, commercial and industrial sectors. Rock is required for all types of building activities and rock is incorporated into construction through concrete, base materials, asphalt roads, rip rap and in many other ways. Rock products are essential to the healthy and growing economy in the county and state, and protection of high quality mineral and aggregate resources has a significantly positive effect on the state economy. Preservation of future reserves on the Ordway property will help maintain Big River's payroll in Clatsop County and provide a stable supply of rock for future use in the county and state. Failure to preserve good quality rock sites that are favorably situated close to the market area may ultimately lead to higher prices and undependable levels of supply. This can directly, or indirectly, increase the costs of roads in the county, the affordability of homes in the county, and even the amount of tax revenue that must be used for road construction and repair materials. Approval of the Ordway property will provide a dependable source to serve Clatsop County with quality rock materials that are important to the county's economic well being. This PAPA application directly supports the requirements of Goal 9 and Goal 9 strongly supports inclusion of the site on the significant inventory and approval operations on the Ordway Quarry.

Statewide Goal 10

Goal 10 requires provision of the housing needs for the citizens of the state.

Findings: Goal 10 generally guides buildable land determinations and housing assistance determinations which are not relevant in this Goal 5 proceeding. However, mineral and aggregate resources are a critical component for providing for the housing needs for the citizens of the state in that mineral and aggregate resources are a fundamental building block for houses and infrastructure, including concrete sidewalks, asphalt streets and general housing construction. Preservation and protection of the Ordway property will provide a necessary basic

resource that assists in providing for the housing needs of the citizens of the county and state. Goal 10, to the extent that it applies to this application, is met.

Statewide Goal 11

Goal 11 requires planning, development and an orderly and efficient arrangement for public facilities and services to serve as a framework for urban and rural development.

Findings: Goal 11 generally provides that the county should plan and develop public facilities frameworks for urban and rural development. The use we have requested, mineral and aggregate extraction, does not require a significant level of public services and we do not believe that Goal 11 directly applies in this matter. However, we wish to make it clear that mineral and aggregate extraction is a rural use. It is locationally specific and rock extraction must occur where the resource is located. In Clatsop County, available rock resources are rare and are predominantly found in rural areas. While some of the mineral and aggregate material from the sites may be used within the urban area, the fact that some material may ultimately be used inside the urban growth boundary does not, in and of itself, define whether an activity is urban or rural in nature. For example, agriculture is a rural land use even though most food is consumed by urban residents. Because rock resources in the county are predominantly located outside urban areas, we believe it is appropriate for the proposed use to be described as a rural development. No significant public services are necessary to allow the rural mineral and aggregate use on the Ordway property. First, electrical power is currently available to the Ordway operations. Second, adequate water is available from an onsite well or from offsite sources. Third, sanitary facilities will be provided by porta-potties onsite and there is no need for any kind of sewage or other sanitary infrastructure. Fourth, the operation is currently served by an approved access onto Highway 26 which provides ample capacity and allows truck movements in and out of Big River's operations. Fifth, no residential uses are contemplated or allowed in Big River's mineral and aggregate operation and there will be no adverse effect on schools or other types of facilities that might accompany residential-type development. There is an adequate level of services and facilities to currently serve the proposed use and to serve the use in the future without the need to extend any type of services to the Ordway property. Accordingly, to the extent Goal 11 is applicable, it is satisfied by the proposed use.

Statewide Goal 12

Goal 12 requires the County to encourage a safe, convenient and economic transportation system.

Findings: As an initial matter, aggregate materials are key raw materials that are necessary to build transportation facilities, such as roads, railroads, airports, sidewalks and bikeways. Protection of adequate supplies of mineral and aggregate resources significantly advances the county's ability, and the state's ability, to have raw materials available for construction and repair of these types of multi-modal transportation systems.

Goal 12 is implemented by the transportation planning rule (OAR 660-012-0000). The transportation planning rule provides that amendments to comprehensive plans, which "significantly affect" a transportation facility, shall assure that all allowed uses are consistent with the identified function, capacity and performance standards of the facility. The transportation planning rule defines when a plan amendment or land use regulation amendment "significantly affects" a transportation facility. This occurs if: (a) the amendment changes the functional classification of an existing or planned transportation facility; (b) the amendment changes standards implementing the functional classification system; or (c) the amendment would allow land use levels of development that would result in types of levels of travel or access that are inconsistent with the functional classification of the existing planned transportation facility, reduce the performance of an existing or planned transportation facility below the minimum acceptable performance or the standard identified transportation system plan, comprehensive plan or worsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the TSP or Comprehensive Plan, all as measured at the end of the planning period identified in the adopted transportation system plan.

In addressing transportation issues in the Goal 12 rule, Big River has provided an analysis of ATEP, a leading regional transportation planning and engineering firm. ATEP's analysis is that approval of the Ordway property will not significantly affect a transportation facility and therefore the Big River request is in compliance with the Goal 12 planning rule.

First, Big River's request at the Ordway property does not change, or require a change, of any functional classification at any existing or planned transportation facility in the area. The application is neutral with regard to any existing or planned functional classification.

Second, the PAPA application for the Ordway property does not change the standards that implement the functional classification within the general area in Clatsop County. Again, the application is neutral with regard to these factors and requires no change.

Third, as measured at the end of the planning period, the proposed PAPA at the Ordway property does not allow levels of development or levels of travel or access that are inconsistent with the functional classification of an existing planned facility, does not reduce the performance of an existing plan or facility below the minimum accepted performance standard identified in the County Transportation System Plan or Comprehensive Plan and does not worsen the performance of the existing or planned transportation facility that is otherwise projected to perform below the minimum accepted standard. ATEP's analysis is that no new truck trips will accompany the Ordway property approval that are above the allowable amount of traffic to and from the operations previously approved by Clatsop County and ODOT. The level of truck activity allowed by ODOT under the currently approved access permits and ODOT's change of use rules has already been factored into the transportation system plan and the functioning of transportation facilities in the area. Because approval of this request at the Ordway property will not generate additional truck traffic beyond ODOT's already-approved trip levels, there can be no measurable affect on any transportation facility or reduction in the performance of any existing transportation facility in the area. Accordingly, the proposed future use of the Ordway

property mandates no additional peak hour or operational trips above the level previously permitted by Clatsop County and approved by ODOT in the access permit. Accordingly, there can be no measurable affect from the proposed request on any existing or planned transportation facility, nor any measurable worsening of performance that is related to the requested operations.

The requirements of the transportation planning rule are complied with because the proposed use does not significantly affect the transportation facility. Truck traffic associated with the Ordway property will continue to use the ODOT-approved improvements that have been in place and those improvements will continue to safely and economically serve all transportation system users. Accordingly, Goal 12 is fully satisfied by the PAPA application.

Statewide Goal 13

Goal 13 requires the county to analyze any energy considerations for the proposed land use with the goal of conserving energy.

Findings: The proposed Ordway property is located close to the south Clatsop County market area where there is a significant amount of growth. Locating mineral and aggregate sites that are reasonably close to market areas reduces the amount of transportation necessary to move rock material to where it will be used and, therefore, saves energy. Excellent infrastructure and approved access also assist in better movements of truck traffic to and from the site and save energy. For all these reasons, the requirements of Goal 13 are met.

Statewide Goal 14

Goal 14 requires the county to provide for an orderly and efficient transition from rural to urban land use to accommodate the population, and urban employment inside urban growth boundaries to ensure efficient use of the land and to provide for livable communities.

Findings: As discussed under Goal 11 above, the proposed mineral and aggregate extraction uses are generally and typically located on rural lands in Clatsop County. Mineral and aggregate extraction sites typically require large acreages and large parcel sizes that are not consistent with urban uses. The general practice in Clatsop County is that rock extraction and associated processing (e.g., crushing) are located in rural areas and their activities are predominantly rural in character. Nothing in the use that is proposed for the Ordway property would permit any change of the use from rural to urban. Goal 14 was amended in 2005 to require additional consideration about accommodating an urban population and urban environment, and ensuring efficient use of the land and providing for livable communities. Mineral and aggregate materials are fundamental building blocks for streets, roads, residential, commercial and industrial properties that are essential to accommodate urban population even though the resource materials may be sourced on rural lands. Available supplies of mineral and aggregate materials on rural resource areas allow the county to accommodate urban population and continue to have urban employment inside the urban growth boundary. The "efficient use" requirement of Goal 14 is primarily directed toward maintaining proper inventoried balances for urban uses, urbanizable lands and urban growth boundaries. However, to the extent applicable,

the PAPA request for the Ordway property is an extremely efficient use of land because it is immediately adjacent to a state highway which allows the mineral and aggregate resource to be extracted and moved efficiently to the nearby markets. While the emphasis in Goal 14 is directed towards urban planning and intelligent development of urbanizable areas creating livable communities, the proposed development of the Ordway property is intelligent and efficient development that will allow reorienting quarrying activities to reduce impacts. Accordingly, Goal 14 supports approval of the PAPA application for the requested expansion.

Goal 15 Related to the Willamette River Greenway, Goal 16 Related to Estuarine Resources, Goal 17 Related to Coastal Shorelines, Goal 18 Related to Beaches and Dunes, and Goal 19 Related to Ocean Resources. These goals do not apply as the property under consideration is not near the Willamette River or in areas that are subject to the County's policies for estuarine, shoreline, ocean or beaches and dunes resources.

Exhibit I (B).

Staff Report

MEMORANDUM

March 4th, 2008

Before the Planning Commission:

As instructed Staff held a collaborative forum between the interested parties involved in the Big River Zone Change request. Staff is pleased to present the Compromise reached by the applicants and the members of the community. The Compromise is described in the meeting notes on the following pages and reflected in the Resolution and Order and Proposed Conditions.

On the Following pages the Commission will find Notes from the Forum held on February 28th, 2008, a revised Resolution and Order, Staff's proposed conditions, & the Applicants requested conditions.

If the Commission decides to adopt the proposed Resolution and Order Staff will append the executive summary and supporting documentation as presented at the last Planning Commission hearing on February 12th, 2008.

The only difference between Staff's Conditions and the Requested Conditions submitted by the applicant is the Batch Plant. At the meeting it was agreed upon to make future applicants for a batch plant go through the PAPA procedures. In fairness to those present at the meeting Staff felt that to change the conditions to reflect an alternate version might not be acceptable to all parties involved. Therefore Staff's Conditions reflect the requested conditions with the Batch Plant Condition differing from the Applicant's version. Everything else represents the same conditions requested by the Applicant.

The Commission also requested Staff to investigate the previous Conditional Use and any violations presently existing. Staff has a letter from the Oregon Department of State Lands and Oregon Department of Transportation addressing these matters. Since the Planning Commission has decided not to admit new evidence both of these letters will be presented at the next level to the Board of Commissioners at the first adoption hearing. The Commission should be aware that neither of these letters is injurious to the application nor should they hinder this decision. In order to address the Commission's inquiry Staff has investigated the previous violations, and while there is no evidence that these violations have been rectified in the record, the letters to be presented to the Board should clear up the violation questions.

Respectfully,

_____

Michael Weston II, MPA
Planner, Trans. & Dvlp. Srvcs

Big River Notes From Collaborative Meeting 2/28/08

1 – Batch Plant ✓
2 – Storm Water Drainage ✓
3 – Transportation Issues ✓ (Big River will pursue app. Within 30 days of approval)
4 – Buffer, Greenery ✓
5 – Time Line ✓
6 – Operating Hours (same as previous) ✓
7 – Previous Violations (See File for letter from ODOT, ODFW & ODSL) ✓

These Letters have been deemed inadmissible for the purposes of this hearing.
They will be presented to the Board of Commissioners.

Transportation:

- Pave up to the scale
- Big River will pursue an application through ODOT to use a circular truck pattern as described in the application
- Identifying the truck for the community will help alleviate the problem in the future.
- Move trucks into the site, No sitting on Hwy outside of Gate.

Truck Trips will not increase unless the Volomer Creek access is used. ODOT approval required.

Batch Plant:

Big River will agree to place a deed restriction on 1203 & 101 and the zone change will restrict a batch plant on the site as a condition to the zone change. As a function of this zone change no batch plant will be allowed unless the applicant comes back through the PAPA procedures with the ability to utilize the Geo-Study's and supporting data submitted as a function of this application.

Stormwater Drainage:

Ditching the water into ponds on the Big River site.
Berm aprx 10- 15 foot high, vegetating the outside edge with conifer trees, 200 foot buffer. Big River will maintain the settlement ponds to ensure their proper operation.

Revegetate southern hillside. Alders have started below, but trees on the hillside will reduce noise impacts and turbidity.

200 Foot Buffer: establish screening with trees, salal, other natural vegetation. No Operations within the 200 foot Buffer with the exception of the access roads.

Time Line:
Big River will make a good faith effort to move to the back within a 3 Year Time Frame.
Move the Crusher to the rear of the mountain as soon as possible

Blasting:
Blasting Notifications, Big River will notify the Surrounding Neighbors

Not to exceed 10 drilling/blasting sessions per year

Supplemental Information, Testimony and Decision Documents

February 5th, 2008

Before the Planning Commission:

As directed by the Commission at its January 8th, 2008 public hearing, the public record remained open for additional testimony and evidence until January 25th, 2008, and a rebuttal period of one week was allotted to the applicants until February 1st, 2008. The testimony received and compiled is contained within the pages immediately following this cover letter.

Please be advised that a request was submitted to extend the public comment period. Staff feels that to extend the public comment period would place an undue burden upon the applicant. Staff would remind those parties interested in extending the public comment period that a secondary hearing before the Board of Commissioners is forthcoming, and a chance to submit additional public testimony will be allotted at that level as well.

In addition appended to the supplemental testimony and evidence previously mentioned the Commission will find a secondary packet arranged for adoption. Within this packet the commission will find a Resolution and Order, Conditions, Maps, Supporting Documentation including a summary and findings, and the Economic, Social, Environmental, & Energy analysis provided by the applicant. This packet contains the information that will be continued forward to the Board of Commissioners for adoption.

Please note that the original Staff report is contained within the Record and is appended to the back of the "*Executive Summary*". At this time Staff's recommendation has not changed from its previous recommendation to approve the request and recommend adoption to the Board of Commissioners. Despite the opposition on this matter the quarry has been in operation for many years. The proposed expansion will reduce the impacts of the mining operations on those residents surrounding the quarry. Furthermore, the previous owners (Osburn & Olson Bros.) created most of the concerns raised by the opponents. Since acquiring the Property in 2006, Big River LLC has worked diligently to rectify the violations created by the previous owners. In addition Big River has offered to work with the local water shed authority to reestablish the riparian corridors and reduce and control turbidity and the discharge of stormwater into the surrounding creeks. They have also proposed to redirect the drainage to prevent the stormwater runoff from affecting neighboring parcels.

The other main concern voiced by the opposition to this amendment was the possible creation of a Concrete or Asphalt Batch Plant. As mentioned by the applicant, they are not interested in pursuing a Batch plant at this quarry. **Therefore staff would recommend the Planning Commission Modify the proposed Condition 1 to prohibit a batch plant on the property.** Staff feels that prohibiting a batch plant and requiring future owners of the quarry to go through the PAPA process to be granted approval for a Batch plant will protect the interests of the citizens in that community. **With the afore mentioned change in mind, Staff respectfully submits the following Documents for Review and Approval. (See Attached Documents)**

Sincerely,

Michael J Weston II, MPA
Planner, Transportation & Development

Clatsop County
Community Development Department
800 Exchange Street, Suite 100,
Astoria, OR 97103

www.co.clatsop.or.us
ph: 503-325-8611
fx: 503-338-3666
em: comdev@co.clatsop.or.us

STAFF REPORT

STAFF REPORT DATE: January 2nd, 2008

HEARING DATE: January 8th, 2008

HEARING BODY: Planning Commission

REQUEST: The applicant's request is two fold: first the applicant requests a text amendment to Clatsop County's Comprehensive Plan acknowledging the site and adding it to the County's List of "Significant" mineral and aggregate resource sites, second the applicant requests a Zone Change from AF {Agriculture-Forestry} to QM {Quarry Mining},

Current Zone: Agriculture-Forestry {AF}, Forest-80 (F-80), & Residential Agriculture -2 (RA-2)

Current Plan Designation: Conservation Forest & Rural Lands

AGENT: Paul Hribernick/Black Helterline LLP
805 S >W> Broadway, Suite 1900
Portland, OR 97205-3359

APPLICANT: Big River Holdings Inc.
1050 Olney Avenue
Astoria, OR 97103

PROPERTY OWNER: Weyerhaeuser Inc. c/o Chris Antilla
86645 Lewis & Clark Road / PO Box 998
Seaside, OR 97138

PROPERTY DESCRIPTION: T5N, R10W, Sec. 14, TLs 800, 900, 1000, 1001, 1203 & T5N, R10W, TLs 101, 100 (Partial)

PROPERTY LOCATION: The property is located to the Southeast of Sunset Highway {Highway 26} between milepost 2.5 and 3.0

PROPERTY SIZE: The total size of the subject property is 112.24 acres.

COUNTY STAFF REVIEWER: Michael J .Weston II, Planner

STAFF RECOMMENDATION: Approve with Conditions

SUGGESTED MOTION: Create and pass a motion to Adopt Applicant's Proposed Findings and Recommend Conditional Approval before the Board of Commissioners of Clatsop County

EXHIBITS: 1 – Application & Exhibits Submitted by the Applicants
2 – Public Notices
3 – Comments

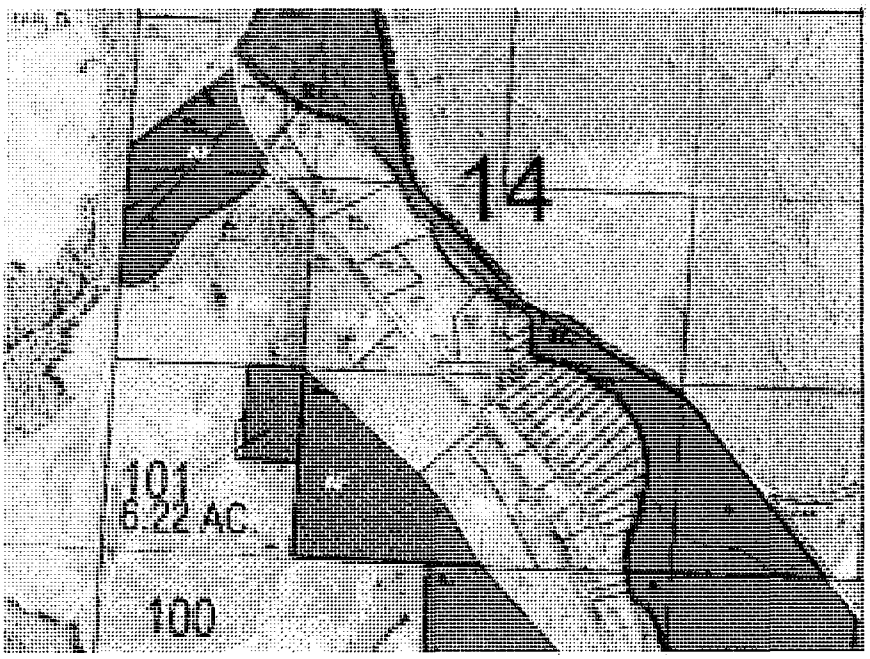
SUMMARY

On October 16th, 2007 Staff conducted a pre-application conference with Paul Hribernick of Black Helterline LLP, and executives of Big River Holdings Inc. On October 25th, 2007 the applicant submitted their Post Acknowledgement Procedures Application for the following matters: 1st A comprehensive plan text amendment, essentially adding the location to Clatsop County's List of Significant mineral and aggregate resources sites; 2nd applicants request the location be rezoned from Agriculture Forest to Quarry Mining and a Quarry Mining Overlay be placed over the impact area and areas within 500 feet of any RA-2 Zones. The Comprehensive Plan amendment in this matter would result in a change from Conservation Forest & Rural Lands to Conservation Other Resources. 3rd the applicants request approval of the submitted Erosion Control Plan, Geologic Hazard Permit, Development Permit, & Site Plan Approval

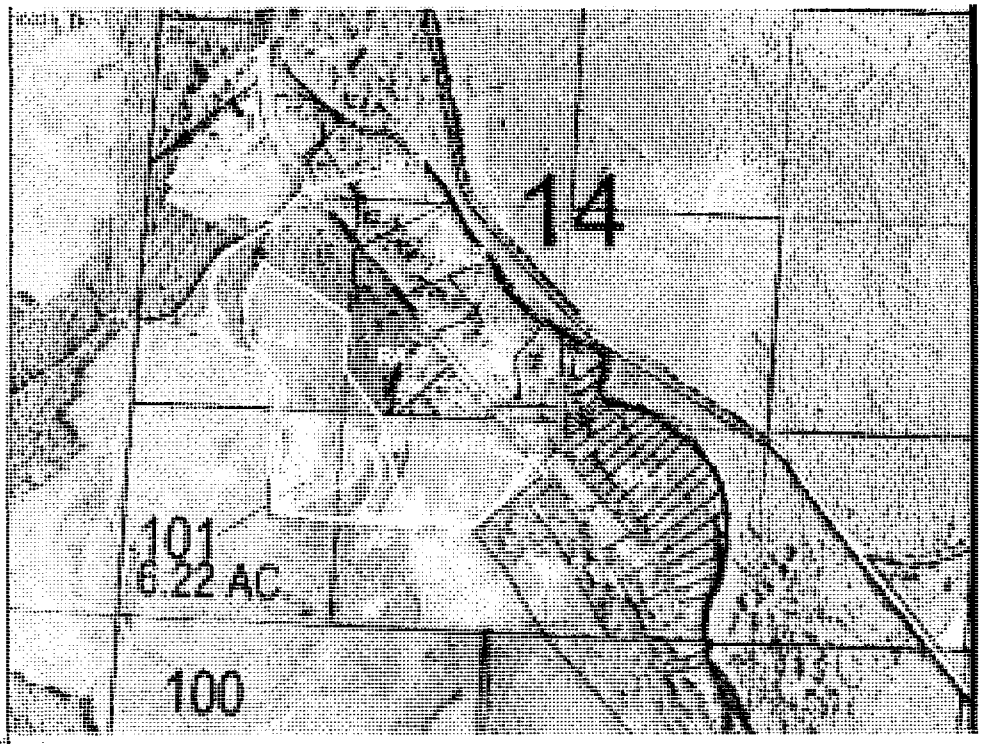
PROPERTY CONDITIONS

The subject property consists of forested lands, open fields, wetlands, creeks, intermittent drainage and the subject hill where the mining operations are to occur.

AREA ZONING MAP



NEIGHBORHOOD CONDITIONS



2005 Aerial Photo

The area is outside of urban growth boundaries; however residential zones are adjacent to the Rock Quarry. A subdivision of 30+ homes is located directly across the Highway from the subject property. The site is surrounded on three sides by residences.

BACKGROUND

The site has historically been used for the purposes of extracting rock and timber resources. George & Donna Ordway acquired the property in 1973. The property is currently identified as a primary site requiring conditional use approval. The site is identified under the Goal 5 Quarry and Mining Element of the Clatsop County Comprehensive Plan. The site was one of the original sites identified for Quarry & Mining. The property remained in Mr. George Ordway's possession until Pacific Continental acquired it in 2001. Osburn Brothers Rock then purchased the Property in 2002; they in turn sold the property to Big River Holding in 2006. The property has had violations in the past in the form of encroachment on neighboring parcels, excess sediment deposits into nearby streams, and uncontrolled storm water discharge; the current owners of the Ordway site have rectified past violations and taken measures to ensure that future violations do not occur. Currently the subject property continues to produce large quantities of Basalt, used as embankment material, crushed rock and other non-specified uses.

APPLICABLE CRITERIA

The applicable criteria for this land use application is contained in LWDUO Section 5.412 which reads:

Section 5.412. Zone Change Criteria.

The governing body shall approve a non-legislative zone designation change if it finds compliance with Section 1.040, and all of the following criteria:

(1) The proposed change is consistent with the policies of the Clatsop County Comprehensive Plan.
(2) The proposed change is consistent with the statewide planning goals (ORS 197).
(3) The property in the affected area will be provided with adequate public facilities and services including, but not limited to:
  (A) Parks, schools and recreational facilities
  (B) Police and fire protection and emergency medical service
  (C) Solid waste collection
  (D) Water and wastewater facilities
(4) The proposed change will insure that an adequate and safe transportation network exists to support the proposed zoning and will not cause undue traffic congestion or hazards.
(5) The proposed change will not result in over-intensive use of the land, will give reasonable consideration to the character of the area, and will be compatible with the overall zoning pattern.
(6) The proposed change gives reasonable consideration to peculiar suitability of the property for particular uses.
(7) The proposed change will encourage the most appropriate use of land throughout Clatsop County.
(8) The proposed change will not be detrimental to the health, safety and general welfare of Clatsop County.

ASSESSMENT OF APPLICATION VERSUS APPLICABLE CRITERIA

The following section examines the application versus the eight applicable criteria of LWDUO § 5.412.

(1) Consistency with Comprehensive Plan

Analysis:
As part of its land use application (attached, Exhibit 1), the applicant evaluates the application against the applicable elements of the Clatsop County Comprehensive Plan. The applicant's assessment provides satisfactory evidence that the zone change on the subject parcel is consistent with the applicable policies of the Comprehensive Plan.

All requirements pertaining to the public notices (LWDUO § 2.105 - § 2.125) for the land use matter have been met.

Finding of Fact:
Based on the analysis above, the application satisfies Zone Change Criterion No. 1. LWDUO § 5.412(1).

(2) Consistency with Statewide Planning Goals

Analysis:
Clatsop County's acknowledged comprehensive plan implements the 19 Statewide Planning Goals. The determination in the preceding section that confirms the application's consistency with the Comprehensive Plan provides satisfactory evidence that the application is in conformance with the applicable Statewide Planning Goals.

Finding of Fact:
Based on the analysis above, the application satisfies Zone Change Criterion No. 2. LWDUO § 5.412(2).

(3) Adequacy of Public Facilities and Services

Analysis:
In its application (Exhibit 1; Goal 11 assessment on page 66), the applicant explains that the nature of the activity at the site does not require a significant level of public services. Furthermore the services necessary for the proposed activity are currently available. Therefore the current level of public services at the site is adequate for the proposed use now and into the future without the need to extend any type of services.

Finding of Fact:
Based on the analysis above, the application satisfies Zone Change Criterion No. 3. LWDUO § 5.412(3).

(4) Adequacy of Transportation Facilities

Analysis:
In its application (Exhibit 1; Goal 12 assessment on page 67), the applicant explains that the level of truck traffic will not create any substantial impacts with this designation and that the trip levels and proposed transportation plan will mitigate the trip levels proposed. A site visit conducted on December 27th, 2007 would indicate that the plan proposed by ODOT to mitigate the effects of trucks entering & exiting the Highway should be sufficient to address concerns with the current level of operations.

As a function of the PAPA application Staff would recommend a condition to mitigate the potential traffic impacts of the site. The proposed plan submitted by the applicant and discussed on pages 10-13 of the application would satisfy this condition. Essentially the applicant will be responsible for demonstrating that suitable access roads exist to serve the proposed development site and must gain consent from ODOT for expanded use of Hwy 26, as appropriate.

Finding of Fact:
Based on the analysis above, the application satisfies Zone Change Criterion No. 4. LWDUO § 5.412(4).

(5) Compatibility with Area

Analysis:
Issues of compatibility were raised in the applicant's application particularly in regards to neighboring residences. A letter submitted by the Edgewater Terrace Home Owners association indicates their adamant objections and concerns regarding the construction or use of a concrete, ready-mix, or asphalt batch plant.

The applicant has indicated that they do not intend to construct or operate a batch plant on the site. Staff feels that as a condition of the Zone Change and PAPA procedure a condition is attached to the site to restrict the construction and operation of any Batch Plant on the Property. In so doing, the majority of the concerns from surrounding neighbors would be addressed and a higher level of compatibility can be attained.

Finding of Fact:
Based on the analysis above, the application satisfies Zone Change Criterion No. 5. LWDUO § 5.412(5).

(6) Peculiar Suitability of Site for Particular Uses

Analysis:
In their application the applicants indicate that a recent review of the quality of the mineral resources on the site indicates that there is over 5 million tons of quality mineral and aggregate materials at the Ordway site. The Clatsop County Comprehensive plan identifies that mineral and aggregate resources are rare in Clatsop County. The Comp. Plan requires that a site must have over 250,000 cubic yards of quality mineral or aggregate resources to be considered a "significant" site. If the submitted geology reports are accurate, the Ordway site far exceeds the requirements necessary to be a considered a significant site. Furthermore this particular site has been in operation as a Rock Quarry for nearly 30 years.

Finding of Fact:
Based on the analysis above, the application satisfies Zone Change Criterion No. 6. LWDUO § 5.412(6).

(7) Zone Change Promotes Appropriate Use of Land in County

Analysis:

Analyses provided by the applicant in their application adequately address the criteria. Currently there are four areas in the county designated as significant resources and protected with a Quarry Mining Overlay. Adding the Ordway site to the list of significant mineral and aggregate sites in Clatsop County is an appropriate text amendment and zone change that would promote the efficient use of the land.

Finding of Fact:
Based on the analysis above, the application satisfies Zone Change Criterion No. 7. LWDUO § 5.412(7).

(8) Health, Safety, and General Welfare

Analysis:
The application promotes the health, safety, and general welfare for Clatsop County residents and visitors by providing economic enhancement, resources for dikes, roads, embankment projects, and county citizens.

Finding of Fact:
Based on the analysis above, the application satisfies Zone Change Criterion No. 8. LWDUO § 5.412 (8).

Conclusion

Due to the amount of subject matter and the potential controversy surrounding this case Staff would advise the Planning Commission to review the subject matter and hear public testimony but refrain from rendering a decision until its next meeting. Staff, after review of comments from the public and input from the planning commission will revise the staff report and compile the appropriate conditions with a Resolution & Order for adoption at the next hearing.

After review of the applicants application staff feels the findings submitted by the applicant appropriately address the criteria, goals, policies, and application procedures. With the addition of a few minor

conditions to address any potentially negative compatibility issues and to ensure compliance with Clatsop County's Comprehensive Plan & Land Use Ordinance 80-14, Staff would recommend the Planning Commission Motion to Recommend to the Board of Commissioners the adoption of the applicant's findings and the approval of their request to:

1) Rezone the Quarry site to QM {Quarry Mining}.
2) Identify the Impact area.
3) Place a QMO over the remainder of the Property.
4) Add the Site to the County's List of Significant Mineral and Aggregate Resources.
5) Allow the applicant to expand their operations through the winter months as requested on Page 4 of the application.
6) Approve the Development Permit and Grant the Geologic Hazard Permit.
7) Allow blasting on the site provided it is in compliance with DEQ requirements and is strictly limited to methods using sequential charges as described in the application.
8) Authorize the site for additional daily deliveries provided the applicant adhere to the access & circulation improvements stipulated by ODOT.

STAFF RECOMMENDS:
The Planning Commission adopt the applicant's findings,
and;
Instruct Staff to present the Planning Commission with a Resolution and Order & Recommended Conditions.

- **R &O to Recommend Approval of the application to Clatsop County's Board of Commissioners.**

Respectfully submitted,

Michael J. Weston II
Clatsop County Planner

Exhibit II.

Economic, Social, Environmental, & Energy Report (ESEE)

ESEE ANALYSIS:

Conflicting Uses:

Only one use (residential use) has been identified which could give rise to conflicts if allowed to locate within the impact area at the Big River Ordway site. Because a conflict is possible, the Goal 5 Economic, Social, Environmental and Energy consequences analysis (ESEE) is required for approval of the application (Step 7 of DLCD guidance paper). The PAPA rule provides that where a conflicting use has been identified, the Goal 5 resource site may impact, and be impacted by, that use. Both the impacts on the resource site and on the conflicting use must be considered in analyzing ESEE consequences.

The Big River site is located on the southeast side of Highway 26 between mileposts 2.5 and 3.0. The property is surrounded by property zoned AF, F-80 and RA-2. No current agricultural activities occur near the site. A residential subdivision is located across Highway 26 to the northeast.

1. Economic Consequences Analysis.

a. Impacts on the resource of allowing conflicting uses.

The Big River site will provide at least 8 million tons of high quality aggregate. The material taken from the site will be utilized for critical infrastructure uses including road construction, structural foundation backfill, culverts, landscaping, and others. The site's proximity to Highway 26, Seaside, and Cannon Beach make it ideal for offering competitive prices on rock products and it will have a significant economic impact.

If a residential use was allowed in close enough proximity to Big River's Goal 5 mineral and aggregate resource to prevent or reduce use of the pit, it would have a significant adverse economic effect on the resource. For example, if a new dwelling was allowed to locate within the impact area, Big River might not be able to meet DEQ's noise regulations without extensive changes to its operations. Those regulations could require new sound walls or berms, changes in hours of operation, significant costs to alter operations, shrinking of the size of the mineral resource that could be extracted and, in a worst case scenario, the shut down of the mineral and aggregate operation because of an inability to comply with DEQ's noise regulations. And, if a residential use was allowed within the impact area, it would be extremely difficult, if not impossible, to design an extraction plan that would yield the fullest utilization of the mineral and aggregate resource or even to potentially obtain a small portion of the resource on the Goal 5 resource site. A residential use, if allowed, could result in the loss of jobs provided by Big River's site and the loss of the material provided by the quarry into the economy of the county.

Clatsop County benefits from long-term, reliable sources of high quality mineral and aggregate material. If conflicting uses were allowed in such location as to prevent or limit operation of the Big River Ordway site, the owner would suffer a significant

economic setback and the community would be denied access to much needed and highly valuable mineral and aggregate materials that help economic growth. These are significant and unacceptable negative economic effects.

b. Impacts on the conflicting uses of allowing the resource use.

No conflicting use currently exists inside the impact area of the Big River Ordway mineral and aggregate resource site. As such, any conflicting use that could occur would move to the area with full knowledge of the existence of the mineral and aggregate site and the potential noise effects. The question is whether it would be necessary for an individual to build a residence within those small portions of the neighboring properties that are within the identified impact area. Currently there are portions of each property affected by an impact area designation that are outside the identified impact area perimeter from the mineral and aggregate resource site. As such, if an individual wishes to build a residence he or she would have several options to choose from on any existing parcel. The ability to move the conflicting use to another location on the same parcel greatly reduces the economic impact on the conflicting use if the mineral and aggregate expansion is approved, located and operated. In addition, the property owners could enter into a waiver of remonstrance, noise easement or other agreement to allow the construction of a residence within the impact area and avoid adverse effects on the quarry. In sum, the economic consequences can be avoided, the economic costs can be lessened, and the owners can continue to make economic use of the properties. Outside the identified impact area, noise impacts can be controlled and DEQ standards can be met and there would be little or no economic impact on any approved use. Another major noise source in the area is created by Highway 26. The residents in the area constantly receive noise from the highway and the overall noise environment in the area is not pristine. As such, the incremental economic cost of noise from the quarry is not large if it, in fact, exists.

When balancing between the economic costs to the resource (potentially the inability to use the resource or operated in an economically sound manner) with the economic impacts from noise radiating from the site onto other properties, economic analysis supports the protection and operation of the mineral and aggregate resource site. If the mineral and aggregate resource site were unable to operate or able to operate without extraordinary noise controls that made the rock costs ineffective, the operator would suffer an economic loss, but more importantly, the county would suffer an economic loss because the mineral and aggregate resource would not be available in the county for infrastructure improvements. Contrasted with a potentially small and difficult to qualify loss in economic value of future uses that would be constructed within the identified impact area where the sound level could increase, it is our conclusion that the activities on the Big River site outweigh the small and difficult to define economic cost to landowners in the area who might wish to place a noise sensitive residential use within the impact area. As such, we believe that our consideration of the economic prong of the ESEE analysis tips clearly in favor of preserving the resource and allowing its operation because it provides for the greater economic good of the entire community.

2. Social Consequences Analysis.

a. Impacts on the resource of allowing conflicting use.

It is difficult to make a rational analysis of the social impacts in this matter because the impacts on mineral and aggregate resources are primarily economic in nature. However, there could be social impacts created that would negatively affect the resource if a conflicting residential use was allowed in close proximity to the site. It appears the most significant social cost to the landowner and the mineral and aggregate operator would be related to attempts to mitigate noise to the satisfaction of neighbors through modifications to the operation that potentially increase the cost of aggregate extraction.

The most probable social impact in allowing a conflicting residential use near the resource site would be to limit or prevent the site's use because of social dissatisfaction from the neighbors. If a conflicting residential use was allowed next to the resource sites, it is possible that the existing regulations controlling the operation of the site, particularly noise standards, might be difficult or impossible to meet at the site and that these regulations would be aired and enforced through social pressure. This social disruption could result in an increase in the price of aggregate materials with a loss of at least a portion of high quality aggregate resource at the site and make that site unavailable for a wide variety of uses in the county, including road and infrastructure construction. Aggregate materials have high social utility in the county and are a critical part of infrastructure, as well as commercial, industrial and residential construction. The increase in price or a decrease in the supply of high quality aggregate, such as that at the proposed site, would have a negative social impact in the greater county area potentially through increased prices of infrastructure, homes, highways and other products which depend on aggregate materials. This could implicate social costs by limiting the county's citizens' ability to afford these products and services and potentially reduce their standard of living.

b. Impacts on conflicting use of allowing the resource use.

If the impacts (largely noise) associated with the proposed operation are not properly controlled, there could be social impacts on new residential uses near the mineral and aggregate resource, such as neighbor dissatisfaction and unrest. However, the nature of the resource site, its location, the surrounding uses, the topographic features and the control mechanisms required by conditions, as well as the noise studies that have been provided, all serve to make any significant adverse social effects unlikely. The record demonstrates that the DEQ noise standards, which are designed to protect residences and human health, can and will be met by the operation at all residences in the area. Further, there is already ambient highway noise and it is hard to assign social value to any increase to ambient noise levels that may occur within the DEQ standards. Rock has a significant social utility and must be obtained at locations where high quality rock is located and where it is close to the market to reduce costs. In the end, the balance between the greater social utility of the mineral and aggregate resource and the personal social costs of individuals whose environment undergo a change as a result of the protection of the mineral and aggregate resource tips in favor of the resource site. The

greater social good of having a confirmed source of high quality mineral and aggregate outweighs the potential social impacts that have been identified by the neighbors immediately in the area.

3. Environmental Consequences Analysis.

a. Impacts on the resource of allowing conflicting uses.

A conflicting residential use would generally not have an environmental impact on the aggregate resource unless it was allowed in the impact area. If the residential use was allowed in the impact area, the environmental impacts on the resource could be severe and the resource potentially could not be used or its use would be severely restricted due to increased difficulties with environmental compliance (primarily noise compliance).

b. Impacts on the conflicting uses of allowing the resource use.

The proposed aggregate operations could potentially have an environmental impact (in the form of noise) upon a conflicting use if located within the impact area. Other potential impacts including dust and transportation will not have adverse environmental consequences because they will be controlled and mitigated. Applicant's noise expert indicates that outside of a mapped distance from the proposed extraction areas, mineral and aggregate operations can meet DEQ's standards. DEQ standards are designed to protect human health and human habitation areas and meeting DEQ standards helps mitigate and eliminate environmental conflicts. The mining and operations plan submitted by Big River provides a number of methods that will minimize environmental impacts (e.g., reorienting mining direction, reducing onsite truck speeds, etc.). It is possible that there would be an adverse environmental effect due to an increase in the ambient noise level even though DEQ standards are met. However, in establishing the noise levels, DEQ has provided a mechanism that adequately protects environmental values. Big River has demonstrated that DEQ's standards can be met within the mapped impact area. Further, Big River has used land forms, has incorporated berms, and has proposed a mining plan to mitigate these environmental issues. Big River's proactive approach in this area is an important consideration to the environmental analysis.

Regardless of where a mineral and aggregate site would be located in Clatsop County, a neighbor would be able to express concern about the adverse effects of the environment. If a mineral and aggregate site was required to have no effect on any person, that resource would be located well beyond the market area and significant additional amounts of fuel would be necessary to move the product to market. That would cause a separate type of environmental consequence that is avoided by locating the sites closer to the market area. Rock resources move by trucks and the more distance that is added (to escape environmental, social and economic consequences to adjoining properties) creates an equal and opposite environmental, social and economic consequence: the use of significantly more fossil fuel that powers the trucks that deliver the mineral and aggregate material. Further, transportation costs greatly increase the cost of aggregate and it is not in the best interests of citizens in Clatsop County to locate mineral and aggregate resources a significant distance outside the market area. .

With regard to the environmental prong of the ESEE analysis, the minimized environmental impacts on neighboring properties must be balanced against the greater environmental impacts caused by moving mineral and aggregate operations to locations that are farther and farther away. While there are potential environmental consequences in terms of noise, these consequences are greatly mitigated or even eliminated by the operator's proposal and they are outweighed by negative environmental consequences if the quarry were required to move farther and farther away from the market area.

4. Energy Consequences Analysis.

a. Impacts on the resource of allowing conflicting uses.

The only adverse energy consequences to a mineral and aggregate resource by allowing a conflicting use would be due to operational changes in the aggregate extraction operations that could make them less efficient and more energy consumptive. And as argued above (in the environmental analysis which we incorporate herein), it is also possible that locating a conflicting use near the resource sites could potentially cause greater energy impacts through fuel consumption by haul trucks that might be required to travel greater distances to bring the aggregate material to market from more distant locations.

b. Impacts on conflicting uses of allowing the resource use.

It is difficult to conceptualize how there would be adverse energy consequences to any conflicting use if the Big River application site is approved. Conceivably, existing neighbors (or new construction) would wish to replace single pane windows with double paned windows to counteract noise effects. This would potentially consume more energy by manufacturing new windows, but also could save energy in terms of increased efficiency of double paned windows. Similarly, it is possible that neighbors could attempt to berm or landscape their properties in a way to reduce the view of the mineral and aggregate sites or some of the potential operating effects. This, conceivably, could increase energy consumption directly related to the energy necessary to construct the berms.

Because transportation of mineral and aggregate materials is very energy dependent, we believe that our consideration of the energy consequences of the ESEE analysis tips slightly in favor of allowing the proposed use.

WASHINGTON STATE DEPARTMENT OF ECOLOGY

ALTERNATIVES TO HAZARDOUS MATERIALS

Techniques for Dust Prevention and Suppression

Publication Number 96-433, Revised March 2001

The Department of Ecology developed this publication to help owners and operators of areas with fugitive dust sources comply with laws pertaining to dust emissions and the use of dust suppressants. It provides guidance for road maintenance departments, road construction and general contractors, real estate developers, as well as government agency technical assistance providers, dust abatement product and service vendors, and the general public.

Common dust sources include:

- agricultural fields
- construction and demolition sites
- feed lots
- hauled materials
- storage piles.
- paved and unpaved roads
- parking lots
- waste cleanup sites
- industrial facilities

This publication describes methods, techniques, and products designed to prevent or suppress dust emissions. Environmental considerations relating to the use of chemical dust suppressants in Washington State are also discussed. The methods outlined here help you apply effective, economical, and environmentally safe dust control techniques.

Benefits of a dust control program

Controlling dust emissions:

- Reduces dust-related human respiratory health problems like asthma, bronchitis, emphysema, hay fever, and allergies.
- Reduces vehicle accidents and human injuries due to poor visibility and road conditions.
- Reduces impacts on fish and other aquatic life, vegetation, agricultural crops, and water quality due to dusting, turbidity, and sedimentation.
- Reduces vehicle and equipment wear and damage due to mechanical abrasion and road impact.

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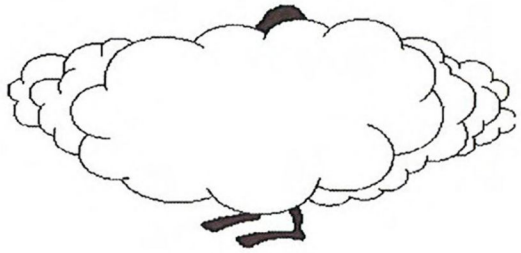
Dust Prevention

- Reduces unpaved road maintenance costs, by:
  - reducing frequency of blading by 25 to 75 percent,
  - decreasing loss of fine-grained road surface material, and
  - lowering regraveling costs.
- Reduces cleaning costs for homes and vehicles.
- Reduces liability for damage caused to property or people
- Improves property values and quality of life.
- Reduces complaints from the public.



Dust Emission Prevention and

Dust emissions can be prevented or reduced in four basic ways:

- Limiting the creation or presence of dust-sized particles.
- Reducing wind speed at ground level.
- Binding dust particles together.
- Capturing and removing dust from its sources.

All of the following techniques rely on one or more of these strategies.

Techniques Applicable to Many Sources:

- Vegetate or mulch areas that won't receive vehicle traffic.
- In areas where planting, mulching or paving is impractical, apply gravel or landscaping rock.
- Clear vegetation only from those areas where you will work right away.
- Construct natural or artificial wind breaks or wind screens. These may be designed as enclosures for small dust sources.

- Apply water to reduce emissions from temporary sources. Limited use of water-absorbing (hygroscopic) salts with water will reduce how often you must water trafficked areas.
- Surface-apply chemical suppressants to untrafficked areas to form a less erodible soil surface.

Techniques for Unpaved, Trafficked Areas:

- Lower speed limits. High vehicle speed increases the amount of dust stirred up from unpaved roads and lots. Lowering the speed of a vehicle from 45 miles per hour to 35 miles per hour can reduce emissions by up to 22 percent.
- Upgrade the road by:
  - Increasing surface strength by improving particle size, shape, and mineral types that make up the surface and base materials.
  - Adding surface gravel to reduce the source of dust emission. Limit the amount of fine particles (those smaller than .075 mm) to 10 to 20 percent.
  - Improving drainage and crown.
- Use geotextile fabrics to increase the strength of new roads or roads undergoing reconstruction.
- Encourage use of alternate, paved routes, if available. Dust emissions from paved surfaces are up to 90 percent less than from unpaved surfaces.
- Restrict use by tracked vehicles and heavy trucks to prevent damage to road surface and base.
- Apply chemical dust suppressants using the admix method, blending the product with the top few inches of surface material. Suppressants may also be applied as surface treatments. Chemical treatment can reduce emissions by 30 to 80 percent.
- Pave unpaved permanent roads and other trafficked areas.
- Pave or treat permanent unpaved haul roads, construction sites, and parking or staging areas at commercial, municipal, or industrial facilities.

Techniques for Paved, Trafficked Areas:

- Improve material specifications for and reduce usage of skid control sand or salt. Use coarse material that isn't easily crushed into powder during snow and ice season.

- Vacuum or wet sweep fine dirt and skid control materials from paved roads soon after winter weather ends and at other times, when needed.

- Minimize vehicle "track-out" material by:
  - Filling in muddy areas with gravel or other surface material.
  - Installing "grizzlies." These rough-surfaced areas, such as lengths of gravel or cattle guards, scrub soil and mud from vehicle tires.
  - Building vehicle tire/underbody wash stations near unpaved road junctions at project sites.

- Pave or stabilize shoulders of paved roads with gravel and vegetation.

- Provide for stormwater drainage and construct curbing to prevent water erosion onto paved roads.

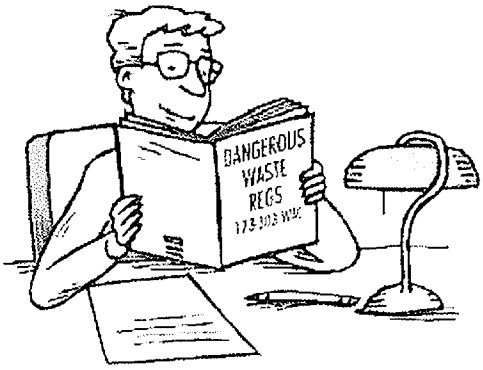
Techniques for Other Specific Sources:

- For *agricultural fields*: use strip cropping, increase soil surface roughness, plant wind breaks, rotate crops, reduce tillage, plant cover crops, limit burning, and apply mulch.

- Apply *load* control measures like load covering, freeboard, bedliners, and watering. Require prompt clean up of spills.

- Cover *piles* with wind-impervious fabric.

- Limit use of *off-road recreational vehicles* on open land. Confine operations to specific areas, require permits, or prohibit use.



Applicable Regulations

Help protect public health and the environment by assuring that your dust control practices comply with federal, state, and local laws. Contact your local Air Pollution Control Authority and county Health Department to find out about requirements in your area. In Washington State, the following laws apply:

Chapter 70.94 RCW Washington Clean Air Act and Chapter 173-400 WAC

These statutes require owners and operators of fugitive dust sources to prevent fugitive dust from becoming airborne and to maintain and operate sources to minimize emissions.

Chapter 70.95I RCW Used Oil Recycling

This law prohibits the use of used oil as a dust suppressant. Used oil includes any oil that has been refined from crude oil, used, and as a result of such use, is contaminated by physical or chemical impurities. If you plan to use a chemical suppressant, verify that it does not contain any used oil as an ingredient. Also be certain that if the product contains fuel oil ingredients, that the fuel oil does not contain used oil. Note that federal regulation 40 CFR Part 279, Standards for the Management of Used Oil, Subpart I prohibits the use of used oil as a dust suppressant in all 50 states.

Chapter 90.48 RCW, Water Pollution Control

Section .080 prohibits the discharge of any material into surface or ground waters that could cause pollution as defined in WAC 173-200-020(22). If your site is near surface or ground water, use dust control measures that have zero or minimal aquatic impact. If you decide to use a chemical dust suppressant, select a product with no aquatic toxicity.

Note that Ecology's General Permit for Sand and Gravel Operations prohibits the use of lignin sulfonate products for dust suppression in *excavated* areas due to the risk of groundwater pollution.

Chapter 70.105 RCW, Hazardous Waste Management

This statute prohibits the disposal to the ground of any dangerous (hazardous) waste. If you are planning to use a chemical dust suppressant, make sure it does not contain any dangerous waste ingredients.

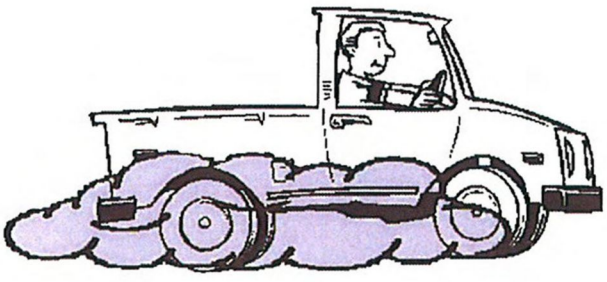
Chapter 70.105D RCW Hazardous Waste Cleanup - Model Toxics Control Act (MTCA)

This law requires the identification and cleanup of hazardous sites. The Department of Ecology can investigate reports of releases or the presence of hazardous substances. If a hazardous product is used as a dust suppressant and Ecology later receives a complaint of contamination, a site assessment may be conducted. A cleanup may be required if it is determined that there is a potential threat to human health or the environment. This determination depends on the hazardous substance(s) present, their concentration(s), the environmental characteristics of the site including proximity to surface and groundwater, as well as the current or proposed future use of the property.

Anyone considering the use of products containing hazardous substances for dust abatement should carefully weigh the risk of possible future cleanup costs or loss in property value which could occur, particularly if land use is likely to change toward more unrestricted uses such as residential housing.

Chapter 90.03 RCW Surface Water Code and Chapter 90.44 RCW Regulation of Public Ground Waters (wells)

This regulation requires a water right permit for **all** surface water withdrawal and for any water from a well that will exceed 5,000 gallons per day. If you plan to use water for dust suppression at your site, be sure that you have a legal right to that water. If in doubt, check with the Department of Ecology's Water Resources Program. Temporary permits are usually obtainable in a short time period. In some instances, water may need to be obtained from a different area and hauled in, or from an existing water right holder.



Chemical Dust Suppressants

Chemical dust suppressants are commercially available for use on most types of emission sources. Keep in mind that most of the products designed for trafficked areas are primarily intended for moderately traveled, low cost roads, typically surfaced with gravel. Dust suppression and periodic unpaved road maintenance are normally combined.

The performance of any dust suppressant is directly related to many factors. These include:

- application method and rate,
- road surface moisture content during application,
- hydrological conditions, like site precipitation and drainage,
- mechanical stability of the road surface aggregate,
- percent of fines in the aggregate mix, and
- the properties of the road base and subgrade.

Don't expect a chemical suppressant to compensate for deficiencies in road design, material composition, local site, or climatic factors.

For unpaved road applications, products applied using the admix method usually work better than if simply surface applied. Table 1 on page 16 lists the common dust suppressant product types and their attributes. Vendors can provide detailed product-specific information.

Product Performance

The literature on road dust suppression includes a number of comparative studies of dust control products; consult these references for detailed product comparisons. A number of them, marked "C", appear in the *References* section on page 14. Several of the references also contain detailed information on application methods, performance-related measurement techniques, comparative costs, and related road engineering topics. These references are recommended for further reading, and are marked with a "•."

Results of comparative studies indicate that for unpaved road sites the most consistently effective suppressant products are the lignin sulfonate and calcium and magnesium chloride types. In Washington State, sixty road managers working in various governmental and private jurisdictions reported using:

- lignin sulfonate products (41 percent),
- water (33 percent),
- magnesium chloride products (8 percent),
- emulsified asphalt products (8 percent),
- petroleum oil products (4 percent),
- calcium chloride products (4 percent), and
- other products (2 percent).

Human Health and Environmental Impacts

Only a few studies have evaluated the human health and environmental impacts of chemical dust suppressants. Any suppressant product or its ingredients may migrate from a treated site due to carelessness in application, runoff, leaching, volatility, dusting, or adhesion to vehicles.

The risk to human health and the environment from chemical dust suppression depends on many factors, including the hazardous characteristics of product ingredients, application practices, and the environmental characteristics of the site. In areas where surface water or groundwater is nearby and where streamflows are very low, adverse environmental impacts are possible.

During preparation or application, chemical dust suppressants may exhibit hazardous characteristics such as corrosivity or ignitability. Some products may produce excessive heat when mixed with water. Others may contain toxic or carcinogenic ingredients. Be sure to carefully review the product literature, Material Safety Data Sheet, and manufacturer's instructions before purchase and prior to use. Observe all safety precautions and follow manufacturer's directions when handling, mixing, and applying chemical suppressants.

A number of studies have looked at the effects of road deicing salts. Calcium chloride, magnesium chloride, and sodium chloride are commonly used for both deicing and dust suppression. When applied to roads and streets these salts can potentially contribute substantial amounts of the chloride ion to groundwater, surface water, and nearby soils. Deicing salt impacts to roadside and nearby vegetation, ground water (including wells) and, to a much lesser degree, surface waters, have been reported.

The results of deicing studies are not directly applicable to dust suppression. Salts applied to unpaved roads remain mostly in the road surface or underlying layers in the short term. Deicing compounds, however, applied to paved roads, quickly wash away as snow and ice melts.

Water quality analysis for the above-referenced dust suppression study conducted at Colorado State University found significant dust suppressant concentrations (from chloride and lignon products) in runoff samples from treated test sections. This study concluded that the total product mass going into the environment was small and would have negligible impact.

Total Cost Accounting for Dust Suppression Projects

Developing an effective and cost-efficient dust control program means accurately identifying and accounting for the true costs and savings of any new alternative, compared to your current practices. For unpaved roads, the costs can be grouped into the categories listed below:

Road Improvement Costs

Drainage improvements, geometric improvements, repairing of failed areas, excavation and removal of substandard material, and addition of surface material. (Note: These costs are not part of dust suppression program costs if they would be required anyway, without dust suppression.)

Surface Preparation Costs

Addition of select material (fines or coarse material), breaking up and loosening the road surface (scarifying), watering, shaping, and compacting.

Product Supply and Application Costs

Material cost, transportation cost, application cost, and contract supervisor cost (if a project supervisor is provided by the contractor).

Miscellaneous Costs

Traffic control, detour, inspection, crew supervision, material storage (if inventory is maintained) and liability costs.

Dust program savings or benefits can be grouped as follows:

Road Improvement Costs Avoided

Listed above, these costs are avoided or reduced over time due to greater road stability and durability resulting from chemical treatment.

Road Maintenance and Repair Savings

These savings are due to less frequent regrading and less frequent need to add supplementary road materials. They accumulate due to reduced loss of gravel and fines, along with greater durability of the road surface.

Savings from Non-road and Off-site Benefits

These are the savings that accrue from the many dust control program benefits not specifically related to the road itself, i.e., human health, vehicle-related, and environmental.

Recommendations

Approach your dust control problem systematically, looking first at prevention options. The decision-making flowchart printed on page 18 provides a general framework.

Prepare a dust control plan

Refer to the general and source-specific guidelines and control measures described in the documents *Control of Open Fugitive Dust Sources* (EPA-450/3-88-008) or *Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures* (EPA-450/2-92-004). Also, be sure to consult with your local Air Pollution Control agency (see page 11). At a minimum your plan should include:

- Identification of all fugitive dust sources.
- A description of the dust control method(s) to be used for each source.
- A schedule, rate of application, calculation or some other means of identifying how often, how much or when the control method is to be used.
- Provisions for monitoring and record-keeping.
- A backup plan in case the first control plan does not work or is insufficient.
- The name and phone number of the person responsible for making sure the plan is implemented and who can be contacted in the event of a dust complaint.

Selecting Chemical Suppressants

Comparative studies of dust suppression products have been conducted. Some of these are listed in the ***References*** section. Evaluate the available products against your own specific emission source, site, performance, and cost criteria.

The burden of proof for product safety lies with the chemical manufacturers, distributors and users. Obtain Material Safety Data Sheets and review them carefully. Ask the vendor whether their product has characteristics or meets criteria that would cause it to designate as a Washington State dangerous waste as it is applied to the ground, after drying or curing, or as a result of biochemical decay.

While hazardous characteristics or criteria or the presence of hazardous ingredients do not prevent the use of a product, they are factors in evaluating worker safety and potential environmental hazards. Beware of the possible presence of contaminants in any product. Ask the product manufacturer to provide you with toxicity test results including mammal and fish bioassay tests. For Washington State, the test methods are referenced in WAC 173-303-110, and are available through any Ecology office. Results of standard tests that measure biological oxygen demand (BOD) and leachability after application (i.e., water solubility) should also be available.

The Department of Ecology does not approve, recommend, or endorse specific products or service providers. However, we can help you in evaluating the environmental safety of specific products. Contact your regional office of Ecology's Hazardous Waste and Toxics Reduction Program for assistance.

Contacts for Further Information or Assistance

Local Air Pollution Control Authorities

Olympic Air Pollution Control Authority

(Clallam, Grays Harbor, Jefferson, Mason, Pacific, and Thurston Counties)
909 Sleater-Kinney Road Southeast, Suite 1
Lacey, Washington 98503-1123
Vacant, Executive Director
Telephone: (360) 438-8768 or 1-800-422-5623
Fax: (360) 491-6308
Website: www.oapca.org

Department of Ecology Northwest Regional Office

(San Juan County)
3190 - 160th Avenue Southeast
Bellevue, Washington 98008-5452
Telephone: (425) 649-7000
Fax: (425) 649-7098
Website: www.ecy.wa.gov

continued on page 12

Northwest Air Pollution Authority
(Island, Skagit, and Whatcom Counties)
1600 S Second St
Mount Vernon, Washington 98273-5202
James Randles, Air Pollution Control Officer
Telephone: (360) 428-1617 **or** 1-800-622-4627 (Island and Whatcom)
Fax: (360) 428-1620
Website: www.nwair.org/

Puget Sound Clean Air Agency
(King, Kitsap, Pierce, and Snohomish Counties)
110 Union Street, Suite 500
Seattle, Washington 98101-2038
Dennis J. McLerran, Air Pollution Control Officer
Telephone: (206) 343-8800 or 1-800-552-3565
Burn Ban Recording: 1-800-595-4341
Fax: (206) 343-7522
Website: www.pscleanair.org/

Southwest Clean Air Agency
(Clark, Cowlitz, Lewis, Skamania, and Wahkiakum Counties)
1308 NE 134th Street
Vancouver, Washington 98685-2747
Robert D. Elliot, Executive Director
Telephone: (360) 574-3058 or 1-800-633-0709
Fax: (360) 576-0925
Website: www.swapca.org

Department of Ecology Central Regional Office
(Chelan, Douglas, Kittitas, Klickitat, and Okanogan Counties)
15 West Yakima Avenue, Suite 200
Yakima, Washington 98902-3401
Telephone: (509) 575-2490
Fax: (509) 575-2809
Website: www.ecy.wa.gov

Yakima Regional Clean Air Authority
6 S Second Street, Room 1016
Yakima, Washington 98901
Les Ornelas, Director
Telephone: (509) 574-1410
Fax: (509) 574-1411
Website: http://co.yakima.wa.us/cleanair/default.htm

Department of Ecology Eastern Regional Office
(Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Stevens, Walla Walla, and Whitman Counties)
4601 N Monroe Street, Suite 202
Spokane, Washington 99205-1295
Telephone: (509) 329-3400
Fax: (509) 329-3529
Website: www.ecy.wa.gov

Spokane County Air Pollution Control Authority
1101 W College Avenue, Suite 403
Spokane, Washington 99201
Eric Skelton, Director
Telephone: (509) 456-4727
Fax: (509) 459-6828
Website: www.scapca.org

Benton County Clean Air Authority
650 George Washington Way
Richland, Washington 99352
Dave Lauer, Director
Telephone: (509) 943-3396
Burn Ban Recording: (509) 946-4489
Fax: (509) 943-0505 or 943-2232
Website: www.bcaa.net/

Department of Ecology

Ecology has environmental experts available to advise you on dust prevention and suppression techniques and issues. Direct your questions to the Ecology regional office nearest you.

Central Regional Office (509) 575-2490
Counties: Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan and Yakima

Eastern Regional Office (509) 329-3400
Counties: Asotin, Garfield, Columbia, Walla Walla, Grant, Adams, Whitman, Spokane, Lincoln, Ferry, Franklin, Stevens, and Pend Oreille

Northwest Regional Office (425) 649-7000
Counties: Whatcom, Skagit, San Juan, King, Kitsap, Snohomish, and Island

Southwest Regional Office (360) 407-6300
Counties: Skamania, Clark, Cowlitz, Wahkiakum, Pacific, Lewis, Pierce, Thurston, Mason, Grays Harbor, Jefferson, and Clallam

References

"C" = Comparative study
• = Recommended for further reading

1• UMA Engineering Ltd. Engineers, Planners and Surveyors, *Guidelines for Cost Effective Use and Application of Dust Palliatives*, Roads and Transportation Association of Canada (RTAC), 1987.

2• Addo, Jonathan Q. and Sanders, Thomas G., *Effectiveness and Environmental Impact of Road Dust Suppressants*, MPC Report No. 95-28 A, Department of Civil Engineering, Colorado State University, Ft. Collins, CO, March 1995.

3C Monlux, Stephen. "Dust Abatement Product Comparisons in Region One", USDA Forest Service, February 17, 1993.

4C Bolander, Peter. U.S. Forest Service, *A Guide to Liquid Spray Applications for Erosion Control, Dust Abatement, and Tackifiers*, February 1996.

5• Palmer, James T., Edgar, Thomas V. and Boresi, Arthur P. *Strength and Density Modification of Unpaved Road Soils Due to Chemical Additives*, MPC Report No. 95-39 University of Wyoming, Department of Civil and Architectural Engineering, Laramie, WY, January 1995.

6 Scholen, Douglas E., *Non-Standard Stabilizers*, FHWA-FLP-92-011, U.S. Department of Transportation, Federal Highway Administration, July 1992.

7C Bolander, Peter, U.S. Forest Service, *Dust Abatement, Street Maintenance and Collection Systems Short School*, April 1995

8 Cowherd, C., Muleski, G. E. and Kinsey, J. S., *Control of Open Fugitive Dust Sources*, Midwest Research Institute, EPA Report No. 450/3-88-008, September 1988.

9C Brown, Dr. Dan A. and Elton, Dr. David J., *Guidelines for Dust Control on Unsurfaced Roads in Alabama*, Alabama Highway Research Center, Harbert Engineering Center, Auburn University, Alabama, June 1994.

10 "Dust Control, Road Maintenance Costs Cut With Calcium Chloride", *Public Works*, Vol. 121. No. 6, (May 1990) pp. 83-84.

11 Washington State Department of Ecology, *State Implementation Plan for Particulate Matter in the Spokane Study Area*, November 1991.

12C Kirchner, Henry W, P.E. . "Road Dust Suppressants Compared", *Public Works*, Vol. 119, No. 13 (December 1988), pp.27-28.

13 *Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures*, EPA Office of Air Quality, EPA-450/2-92-004, September 1992.

14C Bolander, Peter. Draft (August 1996): "Chemical Additives for Dust Control - What We've Used and What We've Learned", USDA Forest Service, Portland, Oregon.

Table 1. Chemical Dust Suppressants

Types	Source	Functional Mechanism
Freshwater	From surface or groundwater sources (need Water Right permit).	Moisture wets particles, increasing their mass and binding them together.
Seawater	Puget Sound, Pacific Ocean.	Moisture stabilizes fines. Contains small quantities of deliquescent (water retaining) chemicals (mostly $MgCi_{2}$,) which retain moisture in road surface.
Calcium chloride (Generically available as flakes or pellets)	By-product of ammonia-soda (Solvary) process; also produced from natural salt brine.	Deliquescent and hygroscopic; i.e., attracts and retains moisture at a relative humidity equal to or greater than 29 % (77 °F).
Magnesium chloride	Produced from natural salt brine; by-product of potash production; produced from the reaction of magnesium hydroxide (from seawater or dolomite) with hydrochloric acid.	Deliquescent and hygroscopic; i.e. attracts and retains moisture at a relative humidity equal to or greater than 32 % (77 °F).
Lignin derivatives	Paper-making industry by-product containing lignin and carbohydrates in solution. Specific composition depends on chemicals and processes used to extract cellulose.	Act as adhesives, binding soil particles together.
Tree Resin Emulsions	Emulsions produced from pine tree resins.	Act as adhesives, binding soil particles together.
Synthetic Polymer Emulsions	Synthetic formulations composed of polyvinyl acetates, vinyl acrylic copolymers, copolymer methacrylates, polybutadiene, et. al.	Bind soil particles together by forming a polymerizing matrix, function similar to adhesives.
Bituments, Tars, and Resins *-Residual Fuel Oil* *-Technical White Oils* *-Fuel oils #4, #5, #6*	Petroleum, coal, and plastics industry by-products.	Asphalt and resinous products are adhesive, binding soil particles together. Petroleum oil products coat soil particles, increasing their mass.
Geotextiles	Manufactured polypropylene and polyethylene fabrics.	Provide and maintain drainage; improve load supporting properties; prevent upward migration of subgrade fines; separate road layer materials.

	Performance Advantages	Performance Limitations	Environmental considerations
	Usually readily available, low material cost, easy to apply.	Frequent light applications may be necessary during hot, dry, weather; therefore, potentially labor intensive. Over-application may result in loss of traction, erosion, or points of road failure.	Minimal environmental hazard. If applied excessively, may result in erosion and sediment runoff. Supply may be limited in some areas.
	Low material cost. Performs somewhat better than fresh water. Need for re-application is less than with fresh water.	Only available in coastal areas. Over application may result in loss of traction, erosion, or points of road failure. Salt ($MgCl_2$, NaCl) is corrosive to metals.	Repeated applications and long-term use may harm adjacent and nearby vegetation.
	Reduces evaporation rate of surface moisture 3.4 times; lowers freezing point of water to -60 degrees F (30% solution) minimizing frost heave and reducing freeze-thaw cycles; increases compacted density of road material; effectiveness retained after reblading.	Effectiveness in arid and semi-arid regions may be limited due to low relative humidity; very corrosive to aluminum alloys; slightly corrosive to steel. Solubility results in leaching during heavy precipitation. Releases heat when mixed in water.	Repeated applications and long-term use may harm adjacent and nearby vegetations.
	Reduces evaporation rate of surface moisture 3.1 times; lowers freezing point of water to -27 degrees F (22% solution) minimizing frost heave and reducing freeze-thaw cycles; increases compacted density of road material, more so than $CaCl_2$; effectiveness retained after reblading.	Effectiveness in arid and semi-arid regions may be limited due to low relative humidity; very corrosive to steel, though inhibitors can be added. Solubility results in leaching during heavy precipitation.	Repeated applications and long-term use may harm adjacent and nearby vegetations.
	Greatly increases dry strength of soil; not humidity-dependent; imparts some plasticity to road surfaces; lowers freezing point of road surface and base; effectiveness retained after reblading.	High solubility results in leaching during heavy precipitation; corrosive to aluminum alloys due to acidity ($CaC0_3$ added ingredient, can neutralize acidity). Proper aggregate mix (4 - 8% fines) important to performance. Becomes slippery when wet, brittle when dry.	Lignin products have a high BOD (biological oxygen demand) in aquatic systems. Spills or runoff into surface or groundwaters may create low dissolved oxygen conditions resulting in fish kills or increases in groundwater concentrations of iron, sulfur compounds, and other pollutants.
	Low solubility after curing minimizes leaching and provides degree of surface waterproofing. Imparts some plasticity to road surfaces. High bonding strength; non-corrosive.	Require proper weather and time to cure. No residual effectiveness after reblading. Equipment requires prompt cleanup to avoid curing of resin in hoses and pipes.	
	Applicable to a range of emission sources; function well in sandy soil conditions. Some types allow seeded vegetation to grow through the polymer matrix.	Require proper weather conditions and time to cure; may be subject to UV (sunlight) degradation; application equipment requires timely cleaning; no residual effectiveness after reblading.	
	Water insoluble when dry; provide a degree of surface waterproofing. Good residual effectiveness.	Surface crusting, fracturing and potholing may develop; long-term application may cause road to become too hard for reblading; won't lower freezing point; petroleum oil products lack adhesive characteristics.	Use of used oils is prohibited. See MTCA discussion on page 6. Some petroleum-based products may contain carcinogenic polycyclic aromatic hydrocarbons (PAHs).
	Flexible, durable, water permeable, and resists soil chemicals; reduces amount of aggregate required during initial construction; lower maintenance	High material cost; material degrades in sunlight, if exposed.	

Dust Prevention Methodology

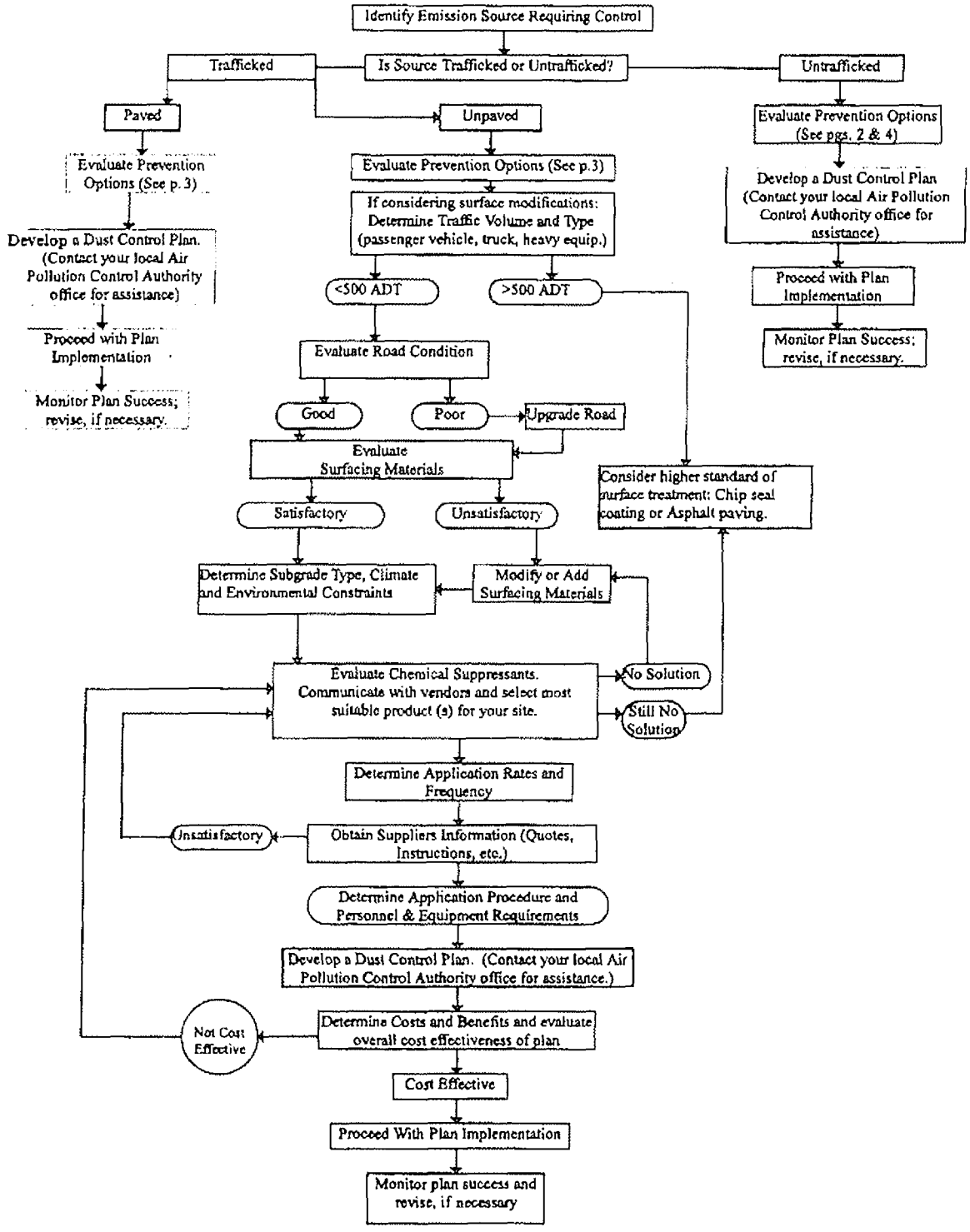
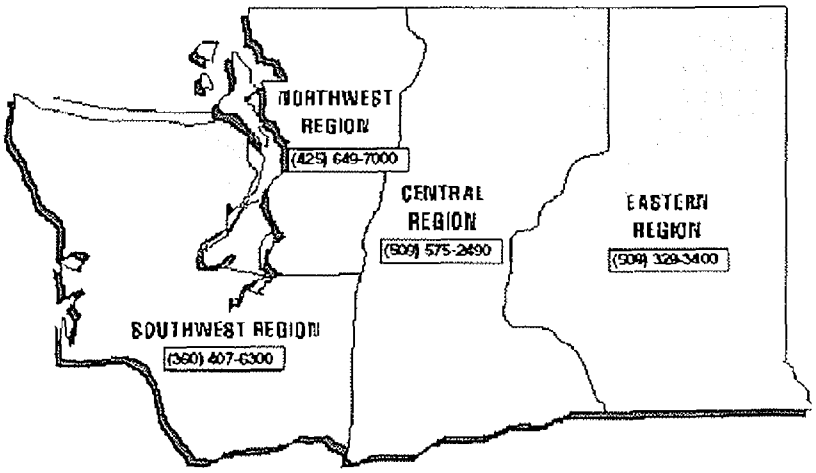


Figure 1. Adapted from "Guidelines for Cost Effective Use and Application of Dust Palliatives," Figure 1.1, p.11.

The Department of Ecology is an equal opportunity agency and does not discriminate on the basis of race, creed, color, disability, age, religion, national origin, sex, marital status, disabled veteran's status, Vietnam Era veteran's status or sexual orientation.

If you have special accommodation needs or require this document in alternative format, please contact the Hazardous Waste and Toxics Reduction Program at (360) 407-6700 (voice) or 711 or (800) 833-6388 (TTY).



printed on recycled paper

Environmental Science Associates, Inc. *1450 Flintridge Avenue Eugene, Oregon 97401* *Phone (541) 683-4997*
FAX (541) 683-5360

January 22, 2008

Paul R. Hribernick
Black Helterline
805 SW Broadway
Suite 1900
Portland, Oregon 97205

RE: Big River Ordway Quarry

Dear Paul:

In regards to your question about concerns expressed by some individuals in the proximity of the Ordway Quarry, specifically the Edgewater Terrace Subdivision, it is my experience as a geologist the periodicity and energy of routine mine methods employed at the Ordway Quarry will not result in vibration perceptible to humans. The distance of over 1500 feet, high energy/short period waveform of blast energy and transition from high density basalt to alluvial sediment will negate perceptible vibration.

High speed, heavy traffic on nearby Highway 26 is a more likely source of vibration due to proximity and energy/waveform type.

If you have any questions please call (541) 683-4997.

Respectfully,

Steve LaFranchi, RG
ESA

Exhibit 12

Exhibit III.

Application, Maps & Submitted Findings

Land Use App. Receipt

Clatsop County Planning and Development
800 Exchange St Ste 100
Astoria, OR 97103

Ph. (503) 325 - 8611 Fax (503) 338 - 3666

For Department Use Only

Permit #: **20070732**
Permit Type: **Type IV**
Entry Date: **10/25/2007**
Entered By: **Michael Weston**
Assigned To:
Permit Status: **Entered**

Permit Timeline

User	Status	Date
Michael Weston	Entered	10/25/2007

Proposed Use

Proposed Use: **Comprehensive Plan Text Amendment**
Zone: **AF , RA-2**
Overlay District: **GHO**
Description: Big River Rock Quarry

Project Location

Address:
City: State: OREGON
Directions:

TaxLot Desc:	T	R	S	Q S	Qq S	Taxlot
	5	10	14	0	0	01203

Applicant/Owner/Agent

Applicant:

Owner: Name: **Big River Holdings Inc** Ph. #: (503) 338-3878
Address: 1050 Olney Ave Cell: ( ) -
City, State, Zip: Astoria, OR 97103 Fax: ( ) -

Agent: Name/Type: Black Helterline LLP (Attorney) Ph. #: (503) 224-5560
Address: 805 Southwest Broadway, Suite 1900 Cell: ( ) -
City, State, Zip: Portland , OR 97205 Fax: (503) 224-6148

Fees

Fee Type:	***Permit Fee Total:***
Planning/Development	$6,622.00
Total:	**$6,622.00**

Receipt

Payor Name:	***Pymnt Type***	***Check #***	***Pymnt Date***	***Pymnt Amount:***
Big River Holdings Inc	Check	24059	10/25/2007	$3,309.00
Big River Holdings Inc	Check	24060	10/25/2007	$2,175.00
Big River Holdings Inc	Check	24061	10/25/2007	$1,059.00
Big River Holdings Inc	Check	24063	10/25/2007	$79.00

Balance Due: **$0.00**

Signatures

1. For Commercial and industrial uses, include parking and loading plan, sign plan and erosion control plan.
2. For residential and other uses, include an erosion control plan.
3. Review attached applicant's statement and sign below.

I have read and understand the attached APPLICANT'S STATEMENT and agree to abide by the terms thereof.

Applicant Signature: _____ ***Date:*** 10/25/07
Owner Signature: _____ ***Date:*** _____
Agent Signature: _____ ***Date:*** _____

	Land Use App. Receipt	For Department Use Only
	Clatsop County Planning and Development 800 Exchange St Ste 100 Astoria, OR 97103 Ph. (503) 325 - 8611 Fax (503) 338 - 3666	Permit #: **20070732**

Zoning District Requirements

Property Access Info.

Access to Property:

County Permit Required?

State Permit Required?

	Direction	Setbacks Req.	Setbacks Actual
F:			
S1:			
S2:			
R:			

Property Information

Compliance/Conditions of Approval

Clatsop County Compliance

Except as noted, the Clatsop County Community Development Department finds the proposed use(s)/action(s) in compliance with the Clatsop County Land & Water Development and Use Ordinance and with the Clatsop County Comprehensive Plan.

The evaluation of the land parcels outlined above is based on the information presented at this time, standards provided in the Clatsop County Land & Water Development & Use Ordinance, and policies of the Comprehensive plan, and the Zoning/ Comprehensive Plan Map.

The applicant or property owner must comply with the conditions noted below and on the attached applicants statement. This permit is not valid unless the conditions are met.

Entered by: **Michael Weston**

Entered Date: **10/25/2007**

Applicants Signature: _____ ***Date:*** 10/25/07

Clatsop County Authorization: _____ ***Date:*** 10-25-07

Applicant's Statement

1. *Pertaining to the subject property described, I hereby declare that I am the legal owner of record, or an agent having the consent of the legal owner of record, and am authorized to make the application for a Development Permit/Action so as to obtain the following permits: Building, Sanitation, U.S. Army Corps of Engineers, Oregon Division of State Lands, Oregon Department of Transportation, Oregon Department of Parks and Recreation, or a Clatsop County Road Approach. I shall obtain any and all necessary permits before I do any of the proposed uses or activities. The statements within this application are true and correct to the best of my knowledge and belief. I understand that if the permit authorized was based on false statements, or it is determined that I have failed to fully comply with all conditions attatched to and made a part of this permit, this permit approval is hereby revoked and null and void.*

2. *It is expressly made a condition of this permit that I at all times fully abide by all State, Federal, and local laws, rules, and regulations governing my activities conducted or planned pursuant to this permit.*

3. *As a condition for issuing this Development Permit/Action, the undersigned agrees that he/she will hold Clatsop County harmless from and indemnify the County for any and all liabilities to the undersigned, his/her property or any other person or property, that might arise from any and all claims, damages, actions, causes of action or suits of any kind or nature whatsoever, which might result from the undersign's failure to build, improve or maintain roads which serve as access to the subject property or from the undersign's failure to fully abide by any of the conditions included in or attached to this permit.*

4. **WAIVER OF VESTED RIGHTS DURING APPEAL PERIOD FOR ZONING AUTHORIZATIONS.**
I have been advised that this Land and Water Development Permit/Action by the Clatsop County Community Development Director may be appealed within twelve (12) calendar days of the date of of permit issuance and authorization (note: if the twelfth day is a Saturday, Sunday or legal holiday, the appeal period lasts until the end of the next day which is not a Saturday, Sunday or legal holiday). I understand that if the approval authorized by the County and referenced above is reversed on appeal, then the authorization granted prior to the end of the appeal period will be null and void. I further understand and consent to the fact that any actions taken by me in reliance upon the authorization granted during the appeal period shall be at my own risk, and that I hereby agree not to attemp to hold Clatsop County responsible for consequenses or damages in the event that removal of improvements constructed during the appeal period is ordered because an appeal is sustained.

5. *I am aware that failure to abide by applicable Clatsop County Land and Water Development and Use Ordinance 80-14, as amended and Standards Document regulations may result in revocation of this permit or enforcement action by the County to resolve a violation and that enforcement action may result in levying of a fine.*

6. *I understand that a change in use, no matter how insignificant, may not be authorized under this permit and may require a new Development Permit/Action (check first, with the Clatsop County Community Development Department).*

7. *I understand that this Development Permit/Action expires 180 days from the date of issuance unless substantial construction or action pursuant to the permit has taken place. Upon expiration, **a new** development permit must be obtained.*

BLACK | HELTERLINE LLP

ATTORNEYS AND COUNSELORS AT LAW

PAUL R. HRIBERNICK
E-mail: prh@bhlaw.com

Our File No. 9395-1

October 23, 2007

HAND-DELIVERED

Mr. Michael J. Weston II, MPA
Planner, Community Development
Clatsop County Community Development Department
800 Exchange Street, Room 100
Astoria, OR 97103

Reference: PAPA Application
Big River Holdings, Inc. (Ordway Quarry)

Dear Mike:

We appreciate the time that you and Patrick Wingard put into the pre-application conference last week. Consistent with our discussions at the pre-app, we are filing the PAPA application for the Ordway quarry at this time. We have included a check for $239 for the pre-application conference as you were gracious enough to allow us to provide the check for the pre-app at the time of the application. We have enclosed the following documents:

1. Comprehensive Plan Ordinance Text Amendment Application (application fee: $3,309)

2. Comprehensive Plan Zone Map Amendment Application (application fee: $2,175)

3. Development Permit Application (application fee: $79)

We understand there is no specific application for a Detailed Geological Hazard/Flood Application. Because there is DOGAMI slide topography mapped on the site, we agreed at the pre-application conference that the Detailed Geological Hazard Permit would need to be addressed. We have enclosed the appropriate check for this review as part of the PAPA process ($1,059).

In addition to the County's application forms, we have enclosed three complete copies, each containing the following documentation:

1. PAPA application narrative dated October 16, 2007.

2. Noise analysis prepared by Daly Standlee & Associates dated October 9, 2007.

3. Traffic impact analysis prepared by Associated Transportation Engineering & Planning, Inc. dated October 2007.

4. Geology analysis prepared by Environmental Science Associates dated October 2007.

5. Various site plan maps.

6. Detailed topographic map of the Ordway quarry area (two-foot contours).

7. Aerial photograph of the site.

8. Soil map of the area and soil classification documents showing detailed access points in the area.

9. Copies of access permits.

10. Area zoning maps and 1,500-foot notice area around the requested QM zone.

11. Parking plan and parking plan narrative.

12. Geologic hazard overlay, DOGAMI slide area overlay, Erosion Control Area and Site Maps and Erosion Control Plan narrative.

13. Preliminary Reclamation Plan narrative.

14. Current Big River DOGAMI permit.

We trust that this documentation will be sufficient to allow the application to be deemed complete and begin processing. We request the earliest possible Planning Commission meeting and would greatly appreciate it if you would send the 45-day DLCD comprehensive

plan change notice immediately to allow us to be on the December Planning Commission agenda.

As we discussed in the pre-application (and supplemental citations to statutes and regulations) the appropriate mechanism for proceeding on this PAPA is OAR Division 23 (660-023-180). As indicated in my e-mail correspondence to you, the Division 16 rules have been superseded. We will need to make findings to that effect and we will potentially need to make alternative findings related to the Division 16 process because of the references in the County's Zoning ordinance and Comprehensive Plan.

With regard to the notice, it would be prudent for the County to extend notice to properties within the County's normal notice radius from the exterior boundary of the potential 1,500-foot impact area (please see zoning maps and 1,500-foot notice area maps). As we discussed in the pre-application conference, we do not believe there is any possibility that the impact area would extend to the full 1,500 feet. Nonetheless, a 1,500-foot notice area is technically possible and 1,500 feet is the "assumed" impact area under the Division 23 PAPA rule. Accordingly, it would be prudent to have notification extend the County's normal distance for this type of application beyond the potential impact area indicated on the impact area maps.

Thank you for your ongoing courtesies in this matter. We look forward to working with all parties as the application progresses through the PAPA process. Please call if you have any questions.

Very truly yours,

Paul R. Hribernick

PRH:vc
Enclosures

cc: Mr. Mike Sarin

Development Permit — PAGE 1 OF 3

Department of Community Development
800 Exchange Street, Suite 100 • Astoria, OR 97103
Phone (503) 325-8611 • Fax (503) 338-3666

DEPARTMENT USE ONLY
Permit No.:
Date issued:
Authorization:
FEE: $79.00

PROPOSED USE: Operate a rock quarry for the production of mineral and aggregate construction material. See detailed Post-Acknowledgment Plan Amendment (PAPA) Application submitted herewith.

BASE ZONE: AF, F-80, RA-2 OVERLAY DISTRICT: GHO

INSTRUCTIONS TO APPLICANT

1. Complete this form—**PRINT CLEARLY PLEASE**—and attach site plan;
2. For commercial and industrial uses, include parking and loading plan, sign plan and erosion control plan;
3. For residential and other uses, include an erosion control plan, and
4. **REVIEW APPLICANT'S STATEMENT** *(on back of this form)* and sign this form.

PROJECT LOCATION:

T: 5N	R: 10W	S: 14	TL: 800, 900, 1000, 1001, 1203	ACRES: 72.24
T: 5N	R: 10W	S:	TL: 101, 100 (pt)	ACRES: 40.00

APPLICANT:

Name Big River Holdings Inc. Phone (503) 338-3878

Address 1050 Olney Avenue

City Astoria State OR Zip 97103

PROPERTY OWNER: *(if different than applicant)*

Name Weyerhaeuser Inc. c/o Chris Antilla

Address 86645 Lewis & Clark Road / PO Box 998

City/State/Zip Seaside, OR 97138

Phone (503) 738-6351 x114

ATTORNEY/SURVEYOR/CONSULTANT/AGENT:

Name Paul Hribernick/Black Helterline LLP

Address 805 S.W. Broadway, Suite 1900

City/State/Zip Portland, OR 97205-3359

Phone (503) 224-5560

I have read and understand the **APPLICANT'S STATEMENT ON THE BACK OF THIS FORM** *and agree to abide by the terms thereof.*

Applicant signature _____ Date 10-25-07

Owner signature Chris Antilla Date 10/25/07

Agent signature _____ Date 10.23.2007

White—Office Yellow—Applicant Pink—File

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Development Permit

APPLICANT'S STATEMENT

1. Pertaining to the subject property described, I hereby declare that I am the legal owner of record, or an agent aving the consent of the legal owner of record, and am authorized to make the application for a Development rmit/Action so as to obtain the following permits: Building, Sanitation, U.S. Army Corps of Engineers, Oregon vision of State Lands, Oregon Department of Transportation, Oregon Department of Parks and Recreation, or a Clatsop County Road Approach. I shall obtain any and all necessary permits and complete the conditions of approval required herein within 180 days of the issuance of this permit before I do any of the proposed uses or activities. The atements within this application are true and correct to the best of my knowledge and belief. I understand that if the permit authorized was based on false statements, or it is determined that I have failed to fully comply with all conditions attached to and made a part of this permit, this permit approval is hereby revoked and null and void.

2. It is expressly made a condition of this permit that I at all times fully abide by all State, Federal and local ws, rules, and regulations governing my activities conducted or planned pursuant to this permit.

3. As a condition for issuing this Development Permit/Action, the undersigned agrees that he/she will hold Clatsop County harmless from and indemnify the County for any and all liabilities to the undersigned, his/her property or any other person or property, that might arise from any and all claims, damages, actions, causes of action or suits of ny kind or nature whatsoever, which might result from the undersign's failure to build, improve or maintain roads which serve as access to the subject property or from the undersign's failure to fully abide by any of the conditions ncluded in or attached to this permit.

4. **WAIVER OF VESTED RIGHTS DURING APPEAL PERIOD FOR ZONING AUTHORIZATIONS.** I ave been advised that this Land and Water Development Permit/Action by the Clatsop County Community Development Director may be appealed within twelve (12) calendar days of the date of permit issuance and authorization (note: if the twelfth day is a Saturday, Sunday or legal holiday, the appeal period lasts until the end of the next day which is not a Saturday, Sunday or legal holiday). I understand that if the approval authorized by the County and referenced above is reversed on appeal, then the authorization granted prior to the end of the appeal period will be null and void. I further understand and consent to the fact that any actions taken by me in reliance upon the authorization granted during the appeal period shall be at my own risk, and that I hereby agree not to attempt to hold Clatsop County responsible for consequences or damages in the event that removal of improvements constructed during the appeal period is ordered because an appeal is sustained.

5. I am aware that failure to abide by applicable Clatsop County Land and Water Development and Use Ordinance 80-14, as amended and Standards Document regulations may result in revocation of this permit or enforcement action by the County to resolve a violation and that enforcement action may result in levying of a fine.

6. I understand that a change in use, no matter how insignificant, may not be authorized under this permit and may require a new Development Permit/Action (check first, with the Clatsop County Community Development Department).

7. I understand that this Development Permit/Action expires 180 days from the date of issuance unless substantial construction or action pursuant to the permit has taken place. Upon expiration, a new development permit must be obtained.

Development Permit

THIS SECTION TO BE COMPLETED BY CLATSOP COUNTY COMMUNITY DEVELOPMENT DEPARTMENT

DEPARTMENT USE ONLY

Permit No.:

ONING DISTRICT REQUIREMENTS

	Required Setbacks	Actual Setbacks
, S, E, W) Front:		
N, S, E, W) Side:		
, S, E, W) Side:		
N, S, E, W) Rear:		

Clear Vision	☐	20 feet
Riparian Vegetation	☐	50 feet
	☐	30 feet
Non-Aquatic Vegetation (non-L&W)	☐	35 feet
Resource Zone	☐	50 feet

TRUCTURE HEIGHT

- ☐ No requirement
- ☐ 35 foot maximum
- ☐ Oceanfront 18 foot maximum in RSA-SFR, CBR, CR
- ☐ 26 foot maximum
- ☐ Other _____

OT COVERAGE PERCENTAGE _____%

EWAGE DISPOSAL

- ☐ None required
- ☐ Subsurface system
- ☐ Public sewer
- ☐ Private sewer

WATER REQUIREMENTS

(must include approval from authorizing agent)

- ☐ None Required
- ☐ Well
- ☐ Spring
- ☐ River, stream, pond, or hand-dug well
- ☐ Private water source _____
- ☐ Public water source _____
- ☐ Potability test from certified water lab (attach certification)
- ☐ Quantity: _____

ACCESS TO PROPERTY: ☐ YES ☐ NO

Is a County or State permit required? ☐ YES ☐ NO

Access Permit #_____

_____ _____

Applicant's Signature Date

_____ _____

Clatsop County Authorization Date

CLATSOP COUNTY COMPLIANCE

The Clatsop County Community Development Department finds the proposed use(s)/action(s) in compliance with the *Clatsop County Land & Water Development and Use Ordinance* and with the *Clatsop County Comprehensive Plan*. The evaluation of the land parcels outlined above is based on the information presented at this time and as shown on the Zoning/Comprehensive Plan Map.

☐ Approved ☐ Approved with conditions *(below or attached)*

☐ Denied *Applicant's initials:*

The applicant or property owner must comply with the conditions noted below or attached. This permit is not valid unless the conditions are met.

CONDITIONS OF APPROVAL —*Attachment* ☐ YES ☐ NO
(Those checked, written, and/or attached.)

- ☐ Access to property (attach County or ODOT permit)
- ☐ Address: _____
- ☐ Airport height/use standards
- ☐ Average grade (attach calculations)
- ☐ Beaches and Dunes (dune stabilization/revegetation)
- ☐ Coastal Shorelands
- ☐ Conditional Use Permit (R & O No. _____)
- ☐ DSL Wetland Fill/Removal Permit (503-378-3805)
- ☐ Design Review (R & O No. _____)
- ☐ Erosion Control Plan
- ☐ Stormwater Drainage Plan
- ☐ Engineer Report
- ☐ Firebreak (clear and maintain a firebreak of at least _____ feet radius around proposed structure
- ☐ Floodplain (Permit No. _____)
- ☐ Geologic Hazards (R & O No. _____)
- ☐ Parking Plan
- ☐ Plot Plan
- ☐ Post-Construction survey
- ☐ Resource zone certification (recorded with County Clerk; copy in Department file)
- ☐ Resource Zone Setback
- ☐ Review Use (R & O No. _____)
- ☐ Road improvement
- ☐ Sign permit (submit plans and receive approval *prior to placement*)
- ☐ Temporary Use Permit (R & O No. _____)
- ☐ US Army Corps of Engineers Permit (503-808-4384)
- ☐ Other conditions of approval:

_____

_____

_____

_____

_____

_____

White—Office Yellow—Applicant Pink—File

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COMPREHENSIVE PLAN/ZONING ORDINANCE TEXT AMENDMENT
Fee: $3,309.00 (Required with application)

APPLICANT: (Mandatory)

Name: Big River Holdings Inc. Phone # (Day): (503) 338-3878

Mailing Address: 1050 Olney Avenue FAX #: (503) 325-3119

City/State/Zip: Astoria, OR 97103 Signature:

APPLICANT #2 / AGENT / CONSULTANT / ATTORNEY: (Optional)

Name: Paul Hribernick/Black Helterline LLP Phone # (Day): (503) 224-5560

Mailing Address: 805 S.W. Broadway, Suite 1900 FAX #: (503) 224-6148

City/State/Zip: Portland, OR 97205-3359 Signature:

Check all that apply:

- ☐ Amendment to Zoning Ordinance
- ☐ Amendment to Standards Document
- ☒ Amendment to Comprehensive Plan
- ☐ Amendment to Community Plan
- ☐ Amendment to Background Report

Proposed amendment:
Rezoning of the property as QM (Quarry and Mining zone) and addition of site to the County's list of "significant" mineral and aggregate resource sites. See detailed Post-Acknowledgment Plan Amendment (PAPA) Application submitted herewith.

OFFICE USE ONLY: date received: _____ application: _____

date completed: _____ R&O /Ord #: _____

Community Development Department
800 Exchange, Suite 100 * Astoria Oregon 97103 * (503)325-8611 * FAX 503-338-3666

COMPREHENSIVE PLAN/ZONING ORDINANCE TEXT AMENDMENT
Fee: $3,309.00 (Required with application)

APPLICANT: (Mandatory)

Name: Weyerhaeuser Inc. c/o Chris Antilla Phone # (Day): (503) 738-6351 x114

Mailing Address: 86645 Lewis & Clark Road / PO Box 998 FAX #: (503) 738-9253

City/State/Zip: Seaside, OR 97138 Signature: Chris Antilla

APPLICANT #2 / AGENT / CONSULTANT / ATTORNEY: (Optional)

Name: _____ Phone # (Day): _____

Mailing Address: _____ FAX #: _____

City/State/Zip: _____ Signature: _____

Check all that apply:

- ☐ Amendment to Zoning Ordinance
- ☐ Amendment to Standards Document
- ☒ Amendment to Comprehensive Plan
- ☐ Amendment to Community Plan
- ☐ Amendment to Background Report

Proposed amendment:
Rezoning of the property as QM (Quarry and Mining zone) and addition of site to the County's list of "significant" mineral and aggregate resource sites. See detailed Post-Acknowledgment Plan Amendment (PAPA) Application submitted herewith.

OFFICE USE ONLY: date received: _____ application: _____

date completed: _____ R&O /Ord #: _____

Community Development Department
800 Exchange, Suite 100 * Astoria Oregon 97103 * (503)325-8611 * FAX 503-338-3666

COMPREHENSIVE PLAN/ZONING MAP AMENDMENT
Fee: $977.00 (required with application)
$2175.00 (required with application)

PROPOSED USE: PAPA to expand existing mining operation

	Zoning	Comprehensive Plan Designation
Current:	AF, F-80, RA-2	Conservation Forest/Rural Land
Proposed:	QM Zone	Conservation Other Resources

LEGAL DESCRIPTION OF PROPERTY:

T: 5N R: 10W S: 14 TL: 800, 900, 1000, 1001, 1203, 101, 100 (pt)
ACRES: 112.24 total QM; 59 (approx.) extraction operations area; 20.5 (approx.) active mining area

OTHER ADJACENT PROPERTY OWNED BY THE APPLICANT:

T: 5N R: 10W S: _____ TL: 100 (pt) ACRES: 2123.54 (pt)

T: 5N R: 10W S: _____ TL: 800 ACRES: 5676.64

APPLICANT 1: (Mandatory)

Name: Big River Holdings Inc. Phone # (Day): (503) 338-3878

Mailing Address: 1050 Olney Avenue FAX #: (503) 325-3119

City/State/Zip: Astoria, OR 97103 Signature: _____

PROPERTY OWNER: (Mandatory if different than applicant)

Name: Weyerhaeuser Inc. c/o Chris Antilla Phone # (Day): (503) 738-6351 x114

Mailing Address: 86645 Lewis & Clark Road / PO Box 998 FAX #: (503) 738-9253

City/State/Zip: Seaside, OR 97138 Signature: Chris Antilla

PROPERTY OWNER #2 / SURVEYOR / AGENT / CONSULTANT / ATTORNEY: (optional)

Name: Paul Hribernick/Black Helterline LLP Phone # (Day): (503) 224-5560

Mailing Address: 805 S.W. Broadway, Suite 1900 FAX #: (503) 224-6148

City/State/Zip: Portland, OR 97205-3359 Signature: _____

Each of the following criteria and standards must be addressed by the applicant. The information needed to address these criteria should be submitted on separate 8.5" by 11" sheets of paper, typed.

1. The map change must be consistent with the Comprehensive Plan. The Comprehensive Plan includes the following elements:

   Goal 1 – Citizen Involvement
   Goal 2 – Land Use Planning
   Goal 3 – Agricultural Lands
   Goal 4 – Forest Lands
   Goal 5 – Open Space
   Goal 6 – Air, Water and Land Resources Quality
   Goal 7 – Natural Hazards
   Goal 8 – Recreational Needs
   Goal 9 – The Economy
   Goal 10 – Housing
   Goal 11 – Public Facilities and Services
   Goal 12 – Transportation
   Goal 13 – Energy Conservation
   Goal 14 – Urbanization
   Goal 16 – Estuarine Resources
   Goal 17 – Coastal Shorelands
   Goal 18 – Beaches and Dunes
   Southwest Coastal Community Plan
   Northeast Community Plan
   Elsie/Jewell Community Plan
   Seaside Rural Community Plan
   Lewis and Clark/Olney/Walluski Community Plan
   Clatsop Plains Community Plan

   Some of these elements of the Comprehensive Plan are not applicable to the proposed map amendment. County staff will help identify applicable plan elements and policies.

2. **Also address the following from** Section 5.412. Zone Change Criteria of the Clatsop County Land and Water Development and Use Ordinance #80-14.

1. The proposed change is consistent with the policies of the Clatsop County Comprehensive Plan.
2. The proposed change is consistent with the statewide planning goals (ORS 197)
3. The property in the affected area will be provided with adequate public facilities and services including, but not limited to:
   1. Parks, schools and recreational facilities
   2. Police and fire protection and emergency medical service
   3. Solid waste collection
   4. Water and wastewater facilities
4. The proposed change will insure that an adequate and safe transportation network exists to support the proposed zoning and will not cause undue traffic congestion or hazards.
5. The proposed change will not result in over-extensive use of the land, will give reasonable consideration to the character of the area, and will be compatible with the overall zoning pattern.
6. The proposed change gives reasonable consideration to peculiar suitability of the property for particular uses .
7. The proposed change will encourage the most appropriate use of land throughout Clatsop County
8. The proposed change will not be detrimental to the health, safety, and general welfare of Clatsop County.

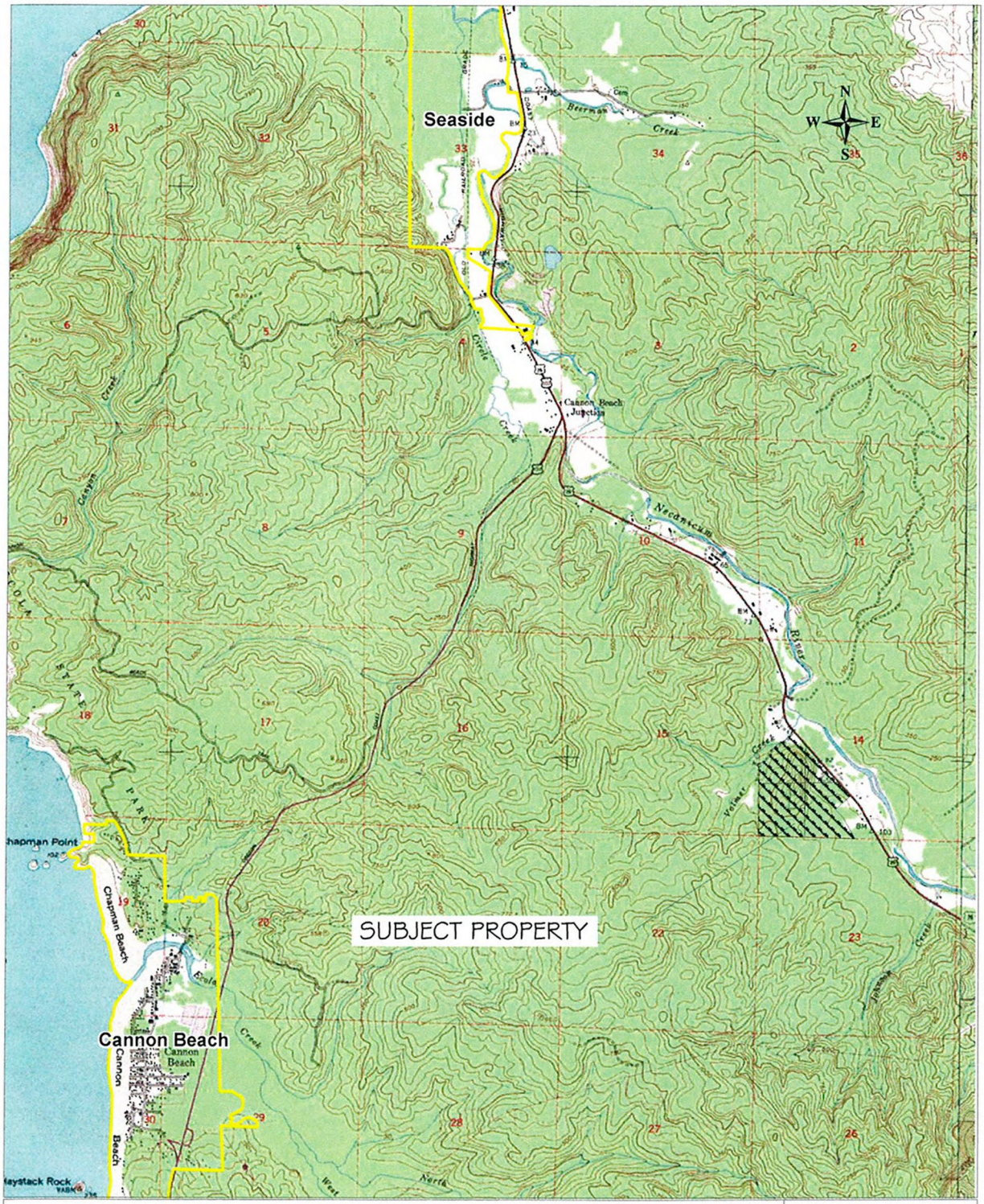
3. The property in the affected area must be presently provided with adequate public facilities, services and transportation networks to support the use; or the governing body by condition requires their provision by condition attached to any approval of use.

OFFICE USE ONLY: date received : _____ application #: _____

date complete: _____ R&O/Ord#: _____

Exhibit III (A).

Maps

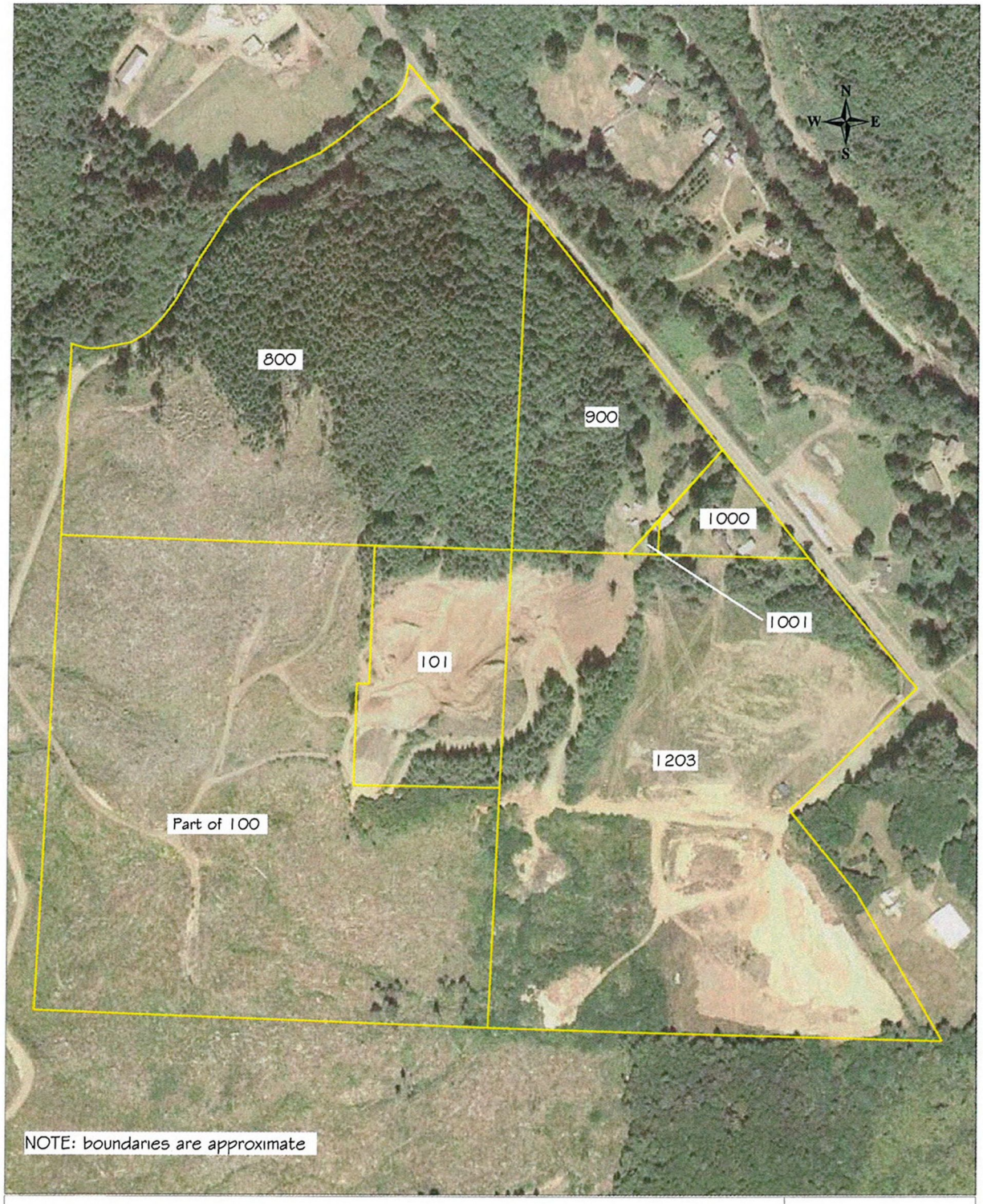


Ordway Quarry
Tax lots 100, 101 Map 5-10-00
Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14
Clatsop County
Seaside, Oregon

LOCATION MAP

FIGURE A

Source: USGS DRG 45123 h8	Environmental Science Associate, Inc. 10/01/07	Scale: 1" = 4000'

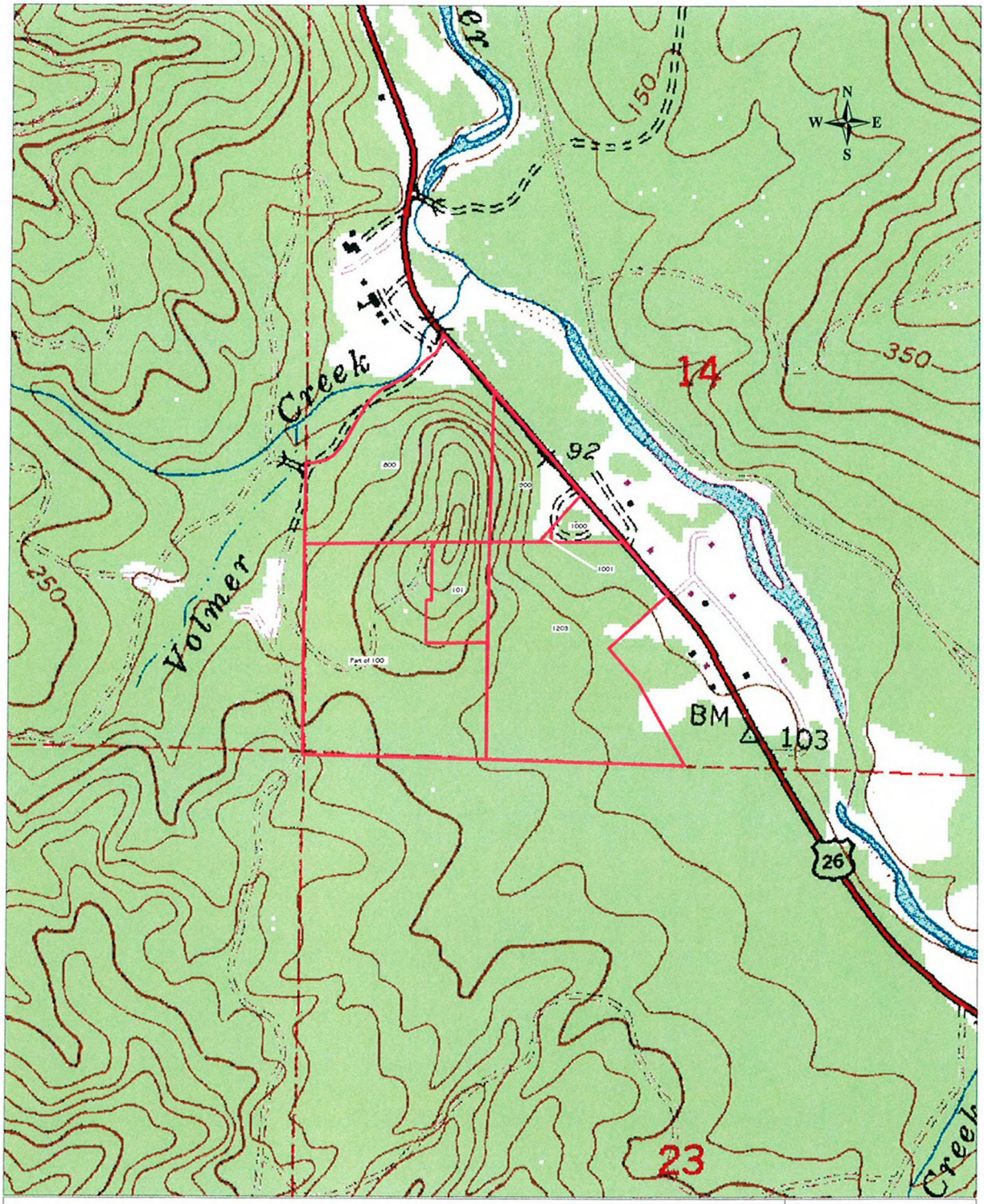


Ordway Quarry
Tax lot 100, 101 Map 5-10-00
Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14
Clatsop County
Seaside, Oregon

TAX LOT MAP

FIGURE B

Source: Spencer Gross 2002 ortho	Environmental Science Associate, Inc. 10/01/07	Scale: 1" = 420'

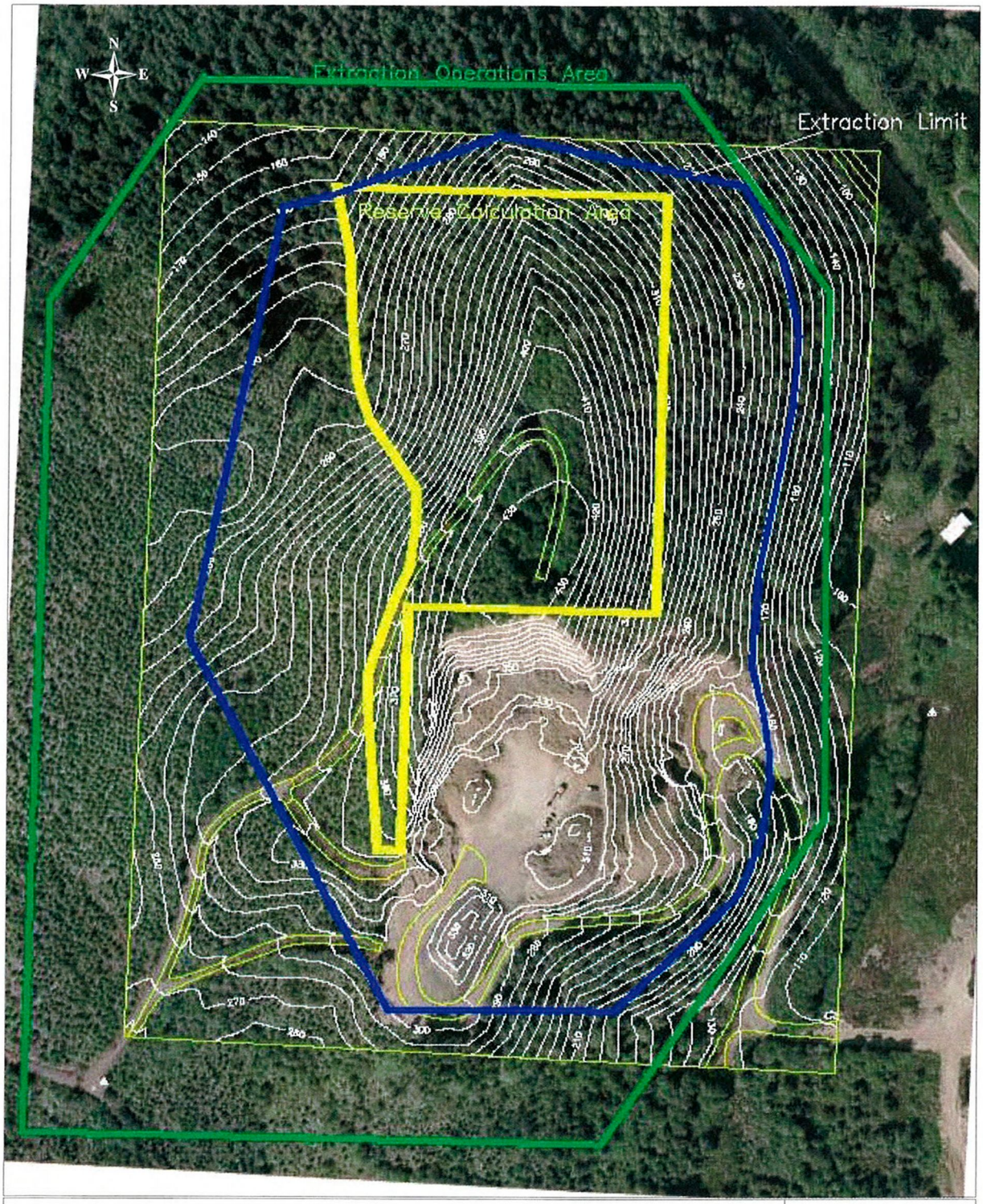


Ordway Quarry
Tax lot 100, 101 Map 5-10-00
Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14
Clatsop County
Seaside, Oregon

TOPOGRAPHIC MAP
50 foot contour intervals

FIGURE C

Source: USGS DRG 45123 h8	Environmental Science Associate, Inc. 10/01/07	Scale: 1" = 1,000'

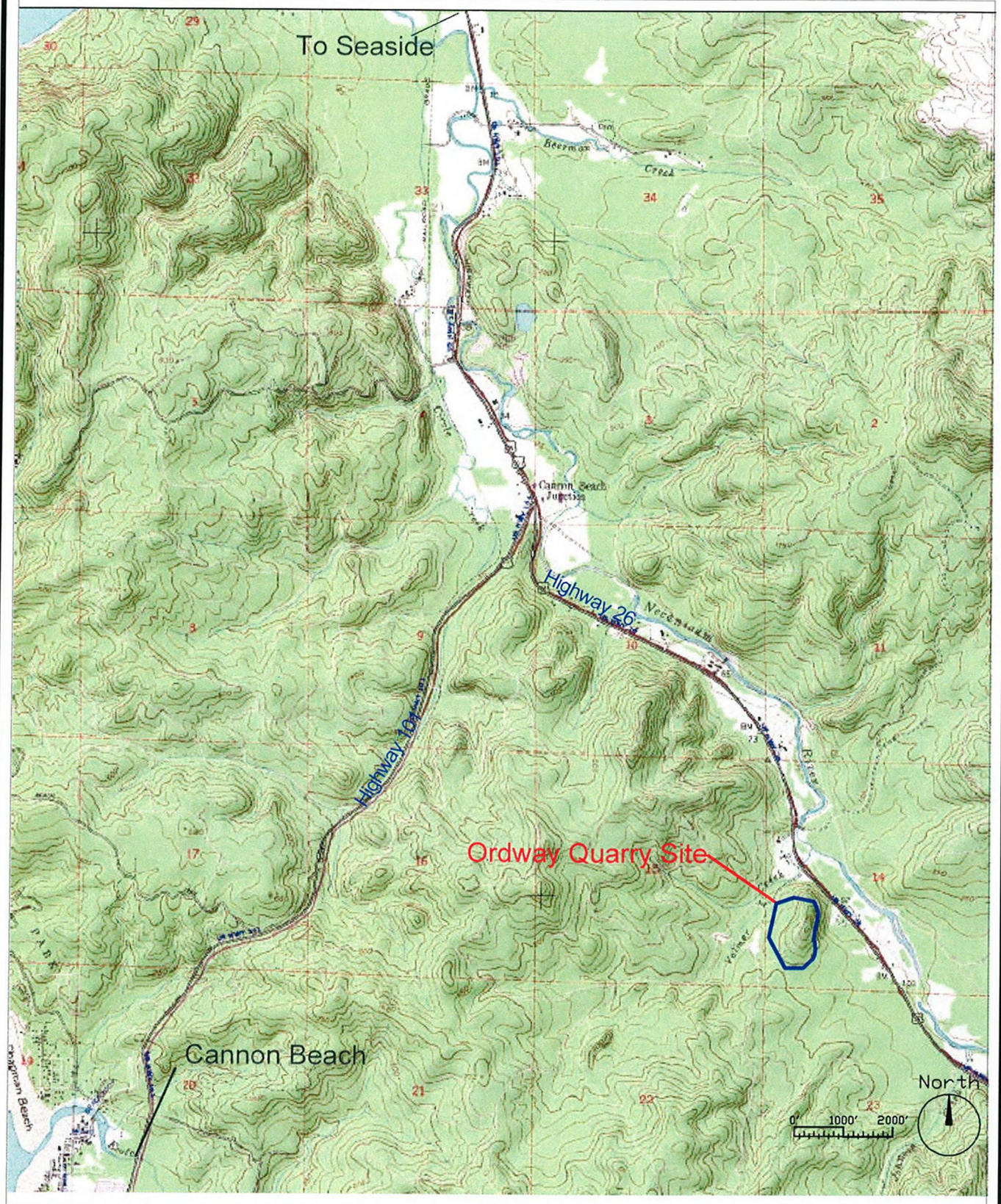


Ordway Quarry
Tax lot 100, 101 Map 5-10-00
Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14
Clatsop County
Seaside, Oregon

MINE / BORING LOCATIONS

FIGURE D

Source: Daly-Standlee & Associates, Inc. drawing dated 10/01/07 by PGM	Environmental Science Associate, Inc. 10/01/07	not to scale

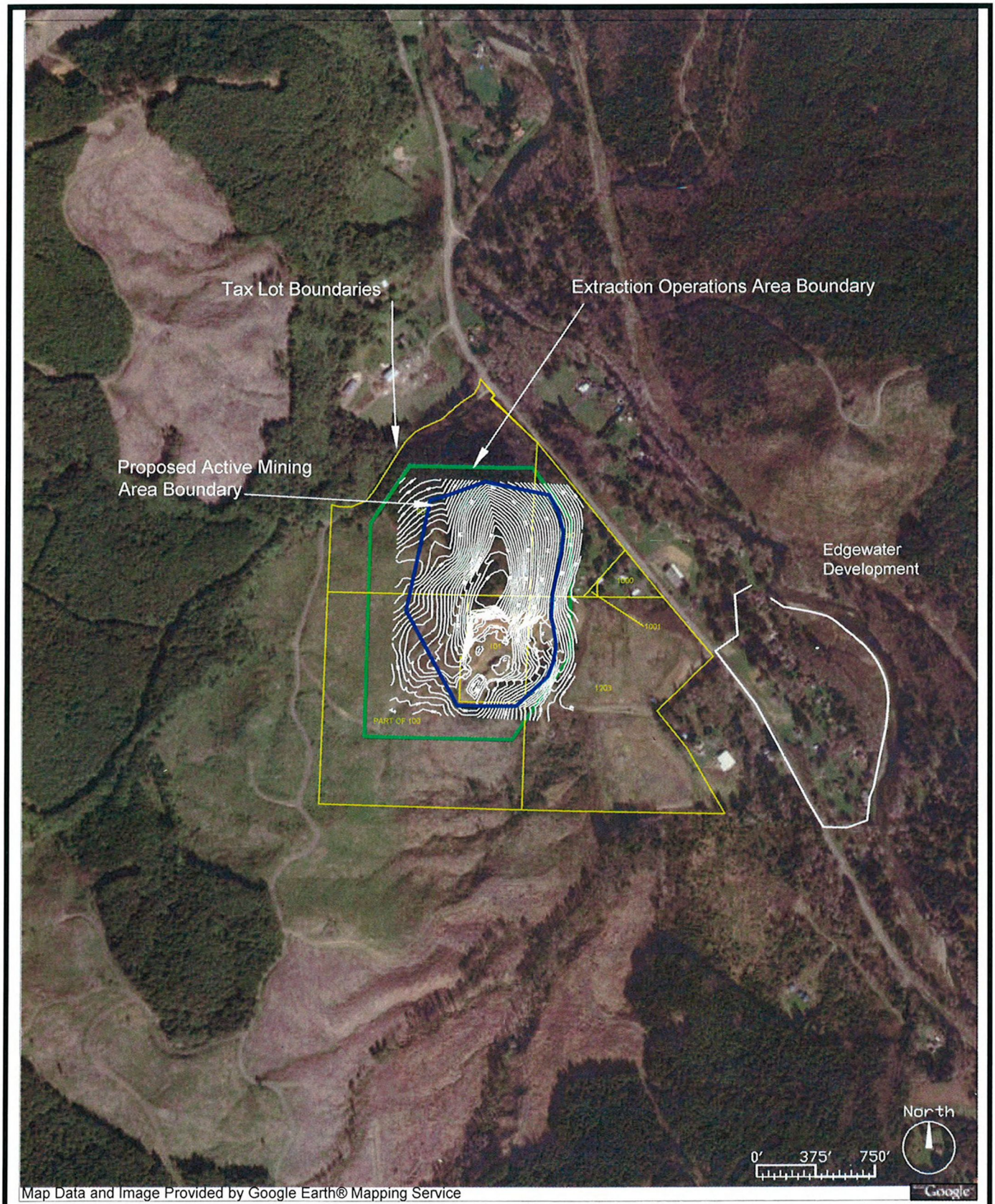


Daly-Standlee & Associates, Inc.

ph: 503-646-4420
fax: 503-646-3385
email: DSA@acoustechgroup.com

Ordway Quarry
Vicinity Map

Source: Beartooth Mapping, 2007	Project Engineer: PGM	DATE: 10/05/07	PROJECT NO. 215061	FIGURE E



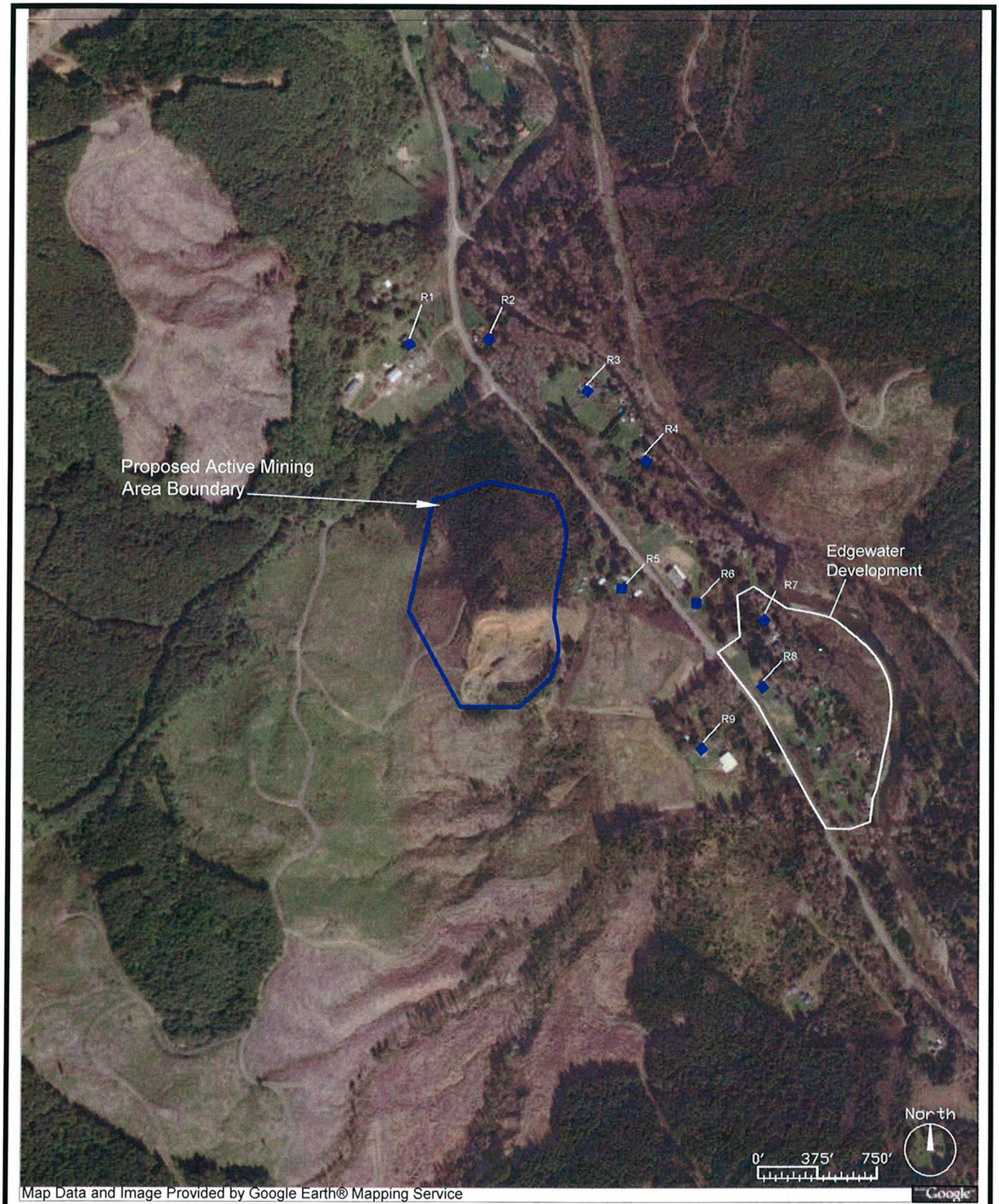
Daly-Standlee & Associates, Inc.

ph: 503-646-4420
fax: 503-646-3385
email: DSA@acoustechgroup.com

Ordway Quarry

Ordway Quarry Mine Site

Project Engineer:	DATE:	PROJECT NO.	
PGM	10/09/07	215061	FIGURE F



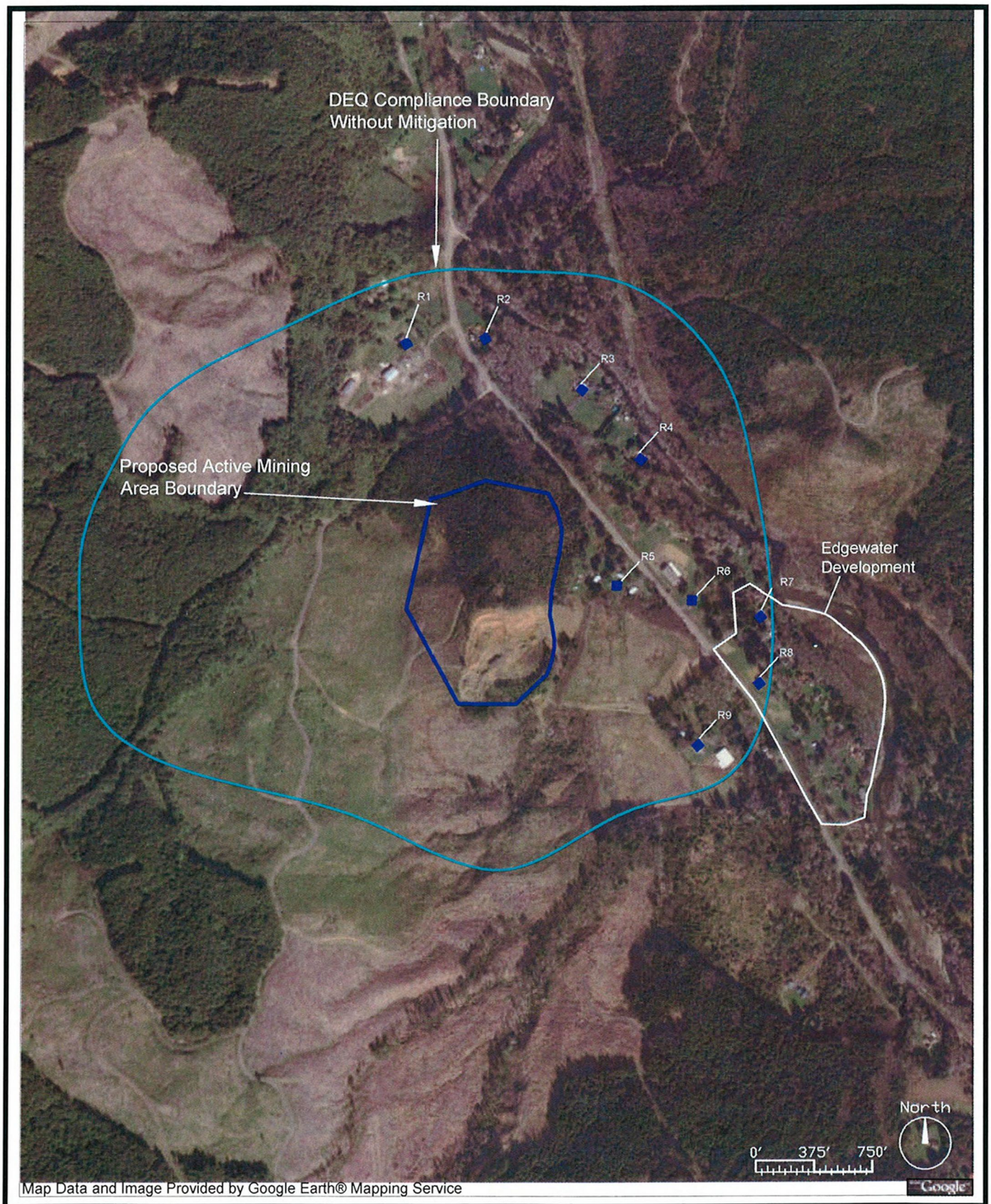
Daly-Standlee & Associates, Inc.

ph: 503-646-4420
fax: 503-646-3385
email: DSA@acoustechgroup.com

Ordway Quarry

Residential Sites and Noise Prediction Locations

Project Engineer:	DATE:	PROJECT NO.	
PGM	10/09/07	215061	FIGURE G



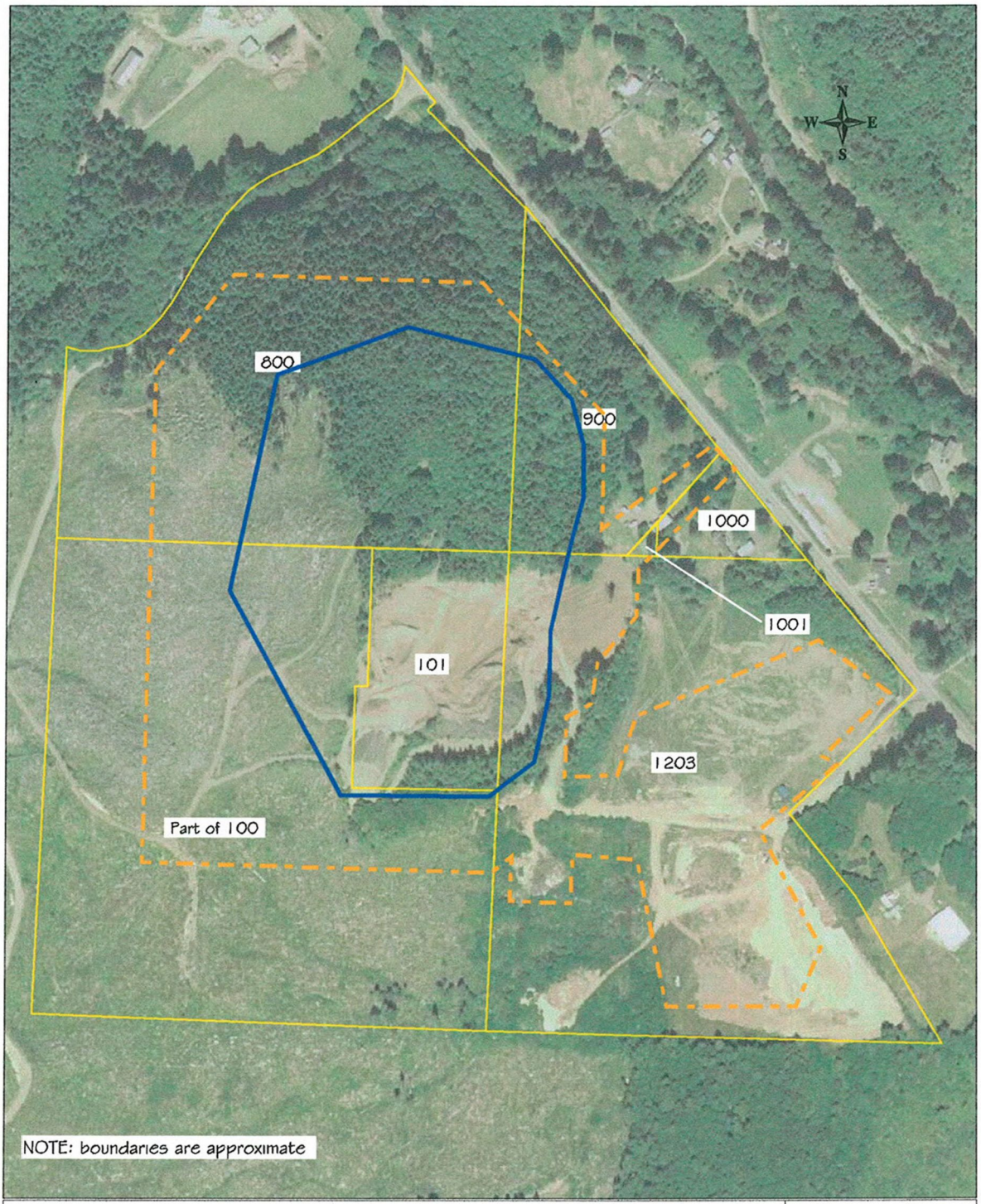
Daly-Standlee & Associates, Inc.

ph: 503-646-4420
fax: 503-646-3385
email: DSA@acoustechgroup.com

Ordway Quarry

DEQ Noise Compliance Boundary w/out Mitigation

Project Engineer:	DATE:	PROJECT NO.	
PGM	10/09/07	215061	FIGURE H



Ordway Quarry
Tax lot 100, 101 Map 5-10-00
Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14
Clatsop County
Seaside, Oregon

TAX LOT MAP

SITE PLAN

Source: Spencer Gross 2002 ortho	Environmental Science Associate, Inc. 10/01/07	Scale: 1" = 420'	Figure I

- - - - Extraction Operations Area

——— Active Mining Area

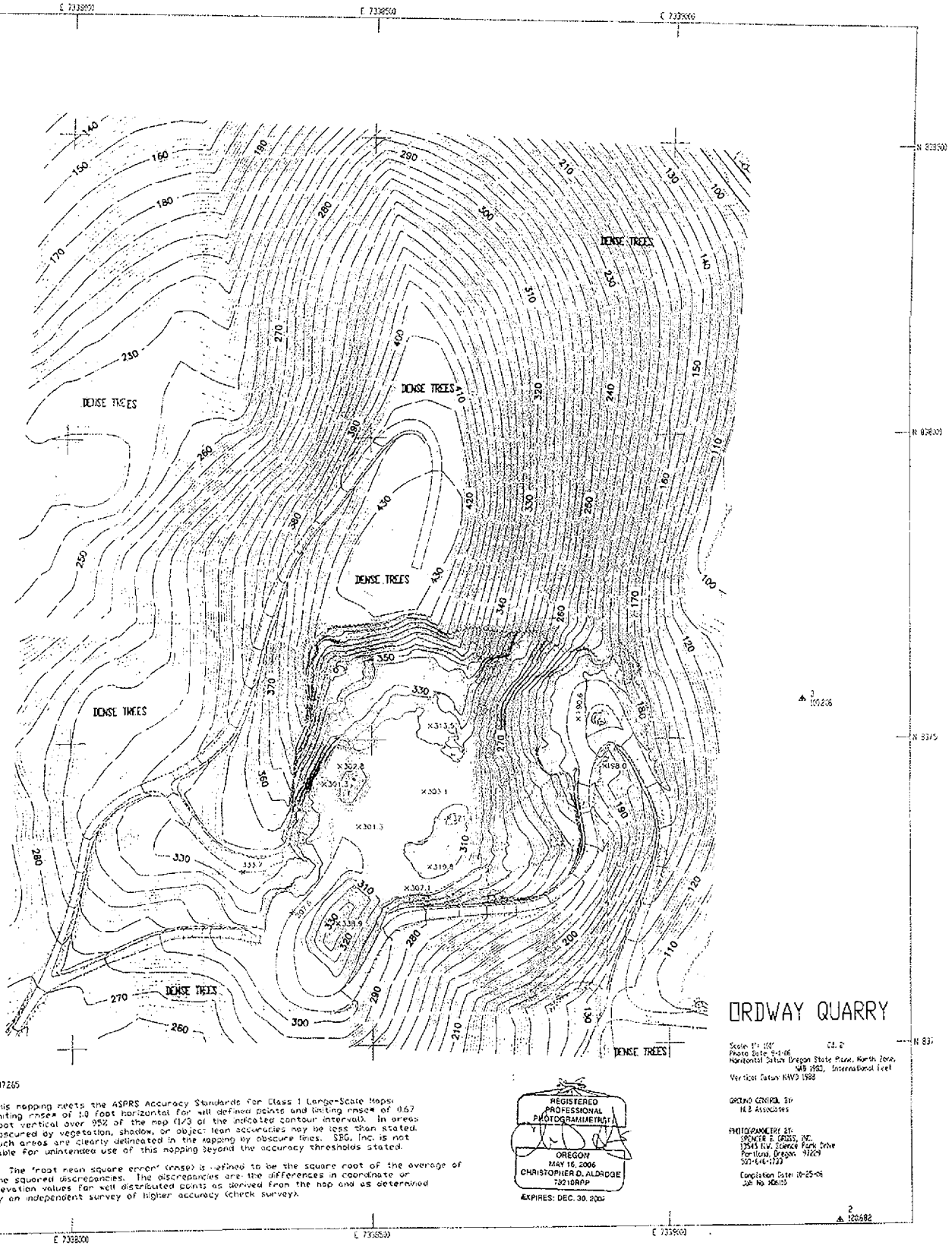
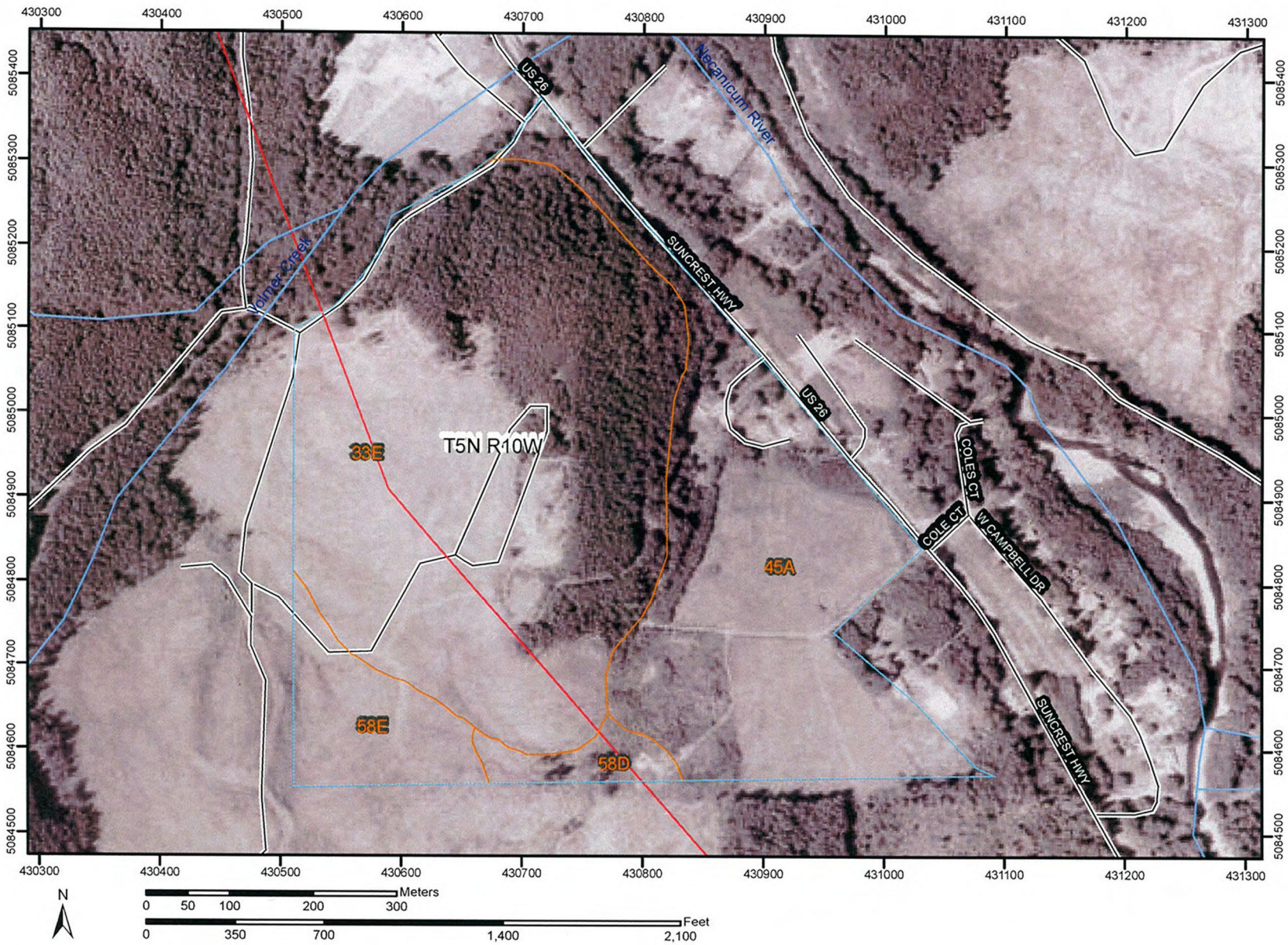

E 7338000
E 7338500
E 7339000
N 838500
N 838000
N 837
DENSE TREES
DENSE TREES
DENSE TREES

Exhibit III (B).

Soils

Soil Map–Clatsop County, Oregon
(Big River Soils)



Natural Resources
Conservation Service

Web Soil Survey 2.0
National Cooperative Soil Survey

10/10/2007
Page 1 of 3

FIGURE K

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features

Public Land Survey
- Township and Range
- Section

Municipalities
- Cities
- Urban Areas

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails

Roads
- Interstate Highways
- US Routes
- State Highways
- Local Roads
- Other Roads

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 10N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Clatsop County, Oregon
Survey Area Data: Version 6, Mar 20, 2007

Date(s) aerial images were photographed: 9/24/1994; 9/30/1994

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Clatsop County, Oregon (OR007)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
33E	Klootchie-Necanicum complex, 30 to 60 percent slopes	62.0	56.9%
45A	Mues silt loam, 0 to 3 percent slopes	36.5	33.4%
58D	Skipanon gravelly silt loam, 3 to 30 percent slopes	2.8	2.6%
58E	Skipanon gravelly silt loam, 30 to 60 percent slopes	7.7	7.1%
Totals for Area of Interest (AOI)		109.0	100.0%

Web Soil Survey - Windows Internet Explorer

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

File Edit View Favorites Tools Help

Google Go Bookmarks 464 blocked Check AutoLink AutoFill Send to Settings

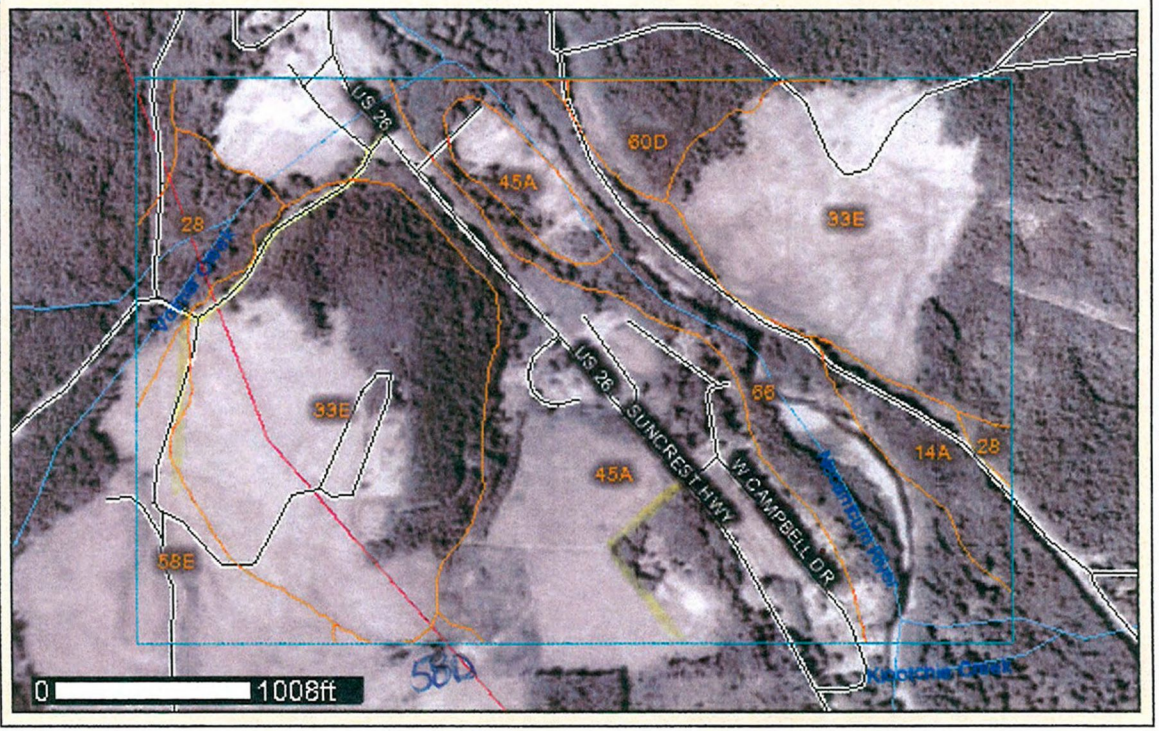
Links ORS Agencies Corp Anywho MapQuest QwestDEX OJIN OPENonline NiteOwl OR Tax Maps Dictionary

Web Soil Survey

Page Tools

Clatsop County, Oregon (OR007)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
14A	Croquib silt loam, 0 to 3 percent slopes		
28	Humitropepts-Tropaquepts complex, 0 to 20 percent slopes		
33E VIe	Klootchie-Necanicum complex, 30 to 60 percent slopes		
45A IIw	Mues silt loam, 0 to 3 percent slopes		
58D VIe	Skipanon gravelly silt loam, 3 to 30 percent slopes		
58E VIe	Skipanon gravelly silt loam, 30 to 60 percent slopes		
60D	Templeton silt loam, 3 to 30 percent slopes		
66	Tropofluvents, 0 to 3 percent slopes		



Data Available

Status Map

To see available data for a specific point on the map, click the map at the location of interest.

To see a map showing available data for all locations in the U.S. and territories, as a PDF in a separate browser window, click the **Status Map** button.

Done Internet 100%

start 9 Mic... 3 Ado... Web S... TIME20... 10:22 AM

Steep yarding paths, skid trails, and firebreaks are subject to rilling and gullying. A plant cover or water bars are needed.
The waste material from roadbuilding can damage vegetation. It is also a potential source of sedimentation.
Reforestation occurs naturally in cutover areas if a seed source is present.
Plant competition delays natural regeneration but does not prevent the eventual development of a fully stocked, normal stand of trees.
Carefully managed reforestation reduces competition from undesirable understory plants.
Reforestation can be accomplished by planting western hemlock, Sitka spruce, or Douglas-fir seedlings.

Suitable management practices:
Use conventional equipment in harvesting, but limit its use when the soil is wet.
Reduce the risk of erosion by seeding roads; cutbanks, and landings and installing water bars and culverts.
Prepare the site carefully to control competing vegetation.
Hand plant nursery stock to establish or improve a stand.
Improve stands by thinning before trees reach commercial size and by selective cutting of mature trees.

33E-Klootchie-Necanicum complex, 30 to 60 percent slopes.

Composition
Klootchie soil and similar inclusions - 50 percent
Necanicum soil and similar inclusions - 30 percent
Contrasting inclusions - 20 percent

Klootchie Soil

Position on landscape: Mountainsides
Elevation: 100 to 1,600 feet
Slope range: 30 to 60 percent
Native plants: Western hemlock, Sitka spruce; Douglas-fir, red alder, western swordfern, red huckleberry, salal, salmonberry, Oregon oxalis
Organic mat on surface: Moss, needles, and twigs 2 inches thick
Typical profile:
0 to 12 inches - dark reddish brown silt loam
12 to 25 inches - reddish brown silt loam
25 to 43 inches - reddish brown gravelly loam
43 inches - weathered basalt
Depth class: Deep (40 to 60 inches)
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9 to 12 inches
Potential rooting depth: 40 to 60 inches
Runoff: Rapid
Hazard of erosion by water: Severe

Necanicum Soil

Position on landscape: Mountainsides
Slope range: 30 to 60 percent
Elevation: 100 to 1,600 feet
Native plants: Western hemlock, Sitka spruce, Douglas-fir, red alder, red huckleberry, salal, western swordfern, salmonberry, Oregon oxalis
Organic mat on surface: Moss, needles, and twigs 2 inches thick
Typical profile:
0 to 12 inches - dark reddish brown gravelly loam and very gravelly loam
12 to 35 inches - dark brown and dark yellowish brown very gravelly loam
35 to 48 inches - yellowish brown extremely cobbly loam
48 inches - basalt
Depth class: Deep (40 to 60 inches)
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 6 to 8 inches
Runoff: Rapid
Hazard of erosion by water: Severe

Included Areas

Contrasting included areas:
Soils that have slopes of less than 30 percent or more than 60 percent
Soils that have hard basalt at a depth of less than 40 inches
Rock outcroppings
Soils that have weathered siltstone at a depth of less than 60 inches

Major Uses
Woodland, wildlife habitat

Major Management Factors
Soil-related factors: Slope, water erosion, gravel and cobbles in some areas, low amount of extractable phosphorus
Climatic factors (mean annual):
Precipitation - 70 to 100 inches
Soil temperature - 47 to 52 degrees F (varies 9 degrees or less from summer to winter)
Frost-free period - 100 to 210 days

Woodland
Klootchie Soil

Mean site index for stated species: Western hemlock - 160 (based on 100-year site curve); 113 (based on 50-year site curve)
Estimated total production per acre: 111,020 board feet (International rule, one-fourth-inch kerf) from a fully stocked stand of trees 70 years old
Growth at culmination of mean annual increment (CMAI): 254 cubic feet per acre in a stand of 50-year-old trees 1.5 inches or larger in diameter at breast height
Mean site index for stated species: Douglas-fir - 156 (based on 100-year site curve); 119 (based on 50-year site curve)
Mean site index for stated species: Sitka spruce - 162 (based on 100-year site curve)

Necanicum Soil

Mean site index for stated species: Western hemlock - 133 (based on 100-year site curve); 97 (based on 50-year site curve)
Estimated total production per acre: 86,730 board feet (International rule, one-fourth-inch kerf) from a fully stocked stand of trees 70 years old
Growth at culmination of mean annual increment (CMAI): 205 cubic feet per acre in a stand of 50-year-old trees 1.5 inches or larger in diameter at breast height
Mean site index for stated species: Douglas-fir - 150 (based on 100-year site curve); 115 (based on 50-year site curve)
Mean site index for stated species: Sitka spruce - 162 (based on 50-year site curve)

General management considerations:

Slope limits the kinds of equipment that can be used in forest management (fig. 5).
Highlead logging is more efficient than most other methods and is less damaging to the soil surface.

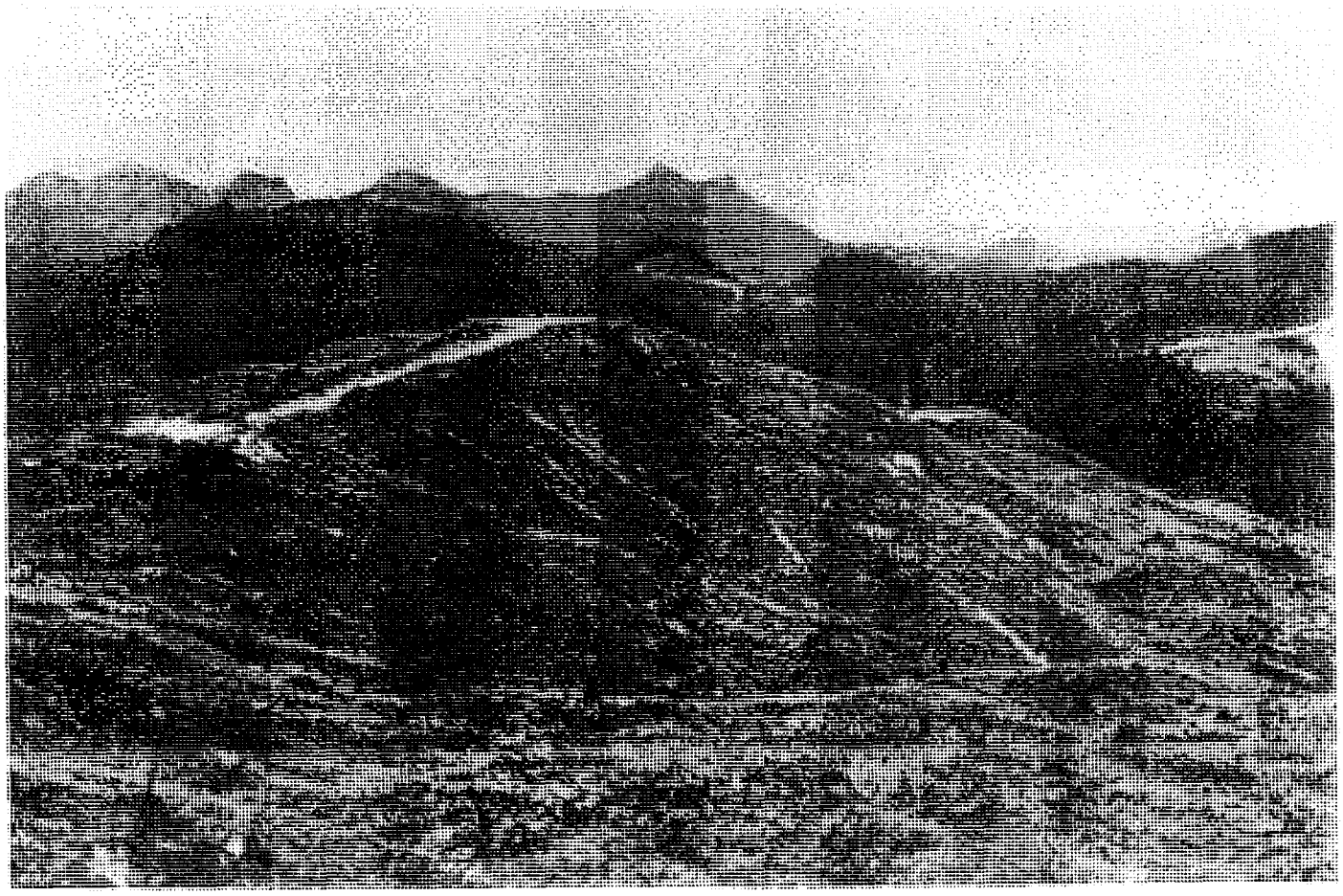


Figure 5.-Areas of Klootchie-Necanicum complex, 30 to 60 percent slopes, on mountainsides.

Disturbing the soil excessively in harvesting timber and building roads increases the loss of soil, which in turn Leaves a greater number of rock fragments on the surface of the Necanicum soil.
The waste material from roadbuilding can damage vegetation. It is also a potential source of sedimentation.
Logging roads require suitable surfacing for year-round use.
Rock for road construction is available in this unit.
Reforestation occurs naturally in cutover areas when a seed source is present.
Plant competition delays natural regeneration but does not prevent the eventual development of a fully stocked, normal stand of trees.
Carefully managed reforestation reduces competition from undesirable understory plants.
Reforestation can be accomplished by planting western hemlock, Sitka spruce, or Douglas-fir seedlings.

Suitable management practices:
Use highlead or other logging that fully or partially suspends logs because it is less damaging to the soil.
Reduce the risk of erosion by seeding roads, cutbanks, and landings and installing water bars and culverts.
Avoid excessive damage to the soil and to the vegetation downslope from roadbuilding sites by removing waste material.
Prepare the site carefully to control competing vegetation.
Hand plant nursery stock to establish or improve a stand.
Improve stands by thinning before trees reach commercial size and by selective cutting of mature trees.

34D-Klootchie-Necanicum complex, 3 to 30 percent slopes, bouldery.

Klootchie soil and similar inclusions - 50 percent
Necanicum soil and similar inclusions - 30 percent
Contrasting inclusions - 20 percent

Klootchie Soil

Position on landscape: Mountaintops
Slope range: 3 to 30 percent
Elevation: 100 to 1,600 feet
Native plants: Western hemlock, Sitka spruce, Douglas-fir, red alder, western swordfern, red huckleberry, salal, salmonberry, Oregon oxalis
Rock fragments on surface: Kind - boulders; percentage of surface covered - 0.1 to 3.0
Organic mat on surface: Moss, needles, and twigs 2 inches thick
Typical profile:
0 to 12 inches - dark reddish brown silt loam
12 to 25 inches - reddish brown silt loam
25 to 43 inches - reddish brown gravelly loam
43 inches - weathered basalt
Depth class: Deep (40 to 60 inches)
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9 to 12 inches
Potential rooting depth: 40 to 60 inches
Runoff: Medium
Hazard of erosion by water: Moderate

Necanicum Soil

Position on landscape: Mountaintops
Slope range: 3 to 30 percent
Elevation: 100 to 1,600 feet
Native plants Western hemlock, Sitka spruce, Douglas-fir, red alder, red huckleberry, salmonberry; salal, western swordfern, Oregon oxalis
Rock fragments on surface: Kind - boulders; percentage of surface covered - 0.1 to 3.0
Organic mat on surface: Moss, needles, and twigs 2 inches thick
Typical profile:
0 to 12 inches - dark reddish brown gravelly loam and very gravelly loam
12 to 35 inches - dark brown and dark yellowish brown very gravelly loam
35 to 48 inches - yellowish brown extremely cobbly loam 48 inches - basalt
Depth class: Deep (40 to 60 inches)
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 6 to 8 inches
Potential rooting depth: 40 to 60 inches
Runoff: Medium
Hazard of erosion by water: Moderate

Included Areas
Soils that have slopes of more than 30 percent
Soils that have weathered siltstone at a depth of 40 to 60 inches
Soils that are wet

Major Uses
Woodland, wildlife habitat

Major Management Factors
Soil-related factors: Boulders, gravel and cobbles in some areas, erosion by water, low amount of extractable phosphorus
Climatic factors (mean annual): Precipitation - 70 to 100 inches

Trees are subject to windthrow because of the limited rooting depth.
Trees are subject to windthrow when the soil is excessively wet and winds are strong.
Reforestation occurs naturally in cutover areas if a seed source is present.
Plant competition delays natural regeneration but does not prevent the eventual development of a fully stocked, normal stand of trees.
Carefully managed reforestation reduces competition from undesirable understory plants.
Trees suitable for planting include western hemlock, Sitka spruce, and Douglas-fir.

Suitable management practices.
Use highlead or other logging that fully or partially suspends logs because it is less damaging to the soil.
Reduce the risk of erosion by seeding roads, cutbanks, and landings and installing water bars and culverts.
Avoid excessive damage to the soil and to the vegetation downslope from roadbuilding sites by removing waste material.
Prepare the site carefully to control competing vegetation.
Hand plant nursery stock to establish or improve a stand.
Improve stands by thinning before trees reach commercial size and by selective cutting of mature trees.

45A-Mues silt loam, 0 to 3 percent slopes.

Composition
Mues soil and similar inclusions - 85 percent
Contrasting inclusions - 15 percent

Mues Soil
Position on landscape: Stream terraces
Slope range: 0 to 3 percent
Elevation: 25 to 500 feet
Native plants: Sitka spruce, western hemlock, red alder, salal, salmonberry, western swordfern, red huckleberry
Typical profile:
0 to 25 inches - very dark brown and dark brown silt loam
25 to 36 inches - brown, mottled silt loam
36 to 60 inches - pale brown and light yellowish brown, mottled very gravelly loam that is strongly consolidated Depth class: Very deep (more than 60 inches) Drainage class: Moderately well drained
Permeability. Very slow
Available water capacity. 6 to 11 inches
Potential rooting depth: 25 to 40 inches
Runoff.- Slow
Hazard of erosion by water. Slight
Depth to perched water table: November through May - 24 to 36 inches

Included Areas
Soils that do not have consolidated, gravelly material in the lower part
Soils that are wet Soils that have a thin, dark-colored upper layer
Soils that have more than 35 percent gravel throughout the profile

Major Uses
Cropland, homesites, wildlife habitat.

Major Management Factors
Soil-related factors: Wetness, permeability, susceptibility of the upper layer to compaction, low amount of extractable phosphorus
Climatic factors (mean annual):
Precipitation - 70 to 100 inches
Soil temperature - 49 to 53 degrees F (varies less than 9 degrees from summer to winter)
Frost-free period. - 210 to 245 days

Cropland
General management considerations:
Most climatically adapted crops can be grown if adequate drainage is provided.
Suitable crops for planting are grasses and legumes.
Grasses and legumes grow well if they are adequately fertilized.
Most crops respond to nitrogen, phosphorus, potassium, and lime.
Legumes respond to phosphorus and lime. Additions of potassium may also be needed.
Grazing when the soil is wet results in compaction of the upper layer, poor tilth, and excessive runoff.

Suitable management practices:
Use tile drains to reduce wetness if a suitable outlet is available.
Maintain or improve fertility by using a cropping system that includes grasses, legumes, or grass-legume mixtures.
Reduce the risk of erosion by using minimum tillage, seeding disturbed areas to native or tame pasture plants, and planting early in spring to provide adequate cover in winter.
Irrigate during the dry period in summer.
Irrigate carefully to prevent the development of a perched water table.

Regulate the application of irrigation water to control runoff and erosion.
Apply enough water to wet the root zone but not so much that it leaches plant nutrients.
Maintain the quality and quantity of forage by rotating grazing, limiting grazing to drier periods, mowing and clipping, controlling weeds, and applying fertilizer annually.

Building Site Development
General management considerations:
The quality of roadbeds and road surfaces can be adversely affected by limited soil strength.
Septic tank absorption fields may function poorly because of limited permeability and seasonal wetness.
If the density of housing is moderate to high, a community sewage system may be needed.

Suitable management practices:
Reduce wetness by installing drain tile around footings.
Offset the risk of corrosion to uncoated steel and concrete by using corrosion-resistant material for foundations,. basements, and underground utilities.
Provide a stable base and an adequate wearing surface to improve trafficability of roads.
Install culverts to carry seasonal runoff where roads cross natural drainageways.

46D-Murtip loam, 3 to 30 percent slopes.

Composition
Murtip soil and similar inclusions - 75 percent
Contrasting inclusions - 25 percent

Murtip Soil

Position on landscape: Mountaintops
Slope range: 3 to 30 percent
Elevation: 1,600 to 2,800 feet
Native plants: Douglas-fir, western hemlock, Pacific silver fir, noble fir, red. huckleberry, cascade Oregon-grape, western swordfern, vine maple, salmonberry, western brackenfern, Oregon oxalis
Organic mat on surface: Moss, needles, and twigs 2 inches thick
Typical profile:
0 to 11 inches - very dark brown and dark brown loam
11 to 38 inches - dark brown and brown loam
38 to 54 inches - brown gravelly and very gravelly loam
54 inches - weathered basalt
Depth class: Deep (40 to 60 inches)
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 9 to 12 inches
Potential rooting depth: 40 to 60 inches
Runoff: Medium
Hazard of erosion by water: Moderate

Included Areas
Soils that have slopes of more than 30 percent
Soils that have more than 35 percent rock fragments throughout the profile
Soils that are wet
Soils that have basalt at a depth of less than 40 inches

Major Uses
Woodland, wildlife habitat

Major Management Factors
Soil-related factors: Water erosion, susceptibility of upper layer to compaction, low amount of extractable phosphorus
Climatic factors (mean annual):
Precipitation - 80 to 100 inches
Soil temperature - 42 to 46 degrees F
Frost-free period - 60 to 100 days

Woodland
Mean site index for stated species: Douglas-fir - 152 (based on 100-year site curve); 111 (based on 50-year site curve)
Estimated total production per acre: 88,480 board feet (International rule, one-eighth-inch kerf) from a fully stocked stand of trees 80 years old
Growth at culmination of mean annual increment (CMAI): 161 cubic feet per acre in a stand of 60-year-old trees 1.5 inches or larger in diameter at breast height
Mean site index for stated species: Western hemlock - 136 (based on 100-year site curve); 96 (based on 50-year site curve)

General management considerations:
Wheeled and tracked equipment can be used in the more gently sloping areas, but cable yarding generally is safer and disturbs the soil less.
Using wheeled and tracked equipment when the soil is wet produces ruts, compacts the soil, and damages the roots of trees.
Logging roads require suitable surfacing for year-round use.
Cutbanks occasionally slump when saturated.
Adequately designed road drainage reduces the risk of erosion.
Steep yarding paths, skid trails, and firebreaks are subject to rilling and gullying. A plant cover or water bars are needed.

Estimated total production per acre: 105,200 board feet (International rule, one-eighth-inch kerf) from a fully stocked stand of trees 80 years old

Braun Soil

Mean site index for stated species: Douglas-fir - 164 (based on 100-year site curve); 129 (based on 50-year site curve)

Growth at culmination of mean annual increment (CMAI): 174 cubic feet per acre in a stand of 60-year-old trees 1.5 inches or larger in diameter at breast height

Estimated total production per acre: 98,240 board feet (International rule, one-eighth-inch kerf) from a fully stocked stand of trees 80 years old

General management considerations:

Slope limits the kinds of equipment that can be used in forest management.

Highlead logging is more efficient than most other methods and is less damaging to the soil surface.

When wet, unsurfaced roads and skid trails are slippery. They may be impassable during rainy periods.

Logging roads require suitable surfacing for year-round use.

Susceptibility of cut and fill areas to erosion is high.

Adequately designed road drainage reduces the risk of erosion.

Spoil from excavations is subject to rill and gully erosion and to sloughing.

The soil is subject to sliding and slumping because it is very plastic and is underlain by highly fractured bedrock.

The waste material from roadbuilding can damage vegetation. It is also a potential source of sedimentation.

Because roots are restricted by bedrock, trees on the Braun soil commonly are subject to windthrow.

Trees on the Braun soil are subject to windthrow because of the limited rooting depth.

Unless the site is adequately prepared, competition from undesirable plants can prevent or prolong natural or artificial reestablishment of trees.

Reforestation can be accomplished by planting Douglas-fir or western hemlock seedlings.

Suitable management practices:

Use highlead or other logging that fully or partially suspends logs because it is less damaging to the soil.

Reduce the risk of erosion by seeding roads, cutbanks, and landings and installing water bars and culverts.

Avoid excessive damage to the soil and to the vegetation downslope from roadbuilding sites by removing waste material.

Prepare the site carefully to control competing vegetation.

Hand plant nursery stock to establish or improve a stand.

Improve stands by thinning before trees reach commercial size and by selective cutting of mature trees.

58D-Skipanon gravelly silt loam, 3 to 30 percent slopes.

Composition

Skipanon soil and similar inclusions - 80 percent

Contrasting inclusions - 20 percent

Skipanon Soil

Position on landscape: Mountaintops

Slope range: 3 to 30 percent

Elevation: 100 to 1,600 feet

Native plants: Western hemlock, Sitka spruce, Douglas-fir, red alder, red huckleberry, western swordfern, salal, salmonberry, Oregon oxalis

Organic mat on surface: Moss, needles, and twigs 2 inches thick

Typical profile:

0 to 19 inches - dark brown gravelly silt loam

19 to 36 inches - brown cobbly silt loam

36 to 53 inches - variegated light yellowish brown and yellowish brown silty clay loam

53 inches - weathered siltstone

Depth class: Deep (40 to 60 inches)

Drainage class: Well drained

Permeability: Moderate

Available water capacity: 7 to 11 inches

Potential rooting depth: 40 to 60 inches

Runoff: Medium

Hazard of erosion by water: Moderate

Included Areas

Soils that have basalt at a depth of 40 to 60 inches

Soils that have more than 35 percent rock fragments throughout the profile

Soils that have less than 15 percent rock fragments throughout the profile

Soils that are wet

Major Uses

Woodland, wildlife habitat

Major Management Factors

Soil-related factors: Erosion by water, susceptibility of upper layer to compaction

Climatic factors(mean annual):

Precipitation - 70 to 100 inches

Soil temperature - 47 to 52 degrees F (varies less than 9 degrees from summer to winter)
Frost-free period - 100 to 210 days

Woodland

Mean site index for stated species: Western hemlock - 159 (based on 100-year site curve); 112 (based on 50-year site curve)
Growth at culmination of mean annual increment (CMAI): 252 cubic feet per acre in a stand of 50-year-old trees 1.5 inches or larger in diameter at breast height
Estimated total production per acre: 110,110 board feet (International rule, one-fourth-inch kerf) from a fully stocked stand of trees 70 years old

General management considerations:
Wheeled and tracked equipment can be used in the more gently sloping areas, but cable yarding generally is safer and disturbs the soil less.
Using wheeled and tracked equipment when the soil is wet produces ruts, compacts the soil, and damages the roots of trees.
Disturbing the soil excessively in harvesting timber and building roads increases the loss of soil, which in turn leaves a greater number of rock fragments on the surface.
Steep yarding paths, skid trails, and firebreaks are subject to rilling and gullying. A plant cover or water bars are needed.
The soil is subject to sliding and slumping because it is very plastic and is underlain by highly fractured bedrock.
Spoil from excavations is subject to rill and gully erosion and to sloughing.
Susceptibility of cut and fill areas to erosion is moderate.
Adequately designed road drainage reduces the risk , of erosion.
Logging roads require suitable surfacing for year-round use.
The waste material from roadbuilding can damage vegetation. It is also a potential source of sedimentation.
Reforestation occurs naturally in cutover areas if a seed source is present.
Plant competition delays natural regeneration but does not prevent the eventual development of a fully stocked, normal stand of trees.
Carefully managed reforestation reduces competition from undesirable understory plants.
Reforestation can be accomplished by planting western hemlock, Sitka spruce, or Douglas-fir seedlings.

Suitable management practices:
Use conventional equipment in harvesting, but limit its use when the soil is wet.
Reduce the risk of erosion by seeding roads, cutbanks, and landings and installing water bars and culverts.
Avoid excessive damage to the soil and to the vegetation downslope from roadbuilding sites by removing waste material.
Prepare the site carefully to control competing vegetation.
Hand plant nursery stock to establish or improve a stand.
Improve stands by thinning before trees reach commercial size and by selective cutting of mature trees.

58E-Skipanon gravelly silt loam, 30 to 60 percent slopes.

Composition

Skipanon soil and similar inclusions - 80 percent
Contrasting inclusions - 20 percent

Skipanon Soil

Position on landscape: Mountainsides
Slope range: 30 to 60 percent
Elevation: 100 to 1,600 feet
Native plants: Western hemlock, Sitka spruce, Douglas-fir, red alder, red huckleberry, western swordfern, salal, salmonberry, Oregon oxalis
Organic mat on surface: Moss, needles, and twigs 2 inches thick
Typical *profile:*
0 to 19 inches - dark brown gravelly silt loam
19 to 36 inches - brown cobbly silt loam
36 to 53 inches - variegated, light yellowish brown and yellowish brown silty clay loam
53 inches - weathered siltstone
Depth class: Deep (40 to 60 inches)
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 7 to 11 inches
Potential rooting depth: 40 to 60 inches
Runoff: Rapid
Hazard of erosion by water: Severe

Included Areas
Soils that have weathered siltstone at a depth of less than 40 inches
Soils that have basalt at a depth of 40 to 60 inches
Soils that have more than 35 percent rock fragments throughout the profile
Soils that have less than 15 percent rock fragments throughout the profile

Soil temperature - 47 to 52 degrees F (varies less than 9 degrees from summer to winter)
Frost-free period - 100 to 210 days

Woodland

Mean site index for stated species: Western hemlock - 159 (based on 100-year site curve); 112 (based on 50-year site curve)
Growth at culmination of mean annual increment (CMAI): 252 cubic feet per acre in a stand of 50-year-old trees 1.5 inches or larger in diameter at breast height
Estimated total production per acre: 110,110 board feet (International rule, one-fourth-inch kerf) from a fully stocked stand of trees 70 years old

General management considerations:
Wheeled and tracked equipment can be used in the more gently sloping areas, but cable yarding generally is safer and disturbs the soil less.
Using wheeled and tracked equipment when the soil is wet produces ruts, compacts the soil, and damages the roots of trees.
Disturbing the soil excessively in harvesting timber and building roads increases the loss of soil, which in turn leaves a greater number of rock fragments on the surface.
Steep yarding paths, skid trails, and firebreaks are subject to rilling and gullying. A plant cover or water bars are needed.
The soil is subject to sliding and slumping because it is very plastic and is underlain by highly fractured bedrock.
Spoil from excavations is subject to rill and gully erosion and to sloughing.
Susceptibility of cut and fill areas to erosion is moderate.
Adequately designed road drainage reduces the risk , of erosion.
Logging roads require suitable surfacing for year-round use.
The waste material from roadbuilding can damage vegetation. It is also a potential source of sedimentation.
Reforestation occurs naturally in cutover areas if a seed source is present.
Plant competition delays natural regeneration but does not prevent the eventual development of a fully stocked, normal stand of trees.
Carefully managed reforestation reduces competition from undesirable understory plants.
Reforestation can be accomplished by planting western hemlock, Sitka spruce, or Douglas-fir seedlings.

Suitable management practices:
Use conventional equipment in harvesting, but limit its use when the soil is wet.
Reduce the risk of erosion by seeding roads, cutbanks, and landings and installing water bars and culverts.
Avoid excessive damage to the soil and to the vegetation downslope from roadbuilding sites by removing waste material.
Prepare the site carefully to control competing vegetation.
Hand plant nursery stock to establish or improve a stand.
Improve stands by thinning before trees reach commercial size and by selective cutting of mature trees.

58E-Skipanon gravelly silt loam, 30 to 60 percent slopes.

Composition

Skipanon soil and similar inclusions - 80 percent
Contrasting inclusions - 20 percent

Skipanon Soil

Position on landscape: Mountainsides
Slope range: 30 to 60 percent
Elevation: 100 to 1,600 feet
Native plants: Western hemlock, Sitka spruce, Douglas-fir, red alder, red huckleberry, western swordfern, salal, salmonberry, Oregon oxalis
Organic mat on surface: Moss, needles, and twigs 2 inches thick
Typical *profile:*
0 to 19 inches - dark brown gravelly silt loam
19 to 36 inches - brown cobbly silt loam
36 to 53 inches - variegated, light yellowish brown and yellowish brown silty clay loam
53 inches - weathered siltstone
Depth class: Deep (40 to 60 inches)
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 7 to 11 inches
Potential rooting depth: 40 to 60 inches
Runoff: Rapid
Hazard of erosion by water: Severe

Included Areas
Soils that have weathered siltstone at a depth of less than 40 inches
Soils that have basalt at a depth of 40 to 60 inches
Soils that have more than 35 percent rock fragments throughout the profile
Soils that have less than 15 percent rock fragments throughout the profile

Major Uses
Woodland, wildlife habitat (fig. 7)

Major Management Factors
Soil-related factors: Slope, erosion by water
Climatic factors (mean annual):
Precipitation - 70 to 100 inches
Soil temperature - 47 to 52 degrees, F (varies less than 9 degrees from summer to winter)
Frost-free period - 100 to 210 days

Woodland
Mean site index for stated species: Western hemlock - 159 (based on 100-year site curve); 112 (based on 50-year site curve)
Growth at culmination of mean annual increment (CMAI): 252 cubic feet per acre in a stand of 50-year-old trees 1.5 inches or larger in diameter at breast height
Estimated total production per acre: 110,110 board feet (International rule, one-fourth-inch kerf) from a fully stocked stand of trees 70 years old -

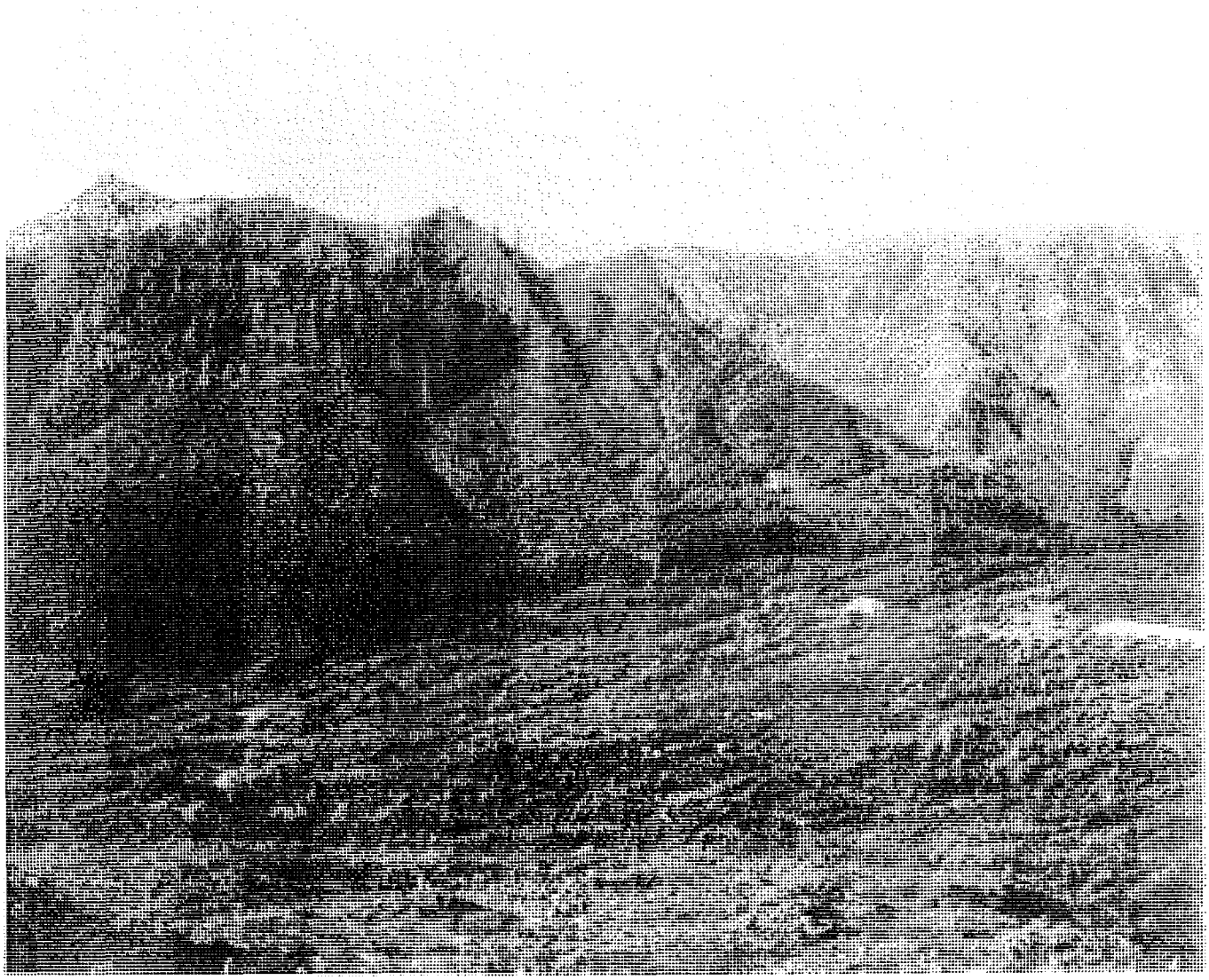


Figure 7.-Area of Skipanon gravelly silt loam, 30 to 60 percent slopes, in foreground.

General management considerations:

- Slope limits the kinds of equipment that can be used in forest management.
- Highlead logging is more efficient than most other methods and is less damaging to the soil surface.
- Disturbing the soil excessively in harvesting timber and building roads increases the loss of soil, which in turn leaves a greater number of rock fragments on the surface.
- Constructing roads at midslope results, in large cuts and fills, which increases the risk of erosion.
- Logging roads require suitable surfacing for year-round use.
- Susceptibility of cut and fill areas to erosion is high.
- Spoil from excavations is subject to rill and gully erosion and to sloughing.
- The soil is subject to sliding and slumping because it is very plastic and is underlain by highly fractured bedrock.
- Adequately designed road drainage reduces the risk of erosion.
- The waste material from roadbuilding can damage downslope vegetation. It is also a potential source of sedimentation.
- Reforestation occurs naturally in cutover areas if a seed source is present.
- Plant competition delays natural regeneration but does not prevent the eventual development of a fully stocked, normal stand of trees.
- Carefully managed reforestation reduces plant competition from undesirable understory plants.
- Reforestation can be accomplished by planting western hemlock, Sitka spruce, or Douglas-fir seedlings.

Suitable management practices:

- Use highlead or other logging that fully or partially suspends logs because it is less damaging to the soil.
- Reduce the risk of erosion by seeding roads, cutbanks, and landings and installing water bars and culverts.
- Avoid excessive damage to the soil and to the vegetation downslope from roadbuilding sites by removing waste material.
- Prepare the site carefully to control competing vegetation.
- Hand plant nursery stock to establish or improve a stand.
- Improve stands by thinning before trees reach commercial size and by selective cutting of mature trees.

59D-Svensen loam, 3 to 30 percent slopes.

Composition

Svensen soil and similar inclusions - 75 percent
Contrasting inclusions - 25 percent

Svensen Soil

Position on landscape: Mountaintops
Slope range: 3 to 30 percent
Elevation: 100 to 500 feet
Native plants: Western hemlock, Sitka spruce, Douglas-fir, red alder, salmonberry, salal, vine maple, western swordfern, Oregon oxalis
Organic mat on surface: Moss, needles, and twigs 3 inches thick
Typical profile:

- 0 to 17 inches - very dark brown and dark brown loam
- 17 to 38 inches - brown loam
- 38 to 60 inches - variegated, strong brown and light brownish gray fine sandy loam

Depth class: Very deep (more than 60 inches)
Drainage class: Well drained
Permeability: Moderate
Available water capacity: 7 to 11 inches
Potential rooting depth: 60 inches or more
Runoff: Medium
Hazard of erosion by water: Moderate

Included Areas

Soils that have slopes of more than 30 percent
Soils that are wet
Soils that have an upper layer that is In ore than 20 inches thick
Soils that are silt loam or silty clay loam throughout the profile
Soils that have weathered siltstone at a depth of 40 to 60 inches

Major Uses

Woodland, homesites, cropland, wildlife habitat

Major Management Factors

Soil-related factors: Erosion by water, susceptibility of the upper layer to compaction
Climatic factors (mean annual):

- Precipitation - 70 to 100 inches
- Soil temperature - 49 to 53 degrees F (varies less than 9 degrees from summer to winter)
- Frost-free period - 175 to 245 days

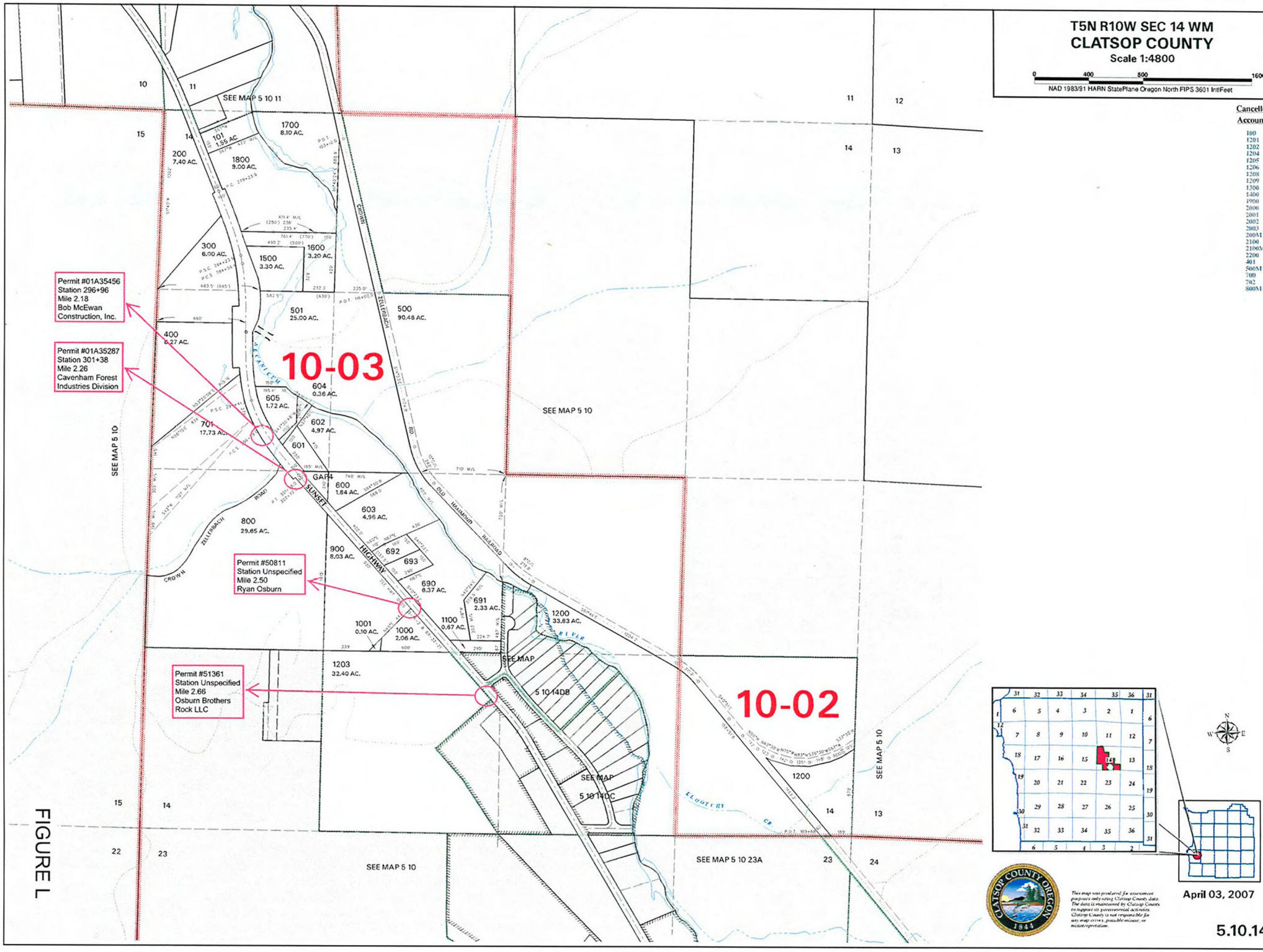
Cropland

General management considerations.

- Most climatically adapted crops can be grown.
- Suitable crops for planting are grasses and legumes.
- Grasses and legumes grow well if they are adequately fertilized.

Exhibit III (C).

Access Maps & Permit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CLATSOP COUNTY
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Cancelled Accounts
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2100M1
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10-02
Permit #01A35456
Station 296+96
Mile 2.18
Bob McEwan Construction, Inc.
Permit #01A35287
Station 301+38
Mile 2.26
Cavenham Forest Industries Division
Permit #50811
Station Unspecified
Mile 2.50
Ryan Osburn
Permit #51361
Station Unspecified
Mile 2.66
Osburn Brothers Rock LLC
SEE MAP 5 10 11
SEE MAP 5 10
SEE MAP 5 10 14DB
SEE MAP 5 10 14DC
SEE MAP 5 10 23A
SUNSET HIGHWAY
OLD HAMMOND RAILROAD
ZELLERBACH ROAD
CROWN ZELLERBACH RD
GAP4
SECANTUM
ELLIOT CRY
April 03, 2007
5.10.14

FIGURE L

Oregon Department of Transportation

APPLICATION AND PERMIT TO CONSTRUCT APPROACH ROAD

Tax lot 701

PERMIT NUMBER: 01 A35456

HIGHWAY NAME: Sunset		MILE POINT: 2.18	ENGINEERS STATION: 296+96
HIGHWAY NUMBER: 47, Route 26	COUNTY: Clatsop	SIDE OF HIGHWAY: ☐ NORTH ☐ EAST ☒ SOUTH ☐ WEST	APPROACH TO SERVE: Farm & Compost Facility
BETWEEN OR NEAR: West of Vollmer Creek		REFERENCE MAP NUMBERS: 6B-32-21	TAX LOT NUMBER: 701
APPLICANT NAME AND ADDRESS: Bob McEwan Construction, Inc. Attention: Robert McEwan Michael R. McEwan Pres. Post Office Box 2845 Gearhart, OR 97138		BOND REQUIRED: ☐ YES ☒ NO — REFERENCE: OAR 734-50-025(6)	AMOUNT OF BOND:
		INSURANCE REQUIRED: ☐ YES ☒ NO — REFERENCE: OAR 734-50-025(3)	☒ ADMINISTRATIVE FEE ☐ TEMPORARY DEPOSIT
		AMOUNT: $50.00	CHECK NUMBER: # 10815 24-22
TELEPHONE NUMBER: (503) 738-5954		DISTRICT MANAGER OR REPRESENTATIVE: [signature]	DATE APPLICATION APPROVED: 6/5/98
APPLICANT: X Michael R. McEwan	APPLICATION DATE: 3/31/98	APPROACH ROAD COMPLETION DATE: REFERENCE: OAR 734-50-050(4)	November 30, 1998

The applicant declares that he/she is the owner or lessee of the real property adjoining the above described highway and has the lawful authority to apply for this permit. When this application is approved by the Department of Transportation, the applicant is subject to the terms and provisions contained herein and attached hereto; and the terms of Oregon Administrative Rule, Chapter 734, Division 50, which is by this reference made a part of this permit. Copies of the Rule may be obtained from the District Manager's office.

Issuing of permits under these regulations is not a finding of compliance with the statewide planning goals or the acknowledged comprehensive plan for the area. Permits are issued subject to the approval of city, county or other governmental agencies having either joint supervision over the section of highway or authority to regulate land use by means of zoning and/or building regulations. It shall be the applicant's responsibility to obtain any such approval including, where applicable, local government determination of compliance with the statewide planning goals. (OAR 734-50-055)

SPECIAL PROVISIONS

1--- If the proposed application requires traffic control devices and/or special road construction, the applicant shall provide a copy of this application to the affected local government. The original application must be signed by the local government official. CUP approved 4-16-98

LOCAL GOVERNMENT OFFICIAL SIGNATURE	TITLE	DATE
X Teri Allen Teri Allen	Planning Tech.	4-20-98

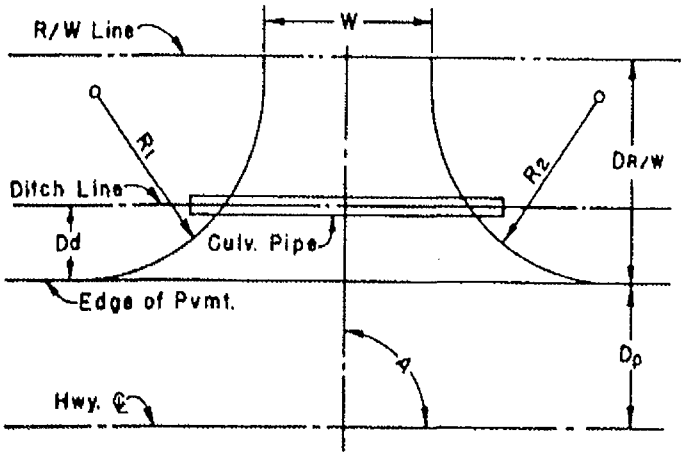
2---Within 48 hours before beginning work, and after completing the permit work, the applicant or his contractor shall notify the District Representative at telephone number: (503)325-7222 Or FAX number: (503)325-1314

3 Permit shall document the farm and compost facility uses at an existing, paved approach road.

4 Highway right-of-way extends fifty (50) feet north & south of right-of-way center-line; there shall be no placement of signs, advertising or vending on highway right-of-way.

5 Applicant shall be responsible for the maintenance of the approach area.

TYPE 2 APPROACH ROAD — PAVED



PLAN

NOTE: All material and workmanship shall be in accordance with the current state of Oregon Standard specifications for Highway Construction.

W = 22'	R_1 = 20'	R_2 = 20'	A = 90
D_P = 16'	D_d = n/a	$D_{R/W}$ = 34'	

CULVERT PIPE REQUIRED? ☐ YES ☒ NO

TYPE: n/a

DIAMETER (INCHES)	LENGTH (FEET)
n/a	n/a

STONE BASE	SIZE AND TYPE: existing	COMPACTED THICKNESS (INCHES): existing
STONE LEVELING COURSE	SIZE AND TYPE: existing	COMPACTED THICKNESS (INCHES): existing
ASPHALT CONCRETE PAVEMENT	CLASS: existing	COMPACTED THICKNESS (INCHES): existing

SEE PAGE 2 OF APPLICATION

800 Tax lot 800

APPLICATION AND PERMIT TO CONSTRUCT APPROACH ROAD

PERMIT NUMBER: 01A35287

HIGHWAY NAME: Sunset		MILE POINT: 2.26	ENGINEERS STATION: 301 + 38
HIGHWAY NUMBER: 47, Route 26	COUNTY: Clatsop	SIDE OF HIGHWAY: ☐ NORTH ☐ EAST ☑ SOUTH ☐ WEST	APPROACH TO SERVE: Logging Operations
BETWEEN OR NEAR: @ Vollmer Creek Road	AND	REFERENCE MAP NUMBERS: 6B-32-21	TAX LOT NUMBER: See Assessor Map
APPLICANT NAME AND ADDRESS: Cavenham Forest Industries Division Attention: Garry L. Phelan Post Office Box 998 Seaside, OR 97138-0998		BOND REQUIRED: ☐ YES ☑ NO — REFERENCE: OAR 734-50-026(6)	AMOUNT OF BOND:
		INSURANCE REQUIRED: ☑ YES ☐ NO — REFERENCE: OAR 734-50-025(3)	☑ ADMINISTRATIVE FEE ☐ TEMPORARY DEPOSIT
		AMOUNT: $50.00	CHECK NUMBER: 150058 19-28
TELEPHONE NUMBER: (503)738-6351		DISTRICT MANAGER OR REPRESENTATIVE: X Donna K. Duff	DATE APPLICATION APPROVED: 5/10/96
APPLICANT: X Garry L. Phelan	APPLICATION DATE: 5-8-96	APPROACH ROAD COMPLETION DATE: November 30, 1996 — REFERENCE: OAR 734-50-050(4)	

The applicant declares that he/she is the owner or lessee of the real property adjoining the above described highway and has the lawful authority to apply for this permit. When this application is approved by the Department of Transportation, the applicant is subject to the terms and provisions contained herein and attached hereto; and the terms of Oregon Administrative Rule, Chapter 734, Division 50, which is by this reference made a part of this permit. Copies of the Rule may be obtained from the District Maintenance Supervisor's office.

Issuing of permits under these regulations is not a finding of compliance with the statewide planning goals or the acknowledged comprehensive plan for the area. Permits are issued subject to the approval of city, county or other governmental agencies having either joint supervision over the section of highway or authority to regulate land use by means of zoning and/or building regulations. It shall be the applicant's responsibility to obtain any such approval including, where applicable, local government determination of compliance with the statewide planning goals. (OAR 734-50-055)

SPECIAL PROVISIONS

1— If the proposed application requires traffic control devices and/or special road construction, the applicant shall provide a copy of this application to the affected local government. The original application must be signed by the local government official.

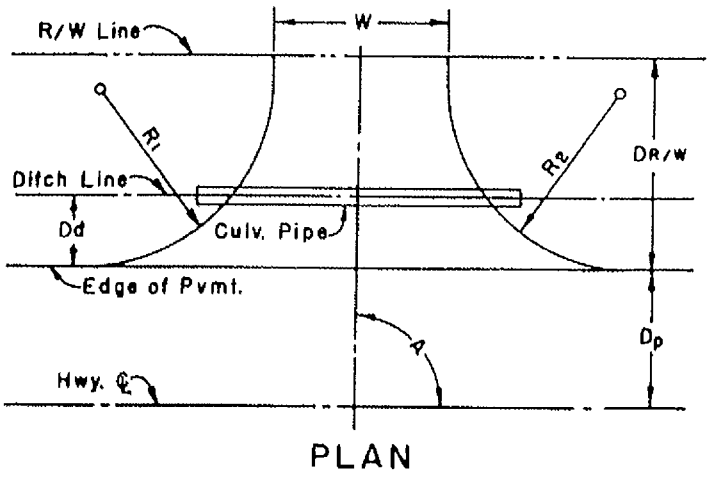
LOCAL GOVERNMENT OFFICIAL SIGNATURE	TITLE	DATE
X		

2—Within 48 hours before beginning work, and after completing the permit work, the applicant or his contractor shall notify the District Representative at telephone number: (503)325-7222

3 Slope and pave existing approach a minimum distance of twenty (20) feet from the existing edge of pavement and at a ninety (90) degree angle to the highway.

4 Applicant is responsible for maintenance of the approach area.

TYPE 2 APPROACH ROAD — PAVED



PLAN

NOTE: All material and workmanship shall be in accordance with the current state of Oregon Standard specifications for Highway Construction.

W = 24'	R_1 = 20'	R_2 = 20'	A = 90
D_p = 18'	D_d = 6'	$D_{R/W}$ = 32'	

CULVERT PIPE REQUIRED? ☑ YES ☐ NO

TYPE: CMP

DIAMETER (INCHES): 12		LENGTH (FEET): 96
STONE BASE	SIZE AND TYPE: 4"-0 pit run	COMPACTED THICKNESS (INCHES): 12
STONE LEVELING COURSE	SIZE AND TYPE: 1"-0 minus	COMPACTED THICKNESS (INCHES): 3
ASPHALT CONCRETE PAVEMENT	CLASS: B or C	COMPACTED THICKNESS (INCHES): 3

900 Tax lot 900

PERMIT NO: 50811

PERMIT TO OPERATE, MAINTAIN AND USE A STATE HIGHWAY APPROACH

Oregon Department of Transportation

Application Id: 1753 Highway Number: 047 MilePoint: 2.50 Reason for Request: Inventory Exist

Applicant Information

Name: Ryan Osburn
Company:
Address: P.O. Box 2069, Gearhart OR 97138
Phone: (503) 738-1124 FAX: ( ) -
eMail:

Property Information

Address: 34334 highway 26, Seaside OR 97138

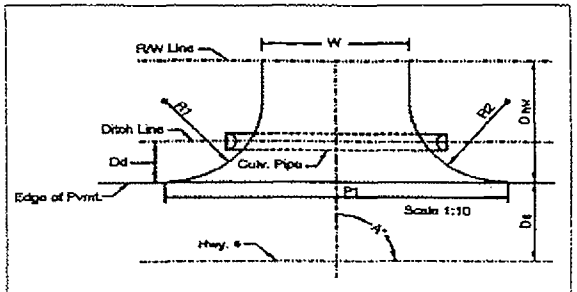
County:	Twnshp:	Range:	Section:
Clatsop	5N	10W	14

Highway: Sunset Route: US26

MilePoint:	Engineering Station:	Side of Hwy:	Natl Forest?:
2.50	307+15	R	N

Landmarks: Between Vollmer Creek & West Cample Loop I

Plan View



Effective Period

A permit to operate, maintain and use an approach shall be in effect for an indefinite period of time unless:

(a) revoked by mutual consent, or cancelled by the Regional Manager for failure of the applicant to abide by the terms and conditions;

(b) there is a change in the use of the approach, as set forth in OAR 734-051-0110;

(c) there is a current or potential safety or operational problem at the approach involving the volume of traffic using the approach a change in the character of the traffic using the approach, or a change in the highway facility such that the approach can no longer be operated without due conflict with other traffic, as set forth in OAR 734-051-0380;

(d) the highway facility is significantly improved to meet classification of the highway and the highway segment designation objectives, highway mobility standards, spacing standards and safety criteria that are inconsistent with the approach or

(e) by other operation of law.

Failure of the applicant to comply with any of the terms and conditions of the permit shall be sufficient cause for cancelation of the permit and may result in removal of the facility by the Oregon Department of Transportation.

The Permit is issued subject to the provisions of Oregon Administrative Rules 734-051-0010 through 734-051-0480, which are by reference made a part of this permit; and which are in effect at any particular time in the duration of the permit.

Specification

Width (W): 20.00ft		Angle (A): 90
Radius 1 (R1): 20.00ft		Radius 2 (R2): 20.00ft
Paving Lmt (P1): 60.00ft		Paving Lmt (P2): 20.00ft
Surf (Ds): 18.00ft	Ditch (Dd): 10.00ft	R/W (Drw): 12.00ft
Culvert: Other	Diam: 18.00in	Len: 35.00ft
Sub Base Crse: 100mm - 0 Aggregate Base (4" - 0)		Thickness: 12.00in
Base Crse: 19mm - 0 Aggregate Base (3/4" - 0)		Thickness: 6.00in
Level Crse:		Thickness:
Wear Crse: Heavy Duty Class 'C' Asphalt Concrete		Thickness: 4.00in

Maintenance of Approach

Prior to performing any maintenance work on the approach, which will interfere with or interrupt traffic upon or along the highway, the applicant shall obtain approval and necessary permits from the District Office. In all cases where traffic signals have been required, signal maintenance will be performed by the Oregon Department of Transportation or as assigned by a Cooperative Cost Agreement.

Property Owner Information

Name: Ryan Osburn
Company:
Address: P.O. Box 2069, Gearhart OR 97138 USA
Phone: (503) 738-1124 FAX: ( ) -
eMail:

Tax Lot Information

900

This permit is not valid until signed by a duly authorized representative of the Oregon Department of Transportation.

Authorized ODOT Signature	Date
Craig Dean	1-29-03

Tax lot 1203

PERMIT NO: 51361

PERMIT TO OPERATE, MAINTAIN AND USE A STATE HIGHWAY APPROACH

Oregon Department of Transportation

Application Id: 2933 Highway Number: 047 MilePoint: 2.66 Reason for Request: Change in use

Applicant Information

Name:	Ryan Osburn
Company:	Osburn Brothers Rock LLC
Address:	PO Box 2069 Gearhart OR 97138
Phone:	(503) 738-7709
FAX:	( ) -
eMail:	

Property Information

Address:	Hwy 26 Seaside OR 97138		
County:	Clatsop	Twnshp: 5N	Range: 10W Section: 14
Highway:	Sunset	Route: US26	
MilePoint:	2.66	Engineering Station: 323+80	Side of Hwy: R Natl Forest?: N
Landmarks:	Across from Cambell Drive.		

Plan View

See Custom Drawing

Effective Period

A permit to operate, maintain and use an approach shall be in effect for an indefinite period of time unless:

(a) revoked by mutual consent, or cancelled by the Regional Manager for failure of the applicant to abide by the terms and conditions;

(b) there is a change in the use of the approach, as set forth in OAR 734-051-0110;

(c) there is a current or potential safety or operational problem at the approach involving the volume of traffic using the approach a change in the character of the traffic using the approach, or a change in the highway facility such that the approach can no longer be operated without due conflict with other traffic, as set forth in OAR 734-051-0380;

(d) the highway facility is significantly improved to meet classification of the highway and the highway segment designation objectives, highway mobility standards, spacing standards and safety criteria that are inconsistent with the approach or;

(e) by other operation of law.

Failure of the applicant to comply with any of the terms and conditions of the permit shall be sufficient cause for cancellation of the permit and may result in removal of the facility by the Oregon Department of Transportation.

The Permit is issued subject to the provisions of Oregon Administrative Rules 734-051-0010 through 734-051-0480, which are by reference made a part of this permit; and which are in effect at any particular time in the duration of the permit.

Specification

Width (W): 30.00ft		Angle (A): 90
Radius 1 (R1): 30.00ft		Radius 2 (R2): 30.00ft
Paving Lmt (P1): 480.00ft		Paving Lmt (P2): 170.00ft
Surf (Ds): 27.00ft	Ditch (Dd): 52.00ft	R/W (Drw): 3.00ft
Culvert: None	Diam:	Len:
Sub Base Crse: 100mm - 0 Aggregate Base (4" - 0)		Thickness: 12.00in
Base Crse: 19mm - 0 Aggregate Base (3/4" - 0)		Thickness: 6.00in
Level Crse:		Thickness:
Wear Crse: Heavy Duty Class 'C' Asphalt Concrete		Thickness: 6.00in

Maintenance of Approach

Prior to performing any maintenance work on the approach, which will interfere with or interrupt traffic upon or along the highway, the applicant shall obtain approval and necessary permits from the District Office. In all cases where traffic signals have been required, signal maintenance will be performed by the Oregon Department of Transportation or as assigned by a Cooperative Cost Agreement.

Property Owner Information

Name:	
Company:	Osburn Brothers Rock LLC
Address:	89053 Hwy 101 Warrenton OR 97146 USA
Phone:	(503) 717-3907
FAX:	( ) -
eMail:	

Tax Lot Information

1203

This permit is not valid until signed by a duly authorized representative of the Oregon Department of Transportation.

Applicant Signature: Ryan Osburn Osburn Brothers Rock	Date: 5-20-03
Authorized ODOT Signature: by Jan Stewart	Date: 5-21-03

Exhibit III (D).

Zoning & 1500' Perimeter

FIGURE M: Zoning Map

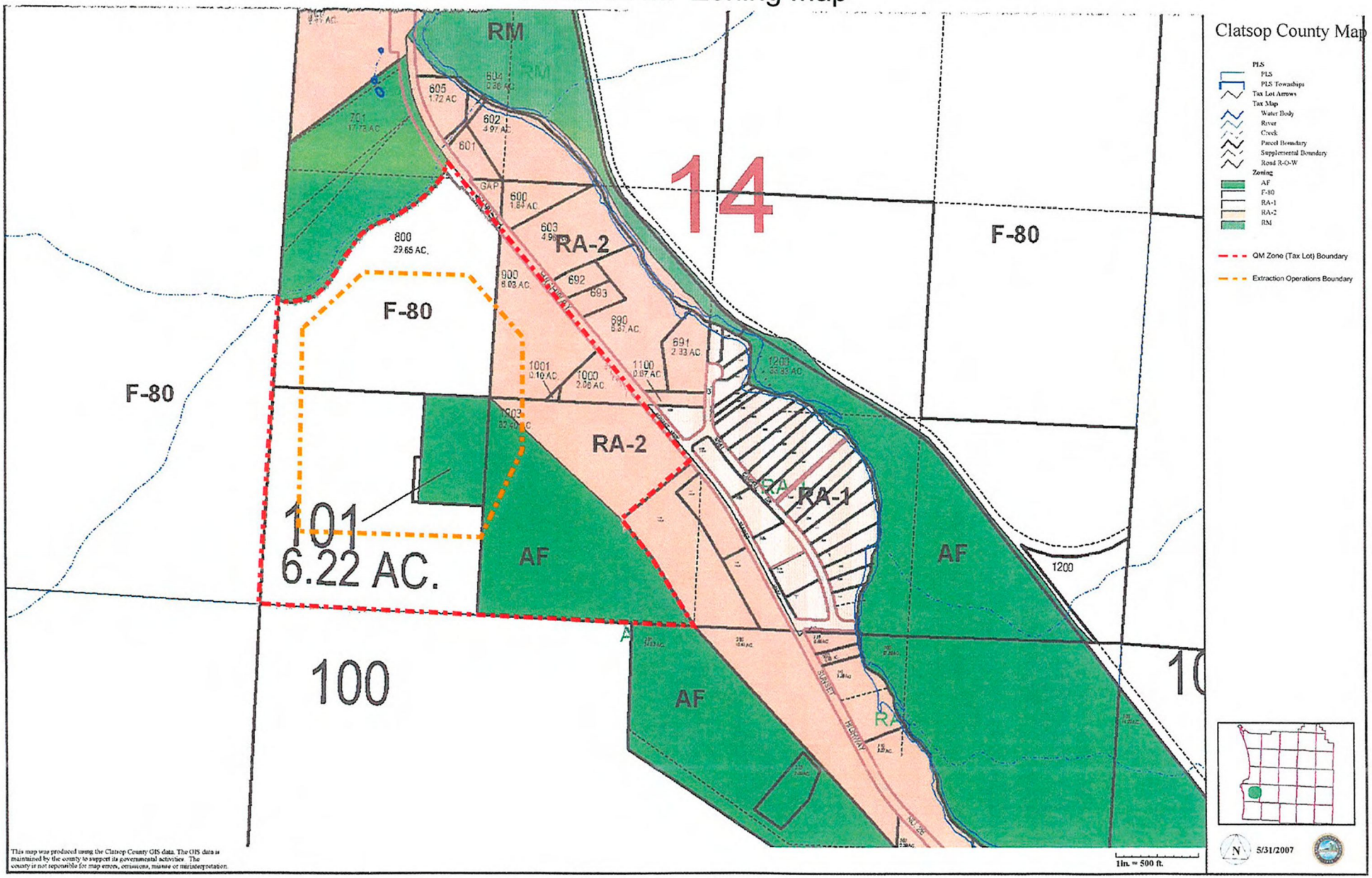


FIGURE M

FIGURE N: QM Tax Lots Overlay

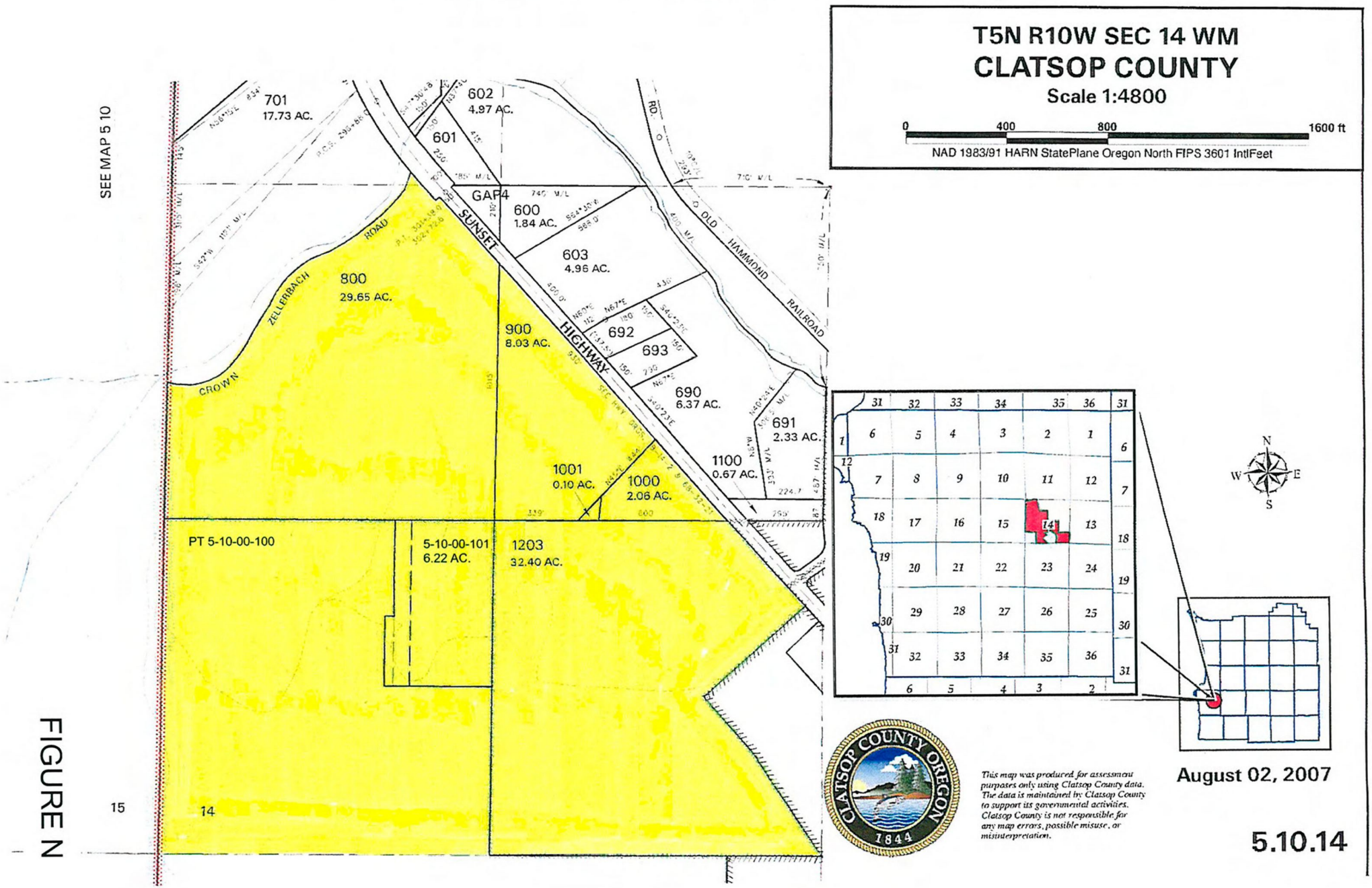


FIGURE O.1: 1,500' Notice Area around QM Zone

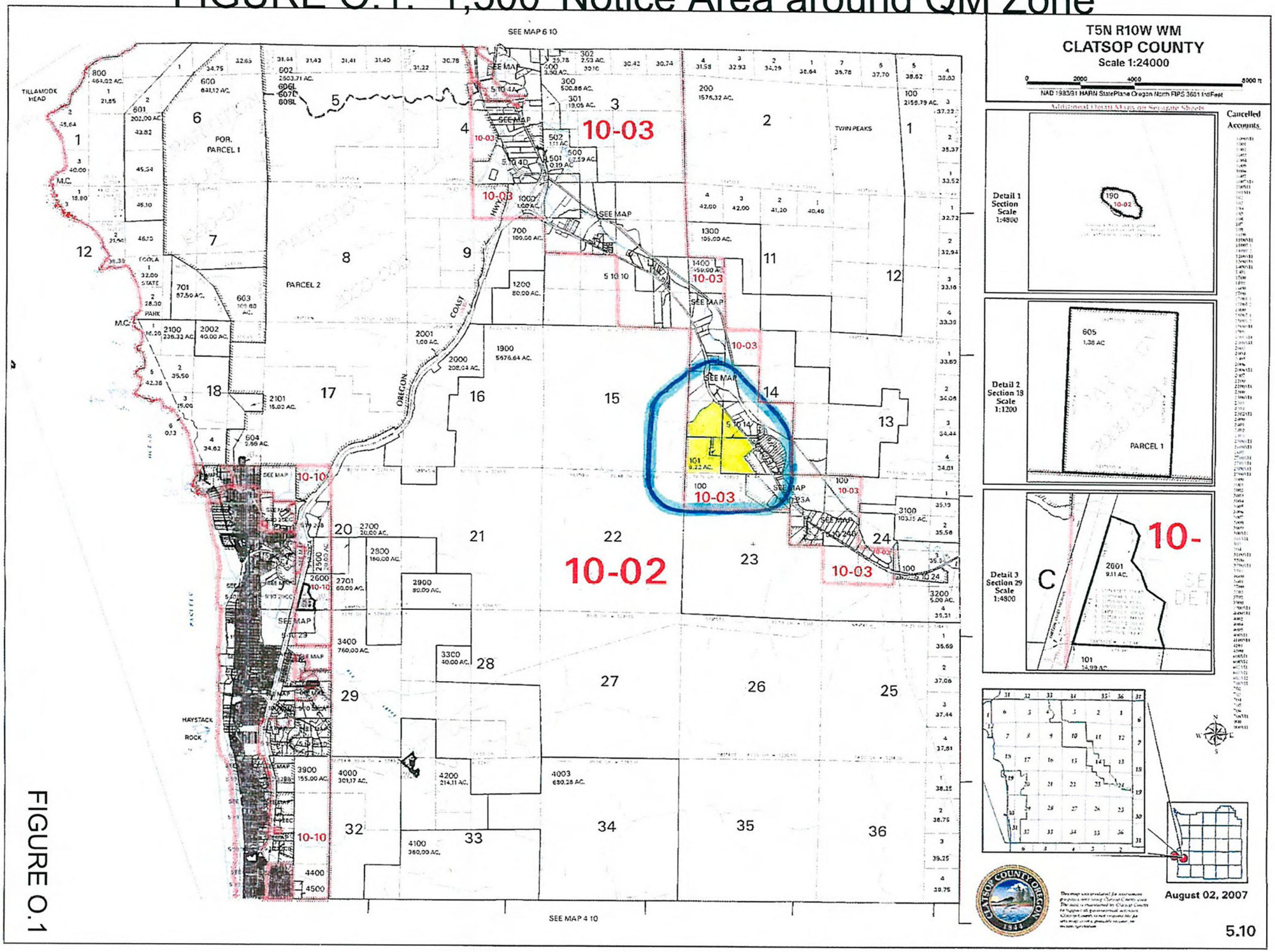


FIGURE O.1

FIGURE O.2: 1,500' Notice Area around QM Zone

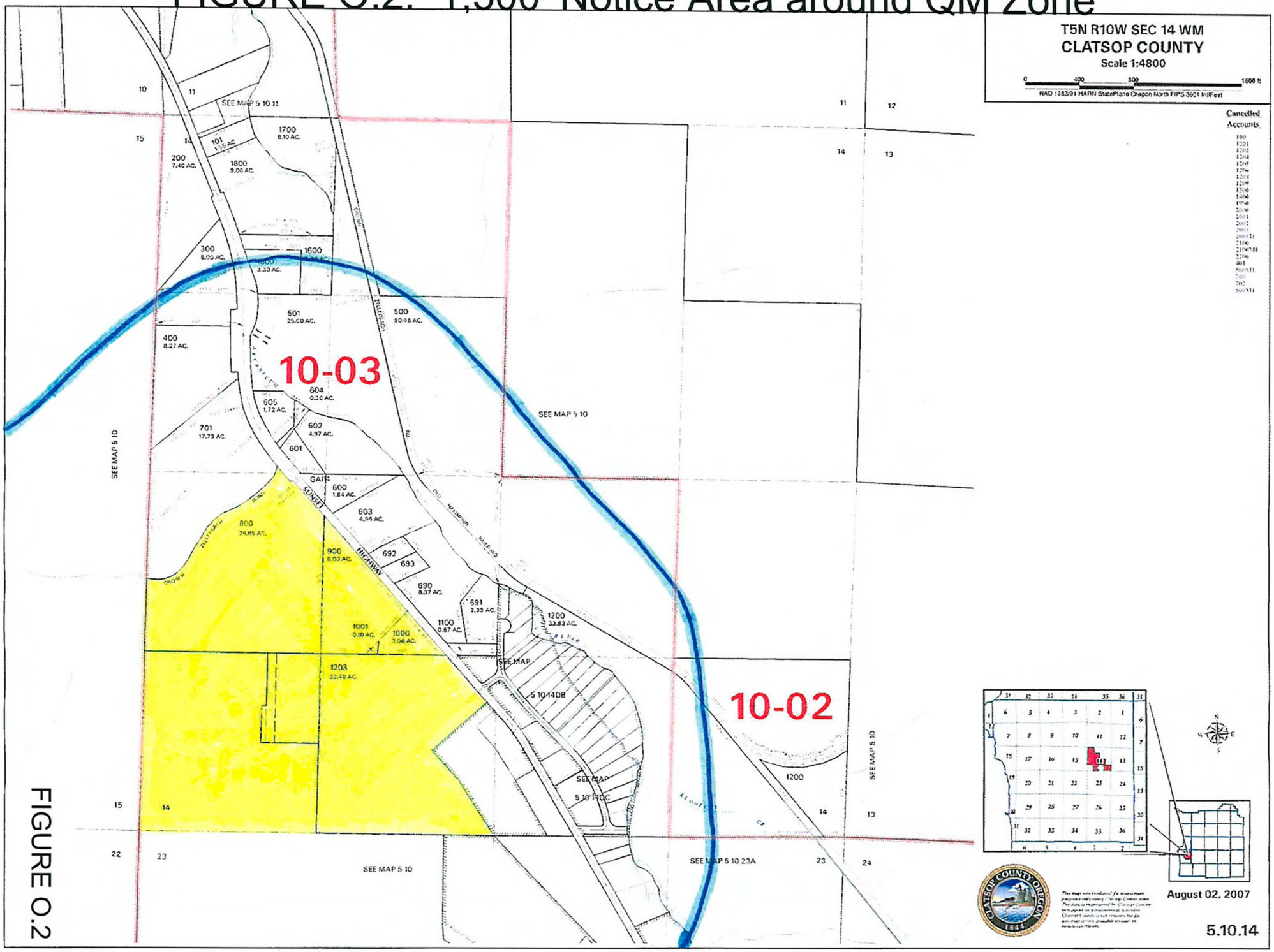


FIGURE O.2

Exhibit III (E).

Parking Plan

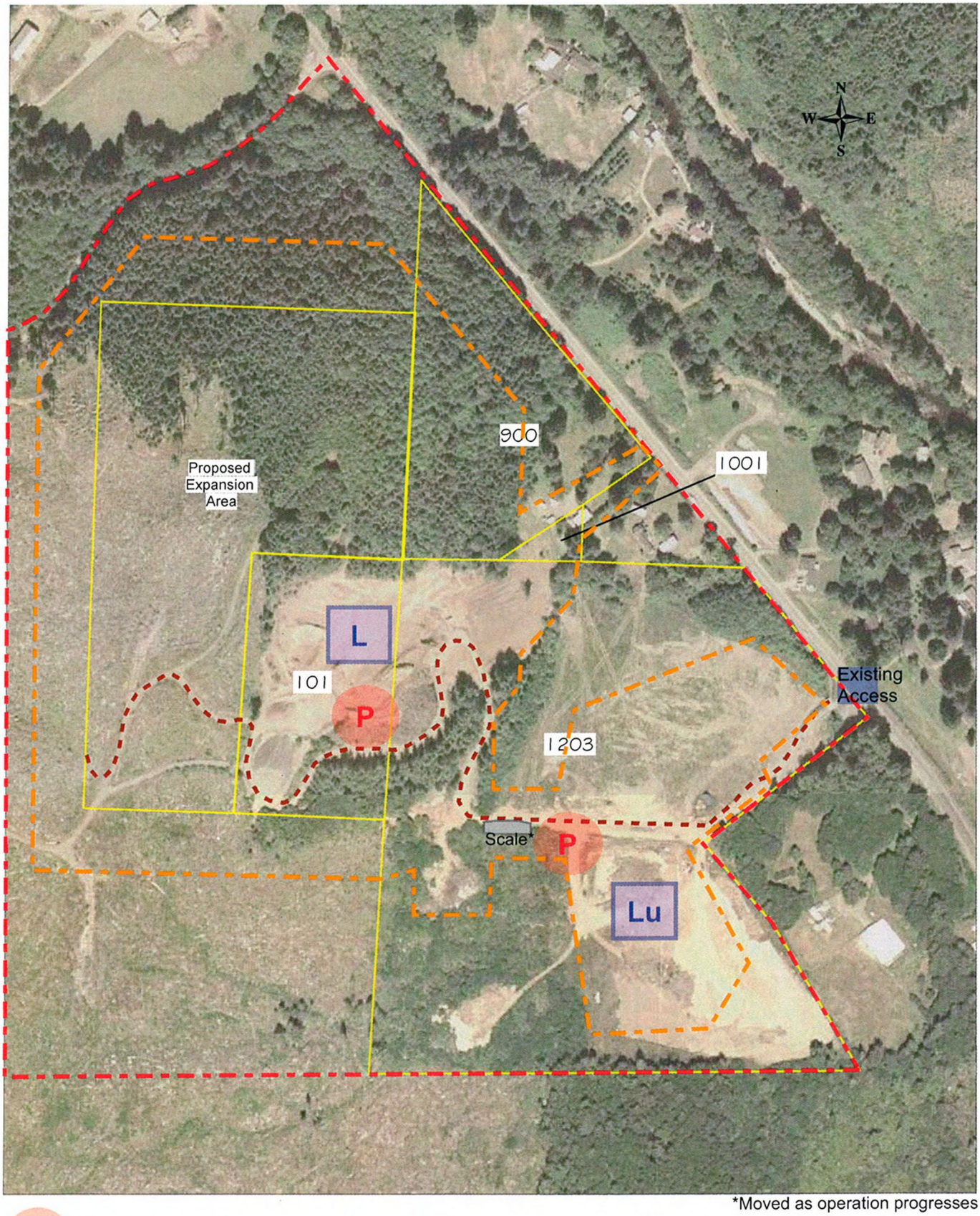
PARKING PLAN NARRATIVE

The County's Standards Document requires that off-street parking and loading shall be provided for all development requiring a development permit. Quarry operations are different from commercial operations or standard industrial uses where parking and loading requirements can be computed on a square-foot basis or from residential uses where parking and loading requirements can be developed based on the number of dwelling units. The closest standard in the Standards Document for providing parking spaces is an industrial development requiring one parking space per employee on the largest shift. It is anticipated that when crushing is in full operation, there will be no more than seven employees on the site at peak times. Accordingly, parking areas have been designated near the aecess road (near the existing scale) and in the southeast corner of the existing quarry floor. Sufficient spaee exists on each of these two sites for substantially more than seven parking spaces of the appropriate size and dimension required by the Standards Document. All such parking is off-street. Parking will be arranged in single file order with adequate spaee to preserve traffic flow for visitors to the site, truck traffic generated by the site, and emergency vehicles. Both designated parking areas will have sufficient turnaround space for maneuvering the vehicles and will be graveled, consistent with their location as Big River's operations. Graveled areas will allow for percolation of rain water and eliminate sheet flow of storm water onto sidewalks, public right-of-ways or abutting private property. Big River will provide signs that elearly mark parking spaces. Big River's operational orientation will change over time. For this reason, Big River requests that it not be required to permanently mark the parking spots. Wheel stops and bumpers are not necessary as parking spaces do not abut the property line or building. No screening is necessary because the parking areas are on the internal portion of quarry areas. Artificial lighting will not be provided because the operational hours for the quarry are day-time operation hours (e.g., 7 a.m. to 6 p.m.). Bicycle parking spaces are not required under the Standards Document and are inappropriate for a graveled industrial site.

Loading areas are critical to the quarry use, but the quarry will not have buildings with gross floor area by which to judge the necessary square footage of loading facilities. In addition, as the operation changes, the necessary loading areas will change as well. As indicated on the parking and loading site plan map, Big River has currently designated a portion of the quarry floor as a loading area continuing operations and will move as necessary as the quarry floor is reoriented. The area is significantly larger than 750 square feet. The loading area provides the ability for trucks to make circular movement to facilitate ease of use. This area is behind existing berms and is screened. As the loading area moves in relationship to quarry reorientation, it will continue to be screened. We have also indicated an unloading area on the southern portion of the property which is where haul back material may be deposited. This area has more than 750 square feet and also provides for circular truck traffic as appropriate.

The Ordway quarry is currently served by a sign that does not extend into any required side yard or street right-of-way. It is not lighted or moveable. The sign will remain and no additional signage is requested for the quarry site.

FIGURE P: Parking Plan



*Moved as operation progresses

P	Vehicle Parking Areas	·····	Internal Roadways
L	Loading Areas	- - -	Extraction Operations Area
Lu	Unloading Areas	— —	QM Zone (Tax Lot) Boundary

FIGURE P

Exhibit III (F).

Flood Hazard Overlay & Erosion Control Plan

FIGURE Q: Geological & Flood Hazard Map

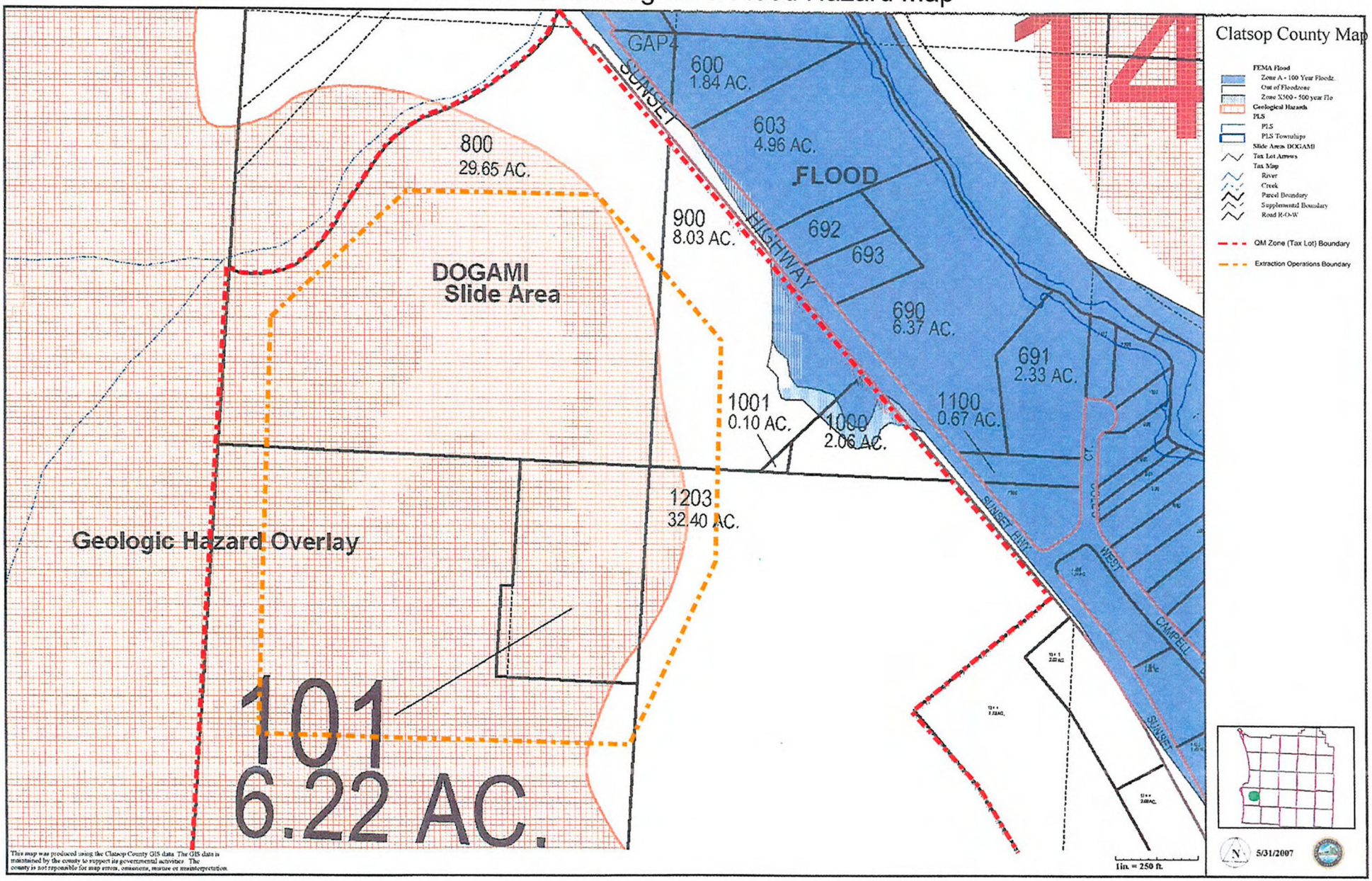


FIGURE Q

EROSION CONTROL PLAN NARRATIVE

October 1, 2007

This narrative accompanies the Erosion Plan Map and explains how Big River currently meets erosion control issues at the Ordway quarry and how it will direct its future operations to meet all of the design and operation standards and requirements related to erosion and sedimentation control in the LWDUO.

The location and physical nature of the site contribute greatly to Big River's ability to control erosion and sedimentation issues. The site itself is a basalt outcropping that is valuable as a crushed rock resource. Because of the hardness of the subsurface, erosion is not a significant problem notwithstanding the steep slopes on some portions of the property.

The site, except for the operational quarry area, is heavily vegetated, contributing to slope stability and limiting erosion and sedimentation. This vegetation will be maintained as much as possible and removed only when an area is cleared for immediate quarry operations.

There are large buffer zones that are vegetated and provide ample areas for sedimentation ponds and sedimentation collection areas to eliminate any offsite impacts. Waterways in the area are buffered from the site by existing roads and highways. The Necanicum River to the east is separated from the site by Highway 26. Vollmer Creek to the west is separated from the site by Vollmer Creek Road. Big River will continue to use the favorable site location and favorable site characteristics to control erosion and sedimentation.

Big River's operational plan calls for enlarging the quarry floor. This will provide ample opportunity to direct stormwater flows internally and have them percolate through fractures in the quarry floor, or be handled by sedimentation ponds on the west side of the quarry operations area or in the southeasterly portion of the site.

Roads necessary for access and internal circulation are already in place on the site. No vegetation removal for road construction eliminates erosion opportunities from this source. In the event that the exit point option preferred by ODOT would be milepost 2.50, adequate erosion control measures will be put in place to protect the haul road that would be constructed on the east side of the existing quarry. All roads are adequately buffered from any waterways by large areas of vegetation which will remain in place and large flat areas which serve to disperse and absorb any runoff water.

The operations at the site will be phased in a logical sequence. This will allow Big River to delay clearing vegetation and stripping overburden until a particular area needs to be opened up for mining activities. Unlike large and flat alluvial deposits of sand and gravel (where stripping is generally done at a time over large areas). Big River will remove vegetation on small portions of the Ordway property as those portions are needed for mining activities. This means that substantial vegetation will remain in place over a majority of the site on a declining basis as operations expand.

Big River's mining plan calls for the retention of a rock lip and vegetation on the eastern side of the expansion area. This will prevent erosion and sedimentation on the eastern side of operations from running toward the Necanicum River. In addition, it will allow Big River to install benches on the interior which may be used to control erosion and stormwater. New phases will be opened up in conjunction with a DOGAMI permit. As additional areas are opened up, additional bond money is paid to DOGAMI to ensure proper reclamation on the entire quarry area. It is impossible to predict an exact timeline over which phasing will occur, but Big River commits to stripping and clearing only those portions of the property necessary for actual ongoing mining operations.

Parking areas and areas for stockpiles are located on several portions of the site area. These areas have flat characteristics to ensure that sedimentation and runoff can be controlled. Parking and stockpile areas will not be paved to ensure there is a porous surface to facilitate percolation and reduce runoff.

There are minor water areas on the east side of the Big River property near Highway 26. These will not be disturbed and the riparian vegetation will be left in place. All existing riparian areas will be fully functioning.

Big River currently inspects its operations periodically for erosion and sedimentation issues and will continue to do so in future operations. In the past, the company has been able to use, on a short-term basis, hay bales and sedimentation fences to control temporary erosion and sedimentation issues that may develop. Big River commits to preserving overburden on the site for reclamation purposes and will mulch as needed to ensure erosion control and stability. Consistent with standard construction operations, Big River may also use filter barriers, filter fences and equivalent control devices as needed.

All the roads on the site, with the exception of small portions of pavement, are graveled and will continue to be graveled. This provides a permeable surface to allow infiltration of water that greatly reduces erosion and runoff.

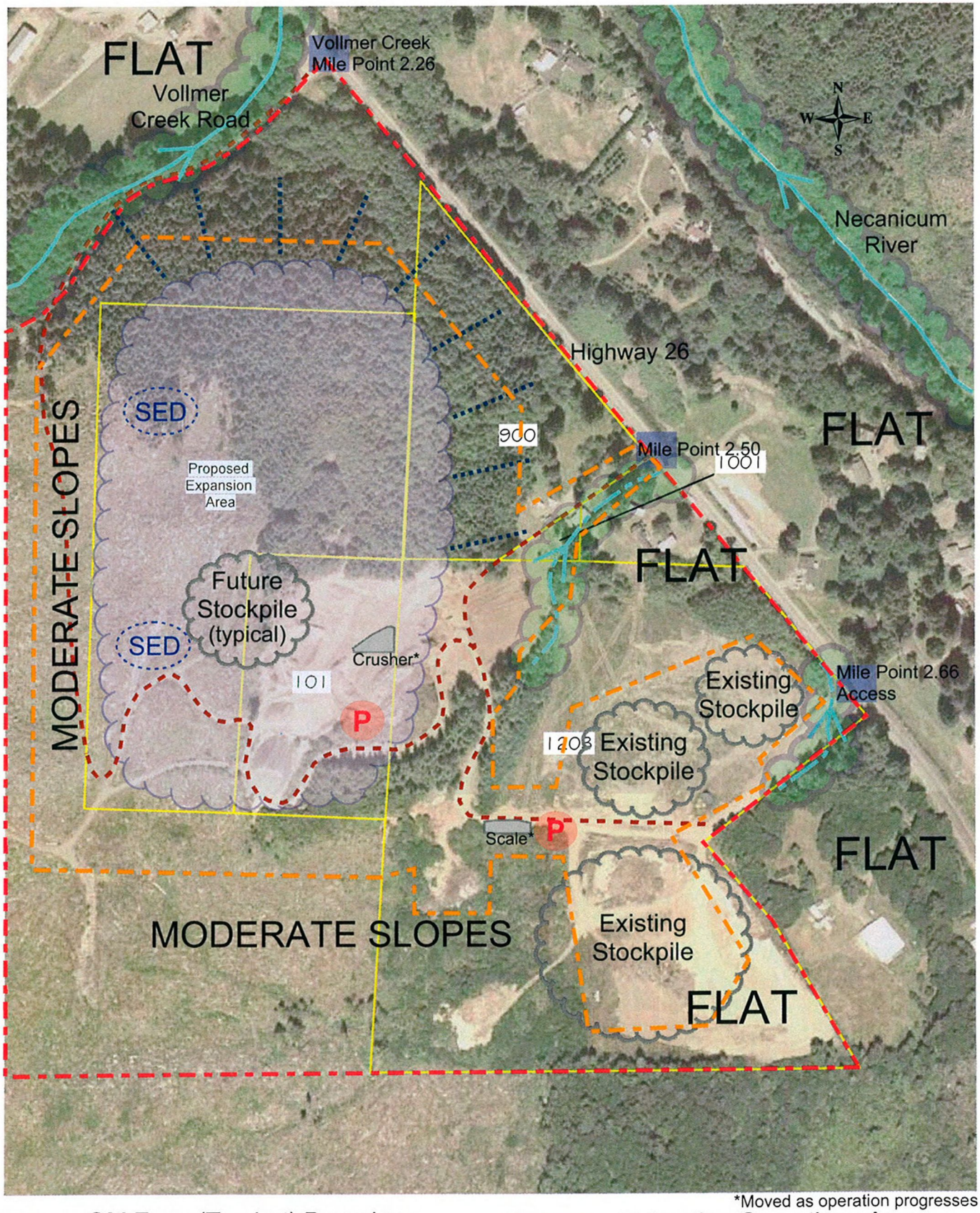
The person responsible for replacement inspection and maintenance of temporary and permanent erosion control measures is: Mike Sarin, President, Big River Excavating, 1050 Olney Avenue, Astoria, OR 97103; telephone (503) 338-3878; fax (503) 325-3119.

Big River certifies that land clearing, construction or development, or other quarry operations involving the movement of the earth shall conform to the erosion control plan as approved by Clatsop County.

Dated October 1, 2007.

Mike Sarin
President
Big River Excavating

FIGURE R: Erosion Control Area & Site Map



*Moved as operation progresses

- QM Zone (Tax Lot) Boundary
- Extraction Operations Area
- SED Potential Areas for Sedimentation
- Watercourses
- P Vehicle Parking Areas
- Internal Roadways (including potential alternative exit options)
- Steep Slopes, no surface water flow
- Vegetation Removed
- Existing Vegetation adjacent to watercourses

FIGURE R

FIGURE R

Exhibit III (G).

Preliminary Reclamation Plan

PRELIMINARY RECLAMATION PLAN

Reclamation for the Ordway quarry is currently permitted under the Department of Geology and Mineral Industries (Permit #04-0056). The expansion at the Ordway site will require a change in the DOGAMI permit. A formal reclamation plan will be provided to DOGAMI when the change in permit is requested. Under state law and the Clackamas County Land Use Code, a DOGAMI application must occur after the County's final land use approval. Accordingly, a DOGAMI permit will not be applied for until land use matters are completed at the local level. As such, we are providing a preliminary reclamation plan for the County's general review as part of the land use application process, knowing that the final reclamation plan will be approved and regulated by DOGAMI.

Reclamation at the Ordway quarry will be guided by the following principles:

- Big River plans to reorient the quarry floor to establish a larger quarry area to allow it to strategically approach the rock resource from a westerly/southwesterly direction. This will allow Big River to maintain defined contours on the east side of the quarry in the form of a "lip" of rock. This will also allow Big River to retain defined vegetation on the easterly side of the quarry which will help screen operations. Big River will maintain the quarry floor lower than the lip rock to the east to protect the residential uses to the east. The lip of rock will be lowered as the quarry floor is lowered and vegetation will be removed only as necessary for ongoing mining operations.

- Internal benches will be maintained in compliance with DOGAMI and MSHA regulations. The benches will provide level areas within the quarry area proper for future reclamation.

- New mining areas within the quarry will be opened up only as needed. This means that overburden will not be removed until mining is ready to proceed and that vegetation will stay in place until mining is ready to proceed. This will help with overall reclamation.

- Big River will stockpile overburden for purposes of reclamation. This will allow us to broadcast overburden on the site once it is completely mined to facilitate return to forest and habitat uses.

- Overburden stockpiles will be properly treated (i.e., seeding, mulching, etc.) to prevent erosion issues.

- To the extent possible, Big River will attempt to reclaim on an ongoing basis. That is, if operational requirements allow, once a resource from one portion of the quarry is depleted, that area will be reclaimed as a part of ongoing operations. Given the small size of the area and the need for internal benching, this will be difficult to achieve, but Big River commits to explore the possibility of ongoing reclamation.

- As part of the quarry design and reclamation, stormwater will be directed onsite into the quarry floor or handled in supplementary sedimentation ponds as necessary.

Exhibit III (H).

DOGAMI Permit

RECEIVED
JUN 19 2007
BY BIG RIVER

Oregon Dept. of Geology & Mineral Industries
Mineral Land Regulation & Reclamation Program
229 Broadalbin St. SW
Albany OR 97321-2246
(541) 967-2039

OPERATING PERMIT -- Pre-Amendment Renewal
ISSUED SUBJECT TO ANY LISTED CONDITIONS

Big River Holdings Inc.
1050 Olney Ave.
Astoria OR 97103

ID No.: 04-0056
County: Clatsop
Section: 14
Twp: 5N
Range: 10W
Tax Lot: 101
Site Name: Volmer Creek

This permit shall be in effect, unless revoked or suspended for cause, from the date of issuance and shall remain in effect so long thereafter as the Permittee pays the annual fee to renew the permit, complies with the provisions of ORS 517.750 through 517.955 as applicable, the Rules as promulgated to administer the Oregon Mined Land Reclamation Act, the approved reclamation plan, and any conditions attached to this permit, and maintains a performance bond as required by the Act.

Issuance of this permit is not a finding of compliance with state-wide planning goals or the acknowledged comprehensive plan. The applicant must receive land-use approval from local government before using this permit.

NOTE: Reclamation plans may be modified per ORS 517.830(4) and OAR 632-(30) and (35)-035.

CONDITIONS: *(Conditions may be appealed per OAR 632-30-030. If an appeal is made, this permit is invalid until the condition(s) appealed is/are resolved and the permit reissued.)*

The Permittee must:

1. restrict mining and mining related activity to tax lot 101.
2. submit a permit amendment application prior to excavating or stockpiling material within tax lot 1203.
3. stabilize overburden stockpiles and the noise berm by seeding with ryegrass or any other native species.
4. retain adequate cover soil material to cover all areas to be reclaimed with twelve inches of topsoil material.
5. seed barren overburden/soil stockpiles and berms by October 1 of each year.
6. excavate all cuts slopes at a slope no steeper than 1.5H:1V. All fill slopes must be 2H:1V or flatter.
7. permanently mark all setbacks in the field.
8. maintain an undisturbed 100 foot set back for the excavation within tax lot 101.
9. maintain compliance with the 1200-A permit.
10. not conduct pit dewatering without first amending the DOGAMI Operating Permit.

Issued 6-14, 2007

Gary W. Lynch
Assistant Director

RENEWAL IS REQUIRED BY APRIL 30, 2008

c: Clatsop County Planning Department
DEQ NW Region
Kirk Jarvie, DSL Salem

Exhibit III (I).

Geology Report

ORDWAY QUARRY & PROPOSED EXPANSION
GOAL 5 EVALUATION

34334 Highway 26
Tax Lot 5-10-14-00900
Tax Lot 5-10-14-00800 (Portion)
Tax Lot 5-10-14-01001
Tax Lot 5-10-14-01203
Tax Lot 5-10-00101
Tax Lot 5-10-00100 (Portion)
Tax Lot 10S03W10A 00100
Clatsop County
Seaside, Oregon

Ordway Quarry & Proposed Expansion
Tax Lot 5-10-14-00900
Tax Lot 5-10-14-00800 (Portion)
Tax Lot 5-10-14-01001
Tax Lot 5-10-14-01203
Tax Lot 5-10-00101
Tax Lot 5-10-00100 (Portion)
Astoria County
Seaside, Oregon

Author: Steve LaFranchi, RG
Email: gabrro@gabbro.net

Prepared for: Mr. Mike Sarin
Big River Excavating, Inc.
1050 Olney Avenue
Astoria, Oregon 97103
(503) 338-3878

Site Location: South side of Highway 26 at 34334 Hwy 26.

Site Description: Active permitted mine and proposed mine expansion.

Site Centroid: Latitude: 45.912727°N
Longitude: -123.893612°W

Prepared by: Environmental Science Associates, Inc.
1450 Flintridge Avenue
Eugene, Oregon 97401
(541) 683-4997
Fax: (541) 683-5360

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Appendix A
- Figure 1: Location Map
- Figure 2: Tax Lot Map
- Figure 3: Topographic Map
- Figure 4: Mine/Boring Locations

Appendix B
- Analytical Report

1. INTRODUCTION

Big River Excavating retained Environmental Science Associates, Inc. (ESA) to conduct a geologic investigation of basalt resources on their property located at 34334 Hwy 26 and adjacent Weyerhaeuser land in Clatsop County, Oregon. The investigation was conducted in response to statewide planning Goals established by Oregon Land Conservation and Development Commission (LCDC). Goal number 5 requires an inventory of mineral and aggregate resource location, quality and quantity. The purpose of the investigation was to determine whether the basalt at the Ordway Quarry and Weyerhaeuser property is significant based on quality and quantity criteria established in OAR 660-23-180(3).

2. LOCATION AND DESCRIPTION

The property is located at 34334 Hwy 26, Clatsop County Oregon in Section 14, T5N R10W and includes tax lots 51014 00900, 51014 01001, 51014 01203 and 510 00101. Portions of tax lot 510 00100 and tax lot 51014 00800 are included in the proposed mine expansion. The Clatsop County Tax records provide the following information:

- 00900 - 8.03 acres
- 01203 – 32.4 acres
- 00101 – 6.0 acres
- 01001 – 0.1 acres
- 00800 – 29.65 acres
- 00100 – large parcel, approximately 10 acres included in site plan

3. SITE CHARACTERISTICS

Local geology consists of a homogeneous basalt dike overlain by a veneer of basalt colluvium and soils derived from weathered basalt. Elevations on the site range from approximately 450 to 100 feet Above Mean Sea Level (AMSL). Lowest elevations exist adjacent to Highway 26.

Two soil types are present in the general area of the mine expansion according to the Clatsop County Soil Report provided by the National Resource Conservation Service (NRCS).

The ridge north of the existing Ordway Quarry, where mine expansion is proposed, is mantled by Klootchie-Necanicum complex. The Klootchie soil is 40 to 60 inches deep to bedrock. It is loamy, high in organic matter, well drained and occurs on mountains. The Necanicum soil is 40 to 60 inches deep to bedrock. It is loamy, high in rock fragments, high in organic matter, well drained and occurs on mountains.

Lower elevation areas outside the proposed mine expansion are typified by Mues silt loam. The Mues soil is over 60 inches deep to bedrock. It is silty and loamy, the surface is high in organic matter and the subsoil is high in rock fragments. It is moderately well drained and occurs on terraces.

4. PROCEDURE

The resource evaluation included completion of six drill holes to depths ranging from 100 to 270 feet below ground surface (bgs). AM Janssen Company drilled three holes with

an air rotary drill rig employing a drill/drive technique using a Holte Hammer to advance casing. Six inch steel casing was advanced behind the drill bit as drilling progressed. Steve LaFranchi, Oregon Registered Geologist supervised the drilling and logged drill information. Drill cuttings were logged at 5-10 foot intervals.

GeoTech Exploration drilled two HQ core holes using a Central Mine Equipment (CME) 75 rig. The core was placed in core boxes, logged and representative samples collected by Steve LaFranchi, Oregon Registered Geologist for quality testing by Carlson Testing, Inc.

Two Cubex drill rig holes were completed by BJ Equipment Company. The borings were 6.75 inches in diameter with a 4 inch inner pipe diameter and 2.75 inch annular cutting return.

Information recorded included thickness of the overburden or topsoil layer, thickness and characteristics of basalt, and total depth of hole. After completion, each geotechnical hole was abandoned by the drillers with bentonite/concrete slurry and bentonite chips.

5. QUANTITY

On November 1,2,3,7 & 8th, 2005, December 11, 12, 15, 16 & 19th, 2006 and January 3,4,5,8,9 & 10th, 2007, the author provided oversight for drilling conducted on the property and collected rock chip and cores samples for logging and quality analysis (Table 1). A total of seven subsurface holes were placed in the mine and expansion area to evaluate the resource (Figure 4). Two core borings were completed to provide quality test material, two Cubex borings were driven to further evaluate depth/quality of basalt and three air rotary holes were completed in the active quarry to confirm depth and quality of basalt. Eight air track holes were placed (A1-A8) to assist in evaluating overburden thickness.

Hole ID	Overburden thickness	Basalt Interval bgs	Basalt Thickness	Base of Basalt amsl	Drilled Intercept of Basalt
B-1	5'	5'-200'	195'	Depth >90' ASL	>195"
B-2	0'	0'-197.5'	197.5'	Depth >90' ASL	>197.5'
B-3	5'	0'-270'	265'	Depth >90' ASL	>265'
B-4	15'	15'-136'	121"	Depth >90' ASL	>121'
OPH1	0	0'-140'	140'	Depth >90' ASL	>140'
OPH2	0	0'-100'	100'	Depth >90' ASL	>100'
OPH3	60'	-	25'	Depth >90' ASL	-

Table 1: Drilling Summary

Overburden consisted of a dark brown, clay loam with weathered fragments of basalt ranging from small grains to several inches depending on proximity to bedrock surface. The overburden thickness ranged from 0 to more than 15 feet below ground surface. Basalt outcrop is located in the road cut along Highway 26 at the north end of the ridge where the Ordway Quarry and proposed expansion are located. Drilling and outcrop exposure of basalt indicate the basalt continues to depths greater than 90 feet above sea level (amsl).

Quantity estimates are based on knowledge of local geology, drilling results and calculations which include overburden thickness. Total area proposed for mining is approximately 8 acres (Figure 4) with approximately 6 acres already permitted for mining on tax lot 100.

The estimated in-place volume of basalt in the proposed expansion area is 2,600,000 yards. Using an expansion factor of 1.9 (in-place cubic yards x 1.9 = loose cubic yards) the mineable volume is approximately 4,930,000 yards. A general conversion for loose yards to tons is a multiplier of 1.28 tons/loose yards. The estimated tonnage within the expansion area is 6,300,000 tons.

The Ordway quarry contains an estimated tonnage of 2,200,000 tons of basalt based on work performed by Big River when acquiring the Osburn Quarry.

Combined the existing permitted site and proposed expansion area would contain approximately 8,500,000 tons of high quality basalt.

6. GOAL 5 MATERIAL TEST METHODS

Material used for quality testing was collected January 10th, 2007 from core borings B1 and B2. Steven LaFranchi, Oregon Registered Geologist observed the core drilling and collected the samples. The samples were delivered to Carlson Testing, Inc. for quality analysis.

The test standards suggested by the Land Conservation and Development Commission for characterizing the quality of aggregate materials are Los Angeles rattler test, sodium sulfate test, and the Oregon degradation test. The laboratory report is included in Appendix B.

6.1 Abrasion – AASHTO T96/ Test Method 211

This test measures resistance to abrasion of small size coarse aggregate using the Los Angeles rattler machine. The test indicates how material will withstand the grinding action of heavy traffic. The material to be tested is weighed, subjected to tumbling for a set time, screened, and reweighed. The statistic listed is the percentage lost during the testing. Depending on the grading classification of material tested, Los Angeles rattler values cannot exceed percentage values between 35 and 45 percent.

Carlson Testing report T0704246.CTI shows the basalt tested from boring B1 had an average percent loss of 15.4% after 500 revs using Grading A for loss determination. Analysis of boring B2 had an average percent loss of 18.1%. The Oregon State Highway Department (OSHD) HMAC 745.10 specification allows a maximum of 30% loss.

6.2 Soundness – OSHD Test Method 206/AASHTO T104

The soundness test is used to determine how weather will affect rock material. The test uses saturated solutions of sodium sulfate or magnesium sulfate to determine resistance to disintegration. Testing consists of soaking the sample in a strong brine solution at an elevated temperature for 16 to 18 hours and then drying it at an elevated temperature for 2 hours. This is repeated several times. The material is weighed, tested, and reweighed. The statistic reported is the percentage of loss. Analytical results of the sodium sulfate test are also dependent on the size classification and cannot exceed 10 to 18 percent depending on the size fraction.

Coarse aggregate loss was an average of 1.3% after 5 cycles for boring B1 and 1.7% for boring B2. The ODOT HMAC 745.10 specification allows a 12.0% maximum for coarse aggregate.

6.3 Aggregate Degradation – OSHD Test Method 208

The Oregon degradation test is designed to measure the quantity and quality of the material produced by attrition similar to that caused in a roadway by repeated traffic loading and unloading. The quantity is measured by a modified sand equivalent test. The fine material is made by using air jets to rub one particle against another in water. Degradation of the test of material should not exceed 30 to 35 percent and the height gain (measurement of fine sediment collected in the bottom of test apparatus) cannot exceed 3 to 8 inches.

For the basalt from boring B1 the percent passing the 850 μm sieve (#20) was 12.1% with a sediment height of 7.6 mm. The ODOT HMAC 745.10 specification for percent passing a 850 μm sieve is 30.0% maximum with a sediment height of 75 mm.

Analysis of boring B2 was 15.1% percent passing the 850 μm sieve (#20) with a sediment height of 13 mm.

7. QUALITY STATEMENT

Six test borings were completed within the active and proposed mine area on the Big River and Weyerhaeuser properties to determine the quantity and quality of the basalt resource. Representative samples were collected from two core holes extended to approximate depths of 200 feet. Core was collected from the entire boring for analysis. Carlson Testing, Inc. completed the testing of the basalt for quality. Tests results demonstrate the basalt resource is of excellent quality exceeding standards set by Oregon Department Highway Department (OSHD) test specifications.

8. SITE VALUE

The Big River mine and proposed expansion are advantageously located close to rapidly growing areas of residential and commercial development. Markets for this resource would Seaside, Astoria, Canon Beach and smaller communities in Clatsop County. The basalt resource identified on the site will play a significant role supplying construction materials for future growth in the region.

9. EROSION CONTROL AND GEOLOGIC HAZARD ASSESSMENT

Clatsop County's zoning and planning maps indicate the Big River site area has a Geologic Hazard Overlay and certain areas of the site are delineated as a DOGAMI Slide Area. Because of these map designations, specific attention was given to geologic hazards and slide potential when investigating the geology of the site. In the course of drilling and excavating on the site to determine the location, quality and quantity of mineral and aggregate resources, the site was traversed by a Registered Geologist. Approximately 100 man hours were spent on the site and additional time was spent reviewing details relevant and important to geologic interpretations. The site's operational history were reviewed. Factors relevant to soil formation, site vegetation and the overall nature and activity of the land form were examined. In addition, ground and aerial photos of the general area were reviewed, including review of ground features and

areas of the site proposed for the mineral and aggregate development. Topographic maps were examined which identify relevant site features including existing mining area, slopes, water courses wet areas and other natural features.

The site is generally covered with replanted commercial timber (primarily Douglas Fir). Commercial thinning is ongoing. No springs or areas of erosion were noted in the general area, including the area within the proposed extraction limit. The area is isolated from the Necanicum River (to the East/Northeast) by Highway 26 and from Volmer Creek (to the West/Northwest) by Volmer Creek Road, a significant Weyerhaeuser truck haul road. There are no locations in the general extraction area subject to stream erosion or that exhibit significant surface erosion due to improper drainage and/or runoff concentration. The currently exposed quarry faces are of sufficiently hard material to resist erosion. Substantial areas on the project site are available for sediment control features, including ponds. Access points to Highway 26 are on level ground and present no geologic issues.

The proposed extraction area is underlain by weathered and unweathered basalt, the resource that provides value to the site under Goal 5. The portions of site that will be mined are essentially bedrock. This subsurface structure does not exhibit excessive horizons of subsurface clay, silt, buried vegetation or other geologic conditions that would give rise to high slide or other geographic hazard potential. No springs in the proposed extraction area were noted. This is consistent with the relatively small size of the basalt outcropping that will be mined and its stand-alone relationship to the general topography in the area. The geologic evidence leads to the conclusion that the site is appropriately suited for mining operations and standard DOGAMI-approved mining methods will secure slope stability for all aspects of the proposed mining operation.

The proposed quarry expansion will move overburden and maintain appropriate benching in the bedrock to maintain stability, in compliance with DOGAMI requirements. DOGAMI has permitted the current quarry operations and we are aware of no DOGAMI concerns related to slope stability or geologic hazard. The site, as it develops, will not be open to the public, and with the exception of minimal paving areas on access roads, there will be no impermeable surfaces on site. Consistent with DOGAMI requirements, portions of the site will remain vegetated until ready for mining. Only as new mine extraction area is needed, will vegetation and overburden be removed.

Overburden will be stored at suitable locations on site, stabilized as necessary (e.g. with vegetation) and saved for reclamation purposes. As the mine extraction area increases in size, appropriately-sized benches will be developed to insure ongoing internal slope integrity. Vegetation and a rock lip will remain in place on the eastern side of the site to reduce noise effects on residences in the area and to further ensure slope stability on the Highway 26-side of the site. Phased removal of vegetation from the mining area and preservation of vegetation on the east side to the extraction area, as indicated in the mining plan, will serve to protect scenic views, habitat and site stability as well as reduce or eliminate erosion potential. Reclamation to DOGAMI standards will include broadcasting overburden and replanting with appropriate commercial timber species.

No onsite sewage disposal is planned; porta-potties will be used. An exempt commercial well may be constructed for onsite water needs (i.e. dust suppression), but such a well is limited to 5,000 gallons per day and is expected to have no effect on groundwater supply in the general area.

Portions of the proposed site area are currently used as a quarry in a compatible manner with existing geologic conditions and without difficulty from slides or geologic hazards. The geologic evidence at the site indicates quarry expansion activities will not present slide or geologic hazard dangers because of the nature of the basalt resource underlying the site. As such the proposed expansion activities are compatible with the existing geologic conditions on the site. Compliance with standard DOGAMI operations procedures and permit conditions will assure operational compatibility.

10. CONCLUSIONS

Six air rotary and core drill holes were completed on the Ordway mine and proposed Weyerhaeuser expansion to evaluate quality and quantity of basalt deposits present. Drilling results indicate a ten foot average overburden layer of topsoil and broken basalt overlies the basalt. Basalt is present from the active mine, north along the ridge to road cuts visible in Highway 26. Based on drill results and field geology, the basalt extends from the top of the ridge (proposed expansion area) to depths equal to or greater than basalt outcropping at the intersection of Highway 26 and the ridge (approximately 90 feet amsl).

The basalt is of high quality and meets ODOT specifications for highway construction. Based

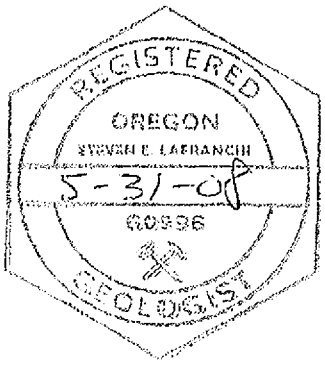
Based on average an average overburden thickness of ten feet in the expansion area, and mine depths of 140 feet amsl, the estimated quantity of basalt in the proposed expansion area is approximately 6.3 million tons.

Earlier work performed on the Ordway Quarry estimated 2.2 million tons of basalt in the permitted mine. The combined tonnage of the existing Ordway Quarry and proposed expansion is approximately 8.5 million tons.

It is the professional opinion of ESA, based on the site investigation, quantity estimates, and quality testing completed by Carlson Testing, Inc. the Ordway Quarry and proposed expansion on the adjacent Weyerhaeuser property contains a significant resource of at least 8.5 million tons of high quality basalt. The site represents a significant Goal 5 Mineral and Aggregate Resource and meets the quality, quantity and location criteria to be a protected resource under the Mineral and Aggregate Inventory of Clatsop County.

Environmental Science Associates, Inc. appreciates the opportunity to assist Big River Excavating, Inc. with the proposed Ordway Quarry expansion Goal 5 review. If further assistance is required, we would be pleased to offer our services.

Signed:



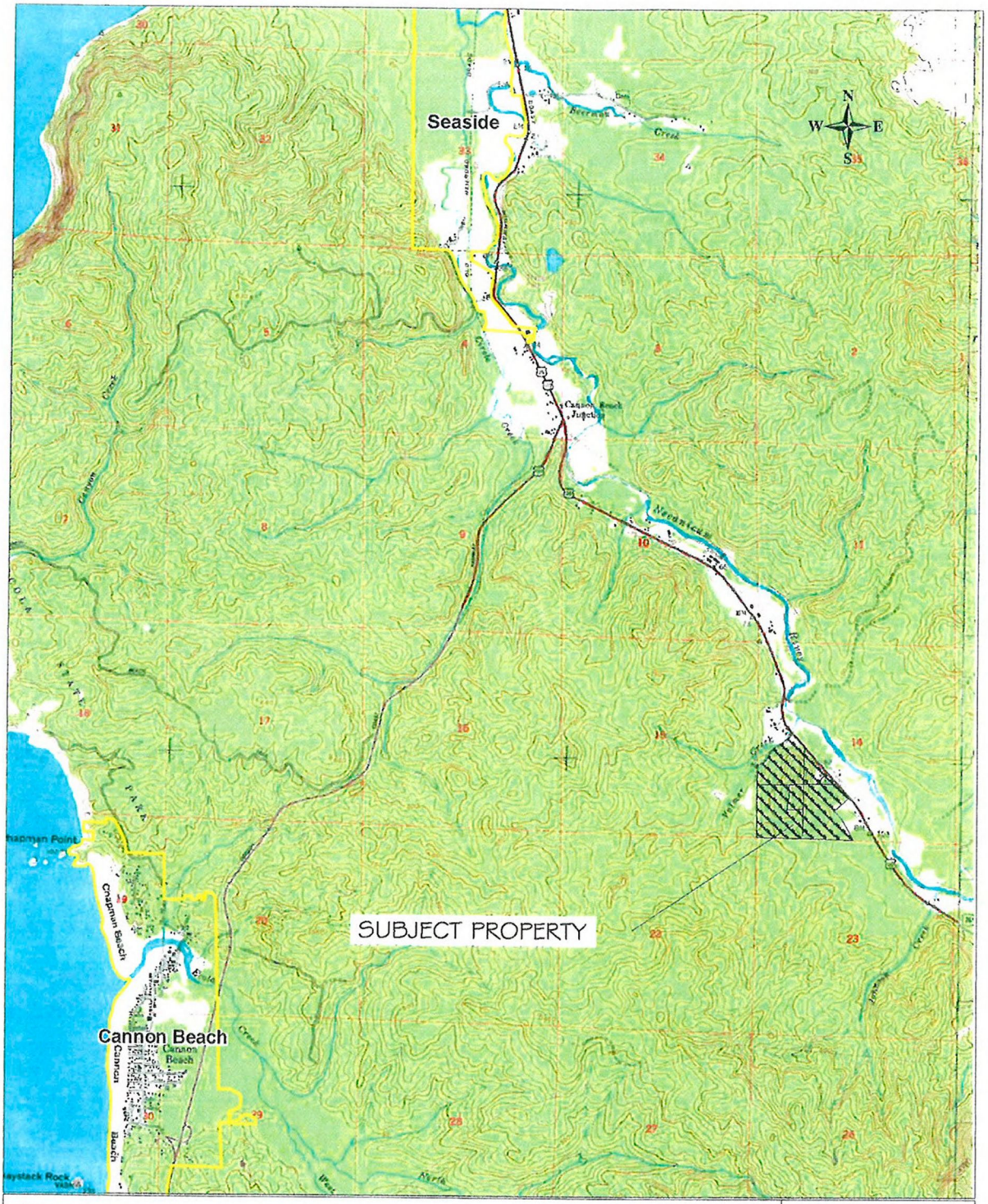
Steve LaFranchi, RG

10-23-07
Date

Environmental Science Associates, Inc.
1450 Flintridge Avenue
Eugene, Oregon 97401

Phone (541) 683-4997
FAX (541) 683-5360

APPENDIX A

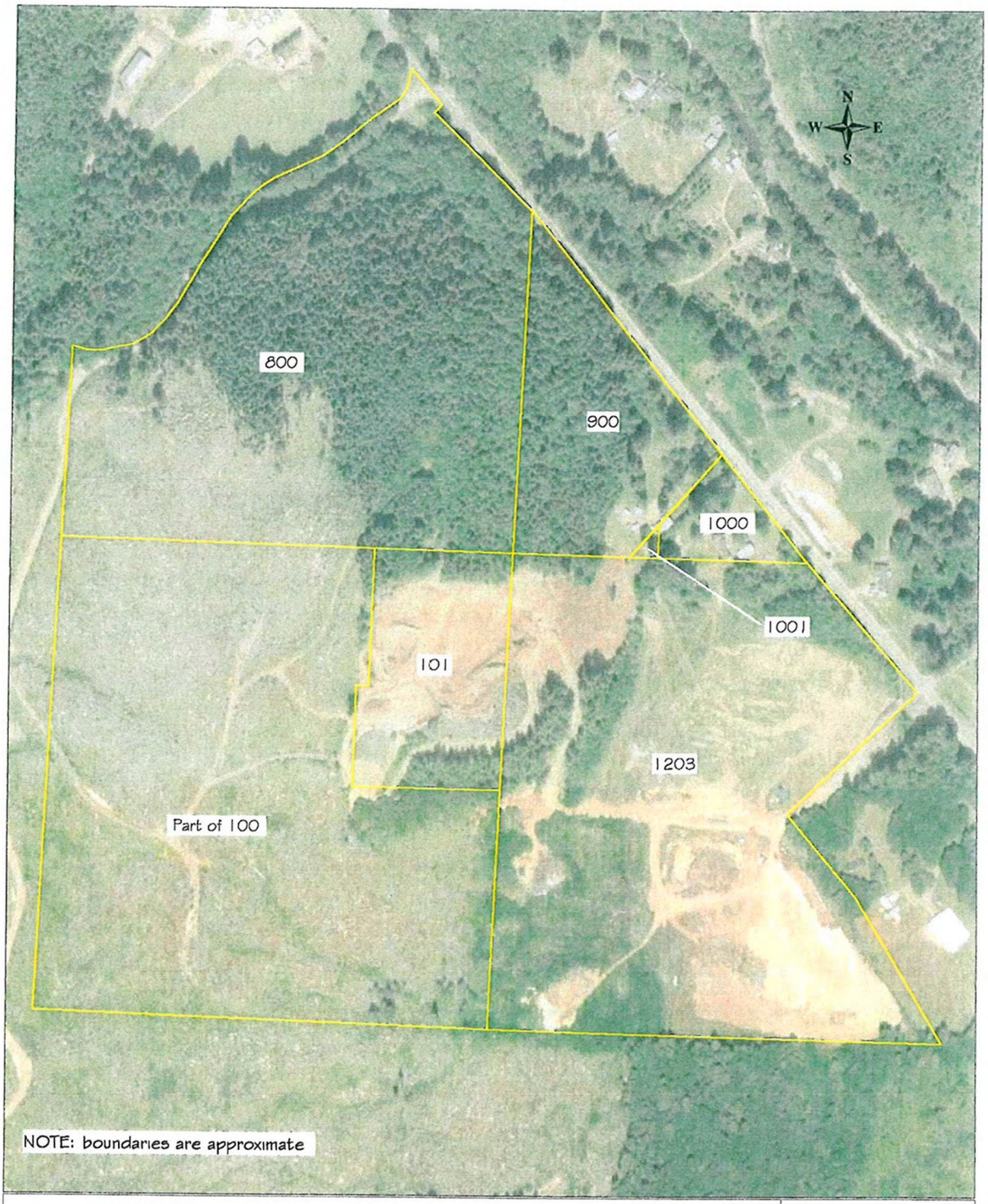


Ordway Quarry
Tax lots 100, 101 Map 5-10-00
Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14
Clatsop County
Seaside, Oregon

LOCATION MAP

FIGURE 1

Source: USGS DRG 45123 h8	Environmental Science Associate, Inc. 10/01/07	Scale: 1" = 4000'

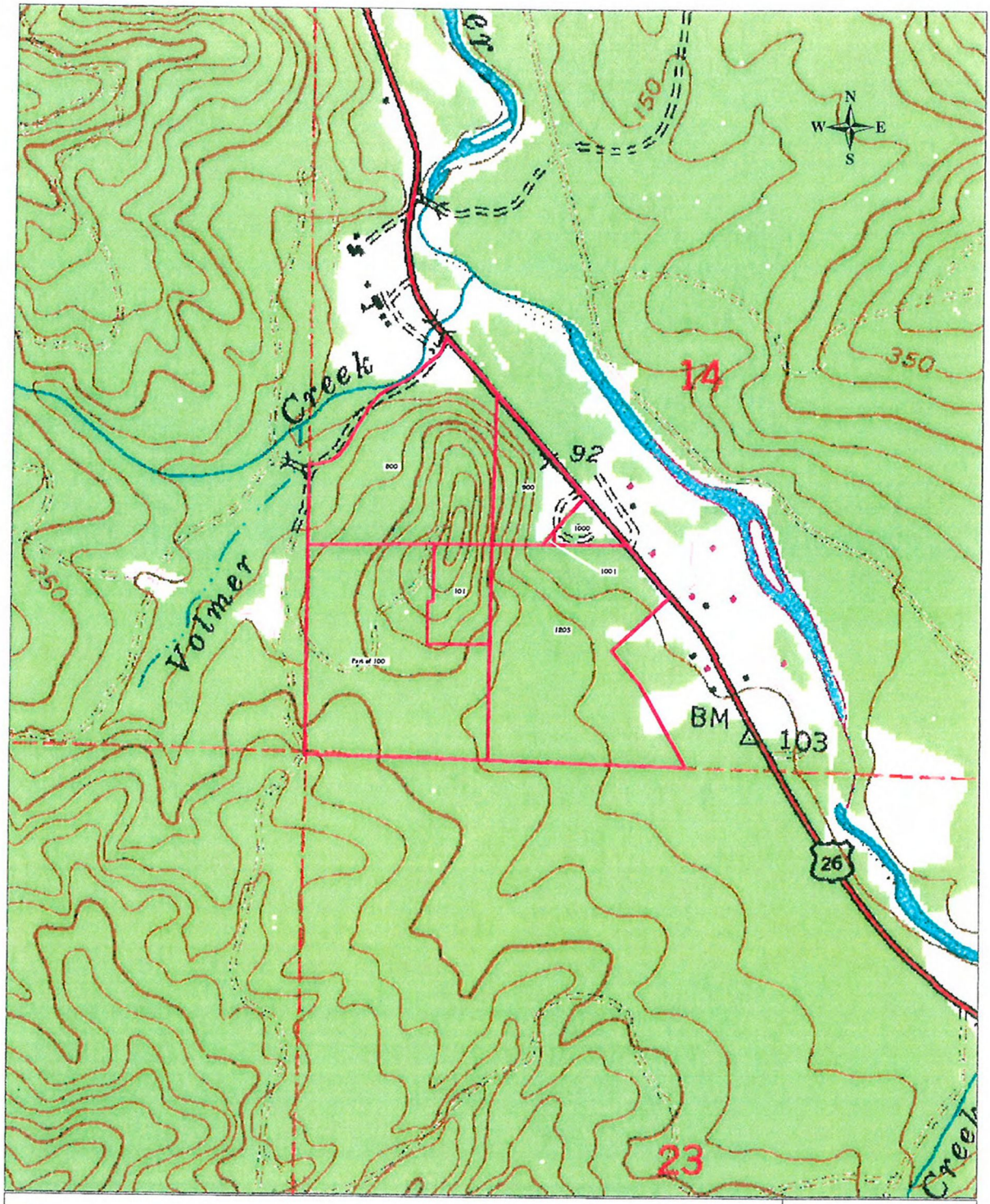


Ordway Quarry
Tax lot 100, 101 Map 5-10-00
Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14
Clatsop County
Seaside, Oregon

TAX LOT MAP

FIGURE 2

Source: Spencer Gross 2002 ortho	Environmental Science Associate, Inc. 10/01/07	Scale: 1" = 420'

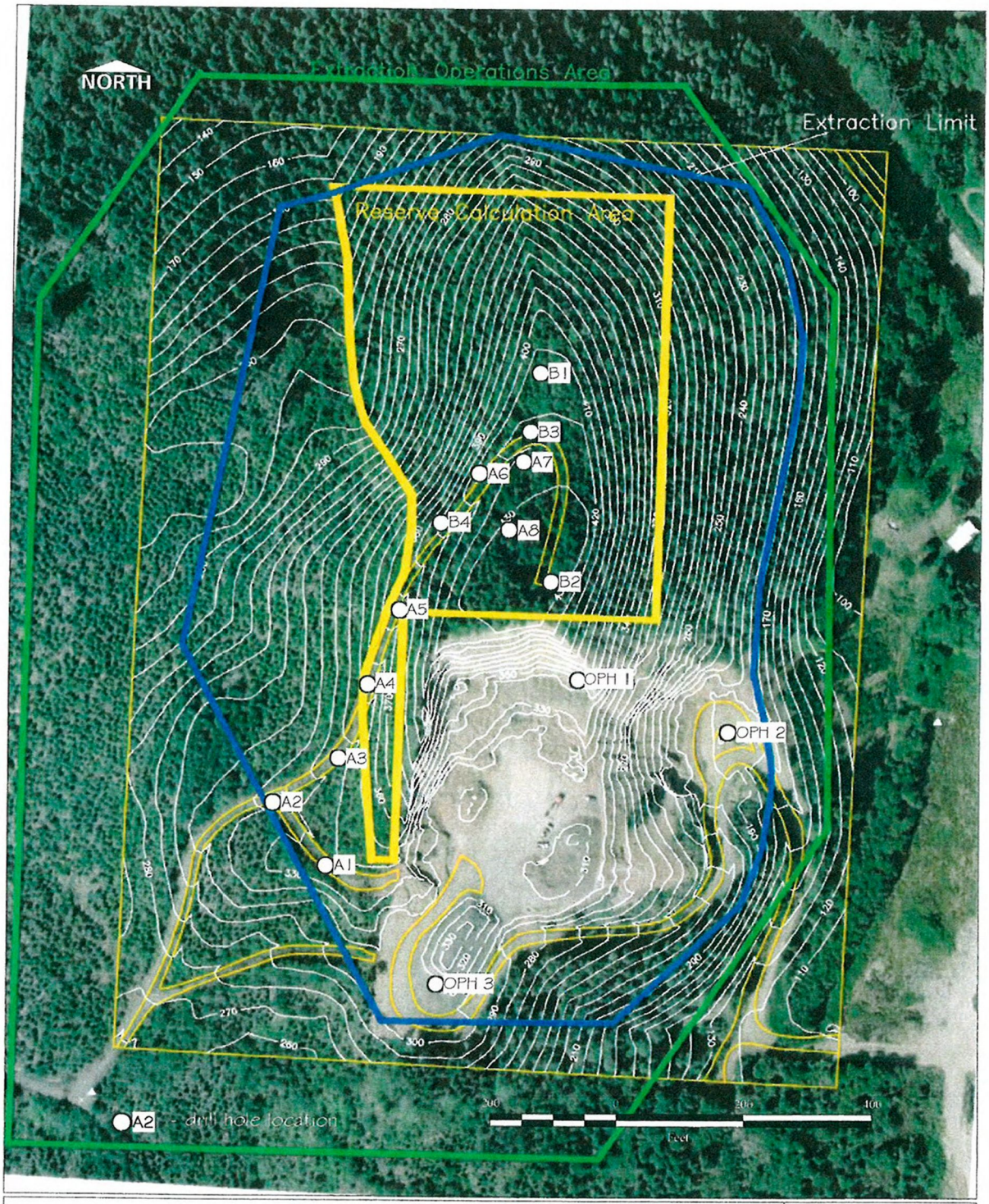


Ordway Quarry
Tax lot 100, 101 Map 5-10-00
Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14
Clatsop County
Seaside, Oregon

TOPOGRAPHIC MAP
50 foot contour intervals

FIGURE 3

Source: USGS DRG 45123 h8	Environmental Science Associate, Inc. 10/01/07	Scale: 1" = 1,000'



Ordway Quarry
Tax lot 100, 101 Map 5-10-00
Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14
Clatsop County
Seaside, Oregon

BOUNDARY & DRILL HOLE LOCATIONS

FIGURE 4

Source: Modified from 10/01/07 by PGM, Daly-Standlee & Associates, Inc.

Environmental Science Associate, Inc.
10/23/07

APPENDIX B

Carlson Testing, Inc.

Main Office
P.O. Box 23814
Tigard, Oregon 97281
Phone (503) 684-3460
FAX (503) 684-0954

Salem Office
4060 Hudson Ave., NE
Salem, OR 97301
Phone (503) 589-1252
FAX (503) 589-1309

Bend Office
P.O. Box 7918
Bend, OR 97708
Phone (541) 330-9155
FAX (541) 330-9163

April 27, 2007
T0704246.CTI

ESA – Steve Lafranchi
1450 Flint Ridge Avenue
Eugene, OR 97401

Re: Ordway Quarry – Expansion (Lab Testing)
Seaside, OR
Oregon Air Degradation Testing
Los Angeles Abrasion Testing
Sodium Sulfate Soundness Testing

Gentlemen:

As requested, Carlson Testing, Inc. (CTI) has completed Oregon Air Degradation, Los Angeles Abrasion, and Sodium Sulfate Soundness testing on a sample of aggregate borings, taken from the Ordway Quarry expansion. The sample was obtained by your representative from boreholes on March 16, 2007 and received in our laboratory on the same day. ODOT HMAC 745.10 specifications were applied at your request. Testing was completed on March 29, 2007. Following is the test data:

Boring #1

Oregon Air Degradation - OSHD TM208:
Sediment Height = 7.6mm (0.3 in.)
ODOT HMAC 745.10 SPECIFICATIONS: 75mm (3 in.) Maximum
% Passing the 850µm (#20) sieve = 12.1%
ODOT HMAC 745.10 SPECIFICATIONS: 30% Maximum

LA Abrasion - AASHTO T96:
Percent loss to abrasion @ 500 revs. = *15.4%
*Grading "A" used in the loss determination.
ODOT HMAC 745.10 SPECIFICATIONS: 30.0% Maximum

Sodium Sulfate Soundness (Coarse Aggregate) – OSHD TM 206:

SIEVE FRACTIONS	WEIGHT BEFORE TEST	WEIGHT AFTER TEST	WEIGHT LOSS @ 5 CYCLES	% LOSS @ 5 CYCLES
1 1/2" (37.5mm) to 3/4" (19mm)	1502.5 gms	1489.0 gms	13.5 gms	0.9 %
3/4" (19mm) to 3/8" (9.5mm)	998.8 gms	986.2 gms	12.6 gms	1.3 %
3/8" (9.5mm) to #4 (4.75mm)	300.6 gms	295.8 gms	4.8 gms	1.6 %

*Average percent loss @ 5 cycles = 1.3%; ODOT HMAC 745.10 Specifications = 12% maximum

Boring #2

Oregon Air Degradation - OSHD TM208:
Sediment Height = 13mm (0.5 in.)
ODOT HMAC 745.10 SPECIFICATIONS: 75mm (3 in.) Maximum
% Passing the 850µm (#20) sieve = 15.1%
ODOT HMAC 745.10 SPECIFICATIONS: 30% Maximum

LA Abrasion - AASHTO T96:
Percent loss to abrasion @ 500 revs. = *18.1%
*Grading "A" used in the loss determination.
ODOT HMAC 745.10 SPECIFICATIONS: 30.0% Maximum

Sodium Sulfate Soundness (Coarse Aggregate) – OSHD TM 206:

SIEVE FRACTIONS	WEIGHT BEFORE TEST	WEIGHT AFTER TEST	WEIGHT LOSS @ 5 CYCLES	% LOSS @ 5 CYCLES
1 1/2" (37.5mm) to 3/4" (19mm)	1501.9 gms	1485.3 gms	16.6 gms	1.1 %
3/4" (19mm) to 3/8" (9.5mm)	1000.4 gms	984.8 gms	15.6 gms	1.6 %
3/8" (9.5mm) to #4 (4.75mm)	300.8 gms	293.7 gms	7.1 gms	2.4 %

*Average percent loss @ 5 cycles = 1.7%; ODOT HMAC 745.10 Specifications = 12% maximum

Test results pertain to the specific material tested/inspected only and may not be representative of other locations or elevations. Information contained herein is not to be reproduced, except in full, without prior authorization from Carlson Testing Inc

If there are any further questions regarding this matter, please do not hesitate to contact this office.

Respectfully submitted,
CARLSON TESTING, INC.

Ty Toller
Project Manager

CC: ESA – Steve Lafranchi

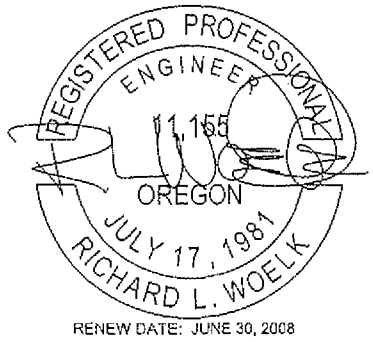
The remaining sample material will be discarded in three weeks from the date the test was completed.

Exhibit III (J).

Traffic Report

Traffic Impact Analysis
For
Big Rock Products Pit Expansion
Seaside, Oregon

Prepared for
Big Rock Products
Seaside, Oregon



October 2007

Prepared by
Associated Transportation Engineering & Planning, Inc. (ATEP)
PO Box 3047
Salem, Oregon

Date: October 11, 2007
Big River Holding, Inc. - Transportation
Highway 26, Mile Point 2.66 near Seaside, Oregon

ASSOCIATED TRANSPORTATION ENGINEERING & PLANNING Inc.
A.T.E.P., Inc.
P.O. Box 3047
Salem, OR. 97302
Tel.: 503.364.5066
FAX: 503.364.1260
e-mail: kbirky@atepinc.com

Big River Holding, Inc. (Big River) intends to develop an additional extraction area at its Ordway quarry site. The site currently provides rock for construction, roadways and other general uses. The additional quarry area will serve as future reserves and provide a long-term supply for the southern Clatsop County area. Big River confirms that truck trips will not increase over the currently allowed level in Oregon Department of Transportation (ODOT) Permit #51361, which approves the existing access for Big River's quarry at mile point 2.66 on Highway 26.

Application Summary - The intent of this analysis is to provide information to decision-makers about traffic impacts of the requested quarry and related processing operations on the transportation system. The proposed Ordway site will expand the old Osburn Brothers Rock facility onto adjoining Weyerhaeuser land, generally to the north and west. The current site primarily occupies tax lot 101 and a portion of 1203 of T5N-R10W-SEC14. The site expansion will cover parts of tax lots 800, 900, 1000, 1001, 1203 and 100 (as well as the current quarry location at tax lot 101). The application will provide long-term supply of mineral and aggregate materials which are rare in Clatsop County. Operations will continue to occur as they have in the past. Truck levels will not increase from the 40 trips per day authorized by ODOT at the approved access point at mile point 2.66.

Background - Approximately 17 tons of crushed aggregate is used each year for every Oregonian (*Planning for Aggregate,* Oregon DLCD, 2001). The necessary challenge is to identify and develop additional sources of quality crushed rock to build new streets and new buildings while minimizing adverse impacts on transportation systems. The Ordway quarry, for years, has served as a mineral and aggregate resource for the south Clatsop County area. Additional quantities of high-quality aggregate have been located on the site and Big River has worked with Weyerhaeuser, the adjoining landowner, to expand the quarry area, reorient the mining operations, and extend the life of the quarry operation. Big River will limit its site traffic to the number of trips currently permitted under its existing access permit and existing entrance at mile point 2.66 on Highway 26. That access point has previously been improved with a

right-hand turn refuge lane. The access width, turning radius and surface are appropriate for the quarry use. As noted in this report, mineral and aggregate extraction is motor vehicle "truck" dependent and alternative modes of transportation cannot accommodate the use. At this particular site location, rail, water and other alternatives are not available and cannot be used to reduce impacts or improve performance. Similarly, bicycle and pedestrian transportation is not available for mineral and aggregate extraction activities; however, continued use of the existing site will not preclude pedestrian or bicycle modalities on the transportation facilities in the area.

Crash History - The ODOT Crash Analysis and Reporting Unit has provided information about all reported accidents on Highway 26 between mile post 1.5 and 3.5 for the five years from 2000 to 2005. In the two-mile section of highway from mile point 1.50 to 3.50, there have been 30 reported crashes in the five-year period from 2000 to 2005. There were no fatal accidents in this section. There have been five crashes in the five years between mile point 2.41 and 2.99. The applicant's existing access is at mile post 2.66. There was one ice accident on the highway between mile post 2.6 and 2.9 in the five year period. This section of roadway is a category 3 section in the ODOT SIP (Safety Improvement Program). SIP categories run from 1 (low priority) to 5 (high priority). The nearest SPIS (Safety Priority Index Site) is about 5 miles east on Highway 26 towards Portland or the west, nearer to Seaside. Highway 26, also known as the Sunset Highway, is a State Highway, one level below the Interstate Highway designation in the State of Oregon.

Traffic Volumes - There are several ways to determine the opposing and advancing traffic volumes on Highway 26 in the vicinity of the existing Big River ODOT-permitted access at mile point 2.66. The best method is to count the number of vehicles during the highest traffic volume months (July and August) on the roadway.

A second method is to estimate the traffic volumes using ODOT data. ODOT estimates the 2005 AADT (Average Annual Daily Traffic) on Highway 26 at milepost 0.50 was 6600 and at milepost 4.40, the 2005 AADT was 5000 vehicles. Using this ODOT data, AADT at mile point 2.6 for 2005 was 5800 vehicles.

A third method is to count the traffic volumes at the site and adjust the counted volumes up to estimate the AADT and the 30th HV (30th highest volume hour traffic). In July 2007, the PM Peak hour turning movements were counted at the existing Big River entrance. In that count, the Highway 26 PM Peak Hour counted bi-directional volume was 755 vehicles. ODOT, correctly in our opinion, estimates that the PM Peak Hour volume is 10% of the daily traffic.

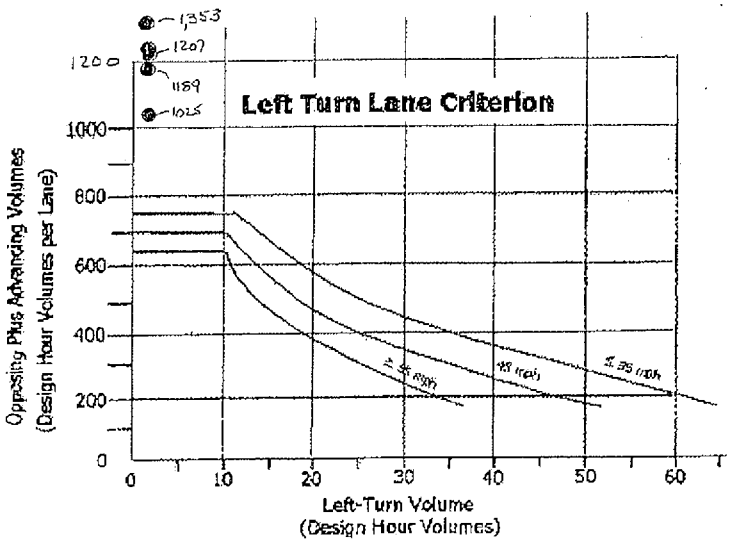
ODOT also has found that at the automatic traffic recorder (ATR) on this highway at milepost 37.73, the July average weekday traffic is 127% of the average daily traffic (ADT). By multiplying the PM Peak Hour volume by 10 and dividing by 1.27 the estimated AADT from the counted volume is 5945 vehicles. The 30th highest hourly volume in a year is estimated by ODOT to be 20.5% of this volume or 1,219 vehicles. This is a major route from Portland to the coast and we believe this volume occurs primarily during Sunday evening traffic home from the beach **when the rock pit will be closed.** However, to ensure this analysis is conservative, the 1,219 vehicle peak hour volume will be used.

Table 1 summarizes the estimated total opposing plus advancing vehicles on the roadway at the existing approved ODOT access.

Table 1 – Estimates of Highway 26 traffic volumes near milepost 2.50		
Hwy 26 Location	Annual Average Daily Traffic	Est. advancing & opposing traffic
Milepost	AADT (source)	30th HV (20.5% AADT)
0.50	6600 (ODOT 2005 est.)	1,353 vehicles
4.40	5000 (ODOT 2005 est.)	1,025 vehicles
2.95	5800 (average of above)	1,189 vehicles
2.66	7550 (July, 07 counted)	1,219 vehicles

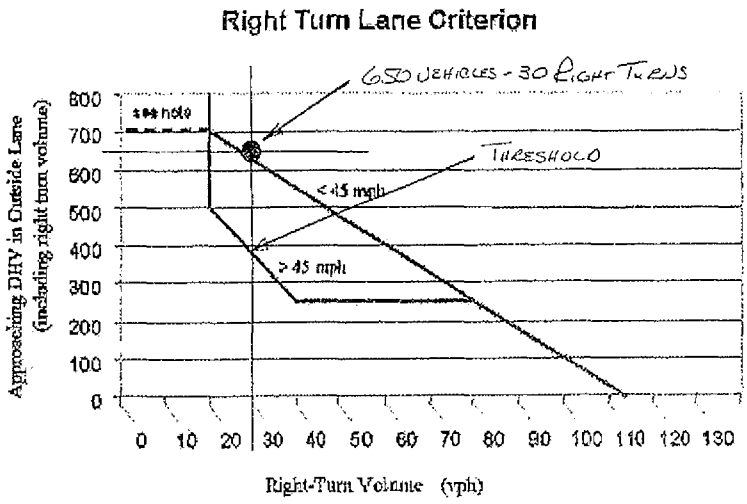
Left turn warrants – ODOT has developed criteria (warrants) to determine the need for a left turn refuge lane. Assuming the 30th HV (highest hour volume) is 1,219 vehicles, if left turn volumes are greater than 9 vehicles per hour, lane warrants would be met at milepost 2.66 of Highway 26 at the existing access. Figure 1 is the nomogram for the left turn warrants at the proposed access. Because most of the rock from the quarry will be taken to the coast (i.e., westward on Highway 26), very few vehicles (estimated to be less than two to three per day) will turn left into the quarry. This is because the primary market delivery area is to the west (e.g., Seaside, Cannon Beach) and there are virtually no returning empty trucks coming from the

Figure 1



east and turning left into the existing access. The total of all trucks making this left turn "in" movement is certainly less than nine vehicles per hour, given the nature of Big River's operation. Accordingly, the left turn lane warrants are not met at the existing access point, or any of the alternatives discussed in this report.

Figure 2



Right turn warrants - The Oregon Department of Transportation has developed criteria to determine the need for a right turn acceleration and deceleration lane. Figure 2 is the nomogram for the right turn warrants at the proposed access. During the 30th HV, the calculated advancing (following) traffic volume is 770 vehicles (450 veh * 10 * (1/120%) * 20.5%) per hour. If there are more than 19 right turns at the site per hour, then right turn warrants are met. Again, given the nature of Big River's operation, there is no possibility of 19 right turns from the site per hour. Using the ODOT nomogram, right turn acceleration turn lane warrants are not met in this section of highway for the existing access or any of the alternatives discussed in this report. We note that Big River's existing ODOT-approved access already has a constructed and operational right-turn deceleration lane.

Production – Rock quarries extract and process rock for many construction and development related uses throughout Clatsop County. Production volumes are dependent on market demand, alternative sources, costs of production, transportation facilities, regulations and numerous other factors. Unlike factory production with specific and forecastable production schedules, quarry extraction and processing tend to be intermittent in nature. For this reason, the most accurate way to calculate average daily trips for gravel production is to focus on annual production and divide by the hauling capacity of the trucks that are used to move the material. Historically, Big River and its predecessor, Osburn Rock Products, have produced an average of around 20 deliveries (40 trips; 20 trips "out" and 20 trips "in") of processed rock per day. This proposed application is expected to maintain the average daily delivery of crushed rock at between 18 and 20 truck deliveries per day (36 to 40 trips per day). The turning movement counts indicate that 98% of the

rock will travel west toward Seaside and Cannon Beach. These numbers and estimates are confirmed by the applicant.

Jurisdiction - Highway 26 is a State Highway and ODOT has sole jurisdiction over access to the highway. The Clatsop County Transportation System Plan confirms that ODOT maintains jurisdiction over Highway 26 (see Clatsop County Transportation System Plan, Section 2, page 1-10).

Existing Access - Big River's predecessor sought and obtained approval for the existing access point at mile post 2.66. As part of the approval process, a right-turn deceleration lane (eastbound) was constructed to assist traffic movements associated with haul trucks decelerating and making a right turn into Big River's quarry operations. The permit is ODOT Permit #51361, application identification number 2933. Consistent with ODOT regulations, the access permit is valid indefinitely. Consultation with ODOT access personnel in Astoria confirms that the ODOT access permit allows 40 trips per day through the access point.

The existing ODOT access permit is significant on a well-traveled state highway such as Highway 26 because it allows ongoing operations of the same type to continue as long as such operations are consistent with ODOT's change of use regulations (OAR 734-051-0110). As demonstrated in the application, Big River will not change the nature and type of operations and will maintain all truck traffic within the existing limits granted in the approved ODOT access permit. Because these conditions will be met, there is no additional transportation analysis required. Access is directly onto a state highway and that access is currently in existence and approved. Generally, an operation using an existing approved access will have the least negative impact on transportation facilities in the area. Using the existing ODOT-approved access, including the existing right-turn deceleration lane, is an effective mechanism to avoid traffic impacts, allows for efficient use of the highway system, allows for efficient use of the adjoining land served by the access, and contributes to the overall convenience of access to the site through the use of an appropriate and ODOT-regulated access point. Because no changes in the existing traffic pattern are involved, continuing use of the existing ODOT-approved access is the least disruptive and has the least negative impact on public transportation facilities. The ODOT-approved access has in the past, and will continue in the future, connected efficient and convenient internal truck routes on site with direct, convenient and efficient routes to off-site market destinations for mineral and aggregate material while providing a practicable level of safety.

There is no significant pedestrian, bicycle or other non-vehicular use of Highway 26, but use of the ODOT-approved access will continue to provide an adequate environment on Highway 26 for the development of non-motor vehicular modes of transportation. We have reviewed the traffic-related standards of the County's land use ordinance and standards document, and it is our opinion that the transportation access and routing proposals of the application, including use of the existing ODOT-approved process, comply with all applicable county requirements, given the County's limited jurisdictional role and the lack of change in the proposed ongoing operations.

Transportation System Plan Analysis - The PAPA application is a Comprehensive Plan amendment and, therefore, it must be analyzed under the Goal 12 transportation planning goal which is implemented by LCDC's Division 12 transportation planning rule (OAR 660-12-0000). For a Comprehensive Plan change, the operative provision is OAR 660-12-0060. This provision provides that when there is an amendment to an acknowledged Comprehensive Plan that would "significantly affect" an existing or planned transportation facility, the local government shall put in place measures to ensure that allowed land uses are consistent with the identified function, capacity and performance standards on the transportation facility, in this case Highway 26. The rule also defines the term "significantly affects." A Comprehensive Plan "significantly affects" a transportation facility if it would:

"(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in the adopted plan);

(b) Change the standards implementing a functional classification system; or

(c) As measured at the end of the planning period identified in the adopted transportation system plan (2023 for Clatsop County):

(A) Allow land uses or levels of development that would result in types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

(B) Reduce the performance of an existing or planned transportation facility below the minimum acceptable performance standard identified in the TSP or Comprehensive Plan; or

(C) Worsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standards identified in the TSP or comprehensive plan."

The purpose of the "significantly affects" definition is to ensure that proposed land uses are consistent with the identified function, capacity and performance standards of the transportation facility at the end of the planning period and the TSP. In this particular situation, as no new truck trips are requested above the currently approved level in the ODOT-access permit, the total amount and type of traffic to and from the site will not change from the level

previously approved in the conditional use application by Clatsop County and approved by ODOT in its access permit. Accordingly, there will be no change in the functional classification at any existing or planned transportation facility in the area. There also will be no change in the standards that implement the functional classification system within the general area. Also, as measured at the end of the planning period, the requested resource expansion at the Ordway quarry cannot, and will not, allow land uses or levels of development that are inconsistent with any existing planned transportation facility in the area that would reduce performance of such planned transportation facility below the minimum accepted standard identified in the Clatsop County Transportation System Plan or Comprehensive Plan, or would worsen the performance of an existing or planned transportation facility. Simply stated, given the number of trips currently approved for access at the site for the quarry use, there can be no measurable effect from this application hat would adversely affect any transportation facility or reduce the performance of any existing transportation facility in the area. Because no additional trips will be generated by the proposed Comprehensive Plan change and further because the traffic generated by the quarry has already been reviewed and approved by ODOT in 2003 when it issued the access permit, there cannot, and will not, be measurable effect from the proposed request on any existing or planned transportation facility nor can there be, nor will there be, any measurable worsening or performance on any existing or planned transportation facility for the quarry operations, as measured at the end of the transportation system planning for Clatsop County (2023) or as measured at 20 years in the future of this application (2027). In addition, Clatsop County's Transportation System Plan assumes an annual growth rate of 1.7% of traffic on Highway 26 (see TSP, Future Travel Demand, Section 3, page 1-2). The figure assumes that traffic from all sources on Highway 26 will grow at an annual growth rate of 1.7%. Applicant's truck trips are limited by the terms of its existing access permit and the Ordway quarry cannot contribute their proportional share of the 1.7% annual growth rate that is attributed to the highway. As such, Big River's continued use and compliance with the existing access permit acts as a *de facto* transportation demand management/transportation system management mechanism that eliminates any adverse effect from the quarry. Therefore, any traffic associated with this land use request, measured at the end of the planning period set out in the Clatsop County TSP, cannot allow land uses or levels of development that would be inconsistent with the functional classification of transportation facilities in the area, cannot reduce the performance at any existing or planned transportation facility in the area below the minimum acceptable performance standard in the TSP, and cannot worsen the performance of any existing or planned transportation facility in the area that is otherwise projected to perform below the minimum standards set out in the

TSP. ODOT and the Clatsop County Transportation System Plan both predict that Highway 26 will operate at an unacceptable Volume to Capacity ratio by the end of the transportation planning period in 2023 (i.e. both ODOT and the County predict that Highway 26 will "fail"). However, Big River's confirmed and continued use of the existing access for quarry operations (at MP 2.66) has no effect on this systemic "failure" which is attributable solely to additional traffic from other sources

Potential Alternatives and Traffic Analysis - Notwithstanding its intention to use the existing access at mile point 2.66, Big River has had preliminary discussions with ODOT about options that might provide acceptable alternatives to the continued use of the existing access. As indicated in the application, if an alternative access program were to be developed, Big River would need approval for additional truck deliveries per day and would need assurance from ODOT that any required improvements to Highway 26 as a condition of changing the access would not result in unreasonable improvement requirements that are beyond the capability of Big River and are not reasonably related to the smaller size of the company's aggregate operation at the Ordway quarry.

To facilitate discussion of the alternatives during the planning process, we have assessed two potential scenarios. The following scenarios were considered:

Alternative 1: The configuration of the existing access at mile point 2.66 would be changed to "in-only." Trucks would be routed on a circular pattern through the quarry and through existing forest roads on the Weyerhaeuser property to the existing approved access point near Vollmer Creek at mile point 2.26. The exit at mile post 2.26 would be designated "out-only" for Big River aggregate haul trucks only (Weyerhaeuser traffic would continue to use the property for "in" and "out" traffic). This alternative requires no change of use for the existing access at mile point 2.26 which is continually used by Weyerhaeuser forestry trucks.

Alternative 2: As with Alternative 1, the existing access point at mile point 2.66 would be converted to "in-only" and traffic would be routed through the quarry and out through an existing driveway to Highway 26 at mile post 2.50. The access point at mile post 2.50 would be "exit-only" for haul trucks.

Stopping Sight Distance - Stopping sight distance (SSD) is the length of roadway a driver needs to see an object in the roadway, recognize that an emergency stop is required, apply the brakes and bring the vehicle to a stop. The driver's eye is considered to be 3.5' above the roadway and

3' from the centerline of the roadway. The object height is 2.0'. SSD is an important design parameter when designing crest vertical curves (hills) and sag vertical curves (dips) in a roadway. It also comes into play on curves as drivers round a bend. It is one reason high speed roadways have large radius (gentle) horizontal curves.

In this instance the concern will be whether a driver on the highway can see a stopped truck slowing to turn into the proposed access to the Big River Rock Products site in time to safely stop. The required SSD on an ODOT roadway like this one is 730 ft. This assumes that a 55 mph posted speed has a 70 mph design speed and that AASHTO standards are used. The Alternative 2 access has adequate stopping sight distance in both directions. Westbound vehicles have 1140' of SSD, east of the access. Eastbound vehicles have over 1250' of stopping sight distance, west of the access.

Intersection Sight Distance - Intersection Sight Distance (ISD) is the length of roadway a driver on the minor approach at an intersection needs to see an oncoming vehicle so he or she can safely pull out into traffic. Generally the left turn from a minor road onto a major road is the controlling ISD. For instance when a driver with a load of rock is stopped waiting to exit at the existing site and turn left toward Seaside, the driver needs to see cars approaching from the right, then look left and see any cars approaching from the left and still have enough time to glance right and then accelerate into the westbound lane without forcing a westbound car to brake unreasonably hard to avoid a collision. The ODOT ISD in this instance is 775' for standard vehicles. Loaded trucks with trailers (rock product trucks) turning onto a highway from a stop on the minor approach take 4 seconds longer to get up to speed than other vehicles. At 70 mph an approaching vehicle will travel 410' in the 4 seconds. So the ISD needs to be 1185', 410' longer than normal.

The Alternative 2 access, the ISD for drivers stopped at the end of the driveway is 2000' to the left (west) and 1800' to the right (east). In this instance more than adequate intersection site distance exists to meet the current ODOT and AASHTO standards.

Table 2- Alternative 1 Big River Rock Products Level of Service Measures

	Existing	Proposed	2023
	PM Peak	PM Peak	PM Peak
Vollmer Road	D/30.6/.08	D/31.1/.09	F/57.4/.20
Alternative 2 Access MP 2.49	B/13.7/.01	B/13.7/.01	C/16.5/.01
Existing Access MP 2.66	B/13.8/0.1	B/13.8/.01	C/16.7/.02

(LOS / delay/v/c)

Table 3 - Alternative 2 Big River Rock Products Level of Service Measures			
	Existing	Proposed	2023
	PM Peak	PM Peak	PM Peak
Vollmer Road	D/29.0/.01	D/29.1/.01	E/49.5/.03
Alternative 2 Access MP 2.49	E/43.0/.10	E/44.1/.12	F/102.8/.30
Existing Access MP 2.66	B/13.8/0.1	B/13.8/0.1	C/16.8/.02

(LOS / delay/v/c)

Relative Analysis to Potential Alternatives 1 and 2 - Tables 2 and 3 show the relative analysis of levels of service (LOS), delay and volume to capacity (v/c) for Alternatives 1 and 2. The tables demonstrate that both alternatives will currently operate at acceptable levels of service. The analysis of the potential alternatives assumes that the 30th highest hour volume in the summer is 1,219 vehicles in the hour. There is an ATR (automatic traffic recorder) at mile post 7.73 on Highway 26. The July traffic counts were adjusted to estimate the 30th highest hour. We again note that the 30th highest hour occurs Sunday afternoon when the Ordway quarry is closed. Considering all of the analysis, if an alternative was adopted, the better choice would be Alternative 1. This option would allow Big River to use the existing deceleration lane at the existing access point for "in-only" movements to allow gravel truck traffic to integrate with Weyerhaeuser's continuous and ongoing forestry uses when exiting at the ODOT-approved exit at mile point 2.26. Again, both ODOT and the County Transportation System Plan project that Highway 26 will "fail" by end of the planning period (the preferred Volume to Capacity ratio will be exceeded). Again, this has nothing to do with Big River's operations and projected "failure" of Highway 26 would occur even if NO traffic were generated by the Ordway quarry. Accordingly, there may be valid reasons for ODOT to consider alternative access options, and Big River has indicated its willingness to explore alternative access options if additional average daily trips would be allowed and the costs of improvements would not be prohibitive. Continuing use of the existing access or consideration of alternative access would be consistent with the NHS Truck Route designation of Highway 26 (See ODOT Corridor Plan, Page 8 and County TSP, Section 5, page 1-9) and with the ODOT Corridor Plan Objectives which encourage private

timber landowners to utilize existing access points to Highway 26 (ODOT Corridor Plan, page III.22)

Conclusion - Big River's ODOT access permit at the existing entry (mile point 2.66) provides valid, adequate and proven access to the site. Continued use of the site at the levels proposed does not implicate the Transportation Planning Rule because no transportation facility (in this case Highway 26) is "substantially affected" by continued operations . Safety considerations were previously determined to be acceptable before the issuance of the existing access permit. Given the nature of the particular land use and transportation facilities in the area, continued operations at the existing site as proposed by Big River will have the least negative impact on the transportation system. However, there may be valid reasons for ODOT to consider and adopt Alternatives 1 or 2 and the County's decision should allow flexibility for these options to be considered.

Appendices

Big Rock Products Pit Expansion

Figures

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ENGINEERING &
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A.T.E.P., Inc.
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FAX: 503.364.1260
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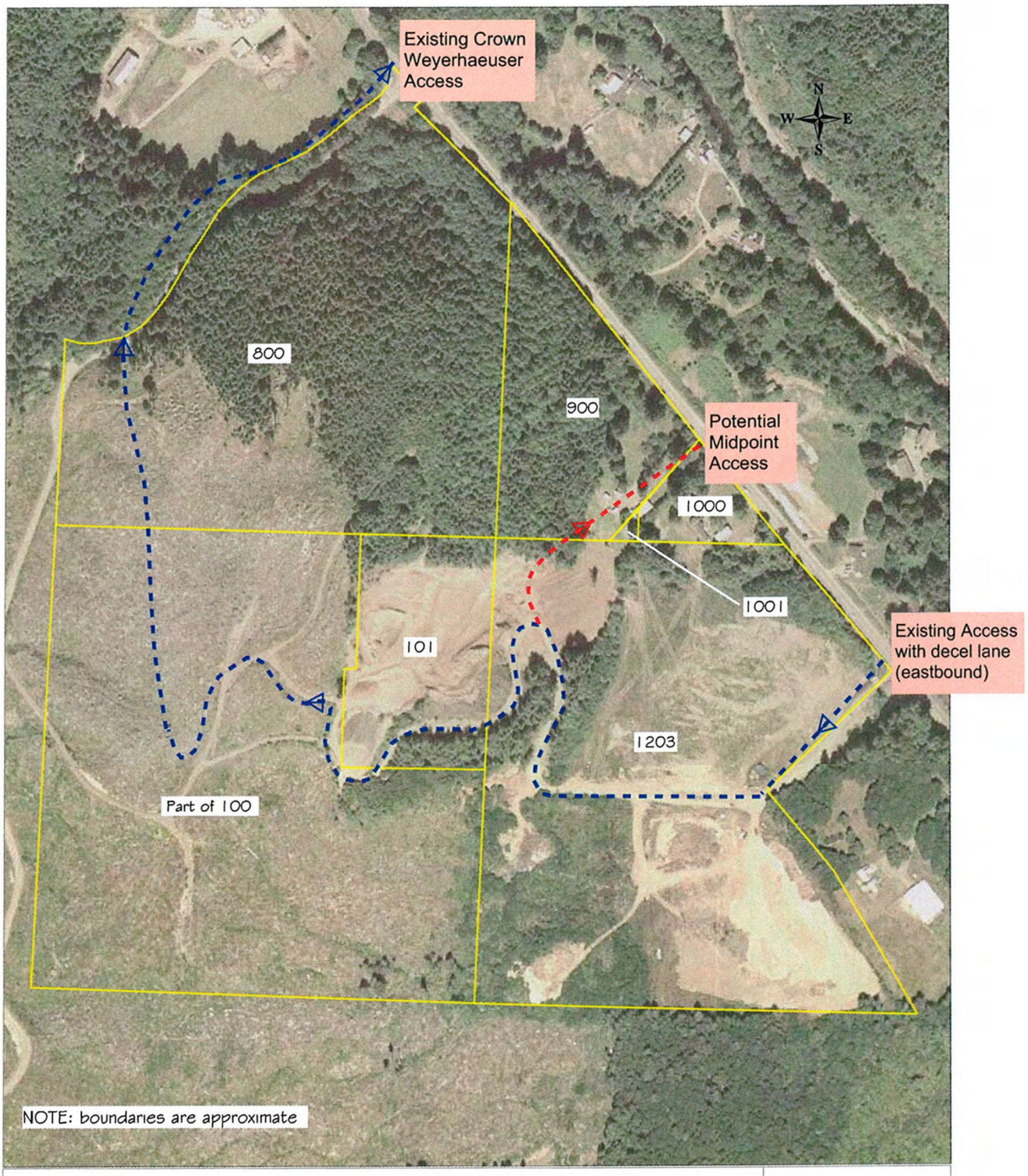
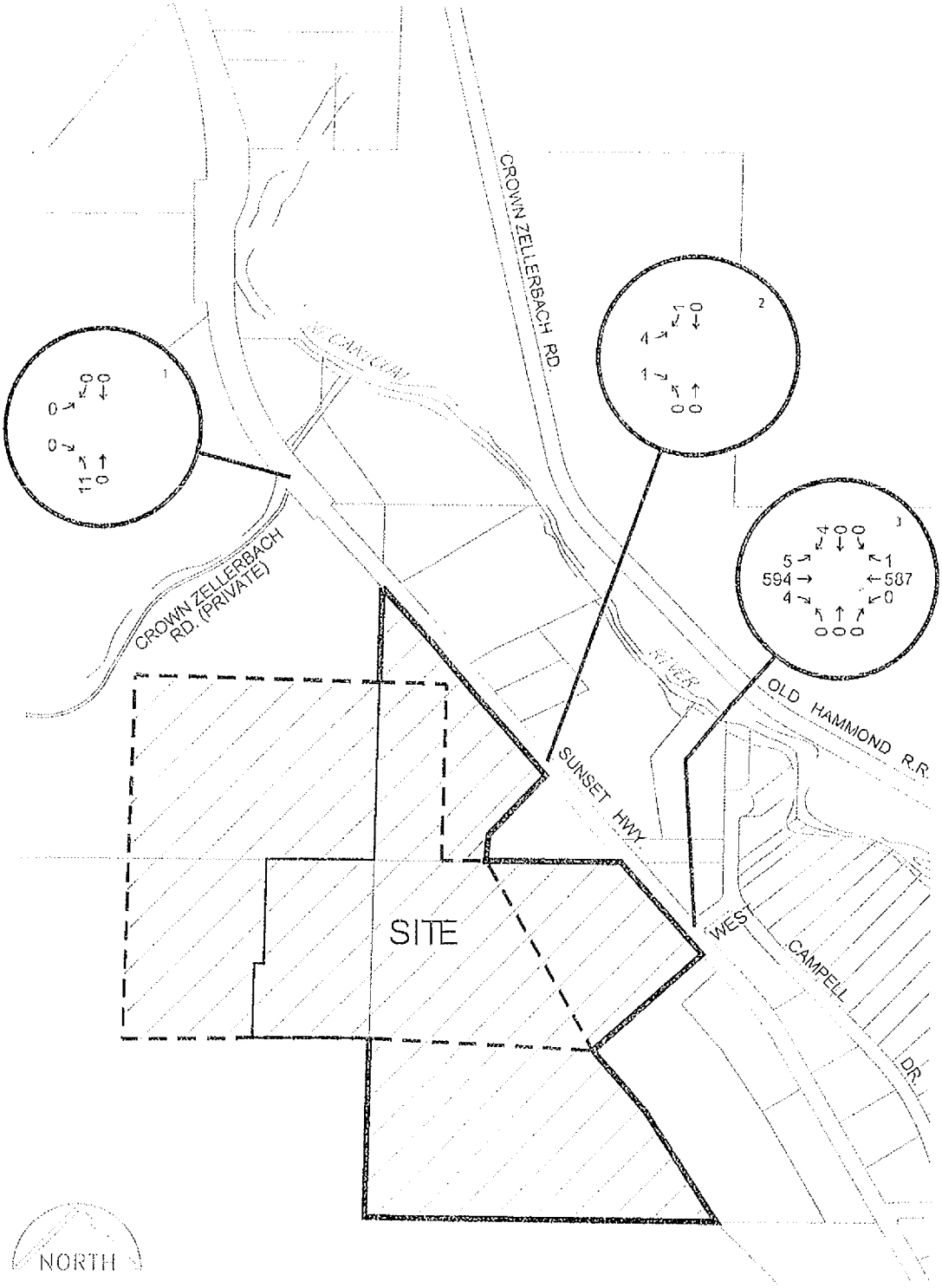


Ordway Quarry
Tax lot 100, 101 Map 5-10-00
Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14
Clatsop County
Seaside, Oregon

TAX LOT MAP

FIGURE 3

Source: Spencer Gross 2002 ortho	ATEPFIGURE J	Scale: 1" = 420'

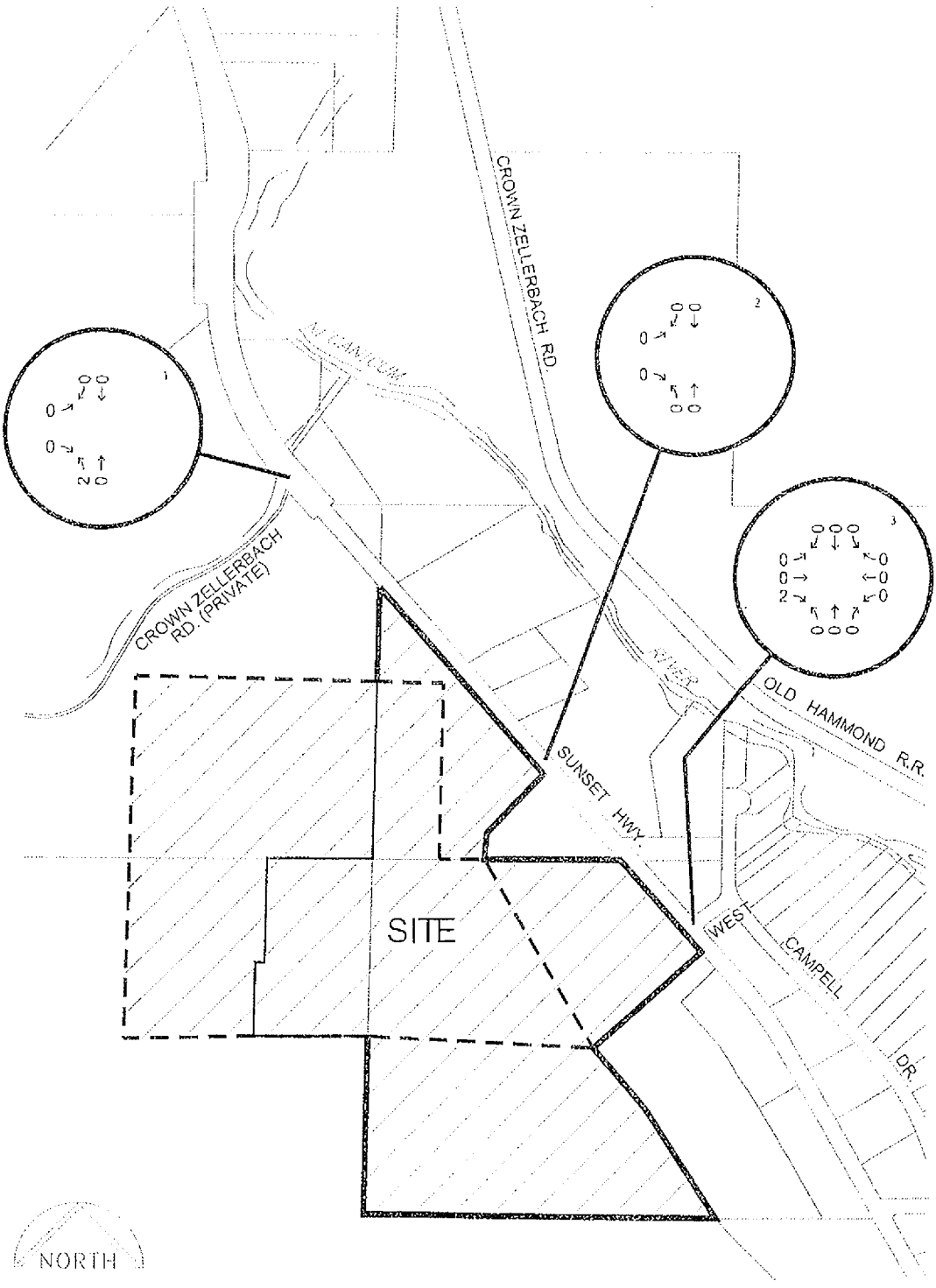


BIG ROCK PRODUCTS PIT EXPANSION

ALTERNATIVE 1
BASE PM VOLUMES

FIGURE 4

ATEP

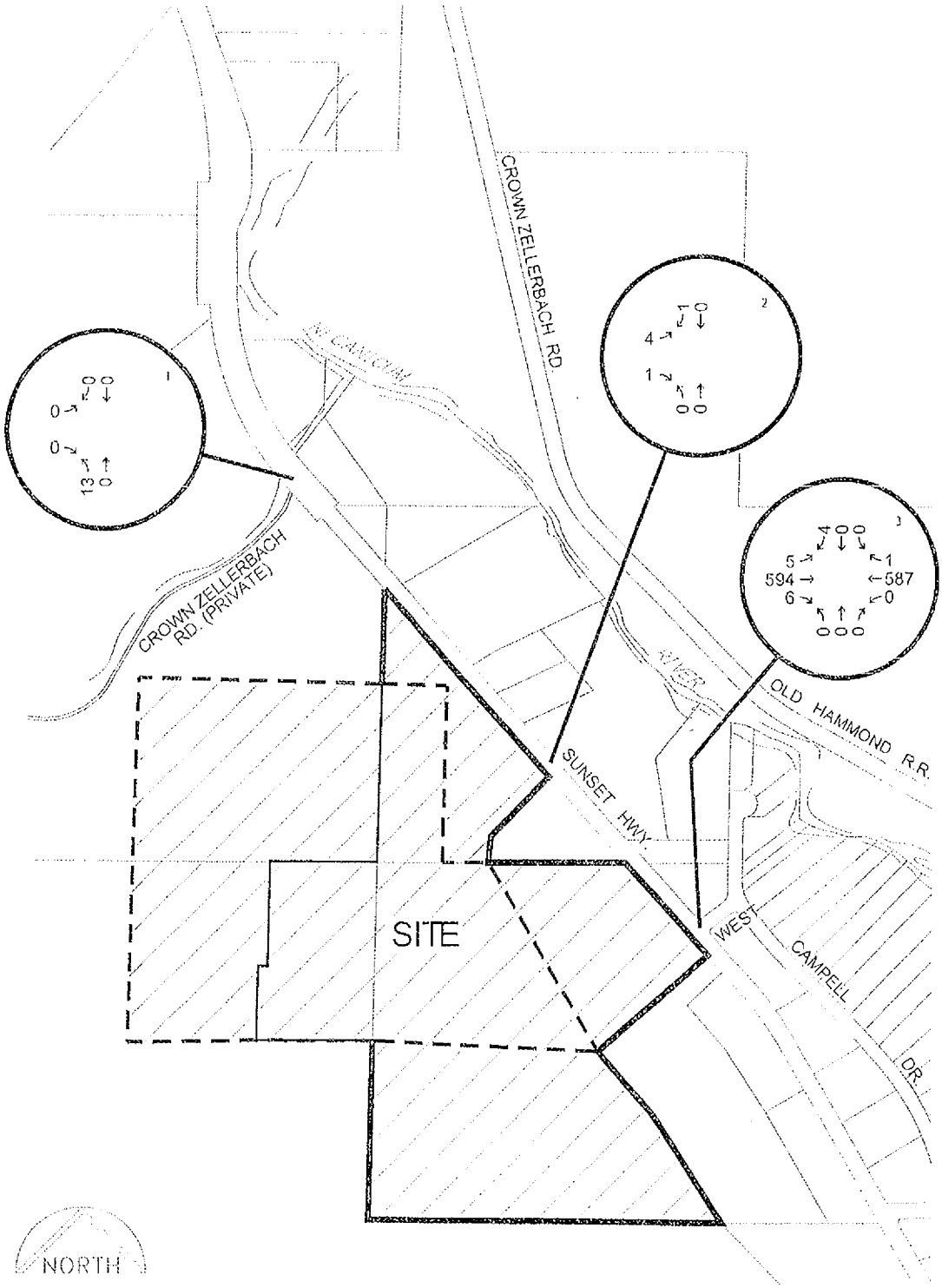


BIG ROCK PRODUCTS PIT EXPANSION

SITE GENERATED TRAFFIC VOLUMES

FIGURE 5

ATEP



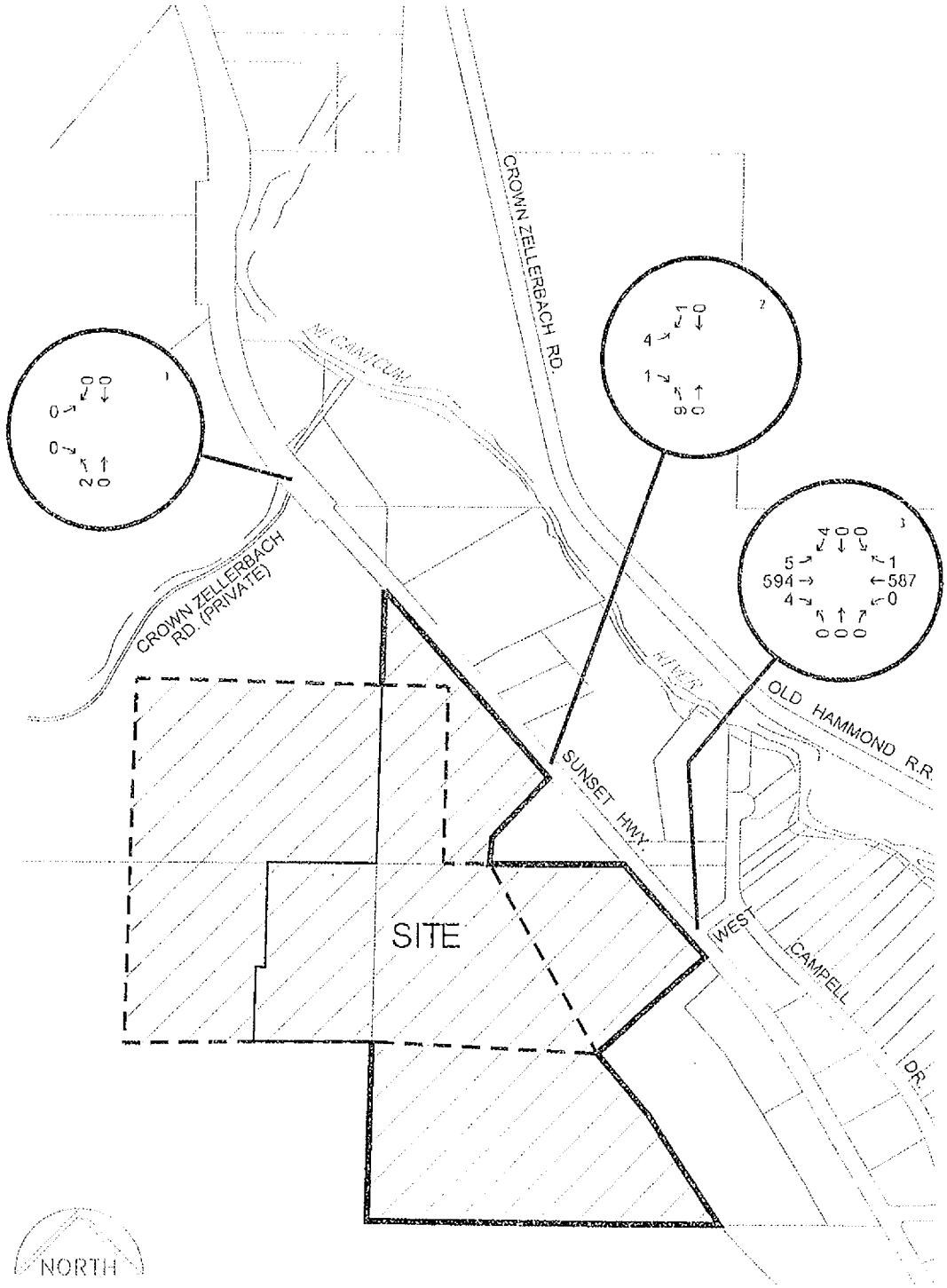
BIG ROCK PRODUCTS PIT EXPANSION

ALTERNATIVE 1

TOTAL PM VOLUMES

FIGURE 6

ATEP



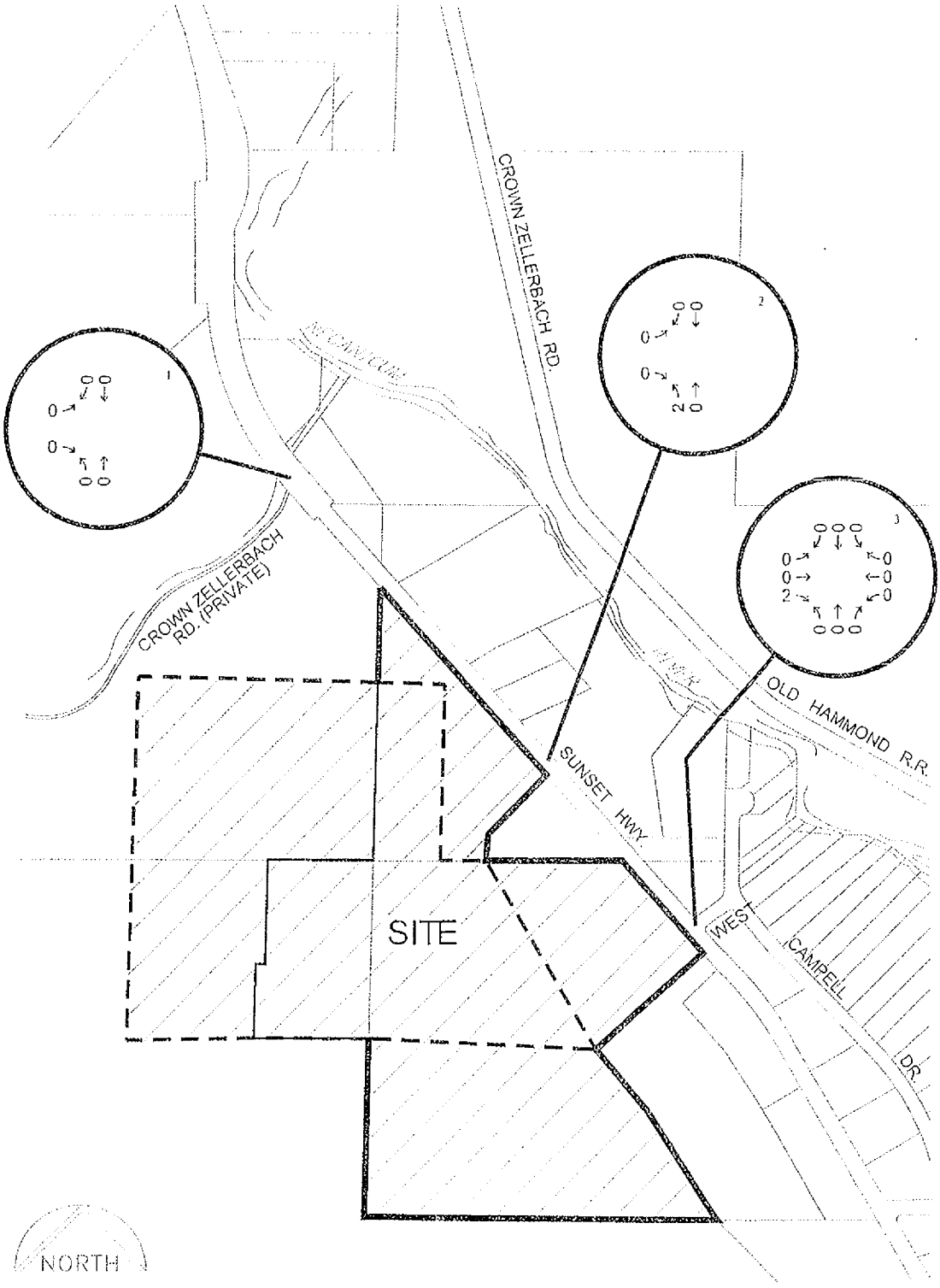
BIG ROCK PRODUCTS PIT EXPANSION

ALTERNATIVE 2

FIGURE 7

BASE PM VOLUMES

ATEP

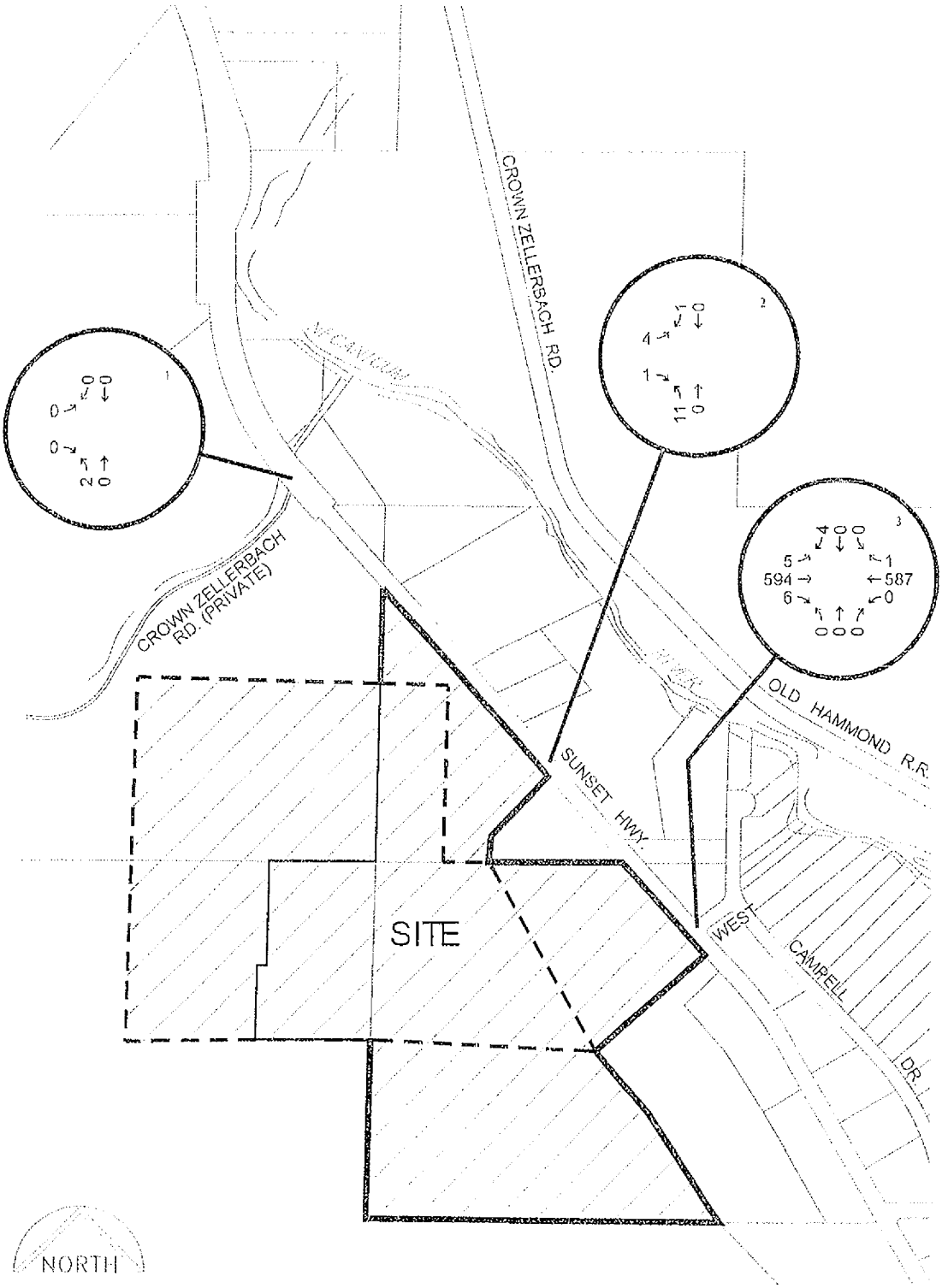


BIG ROCK PRODUCTS PIT EXPANSION

ALTERNATIVE 2

FIGURE 8 SITE GENERATED PM VOLUMES

ATEP



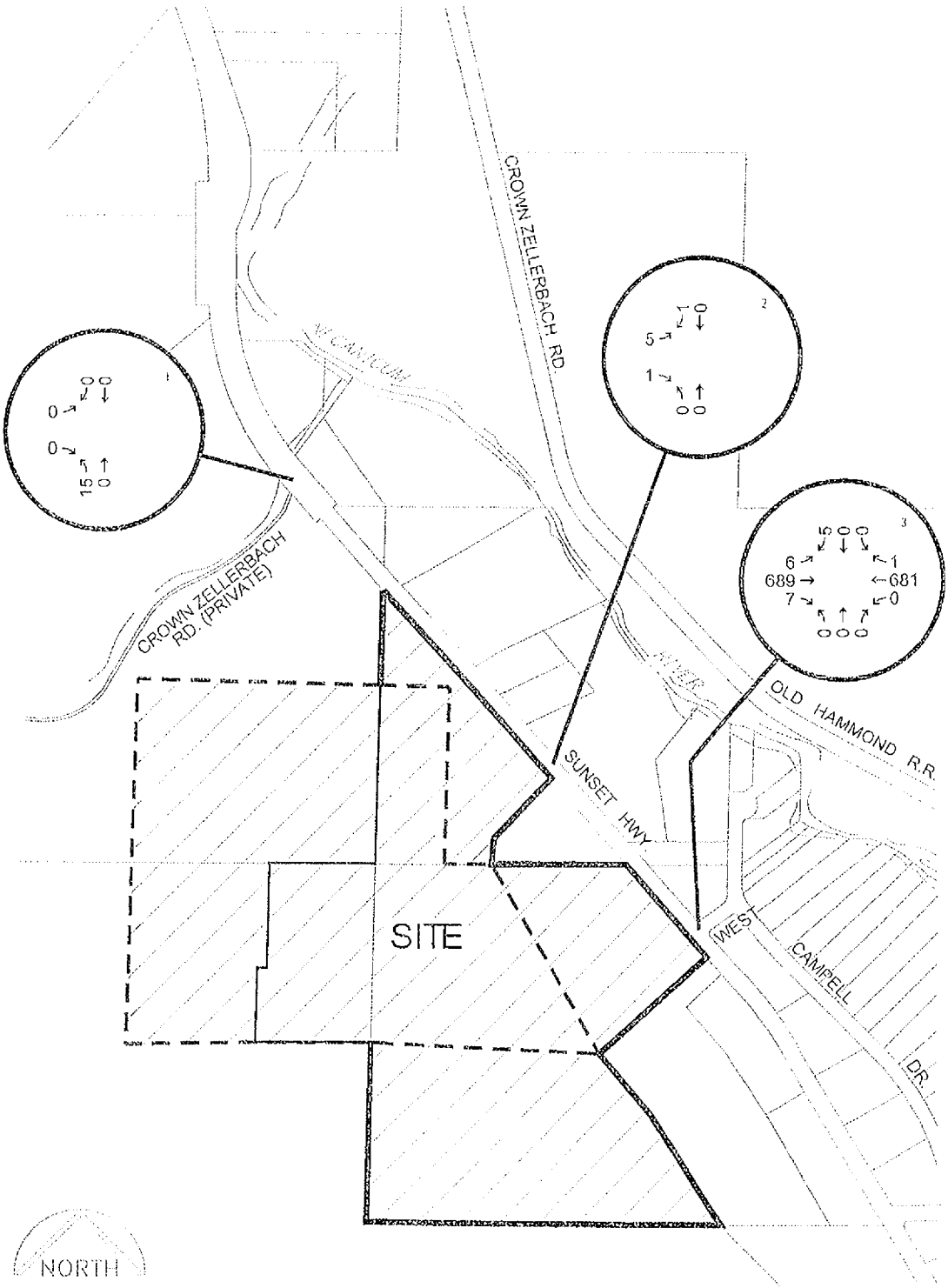
BIG ROCK PRODUCTS PIT EXPANSION

ALTERNATIVE 2

TOTAL PM VOLUMES

FIGURE 9

ATEP



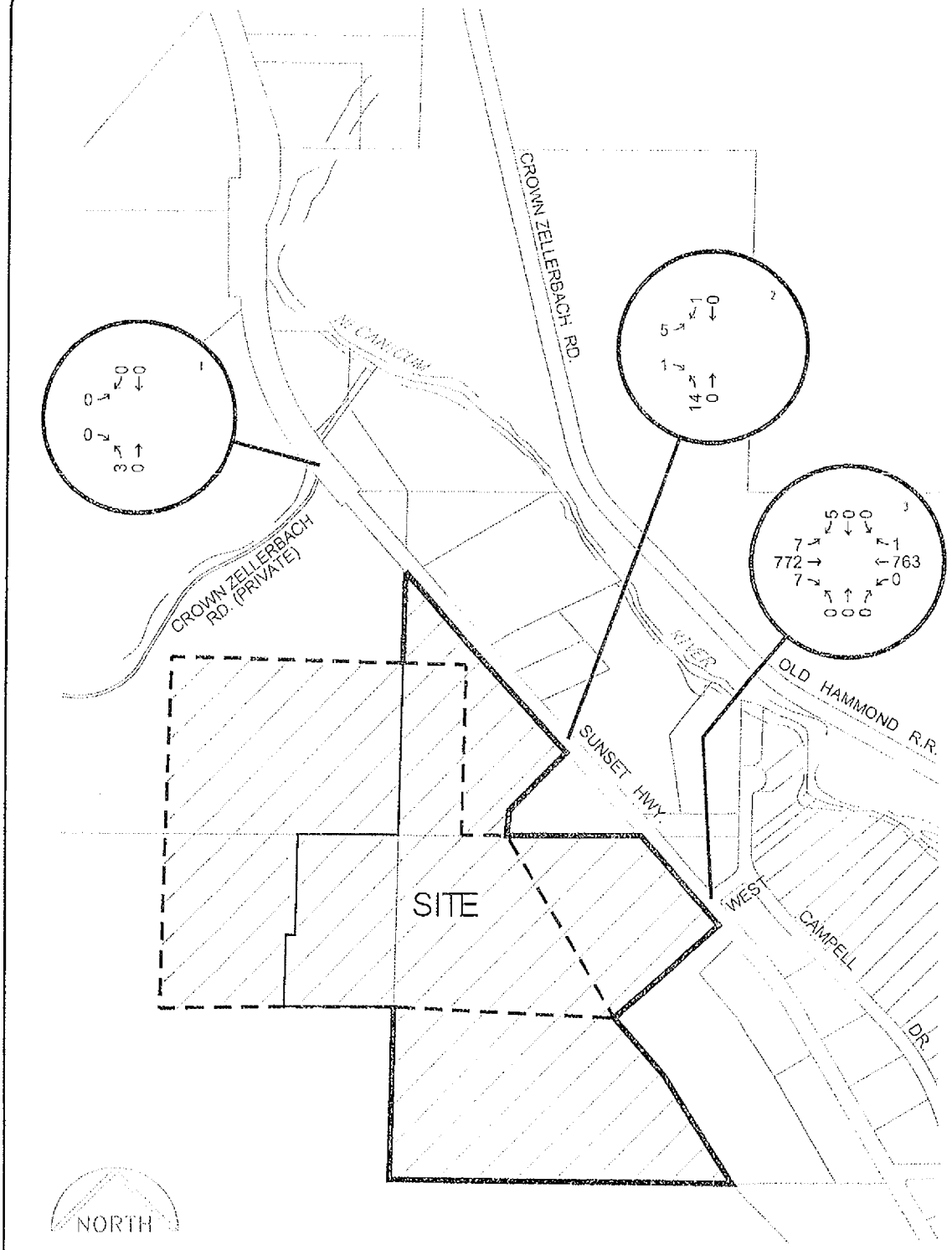
BIG ROCK PRODUCTS PIT EXPANSION

ALTERNATIVE 1

2023 PM VOLUMES

FIGURE 10

ATEP



BIG ROCK PRODUCTS PIT EXPANSION

ALTERNATIVE 2

2023 PM VOLUMES

FIGURE 11

ATEP

Big Rock Products Pit Expansion

Traffic Counts

ODOT Crash Data

ASSOCIATED
TRANSPORTATION
ENGINEERING &
PLANNING Inc.

A.T.E.P., Inc.
P.O. Box 3047
Salem, OR. 97302

Tel.: 503.364.5066
FAX: 503.364.1260
e-mail: atep@engineer.com

047 SUNSET

Sunset Hwy for 2006 (Hwy 47, Route 26)
1-1-2006 through 12-31-2006

SER# / INVEST	SPEC DC	PED ALC	RSL SCH	WRK ZN	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / MLG / MILEPNT	FC / TYP / DIRECT	CORR # / FIRST STREET / SECOND STREET	RD CHAR / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
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ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO ACTION OR NON-WARRANTED
001	SKIDDED	SKIDDED
002	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE
003	LOAD OVR	OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
006	SLOW DN	SLOWED DOWN
007	AVOIDING	AVOIDING MANEUVER
008	PAR PARK	PARALLEL PARKING
009	ANG PARK	ANGLE PARKING
010	INTERFERE	PASSENGER INTERFERING WITH DRIVER
011	STOPPED	STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
012	STP/L TRN	STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
013	STP TURN	STOPPED WHILE EXECUTING A TURN
015	GO A/STOP	PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
016	TRN A/RED	TURNED ON RED AFTER STOPPING
017	LOSTCTRL	LOST CONTROL OF VEHICLE
018	EXIT DWY	ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
019	ENTR DWY	ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
020	STR ENTR	BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
021	NO DRVR	CAR RAN AWAY - NO DRIVER
022	PREV COL	STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
023	STALLED	VEHICLE STALLED
024	DRVR DEAD	DEAD BY UNASSOCIATED CAUSE
025	FATIGUE	FATIGUED, SLEEPY, ASLEEP
026	SUN	DRIVER BLINDED BY SUN
027	HDLGHTS	DRIVER BLINDED BY HEADLIGHTS
028	ILLNESS	PHYSICALLY ILL
029	THRU MED	VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
030	PURSUIT	PURSUING OR ATTEMPTING TO STOP ANOTHER VEHICLE
031	PASSING	PASSING SITUATION
032	PRKOFFRD	VEHICLE PARKED BEYOND CURB OR SHOULDER
033	CROS MED	VEHICLE CROSSED EARTH OR GRASS MEDIAN
034	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
035	X W/ SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
036	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
037	BTWN INT	CROSSING BETWEEN INTERSECTIONS
038	DISTRACT	DRIVER'S ATTENTION DISTRACTED
039	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
040	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
041	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
042	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
043	PLAYINRD	PLAYING IN STREET OR ROAD
044	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
045	WORK ON	WORKING IN ROADWAY OR ALONG SHOULDER
050	LAY ON RD	STANDING OR LYING IN ROADWAY
051	ENT OFFRD	ENTERING / STARTING IN TRAFFIC LANE FROM OFF-ROAD
088	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION

CAUSE CODE TRANSLATION LIST

CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
00	NO CODE	NO CAUSE ASSOCIATED AT THIS LEVEL
01	TOO-FAST	TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SP
02	NO-YIELD	DID NOT YIELD RIGHT-OF-WAY
03	PAS-STOP	PASSED STOP SIGN OR RED FLASHER
04	DIS--RAG	DISREGARDED R-A-G TRAFFIC SIGNAL.
05	LEFT-CTR	DROVE LEFT OF CENTER ON TWO-WAY ROAD
06	IMP-OVER	IMPROPER OVERTAKING
07	TOO-CLOS	FOLLOWED TOO CLOSELY
08	IMP-TURN	MADE IMPROPER TURN
09	DRINKING	ALCOHOL OR DRUG INVOLVED
10	OTHR-IMP	OTHER IMPROPER DRIVING
11	MECH-DEF	MECHANICAL DEFECT
12	OTHER	OTHER (NOT IMPROPER DRIVING)
13	IMP LN C	IMPROPER CHANGE OF TRAFFIC LANES
14	DIS TCD	DISREGARDED OTHER TRAFFIC CONTROL DEVICE
15	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY
16	FATIGUE	DRIVER DROWSY/FATIGUED/SLEEPY
18	IN RDWY	NON-MOTORIST ILLEGALLY IN ROADWAY
19	NT VISBL	NON-MOTORIST CLOTHING NOT VISIBLE
20	IMP PKNG	VEHICLE IMPROPERLY PARKED
21	DEF STER	DEFECTIVE STEERING MECHANISM
22	DEF BRKE	INADEQUATE OR NO BRAKES
24	LOADSHFT	VEHICLE LOST LOAD OR LOAD SHIFTED
25	TIREFAIL	TIRE FAILURE
26	PHANTOM	PHANTOM / NON-CONTACT VEHICLE
27	INATTENT	INATTENTION
30	SPEED	DRIVING IN EXCESS OF POSTED SPEED
31	RACING	SPEED RACING (PER PAR)
32	CARELESS	CARELESS DRIVING (CITATION ISSUED)
33	RECKLESS	RECKLESS DRIVING (CITATION ISSUED)
34	AGGRESV	AGGRESSIVE DRIVING (PER PAR)
35	RD RAGE	ROAD RAGE (PER PAR)

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1TURN	FROM OPPOSITE DIRECTION - ONE TURN, ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

DRIVER LICENSE CODE TRANSLATION LIST

LIC CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NOT LICENSED (HAD NEVER BEEN LICENSED)
1	OR-Y	VALID OREGON LICENSE
2	OTH-Y	VALID LICENSE, OTHER STATE OR COUNTRY
3	SUSP	SUSPENDED/REVOKED

DRIVER RESIDENCE CODE TRANSLATION LIST

RES CODE	SHORT DESC	LONG DESCRIPTION
1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
4	N-RES	NON-RESIDENT
9	UNK	UNKNOWN IF OREGON RESIDENT

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
000	NONE	NO ERROR
001	WIDE TRN	WIDE TURN
002	CUT CORN	CUT CORNER ON TURN
003	FAIL TRN	FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
004	L IN TRF	LEFT TURN IN FRONT OF ONCOMING TRAFFIC
005	L PROHIB	LEFT TURN WHERE PROHIBITED
006	FRM WRNG	TURNED FROM WRONG LANE
007	TO WRONG	TURNED INTO WRONG LANE
008	ILLEG U	U-TURNED ILLEGALLY
009	IMP STOP	IMPROPERLY STOPPED IN TRAFFIC LANE
010	IMP SIG	IMPROPER SIGNAL OR FAILURE TO SIGNAL
011	IMP BACK	BACKING IMPROPERLY (NOT PARKING)
012	IMP PARK	IMPROPERLY PARKED
013	UNPARK	IMPROPER START LEAVING PARKED POSITION
014	IMP STRT	IMPROPER START FROM STOPPED POSITION
015	IMP LGHT	IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
016	INATTENT	FAILED TO DIM LIGHTS (UNTIL 4/1/97) / INATTENTION (AFTER 4/1/97)
017	UNSF VEH	DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
018	OTH PARK	ENTERING, EXITING PARKED POSITION WITH INSUFFICIENT CLEARANCE OR OTHER IMPROPER PARKING MANEUVER
019	DIS DRIV	DISREGARDED OTHER DRIVER'S SIGNAL
020	DIS SGNL	DISREGARDED TRAFFIC SIGNAL
021	RAN STOP	DISREGARDED STOP SIGN OR FLASHING RED
022	DIS SIGN	DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
023	DIS OFCR	DISREGARDED POLICE OFFICER OR FLAGMAN
024	DIS EMER	DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
025	DIS RR	DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
026	REAR-END	FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
027	BIKE ROW	DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
028	NO ROW	DID NOT HAVE RIGHT-OF-WAY
029	PED ROW	FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
030	PAS CURV	PASSING ON A CURVE
031	PAS WRNG	PASSING ON THE WRONG SIDE
032	PAS TANG	PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
033	PAS X-WK	PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
034	PAS INTR	PASSING AT INTERSECTION
035	PAS HILL	PASSING ON CREST OF HILL
036	N/PAS ZN	PASSING IN "NO PASSING" ZONE
037	PAS TRAF	PASSING IN FRONT OF ONCOMING TRAFFIC
038	CUT-IN	CUTTING IN (TWO LANES - TWO WAY ONLY)
039	WRNGSIDE	DRIVING ON WRONG SIDE OF THE ROAD
040	THRU MED	DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
041	P/ST BUS	FAILED TO STOP FOR SCHOOL BUS

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
042	F/SLO MV	FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
043	TO CLOSE	FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
044	STRDL IN	STRADDLING OR DRIVING ON WRONG LANES
045	IMP CHG	IMPROPER CHANGE OF TRAFFIC LANES
046	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY (VEHICLE IS DELIBERATELY TRAVELING ON WRONG SIDE)
047	BASCRULE	DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
048	OPN DOOR	OPENED DOOR INTO ADJACENT TRAFFIC LANE
049	IMPEDING	IMPEDING TRAFFIC
050	SPEED	DRIVING IN EXCESS OF POSTED SPEED
051	RECKLESS	RECKLESS DRIVING (PER PAR)
052	CARELESS	CARELESS DRIVING (PER PAR)
053	RACING	SPEED RACING (PER PAR)
054	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
055	X W/SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
056	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
057	BTWN INT	CROSSING BETWEEN INTERSECTIONS
059	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
060	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
061	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
062	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
063	PLAYINRD	PLAYING IN STREET OR ROAD
064	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
065	WK IN RD	WORKING IN ROADWAY OR ALONG SHOULDER
070	LAYON RD	STANDING OR LYING IN ROADWAY
073	DIS POL	DISREGARDING POLICE (ELUDING)
080	FAIL LN	FAILED TO MAINTAIN LANE
081	OFF RD	RAN OFF ROAD
082	NO CLEAR	DRIVER MISJUDGED CLEARANCE
083	OVRSTEER	OVER CORRECTING
084	NOT USED	CODE NOT IN USE
085	OVRLOAD	OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FELL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
004	PED INV	PEDESTRIAN INVOLVED (NON-PEDESTRIAN ACCIDENT)
005	SUB-PED	"SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
006	BIKE INV	TRICYCLE-BICYCLE INVOLVED
007	HITCHIKR	HITCHHIKER (SOLICITING A RIDE)
008	PSNGR TOW	PASSENGER BEING TOWED OR PUSHED ON CONVEYANCE
009	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE (OCCUPANTS ONLY)
010	SUB OTRN	OVERTURNED AFTER FIRST HARMFUL EVENT
011	MV PUSHD	VEHICLE BEING PUSHED
012	MV TOWED	VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
013	FORCED	VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
014	SET MOTN	VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
015	RR ROW	AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
016	LT RL ROW	AT OR ON LIGHT-RAIL RIGHT-OF-WAY
017	RR HIT V	TRAIN STRUCK VEHICLE
018	V HIT RR	VEHICLE STRUCK TRAIN
019	HIT RR CAR	VEHICLE STRUCK RAILROAD CAR ON ROADWAY
020	JACKNIFE	JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
021	TRL OTRN	TRAILER OR TOWED VEHICLE OVERTURNED
022	CN BROKE	TRAILER CONNECTION BROKE
023	DETACH TRL	DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
024	V DOOR OPN	VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
025	WHEELOFF	WHEEL CAME OFF
026	HOOD UP	HOOD FLEW UP
028	LOAD SHIFT	LOST LOAD, LOAD MOVED OR SHIFTED
029	TIREFAIL	TIRE FAILURE
030	PET	PET: CAT, DOG AND SIMILAR
031	LVSTOCK	STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
032	HORSE	HORSE, MULE, OR DONKEY
033	HRSE&RID	HORSE AND RIDER
034	GAME	WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
035	DEER ELK	DEER OR ELK, WAPITI
036	ANML VEH	ANIMAL-DRAWN VEHICLE
037	CULVERT	CULVERT, OPEN LOW OR HIGH MANHOLE
038	ATENUATN	IMPACT ATTENUATOR
039	PK METER	PARKING METER
040	CURB	CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
041	JIGGLE	JIGGLE BARS OR TRAFFIC SNAKE FOR CHANNELIZATION
042	GDRL END	LEADING EDGE OF GUARDRAIL
043	GARDRAIL	GUARD RAIL (NOT METAL MEDIAN BARRIER)
044	BARRIER	MEDIAN BARRIER (RAISED OR METAL)
045	WALL	RETAINING WALL OR TUNNEL WALL
046	BR RAIL	BRIDGE RAILING (ON BRIDGE AND APPROACH)
047	BR ABUT	BRIDGE ABUTMENT (APPROACH ENDS)
048	BR COLMN	BRIDGE PILLAR OR COLUMN (EVEN THOUGH STRUCK PROTECTIVE GUARD RAIL FIRST)
049	BR GIRDR	BRIDGE GIRDER (HORIZONTAL STRUCTURE OVERHEAD)
050	ISLAND	TRAFFIC RAISED ISLAND
051	GORE	GORE
052	POLE UNK	POLE - TYPE UNKNOWN
053	POLE UTL	POLE - POWER OR TELEPHONE
054	ST LIGHT	POLE - STREET LIGHT ONLY
055	TRF SGNL	POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
056	SGN BRDG	POLE - SIGN BRIDGE
057	STOPSIGN	STOP OR YIELD SIGN
058	OTH SIGN	OTHER SIGN, INCLUDING STREET SIGNS
059	HYDRANT	HYDRANT

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
060	MARKER	DELINEATOR OR MARKER (REFLECTOR POSTS)
061	MAILBOX	MAILBOX
062	TREE	TREE, STUMP OR SHRUBS
063	VEG OHED	TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
064	WIRE/CBL	WIRE OR CABLE ACROSS OR OVER THE ROAD
065	TEMP SGN	TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
066	PERM SGN	PERMANENT SIGN OR BARRICADE IN/OFF ROAD
067	SLIDE	SLIDES, ROCKS OFF OR ON ROAD, FALLING ROCKS
068	FRGN OBJ	FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
069	EQP WORK	EQUIPMENT WORKING IN/OFF ROAD
070	OTH EQP	OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
071	MAIN EQP	WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
072	OTHER WALL	ROCK, BRICK OR OTHER SOLID WALL
073	IRRGL PVMT	SPEED BUMP, OTHER BUMP, POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
075	CAVE IN	BRIDGE OR ROAD CAVE IN
076	HI WATER	HIGH WATER
077	SNO BANK	SNOW BANK
078	HOLE	CHUCKHOLE IN ROAD, LOW OR HIGH SHOULDER AT PAVEMENT EDGE
079	DITCH	CUT SLOPE OR DITCH EMBANKMENT
080	OBJ F MV	STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
081	FLY-OBJ	STRUCK BY OTHER MOVING OR FLYING OBJECT
082	VEH HID	VEHICLE OBSCURED VIEW
083	VEG HID	VEGETATION OBSCURED VIEW
084	BLDG HID	VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
085	WIND GUST	WIND GUST
086	IMMERSED	VEHICLE IMMERSED IN BODY OF WATER
087	FIRE/EXP	FIRE OR EXPLOSION
088	FENC/BLD	FENCE OR BUILDING, ETC.
089	OTH ACDT	ACCIDENT RELATED TO ANOTHER SEPARATE ACCIDENT
090	TO 1 SIDE	TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
092	PHANTOM	OTHER (PHANTOM) NON-CONTACT VEHICLE (ON PAR OR REPORT)
093	CELL-POL	CELL PHONE (ON PAR OR DRIVER IN USE)
094	VIOL GDL	TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
095	GUY WIRE	GUY WIRE
096	BERM	BERM (EARTHEN OR GRAVEL MOUND)
097	GRAVEL	GRAVEL IN ROADWAY
098	ABR EDGE	ABRUPT EDGE
099	CELL-WTN	CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
100	UNK FIXD	UNKNOWN TYPE OF FIXED OBJECT
101	OTHER OBJ	OTHER OR UNKNOWN OBJECT, NOT FIXED
104	OUTSIDE V	PASSENGER RIDING ON VEHICLE EXTERIOR
105	PEDAL PSGR	PASSENGER RIDING ON PEDALCYCLE
106	MAN WHLCHR	PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
107	MTR WHLCHR	PEDESTRIAN IN MOTORIZED WHEELCHAIR
110	N-MTR	NON-MOTORIST STRUCK VEHICLE
111	S CAR VS V	STREET CAR/TROLLEY (ON RAILS AND/OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
112	V VS S CAR	VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS AND/OR OVERHEAD WIRE SYSTEM)
113	S CAR ROW	AT OR ON STREET CAR/TROLLEY RIGHT-OF-WAY
114	RR EQUIP	VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE
125	SHLDR	SHOULDER GAVE WAY

FUNCTIONAL CLASSIFICATION TRANSLATION LIST

FUNC CLASS	DESCRIPTION
01	RURAL PRINCIPAL ARTERIAL - INTERSTATE
02	RURAL PRINCIPAL ARTERIAL - OTHER
06	RURAL MINOR ARTERIAL
07	RURAL MAJOR COLLECTOR
08	RURAL MINOR COLLECTOR
09	RURAL LOCAL
11	URBAN PRINCIPAL ARTERIAL - INTERSTATE
12	URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP
14	URBAN PRINCIPAL ARTERIAL - OTHER
16	URBAN MINOR ARTERIAL
17	URBAN COLLECTOR
19	URBAN LOCAL
78	UNKNOWN RURAL SYSTEM
79	UNKNOWN RURAL NON-SYSTEM
98	UNKNOWN URBAN SYSTEN
99	UNKNOWN URBAN NON-SYSTEN

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLET
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

INJURY SEVERITY CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
1	KILL	FATAL INJURY
2	INJA	INCAPACITATING INJURY - BLEEDING, BROKEN BONES
3	INJB	NON-INCAPACITATING INJURY
4	INJC	POSSIBLE INJURY - COMPLAINT OF PAIN
5	PRI	DIED PRIOR TO CRASH
7	NO<5	NO INJURY - 0 TO 4 YEARS OF AGE

LIGHT CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

MEDIAN TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NO MEDIAN
1	RSDMD	SOLID MEDIAN BARRIER
2	DIVMD	EARTH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
S	OVERLAPPING

MOVEMENT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	STRGHT	STRAIGHT AHEAD
2	TURN-R	TURNING RIGHT
3	TURN-L	TURNING LEFT
4	U-TURN	MAKING A U-TURN
5	BACK	BACKING
6	STOP	STOPPED IN TRAFFIC
7	PRKD-P	PARKED - PROPERLY
8	PRKD-I	PARKED - IMPROPERLY

PEDESTRIAN LOCATION CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH
09	NOT AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

ROAD CHARACTER CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

PARTICIPANT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONV
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING A
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	UNK	UNKNOWN TYPE OF NON-MOTORIST

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFCR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVPHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING

095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

VEHICLE TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
01	PSNGR CAR	PASSENGER CAR, PICKUP, ETC.
02	BOBTAIL	TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
03	FARM TRCTR	FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
04	SEMI TOW	TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
05	TRUCK	TRUCK WITH NON-DETACHABLE BED, PANEL, ETC.
06	MOPED	MOPED, MINIBIKE, MOTOR SCOOTER, OR MOTOR BICYCLE
07	SCHL BUS	SCHOOL BUS (INCLUDES VAN)
08	OTH BUS	OTHER BUS
09	MTRCYCLE	MOTORCYCLE
10	OTHER	OTHER: FORKLIFT, BACKHOE, ETC.
11	MOTRHOME	MOTORHOME
12	TROLLEY	MOTORISED STREET CAR/TROLLEY (NO RAILS/WIRES)
13	ATV	ATV
14	MTRSCTR	MOTORISED SCOOTER
15	SNOWMOBILE	SNOWMOBILE
99	UNKNOWN	UNKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2006														
ANGLE	0	1	2	3	0	1	0	3	0	2	1	3	0	0
BACKING	0	0	1	1	0	0	0	0	0	1	0	1	0	0
PEDESTRIAN	0	3	0	3	0	4	0	2	1	1	2	2	0	0
REAR-END	0	29	33	62	0	37	0	46	14	54	8	19	5	0
SIDESWIPE - OVERTAKING	0	0	6	6	0	0	0	3	2	3	3	1	2	1
TURNING MOVEMENTS	0	11	14	25	0	15	0	20	5	19	6	19	1	0
2006 TOTAL	0	44	56	100	0	57	0	74	22	80	20	45	8	1
FINAL TOTAL	0	44	56	100	0	57	0	74	22	80	20	45	8	1

Note: Legislative changes to DMV's vehicle crash reporting requirements, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CONTINUOUS SYSTEM CRASH LISTING

026 MT. HOOD

Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	S P E D	A L C	P D S U G C	S W O R K	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MLG / MILEPNT	FC / TYP / SECOND STREET	CONN # / FIRST STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PSTC / TYPE	INJ / SVRTY	A / G / E	S / E / X	LICNS / RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
05459	N	N	N		05/16/2006	MULTNOMAH	1 14			STRGHT		Y	N	CLR	S-1STOP	01	NONE 0	STRGHT											27,07
NONE					Tue	PORTLAND SE	0 0		01940	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	W E										000		00
					5P	PORTLAND UA	1.80		05021	03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	28	M	OR-Y		016,026	000		27,07
											(04)													OR<25					
																02	NONE 0	STOP										
																	PRVTE	W E									011	015	00
																	PSNGR CAR		01	DRVR	NONE	00	M	UNK		000	000		00
																								UNK				
																03	NONE 0	STOP										
																	PRVTE	W E									012		00
																	PSNGR CAR		01	DRVR	NONE	00	F	UNK		000	000		00
																								UNK				
15298	N	N	N		12/19/2006	MULTNOMAH	1 14			INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											04
NO RPT					Tue	PORTLAND SE	0 0			CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	E W									000		00
					6P	PORTLAND UA	1.81		21ST AVE	01	0		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	23	M	OTH-Y		UNK	000		04
																								N-RES				
																02	NONE 0	STRGHT										
																	PRVTE	N S									000		00
																	PSNGR CAR		01	DRVR	NONE	55	F	OR-Y		000	000		00
																								OR>25				
07508	N	N	N		07/04/2006	MULTNOMAH	1 14			INTER	CROSS	N	N	CLR	O-1TURN	01	NONE 0	STRGHT											02
NONE					Tue	PORTLAND SE	0 0		POWELL BLVD	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	E W									000		09
					3P	PORTLAND UA	1.81		21ST AVE	02	0		N	DAY	PDO		MTRCYCLE		01	DRVR	NONE	52	M	OR-Y		000	000		00
																								OR<25				
																02	NONE 0	TURN-L										
																	PRVTE	W N									000		00
																	PSNGR CAR		01	DRVR	NONE	00	F	OR-Y		004,028	000		02
																								OR<25				
03602	N	N	N		01/05/2006	MULTNOMAH	1 14			INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT											07
NO RPT					Thu	PORTLAND SE	0 0		POWELL BLVD	E		TRF SIGNAL	N	WET	REAR		PRVTE	E W									000		00
					9P	PORTLAND UA	1.82		21ST AVE	06	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	54	M	OR-Y		026	000		07
																								OR<25				
																02	NONE 0	STOP										
																	PRVTE	E W									011		00
																	PSNGR CAR		01	DRVR	INJC	46	M	OR-Y		000	000		00
																								OR<25				
01164	N	N	N		01/29/2006	MULTNOMAH	1 14			INTER	CROSS	N	N	CLD	O-1TURN	01	NONE 0	TURN-L											02
NO RPT					Sun	PORTLAND SE	0 0		POWELL BLVD	CN		STOP SIGN	N	WET	TURN		PRVTE	SE S									000		00
					1A	PORTLAND UA	1.86		22ND AVE	03	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	00	U	UNK		028	000		02
																								UNK				
																02	NONE 0	STRGHT										
																	PRVTE	NW SE									000		00
																	PSNGR CAR		01	DRVR	INJB	21	F	OR-Y		000	000		00
																								OR<25				

026 MT. HOOD

Sunset Hwy (HWY #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	SPEED	ALC	DRUGS	RSUR	WCOND	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPMT / MLG / MILEPNT	FC / TYP	CONN # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / HOCTN	INT-TYP (MEDIAN) / LEGS / (FLARES)	INT-REL / TRAF- / CNTL	OFFRD / RWDET / DRWWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	VH	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	PS	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS / RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
																				02	PSNG	INJB	20	F		000		000		00
15841	N	N	N			12/29/2006	MULTNOMAH	1 14			STRGHT		N	Y	UNK	FRND MV	01	NONE 0	STRGHT											10
NONE						Fri	PORTLAND SE	0 0		01940	E	(NONE)	UNKNOWN	N	UNK	SS-O		PRVTE	W E										000		00
						3P	PORTLAND UA	1.88		05122	03			N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	50	M	OR-Y	026,030		000		10
												(02)													OR<25					
																	02	NONE 0	FRKD-P											
																		PRVTE	W E									008		00
																		PSNGR CAR												
10040	N	N	N			08/31/2006	MULTNOMAH	1 14			STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	07
NONE						Thu	PORTLAND SE	0 0		01940	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E W									000		00
						12P	PORTLAND UA	1.89		05023	06			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	35	M	OR-Y	026		000		07
												(04)													OR<25					
																	02	NONE 0	STOP											
																		PRVTE	E W									011	013	00
																		PSNGR CAR		01	DRVR	NONE	30	M	OR-Y	000		000		00
																									OR<25					
																	03	NONE 0	STOP											
																		PRVTE	E W									011	013	00
																		PSNGR CAR		01	DRVR	INJC	42	F	OR-Y	000		000		00
																									OR<25					
																				02	PSNG	NOINJ	01	M		000		000		00
																	04	NONE 0	STOP											
																		PRVTE	E W									011		00
																		PSNGR CAR		01	DRVR	NONE	00	U	UNK	000		000		00
																									UNK					
01383	N	N	N			02/01/2006	MULTNOMAH	1 14			ALLEY		N	N	CLR	S-STRGHT	01	NONE 0	STRGHT											07
						Wed	PORTLAND SE	0 0		01940	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E W									000		00
						3P	PORTLAND UA	1.95		05024	07			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	45	M	OR-Y	040		000		07
												(04)													OR<25					
																	02	NONE 0	TURN-R											
																		PRVTE	E N									019		00
																		PSNGR CAR		01	DRVR	NONE	52	F	OR-Y	000		000		00
																									OR<25					
04134	N	Y	N			04/14/2006	MULTNOMAH	1 14			STRGHT		N	N	RAIN	S-1STOP	01	NONE 0	STRGHT										013	33,10
CITY						Fri	PORTLAND SE	0 0		01940	W	(NONE)	UNKNOWN	N	WET	REAR		PRVTE	W E									000		26
						1P	PORTLAND UA	2.05		05026	03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	46	F	OR-Y	051,026		000		33,10
												(04)													OR<25					
																	02	NONE 0	STOP											
																		PRVTE	W E									011	013	00
																		PSNGR CAR		01	DRVR	NONE	49	M	OR-Y	000		000		00
																									OR<25					

026 MT. HOOD

Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	S F E D	A L C	D R U G	S C L	W O R K	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / FC / COMPNT / MLG TYP / MILEPNT	CONN # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- CNTL	OFFRD / RNDST / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACTN EVENT	CAUSE
																03	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	NONE	48	M	OR-Y OR<25		000	022 000	00 00
09633 NONE	N	N	N			08/22/2006 Tue 5P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.07	POWELL BLVD 26TH AVE 0	INTER E 06	CROSS 0	N TRF SIGNAL	N Y N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	44	M	OR-Y OR<25		026	000 000	07 00 07
																02	NONE 0 PRVTE PSNGR CAR	STOP E W	01	DRVR	NONE	41	M	OR-Y OR<25		000	011 000	00 00
14565 NO SPT	N	N	N			12/05/2006 Tue 6P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.07	POWELL BLVD 26TH AVE 0	INTER CN 01	CROSS 0	N TRF SIGNAL	N N N	CLR DRY DLIT	O-1TURN TURN INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT N S	01	DRVR	NONE	32	F	OR-Y OR<25		000	000 000	02 00 00
																02	NONE 0 PRVTE PSNGR CAR	TURN-L S W	01	DRVR	INJC	22	F	OR-Y OR<25		004	000 000	00 00 02
02829	N	N	N			02/16/2006 Thu 7A	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.07	POWELL BLVD 26TH AVE 0	INTER CN 03	CROSS 0	N TRF SIGNAL	N N N	CLR DRY DAY	ANGL-OTH TURN INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT N S	01	DRVR	NONE	00	F	UNK UNK		000	000 000	02 00 00
																02	NONE 0 PRVTE PSNGR CAR	TURN-R W S	01	DRVR	INJC	50	F	OR-Y OR<25		028	000 026	00 00 02
11813 CITY	N	N	N	N	N	10/13/2006 Thu 8A	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.07	POWELL BLVD 26TH AVE 0	INTER CN 03	CROSS 0	N TRF SIGNAL	N N N	CLR DRY DAY	PED PED INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT NW SE	01	DRVR	NONE	48	M	OR-Y OR<25		020,029	000 000	04,02 00 04,02
																		STRGHT S N	01	PED	INJB	58	F		01	000	035	00
14415 NONE	N	N	N			11/30/2006 Thu 4P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.07	POWELL BLVD 26TH AVE 0	INTER CN 06	CROSS 0	N TRF SIGNAL	N N N	CLR WET DUSK	S-STRGHT REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	58	M	OR-Y OR<25		042	000 000	07 00 07
																02	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	INJC	21	M	OR-Y OR>25		000	006 000	00 00

026 MT. HOOD

Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	SPEED	ALC	DRUGS	SCHL	WORK	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MLG / MILEPNT	FC / TYP / DIST	CONN # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RHDET / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	VE	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	PE	PRTC TYPE	INJ SVRTY	AGE	SEX	LIGHS / RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
11820	N	N	N			10/12/2006	MULTNOMAH	1 14			STRGHT		Y	N	CLR	S-STRGHT	01	NONE 0	STRGHT											13
NONE						Thu	PORTLAND SE	0 0	01940		SE	(NONE)	L-TURN REF	M	DRY	SS-O		PRVTE	SE NW										000		00
						8A	PORTLAND UA	2.08	05026		05			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	F	OR-Y	045		000		13
												(05)													OR<25					
																	02	NONE 0	STRGHT											
																		PRVTE	SE NW									000		00
																		PSNGR CAR		01	DRVR	NONE	53	F	OR-Y	000		000		00
																									OR<25					
15548	N	N	Y			12/21/2006	MULTNOMAH	1 14			STRGHT		N	N	RAIN	S-1STOP	01	NONE 0	STRGHT											07
NONE						Thu	PORTLAND SE	0 0	01940		SE	(NONE)	UNKNOWN	M	WET	REAR		PRVTE	SE NW									000		00
						9P	PORTLAND UA	2.08	05026		06			N	DARK	PDO		PSNGR CAR		01	DRVR	NONE	44	M	OR-Y	026		000		07
												(04)													OR<25					
																	02	NONE 0	STOP											
																		PUBLC	SE NW									011		00
																		OTH BUS		01	DRVR	NONE	58	F	OR-Y	000		000		00
																									OR<25					
11386	N	N	N			10/03/2006	MULTNOMAH	1 14			STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
NONE						Tue	PORTLAND SE	0 0	01940		SE	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E W									000		00
						7A	PORTLAND UA	2.09	05026		05			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	M	OR-Y	026		000		07
												(04)													OR<25					
																	02	NONE 0	STOP											
																		PRVTE	E W									011		00
																		PSNGR CAR		01	DRVR	NONE	22	F	OTH-Y	000		000		00
																									N-RES					
02421	N	N	N			03/05/2006	MULTNOMAH	1 14			CURVE		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										004	07
NO RPT						Sun	PORTLAND SE	0 0	01940		W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E W									000		00
						4P	PORTLAND UA	2.14	05029		06			M	DAY	INJ		PSNGR CAR		01	DRVR	NONE	22	F	OR-Y	026		000		07
												(04)													OR<25					
																	02	NONE 0	STOP									011	004	00
																		PRVTE	E W											
																		PSNGR CAR		01	DRVR	NONE	53	M	OR-Y	000		000		00
																									OR<25					
																				02	PSNG	INJR	50	F		000		000		00
01508	N	N	N			02/02/2006	MULTNOMAH	1 14			STRGHT		N	N	RAIN	S-1STOP	01	NONE 0	STRGHT										004	07
						Thu	PORTLAND SE	0 0	01940		W	(NONE)	UNKNOWN	N	WET	REAR		PRVTE	W E									000		00
						1P	PORTLAND UA	2.16	05028		03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	27	M	OR-Y	026		000		07
												(04)													OR<25					
																	02	NONE 0	STOP											
																		PRVTE	W E									011		00
																		PSNGR CAR		01	DRVR	NONE	29	M	OR-Y	000		000		00
																									OR<25					

026 MT. HOOD

Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SERF INVEST	SPEED	ALC	DRUGS	RSLK	SWCHR	DATE DAY TIME	COUNTY CITY URBAN AREA	RD# FC COMENT MAG TYP MILEPNT	CONN # FIRST STREET SECOND STREET	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CNTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER VEH TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
02463	N	N	N			03/02/2006	MULTNOMAH	1 10		STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										004	07
NONE						Thu	PORTLAND SE	0 0	01940	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	W S									000		00
						12P	PORTLAND UA	2.16	05028	04			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	38	M	OR-Y		026	000		07
											(04)														OR<25				
																02	NONE 0	STOP											
																	PRVTE	W E									011	004	00
																	PSNGR CAR		01	DRVR	INJS	47	F	OR-Y		000	000		00
																								OR<25					
01700	N	N	N			02/10/2006	MULTNOMAH	1 14		STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
						Fri	PORTLAND SE	0 0	01940	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E W									000		00
						11A	PORTLAND UA	2.16	05028	06			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	17	M	OR-Y		026	000		07
											(04)														OR<25				
																02	NONE 0	STOP											
																	PRVTE	E W									011		00
																	PSNGR CAR		01	DRVR	INJC	58	M	OR-Y		000	000		00
																								OR<25					
15839	N	N	N	N	Y	12/29/2006	MULTNOMAH	1 14		INTER	5-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										004	27,07
NO RPT						Fri	PORTLAND SE	0 0	POWELL BLVD	E		STOP SIGN	N	WET	REAR		PRVTE	E W									000		00
						4P	PORTLAND UA	2.17	58TH AVE	06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	30	M	OR-Y		016,026	038		27,07
																								OR<25					
																02	NONE 0	STOP											
																	PRVTE	E W									011	004	00
																	PSNGR CAR		01	DRVR	INJC	31	M	OR-Y		000	000		00
																								OR<25					
00054	N	N	N			01/03/2006	MULTNOMAH	1 14		STRGHT		N	N	CLR	S-STRGHT	01	NONE 0	STRGHT											10
						Tue	PORTLAND SE	0 0	01940	E	(NONE)	UNKNOWN	N	WET	SS-O		PRVTE	W E									000		00
						6P	PORTLAND UA	2.18	05028	04			N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	M	UNK		045	000		13
											(04)														OR>25				
																02	NONE 0	STRGHT											
																	PRVTE	W E									000		00
																	PSNGR CAR		01	DRVR	NONE	30	M	OR-Y		000	000		00
																								OR<25					
00582	N	N	N			01/12/2006	MULTNOMAH	1 14		STRGHT		N	N	RAIN	S-1STOP	01	NONE 0	STRGHT										004	07
						Thu	PORTLAND SE	0 0	01940	E	(NONE)	UNKNOWN	N	WET	REAR		PRVTE	E W									000		00
						1P	PORTLAND UA	2.18	05028	06			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	30	M	OR-Y		026	000		07
											(04)														OR<25				
																02	NONE 0	STOP											
																	PRVTE	E W									011	004	00
																	PSNGR CAR		01	DRVR	NONE	57	M	OR-Y		000	000		00
																								OR<25					
10469	N	N	N			09/09/2006	MULTNOMAH	1 14		STRGHT		N	N	CLR	S-STRGHT	01	NONE 0	STRGHT											07
NONE						Sat	PORTLAND SE	0 0	01940	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E W									000		00
						10P	PORTLAND UA	2.19	05028	06			N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	U	OR-Y		042	000		07
											(04)														UNK				

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Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	SPEAD	PDOLG	SUCSL	WCOHR	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MLG / MILEPNT	FC / TYP	CONJ # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CNTL	OFFRD / RNDST / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
																02	NONE 0 PRVTE PSNGR CAR	STRGHT E W										000		00
																			01	DRVR	NONE	27	M	OR-Y OR<25		000	000		00
02939 NONE	N N N Y	03/13/2006 Mon 3P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.23	01940 06028	STRGHT E 07	(NONE) (05)	N UNKNOWN	N N N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE PRVTE PSNGR CAR	STRGHT E W					01	DRVR	NONE	00	M	OR-Y OR<25		026	000 000		10 00 10
																02	NONE PRVTE PSNGR CAR	STOP E W										011 000		00 00
01222 NO RPT	N N N	01/30/2006 Mon 3P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.36	01940 05031	STRGHT W 03	(NONE) (04)	N UNKNOWN	N N N	RAIN WET DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E					01	DRVR	NONE	20	M	OR-Y OR<25		026	092,004 000 045	092	13,07 00 13,07
																02	NONE 0 PRVTE PSNGR CAR	STOP W E										011 000	004	00 00
06074 CITY	N N N	05/30/2006 Tue 5P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.36	POWELL BLVD 31ST AVE 06	INTER W	3-LEG 0	N UNKNOWN	N N Y	CLR DRY DAY	ANGL-STP TURN PDO	01	NONE 0 PRVTE PSNGR CAR	TURN-L S W					01	DRVR	NONE	00	M	UNK UNK		028	010 000		02 00 02
																02	NONE 0 PRVTE PSNGR CAR	STOP W E										011 000		00 00
08957 NONE	N N N	08/30/2006 Wed 7A	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.37	POWELL BLVD 31ST AVE 06	INTER E	3-LEG 0	N UNKNOWN	N N N	RAIN WET DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W					01	DRVR	NONE	25	M	OR-Y OR<25		026	004 000	004	07 00 07
																02	NONE 0 PRVTE PSNGR CAR	STOP E W										011 000	004	00 00
																			01	DRVR	INJC	19	F	OR-Y OR<25		000	000		00
																			02	PSNG	INJC	52	F			009	000		00
15289 NONE	N N N	12/19/2006 Tue 12P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.37	POWELL BLVD 31ST AVE 06	INTER W	3-LEG 0	N UNKNOWN	N N N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E					01	DRVR	NONE	00	M	OR-Y OR<25		026	004 000	004	07 00 07

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Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	S P E D / A L C	R S U H S	W C O H K	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MILEPNT	FC / MA TYP	CONN # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- CNTL	OFFRD / RNDBT / DRWWY	WTHR / LIGHT	SURF / COLL TYP / SVRTY	CRASH TYP	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
																02	NONE 0 PRVTE PSNGR CAR	STOP W E									011	004	00
																			01	DRVR	NONE	47	M	OR-Y OR<25		000	000		00
00587	N N N	01/12/2006	MULTNOMAH	1 14				STRGHT		N		N	RAIN	S-1STOP	01	NONE 0	STRGHT											004,013	07
NO RPT		Thu	PORTLAND SE	0 0	01940			E	(NONE)	UNKNOWN		N	WET	REAR		PRVTE	NW SE										000		00
		2P	PORTLAND UA	2.38	05031			03				N	DAY	INJ		PSNGR CAR			01	DRVR	NONE	19	F	OR-Y OR<25		026	000		07
										(04)																			
																02	NONE 0 PRVTE PSNGR CAR	STOP NW SE									011	013	00
																			01	DRVR	INJC	67	M	OR-Y OR<25		000	000		00
																03	NONE 0 PRVTE PSNGR CAR	STOP NW SE									011	004	00
																			01	DRVR	NONE	49	M	OR-Y OR<25		000	000		00
04514	N N N	04/24/2006	MULTNOMAH	1 14				STRGHT		N		N	CLR	S-1STOP	01	NONE 0	STRGHT											013	07
NONE		Mon	PORTLAND SE	0 0	01940			E	(NONE)	UNKNOWN		N	DRY	REAR		PRVTE	E W										000		00
		9A	PORTLAND UA	2.38	05031			06				N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	26	F	OR-Y OR<25		026	000		07
										(04)																			
																02	NONE 0 PRVTE PSNGR CAR	STOP E W									011	013	00
																			01	DRVR	NONE	56	M	OR-Y OR<25		009	000		00
																03	NONE 0 PRVTE PSNGR CAR	STOP E W									011		00
																			01	DRVR	NONE	00	F	OR-Y OR<25		000	000		00
05239	N N N	05/05/2006	MULTNOMAH	1 14				INTER	3-LEG	N		N	UNK	S-1STOP	01	NONE 0	STRGHT												07
NO RPT		Wed	PORTLAND SE	0 0	POWELL BLVD			E		UNKNOWN		N	UNK	REAR		PRVTE	E W										000		00
		5P	PORTLAND UA	2.38	31ST AVE			06	0			N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	23	M	OR-Y OR>25		026	000		07
																02	NONE 0 PRVTE PSNGR CAR	STOP E W									011		00
																			01	DRVR	NONE	54	M	OR-Y OR<25		000	000		00
09047	N N N	08/08/2006	MULTNOMAH	1 14				STRGHT		N		N	CLR	S-1STOP	01	NONE 0	STRGHT											004	07
NO RPT		Tue	PORTLAND SE	0 0	01940			E	(NONE)	UNKNOWN		N	DRY	REAR		PRVTE	E W										000		00
		6P	PORTLAND UA	2.38	05031			06				N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	51	M	OR-Y OR<25		026	000		07
										(04)																			
																02	NONE 0 PRVTE PSNGR CAR	STOP E W									011	004	00
																			01	DRVR	NONE	41	M	OR-Y OR<25		000	000		00

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Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	SPEED	ALC	DRUGS	SCHL	WORK	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / MLG TYP / MILEPNT	FC / CONN # / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RMDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
13393	N	N	N			11/07/2006	MULTNOMAH	1 14		STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	07
NONE						Tue	PORTLAND SE	0 0	01940	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E W										000		00
						8A	PORTLAND UA	3.38	05031	06			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	23	F	OR-Y	026		000		07
											(04)														OR>25					
																02	NONE 0	STOP										011	013	00
																	PRVTE	E W										000		00
																	PSNGR CAR		01	DRVR	INJC	48	F	OR-Y	000		000		00
																								OR<25					
																03	NONE 0	STOP										011		00
																	PRVTE	E W										000		00
																	PSNGR CAR		01	DRVR	NONE	26	M	OR-Y	000		000		00
																								OR<25					
14978	N	N	N			12/11/2006	MULTNOMAH	1 14		INTER	3-LEG	N	N	RAIN	S-1TURN	01	NONE 0	TURN-L											08
NO RPT						Mon	PORTLAND SE	0 0	POWELL BLVD	CN		STOP SIGN	N	WET	TURN		PRVTE	E S										000		00
						5P	PORTLAND UA	2.65	32ND AVE	01	0		N	DLGT	PDO		PSNGR CAR		01	DRVR	NONE	00	F	OTH-Y	006		000		00
																								N-RES					
																02	NONE 0	STRGHT											
																	PRVTE	E W										000		00
																	PSNGR CAR		01	DRVR	NONE	46	M	EXP	000		000		00
																								OR>25					
07108	N	N	N			06/22/2006	MULTNOMAH	1 14		STRGHT		N	N	CLR	S-1STOP	01	NONE	STRGHT										013	07
CITY						Thu	PORTLAND SE	0 0	01940	W	(NONE)	TRF SIGNAL	N	DRY	REAR		PRVTE	W E										000		00
						5P	PORTLAND UA	2.46	05033	03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	M	UNK	026		000		07
											(04)														UNK					
																02	NONE	STOP										011	013	00
																	PRVTE	E W										000		00
																	PSNGR CAR		01	DRVR	NONE	38	F	OR-Y	000		000		00
																								OR<25					
																03	NONE	STOP										011		00
																	PRVTE	W E										000		00
																	PSNGR CAR		01	DRVR	NONE	00	M	UNK	000		000		00
																								UNK					
08526	N	N	N			06/26/2006	MULTNOMAH	1 14		STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
NONE						Mon	PORTLAND NE	0 0	01940	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	W E										000		00
						6P	PORTLAND UA	2.46	05033	03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	24	M	OR-Y	026		000		07
											(04)														OR<25					
																02	NONE 0	STOP										011		00
																	PRVTE	W E										000		00
																	PSNGR CAR		01	DRVR	NONE	00	M	OR-Y	000		000		00
																								OR<25					
06999	N	N	N			06/23/2006	MULTNOMAH	1 14		INTER	CROSS	N	N	CLR	O-1TURN	01	NONE 0	STRGHT										082	08
NONE						Fri	PORTLAND SE	0 0	POWELL BLVD	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	W S										000		00
						5P	PORTLAND UA	2.47	33RD AVE	03	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	56	M	OR-Y	000		000		00
																								OR<25					

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Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	SPEED	ALC	DRUG	SCHL	WORK	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / FC / COMPNT / MLG TYP / MILEPNT	CONN # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	VE	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	PE	PRTC TYPE	INJ SVRTY	AGE	SEX	RSTRNTS / RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
																02	NONE 0 PRVTE PSNGR CAR	TURN-L E S									000		00
																			01	DRVR	NONE	25	M	OR-Y OR<25		004	000	082	00
10849 NONE	N	N	N			09/18/2006 Mon 6P	MULTNOMAH PORTLAND SE PORTLAND UA	1 16 0 0 2.48	01940 05033	ALLEY E 03	(NONE) (04)	N UNKNOWN	N N	CLR DRY DAY	S-1TURN REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	26	F	OTH-Y N-RES	026		000	004	07 00 07
																02	NONE 0 PRVTE PSNGR CAR	STOP W S	01	DRVR	INJC	29	N	OR-Y OR<25	000		013 000	004	00 00
01995	N	N	N			02/16/2006 Thu 1P	MULTNOMAH PORTLAND SE PORTLAND UA	1 16 0 0 2.48	POWELL BLVD 33RD AVE 06	INTER E 0	CROSS 0	N TRF SIGNAL	N N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	00	U	UNK UNK	026		000	004,013	07 00 07
																02	NONE 0 PRVTE PSNGR CAR	STOP E W	01	DRVR	NONE	23	M	OR-Y OR<25	000		011 000	013	00 00
																03	NONE 0 PRVTE PSNGR CAR	STOP E W	01	DRVR	INJB	39	F	OR-Y OR<25	000		011 022	004	00 00
																			02	PSNG	NO<5	03	M		000		000		00
12855 NONE	N	N	N			11/01/2006 Wed 11A	MULTNOMAH PORTLAND SE PORTLAND UA	1 16 0 0 2.57	01940 05034	STRGHT W 03	(NONE) (04)	N UNKNOWN	N N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	27	F	OR-Y OR<25	026		000		07 00 07
																02	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	NONE	24	F	OR-Y OR<25	000		011 009		00 00
13715 CITY	N	N	N	N	Y	11/13/2006 Mon 6P	MULTNOMAH PORTLAND SE PORTLAND UA	1 16 0 0 2.57	01940 05034	STRGHT W 03	(NONE) (04)	N UNKNOWN	N N N	RAIN WET DLIT	PED PED INJ	01	NONE 0 PRVTE MTRCYCLE	STRGHT W E	01	DRVR	INJS	24	M	OR-Y OR<25	000		000 000	010	18,19 00 00
																		STRGHT N S	01	PED	INJA	13	F		04	057	037		18,19
02750 NONE	N	N	N			03/07/2006 Tue 6P	MULTNOMAH PORTLAND SE PORTLAND UA	1 16 0 0 2.57	POWELL BLVD 34TH AVE 06	INTER W 0	3-LEG 0	N UNKNOWN	N N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	36	F	OR-Y OR<25	026		000	004	07 00 07

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Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	S P E D	A L C	D S L	S W O H K	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / CONSNT / MLG / MILEPNT	FC / TYP / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
															02	NONE 0 PRVTE PSNGR CAR	STOP W E									011	004	00
																		01	DRVR	INJC	29	M	OR-Y OR<25		000	000		00
																		02	PSNG	INJC	13	M			000	000		00
																		03	PSNG	INJC	06	F			000	000		00
																		04	PSNG	INJC	47	F			000	000		00
05733 NONE	N	H	N	N	05/23/2006 Tue 4P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.57	POWELL BLVD 34TH AVE	INTER W 06	3-LEG 0	N UNKNOWN	N N	CLR WET DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	34	M	OR-Y OR<25	026	000	000	004,104	07 00 07
															02	NONE 0 PRVTE PSNGR CAR	STOP W E									011		00 00
																		01	DRVR	INJC	36	M	OR-Y OR<25	000	000			00
																		02	PSNG	INJC	63	F		000	000			00
14462 NO RPT	N	N	N	N	11/29/2006 Wed 8A	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.58	POWELL BLVD 34TH AVE	INTER E 06	3-LEG 0	N UNKNOWN	N N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	35	M	OR-Y OR<25	026	000	000	004,013	07 00 07
															02	NONE 0 PRVTE PSNGR CAR	STOP W E									011	013	00 00
																		01	DRVR	NONE	51	M	OR-Y OR<25	000	000			00
															03	NONE 0 PRVTE PSNGR CAR	STOP W E									011	004	00 00
																		01	DRVR	NONE	26	F	OTH-Y N-RES	000	000			00
09625 CITY	N	H	N	N	N 08/22/2006 Tue 6P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.62	01940 060US	STRGHT W 03	(NONE) (04)	N UNKNOWN	N N	CLR DRY DAY	S-1STOP REAR INJ	01	POLICE 0 PUBLC PSNGR CAR	STRGHT W E	01	DRVR	NONE	24	M	OR-Y OR<25	016,026	000	000	013	27,07 00 27,07
															02	NONE 0 PRVTE PSNGR CAR	STOP W E									011	013	00 00
																		01	DRVR	INJB	37	F	OR-Y OR<25	000	000			00
																		02	PSNG	INJB	36	M		000	000			00
															03	NONE 0 PRVTE PSNGR CAR	STOP W E									011		00 00
																		01	DRVR	INJC	33	F	OR-Y OR<25	000	000			00
12557 NO RPT	N	H	N	N	10/26/2006 Thu 7P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.66	POWELL BLVD 35TH PL	INTER SB 03	3-LEG 0	N UNKNOWN	N N	CLR DRY DLIT	ANGL-OTH TURN INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT N S	01	DRVR	NONE	35	M	OR-Y OR<25	000	000	000		02 00 00

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Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	SPEC / DIAG	DRSWLK	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MLG / MILEPNT	FC / TYP / CONN # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRYC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
													02	NONE 0 PRVTE PSNGR CAR	TURN-L W N									000		00
																01	DRVR	INJA	28	M	OR-Y OR<25		026	000		02
																02	PSNG	INJC	27	F			000	000		00
33411 NONE	N N N		11/07/2006 Tue 7P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.70	01940 05036	STRGHT W 06	(NONE) (04)	N UNKNOWN	N N	CLD WET DLIT	S-1STOP REAR PDO	01	NONE 0 PUBLIC OTH BUS	STRGHT E W	01	DRVR	NONE	65	M	OR-Y OR<25	026			004	07 00 07
													02	NONE 0 PRVTE PSNGR CAR	STOP E W	01	DRVR	NONE	24	F	OR-Y OR<25	000		011 000	004	00 00
06599 NONE	N N N		06/11/2006 Sun 12P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.72	01940 05036	STRGHT W 03	(NONE) (04)	Y UNKNOWN	N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	36	F	OR-Y OR<25	026		000 000		07 00 07
													02	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	INJC	47	F	OR-Y OR<25	000		011 000		00 00
10956	N N N		09/21/2006 Thu 1P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.73	POWELL BLVD 36TH AVE	INTER W 06	3-LEG 0	N STOP SIGN	N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	58	M	OR-Y OR<25	026		000	004,013	07 00 07
													02	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	NONE	23	F	OR-Y OR<25	000		011 000	013	00 00
													03	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	INJC	24	F	OR-Y OR<25	000		011 000	013	00 00
													04	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	NONE	35	F	OTH-Y N-RES	000		011 000	004	00 00
06635 NONE	N N N		06/15/2006 Thu 8P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.73	POWELL BLVD 36TH AVE	INTER CN 00	3-LEG 0	N STOP SIGN	N N	CLR DRY DUSK	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT UN UN	01	DRVR	NONE	09	M	UNK OR<25	026		000	004	07 00 07

026 MT. HOOD

Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	SPEC / ALC	DRUG	SCHL	WORK	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MLG / MILEPNT	FC / TYP / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- CNTL	OFFRD / RNDBT / DRWWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICENS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
															02	NONE 0 PRVTE PSNGR CAR	STOP UN UN	01	DRVR	NONE	32	N	OR-Y OR<25	000	011 000	004		00 00
05057 NONE	N N N	05/05/2006 Fri 6P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.73	POWELL BLVD 36TH AVE	INTER CN 01	3-LEG 0	N STOP SIGN	N N	CLR DRY DAY	ANGL-OTH TURN PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	26	F	OR-Y OR<25	000	000		082	02 00 00
												02	NONE 0 PRVTE PSNGR CAR	TURN-L N E	01	DRVR	NONE	23	M	OR-Y OR<25	028	015 000	082		00 02
01898 CITY	N N N	02/11/2006 Sat 7P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.73	POWELL BLVD 36TH AVE	INTER CN 02	CROSS 0	N STOP SIGN	N N	CLR DRY DLIT	PED PED INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	34	M	OR-Y OR<25	029	000		082	02 00 02
														STRGHT N S	01	PED	INJA	55	M		01 000	034			00
09036 NONE	N N N	08/08/2006 Tue 8A	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.74	01940 05036	STRGHT E 03	(NONE) (04)	Y UNKNOWN	N N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	00	F	UNK UNK	026	000		004	07 00 07
												02	NONE 0 PRVTE PSNGR CAR	STOP E W	01	DRVR	NONE	20	M	OR-Y OR<25	000	011 000	004		00 00
02576	N N N	03/03/2006 Fri 12P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.74	01940 05036	STRGHT E 06	(NONE) (04)	N UNKNOWN	N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	INJB	26	F	OR-Y OR<25	026	000		004	07 00 07
												02	NONE 0 PRVTE PSNGR CAR	STOP E W	01	DRVR	NONE	35	M	OR-Y OR<25	000	013 000	004		00 00
10867 NONE	N N N	09/18/2006 Mon 10A	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.78	01940 05037	STRGHT W 03	(NONE) (04)	N UNKNOWN	N N	RAIN WET DAY	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	36	M	OR-Y OR<25	026	000			07 00 07
												02	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	NONE	23	F	OR-Y OR<25	000	011 000			00 00

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Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	S P E D	A U C S	D R S W G H R K	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MLG TYP / MILEPNT	FC / CONN # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
11149	N	N	N	09/23/2006	MULTNOMAH	1 14		INTER	3-LEG	N	N	CLR	O-1TURN	01	NONE 0	TURN-L										082	02
NONE				Thu	PORTLAND SE	0 0	POWELL BLVD	CN		STOP SIGN	N	DRY	TURN		PRVTE	E S								000			00
				9A	PORTLAND UA	2.80	37TH AVE	03	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	69	F	OR-Y OR<25	004	000	082	02	02
														02	NONE 0	STRGHT											
															PRVTE	W E								000			00
															PSNGR CAR		01	DRVR	NONE	84	M	OR-Y OR<25	000	000	082	00
09465	N	N	N	08/11/2006	MULTNOMAH	1 14		INTER	3-LEG	N	N	CLR	O-1TURN	01	NONE 0	TURN-L										099	02
NONE				Fri	PORTLAND SE	0 0	POWELL BLVD	CN		STOP SIGN	N	DRY	TURN		PRVTE	E S								000			00
				5P	PORTLAND UA	2.80	67TH AVE	06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	36	F	UNK OR<25	004	000	099	02	02
														02	NONE 0	STRGHT											
															PRVTE	W E								000			00
															PSNGR CAR		01	DRVR	NONE	41	M	OR-Y OR<25	000	000		00	00
04589	N	N	N	04/27/2006	MULTNOMAH	1 14		STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										004	07
NONE				Thu	PORTLAND SE	0 0	01940	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E W								000			00
				10A	PORTLAND UA	2.89	05039	06	(04)		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	42	F	OR-Y OR<25	026	000		07	07
														02	NONE 0	STOP											
															PRVTE	E W								011			00
															PSNGR CAR		01	DRVR	INJB	21	F	OR-Y OR<25	000	000		00	00
12411	N	N	N	10/25/2006	MULTNOMAH	1 14		STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
NONE				Wed	PORTLAND SE	0 0	01940	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E W								000			00
				2P	PORTLAND UA	2.89	05039	06	(04)		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	19	M	OR-Y OR<25	026	000		07	07
														02	NONE 0	STOP											
															PRVTE	E W								011			00
															PSNGR CAR		01	DRVR	NONE	34	F	OTH-Y OR<25	000	000		00	00
																	02	PSNG	NO<5	02	M		000	000		00	00
																	03	PSNG	NO<5	01	M		000	000		00	00
01608	N	N	N	02/02/2006	MULTNOMAH	1 14		STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	07
NO RPT				Wed	PORTLAND SE	0 0	01940	W	(ESDMD)	UNKNOWN	N	DRY	REAR		PRVTE	W E								000			00
				12P	PORTLAND UA	2.89	05039	06	(05)		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	49	F	OTH-Y N-RES	026	000		07	07
														02	NONE 0	STOP											
															PRVTE	W E								011	013		00
															PSNGR CAR		01	DRVR	NONE	64	M	OR-Y OR<25	000	000		00	00

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Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	SPEED	ALC	SCH BUS	HAZ MAT	WORK ZONE	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / MIL PNT	FC / TYP	CONFIG / CONN # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
																	03	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	NONE	61	M	OR-Y OR<25		000	011 022		00 00
15167 NONE	N	N	N			12/15/2006 Fri 4P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.90		01940 05039	STRGHT W 04	(NONE) (04)	N UNKNOWN	N N N	RAIN WET DUSK	S-STRGHT SS-O PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT N E	01	DRVR	NONE	26	F	OR-Y OR<25		000	000 000	002	13 00 00
																	02	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	21	F	OR-Y OR<25		045	000 000	002	00 13
05598 CITY	N	N	N			05/18/2006 Thu 1P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.90		POWELL BLVD 39TH AVE 0	INTER W 05	CROSS	N TRF SIGNAL	N N N	CLR DRY DAY	BIKE TURN INJ			STRGHT S N	01	BIKE	INJA	51	M			047	035		27,02,01 01
																	01	NONE 0 PRVTE PSNGR CAR	TURN-R N W	01	DRVR	NONE	34	M	OR-Y OR<25		016,027	000 000		00 27,02
10391 NONE	N	N	N			09/01/2006 Fri 3P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.90		01940 05039	STRGHT W 06	(NONE) (04)	N UNKNOWN	N N N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	41	F	OR-Y OR<25		026	000 000		07 00 07
																	02	NONE 0 PRVTE PSNGR CAR	STOP E W	01	DRVR	NONE	00	M	UNK UNK		000	011 000		00 00
05092 NONE	N	N	N			05/10/2006 Wed 4P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.91		POWELL BLVD 39TH AVE 0	INTER E 06	CROSS	N TRF SIGNAL	N N N	CLR DRY DAY	S-1STOP SS-O PDO	01	NONE PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	29	M	OR-Y OR<25		045	000 000		13 00 13
																	02	NONE PRVTE PSNGR CAR	STOP E W	01	DRVR	NONE	19	F	OR-Y OR<25		000	011 000		00 00
																				02	PSNG	NOT	00	F			000	000		00
09196 NONE	N	N	N			08/13/2006 Sun 2P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.91		POWELL BLVD 39TH AVE 0	INTER SW 06	CROSS	N TRF SIGNAL	N N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT SW NE	01	DRVR	NONE	38	F	OR-Y OR<25		026	000 000		07 00 07

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Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	S F E B	A L C S	D R S W C O H R	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MIL TYP / MILEPNT	FC / CONN # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL TRAF- CNTL	OFFRD / SHDRT / DRWAY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
														02	NONE 0 PRVTE PSNGR CAR	STOP SB NE									011		00
																	01	DRVR	INJC	59	F	OR-Y OR<25		000	000		00
05581 NONE	N N N		05/18/2006 Thu 7A	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.91	POWELL BLVD 39TH AVE	INTER CN 00	CROSS 0	N TRF SIGNAL	N N	UNK UNK DAY	O-1STOP BACK PDO	01	NONE 0 PRVTE PSNGR CAR	BACK UN UN		01	DRVR	NONE	00	M	OR-Y OR<25	011		088 000		10 00 10
														02	NONE 0 PRVTE PSNGR CAR	STOP UN UN		01	DRVR	NONE	55	M	OR-Y OR<25	000		011 000		00 00
06670 NONE	N N N		06/14/2006 Wed 6A	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.91	39TH AVE POWELL BLVD	INTER CN 02	CROSS 0	N TRF SIGNAL	N N	CLR DRY DAY	ANGL-OTH ANGL PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W		01	DRVR	NONE	00	M	UNK UNK	020		000 000		04 00 04
														02	NONE 0 PRVTE PSNGR CAR	STRGHT S N		01	DRVR	NONE	28	M	OR-Y OR<25	000		000 000		00 00
06333 NONE	N N N		06/05/2006 Mon 4P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.91	POWELL BLVD 39TH AVE	INTER CN 04	CROSS 0	N TRF SIGNAL	N N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT S N		01	DRVR	NONE	41	M	OR-Y OR<25	026	004	000 000		07 00 07
														02	NONE 0 PRVTE PSNGR CAR	STOP S E		01	DRVR	NONE	39	M	OR-Y OR<25	000		013 000	004	00 00
01663	N N N		02/07/2006 Tue 9A	MULTNOMAH PORTLAND SE PORTLAND UA	1 19 0 0 2.92	01940 05039	STRGHT E 06	(RSDMD) (05)	N UNKNOWN	N N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W		01	DRVR	NONE	00	M	UNK OR<25	026		000 000		07 00 07
														02	NONE 0 PRVTE PSNGR CAR	STOP E W		01	DRVR	NONE	31	F	OR-Y OR<25	000		011 000		00 00
05463 NONE	N N N		05/16/2006 Tue 12P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 2.92	01940 05039	STRGHT E 06	(NONE) (06)	Y UNKNOWN	N N	CLR DRY DAY	S-STRGHT SS-O PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W		01	DRVR	NONE	23	F	OR-Y OR<25	045		000 000		13 00 13
														02	NONE 0 PRVTE PSNGR CAR	STRGHT S W		01	DRVR	NONE	43	M	OR-Y OR<25	000		000 000		00 00

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Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	S P E D	A L C	D R S W H C O R L K	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MLG / MILEPNT	FC / TYP	CONDI # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
04003	N	N	N	04/08/2006	MULTNOMAH	1 14			STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										096	26,07
NONE				Sat	PORTLAND SE	0 0		01940	E	(NONE)	L-TURN REF	N	DRY	REAR		PRVTE	E W									000	004	00
				12A	PORTLAND UA	2.93		05039	05			N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	18	F	OR-Y	016,026	000			27,07
										(05)													OR<25					
															02	NONE 0	STOP											
																PRVTE	E W									011		00
																PSNGR CAR		01	DRVR	NONE	09	U	UNK	000	000			00
																							UNK					
03951	N	N	N	04/07/2006	MULTNOMAH	1 14			STRGHT		N	N	CLD	S-1STOP	01	NONE 0	STRGHT										092	07
CITY				Fri	PORTLAND SE	0 0		01940	UN	(NONE)	NONE	N	DRY	REAR		PRVTE	SE NW								026			00
				6A	PORTLAND UA	2.94		05039	08			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	34	M	OR-Y	043,026	000			07
										(04)													OR<25					
															02	NONE 0	STOP									011	093	00
																PRVTE	SE NW											
																PSNGR CAR		01	DRVR	NONE	45	F	OR-Y	000	000			00
																							OR<25					
07271	N	N	N	06/27/2006	MULTNOMAH	1 14			ALLEY		N	N	CLR	S-1TURN	01	NONE	TURN-R											08
NONE				Tue	PORTLAND SE	0 0		01940	E	(NONE)	UNKNOWN	N	DRY	TURN		PRVTE	E N								019			06
				5P	PORTLAND UA	2.99		05039	06			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	27	F	OR-Y	000	000			08
										(04)													OR<25					
															02	NONE	STRGHT									000		06
																PRVTE	E W											
																PSNGR CAR		01	DRVR	NONE	72	F	OR-Y	000	000			00
																							OR<25					
03402	N	N	Y	03/26/2006	MULTNOMAH	1 14			ALLEY		N	N	CLD	ANGL-OTH	01	NONE 0	STRGHT											30,10
CITY				Sun	PORTLAND SE	0 0		01940	W	(NONE)	UNKNOWN	N	DRY	TURN		PRVTE	E W								000			00
				11P	PORTLAND UA	2.99		05040	05			N	DLIT	INJ		PSNGR CAR		01	DRVR	INJC	43	M	OR-Y	000	000			00
										(04)													OR<25					
																		02	PSNG	INJC	52	M		000	000			00
															02	NONE 0	TURN-L									000		00
																PRVTE	N E											
																PSNGR CAR		01	DRVR	NONE	29	M	OR-Y	051	000			32,10
																							OR<25					
13670	N	N	N	12/28/2006	MULTNOMAH	1 14			ALLEY		N	N	CLR	O-1TURN	01	NONE 0	STRGHT											02
NONE				Thu	PORTLAND SE	0 0		01940	W	(NONE)	L-TURN REF	N	DRY	TURN		PRVTE	E W								000			00
				9A	PORTLAND UA	2.99		05040	05			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	70	M	OR-Y	000	000			00
										(04)													OR<25					
															02	NONE 0	TURN-L									019		00
																PRVTE	W N											
																PSNGR CAR		01	DRVR	NONE	46	M	OR-Y	004	000			02
																							OR<25					

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Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	SPEED	ALC	DRUGS	SCHL	WORK	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMENT / MLG TYP / MILEPNT	FC / CORR # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRUK QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN EVENT	CAUSE
81601	N	N	N			02/07/2006 Tue 2P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.00	 POWELL BLVD 40TH AVE	INTER CN 01	CROSS 0	N STOP SIGN	N N N	CLR DRY DAY	ANGL-OTH ANGL INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	19	F	OR-Y OR<25	028,003		000	02 00 02
																02	NONE 0 PRVTE PSNGR CAR	STRGHT N S	01	DRVR	INJC	43	F	OR-Y OR<25	000		000 000	00 00
12296 CITY	N	N	N	N	N	10/19/2006 Thu 10A	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.00	 POWELL BLVD 40TH AVE	INTER CN 02	3-LEG 0	N STOP SIGN	N N Y	RAIN WET DAY	O-1TURN TURN PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	59	F	OR-Y OR<25	000		000 000	02 00 00
																02	NONE 0 PRVTE PSNGR CAR	TURN-L W N	01	DRVR	NONE	31	F	OR-Y OR<25	004,020		019 000	00 02
05730 CITY	N	N	N			05/23/2006 Tue 9A	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.01	 01940 05040	ALLEY E 05 (05)	(NONE)	N L-TURN REF	N N N	RAIN WET DAY	ANGL-OTH TURN PDO	01	NONE 0 PRVTE PSNGR CAR	TURN-R N W	01	DRVR	NONE	27	M	NONE OR<25	028		018 000	02 00 02
																02	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	46	M	OR-Y OR<25	000		000 000	00 00
03551 NONE	N	N	N			03/31/2006 Fri 12P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.01	 01940 05040	ALLEY E 06 (06)	(NONE)	Y UNKNOWN	N N N	CLR DRY DAY	ANGL-OTH TURN PDO	01	NONE 0 PRVTE PSNGR CAR	TURN-L N E	01	DRVR	NONE	00	M	UNK UNK	028		018 000	02 00 02
																02	NONE 0 PRVTE PSNGR CAR	STRGHT S W	01	DRVR	NONE	32	F	OR-Y OR<25	000		000 000	00 00
10661 NONE	N	N	N			09/12/2006 Tue 5P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.02	 01940 05040	STRGHT E 03 (04)	(NONE)	N UNKNOWN	N N N	UNK UNK DAY	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT W S	01	DRVR	NONE	44	M	OR-Y OR<25	026		000 000	07 00 07
																02	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	NONE	32	M	OTH-Y N-RES	000		011 000	00 00
08039 NONE	N	N	N			07/19/2006 Tue 4P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.09	 POWELL BLVD 42ND AVE	INTER W 06	3-LEG 0	N TRF SIGNAL	N N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	30	F	OR-Y OR<25	016,026		000 000	013	27,07 00 27,07

026 MT. HOOD

Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	S P E D E L C S L K	R A U C O G H R	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MLG TYP / MILEPNT	FC / COMM # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
													02	NONE 0 PRVTE PSNGR CAR	STOP N E	01	DRVR	INJC	50	F	OR-Y OR>25		000	011 000	013	00 00
													03	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	NONE	40	M	OR-Y OR<25		000	011 000		00 00
05213 NO RPT	N N N	05/13/2006 Sat 3P	MULTNOMAH PORTLAND NE PORTLAND UA	1 14 0 0 3.09	42ND AVE	INTER CN 01	3-LEG 0	N TRF SIGNAL	N N N	CLR DRY DAY	ANGL-OTH TURN INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	23	M	OR-Y OR<25		020	04 000		04 00 04
													02	NONE 0 PRVTE PSNGR CAR	TURN-L N E	01	DRVR	INJB	56	F	OR-Y OR<25		000	00 000		00 00
03446 NONE	N N N	03/28/2006 Tue 8P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.16	POWELL BLVD 43RD AVE	INTER CN 02	3-LEG 0	N TRF SIGNAL	N N N	CLR DRY DLIT	ANGL-OTH TURN PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	00	M	OR-Y OR<25		020	04 000		04 00 04
													02	NONE 0 PRVTE PSNGR CAR	STRGHT S N	01	DRVR	NONE	63	F	OR-Y OR<25		000	000		00 00
07170 NO RPT	N N N	06/29/2006 Thu 7P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.16	POWELL BLVD 43RD AVE	INTER CN 03	3-LEG 0	N TRF SIGNAL	N N N	CLR DRY DAY	O-1TURN TURN INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	INJB	34	F	OR-Y OR<25		000	000		02 00 00
													02	NONE 0 PRVTE PSNGR CAR	TURN-L E S	01	DRVR	NONE	80	M	OR-Y OR<25		004	000 000		00 02
07909 NO RPT	N N N	07/14/2006 Fri 10A	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.17	01940 05043	STRGHT E 00	(NONE) (04)	N UNKNOWN	N N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	50	F	OR-Y OR<25		026	07 000 000		07 00 07
													02	NONE 0 PRVTE PSNGR CAR	STOP E W	01	DRVR	INJC	56	M	OR-Y OR<25		000	011 000		00 00
02199	N N N	02/24/2006 Fri 1P	MULTNOMAH PORTLAND NE PORTLAND UA	1 14 0 0 3.17	01940 05043	STRGHT E 06	(NONE) (04)	N UNKNOWN	N N N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	54	M	OR-Y OR<25		026	07 000 000	013	07 00 07

026 MT. HOOD

Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	S P E D	A L C	S W O R K	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / COMPNT / MLG / MILEPNT	FC / TYP / CONN # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	VE	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	PE	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
														02	NONE 0 PRVTE PSNGR CAR	STOP E W									011	013	00 00
														03	NONE 0 PRVTE PSNGR CAR	STOP E W	01	DRVR	NONE	06	F	UNK OR<25	000		011 022		00 00
00923 CITY	N N N	01/24/2006 Tue 3P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.28	01940 05047	STRGHT W 03	(NONE) (04)	N UNKNOWN	N CLR N DRY N DAY	S-1STOP REAR PDO				01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	40	M	OR-Y OR<25	026		000 000	013	07 06 07
														02	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	NONE	30	M	OR-Y OR<25	000		011 000	013	00 00
														03	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	NONE	55	F	OR-Y OR<25	000		011 000		00 00
02665 NONE	N N N	04/02/2006 Sun 12P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.29	01940 05047	ALLEY W 06	(NONE) (02)	N UNKNOWN	N CLR N DRY N DAY	S-STRGHT REAR PDO				01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	36	F	OR-Y OR<25	042		000 000		07 00 07
														02	NONE 0 PRVTE PSNGR CAR	TURN-R E N	01	DRVR	NONE	00	F	OR-Y UNK	000		019 000		00 00
04272 NONE	N N N	04/18/2006 Tue 3P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.30	POWELL BLVD 47TH AVE	INTER W 06	3-LEG 0	N TRF SIGNAL	N CLR N DRY N DAY	S-1STOP REAR INJ				01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	62	M	OR-Y OR<25	016,026		000 038	004	27 00 27
														02	NONE 0 PRVTE PSNGR CAR	STOP W S	01	DRVR	INJC	35	M	OR-Y OR<25	006		011 000	004	00 00
08790 NONE	N N N	06/01/2006 Tue 6P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.38	01940 08049	STRGHT W 03	(NONE) (04)	Y UNKNOWN	N CLR N DRY N DAY	S-1STOP REAR INJ				01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	HOME	47	M	OR-Y OR<25	016,026		000 038	013	27,07 00 27,07
														02	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	INJC	37	M	OR-Y OR<25	000		011 000	013	00 00

026 MT. HOOD

Sunset Hwy (Hwy #26, Route 47) from mile point 1.50 to mile point 3.50
1-1-2006 through 12-31-2006

SER# / INVEST	SPEAL	DRUGS	SCHL	WORK	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / MLG / MILEPNT	FC / CMPNT / TYP / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRWWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V# / VEH TYPE	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
															03	NONE 0 PRVTE PSNGR CAR	STOP W S	01	DRVR	NONE	25	M	OR-Y OR<25		000	011 000	013	00 00
															04	NONE 0 PRVTE PSNGR CAR	STOP W S	01	DRVR	NONE	18	F	OR-Y OR<25		000	022 000		00 00
15306 NONE	N N N	12/19/2006 Tue 5P	MULTNOMAH PORTLAND NE PORTLAND UA	1 14 0 0 3.58	01940 05049	STRGHT E 03	(NONE) (04)	N UNKNOWN	N N N	CLR DRY DLIT	S-1STOP REAR PDO	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	39	F	OR-Y OR<25	026	000 000		07 00 07
												02	NONE 0 PRVTE PSNGR CAR	STOP W S	01	DRVR	NONE	43	F	OTH-Y N-RES	000	011 000		00 00
08317 NO RPT	N N N	07/22/2006 Sat 2P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.39	POWELL BLVD 49TH AVE	INTER CN 02	CROSS 0	N UNKNOWN	N N N	CLR DRY DAY	O-1TURN TURN PDO	01	NONE 0 PRVTE PSNGR CAR	TURN-L W N	01	DRVR	NONE	41	M	OR-Y OR<25	004	000 000		02 00 02
												02	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	27	M	OR-Y OR<25	000	000 000		00 00
00402 CITY	N N N	01/11/2006 Wed 4P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.39	POWELL BLVD 49TH AVE	INTER CN 04	CROSS 0	N L-TURN REF	N N N	CLD DRY DAY	ANGL-OTH TURN INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	INJB	49	F	OR-Y OR<25	044	000 000		10 00 10
												02	NONE 0 PRVTE PSNGR CAR	TURN-L S W	01	DRVR	NONE	38	M	OR-Y OR<25	000	000 000		00 00
10556 NONE	N N N	09/14/2006 Thu 6P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.40	01940 05049	STRGHT E 03	(NONE) (04)	Y UNKNOWN	N N N	RAIN WET DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	49	F	OR-Y OR<25	047,026	000 000	124 124	01 09 01
												02	NONE 0 PRVTE PSNGR CAR	STOP W E	01	DRVR	INJB	54	M	OR-Y OR<25	000	011 000		00 00
00632	N N N	01/16/2006 Mon 2P	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.45	FOSTER RD POWELL BLVD	INTER CN 01	CROSS 0	N TRF SIGNAL	N N N	CLR WET DAY	ANGL-OTH TURN INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT SE NW	01	DRVR	NONE	00	M	UNK OR<25	003,000	000 000		10 00 10

SER# / INVEST	S P E D / A L C	R S W / U C O / G H R / L K	DATE / DAY / TIME	COUNTY / CITY / URBAN AREA	RD# / MLG / MILEPNT	FC / TYP /	CONN # / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- CNTL	OFFRD / PRDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYP	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
														02	NONE 0 PRVTE PSNGR CAR	TURN-L SE W									000		00
																	01	DRVR	INJB	30	M	OR-Y OR<25		000	000		00
09466 NO RPT	N N N		08/11/2006 Fri 7P	MULTNOMAH PORTLAND SE PORTLAND UA	1 16 0 0 3.46		POWELL BLVD 50TH AVE	INTER E 06	CROSS 0	N TRF SIGNAL	N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	37	F	OTH-Y OR<25	026		000		07
														02	NONE 0 PRVTE PSNGR CAR	STOP E W	01	DRVR	INJC	51	M	OR-Y OR<25	000		011 000		00 00
11277 CITY	N N N		09/26/2006 Tue 8A	MULTNOMAH PORTLAND SE PORTLAND UA	1 16 0 0 3.46		POWELL BLVD 50TH AVE	INTER ON 02	3-LEG 0	N TRF SIGNAL	N N	CLR DRY DAY	S-STRGHT REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	00	M	UNK UNK	042		000	013		07 00 07
														02	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	INJC	55	F	OR-Y OR<25	000		000 000	013	00 00
														03	NONE 0 PRVTE PSNGR CAR	STRGHT E W	01	DRVR	NONE	00	U	UNK UNK	000		022 000		00 00
03393 NONE	N N N		03/26/2006 Sun 10A	MULTNOMAH PORTLAND SE PORTLAND UA	1 14 0 0 3.48	01940 05050		ALLEY E 03	(DIVHD) (04)	N UNKNOWN	N N	CLR DRY DAY	S-1TURN TURN INJ	01	NONE PRVTE PSNGR CAR	STRGHT W E	01	DRVR	NONE	30	M	OR-Y OR<25	003,044,031		000 000		06 00 06
														02	NONE PRVTE PSNGR CAR	TURN-R W S	01	DRVR	INJC	23	M	OR-Y OR<25	000		019 000		00 00
																	02	PSNG	INJB	22	M		000		000		00

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO ACTION OR NON-WARRANTED
001	SKIDDED	SKIDDED
002	GN/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE
003	LOAD OVR	OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
006	SLOW DN	SLOWED DOWN
007	AVOIDING	AVOIDING MANEUVER
008	PAR PARK	PARALLEL PARKING
009	ANG PARK	ANGLE PARKING
010	INTERFERE	PASSENGER INTERFERING WITH DRIVER
011	STOPPED	STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
012	STP/L TRN	STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
013	STP TURN	STOPPED WHILE EXECUTING A TURN
015	GO A/STOP	PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
016	TRN A/RED	TURNED ON RED AFTER STOPPING
017	LOSTCTRL	LOST CONTROL OF VEHICLE
018	EXIT DWY	ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
019	ENTR DWY	ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
020	STR ENTR	BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
021	NO DRVR	CAR RAN AWAY - NO DRIVER
022	PREV COL	STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
023	STALLED	VEHICLE STALLED
024	DRVR DEAD	DEAD BY UNASSOCIATED CAUSE
025	FATIGUE	FATIGUED, SLEEPY, ASLEEP
026	SUN	DRIVER BLINDED BY SUN
027	HDLGHTS	DRIVER BLINDED BY HEADLIGHTS
028	ILLNESS	PHYSICALLY ILL
029	THRU MED	VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
030	PURSUIT	PURSUING OR ATTEMPTING TO STOP ANOTHER VEHICLE
031	PASSING	PASSING SITUATION
032	PRKOFFRD	VEHICLE PARKED BEYOND CURB OR SHOULDER
033	CROS MED	VEHICLE CROSSED EARTH OR GRASS MEDIAN
034	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
035	X W/ SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
036	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
037	BTWN INT	CROSSING BETWEEN INTERSECTIONS
038	DISTRACT	DRIVER'S ATTENTION DISTRACTED
039	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
040	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
041	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
042	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
043	PLAYINRD	PLAYING IN STREET OR ROAD
044	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
045	WORK ON	WORKING IN ROADWAY OR ALONG SHOULDER
050	LAY ON RD	STANDING OR LYING IN ROADWAY
051	ENT OFFRD	ENTERING / STARTING IN TRAFFIC LANE FROM OFF-ROAD
098	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION

CAUSE CODE TRANSLATION LIST

CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
00	NO CODE	NO CAUSE ASSOCIATED AT THIS LEVEL
01	TOO-FAST	TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SP
02	NO-YIELD	DID NOT YIELD RIGHT-OF-WAY
03	PAS-STOP	PASSED STOP SIGN OR RED FLASHER
04	DIS--RAG	DISREGARDED R-A-G TRAFFIC SIGNAL.
05	LEFT-CTR	DROVE LEFT OF CENTER ON TWO-WAY ROAD
06	IMP-OVER	IMPROPER OVERTAKING
07	TOO-CLOS	FOLLOWED TOO CLOSELY
08	IMP-TURN	MADE IMPROPER TURN
09	DRINKING	ALCOHOL OR DRUG INVOLVED
10	OTHR-IMP	OTHER IMPROPER DRIVING
11	MECH-DEF	MECHANICAL DEFECT
12	OTHER	OTHER (NOT IMPROPER DRIVING)
13	IMP IN C	IMPROPER CHANGE OF TRAFFIC LANES
14	DIS TCD	DISREGARDED OTHER TRAFFIC CONTROL DEVICE
15	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY
16	FATIGUE	DRIVER DROWSY/FATIGUED/SLEEPY
18	IN RDWY	NON-MOTORIST ILLEGALLY IN ROADWAY
19	NT VISBL	NON-MOTORIST CLOTHING NOT VISIBLE
20	IMP PKNG	VEHICLE IMPROPERLY PARKED
21	DEF STER	DEFECTIVE STEERING MECHANISM
22	DEF BRKE	INADEQUATE OR NO BRAKES
24	LOADSHFT	VEHICLE LOST LOAD OR LOAD SHIFTED
25	TIREFAIL	TIRE FAILURE
26	PHANTOM	PHANTOM / NON-CONTACT VEHICLE
27	INATTENT	INATTENTION
30	SPEED	DRIVING IN EXCESS OF POSTED SPEED
31	RACING	SPEED RACING (PER PAR)
32	CARELESS	CARELESS DRIVING (CITATION ISSUED)
33	RECKLESS	RECKLESS DRIVING (CITATION ISSUED)
34	AGGRESV	AGGRESSIVE DRIVING (PER PAR)
35	RD RAGE	ROAD RAGE (PER PAR)

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
8	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
S	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
5	OVERTURN	OVERTURNED
9	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1TURN	FROM OPPOSITE DIRECTION - ONE TURN, ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

DRIVER LICENSE CODE TRANSLATION LIST

LIC CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NOT LICENSED (HAD NEVER BEEN LICENSED)
1	OR-Y	VALID OREGON LICENSE
2	OTH-Y	VALID LICENSE, OTHER STATE OR COUNTRY
3	SUSP	SUSPENDED/REVOKED

DRIVER RESIDENCE CODE TRANSLATION LIST

RES CODE	SHORT DESC	LONG DESCRIPTION
1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
4	N-RES	NON-RESIDENT
9	UNK	UNKNOWN IF OREGON RESIDENT

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
000	NONE	NO ERROR
001	WIDE TRN	WIDE TURN
002	CUT CORN	CUT CORNER ON TURN
003	FAIL TRN	FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
004	L IN TRF	LEFT TURN IN FRONT OF ONCOMING TRAFFIC
005	L PROHIB	LEFT TURN WHERE PROHIBITED
006	FRM WRNG	TURNED FROM WRONG LANE
007	TO WRONG	TURNED INTO WRONG LANE
008	ILLEG U	U-TURNED ILLEGALLY
009	IMP STOP	IMPROPERLY STOPPED IN TRAFFIC LANE
010	IMP SIG	IMPROPER SIGNAL OR FAILURE TO SIGNAL
011	IMP BACK	BACKING IMPROPERLY (NOT PARKING)
012	IMP PARK	IMPROPERLY PARKED
013	UNPARK	IMPROPER START LEAVING PARKED POSITION
014	IMP STRT	IMPROPER START FROM STOPPED POSITION
015	IMP LGHT	IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
016	INATTENT	FAILED TO DIM LIGHTS (UNTIL 4/1/97) / INATTENTION (AFTER 4/1/97)
017	UNSF VEH	DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
018	OTH PARK	ENTERING, EXITING PARKED POSITION WITH INSUFFICIENT CLEARANCE OR OTHER IMPROPER PARKING MANEUVER
019	DIS DRIV	DISREGARDED OTHER DRIVER'S SIGNAL
020	DIS SGNL	DISREGARDED TRAFFIC SIGNAL
021	RAN STOP	DISREGARDED STOP SIGN OR FLASHING RED
022	DIS SIGN	DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
023	DIS OFCR	DISREGARDED POLICE OFFICER OR FLAGMAN
024	DIS EMER	DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
025	DIS RR	DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
026	REAR-END	FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
027	BIKE ROW	DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
028	NO ROW	DID NOT HAVE RIGHT-OF-WAY
029	PED ROW	FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
030	PAS CURV	PASSING ON A CURVE
031	PAS WRNG	PASSING ON THE WRONG SIDE
032	PAS TANG	PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
033	PAS X-WK	PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
034	PAS INTR	PASSING AT INTERSECTION
035	PAS HILL	PASSING ON CREST OF HILL
036	N/PAS ZN	PASSING IN "NO PASSING" ZONE
037	PAS TRAF	PASSING IN FRONT OF ONCOMING TRAFFIC
038	CUT-IN	CUTTING IN (TWO LANES - TWO WAY ONLY)
039	WRNGSIDE	DRIVING ON WRONG SIDE OF THE ROAD
040	THRU MED	DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
041	F/ST BUS	FAILED TO STOP FOR SCHOOL BUS

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
042	F/SLO MV	FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
043	TO CLOSE	FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
044	STRDL LN	STRADDLING OR DRIVING ON WRONG LANES
045	IMP CHG	IMPROPER CHANGE OF TRAFFIC LANES
046	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY (VEHICLE IS DELIBERATELY TRAVELING ON WRONG SIDE)
047	BASCRULE	DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
048	OPN DOOR	OPENED DOOR INTO ADJACENT TRAFFIC LANE
049	IMPEDING	IMPEDING TRAFFIC
050	SPEED	DRIVING IN EXCESS OF POSTED SPEED
051	RECKLESS	RECKLESS DRIVING (PER PAR)
052	CARELESS	CARELESS DRIVING (PER PAR)
053	RACING	SPEED RACING (PER PAR)
054	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
055	X W/SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
056	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
057	BTWN INT	CROSSING BETWEEN INTERSECTIONS
059	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
060	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
061	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
062	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
063	PLAYINRD	PLAYING IN STREET OR ROAD
064	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
065	WK IN RD	WORKING IN ROADWAY OR ALONG SHOULDER
070	LAYON RD	STANDING OR LYING IN ROADWAY
073	DIS POL	DISREGARDING POLICE (SIUDING)
080	FAIL LN	FAILED TO MAINTAIN LANE
081	OFF RD	RAN OFF ROAD
082	MD CLEAR	DRIVER MISJUDGED CLEARANCE
083	OVRSTEER	OVER CORRECTING
084	NOT USED	CODE NOT IN USE
085	OVRLOAD	OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FELL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
004	PED INV	PEDESTRIAN INVOLVED (NON-PEDESTRIAN ACCIDENT)
005	SUB-PED	"SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
006	BIKE INV	TRICYCLE-BICYCLE INVOLVED
007	HITCHIKR	HITCHHIKER (SOLICITING A RIDE)
008	PSNGR TOW	PASSENGER BEING TOWED OR PUSHED ON CONVEYANCE
009	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE (OCCUPANTS ONLY)
010	SUB OTRN	OVERTURNED AFTER FIRST HARMFUL EVENT
011	MV PUSHD	VEHICLE BEING PUSHED
012	MV TOWED	VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
013	FORCED	VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
014	SET MOTN	VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
015	RR ROW	AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
016	LT RL ROW	AT OR ON LIGHT-RAIL RIGHT-OF-WAY
017	RR HIT V	TRAIN STRUCK VEHICLE
018	V HIT RR	VEHICLE STRUCK TRAIN
019	HIT RR CAR	VEHICLE STRUCK RAILROAD CAR ON ROADWAY
020	JACKNIFE	JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
021	TRL OTRN	TRAILER OR TOWED VEHICLE OVERTURNED
022	CN BROKE	TRAILER CONNECTION BROKE
023	DETACH TRL	DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
024	V DOOR OPN	VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
025	WHEELOFF	WHEEL CAME OFF
026	HOOD UP	HOOD FLEW UP
028	LOAD SHIFT	LOST LOAD, LOAD MOVED OR SHIFTED
029	TIREFAIL	TIRE FAILURE
030	PET	PET: CAT, DOG AND SIMILAR
031	LVSTOCK	STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
032	HORSE	HORSE, MULE, OR DONKEY
033	HRSE&RID	HORSE AND RIDER
034	GAME	WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
035	DEER ELK	DEER OR ELK, WAPITI
036	ANML VEH	ANIMAL-DRAWN VEHICLE
037	CULVERT	CULVERT, OPEN LOW OR HIGH MANHOLE
038	ATENUATN	IMPACT ATTENUATOR
039	PK METER	PARKING METER
040	CURB	CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
041	JIGGLE	JIGGLE BARS OR TRAFFIC SNAKE FOR CHANNELIZATION
042	GDRL END	LEADING EDGE OF GUARDRAIL
043	GARDRAIL	GUARD RAIL (NOT METAL MEDIAN BARRIER)
044	BARRIER	MEDIAN BARRIER (RAISED OR METAL)
045	WALL	RETAINING WALL OR TUNNEL WALL
046	BR RAIL	BRIDGE RAILING (ON BRIDGE AND APPROACH)
047	BR ABUT	BRIDGE ABUTMENT (APPROACH ENDS)
048	BR COLMN	BRIDGE PILLAR OR COLUMN (EVEN THOUGH STRUCK PROTECTIVE GUARD RAIL FIRST)
049	BR GIRDR	BRIDGE GIRDER (HORIZONTAL STRUCTURE OVERHEAD)
050	ISLAND	TRAFFIC RAISED ISLAND
051	GORE	GORE
052	POLE UNK	POLE - TYPE UNKNOWN
053	POLE UTL	POLE - POWER OR TELEPHONE
054	ST LIGHT	POLE - STREET LIGHT ONLY
055	TRF SGNL	POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
056	SGN BRDG	POLE - SIGN BRIDGE
057	STOPSIGN	STOP OR YIELD SIGN
058	OTH SIGN	OTHER SIGN, INCLUDING STREET SIGNS
059	HYDRANT	HYDRANT

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
060	MARKER	DELINEATOR OR MARKER (REFLECTOR POSTS)
061	MAILBOX	MAILBOX
062	TREE	TREE, STUMP OR SHRUBS
063	VEG OHED	TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
064	WIRE/CBL	WIRE OR CABLE ACROSS OR OVER THE ROAD
065	TEMP SGN	TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
066	PERM SGN	PERMANENT SIGN OR BARRICADE IN/OFF ROAD
067	SLIDE	SLIDES, ROCKS OFF OR ON ROAD, FALLING ROCKS
068	FRGN OBJ	FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
069	EQP WORK	EQUIPMENT WORKING IN/OFF ROAD
070	OTH EQP	OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
071	MAIN EQP	WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
072	OTHER WALL	ROCK, BRICK OR OTHER SOLID WALL
073	IRRGL PVMT	SPEED BUMP, OTHER BUMP, POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
075	CAVE IN	BRIDGE OR ROAD CAVE IN
076	HI WATER	HIGH WATER
077	SNO BANK	SNOW BANK
078	HOLE	CHUCKHOLE IN ROAD, LOW OR HIGH SHOULDER AT PAVEMENT EDGE
079	DITCH	CUT SLOPE OR DITCH EMBANKMENT
080	OBJ F MV	STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
081	FLY-OBJ	STRUCK BY OTHER MOVING OR FLYING OBJECT
082	VEH HID	VEHICLE OBSCURED VIEW
083	VEG HID	VEGETATION OBSCURED VIEW
084	BLDG HID	VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
085	WIND GUST	WIND GUST
086	IMMERSED	VEHICLE IMMERSED IN BODY OF WATER
087	FIRE/EXP	FIRE OR EXPLOSION
088	FENC/BLD	FENCE OR BUILDING, ETC.
089	OTH ACDT	ACCIDENT RELATED TO ANOTHER SEPARATE ACCIDENT
090	TO 1 SIDE	TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
092	PHANTOM	OTHER (PHANTOM) NON-CONTACT VEHICLE (ON PAR OR REPORT)
093	CELL-FOL	CELL PHONE (ON PAR OR DRIVER IN USE)
094	VIOL GDL	TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
095	GUY WIRE	GUY WIRE
096	BERM	BERM (EARTHEN OR GRAVEL MOUND)
097	GRAVEL	GRAVEL IN ROADWAY
098	ABR EDGE	ABRUPT EDGE
099	CELL-WTN	CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
100	UNK FIXD	UNKNOWN TYPE OF FIXED OBJECT
101	OTHER OBJ	OTHER OR UNKNOWN OBJECT, NOT FIXED
104	OUTSIDE V	PASSENGER RIDING ON VEHICLE EXTERIOR
105	PEDAL PSGR	PASSENGER RIDING ON PEDALCYCLE
106	MAN WHLCHR	PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
107	MTR WHLCHR	PEDESTRIAN IN MOTORIZED WHEELCHAIR
110	N-MTR	NON-MOTORIST STRUCK VEHICLE
111	S CAR VS V	STREET CAR/TROLLEY (ON RAILS AND/OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
112	V VS S CAR	VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS AND/OR OVERHEAD WIRE SYSTEM)
113	S CAR ROW	AT OR ON STREET CAR/TROLLEY RIGHT-OF-WAY
114	RR EQUIP	VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE
125	SHLDR	SHOULDER GAVE WAY

FUNCTIONAL CLASSIFICATION TRANSLATION LIST

FUNC CLASS	DESCRIPTION
01	RURAL PRINCIPAL ARTERIAL - INTERSTATE
02	RURAL PRINCIPAL ARTERIAL - OTHER
06	RURAL MINOR ARTERIAL
07	RURAL MAJOR COLLECTOR
08	RURAL MINOR COLLECTOR
09	RURAL LOCAL
11	URBAN PRINCIPAL ARTERIAL - INTERSTATE
12	URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP
14	URBAN PRINCIPAL ARTERIAL - OTHER
16	URBAN MINOR ARTERIAL
17	URBAN COLLECTOR
19	URBAN LOCAL
78	UNKNOWN RURAL SYSTEM
79	UNKNOWN RURAL NON-SYSTEM
98	UNKNOWN URBAN SYSTEM
99	UNKNOWN URBAN NON-SYSTEM

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLET
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

INJURY SEVERITY CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
1	KILL	FATAL INJURY
2	INJA	INCAPACITATING INJURY - BLEEDING, BROKEN BONES
3	INJB	NON-INCAPACITATING INJURY
4	INJC	POSSIBLE INJURY - COMPLAINT OF PAIN
5	PRI	DIED PRIOR TO CRASH
7	NO<5	NO INJURY - 0 TO 4 YEARS OF AGE

LIGHT CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

MEDIAN TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NO MEDIAN
1	RSDMD	SOLID MEDIAN BARRIER
2	DIVMD	EARTH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

MOVEMENT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	STRGHT	STRAIGHT AHEAD
2	TURN-R	TURNING RIGHT
3	TURN-L	TURNING LEFT
4	U-TURN	MAKING A U-TURN
5	BACK	BACKING
6	STOP	STOPPED IN TRAFFIC
7	PRKD-P	PARKED - PROPERLY
8	PRKD-I	PARKED - IMPROPERLY

PEDESTRIAN LOCATION CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH
09	NOT AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

ROAD CHARACTER CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

PARTICIPANT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONV
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING A
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	UNK	UNKNOWN TYPE OF NON-MOTORIST

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHSGN-R	FLASHING BEACON - RED (STOP)
003	FLASHSGN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFCR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING

095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

VEHICLE TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
01	PSNGR CAR	PASSENGER CAR, PICKUP, ETC.
02	BOBTAIL	TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
03	FARM TRCTR	FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
04	SEMI TOW	TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
05	TRUCK	TRUCK WITH NON-DETACHABLE BED, PANEL, ETC.
06	MOPED	MOPED, MINIBIKE, MOTOR SCOOTER, OR MOTOR BICYCLE
07	SCHL BUS	SCHOOL BUS (INCLUDES VAN)
08	OTH BUS	OTHER BUS
09	MTRCYCLE	MOTORCYCLE
10	OTHER	OTHER: FORKLIFT, BACKHOE, ETC.
11	MOTRHOME	MOTORHOME
12	TROLLEY	MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
13	ATV	ATV
14	MTRSCTR	MOTORIZED SCOOTER
15	SNOWMOBILE	SNOWMOBILE
99	UNKNOWN	UNKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Sunset Hwy for 2006 (Hwy 47, Route 26)
1-1-2006 through 12-31-2006

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2006														
ANGLE	0	0	1	1	0	0	0	1	0	1	0	1	0	0
FIXED / OTHER OBJECT	0	1	2	3	0	2	0	0	3	1	2	0	0	2
SIDESWIPE - MEETING	0	1	0	1	0	2	0	1	0	1	0	0	0	0
TURNING MOVEMENTS	0	1	0	1	0	1	1	1	0	0	1	0	0	0
2006 TOTAL	0	3	3	6	0	5	1	3	3	3	3	1	0	2
FINAL TOTAL	0	3	3	6	0	5	1	3	3	3	3	1	0	2

Note: Legislative changes to DMV's vehicle crash reporting requirements, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

Big Rock Products Pit Expansion

Alternative 1 & 2

Level of Service Calculations

ASSOCIATED
TRANSPORTATION
ENGINEERING &
PLANNING Inc.

A.T.E.P., Inc.
P.O. Box 3047
Salem, OR. 97302

Tel.: 503.364.5066
FAX: 503.364.1260
e-mail: atep@engineer.com

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1
Associated Transportation Engineering & Planning, Inc.

Scenario Report

Scenario:	PM Developed
Command:	PM Developed
Volume:	PM Peak
Geometry:	Ordway Rock Products
Impact Fee:	Default Impact Fee
Trip Generation:	PM Peak
Trip Distribution:	Ordway Rock Products
Paths:	Ordway Rock Products
Routes:	Default Route
Configuration:	PM Developed

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1
Associated Transportation Engineering & Planning, Inc.

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Vollmer Cr Rd - MP 2.26	D	30.6	0.000	D	31.1	0.000	+ 0.483 D/V
# 2 MP 2.56 - Residential Driveway	B	13.7	0.000	B	13.7	0.000	+ 0.000 D/V
# 3 Rock Quarry - MP 2.68	B	13.8	0.000	B	13.8	0.000	+ 0.000 D/V

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #1 Vollmer Cr Rd - MP 2.26

****

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: D[30.6]

****

Street Name:	Vollmer Cr. Rd.						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0	0 0	0	0 1!	0 0	0	0 1	0 0	0	0 1	0 0
Volume Module: >> Count Date: 13 Dec 2006 << 3:30-6:30												
Base Vol:	11	0	0	0	0	0	0	647	0	0	626	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	0	0	0	0	0	647	0	0	626	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	12	0	0	0	0	0	0	696	0	0	673	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	0	0	0	0	0	0	696	0	0	673	0
Critical Gap Module:												
Critical Gp:	6.5	xxxx	xxxxx	7.2	6.6	6.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	xxxxx	3.6	4.1	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1369	xxxx	xxxxx	1369	1369	673	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	152	xxxx	xxxxx	117	138	435	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	152	xxxx	xxxxx	117	138	435	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.08	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	30.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	D	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		30.6			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		D			*			*			*	

****

Note: Queue reported is the number of cars per lane.

****

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Vollmer Cr Rd - MP 2.26

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: D[31.1]

Street Name:	Vollmer Cr. Rd.						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0 0		0 0 1!	0 0		0 0	1 0	0	0 0	1 0	0
Volume Module: >> Count Date: 13 Dec 2006 << 3:30-6:30												
Base Vol:	11	0	0	0	0	0	0	647	0	0	626	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	0	0	0	0	0	647	0	0	626	0
Added Vol:	2	0	0	0	0	0	0	2	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	0	0	0	0	0	0	649	0	0	626	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	14	0	0	0	0	0	0	698	0	0	673	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	14	0	0	0	0	0	0	698	0	0	673	0
Critical Gap Module:												
Critical Gp:	6.5	xxxx	xxxxx	7.2	6.6	6.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	xxxxx	3.6	4.1	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1371	xxxx	xxxxx	1371	1371	673	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	152	xxxx	xxxxx	116	138	435	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	152	xxxx	xxxxx	116	138	435	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.09	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	31.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	D	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		31.1			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		D			*			*			*	

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #2 MP 2.56 - Residential Driveway

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[13.7]

****

Street Name:	Driveway						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0	1	0 0	0	1	0 0	1! 0	0	0 0	1 0	0
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	0	0	0	0	0	1	4	628	1	0	626	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	1	4	628	1	0	626	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	0	0	0	0	1	5	711	1	0	709	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	1	5	711	1	0	709	0
Critical Gap Module:												
Critical Gp:	7.2	xxxx	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1430	xxxx	712	xxxx	xxxx	709	709	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	106	xxxx	413	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	105	xxxx	413	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.00	xxxx	xxxx	0.00	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.7	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.7			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

****

Note: Queue reported is the number of cars per lane.

****

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 MP 2.56 - Residential Driveway

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[13.7]

Street Name:	Driveway						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0	0 1	0	0 0	0 1	0	0 1! 0	0	0	0 1	0 0
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	0	0	0	0	0	1	4	628	1	0	626	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	1	4	628	1	0	626	0
Added Vol:	0	0	0	0	0	0	0	2	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	1	4	630	1	0	626	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	0	0	0	0	1	5	713	1	0	709	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	1	5	713	1	0	709	0
Critical Gap Module:												
Critical Gp:	7.2	xxxx	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1433	xxxx	714	xxxx	xxxx	709	709	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	105	xxxx	412	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	104	xxxx	412	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.00	xxxx	xxxx	0.00	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.7	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.7			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Rock Quarry - MP 2.68

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.8]

Street Name:	Rock Quarry						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	1	1 0 1	0	1	1 0 0	1	0
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	0	0	0	0	0	4	5	594	4	0	587	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	4	5	594	4	0	587	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	0	0	0	0	0	5	6	716	5	0	707	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	5	6	716	5	0	707	1
Critical Gap Module:												
Critical Gp:	7.2	6.6	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	4.1	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1438	1436	716	xxxx	xxxx	708	708	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	104	126	411	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	102	125	411	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	xxxx	xxxx	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.8	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.8			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Rock Quarry - MP 2.68

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.8]

Street Name:	Rock Quarry						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0 0		0 0 0	0 1		1 0 1	0 1		1 0 0	1 0	
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	0	0	0	0	0	4	5	594	4	0	587	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	4	5	594	4	0	587	1
Added Vol:	0	0	0	0	0	0	0	0	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	4	5	594	6	0	587	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	0	0	0	0	0	5	6	716	7	0	707	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	5	6	716	7	0	707	1
Critical Gap Module:												
Critical Gp:	7.2	6.6	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	4.1	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1438	1436	716	xxxx	xxxx	708	708	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	104	126	411	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	102	125	411	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	xxxx	xxxx	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.8	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.8			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2
Associated Transportation Engineering & Planning, Inc.

Scenario Report

Scenario:	PM Developed
Command:	PM Developed
Volume:	PM Peak
Geometry:	Ordway Rock Products
Impact Fee:	Default Impact Fee
Trip Generation:	PM Peak
Trip Distribution:	Ordway Rock Products
Paths:	Ordway Rock Products
Routes:	Default Route
Configuration:	PM Developed

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Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2
Associated Transportation Engineering & Planning, Inc.

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Vollmer Cr Rd - MP 2.26	D	29.0	0.000	D	29.1	0.000	+ 0.150 D/V
# 2 MP 2.56 - Residential Driveway	E	43.0	0.000	E	44.1	0.000	+ 1.075 D/V
# 3 Rock Quarry - MP 2.68	B	13.8	0.000	B	13.8	0.000	+ 0.000 D/V

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Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Vollmer Cr Rd - MP 2.26

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: D[29.0]

Street Name:	Vollmer Cr. Rd.						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0	0 0	0	0 1! 0	0	0	0 1	0 0	0	0 1	0 0
Volume Module: >> Count Date: 13 Dec 2006 << 3:30-6:30												
Base Vol:	2	0	0	0	0	0	0	647	0	0	626	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	0	0	0	0	0	647	0	0	626	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	2	0	0	0	0	0	0	696	0	0	673	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	0	0	0	0	0	0	696	0	0	673	0
Critical Gap Module:												
Critical Gp:	6.5	xxxx	xxxxx	7.2	6.6	6.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	xxxxx	3.6	4.1	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1369	xxxx	xxxxx	1369	1369	673	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	152	xxxx	xxxxx	117	138	435	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	152	xxxx	xxxxx	117	138	435	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	29.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	D	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		29.0			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		D			*			*			*	

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Vollmer Cr Rd - MP 2.26

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: D[29.1]

Street Name:	Vollmer Cr. Rd.						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0 0 0			0 0 1! 0 0			0 0 1 0 0			0 0 1 0 0		
Volume Module: >> Count Date: 13 Dec 2006 << 3:30-6:30												
Base Vol:	2	0	0	0	0	0	0	647	0	0	626	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	0	0	0	0	0	647	0	0	626	0
Added Vol:	0	0	0	0	0	0	0	2	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	0	0	0	0	0	649	0	0	628	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	2	0	0	0	0	0	0	698	0	0	675	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	0	0	0	0	0	0	698	0	0	675	0
Critical Gap Module:												
Critical Gp:	6.5	xxxx	xxxxx	7.2	6.6	6.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	xxxxx	3.6	4.1	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1373	xxxx	xxxxx	1373	1373	675	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	151	xxxx	xxxxx	116	138	434	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	151	xxxx	xxxxx	116	138	434	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	29.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	D	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		29.1			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		D			*			*			*	

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 MP 2.56 - Residential Driveway

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: E[43.0]

Street Name:	Driveway						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0 1		0 0 0	0 1		0 0 1!	0 0		0 0 1	0 0	
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	9	0	0	0	0	1	4	628	1	0	626	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	0	0	0	0	1	4	628	1	0	626	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	10	0	0	0	0	1	5	711	1	0	709	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	10	0	0	0	0	1	5	711	1	0	709	0
Critical Gap Module:												
Critical Gp:	7.2	xxxx	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1430	xxxx	712	xxxx	xxxx	709	709	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	106	xxxx	413	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	105	xxxx	413	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.10	xxxx	0.00	xxxx	xxxx	0.00	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.3	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	43.0	xxxx	xxxxx	xxxxx	xxxx	13.7	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	E	*	*	*	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	43.0			13.7			xxxxxx			xxxxxx		
ApproachLOS:	E			B			*			*		

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 MP 2.56 - Residential Driveway

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: E[44.1]

Street Name:	Driveway						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0 1		0 0 0	0 1		0 0 1!	0 0		0 0 1	0 0	
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	9	0	0	0	0	1	4	628	1	0	626	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	0	0	0	0	1	4	628	1	0	626	0
Added Vol:	2	0	0	0	0	0	0	2	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	0	0	0	0	1	4	630	1	0	626	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	12	0	0	0	0	1	5	713	1	0	709	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	0	0	0	0	1	5	713	1	0	709	0
Critical Gap Module:												
Critical Gp:	7.2	xxxx	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1433	xxxx	714	xxxx	xxxx	709	709	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	105	xxxx	412	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	104	xxxx	412	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.12	xxxx	0.00	xxxx	xxxx	0.00	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.4	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	44.1	xxxx	xxxxx	xxxxx	xxxx	13.7	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	E	*	*	*	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
ApproachDel:	44.1			13.7			xxxxxx			xxxxxx		
ApproachLOS:	E			B			*			*		

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Rock Quarry - MP 2.68

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.8]

Street Name:	Rock Quarry						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!			0 0 0 0 1			1 0 1 0 1			1 0 0 1 0		
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	0	0	0	0	0	4	5	594	4	0	587	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	4	5	594	4	0	587	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	0	0	0	0	0	5	6	716	5	0	707	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	5	6	716	5	0	707	1
Critical Gap Module:												
Critical Gp:	7.2	6.6	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	4.1	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1438	1436	716	xxxx	xxxx	708	708	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	104	126	411	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	102	125	411	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	xxxx	xxxx	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.8	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.8			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Rock Quarry - MP 2.68

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.8]

Street Name:	Rock Quarry						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	1	1 0 1	0	1	1 0 0	1	0
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	0	0	0	0	0	4	5	594	4	0	587	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	4	5	594	4	0	587	1
Added Vol:	0	0	0	0	0	0	0	0	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	4	5	594	6	0	587	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	0	0	0	0	0	5	6	716	7	0	707	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	5	6	716	7	0	707	1
Critical Gap Module:												
Critical Gp:	7.2	6.6	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	4.1	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1438	1436	716	xxxx	xxxx	708	708	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	104	126	411	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	102	125	411	xxxx	xxxx	415	837	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	xxxx	xxxx	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.8	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.8			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1 2023
Associated Transportation Engineering & Planning, Inc.

Scenario Report

Scenario:	PM Developed
Command:	PM Developed
Volume:	PM Peak
Geometry:	Ordway Rock Products
Impact Fee:	Default Impact Fee
Trip Generation:	PM Peak
Trip Distribution:	Ordway Rock Products
Paths:	Ordway Rock Products
Routes:	Default Route
Configuration:	PM Developed

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1 2023
Associated Transportation Engineering & Planning, Inc.

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Vollmer Cr Rd - MP 2.26	F	55.7	0.000	F	57.4	0.000	+ 1.714 D/V
# 2 MP 2.56 - Residential Driveway	C	16.5	0.000	C	16.5	0.000	+ 0.000 D/V
# 3 Rock Quarry - MP 2.68	C	16.7	0.000	C	16.7	0.000	+ 0.000 D/V

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1 2023
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Vollmer Cr Rd - MP 2.26

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: F[55.7]

Street Name:	Vollmer Cr. Rd.						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0 0		0 0 1!	0 0		0 0	1 0	0	0 0	1 0	0
Volume Module: >> Count Date: 13 Dec 2006 << 3:30-6:30												
Base Vol:	11	0	0	0	0	0	0	647	0	0	626	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	14	0	0	0	0	0	0	835	0	0	808	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	15	0	0	0	0	0	0	897	0	0	868	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	15	0	0	0	0	0	0	897	0	0	868	0
Critical Gap Module:												
Critical Gp:	6.5	xxxx	xxxxx	7.2	6.6	6.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	xxxxx	3.6	4.1	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1766	xxxx	xxxxx	1766	1766	868	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	86	xxxx	xxxxx	61	78	335	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	86	xxxx	xxxxx	61	78	335	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.18	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.6	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	55.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	F	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	55.7			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1 2023
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Vollmer Cr Rd - MP 2.26

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: F[57.4]

Street Name:	Vollmer Cr. Rd.						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0 0		0 0 1!	0 0		0 0 1	0 0		0 0 1	0 0	
Volume Module: >> Count Date: 13 Dec 2006 << 3:30-6:30												
Base Vol:	11	0	0	0	0	0	0	647	0	0	626	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	14	0	0	0	0	0	0	835	0	0	808	0
Added Vol:	2	0	0	0	0	0	0	2	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	0	0	0	0	0	0	837	0	0	808	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	17	0	0	0	0	0	0	900	0	0	868	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	17	0	0	0	0	0	0	900	0	0	868	0
Critical Gap Module:												
Critical Gp:	6.5	xxxx	xxxxx	7.2	6.6	6.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	xxxxx	3.6	4.1	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1768	xxxx	xxxxx	1768	1768	868	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	86	xxxx	xxxxx	61	78	335	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	86	xxxx	xxxxx	61	78	335	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.20	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.7	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	57.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	F	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	57.4			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1 2023
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #2 MP 2.56 - Residential Driveway

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[16.5]

****

Street Name:	Driveway						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0	1	0 0 0	0	1	0 0 1!	0	0	0 0 1	0	0
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	0	0	0	0	0	1	4	628	1	0	626	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	0	0	0	0	0	1	5	810	1	0	808	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	0	0	0	0	1	6	917	1	0	915	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	1	6	917	1	0	915	0
Critical Gap Module:												
Critical Gp:	7.2	xxxx	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1845	xxxx	918	xxxx	xxxx	915	915	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	53	xxxx	313	xxxx	xxxx	314	698	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	53	xxxx	313	xxxx	xxxx	314	698	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.00	xxxx	xxxx	0.00	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	16.5	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			16.5			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

****

Note: Queue reported is the number of cars per lane.

****

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1 2023
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 MP 2.56 - Residential Driveway

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[16.5]

Street Name:	Driveway						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0 1		0 0 0	0 1		0 0 1!	0 0		0 0 1	0 0	
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	0	0	0	0	0	1	4	628	1	0	626	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	0	0	0	0	0	1	5	810	1	0	808	0
Added Vol:	0	0	0	0	0	0	0	2	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	1	5	812	1	0	808	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	0	0	0	0	1	6	920	1	0	915	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	1	6	920	1	0	915	0
Critical Gap Module:												
Critical Gp:	7.2	xxxx	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1847	xxxx	920	xxxx	xxxx	915	915	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	53	xxxx	312	xxxx	xxxx	314	698	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	53	xxxx	312	xxxx	xxxx	314	698	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.00	xxxx	xxxx	0.00	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	16.5	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	B	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx

ApproachDel:	xxxxxx	16.5	xxxxxx	xxxxxx
ApproachLOS:	*	C	*	*

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1 2023
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Rock Quarry - MP 2.68

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[16.7]

Street Name:	Rock Quarry						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	1	1 0 1	0	1	1 0 0	1	0
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	0	0	0	0	0	4	5	594	4	0	587	1
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	0	0	0	0	0	5	6	766	5	0	757	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	0	0	0	0	0	6	8	923	6	0	912	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	6	8	923	6	0	912	2
Critical Gap Module:												
Critical Gp:	7.2	6.6	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	4.1	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1855	1853	923	xxxx	xxxx	913	914	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	53	69	311	xxxx	xxxx	315	699	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	51	68	311	xxxx	xxxx	315	699	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	xxxx	xxxx	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	16.7	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	B	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			16.7			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 1 2023
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Rock Quarry - MP 2.68

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[16.7]

Street Name:	Rock Quarry						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	1	1 0 1	0	1	1 0 0	1	0
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	0	0	0	0	0	4	5	594	4	0	587	1
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	0	0	0	0	0	5	6	766	5	0	757	1
Added Vol:	0	0	0	0	0	0	0	0	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	5	6	766	7	0	757	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	0	0	0	0	0	6	8	923	9	0	912	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	6	8	923	9	0	912	2
Critical Gap Module:												
Critical Gp:	7.2	6.6	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	4.1	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1855	1853	923	xxxx	xxxx	913	914	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	53	69	311	xxxx	xxxx	315	699	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	51	68	311	xxxx	xxxx	315	699	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	xxxx	xxxx	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	16.7	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			16.7			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2 2023
Associated Transportation Engineering & Planning, Inc.

Scenario Report

Scenario:	PM Developed
Command:	PM Developed
Volume:	PM Peak
Geometry:	Ordway Rock Products
Impact Fee:	Default Impact Fee
Trip Generation:	PM Peak
Trip Distribution:	Ordway Rock Products
Paths:	Ordway Rock Products
Routes:	Default Route
Configuration:	PM Developed

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2 2023
Associated Transportation Engineering & Planning, Inc.

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Vollmer Cr Rd - MP 2.26	E	49.2	0.000	E	49.5	0.000	+ 0.287 D/V
# 2 MP 2.56 - Residential Driveway	F	97.3	0.000	F	102.8	0.000	+ 5.485 D/V
# 3 Rock Quarry - MP 2.68	C	16.8	0.000	C	16.8	0.000	+ 0.000 D/V

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2 2023
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Vollmer Cr Rd - MP 2.26

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: E[49.2]

Street Name:	Vollmer Cr. Rd.						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0 0		0 0	1! 0	0	0 0	1 0	0	0 0	1 0	0
Volume Module: >> Count Date: 13 Dec 2006 << 3:30-6:30												
Base Vol:	2	0	0	0	0	0	0	647	0	0	626	0
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	3	0	0	0	0	0	0	841	0	0	814	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	3	0	0	0	0	0	0	904	0	0	875	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	0	0	0	0	0	0	904	0	0	875	0
Critical Gap Module:												
Critical Gp:	6.5	xxxx	xxxxx	7.2	6.6	6.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	xxxxx	3.6	4.1	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1779	xxxx	xxxxx	1779	1779	875	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	84	xxxx	xxxxx	60	77	332	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	84	xxxx	xxxxx	60	77	332	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	49.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	E	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		49.2			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		E			*			*			*	

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2 2023
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #1 Vollmer Cr Rd - MP 2.26

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: E[49.5]

****

Street Name:	Vollmer Cr. Rd.						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0 0 0			0 0 1! 0 0			0 0 1 0 0			0 0 1 0 0		
Volume Module: >> Count Date: 13 Dec 2006 << 3:30-6:30												
Base Vol:	2	0	0	0	0	0	0	647	0	0	626	0
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	3	0	0	0	0	0	0	841	0	0	814	0
Added Vol:	0	0	0	0	0	0	0	2	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	0	0	0	0	0	0	843	0	0	816	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	3	0	0	0	0	0	0	907	0	0	877	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	0	0	0	0	0	0	907	0	0	877	0
Critical Gap Module:												
Critical Gp:	6.5	xxxx	xxxxx	7.2	6.6	6.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	xxxxx	3.6	4.1	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1784	xxxx	xxxxx	1784	1784	877	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	84	xxxx	xxxxx	59	76	331	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	84	xxxx	xxxxx	59	76	331	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	49.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	E	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		49.5			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		E			*			*			*	

****

Note: Queue reported is the number of cars per lane.

****

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2 2023
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #2 MP 2.56 - Residential Driveway

****

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: F[97.3]

****

Street Name:	Driveway						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0	1	0 0	0	1	0 0	1! 0	0	0 0	1 0	0
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	9	0	0	0	0	1	4	628	1	0	626	0
Growth Adj:	1.30 1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	12	0	0	0	0	1	5	816	1	0	814	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88 0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	13	0	0	0	0	1	6	925	1	0	922	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	13	0	0	0	0	1	6	925	1	0	922	0
Critical Gap Module:												
Critical Gp:	7.2 xxxx		6.3	xxxxx xxxx		6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6 xxxx		3.4	xxxxx xxxx		3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1859 xxxx		925	xxxx xxxx		922	922	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	52 xxxx		310	xxxx xxxx		311	694	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	52 xxxx		310	xxxx xxxx		311	694	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.26 xxxx	0.00		xxxx xxxx	0.00		0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.9 xxxx	xxxxx		xxxx xxxx		0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	97.3 xxxx	xxxxx		xxxxx xxxx		16.6	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	F	*		*	*	C	B	*		*	*	*
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT	
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*		*	*		*	*		*	*	*
ApproachDel:	97.3			16.6			xxxxxx			xxxxxx		
ApproachLOS:	F			C			*			*		

****

Note: Queue reported is the number of cars per lane.

****

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2 2023
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #2 MP 2.56 - Residential Driveway

****

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: F[102.8]

****

Street Name:	Driveway						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0	1	0 0	0	1	0 0	1! 0	0	0 0	1 0	0
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	9	0	0	0	0	1	4	628	1	0	626	0
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	12	0	0	0	0	1	5	816	1	0	814	0
Added Vol:	2	0	0	0	0	0	0	2	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	0	0	0	0	1	5	818	1	0	814	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	16	0	0	0	0	1	6	927	1	0	922	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	16	0	0	0	0	1	6	927	1	0	922	0
Critical Gap Module:												
Critical Gp:	7.2	xxxx	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	xxxx	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1862	xxxx	928	xxxx	xxxx	922	922	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	52	xxxx	309	xxxx	xxxx	311	694	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	51	xxxx	309	xxxx	xxxx	311	694	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.30	xxxx	0.00	xxxx	xxxx	0.00	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.1	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	102.8	xxxx	xxxxx	xxxxx	xxxx	16.6	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	F	*	*	*	*	C	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel:	102.8	16.6	xxxxxx	xxxxxx
ApproachLOS:	F	C	*	*

****

Note: Queue reported is the number of cars per lane.

****

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2 2023
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Rock Quarry - MP 2.68

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[16.8]

Street Name:	Rock Quarry						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!		0 0	0 0	0 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	0	0	0	0	0	4	5	594	4	0	587	1
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	0	0	0	0	0	5	7	772	5	0	763	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	0	0	0	0	0	6	8	930	6	0	919	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	6	8	930	6	0	919	2
Critical Gap Module:												
Critical Gp:	7.2	6.6	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	4.1	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1869	1867	930	xxxx	xxxx	920	921	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	51	68	308	xxxx	xxxx	312	694	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	50	67	308	xxxx	xxxx	312	694	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	xxxx	xxxx	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	16.8	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	B	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			16.8			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

Ordway Rock Products TIA
PM Developed Peak Hour Traffic Alternative 2 2023
Associated Transportation Engineering & Planning, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Rock Quarry ~ MP 2.68

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[16.8]

Street Name:	Rock Quarry						Hwy 26					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	1	1 0 1	0	1	1 0 0	1	0
Volume Module: >> Count Date: 12 Dec 2006 << 3:30-6:30												
Base Vol:	0	0	0	0	0	4	5	594	4	0	587	1
Growth Adj:	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Initial Bse:	0	0	0	0	0	5	7	772	5	0	763	1
Added Vol:	0	0	0	0	0	0	0	0	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	5	7	772	7	0	763	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	0	0	0	0	0	6	8	930	9	0	919	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	6	8	930	9	0	919	2
Critical Gap Module:												
Critical Gp:	7.2	6.6	6.3	xxxxx	xxxx	6.3	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.6	4.1	3.4	xxxxx	xxxx	3.4	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1869	1867	930	xxxx	xxxx	920	921	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	51	68	308	xxxx	xxxx	312	694	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	50	67	308	xxxx	xxxx	312	694	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	xxxx	xxxx	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	16.8	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			16.8			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

TRAFSTATS
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Salem, OR 97309
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Fax: (503) 526-0628

Intersection Turning Movement
Summary Report

Location HIGHWAY 26 AT MP 2.68-ROCK QUARRY DRIVEWAY
Date 12/12/2006
Day of Week Tuesday
Time Begin 15:30
Reviewed By: JW

	Eastbound			Westbound			Northbound			Southbound			
Time Period	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
15:30 - 15:45	2	40	1	0	49	0	0	0	0	0	0	0	92
15:45 - 16:00	2	34	0	0	48	0	0	0	3	1	0	0	88
16:00 - 16:15	2	39	0	0	30	0	0	0	1	0	0	0	72
16:15 - 16:30	0	40	2	0	30	0	0	0	2	2	0	0	76
16:30 - 16:45	0	45	3	1	48	0	0	0	3	1	0	0	101
16:45 - 17:00	0	45	1	0	29	0	0	0	0	1	0	0	76
17:00 - 17:15	0	30	0	0	41	0	0	0	0	0	0	0	71
17:15 - 17:30	0	33	1	0	29	0	0	0	0	1	0	0	64
17:30 - 17:45	0	27	1	0	27	0	0	0	0	2	0	0	57
17:45 - 18:00	0	24	0	0	33	0	0	0	0	0	0	0	57
18:00 - 18:15	0	23	4	0	20	0	0	0	0	1	0	0	48
18:15 - 18:30	0	14	1	0	37	0	0	0	0	3	0	0	55
Movement Totals	6	394	14	1	421	0	0	0	9	12	0	0	857
Enter Totals	414			422			9			12			
Exit Totals	403			433			14			7			

Three-Hour Totals

Light Trucks	0	8	1	1	9	0	0	0	1	1	0	0	21
Medium Trucks	5	3	0	0	6	0	0	0	5	0	0	0	19
Heavy Trucks	0	5	0	0	4	0	0	0	0	0	0	0	9
% Trucks	83.3%	4.1%	7.1%	100.0%	4.5%	NA	NA	NA	66.7%	8.3%	NA	NA	5.7%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0

	South	North	East	West	
Pedestrians	0	0	0	0	0

Peak Hour Information

Peak Hour 15:45 16:45

	Eastbound			Westbound			Northbound			Southbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
Movement Total	4	158	5	1	156	0	0	0	9	4	0	0	337
Peak Hour Factor	0.50	0.88	0.42	0.25	0.81	NA	NA	NA	0.75	0.50	NA	NA	0.83

Enter Totals	167	157	9	4
Peak Hour Factor	0.87	0.80	0.75	0.50

Exit Totals	158	169	6	4
Peak Hour Factor	0.88	0.81	0.38	0.50

Light Trucks	0	5	0	1	3	0	0	0	1	1	0	0	11
Medium Trucks	4	2	0	0	2	0	0	0	5	0	0	0	13
Heavy Trucks	0	1	0	0	1	0	0	0	0	0	0	0	2
% Trucks	100.0%	5.1%	0.0%	100.0%	3.8%	NA	NA	NA	66.7%	25.0%	NA	NA	7.7%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0

	South	North	East	West	
Pedestrians	0	0	0	0	0

TRAFSTATS
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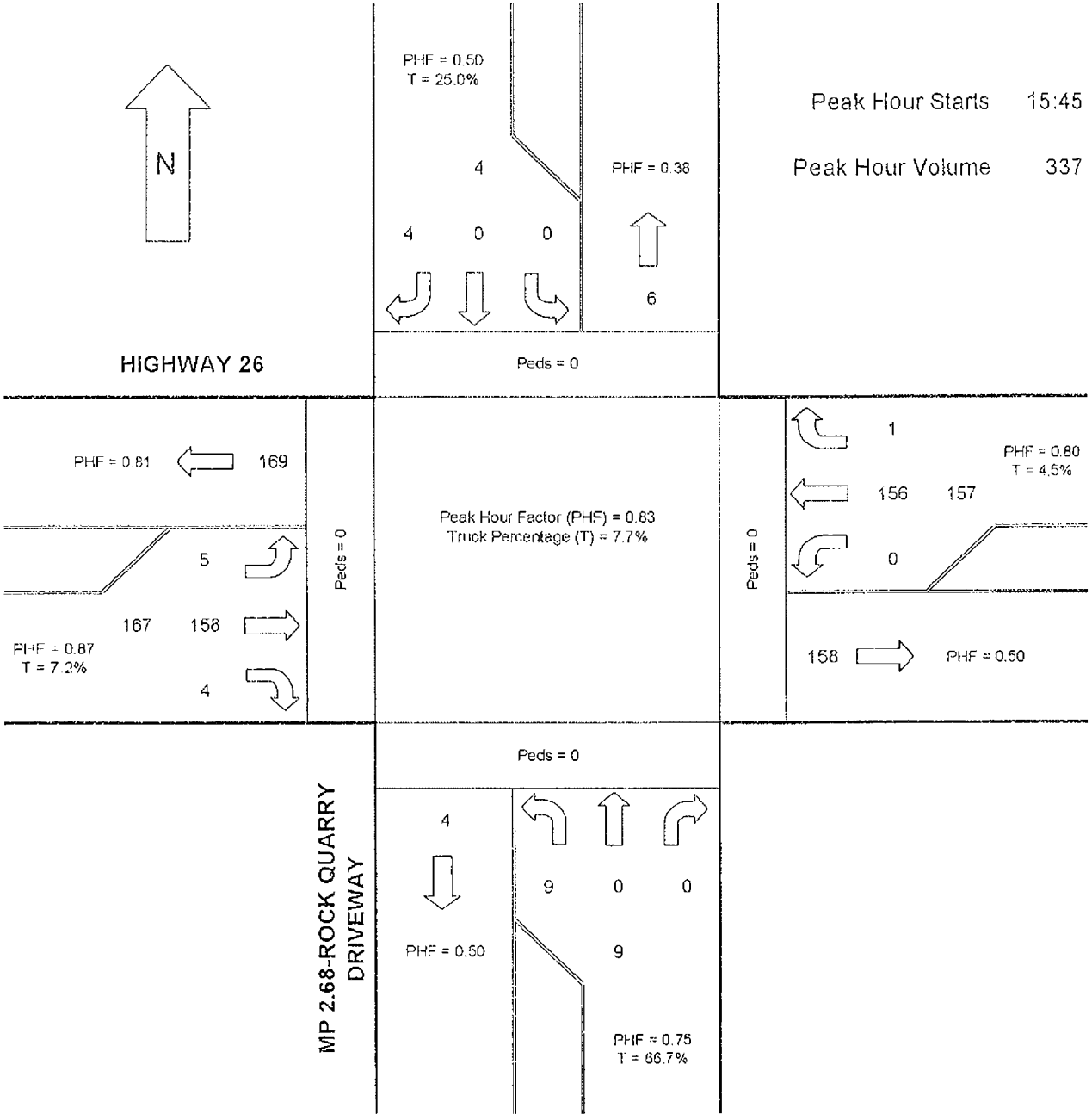
Intersection Turning Movement

Peak Hour Diagram

Location HIGHWAY 26 AT MP 2.68-ROCK QUARRY DRIVEWAY
Date 12/12/2006
Day of Week Tuesday
Time Begin 15:30
Reviewed By: JW



TRAFSTATS
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Intersection Turning Movement
Summary Report

Location HIGHWAY 26 AT APPX MP 2.26 (VOLLMER CR RD)
Date 12/13/2006
Day of Week Wednesday
Time Begin 6:00
Reviewed By: BV

	Eastbound			Westbound			Northbound			Southbound			
Time Period	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
6:00 - 6:15	1	14	0	0	5	0	0	0	0	0	0	0	20
6:15 - 6:30	0	19	0	0	11	0	0	0	0	0	0	0	30
6:30 - 6:45	0	29	0	0	12	0	0	0	0	0	0	0	41
6:45 - 7:00	0	13	0	0	27	0	0	0	0	0	0	0	40
7:00 - 7:15	1	7	0	0	36	0	0	0	1	0	0	0	45
7:15 - 7:30	0	17	0	0	30	0	0	0	0	0	0	0	47
7:30 - 7:45	0	21	0	0	42	0	0	0	0	0	0	0	63
7:45 - 8:00	0	25	0	0	26	0	0	0	0	0	0	0	51
8:00 - 8:15	0	18	0	0	37	0	0	0	1	0	0	0	56
8:15 - 8:30	0	38	0	0	29	0	0	0	0	0	0	0	67
8:30 - 8:45	1	31	0	0	21	0	0	0	0	0	0	0	53
8:45 - 9:00	2	24	0	0	30	0	0	0	0	0	0	0	56
Movement Totals	5	256	0	0	306	0	0	0	2	0	0	0	569
Enter Totals		261			306			2			0		
Exit Totals		258			306			0			5		

Three-Hour Totals

Light Trucks	0	9	0	0	18	0	0	0	0	0	0	0	27
Medium Trucks	3	11	0	0	15	0	0	0	0	0	0	0	29
Heavy Trucks	1	13	0	0	13	0	0	0	2	0	0	0	29
% Trucks	80.0%	12.9%	NA	NA	15.0%	NA	NA	NA	100.0%	NA	NA	NA	14.9%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0

	South	North	East	West	
Pedestrians	0	0	0	0	0

Peak Hour Information

Peak Hour 7:30 8:30

	Eastbound			Westbound			Northbound			Southbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
Movement Total	0	102	0	0	134	0	0	0	1	0	0	0	237
Peak Hour Factor	NA	0.67	NA	NA	0.80	NA	NA	NA	0.25	NA	NA	NA	0.88

Enter Totals	102	134	1	0
Peak Hour Factor	0.67	0.80	0.25	NA

Exit Totals	102	135	0	0
Peak Hour Factor	0.67	0.80	NA	NA

Light Trucks	0	3	0	0	9	0	0	0	0	0	0	0	12
Medium Trucks	0	5	0	0	6	0	0	0	0	0	0	0	11
Heavy Trucks	0	7	0	0	3	0	0	0	1	0	0	0	11
% Trucks	NA	14.7%	NA	NA	13.4%	NA	NA	NA	100.0%	NA	NA	NA	14.3%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0

	South	North	East	West	
Pedestrians	0	0	0	0	0

TRAFSTATS
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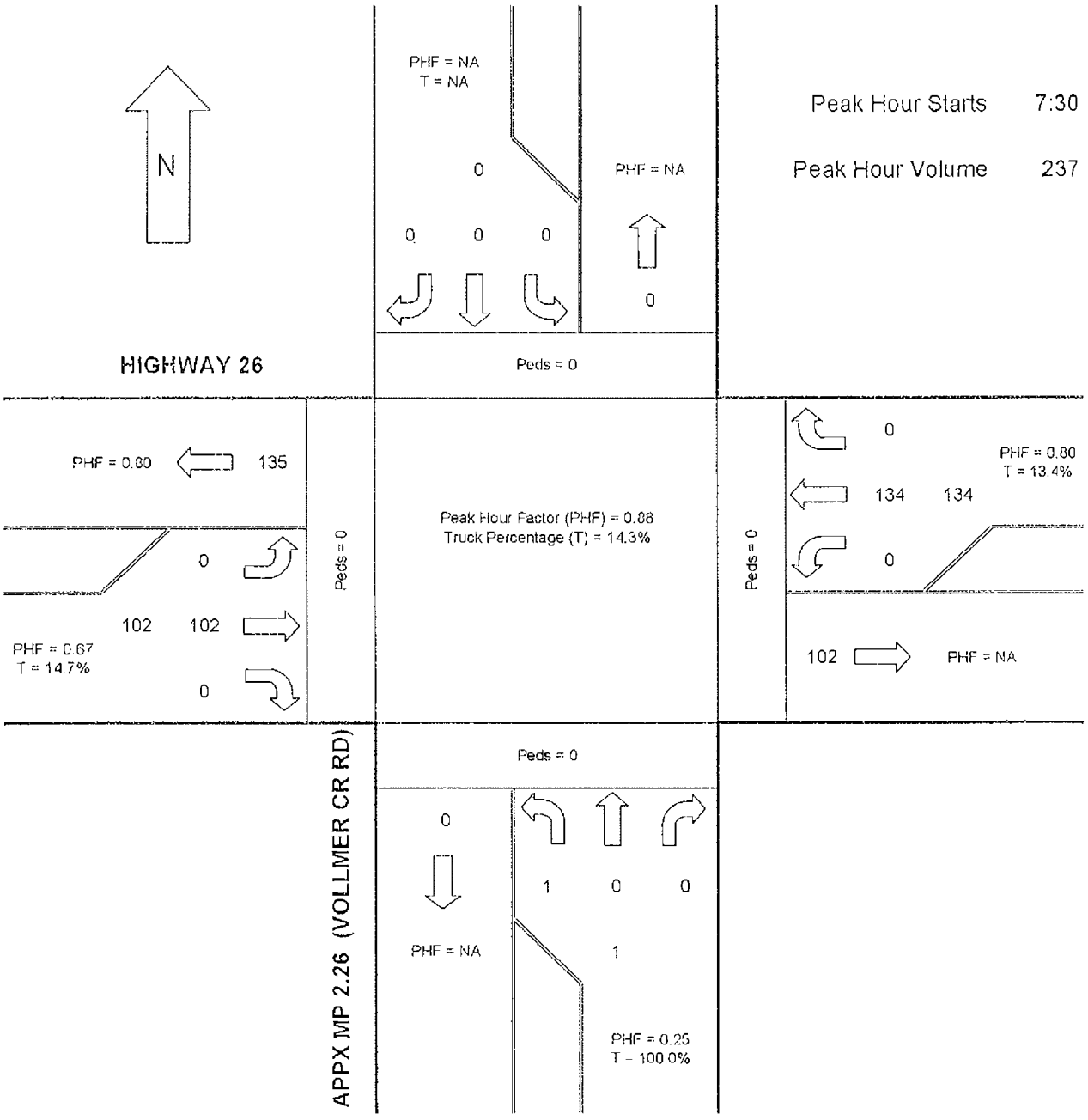
Intersection Turning Movement

Peak Hour Diagram

Location HIGHWAY 26 AT APPX MP 2.26 (VOLLMER CR RD)
Date 12/13/2006
Day of Week Wednesday
Time Begin 6:00
Reviewed By: BV



Peak Hour Starts	7:30
Peak Hour Volume	237

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Fax: (503) 526-0628

Intersection Turning Movement

Summary Report

Location HIGHWAY 26 AT APPX MP 2.26 (VOLLMER CR RD)
Date 12/12/2006
Day of Week Tuesday
Time Begin 15:30
Reviewed By: BV

	Eastbound			Westbound			Northbound			Southbound			
Time Period	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
15:30 - 15:45	0	44	0	0	47	0	0	0	0	0	0	0	91
15:45 - 16:00	0	37	0	0	53	0	0	0	1	0	0	0	91
16:00 - 16:15	0	45	0	0	29	0	0	0	0	0	0	0	74
16:15 - 16:30	0	43	0	0	37	0	0	0	1	0	0	0	81
16:30 - 16:45	0	43	0	0	43	0	0	0	0	0	0	0	86
16:45 - 17:00	0	46	0	0	39	0	0	0	0	0	0	0	85
17:00 - 17:15	0	33	0	0	43	0	0	0	0	0	0	0	76
17:15 - 17:30	0	35	0	0	26	0	0	0	0	0	0	0	61
17:30 - 17:45	0	25	0	0	35	0	0	0	0	0	0	0	60
17:45 - 18:00	0	24	0	0	30	0	0	0	0	0	0	0	54
18:00 - 18:15	0	26	0	0	25	0	0	0	0	0	0	0	51
18:15 - 18:30	0	16	0	0	34	0	0	0	0	0	0	0	50
Movement Totals	0	417	0	0	441	0	0	0	2	0	0	0	860
Enter Totals		417			441			2			0		
Exit Totals		419			441			0			0		

Three-Hour Totals

Light Trucks	0	17	0	0	11	0	0	0	0	0	0	0	28
Medium Trucks	0	10	0	0	12	0	0	0	0	0	0	0	22
Heavy Trucks	0	6	0	0	6	0	0	0	0	0	0	0	12
% Trucks	NA	7.9%	NA	NA	6.6%	NA	NA	NA	0.0%	NA	NA	NA	7.2%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0

	South	North	East	West	
Pedestrians	0	0	0	0	0

Peak Hour Information

Peak Hour 15:30 16:30

	Eastbound			Westbound			Northbound			Southbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
Movement Total	0	169	0	0	166	0	0	0	2	0	0	0	337
Peak Hour Factor	NA	0.94	NA	NA	0.78	NA	NA	NA	0.50	NA	NA	NA	0.93

Enter Totals	169	166	2	0
Peak Hour Factor	0.94	0.78	0.50	NA
Exit Totals	169	168	0	0
Peak Hour Factor	0.94	0.78	NA	NA

Light Trucks	0	8	0	0	1	0	0	0	0	0	0	0	9
Medium Trucks	0	8	0	0	7	0	0	0	0	0	0	0	15
Heavy Trucks	0	1	0	0	1	0	0	0	0	0	0	0	2
% Trucks	NA	10.1%	NA	NA	5.4%	NA	NA	NA	0.0%	NA	NA	NA	7.7%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0

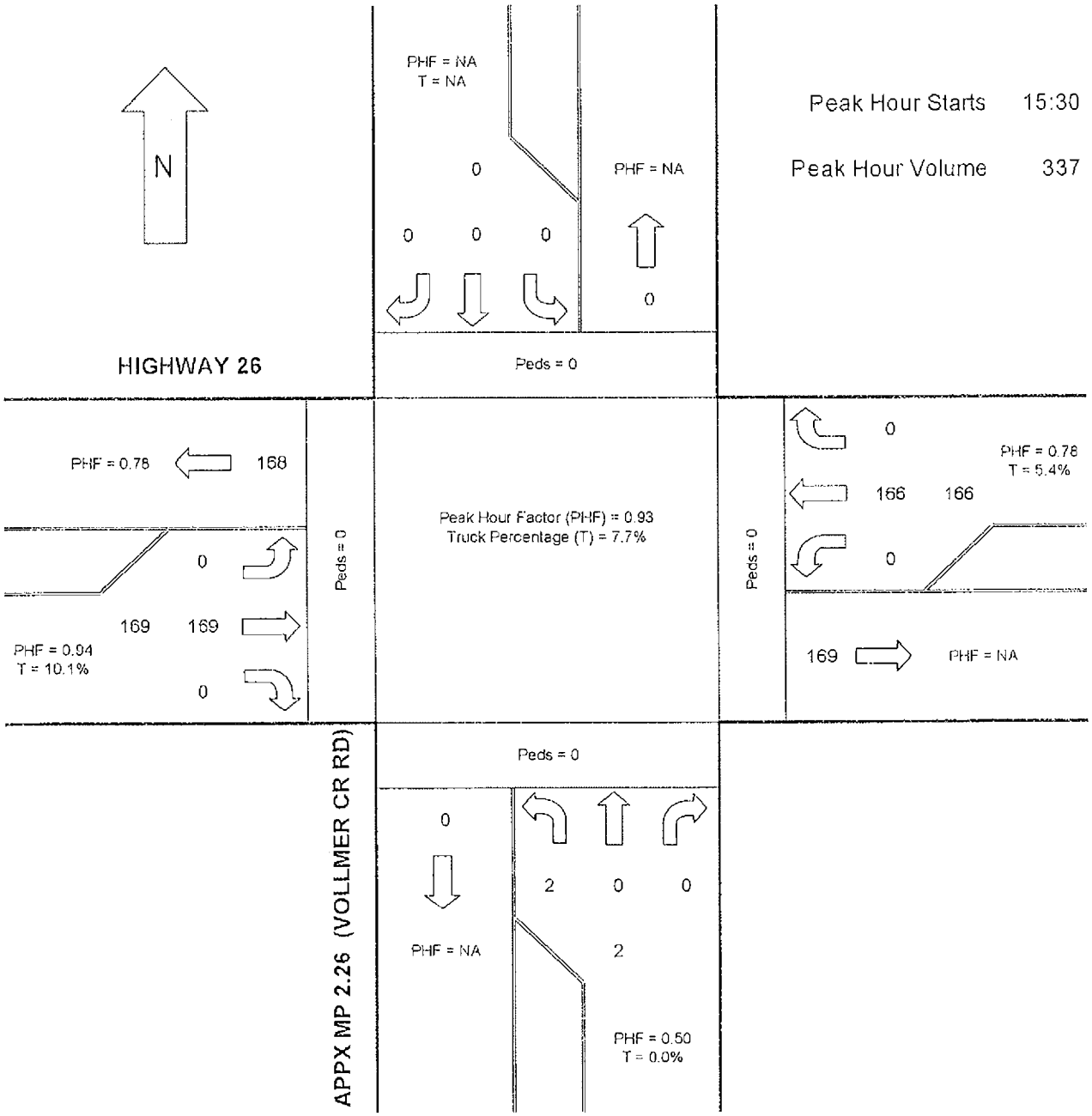
	South	North	East	West	
Pedestrians	0	0	0	0	0

TRAFSTATS
PO Box 13499
Salem, OR 97309
Tel: (503) 540-2942
Fax: (503) 585-8620

Intersection Turning Movement

Peak Hour Diagram

Location HIGHWAY 26 AT APPX MP 2.26 (VOLLMER CR RD)
Date 12/12/2006
Day of Week Tuesday
Time Begin 15:30
Reviewed By: BV



Peak Hour Starts 15:30

Peak Hour Volume 337

TRAFSTATS
PO Box 13699
Salem, OR 97309
Tel: (503) 646-2942
Fax: (503) 576-0628

Intersection Turning Movement
Summary Report

Location HIGHWAY 26 AT APPX MP 2.26 (VOLLMER CR RD)
Date 12/12/2006
Day of Week Tuesday
Time Begin 15:30
Reviewed By: BV

	Eastbound			Westbound			Northbound			Southbound			
Time Period	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
15:30 - 15:45	0	44	0	0	47	0	0	0	0	0	0	0	91
15:45 - 16:00	0	37	0	0	53	0	0	0	1	0	0	0	91
16:00 - 16:15	0	45	0	0	29	0	0	0	0	0	0	0	74
16:15 - 16:30	0	43	0	0	37	0	0	0	1	0	0	0	81
16:30 - 16:45	0	43	0	0	43	0	0	0	0	0	0	0	86
16:45 - 17:00	0	46	0	0	39	0	0	0	0	0	0	0	85
17:00 - 17:15	0	33	0	0	43	0	0	0	0	0	0	0	76
17:15 - 17:30	0	35	0	0	26	0	0	0	0	0	0	0	61
17:30 - 17:45	0	25	0	0	35	0	0	0	0	0	0	0	60
17:45 - 18:00	0	24	0	0	30	0	0	0	0	0	0	0	54
18:00 - 18:15	0	26	0	0	25	0	0	0	0	0	0	0	51
18:15 - 18:30	0	16	0	0	34	0	0	0	0	0	0	0	50
Movement Totals	0	417	0	0	441	0	0	0	2	0	0	0	860
Enter Totals		417			441			2			0		
Exit Totals		419			441			0			0		

Three-Hour Totals

Light Trucks	0	17	0	0	11	0	0	0	0	0	0	0	28
Medium Trucks	0	10	0	0	12	0	0	0	0	0	0	0	22
Heavy Trucks	0	6	0	0	6	0	0	0	0	0	0	0	12
% Trucks	NA	7.9%	NA	NA	6.6%	NA	NA	NA	0.0%	NA	NA	NA	7.2%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0

	South	North	East	West	
Pedestrians	0	0	0	0	0

Peak Hour Information

Peak Hour 15:30 16:30

	Eastbound			Westbound			Northbound			Southbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
Movement Total	0	169	0	0	166	0	0	0	2	0	0	0	337
Peak Hour Factor	NA	0.94	NA	NA	0.78	NA	NA	NA	0.50	NA	NA	NA	0.93

Enter Totals	169	166	2	0
Peak Hour Factor	0.94	0.78	0.50	NA

Exit Totals	169	168	0	0
Peak Hour Factor	0.94	0.78	NA	NA

Light Trucks	0	8	0	0	1	0	0	0	0	0	0	0	9
Medium Trucks	0	8	0	0	7	0	0	0	0	0	0	0	15
Heavy Trucks	0	1	0	0	1	0	0	0	0	0	0	0	2
% Trucks	NA	10.1%	NA	NA	5.4%	NA	NA	NA	0.0%	NA	NA	NA	7.7%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0

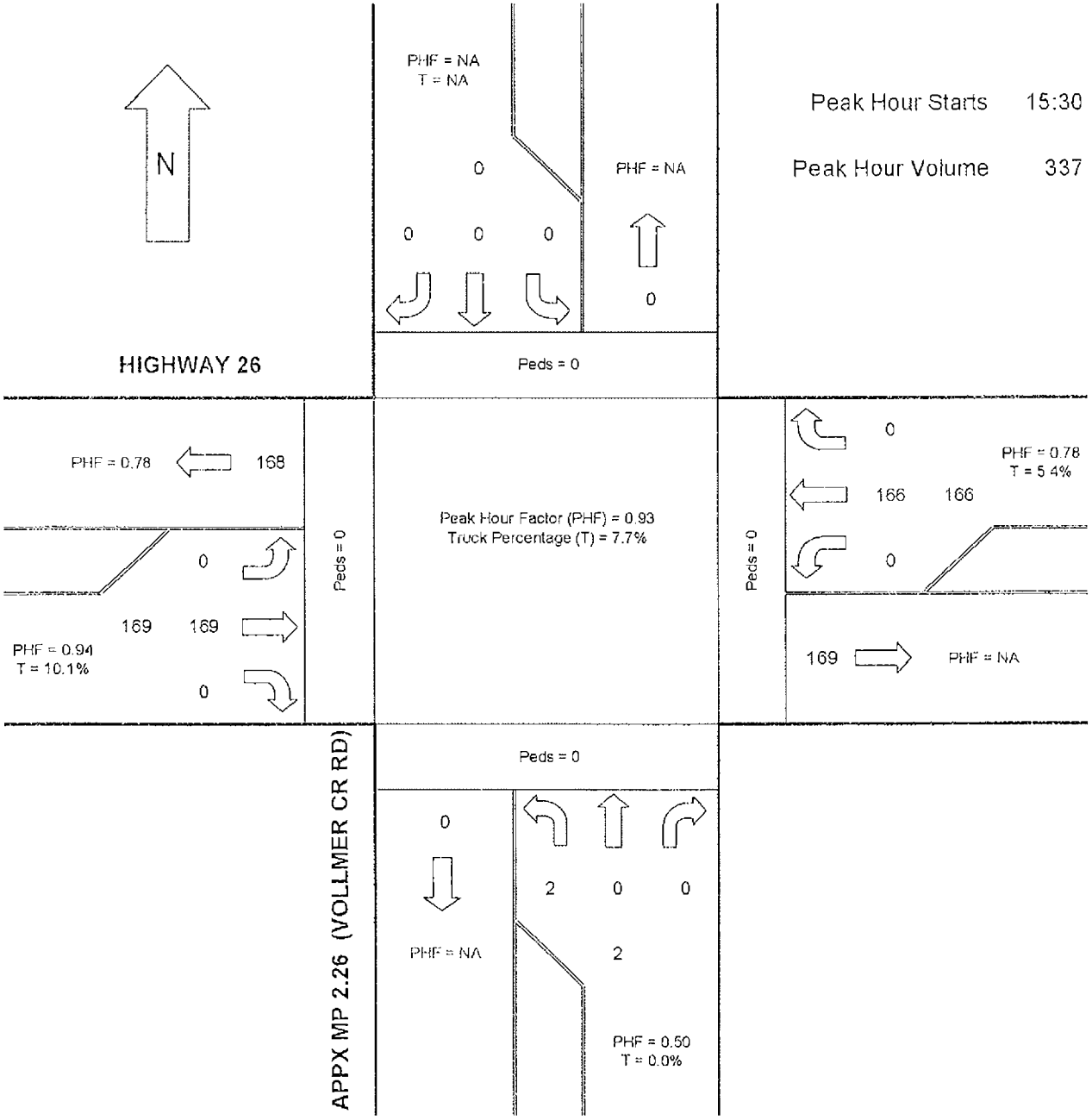
	South	North	East	West	
Pedestrians	0	0	0	0	0

TRAFSTATS
PO Box 13699
Salem, OR 97309
Tel: (503) 646-2342
Fax: (503) 526-0525

Intersection Turning Movement

Peak Hour Diagram

Location HIGHWAY 26 AT APPX MP 2.26 (VOLLMER CR RD)
Date 12/12/2006
Day of Week Tuesday
Time Begin 15:30
Reviewed By: BV



Peak Hour Starts 15:30

Peak Hour Volume 337

TRAFSTATS
PO Box 13699
Salem, OR 97309
Tel: (503) 646-2942
Fax: (503) 526-0620

Intersection Turning Movement
Summary Report

Location HIGHWAY 26 AT MP 2.56-RESIDENTIAL DRIVEWAYS
Date 12/13/2006
Day of Week Wednesday
Time Begin 6:00
Reviewed By: CR

Time Period	Eastbound			Westbound			Northbound			Southbound			Totals
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
6:00 - 6:15	0	14	0	0	5	0	0	0	0	0	0	0	19
6:15 - 6:30	0	19	0	0	12	0	0	0	0	0	0	0	31
6:30 - 6:45	0	29	0	0	11	0	0	0	0	0	0	0	40
6:45 - 7:00	0	13	0	0	26	0	0	0	1	0	0	0	40
7:00 - 7:15	0	7	0	0	35	0	0	0	0	0	0	0	42
7:15 - 7:30	0	17	0	0	31	0	0	0	0	0	0	0	48
7:30 - 7:45	0	21	0	0	40	0	0	0	0	0	0	0	61
7:45 - 8:00	0	25	0	0	25	0	0	0	0	0	0	0	50
8:00 - 8:15	0	23	0	0	40	0	0	0	0	0	0	0	63
8:15 - 8:30	0	38	0	0	28	0	0	0	0	0	0	0	66
8:30 - 8:45	0	34	0	0	21	0	0	0	0	0	0	0	55
8:45 - 9:00	0	26	0	0	33	0	0	0	0	0	0	0	59
Movement Totals	0	266	0	0	307	0	0	0	1	0	0	0	574
Enter Totals		266			307			1			0		
Exit Totals		267			307			0			0		

Three-Hour Totals

Light Trucks	0	12	0	0	22	0	0	0	1	0	0	0	35
Medium Trucks	0	11	0	0	9	0	0	0	0	0	0	0	20
Heavy Trucks	0	9	0	0	14	0	0	0	0	0	0	0	23
% Trucks	NA	12.0%	NA	NA	14.7%	NA	NA	NA	100.0%	NA	NA	NA	13.6%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	1	0	0	0	0	0	0	0	0	0	0	1

	South	North	East	West	
Pedestrians	0	0	0	0	0

Peak Hour Information

Peak Hour 8:00 9:00

	Eastbound			Westbound			Northbound			Southbound			Totals
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Movement Total	0	121	0	0	122	0	0	0	0	0	0	0	243
Peak Hour Factor	NA	0.80	NA	NA	0.76	NA	NA	NA	NA	NA	NA	NA	0.92

Enter Totals	121	122	0	0
Peak Hour Factor	0.80	0.76	NA	NA

Exit Totals	121	122	0	0
Peak Hour Factor	0.80	0.76	NA	NA

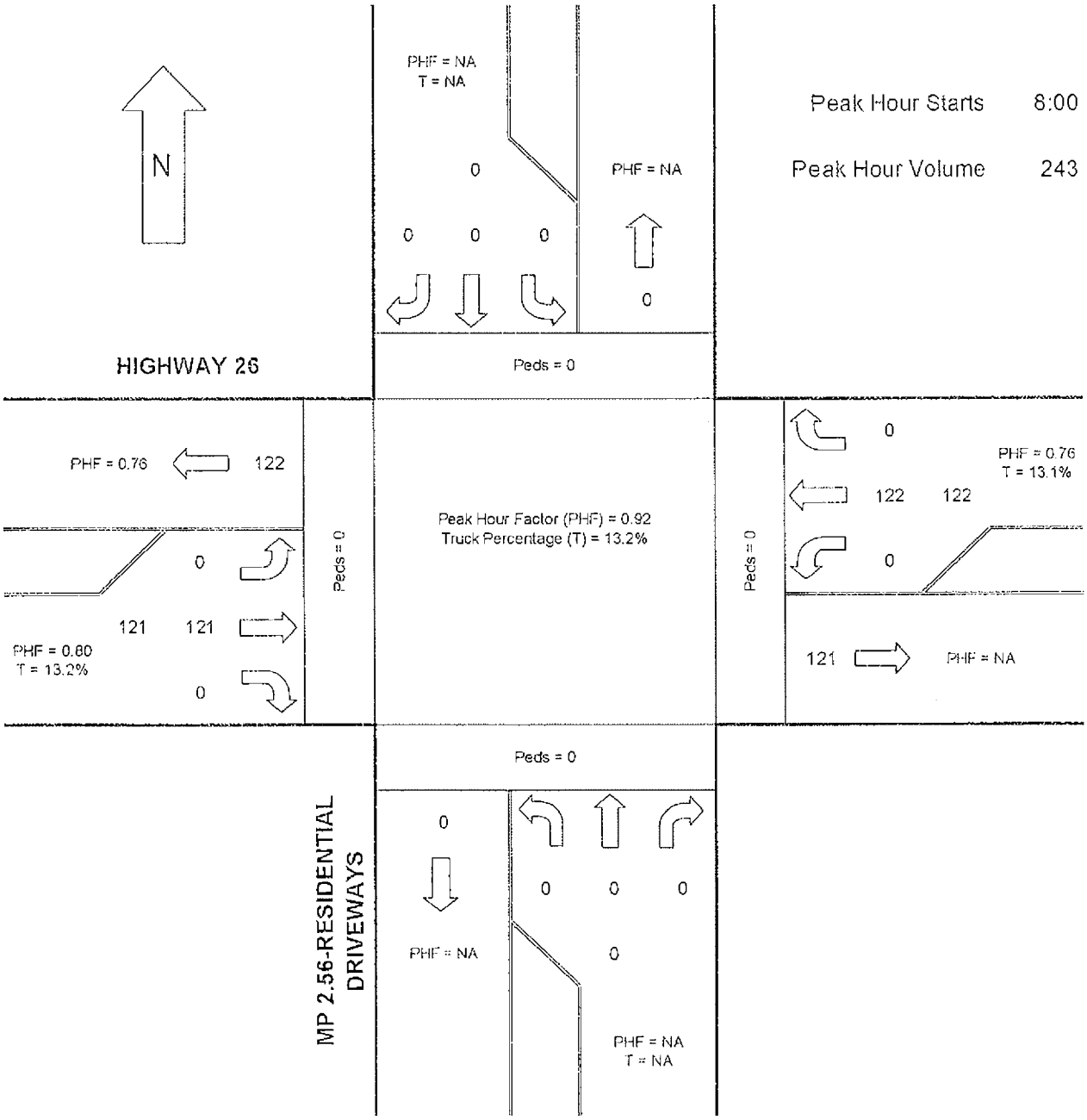
Light Trucks	0	6	0	0	5	0	0	0	0	0	0	0	11
Medium Trucks	0	3	0	0	7	0	0	0	0	0	0	0	10
Heavy Trucks	0	7	0	0	4	0	0	0	0	0	0	0	11
% Trucks	NA	13.2%	NA	NA	13.1%	NA	NA	NA	NA	NA	NA	NA	13.2%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	1	0	0	0	0	0	0	0	0	0	0	1

	South	North	East	West	
Pedestrians	0	0	0	0	0

TRAFSTATS
PO Box: 13699
Salem, OR 97309
Tel: (503) 696-2542
Fax: (503) 526-0523

Intersection Turning Movement

Location HIGHWAY 26 AT MP 2.56-RESIDENTIAL DRIVEWAYS
Date 12/13/2006
Day of Week Wednesday
Time Begin 6:00
Reviewed By: CR



Peak Hour Starts	8:00
Peak Hour Volume	243

TRAFSTATS
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Salem, OR 97309
Tel: (503) 585-2942
Fax: (503) 526-0628

Intersection Turning Movement
Summary Report

Location HIGHWAY 26 AT MP 2.56-RESIDENTIAL DRIVEWAYS
Date 12/12/2006
Day of Week Tuesday
Time Begin 15:30
Reviewed By: CR

	Eastbound			Westbound			Northbound			Southbound			
Time Period	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
15:30 - 15:45	0	42	0	0	40	0	0	0	0	0	0	0	82
15:45 - 16:00	0	33	2	0	52	0	0	0	0	0	0	0	87
16:00 - 16:15	0	43	2	0	29	0	0	0	0	0	0	0	74
16:15 - 16:30	1	39	0	0	37	0	0	0	0	0	0	0	77
16:30 - 16:45	0	43	0	0	48	0	0	0	0	1	0	0	92
16:45 - 17:00	0	43	0	0	33	0	0	0	0	1	0	1	78
17:00 - 17:15	0	34	0	0	43	0	0	0	0	0	0	0	77
17:15 - 17:30	0	34	0	0	29	0	0	0	0	0	0	0	63
17:30 - 17:45	0	25	0	0	29	0	0	0	0	0	0	0	54
17:45 - 18:00	0	26	0	0	31	0	0	0	0	0	0	0	57
18:00 - 18:15	0	26	0	0	25	0	0	0	0	1	0	0	52
18:15 - 18:30	0	16	0	0	33	0	0	0	0	0	0	0	49
Movement Totals	1	404	4	0	429	0	0	0	0	3	0	1	842
Enter Totals	409			429			0			4			
Exit Totals	405			432			4			1			

Three-Hour Totals

Light Trucks	0	13	0	0	15	0	0	0	0	0	0	0	28
Medium Trucks	0	7	0	0	8	0	0	0	0	0	0	0	15
Heavy Trucks	0	4	0	0	1	0	0	0	0	0	0	0	5
% Trucks	0.0%	5.9%	0.0%	NA	5.6%	NA	NA	NA	NA	0.0%	NA	0.0%	5.7%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0

	South	North	East	West	
Pedestrians	0	0	0	0	0

Peak Hour Information

Peak Hour 15:45 16:45

	Eastbound			Westbound			Northbound			Southbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
Movement Total	1	158	4	0	166	0	0	0	0	1	0	0	330
Peak Hour Factor	0.25	0.92	0.50	NA	0.80	NA	NA	NA	NA	0.25	NA	NA	0.90
Enter Totals	163			166			0			1			
Peak Hour Factor	0.91			0.80			NA			0.25			
Exit Totals	158			167			4			1			
Peak Hour Factor	0.92			0.80			0.50			0.25			

Light Trucks	0	8	0	0	6	0	0	0	0	0	0	0	14
Medium Trucks	0	4	0	0	6	0	0	0	0	0	0	0	10
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0.0%	7.6%	0.0%	NA	7.2%	NA	NA	NA	NA	0.0%	NA	NA	7.3%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0

	South	North	East	West	
Pedestrians	0	0	0	0	0

TRAFSTATS
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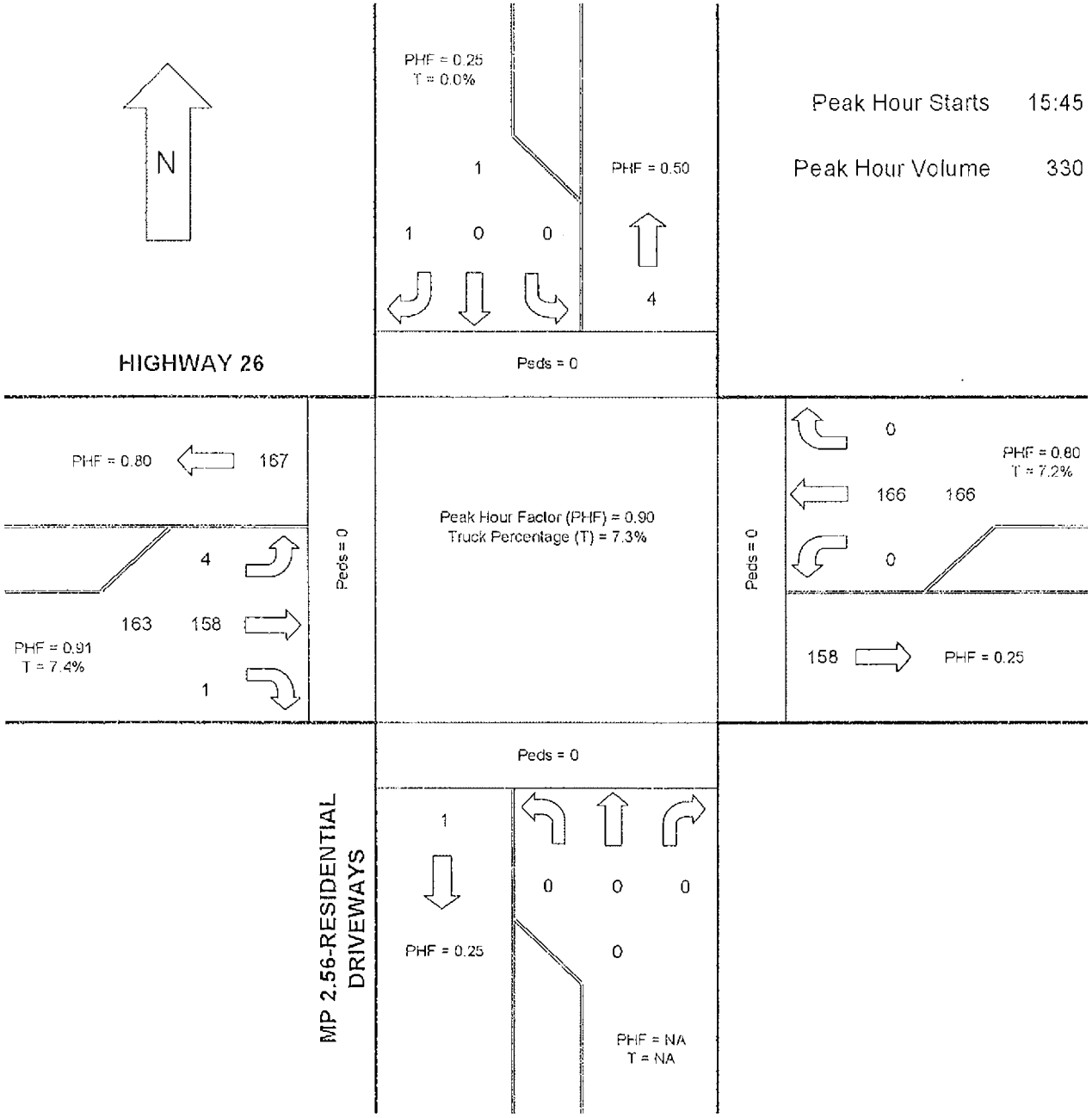
Salem, OR 97309 Fax: (503) 370-8678

Intersection Turning Movement
Peak Hour Diagram

Location HIGHWAY 26 AT MP 2.56-RESIDENTIAL DRIVEWAYS
Date 12/12/2006
Day of Week Tuesday
Time Begin 15:30
Reviewed By: CR



Peak Hour Starts 15:45

Peak Hour Volume 330

TRAFSTATS
PO Box 13699
Salem, OR 97309
Tel: (503) 646-2942
Fax: (503) 526-0628

Intersection Turning Movement

Summary Report

Location HIGHWAY 26 AT MP 2.68-ROCK QUARRY DRIVEWAY
Date 12/13/2006
Day of Week Wednesday
Time Begin 6:00
Reviewed By: JW

	Eastbound			Westbound			Northbound			Southbound			
Time Period	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
6:00 - 6:15	0	14	0	0	5	0	0	0	0	0	0	0	19
6:15 - 6:30	0	19	0	0	10	0	0	0	0	3	0	0	32
6:30 - 6:45	1	29	0	0	13	0	0	0	0	0	0	0	43
6:45 - 7:00	2	10	0	0	29	0	0	0	0	2	0	0	43
7:00 - 7:15	0	7	0	0	32	0	0	0	0	3	0	0	42
7:15 - 7:30	0	23	0	0	25	0	0	0	0	1	0	0	49
7:30 - 7:45	0	16	1	0	44	0	0	0	0	2	0	0	63
7:45 - 8:00	4	22	1	0	27	0	0	0	0	0	0	0	54
8:00 - 8:15	0	21	0	0	29	0	0	0	3	3	0	0	56
8:15 - 8:30	0	36	0	0	27	0	0	0	1	1	0	0	65
8:30 - 8:45	1	33	1	0	25	0	0	0	0	1	0	0	61
8:45 - 9:00	3	19	0	0	18	0	0	0	2	3	0	0	45
Movement Totals	11	249	3	0	284	0	0	0	6	19	0	0	572
Enter Totals	263			284			6			19			
Exit Totals	255			303			3			11			

Three-Hour Totals

Light Trucks	2	10	0	0	15	0	0	0	0	2	0	0	29
Medium Trucks	5	4	0	0	7	0	0	0	5	0	0	0	21
Heavy Trucks	2	12	0	0	13	0	0	0	1	0	0	0	28
% Trucks	81.8%	10.4%	0.0%	NA	12.3%	NA	NA	NA	100.0%	10.5%	NA	NA	13.6%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	1	0	0	0	0	0	0	0	0	0	0	1

	South	North	East	West	
Pedestrians	0	0	0	0	0

Peak Hour Information

Peak Hour 7:30 8:30

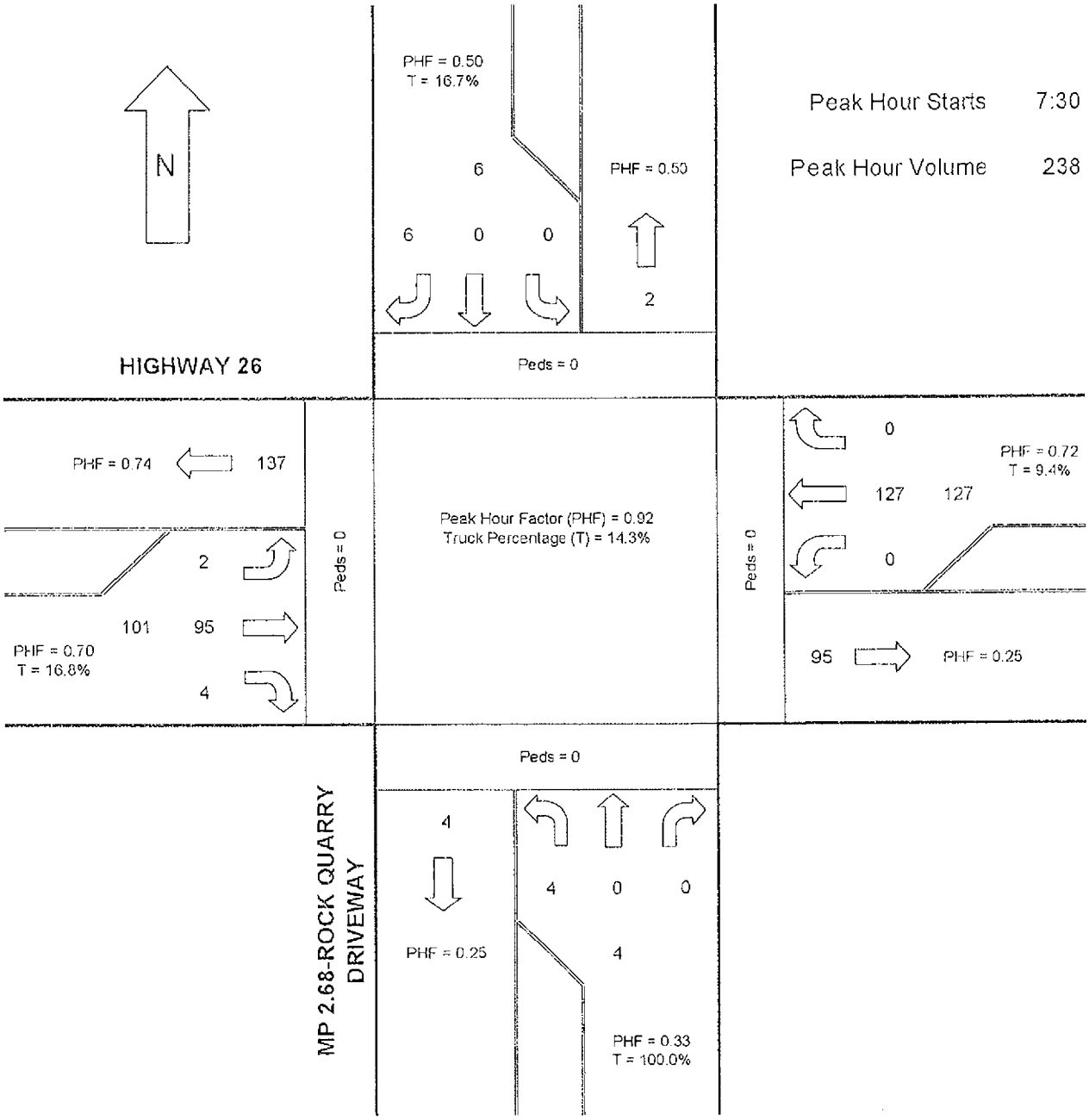
	Eastbound			Westbound			Northbound			Southbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
Movement Total	4	95	2	0	127	0	0	0	4	6	0	0	238
Peak Hour Factor	0.25	0.66	0.50	NA	0.72	NA	NA	NA	0.33	0.50	NA	NA	0.92
Enter Totals	101			127			4			6			
Peak Hour Factor	0.70			0.72			0.33			0.50			
Exit Totals	95			137			2			4			
Peak Hour Factor	0.66			0.74			0.50			0.25			
Light Trucks	0	4	0	0	8	0	0	0	0	1	0	0	13
Medium Trucks	3	3	0	0	2	0	0	0	3	0	0	0	11
Heavy Trucks	1	6	0	0	2	0	0	0	1	0	0	0	10
% Trucks	100.0%	13.7%	0.0%	NA	9.4%	NA	NA	NA	100.0%	16.7%	NA	NA	14.3%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	1	0	0	0	0	0	0	0	0	0	0	1

	South	North	East	West	
Pedestrians	0	0	0	0	0

TRAFSTATS
PO Box 13699
Salem, OR 97309
Tel: (503) 585-2842
Fax: (503) 585-3538

Intersection Turning Movement
Peak Hour Diagram

Location HIGHWAY 26 AT MP 2.68-ROCK QUARRY DRIVEWAY
Date 12/13/2006
Day of Week Wednesday
Time Begin 6:00
Reviewed By: JW



Peak Hour Starts	7:30
Peak Hour Volume	238

Exhibit III (K).

Noise Report

Daly • Standlee & Associates, Inc.
4900 S.W. Griffith Drive
Suite 216
Beaverton, Oregon 97005
(503) 646-4420
Fax (503) 646-3385

Report on

Ordway Quarry Expansion
Goal 5 Application Noise Study

Prepared for

Troy Lindgren
1050 Olney Avenue
Astoria, Oregon 97013

DSA Project No. 215061
October 9, 2007

REGISTERED PROFESSIONAL ENGINEER
11,962
OREGON
FEB 3, 1983
KERRIE G. STANDLEE
EXPIRES: 6/30/08

Note:

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Daly-Standlee & Associates, Inc.

Prepared by:

Philip Muzzy
Acoustical EIT

Kerrie G. Standlee, P.E.
Senior Principal

Executive Summary

Big River Holding (Big River) currently has a conditional use permit to mine and process aggregate material from Ordway Quarry, a hard rock quarry on approximately 16 acres of Clatsop County Tax Lot 101, located approximate 2.5 miles east of the Highway 101/Highway 26 intersection in Clatsop County (see Figure 1). Big River is applying to expand the boundary of the mining extraction area at the site to approximately 46 acres in size and have that area designated as a significant Goal 5 resource site using the Oregon Statewide Planning Goal 5 process. To help facilitate the use of the Goal 5 process, Big River is requesting that Clatsop County designate an area larger than the mining extraction area as a Quarry and Mining (QM) Overlay Zone within the County.

To help in the preparation of materials for their application, Big River asked Daly-Standlee & Associates, Inc. (DSA) to conduct a noise study and assist in developing a mining plan that would ensure the noise radiating from mining activities at the expanded Ordway Quarry would meet the noise criteria specified in Oregon's Statewide Planning Goal 5. The results of the noise study show that noise generated by all operations proposed on the site including blasting activities, excavation related activities, crushing and screening activities at the Ordway Quarry between 7 a.m. and 6 p.m. can be minimized to demonstrate compliance with the DEQ noise regulations at all noise sensitive receptors around the quarry if specific noise mitigation measures are included in the mining plan.

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1. Introduction

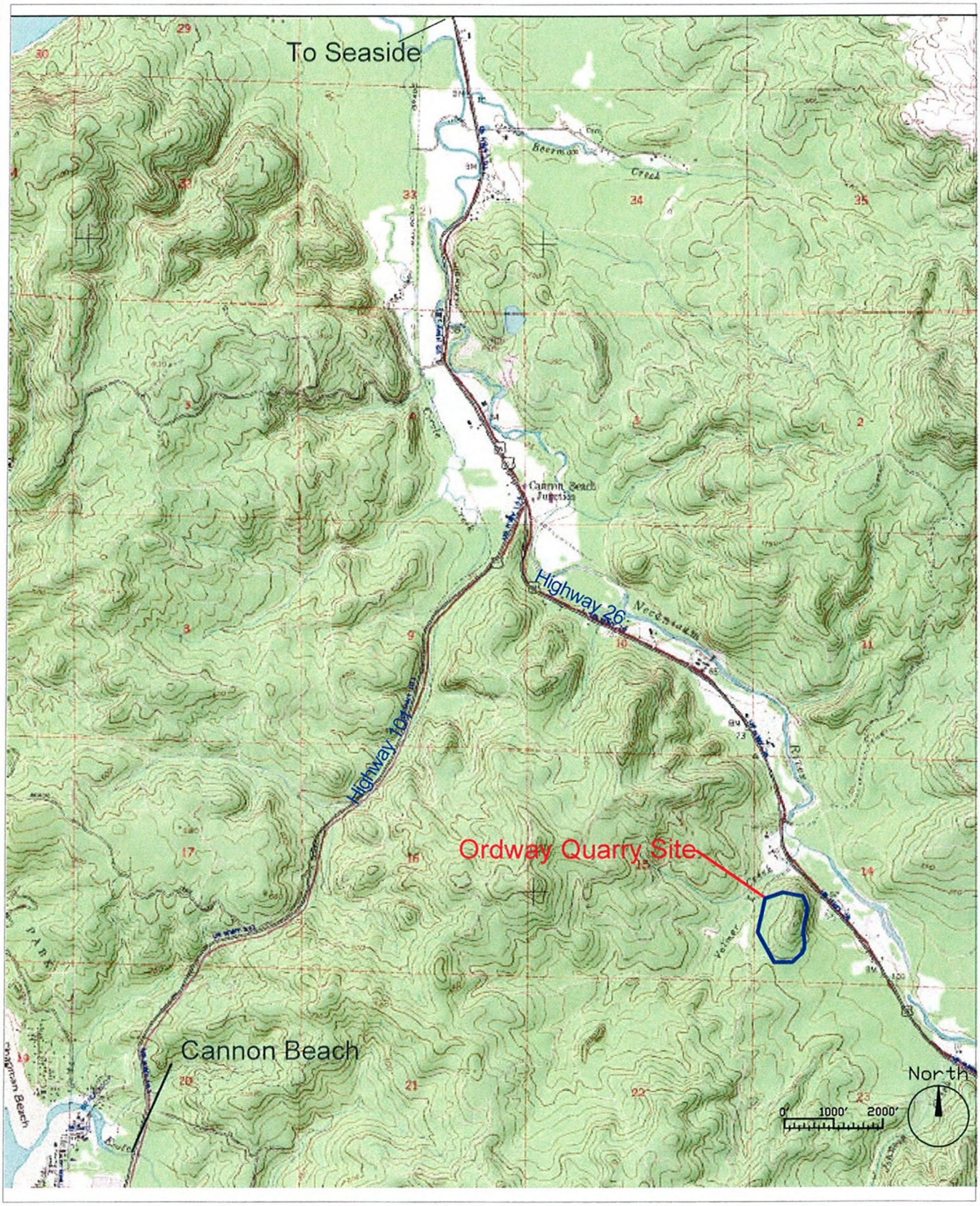
Big River currently has a conditional use permit to mine and process aggregate material from Ordway Quarry, a hard rock quarry on approximately 16 acres of Clatsop County Tax Lot 101. Big River is applying to expand the boundary of the mining extraction area at the site to approximately 46 acres in size and have that area designated as a significant Goal 5 resource site using the Oregon Statewide Planning Goal 5 process. To help in the preparation of materials for their application, Big River asked Daly-Standlee & Associates, Inc. (DSA) to conduct a noise study and assist in developing a mining plan that would ensure the noise radiating from mining activities at the expanded Ordway Quarry would meet the noise criteria specified in Oregon's Statewide Planning Goal 5.

This report presents the results of the noise study conducted by DSA between June and September of 2007 and the conclusions drawn from those results.

2. Overview of Proposed Mining and Processing Operations

2.1. Site Description

Ordway Quarry is located approximate 2.5 miles east of the Highway 101/Highway 26 intersection in Clatsop County (see Figure 1). The proposed extraction operations area at the quarry (defined as the area within which either active mining operations or support operations such as overburden storage or extraction-dependent activities can occur) will generally fall within the area formed by the 180 foot contour line around the hill located on Tax Lot 100, 800 and 900, just west of Highway 26 (see Figures 1 and 2). However, the proposed active mining area within the proposed extraction operations area will generally be bounded by the 180 foot contour line along the east side of the area and the 250 foot contour line on the west side of the area. The mining area will generally follow a transition line from the 250 foot contour line to the 180 foot contour line on the north and south ends. The proposed extraction operations area will overlay portions of Clatsop County Tax Lots 5-10-14-800, 900, 1001 and 1203 and Tax Lots 5-10-100 and 101 (See Figure 2).



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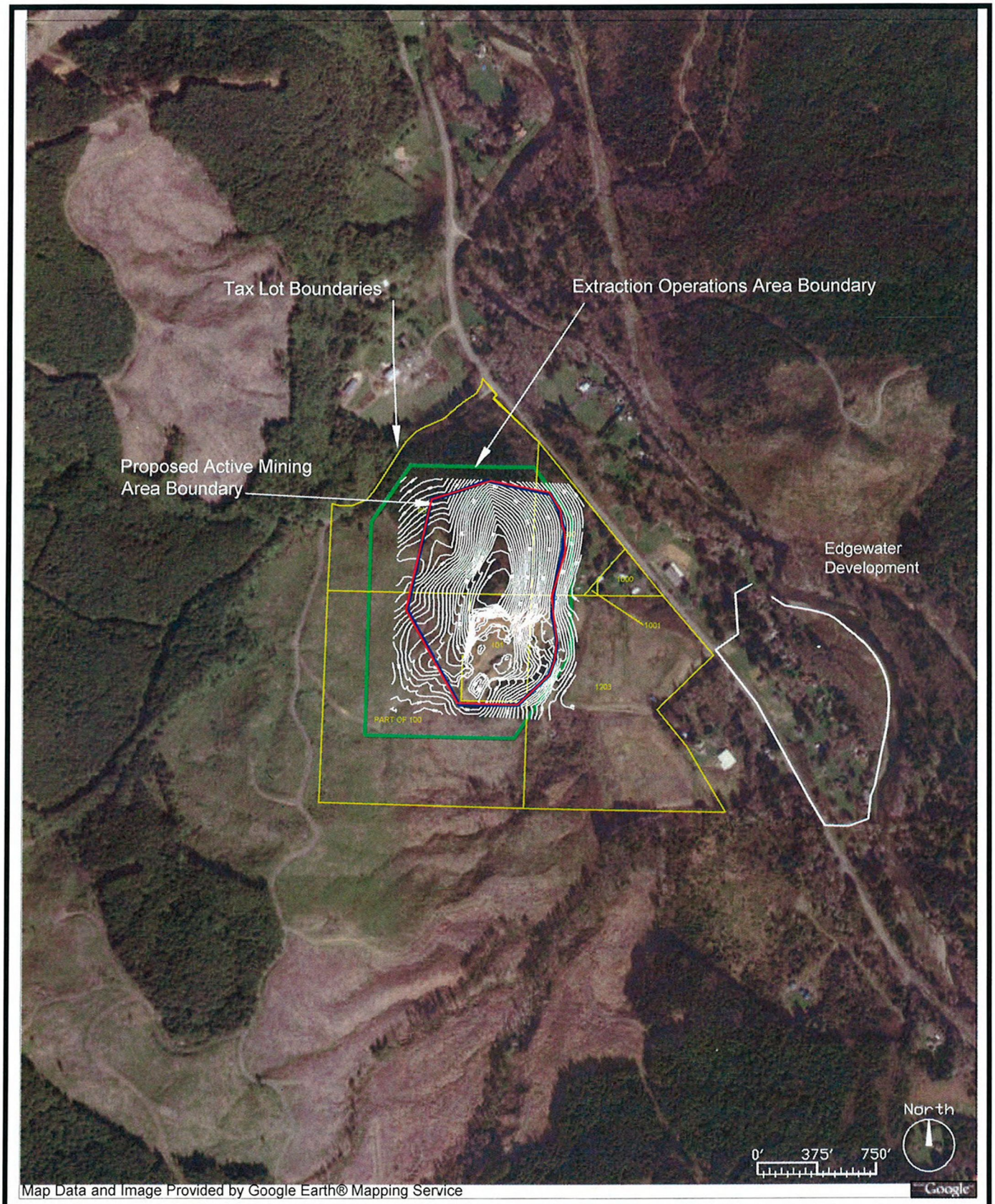
Ordway Quarry
Vicinity Map

Source: Beartooth Mapping, 2007	Project Engineer: PGM	DATE: 10/05/07	PROJECT NO. 215061	Figure 1



Daly-Standlee & Associates, Inc. ph: 503-646-4420 fax: 503-646-3385 email: DSA@acoustechgroup.com		Ordway Quarry Ordway Quarry Mine Site		
	Project Engineer: PGM	DATE: 10/09/07	PROJECT NO. 215061	Figure 2

2.2. *Proposed Mining and Processing Plan*

Mining operations currently occur on Clatsop County Tax Lot 5-10-101 at the approximately 300 foot elevation of the south end of the north-south oriented hill. To extend the mining area at the quarry, Big River proposes to continue their existing mining operations in a westerly direction and take the west wall of the existing mining area down to the elevation of the existing floor at the mine (the 300 foot elevation). Once the west wall has been excavated down to the 300 foot elevation, the company proposes to move excavation equipment to the top of the hill and begin forming west facing benches on the west side of the hill away from view of residences to the east, southeast and northeast. The benches will generally be 30 to 40 foot high and vary in width from 20 to 40 feet across. The benches will generally traverse the length of the west side of the hill.

Once the benches are formed on the west side of the hill, mining will generally progress easterly with the goal of always leaving a rock wall along the east boundary of mining area to block the line of sight between residences to the east and mining activities on the west.

During the beginning of mining on the west side of the quarry, resource material will be pushed from the west side of the top of the hill over the north face of the existing mining area (which is basically the south end of the new mining area). The material will fall to the 300 foot elevation floor of the existing mining area and it will be crushed and screened in basically the same general area where crushing and screening currently occurs at the quarry. Once enough resource material has been removed from the southwest corner of the hill, the crushing and screening plant may be moved around to the west side of the hill to further provide mitigation of noise radiating from that equipment to residences to the east and southeast.

Eventually, all mining and processing operations will occur on the west side of the hill so that noise radiating from the site is minimized by the natural barrier provided by the hill itself.

Big River will generally excavate at the "center" of the hill. To accomplish this, the company will be forming a "bowl" in the hill with the final top edge of the bowl at an elevation of 180 feet above sea level along the east side of the hill and 250 feet above sea level on the west side of the hill. The southwest portion of the

bowl edge may end up between 250 and 300 feet above sea level depending on how much rock is actually found below the topsoil in that area and the north end of the bowl may be as high as 270 feet above sea level. At this time, the plan is to mine the rock from the hill in such a manner that there is always a natural barrier located between the east side of the mine and the excavation equipment to the west. The top of the wall on the west side of the hill will end up higher than that on the east side. However, the plan will be to continue using the benching approach to mine below the final elevation on the west side of the mine and ensure the west side of the mine is taken down before the east side. In other words, mining activities on the west side of the mine will never be at an elevation above the top of the wall on the east side. The elevation of the east side of the mine will always be higher than any mining activity on the west side of the mine.

In creating a bench, a dozer is first used to remove overburden from the side of the ridge where the bench will be developed. If the rock is weathered, it can possibly be ripped apart with the dozer and pushed over the edge to the floor of the quarry. If the rock it too hard to rip, a rock drill will be brought in to drill holes for explosive charges that will be used to break the rock in a controlled manner. The blasting will cause the rock to crack and much of it will fall to the quarry floor but some of it will remain on the bench. To remove the remaining portion of the rock that did not all to the floor, the dozer will move back into that area and push the material down to the quarry floor. The material that falls to the quarry floor will be scooped up by a front-end loader and transported to a portable crushing and screening plant located on the quarry floor.

The portable crushing and screening plant will be located on the quarry floor during the life of the quarry. The equipment will be positioned near the working face of the quarry. Once the crushing and screening plant is more than approximately 500 feet from the point where the resource material is pushed from the benches to the quarry floor, the equipment will be relocated closer to the working area.

2.3. *Hours of Operation*

Mining, processing and hauling operations are proposed to occur at Ordway Quarry between 7:00 a.m. and 6:00 p.m. Monday through Friday and 8 a.m. and 5 p.m. on Saturdays. There will be no operations on Sundays or normal holidays.

3. Noise Descriptors

Sound is the term given to variations in air pressure that are capable of being detected by the human ear. Small fluctuations in atmospheric pressure (sound pressure) constitute the physical property measured with a sound pressure level meter. Because the human ear can detect variations in atmospheric pressure over such a large range of magnitudes, sound pressure is expressed on a logarithmic scale in units called decibels (dB).

The human auditory response to sound is a function of the magnitude of the sound, the frequency spectrum of the sound (the specific pitch components of the sound), the duration of the sound, and the existence of other sounds. It is difficult to describe a sound with a single number because of the many parameters that influence the human auditory response. However, over the last 20 to 25 years, there have been a significant number of acoustic studies which have helped provide noise descriptors that correlate well with the human response.

Studies have shown conclusively that at equal sound pressure levels, people are generally more sensitive to certain higher frequency sounds (such as made by speech, horns, and whistles) than lower frequency sounds (such as made by motors and engines)[1]. To address this preferential response to frequency, the A-weighted scale was developed. The A-weighted scale adjusts the sound level in each frequency band in much the same manner that the human auditory system does. Thus the A-weighted sound level (read as "dBA") becomes a single number that defines the level of a sound and has some correlation with the sensitivity of the human ear to that sound.

The A-weighted sound level alone, however, is not sufficient to describe the noise environment at any given location, due to the fact that environmental sound levels tend to change frequently with time. Therefore, an environmental noise descriptor needs to address the length of time sound is present as well as the level of the sound. One environmental noise descriptor used widely throughout the United States is the "Statistical Sound Level." The statistical sound level is given as "L_{xx}," which corresponds to the level exceeded "xx" percent of the specified

[1] D.W. Robinson and R.S. Dadson, "A Re-Determination of the Equal-Loudness Relations for Pure Tones," *British Journal of Applied Physics*, vol. 7, pp. 166 - 181, 1956. (Adopted by the International Standards Organization as Recommendation R-226.

measurement time. For example, the L_{50} would be that level exceeded 50% of the time during a specified time period. Typically, in noise regulations and standards, the specified time period is one hour.

In this study, statistical noise levels are used to quantify the mining generated noise because the DEQ noise regulations are written in terms of statistical noise levels.

4. Noise Criteria

Big River is applying for operating permits under Oregon's Statewide Planning Goal 5 rule (Oregon Administrative Rule 660-23-180). The Goal 5 rule requires that noise conflicts be identified and minimized within 1500 feet of a mining site (unless there is compelling reasons to extend the distance out further than 1500 feet). Noise conflicts are considered minimized under the rule (OAR 660-23-180(1)(f)) when the Oregon Department of Environmental Quality (DEQ) noise regulations (OAR 340-035-0035) are met. Therefore, noise generated by the proposed mining operations was assessed using the criteria set forth in the Oregon Department of Environmental Quality Noise Control Regulations, OAR Chapter 340 Division 35, Section 340-035-0035, "Noise Control Regulations for Industry and Commerce".

The Oregon DEQ noise regulations are written for existing noise sources and new noise sources. An existing noise source is defined in OAR 340-35-015(17), as any noise source which was in operation prior to January 1, 1975, and a new noise source is considered under the regulations to be any noise source commencing operation after January 1, 1975. Mining operations are believed to have begun at Ordway Quarry sometime prior to 1980. In the 1990's and early 2000's, Osburn Brothers Rock, LLC operated the quarry and in 2006, Big River purchased the rights to the quarry from that business. Because Big River purchased the rights to the quarry site in 2006 it is possible to conclude that the operations at the quarry under Big River Excavating ownership could be considered a new noise source at the quarry as defined by the DEQ noise regulations. If that conclusion is reached, then the operations at the quarry would be required to meet the noise control regulations for new noise sources.

The DEQ noise regulations for new noise sources are broken into two parts: regulations for new sources located on previously unused sites (commercial or industrial sites) and regulations for new sources located on previously used sites. A previously unused site is defined in OAR 340-35-015(47) as any property on which industrial or commercial activities have not occurred during the 20 years prior to commencement of the activity in question. As stated earlier, it is believed that mining operations began at the Ordway Quarry sometime prior to 1980. It is known that, within the past 20 years, operations were conducted at the quarry by the Osburn Brothers, LLC and their predecessors. Thus, under the DEQ noise regulations, the quarry site would be considered a previously used site.

With regard to the status of the expansion area relative to the "previously used/previously unused site" definition, the Oregon DEQ in the past took the position that when an operation expanded onto contiguous property, the noise generated by the operation on the expansion area would be regulated by the rules for previously used sites, rather than be subjected to the more restrictive ambient degradation standard for previously unused sites. Given this historic practice by the organization that enforced the noise regulations, the noise generated by equipment in the expansion area at the Ordway Quarry will be limited by the section of the regulation that relates to new sources located on "previously used sites".

OAR Chapter 340-35-035 (1)(b)(A) of the noise regulations states that a new noise source located on a previously used industrial or commercial site shall not radiate noise that exceeds the maximum allowable hourly statistical L_{01}, L_{10}, and L_{50} sound levels at any appropriate noise sensitive receiver location. An appropriate noise sensitive receiver location is defined in subsection (3)(b) as any point 25 feet from a residence, motel, church, school or hospital or the property line of the noise sensitive property, whichever is farther from the noise source. The maximum allowable hourly statistical noise levels are shown in Table 1.

TABLE 1
(From OAR 340-35-035 - Table 8)
New Industrial and Commercial Noise Source Standards

Hourly Statistical Noise Descriptor	Allowable Statistical Noise Levels in Any One Hour (25 feet from any residence)	
	Daytime Limit (7 AM - 10 PM)	Nighttime Limit (10 PM - 7 AM)
L_{50}	55 dBA	50 dBA
L_{10}	60 dBA	55 dBA
L_{01}	75 dBA	60 dBA

Note 1: The L_{01}, L_{10}, and L_{50} noise levels are those levels equaled or exceeded 1%, 10%, and 50% of an hour, respectively.

OAR Chapter 340-35-035(1)(d) of the noise regulations also states that an industrial or commercial noise source shall not generate impulsive sounds that exceed maximum allowable sound pressure levels at an appropriate noise sensitive receiver location defined above. An impulsive sound is defined by OAR 340-35-015 as either a single pressure peak or a single burst (multiple pressure peaks) for a duration of less than one second. For blasting, the sound pressure level at an appropriate noise sensitive receiver location shall not exceed 98 dBC, as measured using the slow response mode of a sound level meter. For all other impulsive sounds, the sound pressure level at an appropriate noise sensitive receiver location shall not exceed 100 dB, as measured using the peak response mode of a sound level meter.

According to OAR 340-35-035(1)(f), median octave and one-third octave band level standards are applicable when the Director has reasonable cause to believe that the requirements of subsections (1)(a), (b), or (c) of this rule do not adequately protect the health, safety, or welfare of the public as provided for in ORS Chapter 467. The maximum allowable daytime median octave band levels, shown in Table 10 of OAR 340-35-035, are by definition, equivalent to spectral L_{50} levels and sum to an overall total of 55 dBA. This is identical to the maximum allowable daytime L_{50} in Table 1 above. However, because there are a large possible number of combinations of spectral (octave band) levels which sum to 55 dBA or less, which do not meet the maximum allowable octave band levels in Table 10, and which do not have strong tonal characteristics, the maximum allowable median octave band levels are clearly intended to establish a higher

standard for special cases, as determined by the DEQ Director. The median octave band level standards in subsection are intended to ensure that noise sources with strong tonal characteristics, such as can be generated by continuously operating whistles, turbines, and fans, for example, are held to a higher standard than required by subsections (1)(a), (b), or (c).

According to the Oregon Department of Environmental Quality (DEQ), the DEQ has never applied the octave band or one-third octave band criteria to a quarry operation because there are no strong tonal noise sources that are present long enough to pass the hourly "median" level test for applying the standard. Because none of the noise sources at Ordway Quarry are expected to generate strong tonal characteristics which would qualify for special consideration under OAR 340-35-035(1)(f), the maximum allowable median octave band levels in Table 10 will not apply.

Under OAR Chapter 340-35-035(5)(c), the sounds created by the tires or motor used to propel any road vehicle are exempt from the limits set out in OAR 340-35-035 but are required to comply with the limits set out in OAR 340-35-030, Noise Control Regulations for In-Use Motor Vehicles. OAR 340-35-030 establishes noise limits for road vehicles and trucks engaged in interstate commerce. Since the off-site road vehicles used to haul gravel out of Ordway Quarry site are expected to comply with the DEQ standards for road vehicles, they do not need to be included in the noise analysis.

The DEQ regulations address sound created by back up beepers. OAR 340-35-035(5)(a) states that "warning devices not operating continuously for more than 5 minutes" are exempted from the rules in Section (1). None of the back up beeper warning devices used at Ordway Quarry is known to have been operated or is expected to operate continuously for more than 5 minutes in an hour. With respect to the DEQ regulations for road vehicles, OAR Chapter 340-35-030(3)(b) simply states, Motor vehicle warning devices are exempt from these regulations. Therefore, the sounds created by the expected use of back up beeper warning devices are not regulated by the Oregon DEQ and are not included in the noise analysis.

A copy of the DEQ regulations is presented in Appendix A of this report.

5. Overview of the Noise Analysis

In conducting the noise analysis, the following steps were taken:

1. The loudest hourly statistical noise levels that could ever be generated during the daytime hours (7 a.m. to 6 p.m.) at the site were predicted at residences in the vicinity of the site. The residences chosen were considered to be representative of the residences in the area with the greatest potential of receiving noise that would exceed the appropriate criteria.
2. The loudest hour noise levels predicted at the residences were compared to the limits specified in the "Noise Control Regulations for Industry and Commerce" (OAR Chapter 340, Division 35 - Oregon Department of Environmental Quality (DEQ)).
3. In addition to the predictions made at individual noise sensitive receivers, predictions were made to determine the "DEQ Noise Compliance Boundary" for the site. The "DEQ Noise Compliance Boundary" defines the area within which noise from the mining operations would exceed the DEQ noise regulation limits. Outside the boundary the noise would be less than or equal to the regulation limits. Goal 5 [OAR 660-23-180 (4)(a)] states that the impact area, "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." In this study, the area where the noise levels would exceed the DEQ regulation without mitigation is considered the impact area.

6. Existing Environment around Ordway Quarry

6.1. Surrounding Land Use

The land surrounding Ordway Quarry is generally zoned for agriculture or forestry use (AF and F-80) with some areas zoned for residential/agricultural use (RA-1 and RA-2). The F-80 zone, Forest-80, overlays a majority of the proposed mining area and all of the property immediately west of the proposed mining area and the area immediately south of the mine site. The AF zone, Agriculture-Forestry, overlays the existing mining area and all the property immediately southeast of the mine site as well as a parcel of land north of the proposed mining area. The RA zone overlays the property immediately east of the proposed mining area and the zone generally follows along both the east and west sides of Highway 26 in the direction south of the mine site.

U.S. Highway 26 traverses along the eastern side of the quarry and separates the quarry property from residences to the east. The Edgewater housing development

is located immediately east/southeast of the quarry and it includes as many as 20 homes between Highway 26 and the Necanicum River. There are approximately 4 homes constructed east of the quarry on large parcels of land between Highway 26 and the Necanicum River. North of the quarry, there are approximately 3 homes between the highway and the river and two homes immediately north of the quarry located just west of Highway 26. Southeast of the quarry, there are several homes located on both the east and west side of Highway 26 approximately ¾ mile away.

The nearest residence south of the quarry is located on the west side of Highway 26 approximately 1200 feet from the existing crushing and screening plant located at the quarry. Due to the fact that a berm has been constructed along the south edge of the crushing and screening plant at the quarry, there is no direct line between the plant and the residence.

Other residences to the southeast and east of Highway 26 are located between 1225 feet and 2400 feet from the existing crushing and screening plant and in each instance, the earthen berm located along the southern edge of the aggregate processing site blocks the line of sight between the equipment and the residence.

The nearest residence to the east is located approximately 750 feet the eastern boundary of the proposed expansion area at the quarry.

The nearest residence to the north is located approximately 750 feet from the north end of the proposed expansion area

There are no residences southwest, west or northwest of the quarry site and the property is totally devoted to timber production for the Weyerhaeuser Timber Company.

6.2. *Topography and Vegetation*

Ordway Quarry is currently generally located on the south end of a north-south oriented hill. The proposed future quarry boundary includes the surface of the hill bounded generally by the 180 elevation line going around the hill. The terrain at the site is generally sloped downward in all directions from the top of the hill to its base.

The site is currently covered with a mixture of hardwood and conifer trees that will be removed within specific areas prior to excavation within that area. Trees

will be left on the undisturbed portions of the site where mining activities are not proposed unless Weyerhaeuser Company, the owner of the property elects to harvest the timber for their needs.

7. Predicted Future Noise Levels

Future mining-generated noise levels were predicted at 9 noise sensitive receivers (residences) located near Ordway Quarry (see Figure 3). The selected receivers represented the receivers in each direction of the quarry with the greatest potential of receiving quarry generated noise levels that could exceed the maximum allowable noise limits specified in the DEQ noise regulation.

In addition to the noise levels predicted at specific residences, calculations were made to predict the location in different directions from the quarry where the noise radiating from the quarry would exceed the DEQ maximum allowable noise limits. The results of these calculations were used to determine the "DEQ Noise Compliance Boundary" around the site. The "DEQ Noise Compliance Boundary" defines the area within which noise from the mining operations would exceed the DEQ noise regulation limits. Outside the boundary the noise would be less than or equal to the regulation limits.

7.1. Noise Prediction Methodology

Established acoustical formulas for outdoor sound propagation were used to predict the noise levels that will radiate from the excavation, processing and loading operations (Handbook of Acoustical Measurements and Noise Control, Third Edition, Cyril M. Harris, McGraw-Hill Inc., 1991). The formulas calculate the sound pressure level at a receiver due to any number of sources and account for sound attenuation due to distance, atmospheric conditions, barriers and vegetation.

7.2. Source Data Used In Analysis

Mining Equipment Reference Noise Data

According to the applicant, equipment used on site could possibly include a:

- CAT D8 dozer – possibly used to remove overburden and push aggregate material down to the floor of the mine
- CAT 966 front end loader – used to load trucks

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Ordway Quarry

Residential Sites and Noise Prediction Locations

Project Engineer	DATE	PROJECT NO.	
PGM	10/09/07	215061	Figure 3

- CAT 980 front end loader – used to load the jaw crusher and haul crushed rock to the stockpile
- Hitachi excavator – possibly used in the excavation operations,
- CAT 330L excavator – possibly used in the excavation operations
- hydraulic rock drill – possibly used to drill holes for blasting in areas where dozer may not be able to rip the rock
- CAT generator – a trailer mounted power generator used to produce electrical power for the crushing and screening plant
- Jaw crusher – used as a primary crusher to break large rock to smaller size
- Impact or cone crusher – used as a secondary crusher to further break rocks down to smaller sizes
- Two or three deck screen – used to separate rock by size

Reference sound levels used in the analysis for the mining equipment are summarized in Table 2. Octave band sound levels for the reference sources are given in Appendix B.

Table 2
Mining Equipment Reference Noise Levels

Noise Source	Ref. Dist. (ft)	L_{01} (dBA)	L_{10} (dBA)	L_{50} (dBA)
Crushing and Screening Plant[1,2]	50	95	94	93
CAT 330L excavator[2]	50	76	74	73
rock drill[2]	50	89	88	87
CAT 966 front end loader[2]	50	71	71	0
Cat D8 dozer[2]	50	91	87	84

Note 1: Includes noise generated by jaw crusher, impact crusher, triple deck screen and 980 front end loader as well as trailer mounted power generator.
Note 2: Data taken from archival data measured by DSA on past projects.

Blasting Noise

Blasting may occur at Ordway Quarry if the resource material is too hard to be ripped with a dozer or excavator. If blasting occurs, it is expected occur no more than once every few weeks for those areas where blasting is required.

Blasting at aggregate quarries is conducted in a manner that breaks up the rock but does not cause it to fly out from the surface. The intent of the blasting is to crack the rock into sizes that can be handled by the crushing plant; not to break the rock into the final crushed rock sizes. In preparation for a blast, blasting

experts will drill holes at specific locations and specific depths into the rock depending on the type of rock and hardness of the rock. The holes will then be loaded with charges and detonators and they will be set to explode in a prescribed grouping by including delays between detonations. A blast is a sequential series of smaller blasts set to occur over a finite period of time. Thus, with this approach, there is less noise and less fly rock generated by the blast.

Noise generated by quarry blasting depends on all the factors described above. It has been the experience of DSA that professional blasters can size their blasts to ensure the noise will meet the DEQ noise criteria for blasting (see discussion about blasting criteria in the Noise Criteria section of this report). We have witnessed blasting at quarries on past projects where the noise levels at homes within 350 feet of the blast were well within the limits specified in the DEQ noise regulations. However, to demonstrate that blasting at the Ordway Quarry can be in compliance with the DEQ noise regulation limits at all residences around Ordway Quarry, a prediction was made using reference data measured at a quarry in Canyonville, Oregon last year. The data was measured in line of sight of the blast at that quarry so the level measured was only influenced by the distance between the measurement location and the blasting location. Table 3 presents the reference data used in the Ordway Quarry blasting noise analysis. It is important to note that the mining plan for the Ordway Quarry does not propose blasting that will be in the line of sight of existing residences.

Table 3
Blast Noise Reference Levels

Noise Source	Ref. Dist. (ft)	Sound Pressure Level (dB-C Slow)
Excavation Blast	2300	76

7.3. Assumptions Used in Predicting Loudest Hour Noise Levels Radiating From Ordway Quarry Operations

The noise predicted to radiate from the equipment in the Ordway Quarry site during the loudest hour does not represent the noise that will be produced during typical operations at the site. Instead, DSA modeled the loudest noise that could possibly radiate to surrounding residences during the life of the project. It therefore represents the loudest possible case. It should be pointed out that the noise levels predicted at each residence would not occur at the same time.

Instead, the loudest noise at each residence would occur only when the equipment is nearest that residence.

It should also be pointed out that the loudest hour operating conditions assumed will most likely never occur, but to ensure the loudest potential hour levels are predicted, the model included the following assumptions:

- The crushing and screening plant (including a generator and front end loader at the plant) will be operating continuously at the quarry floor.
- A rock drill or the dozer will be operating continuously throughout an entire hour at the surface of the existing ground in the excavation area at the point nearest each receiver.
- There will be a front-end loader operating continually during the hour to scoop up and transport resource material from the quarry working face to the crushing and screening plant.
- There will be a front-end loader operating continuously during the entire loudest hour to load off-site trucks.
- The effects of atmospheric absorption, vegetation, and topography are included in the noise model where appropriate. 70% humidity and 50 degrees Fahrenheit were assumed in predicting the noise level. The noise level at the receivers will be slightly lower, if the humidity is lower or if the temperature is higher (e.g., during the summer months).

7.4. *Analysis Results*

Table 4 presents the loudest hourly L_{01}, L_{10} and L_{50} noise levels predicted to radiate to Receivers 1 through 9 during the life of the quarry assuming no man made noise mitigation measures are used at the quarry. Again, it should be noted that the predicted levels are a very conservative representation of the loudest hour noise levels that could ever possibly occur. It should also be noted that the noise level shown for a residence in Table 4 will not necessarily occur simultaneously as that predicted at the other residences. For instance, the maximum noise levels at the residences to the south will occur when the operations are closer to those residences. Maximum noise levels to the east will occur when the proposed operations are closest to those residences. And, maximum noise levels at residences on the north will occur when the operations are near the north end of

the site.

Table 4
Loudest Mining Generated Hourly Statistical Noise Levels at 9 Receivers without Inclusion of Man Made Mitigation

Receiver Number[1]	Loudest Hour Statistical Noise Levels (dBA)			Loudest Blasting Sound Level
	L_{01}	L_{10}	L_{50}	dBC (slow response)
R1	63	62	60	85
R2	62	61	59	84
R3	63	62	61	85
R4	62	61	60	85
R5	67	63	62	91
R6	62	60	59	84
R7	59	56	55	80
R8	59	56	54	80
R9	60	56	55	82

Note 1: See Figure 3 for prediction locations.

Again, it should be mentioned that the levels in Table 4 do not represent the typical conditions expected to be found at the residences and they should not be considered representative of the noise levels that will be found at the residences during normal operating conditions at the quarry.

8. Discussion of Mining Generated Noise Levels

The noise levels shown at each receiver in Table 4 were found to be controlled by the noise radiating from a dozer or rock drill operating near the edge of the mining area nearest the receiver in direct line of sight of the receiver. A comparison of the noise levels in Table 4 with the maximum allowable statistical noise levels shown in Table 1 indicates the noise radiating from a rock drill or dozer toward those receivers could exceed the DEQ noise regulation limits at several of the residential receivers at some time during the years of mining at the quarry if noise mitigation measures are not incorporated into the mining plan.

The noise radiating from the rock drill and dozer were found to have a significant influence on the results presented in Table 4. During the course of conducting the

noise analysis, it was realized that presenting the results in Table 4 without some explanation of what it represents does not present full an accurate picture of the noise that will typically radiate from the mine site. It should be remembered that the rock drill or dozer will not operate near the eastern boundary of the mine site until many years in the future. As discussed earlier in the overview of the proposed mining operations, the mining plan calls for excavation operations to move to the west side of the hill once the southwest corner of the hill has been excavated down to the 300 foot elevation. By forming and mining along benches on the west side of the hill, a rock drill or dozer will not be in direct line of sight of receivers to the east, southeast and northeast for many years after mining begins in the expansion area. It is only when the mining operations move east of the north-south centerline of the hill, and only when the equipment operates at the upper bench in that area will there be a potential of having the dozer or rock drill in direct line of sight of residences.

It should be further mentioned that, in those instances when a rock drill and dozer could potentially operate on an upper bench east of the north-south center line of the hill in direct line of sight of receivers, the equipment will likely operate for a week at most before it moves out of the line of sight of residences because it would be working on the bench in line of sight only long enough to bring the top of the bench down below the line of sight. And once the bench was dropped in elevation, the equipment would be moved to a lower bench to continue moving the mining operations down toward the quarry floor.

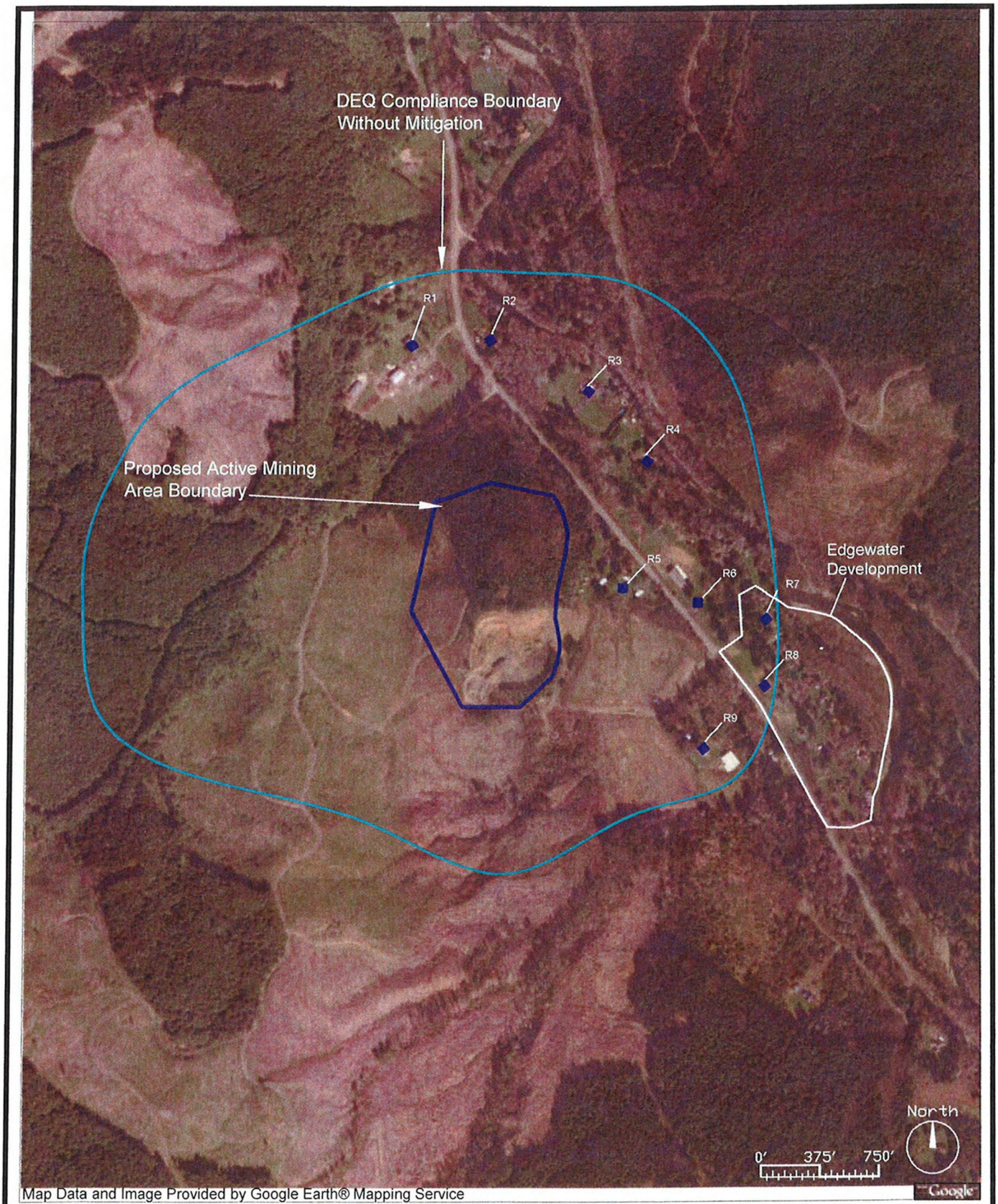
Without the inclusion of the noise from a rock drill or dozer in direct line of sight of receivers on the east side of the hill, the hourly statistical noise levels reaching the receivers were found to be more than 10 dB below the maximum allowed by the DEQ noise regulations. In other words, the noise from excavation operations, crushing and screening operations and truck loading and hauling operations on the west side of the hill out of sight of receivers was found to be well below the DEQ limits. Therefore, it is only those times when a rock drill or dozer operates on the east side of the north-south center line of the hill in direct line of sight of a receiver when the noise at a receiver could potentially exceed the DEQ limits.

9. DEQ Noise Compliance Boundary

In addition to predicting noise levels at specific residences, calculations were made to determine the area around the quarry where the DEQ noise regulations would be met without the use of man made noise mitigation measures. Figure 4 shows the DEQ noise compliance boundary for activities at the quarry with the equipment operating as described in Section 7.3 of this report assuming that there would be no mitigation measures included in the mining plan. The figure should be interpreted in the following manner:

> The loudest possible hour of quarry generated noise will be equal to or less than the DEQ noise regulation criteria in all areas outside the "DEQ Noise Compliance Boundary". The loudest possible hour of quarry generated noise will exceed the DEQ noise regulation criteria at all points inside the "DEQ Noise Compliance Boundary".

Again it should be mentioned that the placement of the boundary to the east is controlled by the assumption that at some time during the life of mining at the site, the rock drill or dozer could be in direct line of sight to the property east of the hill. The placement of the boundary to the west is controlled by the noise that will radiate from all activities at the mine including the crushing and screening, the excavation and the loading and hauling by trucks at the site. The boundary extends further to the west than it does to the east due to the assumption that all sources would be operating simultaneously and due to the fact that there will be an increase in the amount of sound radiating to the west caused by sound reflecting off the west facing bench walls.



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Ordway Quarry

DEQ Noise Compliance Boundary w/out Mitigation

Project Engineer	DATE	PROJECT NO.	
PGM	10/09/07	215061	Figure 4

10. Mitigation

As stated earlier in the "Discussion of Mining Generated Noise Levels" section, mitigation of the noise radiating from the Ordway Quarry to acceptable levels can be achieved by reducing the noise radiating from the rock drill or the dozer when that equipment has the potential of being in line of sight of homes on the east side of the hill. It was found through the analysis that when a rock drill or dozer was in direct line of sight of a residence located within 1400 feet of the equipment, the noise reaching the residence from the equipment should be reduced. The specific point on the ground where that condition occurs was found to depend on the distance between the dozer or rock drill and the edge of the hill and the elevation on the hill. Table 5 provides the distance between rock drill (or dozer) and the edge of the hill where the equipment first comes into line of sight of residences in three directions; southeast, east and northeast. The distances are given for different elevations on the hill. When the dozer or rock drill are within these distances of the edge, some additional form of mitigation would be required to ensure the noise radiating from the equipment would remain in compliance with the DEQ noise regulation at all receivers.

Table 5
Approximate Distance from Eastern Edge of Hill Where Rock Drill/Dozer First Requires Mitigation for Residences to Southeast, East and Northeast

Elevation on Hill (feet)	Rock Drill			Dozer		
	Distance from eastern edge of hill in direction shown when noise mitigation is required (feet)			Distance from eastern edge of hill in direction shown when noise mitigation is required (feet)		
	NE	E	SE	NE	E	SE
420	20	22	31	27	29	41
380	21	24	34	27	32	45
340	22	27	39	29	35	51
300	16	30	44	27	40	58
270	17	34	49	31	44	64
230	20	41	57	40	54	78
190	25	55	84	54	71	109

10.1. Potential Noise Mitigation Measures

The noise radiating from the rock drill or dozer can be reduced to within an acceptable level in those areas where required by placing a physical barrier between equipment and a receiver. Based on the results of mitigation calculations, an 8 foot high noise barrier of either an earth berm or solid barrier along the edge of the hill will be sufficient to reduce the noise at receivers to within the DEQ limits. If the source is a rock drill and a solid barrier is used, the barrier can be moved close to the drill to reduce the length required to provide the mitigation. This is a common technique used to control and mitigate rock drill noise. If a dozer is the source, a number of mitigation methods are available to minimize and control noise including construction of a berm or wall along the edge of the bench, use of residential mufflers, intermittent operation or using an excavator instead of the dozer. Use of one or more of these methods will provide noise compliance.

10.2. Predicted Noise Levels With Mitigation

Table 6 presents the loudest hour statistical noise levels predicted at the nine residential receiver locations shown in Figure 3 with the inclusion of the mitigation measures discussed above.

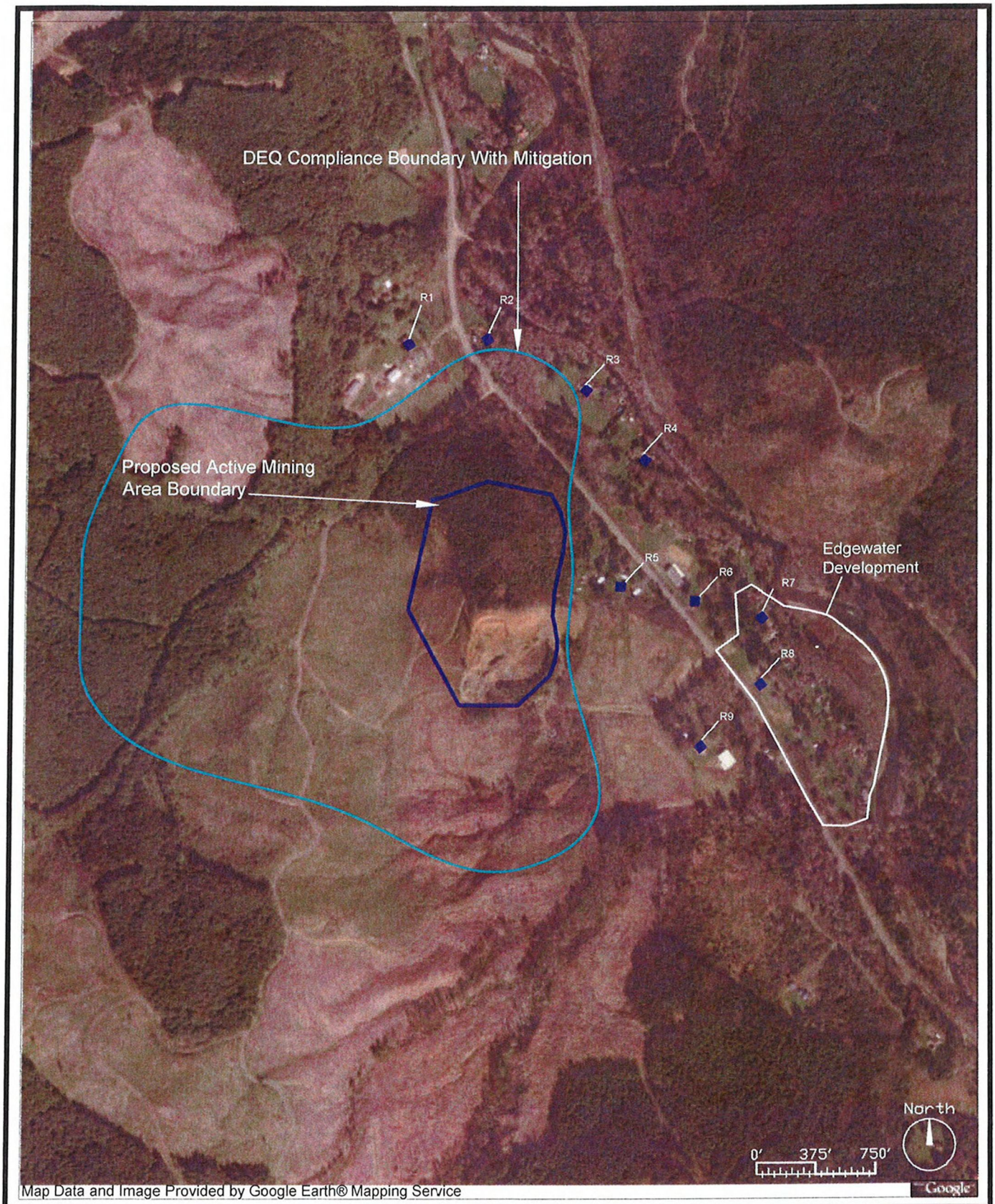
Table 6
Loudest Mining Generated Hourly Statistical Noise Levels at 9 Receivers with Inclusion of Man Made Mitigation

Receiver Number[1]	Loudest Hour Statistical Noise Level (dBA)		
	L_{01}	L_{10}	L_{50}
R1	59	56	54
R2	62	58	55
R3	50	49	48
R4	47	46	44
R5	62	58	55
R6	59	55	52
R7	59	55	52
R8	58	54	51
R9	60	56	53

Note 1: See Figure 3 for prediction locations.

Figure 5 presents the DEQ noise compliance boundary with the mitigation of rock drill and dozer noise included in the calculations.

It should be noted that the boundary presented in Figure 5 shows the County the area where, under the Goal 5 process, land use controls will be required to ensure that noise sensitive uses do not encroach upon the quarry and cause it to go out of compliance with the DEQ noise regulations.



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Ordway Quarry

DEQ Noise Compliance Boundary with Mitigation

	Project Engineer	DATE	PROJECT NO.	
	PGM	10/09/07	215061	Figure 5

11. Conclusions

The results of the noise study conducted by Daly-Standlee & Associates, Inc. show that noise generated by typical operations at the Ordway Quarry will be in compliance with the DEQ noise regulations the need of any manmade mitigation measures. At those times when a rock drill or dozer operate east of the north-south center line in direct line of sight of a residence, the noise reaching the residence could exceed the DEQ noise limits if the source operates for more than 30 minutes per hour. DSA found that, with mitigation of the rock drill or dozer noise at those times when the equipment operates in line of sight of a residence, noise radiating from the equipment will be in compliance with DEQ noise regulations. Noise mitigation can be achieved through the use of noise barriers.

Appendix A – DEQ Noise Control Regulations for Industry & Commerce

340-035-0035 Noise Control Regulations for Industry and Commerce

(1) Standards and Regulations:

(a) Existing Noise Sources. No person owning or controlling an existing industrial or commercial noise source shall cause or permit the operation of that noise source if the statistical noise levels generated by that source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in **Table 7**, except as otherwise provided in these rules.

(b) New Noise Sources:

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in **Table 8**, except as otherwise provided in these rules.

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L_{10} or L_{50}, by more than 10 dBA in any one hour, or exceed the levels specified in **Table 8**, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule.

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.

(c) Quiet Areas. No person owning or controlling an industrial or commercial noise source located either within the boundaries of a quiet area or outside its boundaries shall cause or permit the operation of that noise source if the statistical noise levels generated by that source exceed the levels specified in Table 9 as measured within the quiet area and not less than 400 feet (122 meters) from the noise source.

(d) Impulse Sound. Notwithstanding the noise rules in **Tables 7 through 9**, no person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if an impulsive sound is emitted in air by that source which exceeds the sound pressure levels specified below, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule:

(A) Blasting. 98 dBC, slow response, between the hours of 7 a.m. and 10 p.m. and 93 dBC, slow response, between the hours of 10 p.m. and 7 a.m.

(B) All Other Impulse Sounds. 100 db, peak response, between the hours of 7 a.m. and 10 p.m. and 80 dB, peak response, between the hours of 10 p.m. and 7 a.m.

(f) Octave Bands and Audible Discrete Tones. When the Director has reasonable cause to believe that the requirements of subsection (1)(a), (b), or (c) of this rule do not adequately protect the health, safety, or welfare of the public as provided for in ORS Chapter 467, the Department may require the noise source to meet the following rules:

(A) Octave Bands. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceeds applicable levels specified in **Table 10**.

(B) One-third Octave Band. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median one-third octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, and in a one-third octave band at a preferred frequency, exceeds the arithmetic average of the median sound pressure levels of the two adjacent one-third octave bands by:

(i) 5 dB for such one-third octave band with a center frequency from 500 Hertz to 10,000 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band; or

(ii) 8 dB for such one-third octave band with a center frequency from 160 Hertz to 400 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band; or

(iii) 15 dB for such one-third octave band with a center frequency from 25 Hertz to 125 Hertz, inclusive. Provided: Such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band;

(iv) This rule shall not apply to audible discrete tones having a one-third octave band sound pressure level 10 dB or more below the allowable sound pressure levels specified in **Table 10** for the octave band which contains such one-third octave band.

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurements procedures shall conform to those procedures which are adopted by the Commission and set forth in **Sound Measurement Procedures Manual (NPCS-1)**, or to such other procedures as are approved in writing by the Department;

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in **Sound Measurement Procedures Manual (NPCS-1)**;

(b) Nothing in this rule shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site;

(B) Reasonable facilities, where available, including but not limited to, electric power and ladders adequate to perform the testing;

(C) Cooperation in the reasonable operation, manipulation, or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis;

(b) Warning devices not operating continuously for more than 5 minutes;

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles;

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in **Part 201** of **Title 40** of the **Code of Federal Regulations**, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576; but this exemption does not apply to any standard, control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in Section 17(c)(2) of the Act;

(e) Sounds created by bells, chimes, or carillons;

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent, or ongoing activities such as, but not limited to, those which normally occur at bowling alleys or amusement parks operating in one location for a significant period of time;

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment;

(i) Sounds created by lawn care maintenance and snow removal equipment;

(j) Sounds generated by the operation of aircraft and subject to pre-emptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not pre-emptively regulated by the federal government or controlled under OAR 340-035-0045;

(k) Sounds created by the operation of road vehicle auxiliary equipment complying with the noise rules for such equipment as specified in OAR 340-035-0030(1)(e);

(l) Sounds created by agricultural activities;

(m) Sounds created by activities related to the growing or harvesting of forest tree species on forest land as defined in subsection (1) of ORS 526.324.

(6) Exceptions: Upon written request from the owner or controller of an industrial or commercial noise source, the Department may authorize exceptions to section (1) of this rule, pursuant to rule 340-035-0010, for:

(a) Unusual and/or infrequent events;

(b) Industrial or commercial facilities previously established in areas of new development of noise sensitive property;

(c) Those industrial or commercial noise sources whose statistical noise levels at the appropriate measurement point are exceeded by any noise source external to the industrial or commercial noise source in question;

(d) Noise sensitive property owned or controlled by the person who controls or owns the noise source;

(e) Noise sensitive property located on land zoned exclusively for industrial or commercial use.

[ED. NOTE: The Table(s) referenced in this rule are not printed in the OAR Compilation. Copies are available from the agency.]

[Publication: The Publication(s) referred to or incorporated by reference in this rule are available from the agency.]

Stat. Auth.: ORS 467
Stats. Implemented: ORS 467.030
Hist.: DEQ 77, f. 9-5-74, ef. 9-25-74; DEQ 135, f. & ef. 6-7-77; DEQ 8-1980, f. & ef. 3-11-80; DEQ 7-1983, f. & ef. 4-22-83

TABLE 7
(340-35-035)

Existing Industrial and Commercial Noise Source Standards

Allowable Statistical Noise Levels in Any One Hour

7am – 10 pm	10 pm – 7am
L_{50} – 55 dBA	L_{50} – 50 dBA
L_{10} – 60 dBA	L_{10} – 55 dBA
L_1 – 75dBA	L_1 – 60 dBA

TABLE 8
(340-35-035)

New Industrial and Commercial Noise Source Standards

Allowable Statistical Noise Levels in Any One Hour

7 am – 10 pm	10 pm – 7am
L_{50} – 55 dBA	L_{50} – 50 dBA
L_{10} – 60 dBA	L_{10} – 55 dBA
L_1 - 75 dBA	L_1 – 60 dBA

TABLE 9
(340-35-035)

Industrial and Commercial Noise Source Standards for Quiet Areas

Allowable Statistical Noise Levels in Any One Hour

7 am – 10 pm	10 pm – 7 am
L_{50} – 50 dBA	L_{50} – 45 dBA
L_{10} – 55 dBA	L_{10} – 50 dBA
L_1 – 60 dBA	L_1 – 55 dBA

TABLE 10
(340-35-035)

Median Octave Band Standards for Industrial and Commercial Noise Sources

Allowable Octave Band Sound Pressure Levels

Octave Band Center Frequency, Hz	7am – 10 pm	10 pm – 7 am
31.5	68	65
63	65	62
125	61	56
250	55	50
500	52	46
1000	49	43
2000	46	40
4000	43	37
8000	40	34

Appendix B - Equipment Reference Noise Levels

Equipment Reference Noise Levels Used in Noise Prediction

Noise levels expressed in decibels re 20 µPa

Source	Ref. Dist.	Octave Band Center Frequencies (Hz)							
		63	125	250	500	1000	2000	4000	8000
Crushing and screening plant	50	90	90	87	88	88	87	83	75
CAT 330L excavator	50	71	82	71	69	65	65	62	58
Hydraulic rock drill	50	79	84	80	81	83	80	72	68
CAT 966 front end loader	50	80	69	65	66	67	64	56	49
CAT D8 dozer	50	82	78	82	79	82	75	71	67

Appendix C Analysis Print-outs

Predicted Noise Levels

With and Without Man Made Mitigation Measures

Project: Ordway Mine
Analyst: PGM
Notes: Western Boundary

Project Number: 215061
Date: 10/10/2007

4

DEQ Compliance Boundary Point 4

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	103	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	2102	280	8	50	82	78	82	79	82	75	71	67	84	91	87	84
ex1	excavator	2148	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
ex2	excavator	2223	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
fel	fel1	2330	280	8	50	80	69	65	66	67	64	56	49	71	71	71	0
screen	screen	2512	300	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	6	180.9	0
ex1	land	32	185.9	0
ex2	land	67	180	0
fel	land	212	186.2	0
screen	land	392	186.6	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-32	0	-3	0	0	49	45	48	45	47	37	21	0		55	51	48
ex1	-33	0	-2	0	0	38	49	38	35	30	27	12	0		41	39	38
ex2	-33	0	-2	0	0	38	49	37	35	30	27	11	0		41	39	38
fel	-33	0	-3	0	0	47	36	31	32	31	25	4	0		35	35	0
screen	-34	0	-4	0	0	55	55	51	52	50	46	28	0		56	55	54

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	57	57	53	53	52	46	29	0	0	59	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Western Boundary

Project Number: 215061
Date: 10/10/2007

5

DEQ Compliance Boundary Point 5

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	92	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	2111	280	8	50	82	78	82	79	82	75	71	67	84	91	87	84
ex1	excavator	2174	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
ex2	excavator	2220	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
fel	fel1	2354	280	8	50	80	69	65	66	67	64	56	49	71	71	71	0
screen	screen	2535	300	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	6	180.8	0
ex1	land	34	185.5	0
ex2	land	50	180	0
fel	land	227	183.9	0
screen	land	417	182.5	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-33	0	-3	0	0	49	45	48	45	47	37	21	0		55	51	48
ex1	-33	0	-2	0	0	38	49	38	35	30	27	12	0		41	39	38
ex2	-33	0	-2	0	0	38	49	37	35	30	27	11	0		41	39	38
fel	-33	0	-3	0	0	47	36	31	31	31	25	4	0		35	35	0
screen	-34	0	-4	0	0	55	55	51	51	50	46	28	0		56	55	54

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	56	57	53	52	52	46	29	0	0	59	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Western Boundary

Project Number: 215061
Date: 10/10/2007

					1
DEQ Compliance Boundary Point					1
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
r1	101	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	2144	280	8	50	82	78	82	79	82	75	71	67	84	91	87	84
ex1	excavator	2221	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
ex2	excavator	2236	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
fel	fel1	2393	280	8	50	80	69	65	66	67	64	56	49	71	71	71	0
screen	screen	2566	300	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	7	180.7	0
ex1	land	39	185	0
ex2	land	41	180	0
fel	land	252	181.1	0
screen	land	411	180	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-33	0	-3	0	0	49	45	48	45	47	37	21	0		55	51	48
ex1	-33	0	-2	0	0	38	49	37	35	30	27	11	0		41	39	38
ex2	-33	0	-2	0	0	38	49	37	35	30	26	11	0		41	39	38
fel	-34	0	-3	0	0	47	35	31	31	31	25	4	0		35	35	0
screen	-34	0	-4	0	0	55	55	51	51	50	46	28	0		56	55	54

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	56	57	53	52	52	46	29	0	0	59	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Western Boundary

Project Number: 215061
Date: 10/10/2007

2

DEQ Compliance Boundary Point 2

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	120	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	2124	280	8	50	82	78	82	79	82	75	71	67	84	91	87	84
ex1	excavator	2213	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
ex2	excavator	2191	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
fel	fel1	2368	280	8	50	80	69	65	66	67	64	56	49	71	71	71	0
screen	screen	2526	300	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	9	180.5	0
ex1	land	48	184.3	0
ex2	land	36	180	0
fel	land	242	180	0
screen	land	362	180	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-33	0	-3	0	0	49	45	48	45	47	37	21	0		55	51	48
ex1	-33	0	-2	0	0	38	49	37	35	30	27	12	0		41	39	38
ex2	-33	0	-2	0	0	38	49	37	35	30	27	12	0		41	39	38
fel	-34	0	-3	0	0	47	36	31	31	31	25	4	0		35	35	0
screen	-34	0	-4	0	0	55	55	51	51	50	46	28	0		56	55	54

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	56	57	53	52	52	46	29	0	0	59	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Western Boundary

Project Number: 215061
Date: 10/10/2007

3

DEQ Compliance Boundary Point 3

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	90	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	2149	280	8	50	82	78	82	79	82	75	71	67	84	91	87	84
ex1	excavator	2246	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
ex2	excavator	2185	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
fel	fel1	2373	280	8	50	80	69	65	66	67	64	56	49	71	71	71	0
screen	screen	2508	300	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	13	180.3	0
ex1	land	71	182.8	0
ex2	land	33	180	0
fel	land	225	180	0
screen	land	334	180	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-33	0	-3	0	0	49	45	48	45	47	37	21	0		55	51	48
ex1	-33	0	-2	0	0	38	49	37	35	30	26	11	0		41	39	38
ex2	-33	0	-2	0	0	38	49	38	35	30	27	12	0		41	39	38
fel	-34	0	-3	0	0	47	36	31	31	31	25	4	0		35	35	0
screen	-34	0	-4	0	0	55	55	51	52	50	46	28	0		56	55	54

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	57	57	53	53	52	46	29	0	0	59	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Eastern Boundary Without Mitigation

Project Number: 215061
Date: 10/10/2007

DEQ Compliance Boundary Point					e6
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
e6	103	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	2109	170	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel	fel1	1639	140	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1440	180	4	50	79	84	80	81	83	80	72	68	86	89	88	87
screen	screen	1739	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects1	screen	2708	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	463	180	0
fel	land	313	180	0
drill	land	28	180	0
screen	land	404	180	0
reflects1	land	1392	180	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-33	0	-3	0	-8	44	39	42	38	39	27	9	0		0	0	0
fel	-30	0	-2	0	-18	40	27	20	18	15	7	0	0		21	21	0
drill	-29	0	-2	0	0	49	54	50	51	52	47	31	2		57	56	55
screen	-21	0	-3	0	-16	51	48	42	41	35	29	14	0		39	38	37
reflects1	-25	0	-4	0	-13	49	46	41	39	33	26	6	0		38	37	36

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	55	56	52	51	52	47	31	10	0	57	56	55

Project: Ordway Mine
Analyst: PGM
Notes: Eastern Boundary Without Mitigation

Project Number: 215061
Date: 10/10/2007

DEQ Compliance Boundary Point					e5
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
e5	92	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1871	170	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel	fel1	1683	140	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1432	180	4	50	79	84	80	81	83	80	72	68	86	89	88	87
screen	screen	1764	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects1	screen	2817	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects2	screen	2957	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	355	180	0
fel	land	283	180	0
drill	land	24	180	0
screen	land	359	180	0
reflects1	land	1417	180	0
reflects2	land	1518	180	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-31	0	-2	0	-13	43	38	40	34	33	21	4	0		0	0	0
fel	-31	0	-2	0	-20	38	25	17	15	12	6	0	0		19	19	0
drill	-29	0	-2	0	0	49	54	50	51	52	47	31	2		57	56	55
screen	-21	0	-3	0	-19	49	45	39	37	32	26	13	0		36	35	34
reflects1	-25	0	-4	0	-18	46	41	36	33	27	20	1	0		32	31	30
reflects2	-26	0	-4	0	-18	45	41	35	33	27	19	0	0		32	31	30

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	54	55	51	51	52	47	31	10	0	57	56	55

Project: Ordway Mine
Analyst: PGM
Notes: Eastern Boundary Without Mitigation

Project Number: 215061
Date: 10/10/2007

DEQ Compliance Boundary Point					e7
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
e7	92	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1555	170	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel	fel1	1715	140	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1459	160	4	50	79	84	80	81	83	80	72	68	86	89	88	87
reflectd1	rock drill	2873	180	4	50	79	84	80	81	83	80	72	68	86	89	88	87
reflects3	screen	2676	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
screen	screen	1762	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects1	screen	2793	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects2	screen	2721	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	265	180	0
fel	land	302	180	0
drill	land	25	180	0
reflectd1	land	1458	180	0
reflects3	mult	748	202.8	0
reflects3	mult	1023	180	0
screen	land	375	180	0
reflects1	land	1477	180	0
reflects2	land	1461	180	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-30	0	-2	0	-14	45	39	41	35	35	23	7	0		0	0	0
fel	-31	0	-2	0	-20	38	24	17	15	12	5	0	0		18	18	0
drill	-29	0	-2	0	0	49	54	50	50	52	47	31	1		57	56	55
reflectd1	-35	0	-4	0	-16	35	38	31	28	26	16	0	0		33	32	31
reflects3	-25	0	-4	0	-21	44	39	33	31	25	20	3	0		30	29	28
screen	-21	0	-3	0	-20	49	45	39	37	31	26	13	0		36	35	34
reflects1	-25	0	-4	0	-19	45	41	35	33	27	19	1	0		32	31	30
reflects2	-25	0	-4	0	-19	45	41	35	33	27	20	2	0		32	31	30

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	55	55	51	51	52	47	31	9	0	57	56	55

Project: Ordway Mine
Analyst: PGM
Notes: Eastern Boundary Without Mitigation

Project Number: 215061
Date: 10/10/2007

DEQ Compliance Boundary Point					e3
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
e3	103	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1573	170	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel	fel1	1978	140	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1746	180	4	50	79	84	80	81	83	80	72	68	86	89	88	87
reflectd1	rock drill	2809	180	4	50	79	84	80	81	83	80	72	68	86	89	88	87
reflects3	screen	3018	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
screen	screen	1999	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects1	screen	2952	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects2	screen	2720	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	196	180	0
fel	land	349	180	0
drill	land	30	180	0
reflects3	mult	626	231.6	0
reflects3	mult	1224	180	0
screen	land	455	180	0
reflects1	land	1622	180	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-30	0	-2	0	-8	46	42	45	40	41	30	15	0		0	0	0
fel	-32	0	-3	0	-17	39	26	19	16	13	5	0	0		20	20	0
drill	-31	0	-3	0	0	48	53	48	49	50	44	27	0		55	54	53
reflectd1	-35	0	-4	0	0	44	48	44	44	45	38	14	0		50	49	47
reflects3	-26	0	-4	0	-22	41	36	30	28	23	18	0	0		27	26	25
screen	-22	0	-3	0	-16	50	46	41	39	34	27	10	0		38	37	36
reflects1	-26	0	-4	0	-13	48	45	40	38	32	24	2	0		36	35	35
reflects2	-25	0	-4	0	0	56	54	51	52	48	44	26	0		51	50	49

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	58	58	54	54	53	48	30	0	0	57	56	55

Project: Ordway Mine
Analyst: PGM
Notes: Eastern Boundary With Mitigation

Project Number: 215061
Date: 10/10/2007

DEQ Compliance Boundary Point					em2
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
em2	103	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1321	170	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel	fel1	545	140	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	524	180	4	50	79	84	80	81	83	80	72	68	86	89	88	87
screen	screen	644	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects1	screen	1488	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	1148	180	6
fel	land	415	180	6
drill	land	314	180	6
screen	land	517	180	6
reflects1	land	1372	180	6

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-28	0	-2	0	-12	47	42	44	39	39	27	13	0		0	0	0
fel	-21	0	-1	0	-17	51	38	31	29	27	20	7	0		33	33	0
drill	-20	0	-1	0	-11	53	57	52	51	51	44	31	15		56	55	54
screen	-13	0	-1	0	-17	60	57	52	50	45	41	31	12		49	48	47
reflects1	-20	0	-3	0	-14	54	51	46	44	39	33	19	0		43	42	41

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	62	60	55	54	52	46	34	18	0	57	56	55

Project: Ordway Mine
Analyst: PGM
Notes: Eastern Boundary With Mitigation

Project Number: 215061
Date: 10/10/2007

DEQ Compliance Boundary Point				em5
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
em5	92	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	865	170	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel	fel1	388	140	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	144	180	4	50	79	84	80	81	83	80	72	68	86	89	88	87
reflectd1	rock drill	1982	180	4	50	79	84	80	81	83	80	72	68	86	89	88	87
screen	screen	464	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects1	screen	1519	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects2	screen	1720	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	615	180	6
fel	land	283	180	6
drill	land	24	180	6
reflectd1	land	1852	180	6
screen	land	359	180	6
reflects1	land	1415	180	6
reflects2	land	1600	180	6

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-25	0	-1	0	-23	43	36	37	31	32	24	15	0		0	0	0
fel	-18	0	-1	0	-24	44	30	23	24	25	22	11	0		29	29	0
drill	-9	0	0	0	-22	57	60	53	51	50	46	37	31		57	56	54
reflectd1	-32	0	-3	0	-24	29	31	24	23	25	19	0	0		30	29	28
screen	-10	0	-1	0	-24	53	48	43	44	42	41	35	20		45	44	43
reflects1	-20	0	-3	0	-24	43	38	32	33	31	28	17	0		33	32	31
reflects2	-21	0	-3	0	-24	42	37	32	32	29	26	14	0		32	31	30

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	59	60	53	52	51	47	39	31	0	57	56	55

Project: Ordway Mine
Analyst: PGM
Notes: Eastern Boundary With Mitigation

Project Number: 215061
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DEQ Compliance Boundary Point					em7
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
em7	103	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	489	170	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel	fel1	634	140	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	463	180	4	50	79	84	80	81	83	80	72	68	86	89	88	87
reflectd1	rock drill	1771	180	4	50	79	84	80	81	83	80	72	68	86	89	88	87
reflects3	screen	1711	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
screen	screen	636	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects1	screen	1604	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects2	screen	1567	140	12	150	81	79	77	78	76	76	73	66	82	80	79	78

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	441	180	6
fel	land	529	180	6
drill	land	71	180	6
reflectd1	land	1729	180	6
reflects3	land	1558	180	6
screen	land	563	180	6
reflects1	land	1559	180	6
reflects2	land	1527	180	6

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-20	0	-1	0	-22	49	43	44	38	38	29	23	10		0	0	0
fel	-22	0	-1	0	-20	47	33	26	24	22	17	5	0		28	28	0
drill	-19	0	-1	0	-11	54	58	53	52	51	45	32	17		57	56	55
reflectd1	-31	0	-3	0	-22	35	37	30	27	26	20	3	0		33	32	30
reflects3	-21	0	-3	0	-18	50	46	41	39	34	27	14	0		38	37	36
screen	-13	0	-1	0	-21	57	52	47	45	40	37	31	13		44	43	43
reflects1	-21	0	-3	0	-22	48	43	37	35	30	27	15	0		35	34	33
reflects2	-20	0	-3	0	-22	47	43	37	35	30	27	16	0		35	34	33

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	60	59	54	53	52	46	35	20	0	58	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Northern Boundary Without Mitiagation

Project Number: 215061
Date: 10/10/2007

3

DEQ Compliance Boundary Point 3

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	103	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1599	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1790	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1403	250	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1859	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	218	239	0
fel1	land	410	238.9	0
drill	land	17	247.3	0
screen	land	478	242.2	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-30	0	-2	0	0	51	47	51	47	50	40	28	0		0	0	0
fel1	-31	0	-2	0	-20	38	24	17	14	12	5	0	0		18	18	0
drill	-29	0	-2	0	0	50	54	50	51	52	47	32	3		58	57	55
screen	-31	0	-3	0	-20	47	44	38	36	32	26	12	0		39	38	37

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	54	56	54	53	54	48	33	11	0	58	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Northern Boundary Without Mitiagation

Project Number: 215061
Date: 10/10/2007

5

DEQ Compliance Boundary Point 5

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	103	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1611	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1789	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1395	250	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1843	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	228	245.6	0
fel1	land	423	249.8	0
drill	land	18	247.9	0
screen	land	413	288.2	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-30	0	-2	0	-11	45	40	43	37	37	25	10	0		0	0	0
fel1	-31	0	-2	0	-23	33	19	12	10	10	5	0	0		15	15	0
drill	-29	0	-2	0	0	50	55	50	51	52	47	32	3		58	57	55
screen	-31	0	-3	0	-24	39	36	30	31	30	26	12	0		36	35	34

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	51	55	51	51	52	47	32	11	0	58	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Northern Boundary Without Mitigation

Project Number: 215061
Date: 10/10/2007

2

DEQ Compliance Boundary Point 2

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	120	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1662	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1806	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1459	250	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1831	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	204	284.5	0
fel1	land	291	342.6	0
drill	land	24	249.1	0
screen	land	250	357.6	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-30	0	-2	0	-20	40	33	34	28	27	16	3	0		0	0	0
fel1	-31	0	-2	0	-24	27	14	10	10	10	5	0	0		14	14	0
drill	-29	0	-2	0	0	49	54	50	50	52	47	31	1		57	56	55
screen	-31	0	-3	0	-24	35	34	30	31	30	26	12	0		36	35	34

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	50	54	50	50	52	47	31	10	0	57	56	55

Project: Ordway Mine
Analyst: PGM
Notes: Northeastern Boundary Without Mitiagation

Project Number: 215061
Date: 10/10/2007

1

DEQ Compliance Boundary Point 1

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	101	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	2166	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1653	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1493	260	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
reflectS	screen	2891	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	619	200	0
fel1	land	283	237.3	0
drill	land	31	250	0
reflectS	mult	675	0	0
reflectS	mult	1494	226.2	0
screen	land	359	220.4	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-33	0	-3	0	0	49	45	48	44	46	36	21	0		0	0	0
fel1	-30	0	-2	0	-22	36	22	15	12	11	6	0	0		17	17	0
drill	-30	0	-2	0	0	49	54	50	50	52	46	30	0		57	56	54
reflectS	-35	0	-4	0	-19	43	41	35	32	28	20	0	0		36	35	34
screen	-31	0	-3	0	-19	48	45	39	37	33	27	13	0		41	40	39

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	54	55	52	51	53	47	31	5	0	57	56	55

Project: Ordway Mine
Analyst: PGM
Notes: Northeastern Boundary Without Mitiagation

Project Number: 215061
Date: 10/10/2007

3

DEQ Compliance Boundary Point 3

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	103	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	2309	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1675	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1411	260	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1842	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	931	250	0
fel1	land	300	250	0
drill	land	23	250	0
screen	land	468	250	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-33	0	-3	0	-20	37	30	31	25	24	12	0	0		0	0	0
fel1	-31	0	-2	0	-23	33	19	12	11	11	6	0	0		16	16	0
drill	-29	0	-2	0	0	50	54	50	51	52	47	31	3		57	56	55
screen	-31	0	-3	0	-23	42	39	33	31	30	26	12	0		36	35	34

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	51	55	50	51	52	47	32	10	0	58	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Northeastern Boundary Without Mitiagation

Project Number: 215061
Date: 10/10/2007

4

DEQ Compliance Boundary Point 5

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	92	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	2317	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1680	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1398	260	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1853	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	898	272.4	0
fel1	land	311	250	0
drill	land	23	250	0
screen	land	484	250	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-33	0	-3	0	-22	35	28	29	22	22	11	0	0		0	0	0
fel1	-31	0	-2	0	-23	33	19	12	11	11	6	0	0		15	15	0
drill	-29	0	-2	0	0	50	55	50	51	52	47	32	3		58	57	55
screen	-31	0	-3	0	-23	42	39	33	31	30	26	12	0		36	35	34

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	51	55	50	51	52	47	32	11	0	58	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Northeastern Boundary Without Mitiagation

Project Number: 215061
Date: 10/10/2007

2

DEQ Compliance Boundary Point 2

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	120	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	2256	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1707	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1464	260	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1858	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	543	379.5	0
fel1	land	206	310.5	0
drill	land	22	253.2	0
screen	land	316	341.7	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-33	0	-3	0	-24	28	21	24	20	22	12	0	0		0	0	0
fel1	-31	0	-2	0	-24	28	14	10	11	11	5	0	0		14	14	0
drill	-29	0	-2	0	0	49	54	50	50	52	47	31	1		57	56	55
screen	-31	0	-3	0	-24	36	33	30	31	30	26	12	0		36	35	34

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	49	54	50	50	52	47	31	9	0	57	56	55

Project: Ordway Mine
Analyst: PGM
Notes: Northeastern Boundary With Mitiagation

Project Number: 215061
Date: 10/10/2007

1

1ner

DEQ Compliance Boundary Point

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	101	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1483	250	6	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	977	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	858	260	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1088	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	643	200	6
fel1	land	275	233.3	6
drill	land	41	250	6
screen	land	354	218.3	6

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-29	0	-2	0	0	52	48	52	48	50	41	29	0		0	0	0
fel1	-26	0	-1	0	-23	39	25	18	16	16	12	0	0		21	21	0
drill	-25	0	-1	0	0	54	59	55	55	57	53	40	21		63	62	60
screen	-27	0	-2	0	-21	50	48	42	40	36	33	23	0		44	43	42

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	57	59	57	56	58	53	41	22	0	63	62	60

Project: Ordway Mine
Analyst: PGM
Notes: Northeastern Boundary With Mitigation

Project Number: 215061
Date: 10/10/2007

4

DEQ Compliance Boundary Point

4ner

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	92	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1726	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1116	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	888	260	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1271	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	842	232.5	6
fel1	land	309	250	6
drill	land	25	250	6
screen	land	461	247.3	6

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-31	0	-2	0	-20	40	33	34	28	27	15	2	0		0	0	0
fel1	-27	0	-2	0	-23	36	22	14	15	15	11	0	0		19	19	0
drill	-25	0	-1	0	0	54	59	54	55	57	52	40	20		62	61	60
screen	-28	0	-2	0	-24	44	42	35	34	34	31	20	0		40	39	38

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	54	59	54	55	57	52	40	21	0	62	61	60

Project: Ordway Mine
Analyst: PGM
Notes: Northeastern Boundary With Mitiagation

Project Number: 215061
Date: 10/10/2007

3

3ner

DEQ Compliance Boundary Point

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	103	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1809	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1168	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	892	260	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1341	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	946	250	6
fel1	land	306	250	6
drill	land	23	250	6
screen	land	478	250	6

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-31	0	-2	0	-23	36	29	30	23	24	15	1	0		0	0	0
fel1	-27	0	-2	0	-24	35	21	14	14	15	10	0	0		19	19	0
drill	-25	0	-1	0	0	54	58	54	55	57	52	39	20		62	61	60
screen	-29	0	-2	0	-24	43	40	34	34	33	30	19	0		39	38	37

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	54	59	54	55	57	52	40	21	0	62	61	60

Project: Ordway Mine
Analyst: PGM
Notes: Northeastern Boundary With Mitiagation

Project Number: 215061
Date: 10/10/2007

2

DEQ Compliance Boundary Point

2ner

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	120	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1642	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1069	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	829	260	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1224	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	605	375.2	6
fel1	land	211	306.5	6
drill	land	22	253.4	6
screen	land	329	332.6	6

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-30	0	-2	0	-24	30	23	27	23	25	16	3	0		0	0	0
fel1	-27	0	-2	0	-24	31	19	14	15	16	11	0	0		19	19	0
drill	-24	0	-1	0	0	54	59	55	56	57	53	41	22		63	62	60
screen	-28	0	-2	0	-24	38	37	34	35	34	31	21	0		40	39	38

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	54	59	55	56	57	53	41	23	0	63	62	60

Date: 10/10/07 Project Number: 215061
Project Name: Ordway Mine Engineer: PGM
Comments: Barrier height necessary for boundary point 2nem to be in compliance.
Barrier height = 10ft

Number of sources: 1 Temperature: 50
Number or receivers: 1 Humidity: 90
Maximum reduction provided by barrier: 24

				Reference Levels						
Source	Ref Dist	dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	50	86.4	89.4	79	84	80	81	83	80	72	68

Receiver 1: 4nem

Total noise level with barrier(s):	62.4	dBA	68.0	dB
Total noise level without barrier(s):	63.8	dBA	69.0	dB
Noise reduction provided by barrier(s):	1.4	dBA	1.0	dB

					Level with and without barrier						
Source		dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	w/ barrier	54.9	58.7	49	54	50	50	52	48	35	30
	w/out barrier	59.9	63.7	54	59	55	55	57	53	40	35

Receiver	X	Y	Z
4nem	0	0	120

	Source Coordinates			Barrier Coordinates			Trees
Source Name	X	Y	Z	X	Y	Z	ft
rock drill	888	0	264	863	0	260	0

Date: 10/10/07 Project Number: 215061
Project Name: Ordway Mine Engineer: PGM
Comments: Barrier height necessary for boundary point 2nem to be in compliance.
Barrier height = 10ft

Number of sources: 1 Temperature: 50
Number or receivers: 1 Humidity: 90
Maximum reduction provided by barrier: 24

				Reference Levels						
Source	Ref Dist	dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	50	86.4	89.4	79	84	80	81	83	80	72	68

Receiver 1: NEM2

Total noise level with barrier(s):	55.1	dBA	59.1	dB
Total noise level without barrier(s):	60.6	dBA	64.3	dB
Noise reduction provided by barrier(s):	5.4	dBA	5.2	dB

					Level with and without barrier						
Source		dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	w/ barrier	55.1	59.1	49	54	50	51	52	48	34	28
	w/out barrier	60.6	64.3	54	59	55	56	58	53	41	36

Receiver	X	Y	Z
NEM2	0	0	125

	Source Coordinates			Barrier Coordinates			Trees
Source Name	X	Y	Z	X	Y	Z	ft
rock drill	829	0	266	807	0	263	0

Date: 10/10/07 Project Number: 215061
Project Name: Ordway Mine Engineer: PGM
Comments: Barrier height necessary for boundary point 3nem to be in compliance.
Barrier height = 12ft

Number of sources: 1 Temperature: 50
Number or receivers: 1 Humidity: 90
Maximum reduction provided by barrier: 24

				Reference Levels							
Source	Ref Dist	dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	50	86.4	89.4	79	84	80	81	83	80	72	68

Receiver 1: NEM3

Total noise level with barrier(s):	54.8	dBA	58.6	dB
Total noise level without barrier(s):	59.8	dBA	63.6	dB
Noise reduction provided by barrier(s):	5.0	dBA	5.0	dB

					Level with and without barrier						
Source		dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	w/ barrier	54.8	58.6	49	54	50	50	52	48	35	30
	w/out barrier	59.8	63.6	54	59	55	55	57	53	40	35

Receiver	X	Y	Z
NEM3	0	0	108

	Source Coordinates			Barrier Coordinates			Trees
Source Name	X	Y	Z	X	Y	Z	ft
rock drill	892	0	266	869	0	262	0

Date: 10/10/07 Project Number: 215061
Project Name: Ordway Mine Engineer: PGM
Comments: Barrier height necessary for boundary point 1nem to be in compliance.
Barrier height = 9ft
(barrier height calculation assumes ground height to be 250ft not 180ft)

Number of sources: 1 Temperature: 50
Number or receivers: 1 Humidity: 90
Maximum reduction provided by barrier: 24

				Reference Levels						
Source	Ref Dist	dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	50	86.4	89.4	79	84	80	81	83	80	72	68

Receiver 1: NEM1

Total noise level with barrier(s):	55.0	dBA	58.9	dB
Total noise level without barrier(s):	60.2	dBA	64.0	dB
Noise reduction provided by barrier(s):	5.2	dBA	5.1	dB

		Level with and without barrier									
Source		dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	w/ barrier	55.0	58.9	49	54	50	51	52	48	35	29
	w/out barrier	60.2	64.0	54	59	55	56	57	53	40	35

Receiver	X	Y	Z
NEM1	0	0	106

	Source Coordinates			Barrier Coordinates			Trees
Source Name	X	Y	Z	X	Y	Z	ft
rock drill	858	0	266	817	0	259	0

Project: Ordway Mine
Analyst: PGM
Notes: Northern Boundary With Mitigation

Project Number: 215061
Date: 10/10/2007

1

DEQ Compliance Boundary Point					1nm
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
r1	101	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	620	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	796	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	483	250	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	875	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	231	232.2	6
fel1	land	411	228.7	6
drill	land	22	246.2	6
screen	land	498	230.6	6

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-22	0	-1	0	-17	51	45	47	41	41	30	20	5		0	0	0
fel1	-24	0	-1	0	-23	41	27	20	18	18	14	2	0		23	23	0
drill	-20	0	-1	0	-11	53	58	53	52	52	45	32	17		57	56	55
screen	-25	0	-2	0	-24	49	46	40	38	37	35	26	3		44	43	42

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	56	58	54	52	52	46	33	19	0	58	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Northern Boundary With Mitiagation

Project Number: 215061
Date: 10/10/2007

3

DEQ Compliance Boundary Point — 3nm

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	103	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	296	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	475	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	177	250	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	550	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	222	235.4	6
fel1	land	413	235	6
drill	land	35	244.6	6
screen	land	486	235.4	6

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-15	0	0	0	-24	49	42	43	39	42	34	29	20		0	0	0
fel1	-20	0	-1	0	-24	41	27	22	22	23	20	9	0		27	27	0
drill	-11	0	0	0	-20	57	60	53	51	50	44	35	28		57	56	54
screen	-21	0	-1	0	-24	49	46	41	42	42	40	33	15		48	47	46

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	58	60	54	52	51	46	38	29	0	57	56	55

Project: Ordway Mine
Analyst: PGM
Notes: Northern Boundary With Mitiagation

Project Number: 215061
Date: 10/10/2007

					4
DEQ Compliance Boundary Point					4nm
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
r1	92	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	327	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	450	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	229	250	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	472	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	184	323.9	6
fel1	land	277	351	6
drill	land	41	265.4	6
screen	land	268	355.3	6

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-16	0	-1	0	-24	48	41	42	38	41	33	28	18		0	0	0
fel1	-19	0	-1	0	-24	39	26	22	23	24	20	10	0		28	28	0
drill	-13	0	0	0	-18	57	60	53	51	50	44	33	25		57	56	54
screen	-20	0	-1	0	-24	47	46	42	43	43	41	35	19		50	49	48

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	58	60	54	52	52	46	37	26	0	58	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Northwestern Boundary Without Mitiagation

Project Number: 215061
Date: 10/10/2007

4

DEQ Compliance Boundary Point 4

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	92	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1999	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1779	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1539	250	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen reflect 2	screen	2152	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	283	236.3	0
fel1	land	210	192	0
drill	land	19	182	0
screen reflect 2	mult	320	312.5	0
screen reflect 2	mult	630	182.8	0
screen	land	217	207.3	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-32	0	-2	0	0	49	45	49	45	47	38	23	0		0	0	0
fel1	-31	0	-2	0	-8	44	33	28	27	26	19	0	0		30	30	0
drill	-30	0	-2	0	0	49	54	49	50	51	46	30	0		57	56	54
screen reflect 2	-33	0	-3	0	-24	37	34	29	29	28	24	8	0		34	33	32
screen	-31	0	-3	0	-14	51	49	44	42	39	32	15	0		46	45	44

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	55	56	53	52	53	47	31	0	0	57	56	55

Project: Ordway Mine
Analyst: PGM
Notes: Northwestern Boundary Without Mitiagation

Project Number: 215061
Date: 10/10/2007

1

DEQ Compliance Boundary Point					1
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
r1	101	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	2074	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1795	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1528	250	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1906	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	282	230.2	0
fel1	land	237	188.2	0
drill	land	22	181.6	0
screen	land	259	198.2	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-32	0	-3	0	0	49	45	49	45	47	37	22	0		0	0	0
fel1	-31	0	-2	0	-5	44	33	29	29	29	23	5	0		33	33	0
drill	-30	0	-2	0	0	49	54	49	50	51	46	30	0		57	56	54
screen	-32	0	-3	0	-8	52	52	48	48	45	40	23	0		52	51	50

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	56	56	53	53	53	47	31	0	0	58	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Northwestern Boundary Without Mitiagation

Project Number: 215061
Date: 10/10/2007

3

DEQ Compliance Boundary Point 3

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	103	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	2059	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1675	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	1420	250	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1842	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	660	205.3	0
fel1	land	259	229.5	0
drill	land	35	184.3	0
screen	land	440	213	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-32	0	-3	0	0	49	45	49	45	47	37	22	0		0	0	0
fel1	-31	0	-2	0	-22	36	22	14	12	11	6	0	0		16	16	0
drill	-29	0	-2	0	0	49	54	50	51	52	47	31	2		57	56	55
screen	-31	0	-3	0	-20	47	45	38	36	32	26	12	0		40	39	38

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	54	55	53	52	53	47	32	11	0	58	57	55

Project: Ordway Mine
Analyst: PGM
Notes: Northwestern Boundary With Mitiagation

Project Number: 215061
Date: 10/10/2007

4

DEQ Compliance Boundary Point 4nw

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	92	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1201	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1063	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	903	250	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen reflect 2	screen	1466	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	293	242.3	0
fel1	land	194	196.7	0
drill	land	18	182.6	0
screen reflect 2	mult	217	352.4	0
screen reflect 2	mult	599	194.8	0
screen	land	184	218.7	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-28	0	-2	0	-13	47	42	44	38	38	27	13	0		0	0	0
fel1	-27	0	-2	0	-16	46	33	26	24	22	15	0	0		27	27	0
drill	-25	0	-1	0	0	53	58	54	55	57	52	39	19		62	61	60
screen reflect 2	-29	0	-3	0	-24	36	36	32	33	32	29	17	0		38	37	36
screen	-27	0	-2	0	-21	50	48	42	39	36	33	23	0		44	43	42

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	56	59	55	55	57	52	39	20	0	62	61	60

Project: Ordway Mine
Analyst: PGM
Notes: Northwestern Boundary With Mitiagation

Project Number: 215061
Date: 10/10/2007

3

3nw

DEQ Compliance Boundary Point

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	103	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1466	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1130	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	857	250	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1268	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	435	199	0
fel1	land	290	182.8	0
drill	land	27	181	0
screen	land	334	191.2	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-29	0	-2	0	0	52	48	52	48	51	42	30	0		0	0	0
fel1	-27	0	-2	0	-13	46	34	28	26	24	17	0	0		29	29	0
drill	-25	0	-1	0	0	54	59	55	55	57	53	40	21		63	62	60
screen	-28	0	-2	0	-15	54	52	47	45	42	36	22	0		49	48	47

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	58	60	57	56	58	53	41	22	0	63	62	60

Project: Ordway Mine
Analyst: PGM
Notes: Northwestern Boundary With Mitiagation

Project Number: 215061
Date: 10/10/2007

1

DEQ Compliance Boundary Point 1nwi

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	101	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1457	250	8	50	82	78	82	79	82	75	71	67	84	91	87	84
fel1	fel1	1069	180	8	50	80	69	65	66	67	64	56	49	71	71	71	0
drill	rock drill	829	250	4	50	79	84	80	81	83	80	72	68	86	89	88	86.5
screen	screen	1238	180	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	646	223.4	0
fel1	land	254	236.8	0
drill	land	33	186.3	0
screen	land	431	226	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-29	0	-2	0	-18	43	36	38	31	31	19	6	0		0	0	0
fel1	-27	0	-2	0	-23	37	23	16	15	16	11	0	0		20	20	0
drill	-24	0	-1	0	0	54	59	55	56	57	53	41	22		63	62	60
screen	-28	0	-2	0	-23	47	44	38	35	34	31	20	0		41	40	39

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	55	59	55	56	57	53	41	23	0	63	62	60

Date: 10/10/07 Project Number: 215061
Project Name: Ordway Mine Engineer: PGM
Comments: Barrier height necessary for boundary point nwm3 to be in compliance.
Barrier height = 2ft
(barrier height calculation assumes the elevation to be at 250ft and not 180ft)

Number of sources: 1 Temperature: 50
Number or receivers: 1 Humidity: 90
Maximum reduction provided by barrier: 24

				Reference Levels						
Source	Ref Dist	dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	50	86.4	89.4	79	84	80	81	83	80	72	68

Receiver 1: NWM3

Total noise level with barrier(s):	54.9 dBA	58.9 dB
Total noise level without barrier(s):	60.2 dBA	64.0 dB
Noise reduction provided by barrier(s):	5.3 dBA	5.1 dB

					Level with and without barrier						
Source		dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	w/ barrier	54.9	58.9	49	54	50	51	52	48	34	29
	w/out barrier	60.2	64.0	54	59	55	56	57	53	40	35

Receiver	X	Y	Z
NWM3	0	0	108

	Source Coordinates			Barrier Coordinates			Trees
Source Name	X	Y	Z	X	Y	Z	ft
rock drill	857	0	256	830	0	252	0

Date: 10/10/07 Project Number: 215061
Project Name: Ordway Mine Engineer: PGM
Comments: Barrier height necessary for boundary point nwm1 to be in compliance.
Barrier height = 1ft
(barrier height calculation assumes the elevation to be at 250ft and not 180ft)

Number of sources: 1 Temperature: 50
Number or receivers: 1 Humidity: 90
Maximum reduction provided by barrier: 24

				Reference Levels						
Source	Ref Dist	dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	50	86.4	89.4	79	84	80	81	83	80	72	68

Receiver 1: NWM1

Total noise level with barrier(s):	55.1 dBA	59.1 dB
Total noise level without barrier(s):	60.5 dBA	64.3 dB
Noise reduction provided by barrier(s):	5.5 dBA	5.2 dB

					Level with and without barrier						
Source		dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	w/ barrier	55.1	59.1	49	54	50	51	52	48	34	28
	w/out barrier	60.5	64.3	54	59	55	56	58	53	41	36

Receiver	X	Y	Z
NWM1	0	0	106

	Source Coordinates			Barrier Coordinates			Trees
Source Name	X	Y	Z	X	Y	Z	ft
rock drill	829	0	256	796	0	251	0

Date: 10/10/07 Project Number: 215061
Project Name: Ordway Mine Engineer: PGM
Comments: Barrier height necessary for boundary point 4nwm to be in compliance.
Barrier height = 3ft
(barrier height calculation assumes the elevation to be 250ft and not 180ft)

Number of sources: 1 Temperature: 50
Number or receivers: 1 Humidity: 90
Maximum reduction provided by barrier: 24

				Reference Levels						
Source	Ref Dist	dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	50	86.4	89.4	79	84	80	81	83	80	72	68

Receiver 1: 4NWM

Total noise level with barrier(s):	62.3 dBA	68.0 dB
Total noise level without barrier(s):	63.7 dBA	68.9 dB
Noise reduction provided by barrier(s):	1.4 dBA	0.9 dB

					Level with and without barrier						
Source		dBA	dB	63	125	250	500	1k	2k	4k	8k
rock drill	w/ barrier	54.7	58.5	49	54	49	50	52	47	34	29
	w/out barrier	59.7	63.5	54	59	54	55	57	52	39	34

Receiver	X	Y	Z
4NWM	0	0	97

	Source Coordinates			Barrier Coordinates			Trees
Source Name	X	Y	Z	X	Y	Z	ft
rock drill	903	0	256	885	0	253	0

Project: Ordway Mine
Analyst: PGM
Notes: Southern Boundary

Project Number: 215061
Date: 10/10/2007

2

DEQ Compliance Boundary Point 2

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
r1	120	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1147	267	8	50	82	78	82	79	82	75	71	67	84	91	87	84
ex1	excavator	1168	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
ex2	excavator	1217	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
fel1	fel1	1254	230	8	50	80	69	65	66	67	64	56	49	71	71	71	0
screen	screen	1273	230	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	57	267.4	0
ex1	land	155	275.5	0
ex2	land	82	262.7	0
fel1	land	242	275.4	0
screen	land	260	275.6	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-27	0	-2	0	0	54	50	54	51	53	44	34	10		62	58	55
ex1	-27	0	-2	0	-17	33	41	27	22	15	11	1	0		30	28	27
ex2	-28	0	-2	0	-12	36	45	32	27	20	15	2	0		34	32	31
fel1	-28	0	-2	0	-22	39	25	18	16	14	9	0	0		20	20	0
screen	-28	0	-2	0	-22	49	46	40	38	34	31	20	0		42	41	40

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	55	53	54	51	53	45	34	14	0	62	58	55

Project: Ordway Mine
Analyst: PGM
Notes: Southern Boundary

Project Number: 215061
Date: 10/10/2007

3

DEQ Compliance Boundary Point					3
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
r1	103	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1122	267	8	50	82	78	82	79	82	75	71	67	84	91	87	84
ex1	excavator	1198	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
ex2	excavator	1129	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
fel1	fel1	1253	230	8	50	80	69	65	66	67	64	56	49	71	71	71	0
screen	screen	1394	230	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	38	263.8	0
ex1	land	112	266	0
ex2	land	53	257.7	0
fel1	land	174	261.3	0
screen	land	304	267.9	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-27	0	-2	0	0	54	50	54	51	53	45	35	11		62	58	55
ex1	-28	0	-2	0	-12	36	45	32	27	19	15	2	0		34	32	31
ex2	-27	0	-2	0	-7	39	49	37	34	28	24	12	0		40	38	37
fel1	-28	0	-2	0	-18	42	29	22	20	17	10	0	0		23	23	0
screen	-29	0	-3	0	-18	51	49	43	41	37	31	18	0		45	44	43

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	56	55	55	51	53	45	35	14	0	62	58	55

Project: Ordway Mine
Analyst: PGM
Notes: Southern Boundary

Project Number: 215061
Date: 10/10/2007

1

DEQ Compliance Boundary Point					1
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
r1	101	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1187	267	8	50	82	78	82	79	82	75	71	67	84	91	87	84
ex1	excavator	1237	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
ex2	excavator	1107	250	6	50	71	82	71	69	65	65	62	58	72.85	76	74	73
fel1	fel1	1191	230	8	50	80	69	65	66	67	64	56	49	71	71	71	0
screen reflect w	screen	2299	225	15	50	90	90	87	88	88	87	83	75	92	95	94	93
screen	screen	1345	230	15	50	90	90	87	88	88	87	83	75	92	95	94	93

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	180	250	0
ex1	land	181	250	0
ex2	land	70	250	0
fel1	land	85	250	0
screen reflect w	land	1122	310.6	0
screen	land	224	307.4	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-28	0	-2	0	0	54	50	54	50	53	44	34	9		61	57	54
ex1	-28	0	-2	0	-12	36	45	32	27	20	15	3	0		35	33	32
ex2	-27	0	-2	0	-7	39	50	38	35	29	25	14	0		41	39	38
fel1	-28	0	-2	0	-19	42	28	21	19	17	10	0	0		23	23	0
screen reflect w	-33	0	-4	0	-24	38	35	29	28	27	23	7	0		33	32	31
screen	-29	0	-2	0	-24	42	39	33	34	33	30	19	0		39	38	37

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	55	54	54	51	53	44	34	13	0	61	58	55

Project: Ordway Mine
Analyst: PGM
Notes: Southeastern Boundary Without Mitigation

Project Number: 215061
Date: 10/10/2007

DEQ Compliance Boundary Point					se7
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
se7	92	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1158	280	6	50	82	78	82	79	82	75	71	67	84	91	87	84
ex	excavator	1194	310	6	50	71	82	71	69	65	65	62	58	73	76	74	73
ex2	excavator	1220	310	6	50	71	82	71	69	65	65	62	58	73	76	74	73
fel	fel1	1291	220	6	50	80	69	65	66	67	64	58	49	71	71	71	0
screen	screen	1369	219	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects1	screen	1984	219	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects2	screen	2525	219	12	150	81	79	77	78	76	76	73	66	82	80	79	78

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	74	263.1	0
ex	land	36	300	0
ex2	land	34	300	0
fel	land	196	295.4	0
screen	land	301	286.2	0
reflects1	land	574	300	0
reflects2	land	1466	237.1	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-27	0	-2	0	0	54	50	54	51	53	44	34	10		62	58	55
ex	-28	0	-2	0	0	43	54	43	41	36	34	25	0		47	45	44
ex2	-28	0	-2	0	0	43	54	43	41	36	34	25	0		47	45	44
fel	-28	0	-2	0	-24	33	19	13	13	14	9	0	0		18	18	0
screen	-19	0	-2	0	-24	45	40	34	34	32	29	18	0		34	33	32
reflects1	-22	0	-3	0	-24	42	37	31	31	28	24	11	0		31	30	29
reflects2	-25	0	-4	0	-21	44	40	34	32	25	21	4	0		30	29	29

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	56	58	55	51	53	45	35	14	0	62	58	55

Project: Ordway Mine
Analyst: PGM
Notes: Southeastern Boundary Without Mitigation

Project Number: 215061
Date: 10/10/2007

DEQ Compliance Boundary Point					se5
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
se5	103	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1155	280	8	50	82	78	82	79	82	75	71	67	84	91	87	84
ex	excavator	1150	310	6	50	71	82	71	69	65	65	62	58	73	76	74	73
ex2	excavator	1162	310	6	50	71	82	71	69	65	65	62	58	73	76	74	73
fel	fel1	1265	220	8	50	80	69	65	66	67	64	56	49	71	71	71	0
screen	screen	1365	219	12	150	81	79	77	78	76	76	73	66	82	80	79	78

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	71	274.5	0
ex	land	32	300	0
ex2	land	30	300	0
fel	land	172	300	0
screen	land	271	300	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-27	0	-2	0	0	54	50	54	51	53	44	34	10		62	58	55
ex	-27	0	-2	0	0	44	55	43	41	37	35	26	2		47	45	44
ex2	-27	0	-2	0	0	44	55	43	41	36	35	25	1		47	45	44
fel	-28	0	-2	0	-24	33	19	13	13	14	9	0	0		18	18	0
screen	-19	0	-2	0	-24	43	39	33	34	32	29	19	0		34	33	32

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	55	58	55	51	53	45	35	14	0	62	58	55

Project: Ordway Mine
Analyst: PGM
Notes: Southeastern Boundary Without Mitigation

Project Number: 215061
Date: 10/10/2007

DEQ Compliance Boundary Point					se2
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
se2	103	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	690	280	8	50	82	78	82	79	82	75	71	67	84	91	87	84
ex	excavator	565	310	6	50	71	82	71	69	65	65	62	58	73	76	74	73
ex2	excavator	525	310	6	50	71	82	71	69	65	65	62	58	73	76	74	73
fel	fel1	673	220	8	50	80	69	65	66	67	64	56	49	71	71	71	0
screen	screen	737	219	12	150	81	79	77	78	76	76	73	66	82	80	79	78

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	109	300	0
ex	land	45	300	0
ex2	land	20	300	0
fel	land	170	300	0
screen	land	209	300	0

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-23	0	-1	0	-21	47	41	42	36	35	26	18	2		46	42	39
ex	-21	0	-1	0	0	50	61	50	48	43	43	36	23		54	52	51
ex2	-20	0	-1	0	0	51	62	50	48	44	43	37	24		55	53	52
fel	-23	0	-1	0	-24	39	25	19	19	20	16	4	0		24	24	0
screen	-14	0	-2	0	-24	49	44	39	40	38	36	29	9		41	40	39

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	55	64	54	51	48	46	40	27	0	58	56	55

Project: Ordway Mine
Analyst: PGM
Notes: Southeastern Boundary With Mitigation

Project Number: 215061
Date: 10/10/2007

DEQ Compliance Boundary Point					sem
Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor	
sem7	92	5	0	none	

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	1197	280	8	50	82	78	82	79	82	75	71	67	84	91	87	84
ex	excavator	1265	310	6	50	71	82	71	69	65	65	62	58	73	76	74	73
ex2	excavator	1301	310	6	50	71	82	71	69	65	65	62	58	73	76	74	73
fel	fel1	1340	220	8	50	80	69	65	66	67	64	56	49	71	71	71	0
screen	screen	1433	219	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects1	screen	2064	219	12	150	81	79	77	78	76	76	73	66	82	80	79	78
reflects2	screen	2533	219	12	150	81	79	77	78	76	76	73	66	82	80	79	78

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	83	252	6
ex	land	43	300	6
ex2	land	40	300	6
fel	land	218	269	6
screen	land	330	249	6
reflects1	land	867	300	6
reflects2	land	1501	180	6

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-28	0	-2	0	0	54	50	54	50	53	44	33	8		61	57	54
ex	-28	0	-2	0	0	43	54	43	40	36	34	24	0		46	44	43
ex2	-28	0	-2	0	0	43	54	42	40	35	33	23	0		46	44	43
fel	-29	0	-2	0	-23	35	21	14	13	13	8	0	0		18	18	0
screen	-20	0	-3	0	-22	48	44	38	36	31	28	18	0		35	34	34
reflects1	-23	0	-3	0	-24	41	36	30	30	27	24	10	0		30	29	28
reflects2	-25	0	-4	0	-14	49	46	40	39	33	26	6	0		37	36	35

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	56	58	54	51	53	45	34	13	0	62	58	55

Project: Ordway Mine
Analyst: PGM
Notes: Southeastern Boundary With Mitigation

Project Number: 215061
Date: 10/10/2007

DEQ Compliance Boundary Point

sem

Location	Ground Elevation	Height Above Ground	Depth of Foliage	Attenuation Factor
sem2	92	5	0	none

Sources

	Location Information				Reference Levels												
Location	Source	Source/ Receiver Distance	Ground Elevation	Height Above Ground	Reference Distance	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	dozer	591	280	8	50	82	78	82	79	82	75	71	67	84	91	87	84
ex	excavator	453	310	6	50	71	82	71	69	65	65	62	58	73	76	74	73
ex2	excavator	403	310	6	50	71	82	71	69	65	65	62	58	73	76	74	73
fel	fel1	534	220	8	50	80	69	65	66	67	64	56	49	71	71	71	0
screen	screen	579	219	12	150	81	79	77	78	76	76	73	66	82	80	79	78

Barriers

Source Name	Berm Type	Source/ Barrier Distance	Ground Elevation	Height
doz	land	181	300	6
ex	land	69	300	6
ex2	land	19	300	6
fel	land	160	300	6
screen	land	193	300	6

Calculation

	A-weighted Attenuation Factors					Contributed Levels at Receiver											
Source	Spreading Loss	Directivity	Atmosphere	Foliage	Barrier	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
doz	-21	0	-1	0	-23	46	39	40	34	35	28	20	6		45	41	38
ex	-19	0	-1	0	-10	46	56	43	39	33	30	21	7		46	44	43
ex2	-18	0	-1	0	0	53	64	53	51	46	46	41	30		57	55	54
fel	-21	0	-1	0	-24	40	26	21	21	22	18	8	0		26	26	0
screen	-12	0	-1	0	-24	50	45	41	42	40	38	32	15		43	42	41

	63	125	250	500	1k	2k	4k	8k	A	L01	L10	L50
Total Receiver Levels:	56	65	54	52	48	47	41	30	0	58	56	55

Exhibit IV.

Public Notices

Clatsop County
Transportation & Development, Planning Div.
800 Exchange Street, Suite 100,
Astoria, OR 97103

ph: 503-325-8611
fx: 503-338-3666
em: comdev@co.clatsop.or.us
www.co.clatsop.or.us

NOTICE OF PUBLIC HEARING
BEFORE THE CLATSOP COUNTY BOARD OF COMMISSIONERS

In The Matter of Ordinance 08-04, an Ordinance Amending the Comprehensive Plan/Zoning Map, and the Comprehensive Plan Text specifically appending findings to the Goal 5 Background Report and a Detailed Geologic Hazard Report on Property described as T5N, R10W, Sec. 14, Tax lots 800, 900, 1000, 1001, 1203 and T5N R10W Tax lots 100 and 101 to operate a rock quarry for the production of mineral and aggregate construction material. For more information see description on top of Page 2.

DATE OF HEARING:	April 9th, 2008
TIME:	10:00 am
LOCATION:	Judge Guy Boyington Building, 857 Commercial Street, Astoria, Oregon 97103
CONTACT PERSON:	Michael Weston II, Clatsop County Planner

You are receiving this notice because you either own property within 1500 feet of the property that serves as the subject of the land use application described in this letter, you are on the record for submitting evidence or testimony on the matter before the Planning Commission, or you are considered to be an affected state or federal agency, local government, or special district. A vicinity map for the subject property is attached.

NOTICE IS HEREBY GIVEN that the Planning Division of Clatsop County's Department of Transportation and Development has scheduled a public hearing on this matter before the Board of Commissioners at 10:00 AM on Wednesday, April 9th, 2008 at the Judge Guy Boyington Building, 857 Commercial St, Astoria, OR 97103.

Interested persons are be invited to testify in person by attending the hearing, or they may submit testimony in writing by addressing a letter to the Clatsop County Board of Commissioners, 800 Exchange Street, Suite 100, Astoria, OR 97103. Written comments may also be sent via FAX to 503-338-3666 or via email to comdev@co.clatsop.or.us. Written comments must be received in this office no later than **5PM on Tuesday, April 8th, 2008** in order to be presented by Staff for submittal at the April 9th, 2008 public hearing.

NOTE: Failure of an issue to be raised in a hearing, in person, or by letter, or failure to provide statements or evidence sufficient to afford the decision maker an opportunity to respond to the issue precludes an appeal based on that issue.

Notice to Mortgagee, Lien Holder, Vendor or Seller: ORS Chapter 215 requires that if you receive this notice it must promptly be forwarded to the purchaser

THE LAND USE APPLICATION DESCRIBED:

On October 16th, 2007 Staff conducted a pre-application conference with Paul Hribernick of Black Helterline LLP, and executives of Big River Holdings Inc. On October 25th, 2007 the applicant submitted their Post Acknowledgement Procedures Application for the following matters: 1st A comprehensive plan text amendment, essentially adding the location to Clatsop County's List of Significant mineral and aggregate resources sites; 2nd applicants requested the location be rezoned from Agriculture Forest to Quarry Mining and a Quarry Mining Overlay be placed over the impact area and areas within 500 feet of any RA-2 Zones (See Maps Page 3 & 4). The Comprehensive Plan amendment in this matter would result in a change from Conservation Forest & Rural Lands to Conservation Other Resources. 3rd the applicants request approval of the submitted Erosion Control Plan, Geologic Hazard Permit, Development Permit, & Site Plan Approval.

On March 12th, 2008 the Planning Commission Recommended Approval with Conditions. For your convenience those Documents have been included with this notice.

In accordance with Clatsop County's Land Water Development and Use Ordinance Section 2.335§(1) The Board of Commissioners may limit the nature of the information it will receive at the hearing and may establish separate rules for consideration of each of the following: A) Compliance with the Plan; B) Appropriateness of the legislative process; C) Policy changes or refinements proposed. Under subsection 2 of 2.335 The Board of Commissioners may then Confirm, amend, or reverse the recommendations of the Planning Commission. The Board of Commissioners may take any of the following steps: A) Enact or Defeat an Ordinance on all or part of the proposal under consideration; B) Refer some or all of the proposal back to the Planning Commission for Further consideration. If such referral is subsequently returned, no further hearing need be conducted if the proposal is processed under the County procedure for Ordinance enactment

The following criteria from Clatsop County Land and Water Development and Use Ordinance (LWDUO) apply to the request: §2.030 (Type III Procedures for Land Use Applications), §2.105-§2.125 (Notice Requirements for Public Hearings), §2.300 (Legislation), §3.220 (Residential Agriculture 2 acre), §3.510 (Agriculture Forestry), §3.550 (Forest 80), §3.460 (Quarry and Mining), §4.040 (Geologic Hazard Overlay), §5.400 (Zone Changes), §5.350 (Transportation System Impact Review), Clatsop County Standards Document, Chapters 1-3 (Site Oriented Development), S3.700 (Geologic Hazard Requirements), Chapter 4 (Environmental Protection), Chapter 5 (Vehicle Access Control and Circulation).

In addition, the following elements of the Clatsop County Comprehensive Plan apply to the request: Goal 1 (Citizen Involvement), Goal 2 (Land Use Planning), Goal 5 (Natural Resources, Scenic and Historic Areas and Open Spaces, Goal 6 (Air, Water, and Land Quality), and the Seaside Rural Community Plan.

These documents are available for review at the Clatsop County Planning Office, 800 Exchange Street, Suite 100, Astoria, Oregon and on-line at the county's website, www.co.clatsop.or.us.

A copy of the application, all documents and evidence submitted by or on behalf of the applicant and applicable criteria are available for inspection at the Planning Office during normal business hours (M-F, 8-5) at no cost and will be provided at reasonable cost. A copy of the staff report will be available for inspection at the Clatsop County Planning office at no cost at least seven days prior to the hearing and will be provided at a reasonable cost.

If you have questions about this land use matter or need more information, please contact Michael Weston II, Clatsop County Planner, at (503) 325-8611 or via email at mweston@co.clatsop.or.us.

FIGURE JAN08 B: QMO Overlay Area

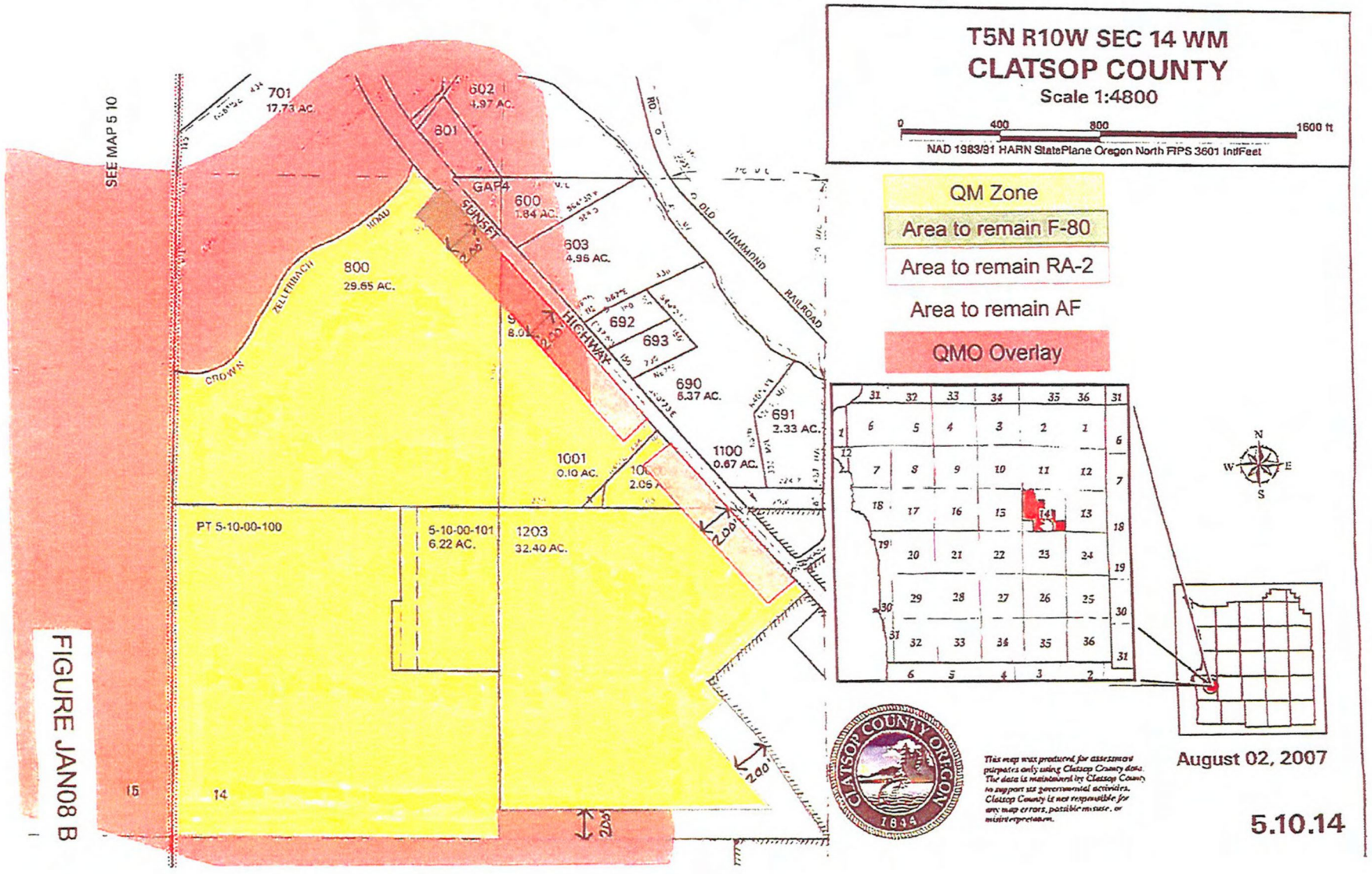


FIGURE JAN08 B

FIGURE JAN08 C: Impact Area

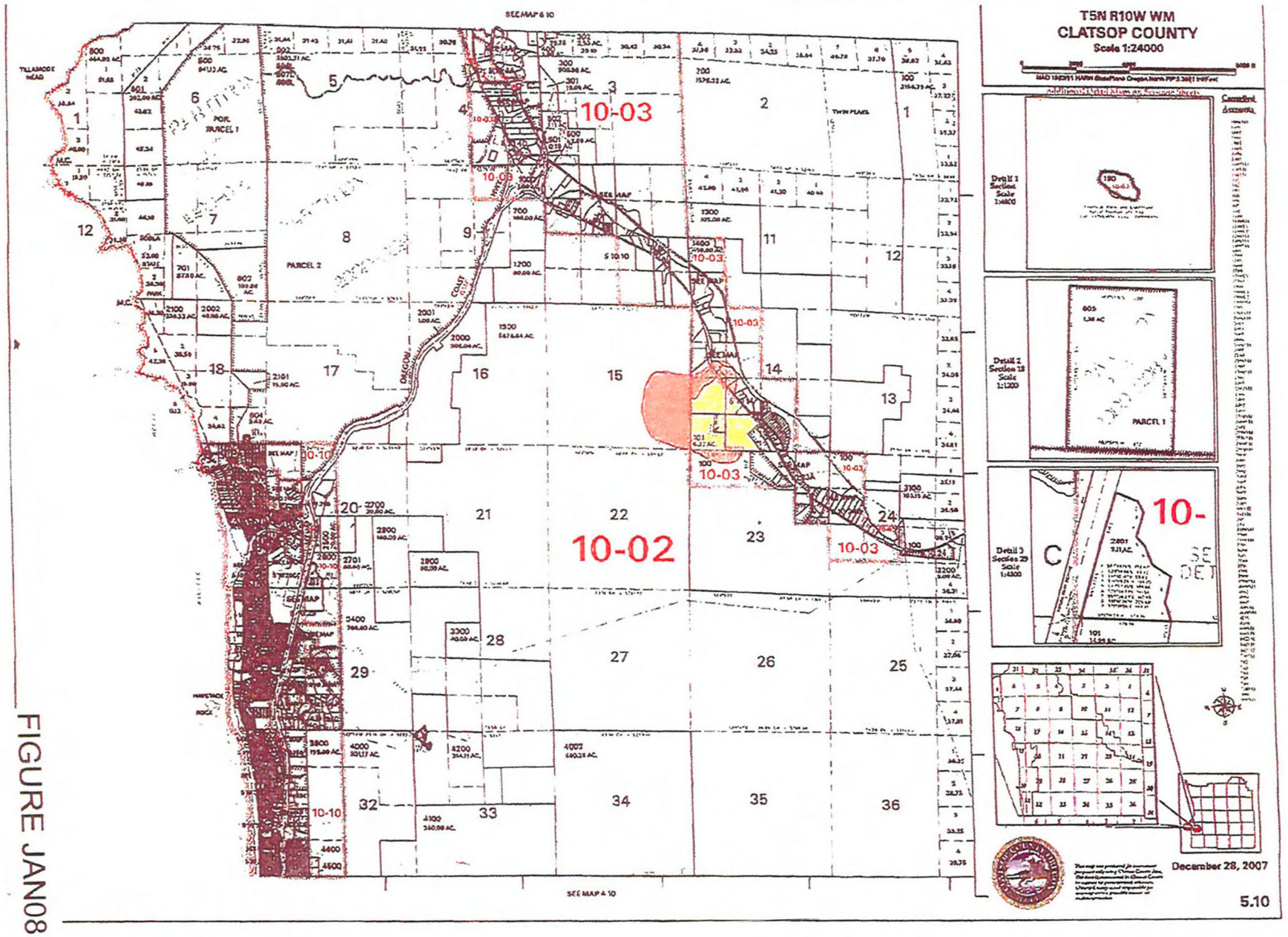


FIGURE JAN08 C

BEFORE THE PLANNING COMMISSION
FOR THE COUNTY OF CLATSOP

In the Matter of

AN ORDINANCE AMENDING THE CLATSOP COUNTY COMPREHENSIVE PLAN / ZONING MAP AND TEXT ADOPTING CERTAIN FINDINGS AND CONDITIONS AND RESCINDING INCONSISTENT PROVISIONS

ORDINANCE # 08-04

RESOLUTION AND ORDER

080203

Recording Date: March 11th, 2008

RECITALS

THE ABOVE ENTITLED MATTER came before the Planning Commission at its regularly scheduled meeting on January 8th, 2008 for public hearing and consideration. The Commission in order to provide fair and reasonable time to review the application and submit additional evidence and testimony ordered the record to remain open until January 25th, 2008; and, allowed the applicants one (1) week from that date to submit additional evidence and rebuttal.

In addition to the afore mentioned order the Commission continued the public hearing to its next regularly scheduled meeting on February 12th, 2008. In accordance with the Commission's directive, Staff compiled and presented the testimony and supplemental evidence to the Commission at its February 12th, 2008 public hearing.

At the February 12th, 2008 hearing the Commission, in order to reach a beneficial outcome for all parties involved, continued the hearing to the next regularly scheduled meeting of March 11th, 2008. In addition the Commission offered all interested parties to enter into a collaborative meeting hosted by Staff on February 28th, 2008. The outcome of the collaborative meeting was an agreement between all parties, the conditions of which have been attached as conditions to this land use decision (*See Conditions*).

The Commission after reviewing the findings of fact in Exhibit "A" *(Executive Summary)* recognizes the need to revise and amend the Clatsop County Comprehensive Pan and Zoning Map and Text. In the interest of the health, safety and welfare of the citizens of Clatsop County and pursuant to State Law, the Commission has determined the proposed changes are consistent with Clatsop County's Comprehensive Plan and Statewide Planning Goals.

THE PLANNING COMMISSION considering all evidence and public testimony provided by the Planning Department Staff, the Applicant, Opposing Parties, and Supporting Parties at the public hearing and on the record, hereby **RECOMMEND THE APPROVAL** OF THE PROPOSED REQUEST FOR A COMPREHENSIVE PLAN / ZONING MAP AND TEXT AMENDMENT AS DESCRIBED IN EXHIBIT "A" *Executive Summary*, attached hereto and by this reference made a part hereof.

WHEREFORE , the Planning Commission finds and Resolves:

To Recommend Adoption of Exhibit "A" and append the findings & proposed conditions to Clatsop County's Comprehensive Plan "Goal 5 Element and Background Report" to the Board of Commissioners.

To Recommend the Comprehensive Plan Zoning Map and Text Amendment representing a change from Agriculture Forestry & Residential Agriculture-2 to Quarry Mining with a Quarry Mining Overlay be adopted as depicted in *Exhibit* "1" – *Map* "A" & "B"; and, recommend the impact area be designated as depicted by the Red on *Exhibit* "1" – *Maps* "C".

To Recommend the Approval of the findings produced in regard to the Detailed Geologic Hazard Report submitted by the Applicant and addressed in the Record as Exhibits "4" & "12" contained in the Applicant's submitted application.

To Recommend the Approval of the Type I development permit to operate Quarry Mining Operations within the Quarry Mining Zone.

SO ORDERED this 11th day of March 2008

THE PLANNING COMMISSION FOR
CLATSOP COUNTY

Bruce Francis, Chairman Clatsop County
Planning Commission

Enclosures:

1) Exhibit "1" Conditions & Maps
    a. Exhibit "A" Executive Summary & Findings
2) Exhibit "2" ESEE Analysis

Coinciding application with evidentiary Findings and Public Comments will be retained in the Record

Staff's Proposed Revisions to the Applicant's Requested Conditions

March 4th, 2008

____ 1. Concrete and Asphalt Batch Plants are NOT approved under this land use approval. Within 30 Days of the expiration of all appeal periods of the approval, Big River shall record a deed restriction Prohibiting the Establishment of a Concrete/Asphalt Batch Plant on Tax Lots 1203 & 101.

The Zone Change granted in this land use proceeding changes the zoning on portions of the affected properties from the County's RA-2, AF & F-80 Zones to the County's QM Zone. Ordinarily the QM Zone would allow Batch Plants as a Type I use. This Approval and Condition specifically override the provisions of the County's QM zone section 3.466§(2).

In the event an applicant in the future would request a Batch Plant for these properties, such request shall be subject to the County's Type IV procedure and the post acknowledgement Processes of OAR 660-23-0180. However, the applicant would not be required to prove significance (i.e. Quantity, Quality, & Location) for the purposes of supporting the Batch Plant request.

____ 2. Consistent with the Comments of the Oregon Department of Fish and Wildlife, the applicant/operator shall complete any required wetlands corrections resulting from activities and infractions of prior operators. Big River also agrees to voluntarily work with the local watershed council on a previously planned project on its bottomland property. For this purpose, Big River will provide limited access to portions of its property not used for extraction activities (Along Highway 26). Big River's Stormwater plan, required in Condition 6 Below, will include changes in Drainage on Tax Lot 1203 (Near the Existing "Spoils" site) to redirect a portion of water flow onto Big River Property (Tax Lot 1203)

____ 3. Operations will continue to use the existing access point at milepost 2.66, consistent with the current permit from the Oregon Department of Transportation. No increase in the number of Average Daily Vehicle Trips is requested or allowed. No queuing (Lining Up) of truck Traffic on Highway 26 shall be permitted.

____ 4. Should Big River wish to expand operations and increase truck trips, they would be required to pursue the circular alternative access as described in the application (i.e.: "In-Only" at the Existing access point – Mile Post 2.66 and "Out – Only at either mile post 2.50 or Vollmer Creek Road – Mile Post 2.26), such alternative access is allowed by this approval provided that ODOT requirements are met and/or an ODOT permit is granted to the operation for the alternative access. Big River shall initiate the process with ODOT within 30 days of the expiration of all appeal periods for the Land Use Approval.

____ 5. Operator shall obtain, and maintain, a valid Oregon Department of Geology and Mineral Industries permit and shall post and maintain the bond required by DOGAMI. As part of the DOGAMI process the operator shall obtain a Stormwater Discharge permit, and shall comply with all provisions of such permit.

____ 6. Operations shall be permitted year round. Hours of Operations shall be 7 am to 6 pm Monday through Friday, 8 am to 5 pm on Saturday with no operations on Sunday or Normal legal Holidays. Controlled Blasting shall be permitted as part of operations. Blasting Hours shall be 8 am to 5 pm Monday through Friday with no blasting on Weekends or Normal Legal Holidays.

Blasting shall use sequential charges to minimize impacts. Owners in the general vicinity (1500 Feet, but including the Edgewater Terrace Subdivision) shall be notified 24 hours in advance of any Blast. Operators shall obtain a list from Clatsop County of the residents that must be notified. No More than 10 Blasting/Drilling sessions are permitted in any calendar year

_____ 7. Operator shall obtain and maintain a Department of Environmental Air Containment Discharge Permit for any crusher used on site. Operator shall comply with all applicable DEQ Standards.

_____ 8. Operator shall minimize dust through the following methods: Sweep the pavement intersection with Highway 26 on a regular Basis; Gravel all internal truck paths; Limit the speed of all vehicles on internal truck paths to 15 MPH or Less; Make a water truck available and moisten internal truck paths as necessary. Within 180 days of the expiration of all appeal periods for the land use approval, Big River shall pave the entrance road from Highway 26 (MP 2.66) to the existing Scale House, a distance of Approximately 250 Feet.

_____ 9. No Division or Parcelization of the Land is approved.

_____ 10. Operator shall follow the provisions of the erosion control and parking plans submitted with the application. Operator shall follow all DOGAMI Rules related to Erosion and Stability.

_____ 11. Operator shall obtain and Maintain Liability Insurance in an amount not less than $500,000 and shall annually provide proof of insurance to the County.

_____ 12. Access to the Quarry shall be gated when not in use.

_____ 13. Operator shall implement noise Mitigation measures as described in the Daly Standlee Noise Report when a Dozer or Rock Drill is in a Direct Line of Sight and within 1400 feet of an existing residence (Excluding Residences on the Site Itself). Specifically, a solid barrier (either a Berm or movable barrier) shall be used for a Rock Drill; a Berm Barrier, Residential Muffler or intermittent operation shall be used for a dozer. In addition, Operator shall, on an ongoing and declining basis, maintain a lip of rock to serve as a natural barrier to the East/Northeast to screen operations and minimize noise impacts.

_____ 14. Operator shall maintain existing vegetation for a distance of 50 feet along Highway 26 to promote screening. 50 Foot setbacks shall be maintained from any riparian area. Excavation shall be maintained from any riparian area. All quarry activities shall be setback 200 feet from any existing residence and Public Road right-of-way, including Excavation and Stockpiles. Sediment ponds shall be setback 25 feet from the perimeter of the site or any public road right-of-way.

_____ 15. A 200 Foot Wide Zoning Buffer strip along Highway 26 (See Attached Map A) shall be retained in the existing zoning (F-80 and RA-2) and within this Buffer strip, only the existing access and potential alternative access points shall be changed to the QM Zone. Access Roads are allowed within the 200-foot Buffer Strip.

_____ 16. A 200 Foot wide Zoning Buffer Strip along portions of the Southerly Boundary of Tax Lot 1203 (In the "Spoils" area) shall be retained in the AF Zone (See attached Map A). Access Roads are allowed within the 200 foot buffer strip. Within this buffer strip on tax lot 1203, Big River shall construct a 10-15 foot high Berm and slope the Stored material so that Run off is directed predominantly toward the Big River Property. Big River will also Plant Conifer vegetation in the 200 foot Buffer area on Tax Lot 1203 to mitigate run off onto adjacent parcels. Big River will also plant native vegetation on the South Hillside of the Existing Quarry.

_____ 17. Big River will make a good faith effort within a three (3) year time frame from the expiration of all appeal periods of the approval to reorient its extraction operations to the backside (westerly side) of the Hill. Big River will move the Crusher to the westerly side of the hill as soon as possible.

State Of Oregon

County Of Clatsop } ss.

FILE COPY

Copy Of Advertisement

Affidavit of
PUBLICATION

I, **Robert D Temple**, being duly sworn, depose and say that I am the principal clerk of the manager of the **DAILY ASTORIAN**, a newspaper of general circulation, as defined by section ORS 193.010 and 193.020 Oregon Compiled Laws, Annotated, printed and published daily at Astoria in the aforesaid county and state; the **Legal Notice #AB1477 Notice of Public Hearing Variance Request (M. Leroy Olvey)** a printed copy of which is hereto attached, was published in the entire issue of said newspaper for **one** successive and consecutive **time(s)** in the following issues **Dec 21, 2007.**

Signed

Signed and attested before me on the **21st** day of **December 2007, by:**

OFFICIAL SEAL
LESLIE TILA
NOTARY PUBLIC-OREGON
COMMISSION NO. 402583
MY COMMISSION EXPIRES FEBRUARY 16, 2010

Notary Public for the State of Oregon, Residing at Astoria, Oregon, Clatsop County.

AB1477
CLATSOP COUNTY PLANNING COMMISSION
NOTICE OF PUBLIC HEARINGS

NOTICE IS HEREBY GIVEN that the Clatsop County Community Development Department has received the land use applications described below. Public hearings on these matters are scheduled before the Clatsop County Planning Commission at the times specified below on Tuesday, January 8, 2008 at the Judge Guy Boyington Building, 857 Commercial Street, Astoria, OR:

10:00 a.m. 1. A Variance request by Douglas West for M. Leroy Olvey to the 50-ft. highway setback on the Clatsop Plains.

10:00 2.A Variance request by Claude Kurtz to the 50-ft. highway setback and the 50-ft. resource zone setback in the Knappa-Svensen area.

11:00 3. A Comprehensive Plan/Zoning Map Amendment and Exception - request by Parker Consulting for Russell Earl and Osburn-Olson LLC from RA-5 to RA-2 and an exception to Statewide Planning Goal 14 (Urbanization).

1:00 p.m. 4. A Subdivision request by James & Virginia Carlson for a 31-lot subdivision located south of Miles Crossing/Jeffers Garden and west of Young's River Road along Tucker Creek Lane. Continued from November 13, 2007.

3:00 5. A Comprehensive Plan/Zoning Map Amendment, Comprehensive Plan Text Amendment to Goal 5 Background Report and Geologic Hazard Permit applications by Paul Hribernick of Black Helterline LLP for Big River Holdings Inc. on property owned by Weyerhauser Inc. and Big River Holdings Inc.

All interested persons are invited to testify in person by attending the hearing, or they may testify in writing by addressing a letter to the Clatsop County Planning Commission, 800 Exchange Street, Suite 100, Astoria, OR 97103. Written comments may also be sent via FAX to 503-338-3666 or via email to comdev@co.clatsop.or.us. Written comments must be received in the Community Development office no later than 5PM on Monday, January 7, 2008 in order to be considered at the January 8, 2008 public hearing. Written comments may also be submitted directly to the Planning Commission at the public hearing.

Failure of an issue to be raised in a hearing, in person or by letter, or failure to provide statements or evidence sufficient to afford the decision maker an opportunity to respond to the issue precludes an appeal based on that issue.

A copy of the applications, all documents and evidence submitted by or on behalf of the applicants and applicable criteria are available for inspection at the Community Development Department Office during normal business hours (M-F, 8-5) at no cost and will be provided at reasonable cost. Copies of the staff reports will be available for inspection at the Clatsop County Community Development Department office and on-line at www.co.clatsop.or.us at least seven days prior to the hearing.

If you have questions about these land use matters please contact Clatsop County Community Development Department at (503) 325-8611.

Published: December 21st, 2007

RECEIVED
DEC 26 2007
Community Development
CLATSOP COUNTY

CERTIFICATE OF MAILING

I hereby certify that I served a copy of the Public Notice for the Big River Holdings requests to the following with postage paid and deposited in the post office at Astoria, Oregon on said day.

Date: December 18, 2007.

Teri Allen
Signature

Planner

COMMUNITY DEVELOPMENT DEPT

Clatsop County Community Development Department
800 Exchange Street, Suite 100, Astoria, OR 97103
www.co.clatsop.or.us

ph: 503-325-8611
fx: 503-338-3666
em: comdev@co.clatsop.or.us

PLANNING COMMISSION
NOTICE OF PUBLIC HEARING:

Comprehensive Plan/Zoning Map Amendment, Comprehensive Plan Text Amendment, and Geologic Hazard Permit Applications to allow reconfiguration and expansion of the existing Ordway rock quarry operated by Big River Holdings Inc and located southwest of Hwy 26 at mile post 2.5. The property is further described as T5N, R10W, Sec. 14, Tax lots 800, 900, 1000, 1001, 1203 and T5N R10W Tax lots 100 (portion of) and 101. Several vicinity maps and site maps for the proposal are enclosed.

DATE OF HEARING:	January 8, 2008
TIME:	3:00 PM
LOCATION:	Judge Guy Boyington Building, 857 Commercial Street, Astoria, Oregon
STAFF CONTACT:	Mike Weston, County Planner

You are receiving this notice because you either own property within 750 feet of the subject property or within the designated 1500-foot impact area that encircles the proposed quarry operation. This notice is also being provided to affected state or federal agencies, local governments, and special districts.

NOTICE IS HEREBY GIVEN that the Clatsop County Community Development Department has received the land use applications described in this letter. Pursuant to Section 2.035 of the Clatsop County Land and Water Development and Use Ordinance (LWDUO), the Department Director has scheduled a public hearing on this matter before the Planning Commission at 3:00 PM on Tuesday, January 8, 2008 at the Judge Guy Boyington Building, 857 Commercial Street, Astoria, OR.

All interested persons are invited to testify in person by attending the hearing, or they may testify in writing by addressing a letter to the Clatsop County Planning Commission, 800 Exchange Street, Suite 100, Astoria, OR 97103. Written comments may also be sent via FAX to 503-338-3666 or via email to comdev@co.clatsop.or.us. Written comments must be received in the Community Development Department office (800 Exchange Street, Suite 100, Astoria) no later than **5PM on Monday, January 7, 2008** in order to be considered at the January 8, 2008 public hearing. Written comments may also be submitted directly to the Planning Commission during the public hearing.

NOTE: Failure of an issue to be raised in a hearing, in person or by letter, or failure to provide statements or evidence sufficient to afford the decision maker an opportunity to respond to the issue precludes an appeal based on that issue.

THE LAND USE APPLICATIONS DESCRIBED:

Agent, Paul Hribernick of Black Helterline LLP, for applicant, Big River Holdings Inc., on property owned by Weyerhauser Inc. and Big River Holdings Inc., proposes changing the zoning on the subject property from AF (Agriculture Forestry), F-80 (Forest-80), and RA-2 (Residential Agriculture - 2 acre minimum) to QM (Quarry and Mining) to allow reconfiguration and expansion of the existing Ordway rock quarry located southwest of Highway 26 at approximately mile post 2.5. The proposed zone change covers 112.24 acres. The application also includes proposed text amendments to the Comprehensive Plan Goal 5 Background Report to include the expanded quarry site as a significant Goal 5 resource and a Detailed Geologic Hazard Report in conjunction with the applicant's request for issuance of a Geologic Hazard Permit to allow operation of a rock quarry on the site.

The following criteria from Clatsop County Land and Water Development and Use Ordinance (LWDUO) apply to the request: §2.035 (Type IV Procedures for Land Use Applications), §2.105-§2.125 (Notice Requirements for Public Hearings), §2.300 (Legislation), §3.220 (Residential Agriculture – 2 Zone Standards), §3.510 (Agriculture Forestry Zone Standards), §3.550 (Forest – 80 Zone Standards), §3.460 (Quarry and Mining Zone Standards), §4.040 (Geologic Hazard Overlay District Standards), §5.350 (Transportation System Impact Review), and §5.400 (Zone Change Standards). The following criteria from the Clatsop County Standards Document also apply to the request: §S3.509 (Approval of Certain Uses in F-80 and AF Zones), §S3.516 (Mining in EFU and AF Zones), §S3.517 (Approval for Uses in the F-80 and AF Zones in Areas of major or Peripheral Big Game Range), §S3.700 (Geologic Hazard Requirements), §S4.400 (Rock and Mineral Resource Use), Chapter 5 (Vehicle Access Control and Circulation), and Chapter 6 (Road Standard Specifications for Design and Construction).

In addition, the following elements of the Clatsop County Comprehensive Plan apply to the request: Goal 1 (Citizen Involvement), Goal 2 (Land Use Planning), Goal 4 (Forest Lands), Goal 5 (Natural Resources, Scenic and Historic Areas and Open Spaces), Goal 6 (Air, Water, and Land Quality), Goal 7 (Natural Hazards), Goal 9 (Economy), Goal 10 (Population and Housing), Goal 11 (Public Facilities and Services), Goal 12 (Transportation), Goal 13 (Energy Conservation), and the Seaside Rural Community Plan.

The documents referenced above are available for review at the Clatsop County Community Development Department office, 800 Exchange Street, Suite 100, Astoria, Oregon and on-line at the county's website, www.co.clatsop.or.us .

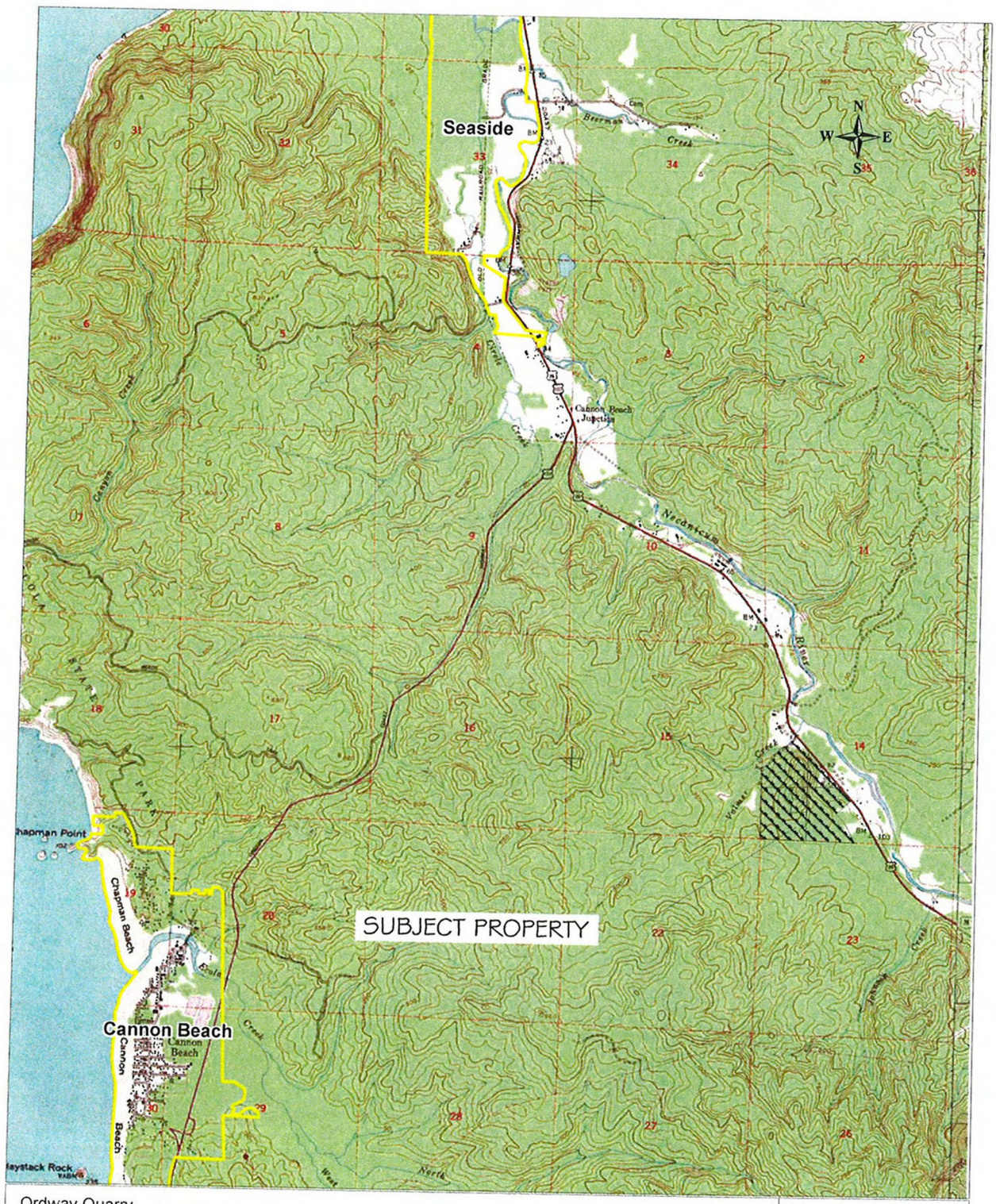
A copy of the application, all documents and evidence submitted by or on behalf of the applicant and applicable criteria are available for inspection at the Community Development Department Office during normal business hours (M-F, 8-5) at no cost and will be provided at reasonable cost. A copy of the staff report will be available for

inspection at the Clatsop County Community Development Department office at no cost at least seven days prior to the hearing and will be provided at reasonable cost.

In general, the procedure for conduct of the public hearing will be as follows: Introductory statements by the Planning Commission Chairperson, Planning Commission disclosures, staff report, applicant's presentation, testimony in favor, testimony in opposition, applicant rebuttal, conclusion of hearing, Planning Commission deliberations, Planning Commission decision (in this case, a recommendation to the Board of Commissioners).

If you have questions about this land use matter or need more information, please contact Mike Weston, Planner, at (503) 325-8611 or via email at mweston@co.clatsop.or.us.

Notice to Mortgagee, Lien Holder, Vendor or Seller: ORS Chapter 215 requires that if you receive this notice it must promptly be forwarded to the purchaser.



Ordway Quarry Tax lots 100, 101 Map 5-10-00 Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14 Clatsop County Seaside, Oregon	**LOCATION MAP**		FIGURE A
Source: USGS DRG 45123 h8	Environmental Science Associate, Inc. 10/01/07	Scale: 1" = 4000'	

FIGURE M: Zoning Map

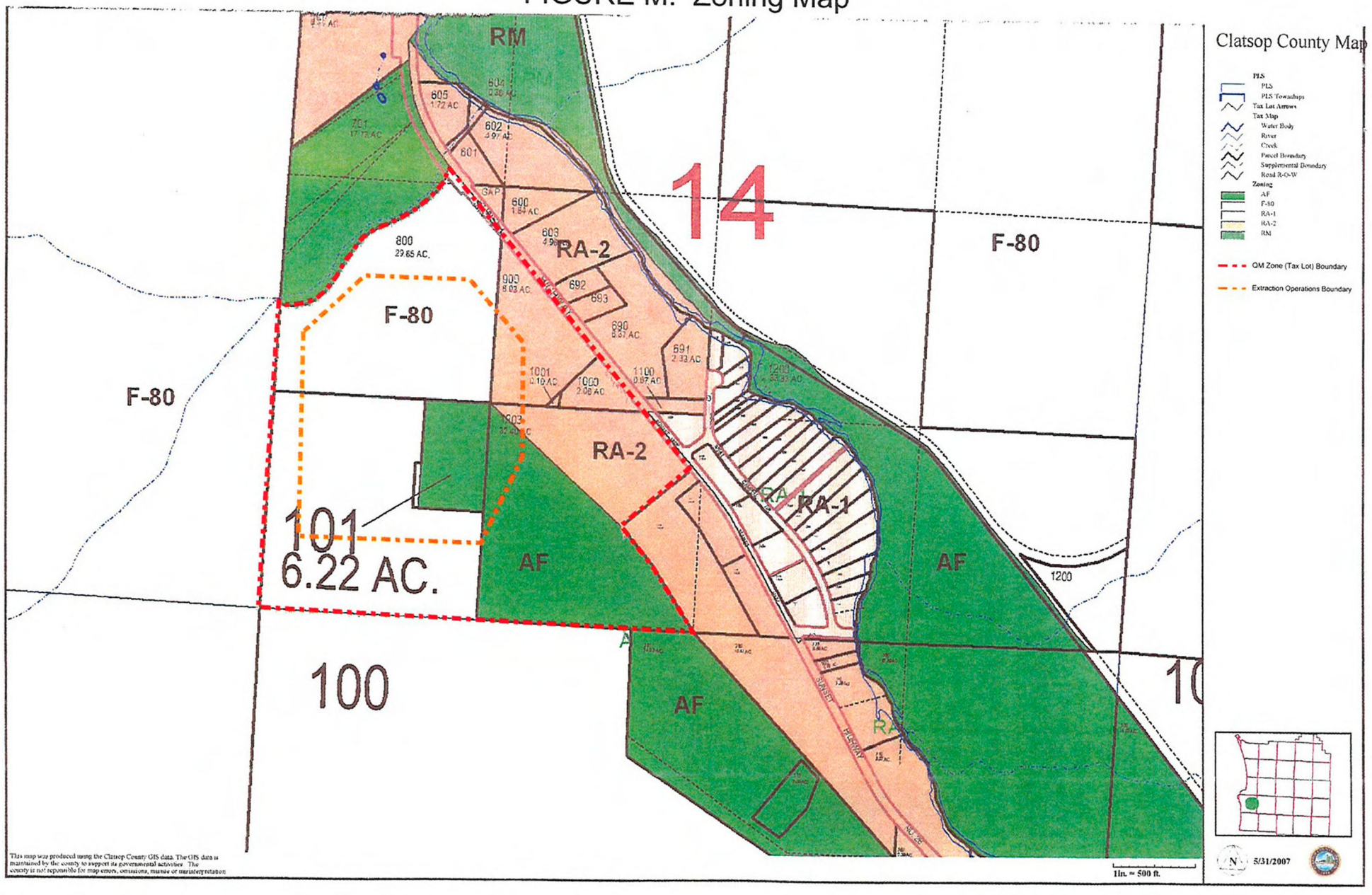


FIGURE M

FIGURE O.2: 1,500' Notice Area around QM Zone

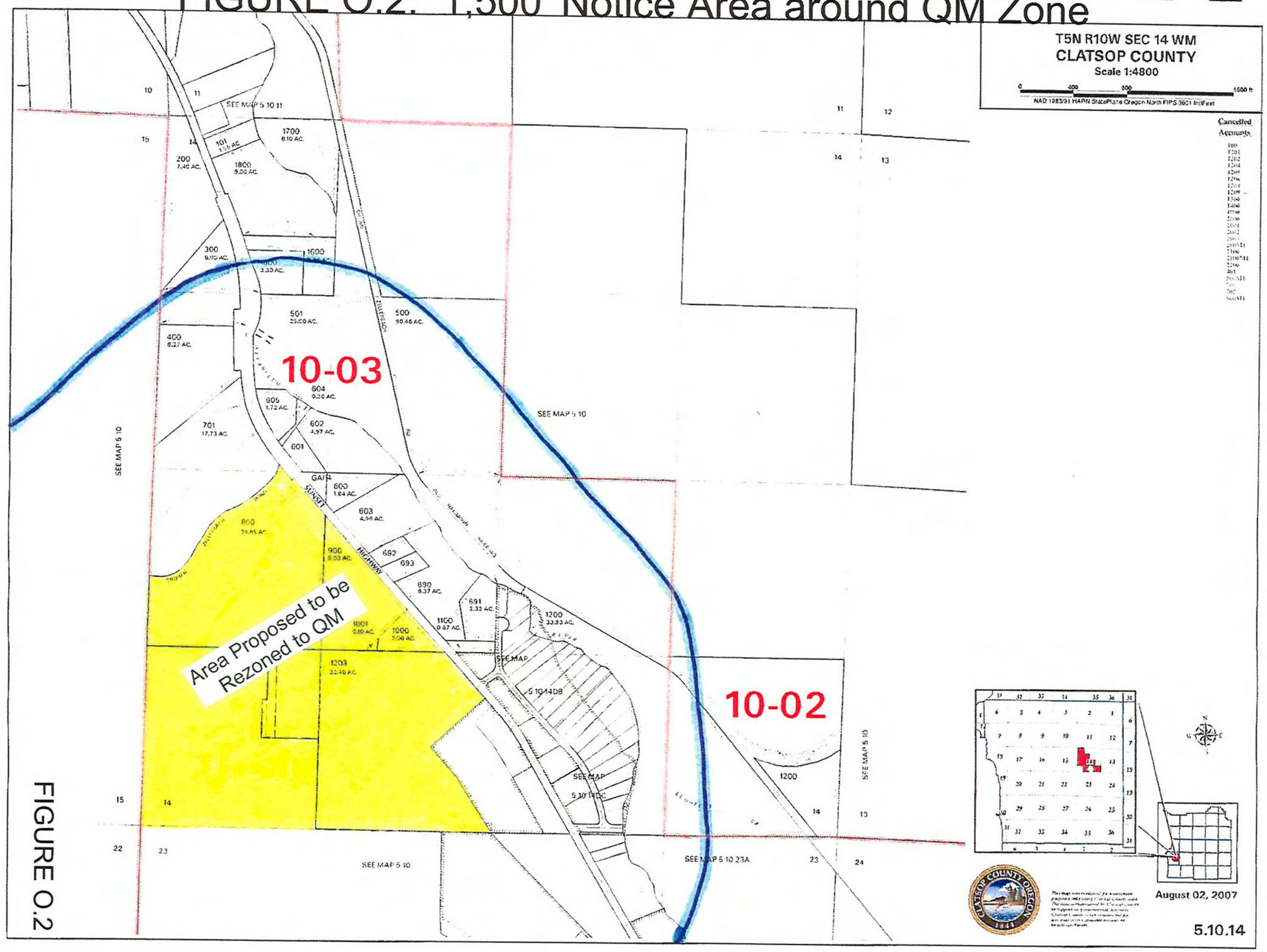
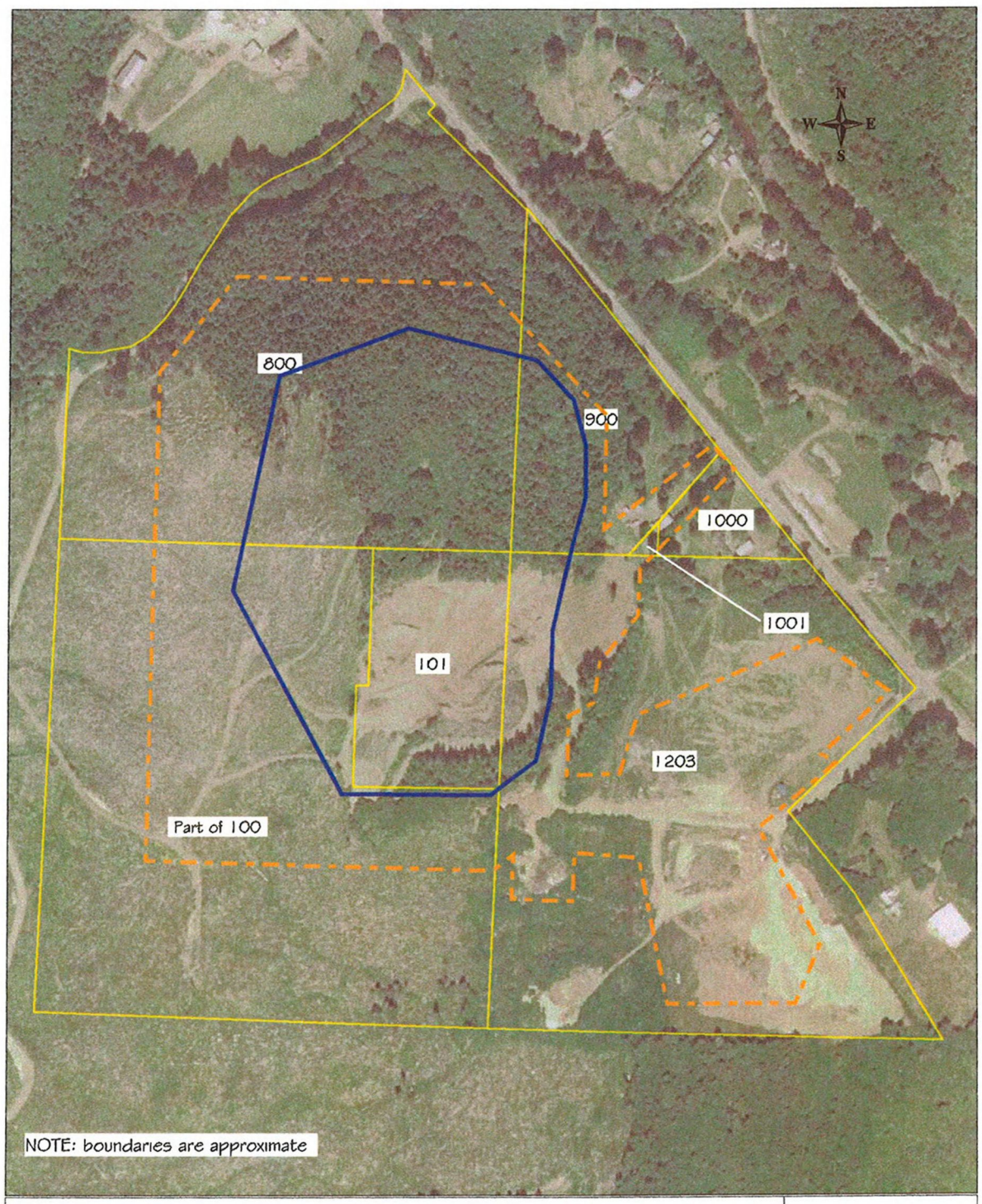


FIGURE O.2

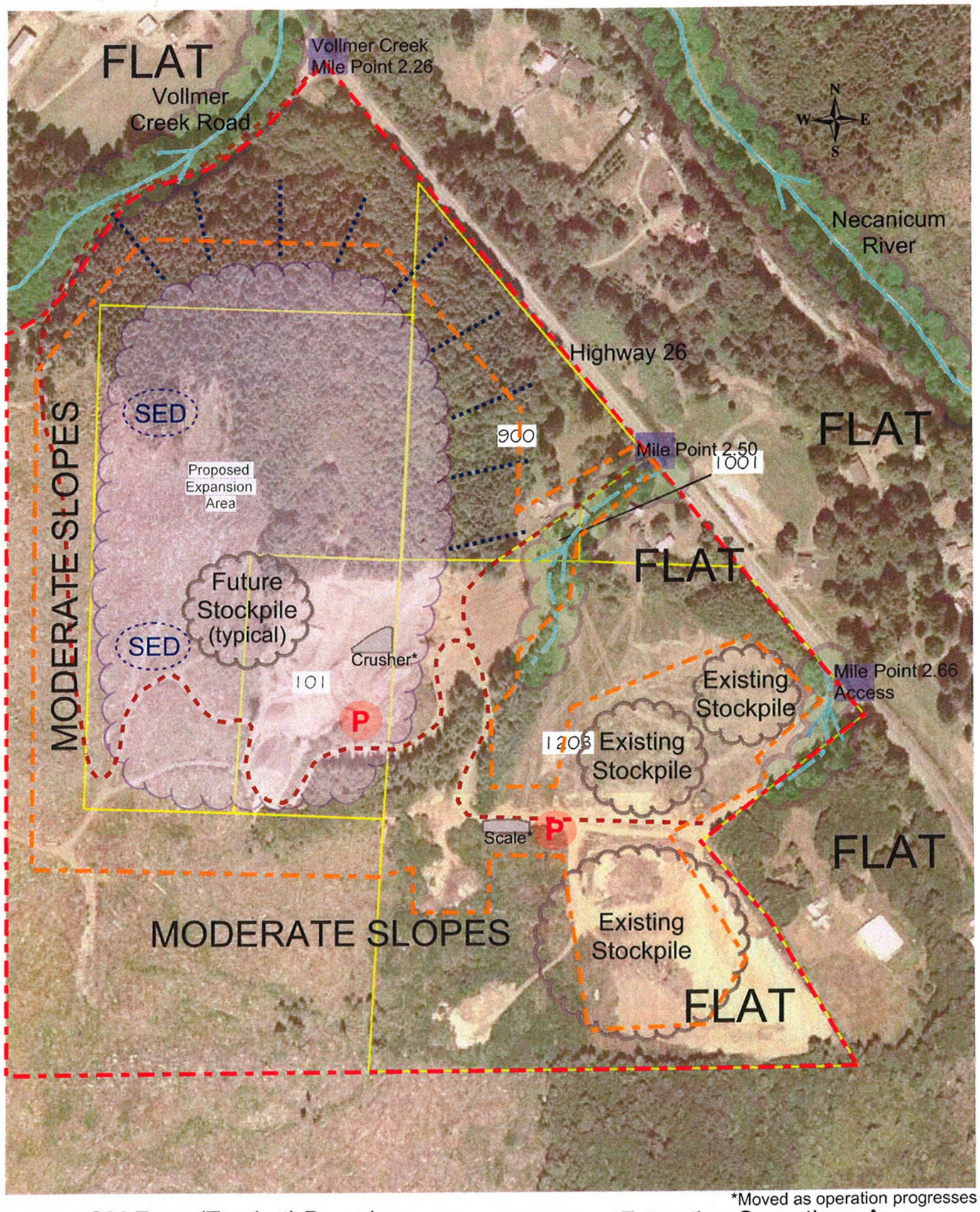


Ordway Quarry Tax lot 100, 101 Map 5-10-00 Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14 Clatsop County Seaside, Oregon	**TAX LOT MAP**		SITE PLAN
Source: Spencer Gross 2002 ortho	Environmental Science Associate, Inc. 10/01/07	Scale: 1" = 420'	

- - - - Extraction Operations Area

——— Active Mining Area

FIGURE R: Erosion Control Area & Site Map



*Moved as operation progresses

- QM Zone (Tax Lot) Boundary
- Extraction Operations Area
- SED Potential Areas for Sedimentation
- Watercourses
- Internal Roadways (including potential alternative exit options)
- P Vehicle Parking Areas
- Steep Slopes, no surface water flow
- Vegetation Removed
- Existing Vegetation adjacent to watercourses

FIGURE R

FIGURE R

FORM 1 DLCD 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

DATESTAMP — in person ☐ electronic ☒ mailed ☒ — COPY — For DLCD Use Only

Jurisdiction: **Clatsop County**
Local file number: **20070733**
Date First Evidentiary hearing: **1/8/2007**
Date of Final Hearing: **2/27/2007**
Is this a **revision** to a previously submitted proposal? ☐Yes ☒No Date submitted: **10/25/2007**

☒ Comprehensive Plan Text Amendment
☒ Comprehensive Plan Map Amendment
☐ Land Use Regulation Amendment
☒ Zoning Map Amendment
☐ New Land Use Regulation
☐ Other:

Briefly Summarize Proposal. Do not use technical terms. Do not write "See Attached" (limit of 500 characters):

The applicants are proposing to rezone a portion of the property from AF to QM and place a QMO over the portions of the property that are zoned RA-2. Furthermore, the applicants request the site be added to the County's list of "significant" mineral and aggregate resource sites in accordance with Goal 5 Division 23.

Has sufficient information been included to advise DLCD of the effect of proposal? Yes

Plan map changed from: **Conservation Forest Lands** To: **Conservation Other Resources**
Zone map changed from:**AF & RA-2** To: **QM and RA-2 w/ QMO**
Location of property (do not use Tax Lot): **Southwest of Highway 26 between milepost 2&3**
Previous density:**N/A** New density: **N/A** Acres involved: **112**

Applicable statewide planning goals:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐

Is an exception to a statewide planning goal proposed? ☐ YES ☒ NO Goals:

Affected state or federal agencies, local governments or special districts (It is jurisdiction's responsibility to notify these agencies. DLCD only reports this information.):

DLCD, DOGAMI, OWRD, ODOT, DSL, DEQ, Clatsop County

Local Contact: **Michael Weston** Phone: **(503) 325-8611** Extension: **1702**
Address: **800 Exchange St, Suite 100** Fax Number: **503-338-3666**
City: **Astoria** Zip: **97103-** E-mail Address: **mweston@co.clatsop.or.us**

DLCD file No. _____

SUBMITTAL REQUIREMENTS

This form must be received by DLCD at least 45 days prior to the first evidentiary hearing
per ORS 197.610 and OAR Chapter 660, Division 18

1. This form must be submitted by local jurisdictions only (not by an applicant).

2. When submitting, please print this form on light **green paper**.

3. Send this Form and **TWO COPIES** of the proposed amendment to:

ATTENTION: PLAN AMENDMENT SPECIALIST
DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT
635 CAPITOL STREET NE, SUITE 150
SALEM, OREGON 97301-2540

4. **Electronic Submittals:** At least **one** hard copy must be sent by mail or in person, but you may also submit an electronic copy, by either email or FTP. You may connect to this address to FTP proposals and adoptions: **webserver.lcd.state.or.us.** To obtain our Username and password for FTP, call Mara Ulloa at 503-373-0050 extension 238, or by emailing **mara.ulloa@state.or.us.**

5. Unless exempt by ORS 197.610(2), proposed amendments must be received at the DLCD's Salem office at least 45 days before the first evidentiary hearing on the proposal. (The clock begins on the day DLCD receives your proposal.) The first evidentiary hearing is usually the first public hearing held by the jurisdiction's planning commission on the proposal.

6. Submittal of a proposed amendment to the text of a comprehensive plan or land use regulation must include the text of the amendment and any other information the local government believes is necessary to advise DLCD of the effect of the proposal. "Text" means the specific language being added to or deleted from the acknowledged plan or land use regulations. A general description of the proposal is not adequate.

7. Submittal of a proposed map amendment must also include a map of the affected area showing existing and proposed plan and zone designations. The map should be legible and on 8½ x 11 inch paper. Please provide the specific location of property, such as an address and/or tax lot number. Include text regarding background and/or the justification for the change, such as the application accepted by the local government.

8. Submittal of proposed amendments that involve a goal exception must include the proposed language of the exception.

9. **Do not submit this form without supporting documentation.**

10. **Need More Copies?** You can now access these forms online at **http://www.lcd.state.or.us/**. Please print on **8-1/2x11 green paper only**. You may also call the DLCD Office at (503) 373-0050; or Fax your request to: (503) 378-5518; or Email your request to **mara.ulloa@state.or.us** - ATTENTION: PLAN AMENDMENT SPECIALIST.

FORM 2

DLCD
Notice of Adoption

THIS FORM **MUST BE MAILED** TO DLCD
WITHIN 5 WORKING DAYS AFTER THE FINAL DECISION
PER ORS 197.610, OAR CHAPTER 660 - DIVISION 18

☐ In person ☒ electronic ☐ mailed

DATE STAMP

For DLCD Use Only

Jurisdiction: **Clatsop County**
Local file number: **08-04**
Date of Adoption: **4/29/2008**
Date Mailed: **5/12/2008**
Was a Notice of Proposed Amendment (Form 1) mailed to DLCD? **Yes** Date: 10/25/2007

☒ Comprehensive Plan Text Amendment
☒ Comprehensive Plan Map Amendment
☐ Land Use Regulation Amendment
☒ Zoning Map Amendment
☒ New Land Use Regulation
☐ Other:

Summarize the adopted amendment. Do not use technical terms. Do not write "See Attached".

A Zoning Map Amendment from RA-2, AF, & F-80 to QM with a QMO. A Comprehensive Plan Text Amendment to the Goal 5 Element & Background Report adding the Site to the County's List of Significant Quarry Sites, including a Geologic Study, Traffic Impact Study, ESEE, and other supportive documentation.

Does the Adoption differ from proposal? Yes, Please explain below:

Some resrictions were placed on the site decreasing the overall size and utility of the QM Zone.

Plan Map Changed from: **Rural Lands - Cnsv Forest** to: **Conservation Other Resources**
Zone Map Changed from: **AF, F-80, & Ra-2** to: **QM with a QMO**
Location: **T5N, R10W, Sec 14, TL 1203** Acres Involved: **112**
Specify Density: Previous: **N/A** New: **N/A**
Applicable statewide planning goals:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐

Was an Exception Adopted? ☐ YES ☒ NO
Did DLCD receive a Notice of Proposed Amendment...

45-days prior to first evidentiary hearing?	☒ **Yes**	☐ **No**
If no, do the statewide planning goals apply?	☐ **Yes**	☐ **No**
If no, did Emergency Circumstances require immediate adoption?	☐ **Yes**	☐ **No**

DLCD file No. _____
Please list all affected State or Federal Agencies, Local Governments or Special Districts:

DLCD, DOGAMI, ODOT, OWRD, DSL, DEQ, CLATSOP COUNTY

Local Contact: **Michael Weston** Phone: **(503) 325-8611** Extension: **1702**

Address: **800 Exchange St** Fax Number: **503-338-3666**

City: **Astoria** Zip: **97103-** E-mail Address: **mweston@co.clatsop.or.us**

ADOPTION SUBMITTAL REQUIREMENTS

This form **must be mailed** to DLCD **within 5 working days after the final decision**
per ORS 197.610, OAR Chapter 660 - Division 18.

1. Send this Form and **TWO Complete Copies** (documents and maps) of the Adopted Amendment to:

ATTENTION: PLAN AMENDMENT SPECIALIST
DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT
635 CAPITOL STREET NE, SUITE 150
SALEM, OREGON 97301-2540

2. Electronic Submittals: At least **one** hard copy must be sent by mail or in person, but you may also submit an electronic copy, by either email or FTP. You may connect to this address to FTP proposals and adoptions: **webserver.lcd.state.or.us**. To obtain our Username and password for FTP, call Mara Ulloa at 503-373-0050 extension 238, or by emailing **mara.ulloa@state.or.us**.

3. Please Note: Adopted materials must be sent to DLCD not later than **FIVE (5) working days** following the date of the final decision on the amendment.

4. Submittal of this Notice of Adoption must include the text of the amendment plus adopted findings and supplementary information.

5. The deadline to appeal will not be extended if you submit this notice of adoption within five working days of the final decision. Appeals to LUBA may be filed within **TWENTY-ONE (21) days** of the date, the Notice of Adoption is sent to DLCD.

6. In addition to sending the Notice of Adoption to DLCD, you must notify persons who participated in the local hearing and requested notice of the final decision.

7. **Need More Copies?** You can now access these forms online at **http://www.lcd.state.or.us/**. Please print on **8-1/2x11 green paper only**. You may also call the DLCD Office at (503) 373-0050; or Fax your request to: (503) 378-5518; or Email your request to **mara.ulloa@state.or.us** - ATTENTION: PLAN AMENDMENT SPECIALIST.

Rebuttal Documents

B L A C K | H E L T E R L I N E LLP

ATTORNEYS AND COUNSELORS AT LAW

PAUL R. HRIBERNICK
E-mail: prh@bhlaw.com

Our File No. 9395-1

January 29, 2008

VIA E-MAIL AND HAND-DELIVERY

Clatsop County Planning Commission
c/o Mr. Michael J. Weston II, MPA
Planner, Community Development
Clatsop County Committee Development Department
800 Exchange Street, Room 100
Astoria, OR 97103

Reference: Applicant's Rebuttal
PAPA Application
Big River Holdings, Inc.
Ordway Quarry, Highway 26

Dear Planning Commission Members:

Pursuant to the schedule established at the Planning Commission hearing on January 8, 2008, both the applicant and opponents have submitted additional information by the January 22, 2008 deadline for closure of the record established by the Commission. This letter will serve as the applicant's rebuttal. No new evidence is being submitted with the rebuttal letter.

Attached to this letter is the eight-step guideline summary prepared by the Oregon Department of Land Conservation and Development and the Department of Transportation DLCD's Guidelines provide a step-by-step process for the Planning Commission to follow in making a decision on this application. The DLCD Guidelines were previously submitted into the record as part of Exhibit 7.

STEP 1

Step 1 of the PAPA process is to determine whether or not the mineral and aggregate resource is **significant**. Significant is defined in the PAPA rule as rock which:

- meets the Oregon Department of Transportation's specifications for base rock;

- has an estimated amount of material more than 500,000 tons outside the Willamette Valley;

- meets any local government standard establishing a lower threshold for significance (250,000 tons in Clatsop County); or

- is on the County's aggregate inventory as a significant resource.

The Ordway Quarry is on the Clatsop County inventory but not as a significant resource site. Part of Big River's request is to move the application to the significant inventory to support this request. A Registered Professional Geologist has unrebutted evidence that the Ordway Quarry and expansion area contains approximately 8 million tons of aggregate material. This is significantly in excess of the 500,000 tons required outside the Willamette Valley (under the PAPA rule) or 250,000 tons required under the Clatsop County ordinance. In addition, the Registered Professional Geologist and testing laboratory confirm that a representative set of samples of aggregate material from the Ordway Quarry meets the specifications for base rock for three important tests: air degradation, abrasion and soundness.

There is no contrary information in the record and the PAPA rule guides the Planning Commission to determine that the site is significant.

STEP 2

Step 2 under the PAPA rule requires the Planning Commission to consider an **impact area** around the Ordway site where mining, if allowed, might conflict with existing or approved land uses. As explained in the applicant's presentation before the Planning Commission, local jurisdictions generally try to limit the impact area as much as possible to avoid placing potential restrictions on surrounding property but still protect the mineral and aggregate resource. Evidence submitted by the applicant, and unrebutted by any opponent, suggests to the Planning Commission that the appropriate component for determining the impact area is noise. Noise radiates from activities on the mining site and can cause conflicts (or impacts) away from the quarry. The Goal 5 PAPA rule presumes that an impact of 1,500 feet is appropriate. As explained at the hearing, the 1,500 foot presumptive impact area was selected because this distance coincides with the common distance necessary to dissipate unmitigated noise impacts from a mining operation. Applicant presented substantial and unrebutted testimony that its mining plan will greatly reduce the presumptive 1,500 foot impact area on the

northerly and easterly sides of the quarry. By reorienting mining operations and maintaining a "lip" of rock between operations and residences to the northeast, applicant's sound engineers were able to determine the precise noise compliance line which should serve as the impact area (this is the light blue line that appears on Figure 5 of the Daly Standlee & Associates Engineer's Noise Study and is produced on page 7 of applicant's Exhibit 7). The impact area is designed to protect the mineral and aggregate resources from conflicts that cannot be minimized under the Goal 5 rule. Inside the "blue line" impact area, the Ordway Quarry may have trouble meeting noise compliance standards. However, outside the line, the noise standards will be met at all times with mitigation conditions that are attached to applicant's application and recommended by the sound engineers. Because applicant can mitigate noise at the blue mitigation line and there is no evidence of any conflicts extending beyond the noise mitigation line, we believe the appropriate impact area to be defined in Step 2 is the blue line impact area (Figure 5 of the Daly Standlee & Associates Engineer's Noise Study.) Figure 5 was previously submitted into the record and a copy is attached for your convenience.

STEP 3

Step 3 requires the County to identify conflicts with existing and approved land uses within the impact area. "Conflicts" are defined in the Goal 5 PAPA rule as a use or activity subject to land use regulations that would interfere with, or be adversely affected by, mining or processing activities at a significant mineral and aggregate resource site. The Goal 5 PAPA rule limits consideration of conflicting uses to five categories:

(a) conflicts due to noise, dust or other discharges;

(b) potential conflicts with local roads used for access and egress to the mining site;

(c) safety conflicts with existing public airports;

(d) conflicts with other identified Goal 5 resource sites within the impact area; and

(e) conflicts with agricultural practices.

Conflicts that were identified during the hearing that meet the PAPA criteria include noise, dust and other discharges (e.g., stormwater discharges). There are no other identified Goal 5 resources within the impact area and the record clearly shows there will be no impact on the

Necanicum River, a nearby identified Goal 5 resource for fish habitat. Applicant's materials demonstrate that it will continue to handle all stormwater discharges on site. The ODF&W letter does not identify any basis for a stormwater conflict with the Necanicum River. Testimony about stormwater issues clearly related back to the Osburn operation and no stormwater problems have been associated with the Big River operation.

There was also testimony about traffic conflicts. However, it is important for the Planning Commission to remember that potential traffic conflicts to be considered under the Goal 5 rule are limited to **LOCAL** roads that are used for access and egress. The Ordway Quarry has permitted access directly onto Highway 26, a state arterial and designated truck transportation route. No local roads are used for access or egress to the mining site. Accordingly, there are no potential conflicts with local roads. See, *Morse Bros. v. Columbia County*, 37 Or LUBA 85 (1999), *aff'd* 165 Or App 512.

There are no significant agricultural activities or practices in the area and no agricultural conflicts were identified. As indicated in the testimony, there is no safety conflict with the public airport in Seaside which is more than five miles away by line of sight. Accordingly, the only conflicts for the Planning Commission to identify in the process are noise, dust and stormwater discharges.

STEP 4

Once conflicts are identified, the Planning Commission must determine reasonable and practical measures that would eliminate conflicts. Language of the PAPA rule is mandatory ("shall") and requires a good faith effort by the Planning Commission to determine reasonable and practical measures that, in fact, can minimize noise, dust and stormwater discharges.

In determining whether or not these three conflicts can be minimized, the Planning Commission must keep in mind the rule's definition of what it means to minimize a conflict. Under the rule, a conflict is minimized when an identified conflict is reduced to a level that is no longer significant. For those types of conflicts addressed by state, local or federal standards (such as the DEQ noise standard), to minimize a conflict means to ensure compliance with the applicable standard.

With regard to noise, Daly Standlee acoustical engineers performed a detailed analysis and study of the site and concluded that reasonable and practical measures exist to minimize noise outside of the "blue line" impact area. These include reorienting the applicant's

planning operations, maintaining a lip of rock between quarry activities and residential uses to the north and northeast, and altering the operation of equipment on the site by using mufflers and portable screens for certain types of equipment when that equipment is less than 1,400 feet from any residence in the area in a direct line of sight. We note the noise engineers assumed the extreme worst case analysis and even using a worst case analysis, noise conflicts can be minimized at all residences in the area. Big River has requested conditions that will ensure noise compliance measures are met. The record supports the conclusion that noise impacts can be minimized through reasonable and practical methods.

With regard to dust, the applicant has provided numerous, reasonable and practical dust suppression methods. Of particular interest, the Washington State Department of Ecology (DOE) publication submitted into the record outlines a number of practical methods that can be used to minimize dust. These include minimizing truck speed. The applicant has requested a condition that requires trucks to travel no more than 15 miles per hour on the operational portions of the site. The Washington DOE guidelines also suggest the use of a water truck to moisten truck paths. Applicant has a water truck and has requested a condition requiring its regular use. The Washington DOE guidelines also suggest paving roads where possible to minimize dust. Applicant has agreed to pave the main road from the entry to the scale station, a distance of approximately 250 feet. The Washington DOE guidelines provide that placing gravel on internal truck routes significantly reduces the dust associated with truck traffic on roads. Big River has graveled all of the internal roads on the site. All these methods are reasonable and practical methods for minimizing dust.

The crusher used on the site holds, and will continue to hold, an air contaminant discharge permit. A copy of the permit is contained in the record. Compliance with the DEQ air contaminant discharge permit for the crusher is also a reasonable and practical method for minimizing dust.

With regard to stormwater, Big River has handled stormwater without incident since taking over the quarry from the Osburn Bros. operation. The proposed reorientation of the quarry requested with this PAPA will allow Big River to provide a larger area in which to handle stormwater and direct stormwater internally on site to make sure there are no adverse stormwater effects offsite, including sedimentation and streams. Handling stormwater in this manner is a reasonable and practical measure that will minimize any offsite stormwater conflicts.

Because the conflicts that have been raised (noise, dust and stormwater) are minimized by Big River in its current operations, and will continue to be minimized with the conditions that are requested with the approval, the Planning Commission must conclude that

conflicts are minimized. Because conflicts can be minimized through reasonable and practical methods, conflicts ESEE (Step 5 of the PAPA process) is not required at this time.

STEP 6

Based on the PAPA process and considering the minimization of conflicts, the Planning Commission must next determine whether or not to allow mining. Because the resource is significant, because a reasonable and appropriate impact area can be defined, and because all identified conflicts are minimized through reasonable and practical measures, the Goal 5 rule directs the Planning Commission to allow mining. Mining has been taking place on the site for more than 25 years and a determination to continue to allow mining through expansion onto the Weyerhaeuser property will greatly aid in reducing any conflicts that have occurred in the past.

STEP 7

Once the determination has been made to allow mining to continue at the Ordway Quarry, the PAPA rule requires an "ESEE analysis." The ESEE analysis requires the Planning Commission to review the economic, social, environmental and energy consequences related to the allowing conflicting uses (such as residences) in the impact area. Step 7 is the reason why most local jurisdictions attempt to make the impact area as small as possible. When an applicant minimizes its conflicts (such as noise radiating from operations), the area and number of uses that must be evaluated through the ESEE analysis is reduced by the size of a smaller impact area. The smaller the impact area, the smaller the number of uses that must be evaluated under the ESEE analysis. It makes sense for local governments to follow the PAPA rule's mandate to identify reasonable and practical measures to minimize conflicts so the impact area will be the smallest possible and the ESEE analysis will affect the smallest area.

In this particular application, applicant's mining plan and the reasonable and practical measures applicant has proposed to reduce conflicts have allowed for a small impact area on the north/northeasterly side of the operation where residences are located. The impact area does not include any existing uses and all residences are outside the impact area because the Ordway Quarry has demonstrated that it can minimize conflicts at all residences in the area. Accordingly, the ESEE analysis only needs to address the small portions of property within the "blue line" impact area and potential future uses that could be located on the property. Given the zoning in the area, it is unlikely that any landowner would be able to locate a second residence on his or her property. Zoning in the impact area is predominantly RA-2 and AF which are not favorably disposed to allowing multiple residences. However, the ESEE analysis provided by

the applicant assumes that additional conflicting uses (residences) could be located in the impact area. The ESEE analysis balances economic consequences in a way we believe is appropriate. If additional conflicting uses (residences) were allowed in the impact area, it could have a large economic effect on permitted quarry operations because noise standards might not be properly complied with inside the "blue line" impact area. The economic consequences to landowners are not as significant because they still have the principal use of the property and areas within the impact area are unlikely to be approved for a new conflicting use (i.e., residence). We believe the economic prong of the ESEE analysis tips in favor of the Ordway Quarry.

The social consequence analysis provided by the applicant balances the social benefit to the greater county community having a rare rock resource protected for the benefit of all community members versus the social dissatisfaction from neighbors in the area. We believe the ESEE analysis correctly concludes that because conflicts can be minimized, the social consequences of failing to protect the rock resource outweigh the social consequences of not allowing conflicting uses in the impact area.

The environmental consequences analysis balances the environmental problems created for the quarry by allowing a conflicting use (i.e., residence) within the impact area versus the environmental effects on a residence allowed within the impact area. We believe the ESEE analysis correctly reaches the proper balance. The ESEE analysis provides that the impact on the resource would be significant (potentially shutting the resource down if it could not control noise) versus using mechanisms to control noise within the impact area and thereby lessening impacts on the conflicting use. In addition, if the rock resource is not protected, additional environmental consequences would be created in hauling mineral and aggregate material from a larger distance using more fuel. We believe on balance, the ESEE analysis reaches the right conclusion with regard to environmental consequences analysis.

With regard to the energy consequences, the ESEE analysis weighs the operational changes on aggregate extraction operations that could be caused by a residence in the impact area versus the energy consequences of installing double-paned windows or other methods to reduce noise impacts for residences within the impact area. Again, we believe the ESEE analysis is the proper balance between the resource and potential future conflicting uses in the impact area.

We have attached a copy of the ESEE analysis previously submitted into the record on January 22, 2008. It is important for the Planning Commission to remember that the Big River has demonstrated that it can minimize impacts beyond the impact area and that the ESEE analysis is only applicable to areas within the impact area. In addition, it is important for

the Planning Commission to remember that if an individual truly needs to build a residence within the small impact area identified, that person can work with the County and Big River to use mechanisms (such as waiver of remonstrance, noise easement or other type of written agreement) to waive noise compliance issues and allow the conflicting use to be constructed. Big River is not requesting that any construction be prohibited in the impact area. Rather, Big River provides the ESEE analysis to show that there could be problems with new residences in the impact area. If the County were to allow these uses, noise easements, waivers of remonstrance or other mechanisms, need to be used to prevent or eliminate economic, social, environmental or energy consequences to the resource.

There are two additional issues that were raised at the hearing and need to be addressed in rebuttal. First, neighbors expressed concern about vibration and testified that vibration was coming from the quarry. Prior to the close of the record, we submitted a letter from a Registered Professional Geologist that states the vibration from quarry activities would not be perceptible at properties within Edgewater Terrace. The Registered Professional Geologist stated that the nature of the basalt resource and alluvial soils between the operation and Edgewater Terrace would not allow transmission of perceptible vibrations. The Registered Professional Geologist suggested that the probable source for any vibration concerns is the fast-moving traffic (i.e., logging trucks) passing by the development on Highway 26. We do not believe that vibration is a legitimate conflict.

Second, the Planning Commission expressed concern about whether the mineral and aggregate resource at the Ordway Quarry was "needed" given that there might be other rock resources in the area. As a preliminary matter, the current market demand for the rock resource from the Ordway Quarry is significant and belies the question of whether or not it is "needed." Clearly, there is a need in the market or Big River would not be able to sell mineral and aggregate materials from the site and those sales would accrue to another location. In addition, the concept of "need" must include market competition. Without competing sources of rock, prices will rise. Because approximately 60 percent of rock materials produced in Oregon are purchased by public entities (counties, state, ODOT, etc.), the concept of "need" must also include the concept of competition to ensure a fair price is paid for mineral and aggregate resources.

More importantly than the logical rebuttal arguments above, "need" is not an approval criterion that may be properly considered in the Goal 5 PAPA process. The concept of "need" is not a requirement of this process under any provision of the Clatsop County Zoning Code, Standards Document or Comprehensive Plan. The County's zone change criteria under Section 5.400 do not have a "need" component and specifically refer to the PAPA process for

Goal 5 mineral and aggregate resources (contrast the County's variance proceeding under Section 5.130 under the Code where the requested variance must be "necessary"). Big River is not requesting a variance and there is no other plan provision, zoning code provision or standards document provision which establishes "need" as a consideration for a mineral and aggregate application. The County's Quarry and Mining Zone standards under Section 3.460 use the word "need" but not in a context that refers to the economic or market need for the mineral and aggregate resources. Rather, the QM zone provision (Section 3.470) refers to "need" in conjunction with the proper lot size for a quarry. The Standard states:

> "(1) Lot size shall be based upon:
>
> (A) The site need of the proposed use . . . ."

This provision does not require consideration of whether the mineral and aggregate resource at the Ordway Quarry is "needed" in the marketplace. Rather, it instructs the Planning Commission to make sure the lot size is big enough based on the particular site where the resource is located.

Even if a portion of the Clatsop County Code, Standards Document or Comprehensive Plan could be construed to add a "need" standard onto a mineral and aggregate application, consideration of "need" is not permitted under the PAPA rule. Under the old Division 16 rules, LUBA consistently ruled that "need" was not a proper determination in a Goal 5 proceeding under the Administrative Rule. In *McCoy v. Linn County*, 16 Or LUBA 295, LUBA stated:

> "Neither the goal nor its implementing administrative rule provide that need for the aggregate resource is a criterion for adding an aggregate site to a planned inventory. The county is not required by Goal 5 to adopt findings demonstrating a need for the aggregate in order to amend its plan to add the subject site to its plan inventory."

Under both the Division 16 and Division 23 PAPA rules, LUBA and the courts have consistently ruled that even when a local government has a "public need" standard, such standard is preempted by the Goal 5 process. In *Hegele v. Crook County*, 44 Or LUBA 357, *aff'd* 190 Or App 376, the opponents argued that public need in the county's ordinance required a demonstration of "need" in the PAPA process. LUBA ruled that the application of the county "need" policy ". . . to petitioner's request to add this subject site to the county's inventory of significant aggregate resources is preempted by OAR 660-023-0180(7)." Similarly, in *Eugene*

Sand & Gravel, Inc. v. Lane County, 44 Or LUBA 50, *aff'd* 189 Or App 21, LUBA stated that the local government cannot add local review standards, including such standards as "public need" on to the Goal 5 process. LUBA stated:

> "The Goal 5 rule for aggregate establishes a comprehensive regulatory scheme that is intended to supersede local review standards for aggregate."

We believe that market sales from the Ordway Quarry clearly demonstrate a "need" for the material. However, it is clear that "need" is not an approval criteria which can be applied by the Clatsop County Planning Commission in this matter.

Big River has provided a well-supported and intelligently developed plan for activities at the Ordway Quarry. We believe the record demonstrates that conflicts can be minimized, that the impact area will affect only a small portion of other properties and that operations can be managed to reduce impacts on adjoining properties. We know our neighbors are concerned, but we also listened to the negative comments at the public hearing that were directed to our predecessor. We know that we will need to continue to work with our neighbors to comply with our requested conditions and maintain mutual respect and trust.

The record demonstrates that the resource is clearly significant. The County's Comprehensive Plan describes significant mineral and aggregate resources as rare in the county and directs that they be protected. We respectfully request the Planning Commission adopt the Staff Report and recommend approval of the Big River application to the Board of Commissioners.

Very truly yours,

Paul R. Hribernick

PRH:vc
Enclosure

cc w/enc: Mr. Mike Sarin

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The 8 Main Steps in Reviewing a Proposed Plan Amendment for an Aggregate Mining Site Under the New Goal 5 Rule

1. Determine significance.
Determine whether the aggregate resource site is significant enough to merit inclusion in the plan's inventory of aggregate resources.

2. Define impact area.
If the site is found to be significant, define the "impact area" where mining, if allowed, might conflict with "existing or approved" land uses.

3. Identify conflicts.
Within the impact area, identify conflicts (situations where noise, dust, traffic, etc., from the mining would adversely affect nearby land uses).

4. Identify ways to minimize conflicts.
Identify "reasonable and practicable measures" that could be used to minimize such conflicts.

5. Evaluate ESEE consequences of mining.
If conflicts exist and cannot be minimized, analyze economic, social, environmental and energy (ESEE) consequences of allowing, limiting, or not allowing the mining.

6. Decide whether to allow mining.
Based on the ESEE analysis, decide whether to allow the mining.

7. Evaluate ESEE consequences of new uses.
If mining is allowed, evaluate the ESEE consequences of allowing, limiting, or not allowing new conflicting uses in the impact area.

8. Amend the plan.
If mining is allowed, amend the local plan and land use regulations to reflect that decision and to protect the site for mining.

Previously Submitted

B L A C K | H E L T E R L I N E LLP

ATTORNEYS AND COUNSELORS AT LAW

PAUL R. HRIBERNICK
E-mail: prh@bhlaw.com

Our File No. 9395-1

January 22, 2008

VIA E-MAIL

Mr. Michael J. Weston II
MPA
Planner, Community Development
Clatsop County Community Development Department
800 Exchange Street, Room 100
Astoria, OR 97103

Reference: PAPA Application
Big River Holdings, Inc. (Ordway Quarry)

Dear Mike:

Enclosed for inclusion in the record is the following additional documentation:

- Applicant's Requested Conditions (Revised January 22, 2008)-- Exhibit 8.

- Figure JAN08 A. Map of zones proposed on applicant's property to maintain a 100-foot strip of existing zoning at all locations except access points to Highway 26--Exhibit 9.

- Figure JAN08 B. Figure showing the QM and QM Overlay areas and existing zoning to remain in place and 100-foot buffers--Exhibit 10.

- Figure JAN08 C. Overall map showing the imposition of the QM district and the surrounding QM Overlay district--Exhibit 11.

- Letter dated January 22, 2008 from Registered Geologist, Steve LaFranchi, regarding vibrations--Exhibit 12.

- Washington Department of Ecology "Techniques for Dust Prevention and Suppression," publication No. 96-433, revised March 2003--Exhibit 13.

- Draft ESEE for new uses (Step 7 of the DLCD eight-step Goal 5 process)--Exhibit 14.

- Copy of Big River's current Storm Water Permit (1200-A)--Exhibit 15.

- Copy of DEQ Air Permit for crusher used at Ordway Quarry (owned by Warrenton Fiber)--Exhibit 16.

We have submitted the exhibits electronically because that will allow them to be reproduced as needed. In the event you need hard copies for the record, please let me know and we will provide them as quickly as possible.

Big River continues to have ongoing discussions with the Edgewater Terrace neighbors. At this point, there appears to be a difference of opinion among the neighborhood members and we are unsure how they will approach the remainder of the process.

If we can provide any additional information, please do not hesitate to contact us.

Very truly yours,

Paul R. Hribernick

PRH:vc
Enclosures

cc w/enc: Mr. Mike Sarin

APPLICANT'S REQUESTED CONDITIONS
JANUARY 22, 2008 (REVISED)

1. CONCRETE AND ASPHALT BATCH PLANTS ARE NOT APPROVED UNDER THIS LAND USE APPROVAL. THE ZONE CHANGE GRANTED IN THIS LAND USE PROCEEDING CHANGES THE ZONING ON PORTIONS OF THE AFFECTED PROPERTIES FROM THE COUNTY'S RA-2, AF AND F-80 ZONES TO THE COUNTY'S QM ZONE. UNDER THE COUNTY'S CURRENT RA-2, AF AND F-80 ZONE STANDARDS, BATCH PLANTS ARE ALLOWED, BUT ONLY UNDER CONDITIONAL USE APPROVAL OR FOREST USE STANDARDS (SEE SECTIONS 3.519(2)(C), 3.555 (8) AND (14) AND 3.207(2)). ORDINARILY, THE COUNTY'S QM ZONE WOULD ALLOW BATCH PLANTS AS A 'TYPE 1' USE (SEE 3.466(2), APPLYING LIGHT INDUSTRIAL STANDARDS). THIS APPROVAL AND CONDITION SPECIFICALLY OVERRIDE THE PROVISIONS OF THE COUNTY'S QM ZONE SECTION 3.466(2). IN THE EVENT AN INDIVIDUAL IN THE FUTURE WOULD REQUEST A BATCH PLANT FOR THESE PROPERTIES, SUCH REQUEST - SHALL BE SUBJECT TO THE APPLICABLE FORESTRY STANDARDS IN FORCE AT THE TIME OF THIS APPROVAL (SECTIONS 3.555(8) AND (14)) FOR LANDS PREVIOUSLY OR CURRENTLY ZONED F-80 OR THE CONDITIONAL USE STANDARDS IN FORCE AT THE TIME OF THIS APPROVAL (SECTIONS 3.519(2)(C) AND/OR 3.207(2)) FOR LANDS PREVIOUSLY OR CURRENTLY ZONED AF AND RA-2, RESPECTIVELY. IT IS THE INTENT OF THIS CONDITION THAT A BATCH PLANT APPLICATION ON THE PROPERTIES APPROVED WITH QM ZONING UNDER THIS LAND USE APPROVAL SHALL NOT BE DEEMED AN ALLOWED USE THROUGH A 'TYPE 1' APPLICATION.

2. CONSISTENT WITH THE COMMENTS OF THE OREGON DEPARTMENT OF FISH AND WILDLIFE, APPLICANT/OPERATOR SHALL COMPLETE ANY REQUIRED WETLANDS CORRECTIONS RESULTING FROM ACTIVITES AND INFRACTIONS OF PRIOR OPERATORS. BIG RIVER ALSO AGREES TO VOLUNTARILY WORK WITH THE LOCAL WATERSHED COUNCIL ON A PREVIOUSLY PLANNED PROJECT ON ITS BOTTOM-LAND PROPERTY. FOR THIS PURPOSE, BIG RIVER WILL PROVIDE LIMITED ACCESS TO PORTIONS OF ITS PROPERTY NOT USED FOR EXTRACTION ACTIVITIES (ALONG HIGHWAY 26).

3. OPERATIONS WILL CONTINUE TO USE THE EXISTING ACCESS POINT AT MILE POST 2.66, CONSISTENT WITH THE OREGON DEPARTMENT OF TRANSPORTATIONS CURRENT PERMT. TO THE EXTENT THAT ODOT

WOULD ALLOW, WITHOUT UNREASONABLY BURDENSOME CONDITIONS ON THE APPLICANT, ALTERNATIVE ACCESS AS DESCRIBED IN THE APPLICATION (i.e. "IN-ONLY" AT THE EXISTING ACCESS POINT--MILE POST 2.66—AND "OUT-ONLY AT EITHER MILE POST 2.50 OR VOLLMER CREEK ROAD—MILE POST 2.26) SUCH ALTERNATIVE ACCESS IS ALLOWED BY THIS APPROVAL PROVIDED THAT ODOT REQUIREMENTS ARE MET AND/OR AN ODOT PERMIT IS GRANTED TO THE OPERATION FOR THE ALTERNATIVE ACCESS. BIG RIVER SHALL INITIATE THE PROCESS WITH ODOT WITHIN 30 DAYS OF THE EXPIRATION OF ALL APPEAL PERIODS FOR THE LAND USE APPROVAL.

4. OPERATOR SHALL OBTAIN, AND MAINTAIN, A VALID OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES PERMIT AND SHALL POST AND MAINTAIN THE BOND REQUIRED BY DOGAMI. AS PART OF THE DOGAMI PERMIT PROCESS, OPERATOR SHALL OBTAIN A STORMWATER DISCHARGE PERMIT AND SHALL COMPLY WITH ALL PROVISIONS OF SUCH PERMIT.

5. OPERATIONS SHALL BE PERMITED YEAR ROUND. HOURS OF OPERATION SHALL BE 7 A.M. TO 6 P.M. MONDAY THROUGH FRIDAY, 8 A.M. TO 5 P.M. ON SATURDAY WITH NO OPERATIONS ON SUNDAY OR NORMAL LEGAL HOLIDAYS. CONTROLLED BLASTING SHALL BE ALLOWED AS PART OF OPERATIONS. BLASTING HOURS SHALL BE 8 A.M. TO 5 P.M. MONDAY THROUGH FRIDAY WITH NO BLASTING ON WEEKENDS OR NORMAL LEGAL HOLIDAYS. BLASTING SHALL USE SEQUENTIAL CHARGES TO MINIMIZE IMPACTS. OWNERS IN THE GENERAL VICINITY (1500 FEET, BUT INCLUDING THE EDGEWATER SUBDIVISION) SHALL BE NOTIFIED 24 HOURS IN ADVANCE OF ANY BLAST. OPERATOR SHALL OBTAIN A LIST FROM CLATSOP COUNTY OF THE RESIDENCES THAT MUST BE NOTIFIED.

6. OPERATOR SHALL OBTAIN AND MAINTAIN A DEPARTMENT OF ENVIRONMENTAL AIR CONTAMINANT DISCHARGE PERMIT FOR ANY CRUSHER USED ON SITE. OPERATOR SHALL COMPLY WITH ALL APPLICABLE DEQ STANDARDS.

7. OPERATOR SHALL MINIMIZE DUST THROUGH THE FOLLOWING METHODS: SWEEP THE PAVEMENT INTERSECTION WITH HIGHWAY 26 ON A REGULAR BASIS; GRAVEL ALL INTERNAL TRUCK PATHS; LIMIT THE SPEED OF ALL VEHICILE ON INTERNAL TRUCK PATHS TO 15 MPH OR LESS; MAKE A WATER TRUCK AVAILABLE AND MOISTEN INTERNAL TRUCK PATHS AS NECESSARY. WITHIN 180 DAYS OF THE EXPIRATION OF ALL APPEAL PERIODS FOR THE LAND USE APPROVAL, BIG RIVER SHALL PAVE THE ENTRANCE ROAD FROM HIGHWAY 26 (MP

2.66) TO THE EXISTING SCALE HOUSE, A DISTANCE OF APPROXIMATELY 250 FEET.

8. OPERATOR SHALL MAINTAIN EXISTING VEGETATION FOR A DISTANCE OF 50 FEET ALONG HIGHWAY 26 TO PROMOTE SCREENING. 50 FOOT SETBACKS SHALL BE MAINTAINED FROM ANY RIPARIAN AREA. EXCAVATION SHALL BE SET BACK 100 FEET FROM ANY EXISTING RESIDENCE OR RESIDENTIAL DISTRICT AND 50 FEET FROM THE PERIMETER OF THE SITE OR ANY PUBLIC ROAD RIGHT OF WAY. STOCKPILES AND SEDIMENTATION PONDS SHALL BE SET BACK 25 FEET FROM THE PERIMETER OF THE SITE OR ANY PUBLIC ROAD RIGHT OF WAY.

9. NO DIVISION OR PARCELIZATION OF LAND IS APPROVED.

10. OPERATOR SHALL FOLLOW THE PROVISIONS OF THE EROSION CONTROL AND PARKING PLANS SUBMITTED WITH THE APPLICATION. OPERATOR SHALL FOLLOW ALL DOGAMI RULES RELATED TO EROSION AND STABILITY.

11. OPERATOR SHALL OBTAIN AND MAINTAIN LIABILITY INSURANCE AN AMOUNT NOT LESS THAN $500,000 AND SHALL ANNUALLY PROVIDE PROOF OF INSURANCE TO THE COUNTY.

12. ACCESS TO THE QUARRY SHALL BE GATED WHEN NOT IN USE.

13. OPERATOR SHALL IMPLEMENT NOISE MITIGATION MEASURES AS DESCRIBED IN THE DALY STANDLEE NOISE REPORT WHEN A DOZER OR ROCK DRILL IS IN A DIRECT LINE OF SIGHT AND WITHIN 1400 FEET OF AN EXISTING RESIDENCE (EXCLUDING RESIDENCES ON THE SITE ITSELF). SPECIFCALLY, A SOLID BARRIER (EITHER A BERM OR MOVABLE BARRIER) SHALL BE USED FOR A ROCK DRILL; A BERM, BARRIER, RESIDENTIAL MUFFLER OR INTERMITTENT OPERATION SHALL BE USED FOR A DOZER. IN ADDITION, OPERATOR SHALL, ON AN ONGOING AND DECLINING BASIS, MAINTAIN A LIP OF ROCK TO SERVE AS A NATURAL BARRIER TO THE EAST/NORTHEAST TO SCREEN OPERATIONS AND MINIMIZE NOISE IMPACTS.

14. A 100 FOOT WIDE ZONING BUFFER STRIP ALONG HIGHWAY 26 (SEE ATTACHED MAP JAN08 A) SHALL BE RETAINED IN THE EXISTING ZONING (F-80 AND RA-2) AND WITHIN THIS BUFFER STRIP, ONLY THE EXISTING ACCESS AND POTENTIAL ALTERNATIVE ACCESS POINTS SHALL BE CHANGE TO THE QM ZONE.

15. A 100 FOOT WIDE ZONING BUFFER STRIP ALONG PORTIONS OF THE SOUTHERLY BOUNDARY OF TAX LOT 1203 SHALL BE RETAINED IN AF

ZONING (SEE ATTACHED MAP JAN08A). WITHIN THIS BUFFER ZONE ON TAX LOT 1203, BIG RIVER SHALL SLIGHTLY BERM AND SLOPE THE STORED MATERIAL SO THAT RUN-OFF IS DIRECTED PREDOMINANTLY TOWARD THE BIG RIVER PROPERTY. BIG RIVER WILL ALSO PLANT VEGETATION IN THE 100 FOOT BUFFER AREA ON TAX LOT 1203 TO MITIGATE RUN-OFF ONTO ADJACENT PARCELS.

Exhibit 9

FIGURE JAN08 A: Zoning on Applicants' Property

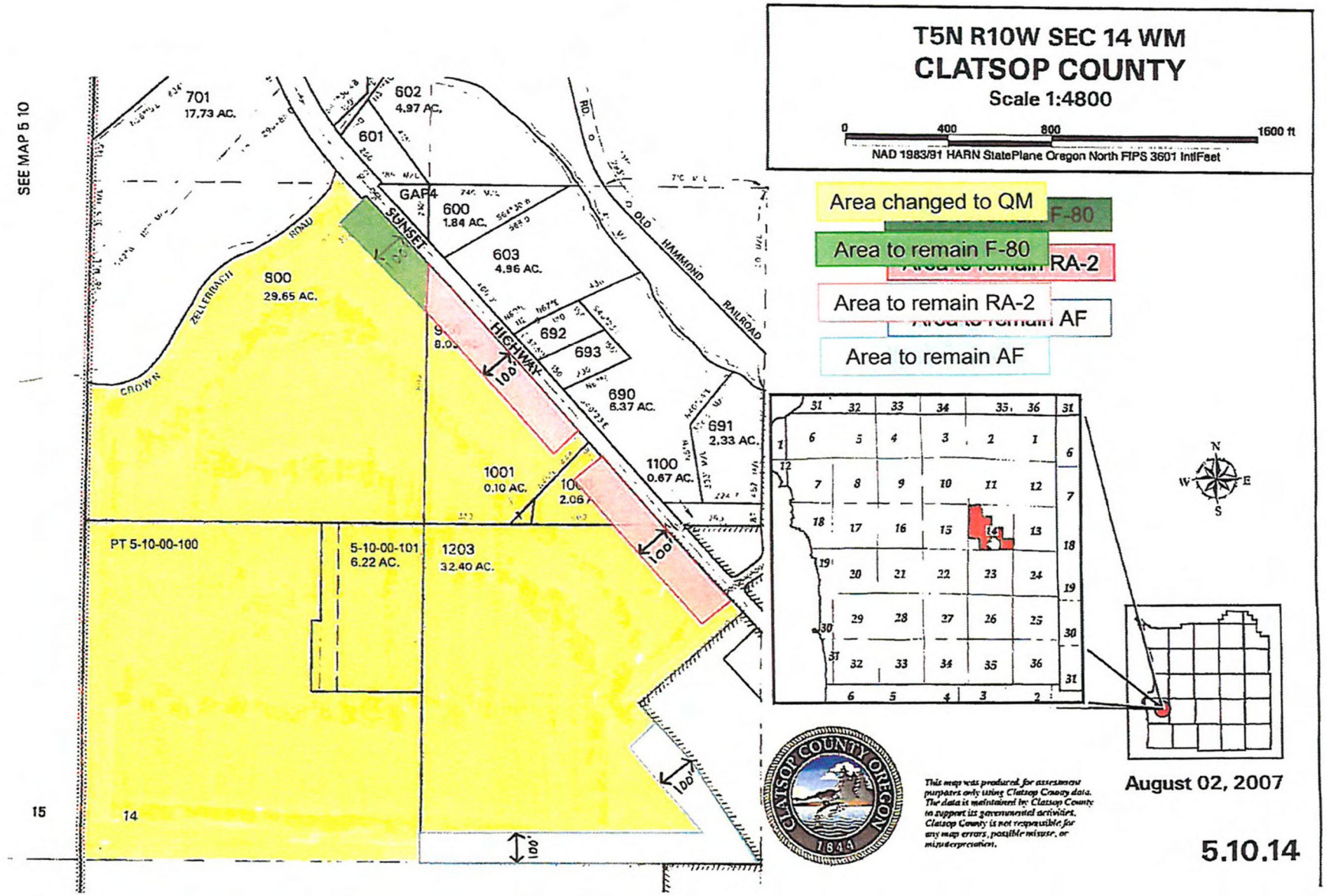


FIGURE JAN08 B

Exhibit 10

FIGURE JAN08 B: QMO Overlay Area

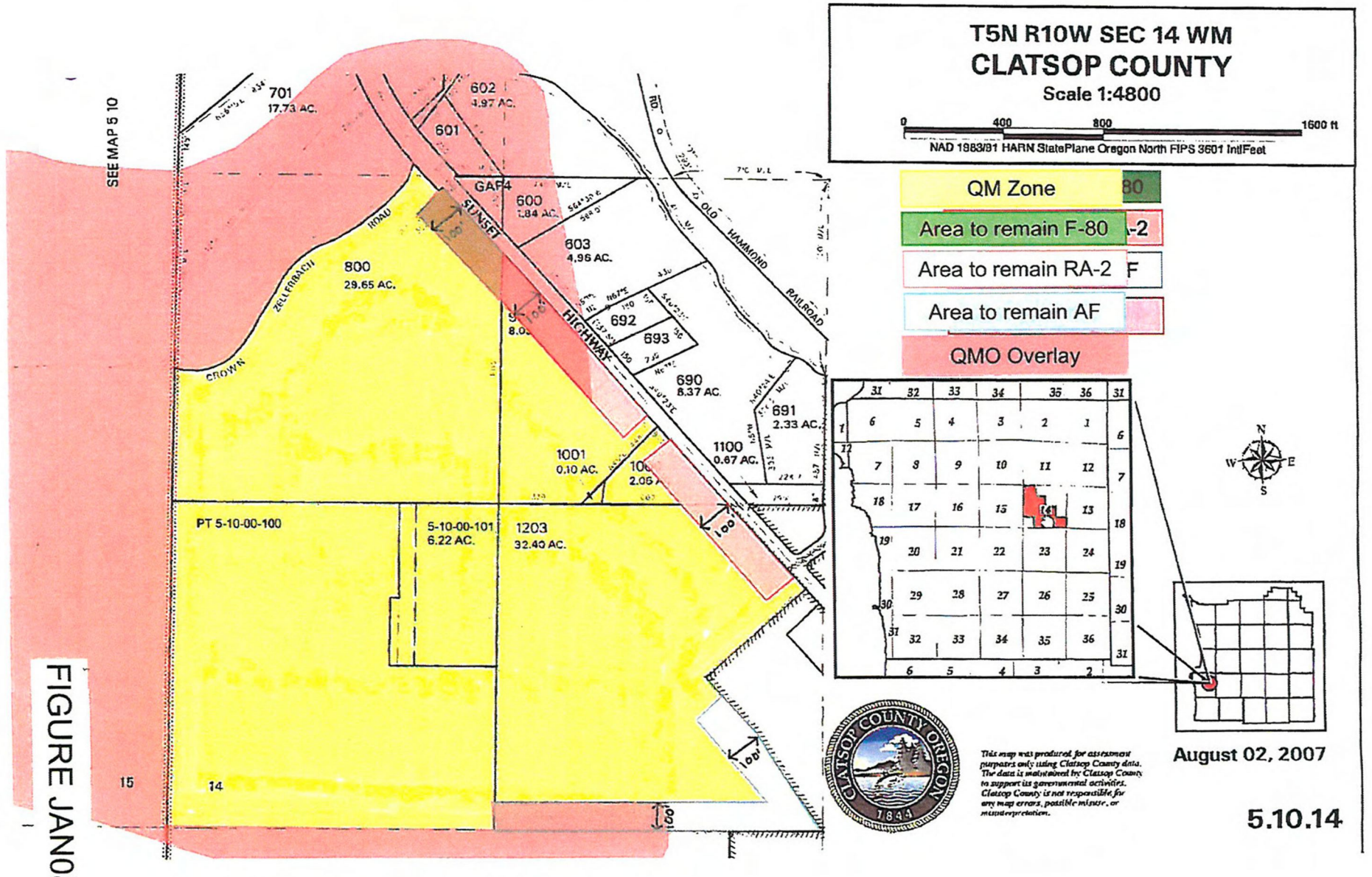
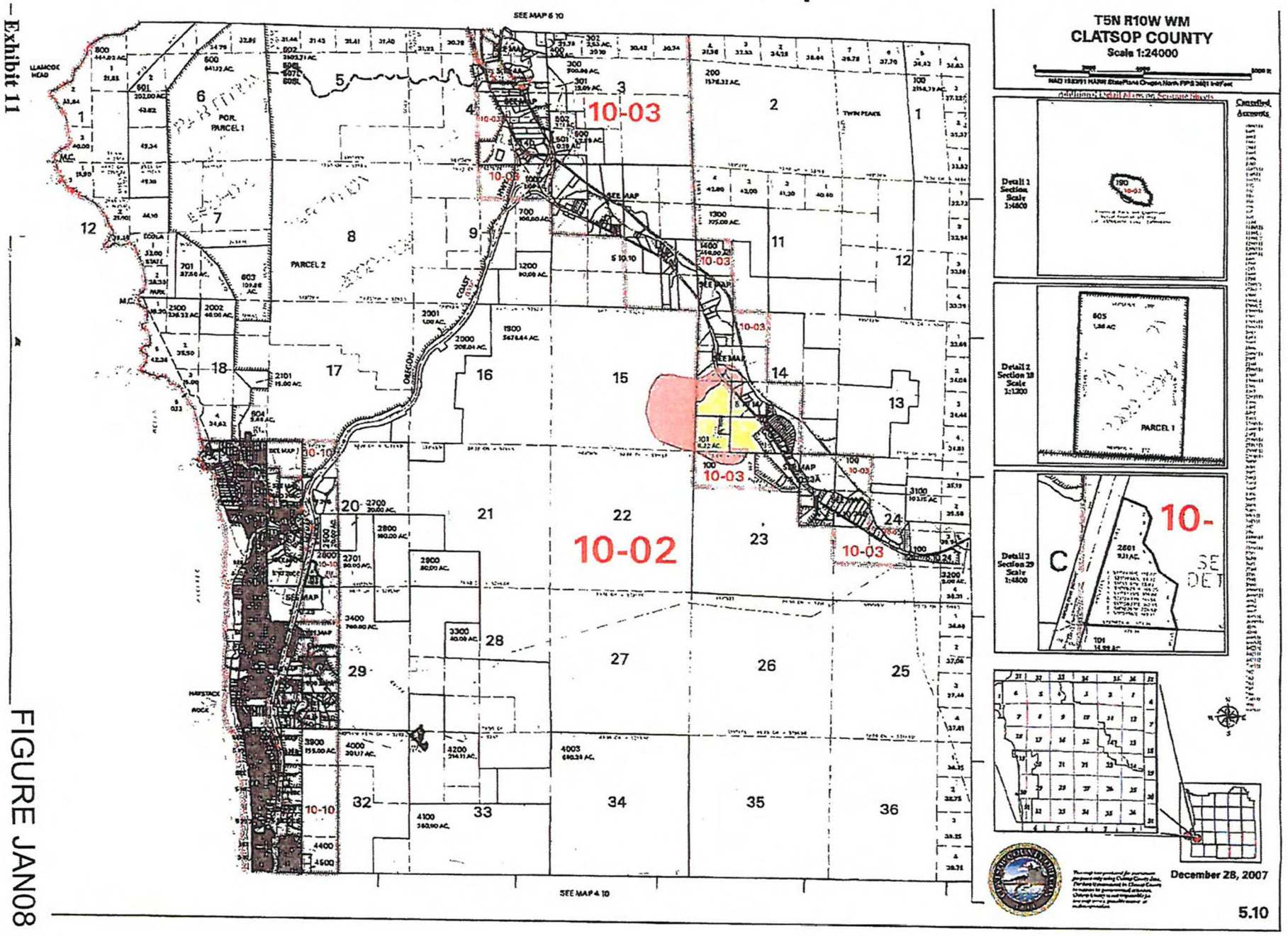


FIGURE JAN08 B

FIGURE JAN08 C: Impact Area



– Exhibit 11

FIGURE JAN08 C

Environmental Science Associates, Inc. *1450 Flintridge Avenue Eugene, Oregon 97401* *Phone (541) 683-4997*
FAX (541) 683-5360

January 22, 2008

Paul R. Hribernick
Black Helterline
805 SW Broadway
Suite 1900
Portland, Oregon 97205

RE: Big River Ordway Quarry

Dear Paul:

In regards to your question about concerns expressed by some individuals in the proximity of the Ordway Quarry, specifically the Edgewater Terrace Subdivision, it is my experience as a geologist the periodicity and energy of routine mine methods employed at the Ordway Quarry will not result in vibration perceptible to humans. The distance of over 1500 feet, high energy/short period waveform of blast energy and transition from high density basalt to alluvial sediment will negate perceptible vibration.

High speed, heavy traffic on nearby Highway 26 is a more likely source of vibration due to proximity and energy/waveform type.

If you have any questions please call (541) 683-4997.

Respectfully,

Steve LaFranchi, RG
ESA

REGISTERED OREGON STEVEN E. LAFRANCHI 5-31-08 GO995 GEOLOGIST

Exhibit 12

Oregon
Theodore R. Kulongoski, Governor

Department of Geology & Mineral Industries
Mineral Land Regulation and Reclamation
229 Broadalbin Street SW
Albany, OR 97321-2246
541-967-2039
FAX 541-967-2075

December 5, 2007

Mike Sarin
Big River Holdings Inc.
1050 Olney Ave.
Astoria, OR 97103

RE: NPDES 1200-A Stormwater Discharge Permit Coverage
DOGAMI ID No.: 04-0056
DEQ File No.: 111965
Volmer Creek

Dear Mike Sarin:

In August 2006, the Oregon Environmental Quality Commission adopted a newly revised National Pollutant Discharge Elimination System Industrial Stormwater Discharge Permit No. 1200-A. The Oregon Department of Environmental Quality (DEQ) has received your application to renew your coverage under this permit. *DOGAMI and DEQ have reviewed the application and found that additional information is required. The Storm Water Pollution Control Plan (SWPCP) needs to be updated to meet the conditions of the revised permit.*

The purpose of the stormwater permit and SWPCP is to ensure registrants are providing adequate Best Management Practices on site to minimize adverse impacts to the environment from stormwater runoff, and prevent violations of the state's instream water quality standards.

DEQ and DOGAMI have entered into an agreement which allows DOGAMI to administer this permit on DEQ's behalf. DOGAMI has developed a revised SWPCP form for 1200-A permittees to use, which is enclosed for your convenience. Please submit a completed form and revised site map by January 9, 2008. We will not be able to renew your stormwater permit until these materials are received.

If you have any questions about the new form or permit requirements, please contact me at (541) 967-2084 or e-mail: nancy.e.collins@mlrr.oregongeology.com.

Sincerely,

Nancy E. Collins
Storm Water Specialist

Encl.

[redacted]

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Northwest Region Portland Office
Air Quality Program
2020 SW 4th Avenue, Suite 400
Portland, OR 97201-4987
(503) 229-5554
FAX (503) 229-5265
TTY (503) 229-5471

DEC 11 2002

WARRENTON FIBER CO
PO BOX 100
WARRENTON OR 97146

RE: Assignment to Air Quality General Permit
SOURCE # **37-0575**

The Department of Environmental Quality has completed processing your application for a General ACDP for a portable rock crusher. Based on the material contained in the application, we have assigned Source No. 37-0575 to General Permit AQGP-008. Please use the enclosed "Relocation Notice" to notify DEQ of the planned effective dates and location of your portable plant. This completed form should be submitted prior to you moving the plant to any new location.

The effective date of the permit is the date it was assigned to you. The signature and date appear on the attached assignment sheet. The permit is issued pursuant to Oregon Revised Statutes 468A and Oregon Administrative Rules (OAR) 340-216-0060.

You may appeal the assignment of the attached permit by applying to the Environmental Quality Commission, or its authorized representative, within twenty days from the date of this letter. Appeals are pursuant to ORS Chapter 183 and OAR Chapter 340, Division 14-025(6). Appeal procedures are contained in OAR Division 11-005 through 11-140.

A copy of the assigned general permit must be available at your facility at all times. Failure to comply with permit conditions may result in civil penalties. **You are expected to read the permit carefully and comply with all conditions** to protect the environment of Oregon.

If you have any questions, please contact Johnny Baumgartner at (503) 229-6035.

Sincerely,

Ed Druback
Air Quality Manager
Northwest Region

EJD: jdb
Enclosure

Cc: DEQ, AQ Division
EPA - Region X
Johnny Baumgartner/NWR

Exhibit 16

Source Number: 37-0575
Page 1 of 2 Pages

ASSIGNMENT

to

GENERAL AIR CONTAMINANT DISCHARGE PERMIT

Department of Environmental Quality
Northwest Region
2020 SW 4th Avenue, #400
Portland, Oregon 97201-4987
(503) 229-5554

PERMITTEE:

Warrenton Fiber Company
PO Box 100
Warrenton OR 97146

PLANT SITE LOCATION:

Portable Source

INFORMATION RELIED UPON:

Application No.: 020434
Date Received: 11/27/02

LAND USE COMPATABILITY STATEMENT:

Not applicable for portable sources

ASSIGNMENT: The permittee identified above is assigned by the Department of Environmental Quality to the General ACDP listed below in accordance with ORS 468A.040, OAR 340-216-0060(2) and based on the land use compatibility findings included in the permit record (note: land use compatibility statements are not applicable to portable sources).

Ed Druback, Northwest Region Air Quality Manager

DEC 11 2002
Dated

General Air Contaminant Discharge Permit Issued in Accordance with OAR 340-216-0060:

General ACDP Number	Expiration Date	Source Category Description	SIC
AQGP-008	08/01/11	Rock crushers (OAR 340-216-0020, Table 1, Part B, 61)	1442

SUPPLEMENTAL INFORMATION:

Facility contact:	
Name:	Mike O'Bryan, Forester
Phone number:	(503) 861-3305
Facsimile number:	(503) 861-2925
e-mail address:	marive@aol.com
Application review report:	
The Department has reviewed the application for assignment to the General ACDP and determined that the application is complete and the subject facility qualifies for assignment to the General ACDP.	

Relocation Notice

Source No. 37-0575

TO: DEQ/NWR-Air Quality Program Attn: Johnny Baumgartner	FAX Number: (503) 229-5265

FROM:

Anticipated date of relocation: _____

Street address & town name: _____

_____

or

Nearest town to the new site: _____

Directions from nearest town to the new site:

_____

_____

_____

_____

If available, transmit a copy of the appropriate map.

Estimated length of stay: _____
(in days, weeks, or months)

Contact Person at the site: _____
(name and phone number)

DEQ/NWR Air Quality Program
2020 SW Fourth Ave., Suite 400
Portland, OR 97201-4987
(503) 229-5554

Submitted Evidence & Testimony

Ex 6:4 VI

Ex 7

William & Anita Dotson

34662 Highway 26

Seaside, Or 97138

January 7, 2008

Clatsop County Planning Commission

And County Planning Staff

PO Box 20

Astoria, Oregon 97103

RE: Big River Request for a Zone Map amendment on Tax Lot 20, 5, 10, 14, Ordway Quarry.

My husband and I bought our house in 1997. It was built in 1976. Our house is located less than ½ mile east of the entrance to the quarry.

We have seen the changes and problems with the quarry for about 10 years. When we first moved to our house the amount of work done in the quarry was almost non existent. In fact, we never did see a truck come out of the area until the previous owners, (Osburn Brothers), took over the operations. We have had to endure increase of truck traffic, noise of the operation, rocks and mud on the highway which has been a traffic hazard, as well as the addition of operations on the weekends.

We are also concerned about the amount of time we have been given to review the 333 page Papa request.

It is our understanding that the current request by the applicant could allow uses not currently allowed on the property. Our main concerns are:

1. Concrete, ready-mix, or asphalt plant operations.
    a. Concern of noise increase, smell of the asphalt operations and dust increase. We are outside a lot in the spring, summer and fall seasons.
2. Hours of operations.
    a. It is our understanding that the hours of operations is from 7:00am to 6:00pm. We do not want these hours to be expanded nor to include operations on the weekends.
    b. With ODOT's need of working at night from time to time, it is our concern that work will be allowed in the evening/night out of this quarry, especially if a ready-mix or asphalt plant is approved in the future.
3. If the PAPA is approved we are concerned that the permits and amendments to obtain the use of a concrete, ready-mix, or asphalt plant will be allowed in the future.

In the Papa request, it states that the Big River does not want to obtain an asphalt plant, ready-mix or concrete plant, but if they were approved in the future, the impact on our daily lives, (concerns of smell, dust and noise), could cause **our use** of our property to be adversely affected, not to mention our property value to be negatively affected as well. We want to go on record that we adamantly oppose the request of such plants.

If the Planning Commission can approve Big Rivers request and permanently eliminate the possibility of any owners from using the property for concrete, ready-mix, or asphalt plants and not expand the hours of operations to more than 7:00am to 6:00pm during the weekdays, then we would not be opposed to the Big River request.

Sincerely,

Anita & Bill Dotson

Ex 2

RECEIVED
JAN 07 2008
DEPT. OF PLANNING AND DEVELOPMENT
CLATSOP COUNTY

Clatsop County Planning Commision
800 Exchange St. Suite 100
Astoria, OR 97103

RE: Big River Request for zone changes on Tax lots 800, 900, 1000, 1001, 1203 and T5NR10W Tax lots 100 and 101. (Also known as the Ordway Quarry.

In regards to the proposed zoning change to the Ordway Quarry; we are against any expansion beyonds its current use.

1) Traffic:

Even though there is now a Right turn refuge lane for inbound traffic, West bound (outbound) traffic is situated in a dangerous area. Any increase in traffic onto the Hiway (US26) will only increase the propability of an accident.

2) Noise and Pollution:

At present the opperation is tolerable; however allowing an expansion or allowing a concrete or asphalt Plant will increase the noise and smell. This would not only be offensive; but would decrease property values.

Respectfully submitted.

Jim + Heidi Lent
34009 W. Campbell Lp
Seaside, OR
97138

Jim Lent

Heidi Lent

Ex 3

From: "Dennis and Lesley Jackson" <riverhome323@charter.net>
To: <mweston@co.clatsop.or.us>
Date: 1/7/2008 3:21 PM
Subject: Ordway Quarry Land Use Applications

CC: <comdev@co.clatsop.or.us>

To whom it may concern,
This letter is written to inform you of our concerns regarding the changes to the existing land use of Big River Quarry.
My husband Dennis and I live at tax lot 603 (milepost 2.4) which is directly across Hwy.26 from the quarry.
On page 13 of one of the sections of the proposal regarding water run off, it is stated "activities have not had any effect on fish and wildlife..."
This statement is very questionable because of the large amount of silting that has occurred to a salmon bearing stream/creek on our property. In the past I have taken photos and forwarded them to the D.E.Q. of evidence of the change in water color as it enters our property from the culvert which drains from the quarry into our creek. Someone from the Salem office came and investigated my concerns and had contact with the Osburns at that time, however, nothing changed. I have also kept Doug Ray aware of the changes to our creek. This unnamed creek runs into Vollmer Creek and hence the Necanicum. In years past, the water would be very low in the driest part of the summer but since the increased amount of silt, there are small standing pools of stagnant water. Because of the past history of non-compliance with the handling of the run off from the quarry, I am dubious about the the plan of water containment as written in the proposal unless there is close supervision.
Another concern I have is the stability of the rock face directly across from our driveway/Hwy.26 access. Should the vibrations from the blasting destabilize that rock face there is the potential for Hwy.26 closure due to rock slides.
The proposal does address noise pollution and states that neighboring home owners were contacted in the past. I would have thought that we would be part of those contacted because of our proximity to the source of the noise, however we were never contacted, and I would like to have recourse regarding the extended hours of the noise pollution occurring at our location.
I would like to see a statement added that at NO time in the future would a cement plant be allowed at this location.
Thank you for listening to my concerns of the changes to our once peaceful environment.
Sincerely,
Lesley Jackson

Ex 4

Oregon

Theodore R. Kulongoski, Governor

Department of Fish and Wildlife
North Coast Watershed District
4907 Third Street
Tillamook, OR 97141
(503) 842-2741
FAX (503) 842-8385
www.dfw.state.or.us

RECEIVED
JAN 7 2008
Community Development
CLATSOP COUNTY

January 4, 2008

Mike Weston
Clatsop County Community Development
800 Exchange Street, Suite 100
Astoria, Oregon 97103

Re: Ordway Rock Quarry Expansion

Mr. Weston:

The Oregon Department of Fish and Wildlife (ODFW) has reviewed the request for a Comprehensive Plan/Zoning Map Amendment, Comprehensive Plan Text amendment, and Geologic Hazard Permit Application for the reconfiguration and expansion of the Ordway rock quarry on the property defined as T5N, R10W, Sec. 14, Tax lots 800, 900, 1000, 1001, 1203 and T5N, R10W Tax lots 100 and 101.

It has recently come to our attention that some of the properties identified may have pending wetland fill violations. On January 31, 2006 Oregon Department of State Lands (DSL) conducted a site visit and documented approximate 1000 yd^3 of fill in wetlands. To our knowledge this matter has yet to be resolved.

The following recommendations are provided for your review and consideration to address potential adverse impacts as a result of implementing this request.

Riparian Areas
ODFW recommends that no development occur within County-designated riparian setbacks (Clatsop County Standard 4.500). Any development within these areas which could result in a loss of fish and wildlife habitat would require that the impact be mitigated consistent with current habitat mitigation standards (OAR 635, Division 415). Additionally, any areas within these setbacks impacted by prior activities should be restored, or mitigated for elsewhere as a condition of approving this request.

Stream Crossings
All stream-road crossings (including utilities) are to comply with fish passage requirements. Laws regarding fish passage may be found in ORS 509.580 through 910, and in OAR 635, Division 412. ODFW shall approve in advance any stream crossing, or replacement or modification of any existing instream structure or crossing.

Wetlands
All activities within wetlands shall comply with DSL Removal-Fill laws (ORS 196.795-990). ODFW recommends approval of this request be contingent upon the completion and compliance of all facets associated with any past or current wetland Removal–Fill infractions as determined by DSL.

Thank you for the opportunity to review and provide comment. If you have any questions regarding this matter, or request any further information free to contact me anytime.

Sincerely,

Ron Rehn
Habitat Conservation Biologist, ODFW
4907 East Third Street
Phone (503) 842-2741
Fax (503) 842-8385
Email ron.f.rehn@state.or.us

Cc. B. Lobdell, DSL

EX 5

RECEIVED
JAN 08 2008
DEPT. OF PLANNING AND DEVELOPMENT
CLATSOP COUNTY

1-7-08

Clatsop County Planning Commission
And County Planning Staff
800 Exchange St. Suite 100
Astoria, OR 97138

RE: Big River Request for a Plan/Zone map amendment, Plan Text amendment at Ordway Quarry

We are adjacent landowners to Big River Holdings, at the Ordway Quarry. The unnamed fish bearing stream that is to the south of the quarry bisects our Boundaries. When we bought our property in 1989, there was very little activity until 2002. Since then the activity greatly increased to the point that the Ordway Quarry no longer fit into our neighborhood. We understand again the current owners of the quarry; Big River Holdings are requesting a new change in the zoning and use of the property. In reviewing the extensive application that Big River has submitted, we asked our selves, do we need and attorney to properly interpret it? Then we ask how is this extensive application going to be enforced. The more we read the applicable approval criteria in the application and compare them to the findings the more concerns we have. The current restrictions were placed on this site because of its close proximity to residences, highways and waterways. With that in mind we ask that the following item, be considered to be added to the list of conditions:

1) Permanently restricting any concrete, ready-mix, or asphalt batch plant from this sight.
2) Not to allow Blasting on this sight, due to closeness to residences.
3) Any previous violations on tax lot 1203 with ODSL are required to be resolved and work with all concerned agencies to restore damaged wetlands.
4) Not authorize the site for additional daily deliveries and still require the applicant adhere to the one-way traffic plan that ODOT stipulated.
5) Not allow the 1500' impact area to be calculated from the internal boundary of the quarry but the external, to protect future conflicts from the currently 30 plus homes.

The current operation levels have been tolerable but that has been only because of the current conditions that restrict the Ordway Quarry. Please consider that this quarry needs restrictions in order for it to be compatible in our neighborhood. The real test will be trying to implement these restrictions.

Respectfully submitted,

Susan and Greg Filliger

Oregon
John A. Kitzhaber, M.D., Governor

Division of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 378-3805
FAX (503) 378-4844
http://statelands.dsl.state.or.us

November 18, 2002

GD-02/5163
RYAN OSBURN
89053 HWY 101 N
WARRENTON OR 97146

State Land Board

John A. Kitzhaber
Governor

Bill Bradbury
Secretary of State

Randall Edwards
State Treasurer

Re: Complaint file No. 5163

Dear Mr. Osburn:

Thank you for meeting with me on July 16, 2002 to inspect your property identified as T5N, R10W, S14 WM, TL 1203. The area filled and restored was partially within wetlands although as all fill material has been removed no enforcement action will result.

You mentioned an interest in constructing a berm along the North side of the entrance road in order to buffer the project from an adjacent residential area. Wetlands do exist North of the haul road within the property. However, a berm constructed parallel to the road and to the North side of the road within 150' of the North edge of the road and no closer than 50' from the tributary to the Necanicum will not impact the wetlands so long as it does not extend West beyond the existing barn.

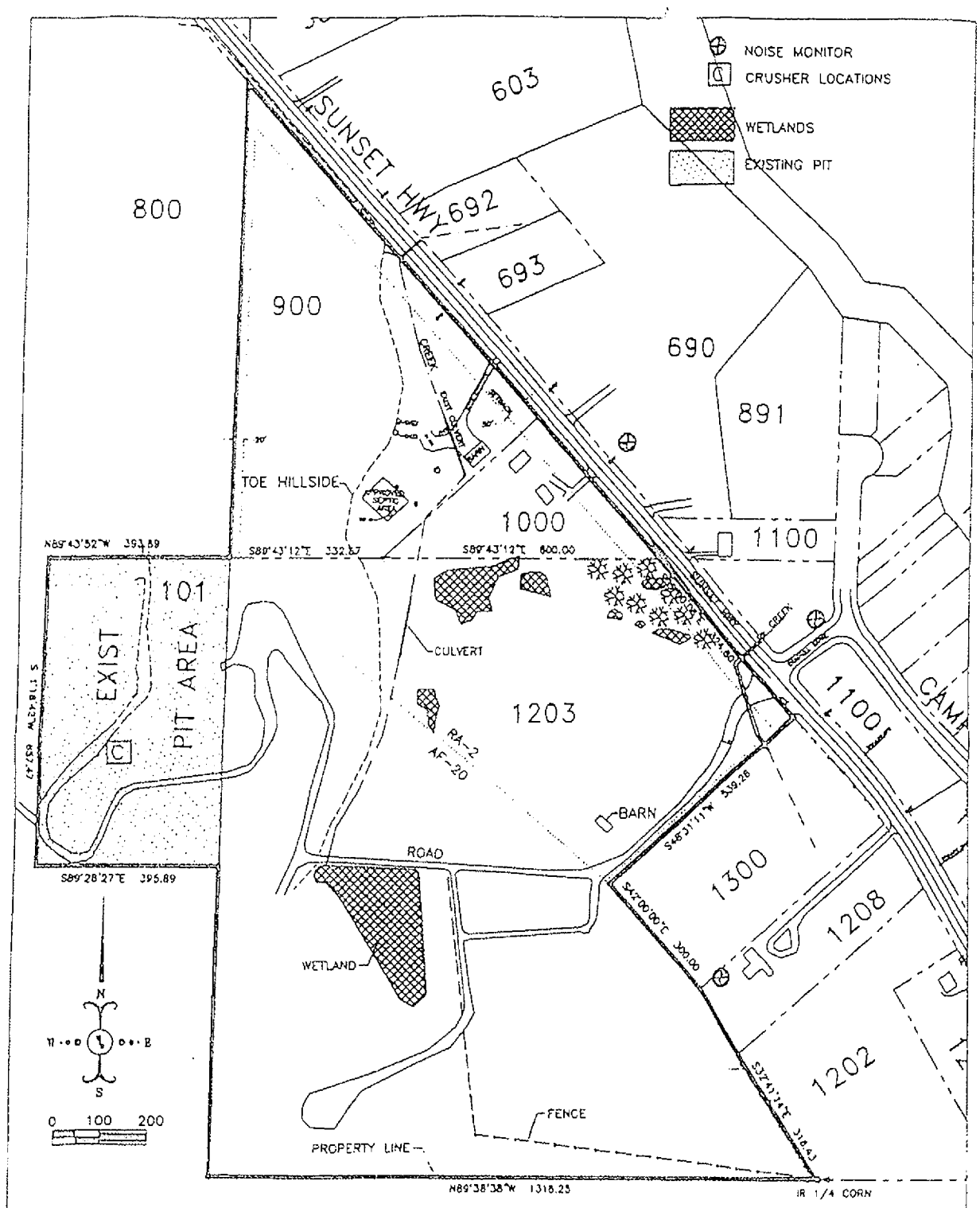
If future earthmoving is anticipated outside the pit area outside other areas already identified as upland, a wetland delineation will be necessary. If such impacts are planned, please contact Kirk Jarvie, DSL permit coordinator for Clatsop County. He can be reached at (503) 378-3805 ext. 320. If you have questions regarding this letter please contact me at ext. 252.

Sincerely,

Gordon Dunkeld
Natural Resource Coordinator
Field Operations-Western Region

C Stark Ackerman, Black Helterline LLP
Clatsop County Planning
Joe Sheehan, ODFW

J:\Counties\Clatsop\Violation\5163NV111802.doc



SEC 14, T5N, R10W, W.M.
TAX LOTS 101, 1203, 1001, 1000, 900
VOLMER CREEK PIT
DOGAMI ID#04-0056
CLATSOP COUNTY
OREGON ZONING: R-2 & AF20

SHEET 2

EXISTING SITE PLAN

9 SEPT. 2002

OSBURN BROTHERS ROCK QUARRY
RYAN OSBURN
PO BOX 2363
GEARHART, OREGON 97138
Ph. 503-717-3907
FAX 503-717-8613

Mead Engineering Resources inc
90331 HAWKINS ROAD
WARRENTON, OREGON 97146
Ph. 503-861-2604

REGISTERED PROFESSIONAL ENGINEER
12,181
OREGON
JULY 15, 1980
EXPIRES 12/31/2002

Paul R. Hribernick

From: Troy/Big River Excavating [tlindgren@bigrivercompanies.com]
Sent: Thursday, January 03, 2008 7:11 AM
To: Paul R. Hribernick
Subject: FW: Ordway Quarry Expansion

From: Ron Rehn [mailto:Ron.F.Rehn@state.or.us]
Sent: Wednesday, January 02, 2008 5:04 PM
To: tlindgren@bigrivercompanies.com
Cc: Doug Ray; VAUGHAN Joy
Subject: Ordway Quarry Expansion

Hi Troy,
Here's a follow-up to our conversation this afternoon. As we discussed my reason for calling was regarding ODFW comments to Clatsop County on the proposed quarry expansion. I was recently informed of a past wetland fill complaint with Oregon Dept. of State Lands (DSL). Upon further investigation I found that this was true, and that this case is still open. A complaint noticed had been sent to the prior owner (Osburn Bros.) and that a site visit had been conducted with DSL. I understand that there was an agreement with the prior owner to conduct some stream restoration work with the local watershed council. This restoration work was voluntary and not part of any enforcement action though it was mentioned in DSL notes that corrective actions were to remove the fill after completion of the restoration project though the property has since changed ownership to Big River Const. As I stated to you ODFW will recommend to the County approval of the expansion should be conditional upon resolution of the wetlands fill with DSL. You've stated that Big River has not heard back from DSL regarding enforcement actions nor from the Watershed Council about the originally proposed stream restoration project. From what you and others have told me it sounds like some "open doors" were never closed. You also stated that Big River Const. is still open to the restoration project. I'm available to assist in resolving this unfinished business if you would like. I've copied Doug Ray who was involved on the restoration work and Joy Vaughan with State Lands to bring them in the loop. Again, we will be recommending approval conditional upon resolution with DSL and the wetlands fill, and I can provide you assists with that. Please feel free to fill in anything I might have left off.

Thanks, Ron

Ron Rehn
Habitat Conservation Biologist
Oregon Dept. Fish & Wildlife
4907 East Third St.
Tillamook, OR. 97141
(503) 842-2741ext. 252 (phone)
(503) 842-8385 (fax)
ron.f.rehn@state.or.us (e-mail)

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1/3/2008

Paul R. Hribernick

From: Troy/Big River Excavating [tlindgren@bigrivercompanies.com]
Sent: Thursday, January 03, 2008 7:19 AM
To: msarin@bigrivercompanies.com
Cc: 'Mark/Big River Construction'; Paul R. Hribernick
Subject: FW: Rock Pit followup/salmon restoration followup

From: Doug Ray [mailto:kdray@pacifier.com]
Sent: Wednesday, January 02, 2008 5:31 PM
To: tlindgren@bigrivercompanies.com
Cc: Ron Rehn
Subject: Rock Pit followup/salmon restoration followup

Troy,
It seems like you had a good conversation with Ron. Thank you for the consideration. I did take the co-blame responsibility with Ron (both Troy Laws and I should have saw this through with you) for not following up and to be honest with you feel badly we did not move forward with your initial good will and interest to implement what could be one of the very best Coho salmon habitat restoration projects ever done on the north coast with in the flatlands of the quarry.
So with a big piece of crow with Tabasco sauce on it, please let me know how I can help work with you to restore very critical salmon habitat and help you to be successful with your quarry expansion.
I have been getting calls from some of the land owners that are concerned who live nearby.
As I said in the first conversations when you bought the land ,I am not keen to be involved in folks shouting at each, other but only in helping to make work solutions that work for the economy and ecology of the north coast which almost always can be done if people are willing to consider each other.

I was very grateful for the wonderful consideration to transport some of the large spruce from Lums which helped to make the project work so much better (it was the biggest wood used in the project) and even got a nice op ed from Steve Forrester not easy to do!That all began with a site visit with Jim Rankin when we looked at the ER control plan.

I would offer that if there is even only a conceptual plan for a large scale stream/alcove/wetland habitat restoration effort it would help alleviate some of the local neighbors concerns, and perhaps help to make the expansion better for every one.

We have a 23k NOAA fisheries grant in right now that was just submitted in Wash. DC last week for a large alcove creation restoration on the Leslie and Dennis Jackson property just across the Hwy from the quarry(she had called me very concerned about the environmental impacts)and the large sediment releases prior to Big River owning the site.The opportunity to do so much more on a larger scale exists on your land.

I am not clear on the details of all the concerns of neighbors, type of operations, hours etc but I do know that a pro active proposal can only help every one understand that with the need for hard rock to support the growth of the north coast economy, there can also be very important salmon habitat restoration and you can make the case that with out the economics of your company the restoration work would be much harder to accomplish!
There are also grants available Troy for some of the work though you are in a very UNIQUE position to have all the tools needed to construct and restore the habitat!!
Please accept my apologies for not following up in the past to help make this work but let me know if you would like to talk further to outline what could be a incredible salmon habitat restoration project on your lands that in

some ways are surplus to your needs to operate the quarry in it's expanded role.
best fishes,
Doug Ray

Carex Consulting
P.O. Box 441
Seaside,Oregon 97138
kdray@pacifier.com
503 738-8710

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DEC 26 2007
Community
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CLATSOP COUNTY

December 20, 2007
Clatsop County Planning Commission
And County Planning Staff
800 Exchange St. Suite 100
Astoria, Oregon 97103

RE: Big River Request for a Zone Map amendment on Tax Lots 800,900,1000,1001,1203, 5 10 14, and 5 10 100(portion of) and 101, Ordway Quarry

This letter is from the Edgewater Terrace Home Owners association. Currently there are 23 members – home owners in our subdivision. The Subdivision was platted in 1978 and we have owned homes in this area for approximately 30 years. Our entrance to the subdivision is adjacent and across Highway 26 from the entrance to the Ordway quarry currently being used to haul gravel and rock.

Our home owners have seen many changes to the quarry over the last 20 to 30 years. The quarry did not exist when our subdivision was platted and many of our homes were built. It is now our understanding that the current owners of the quarry, Big River Rock are requesting a new change in the zoning and use of the property. While the recent increase in truck traffic has impacted our main entrance by dodging rock trucks as well as having rock fall off the trucks and litter our road entrance, we have been patient and tolerated the current use.

It is our understanding that the current request by the applicant, Big River could allow uses not currently allowed on the property. Specifically *Section 3.466 Development and Use Permitted states the following uses*:

1) Surface or subsurface mining
2) Concrete, ready-mix, or asphalt batching plant accessory to and on the same site as an existing or approved surface or subsurface mining operation and subject to t he standards in the Light Industrial (LI) zone Section 3.448(3).
3) Offices, warehouses and maintenance buildings appropriate to uses permitted in the district.
4) Forestry
5) Farm use
6) Low-intensity recreation
7) Rock crushing subject to standards in Section 3.470
8) Property line adjustment

The during recent meetings with the applicant we have been told that the company does not intend to construct or use Concrete, ready-mix, or asphalt batching plants. The Big River representative has indicated to several of the home owners that they have specifically requested the concrete, ready-mix, or asphalt batching plants uses have been eliminated from their requested use. We find their specific response is stated as follows:

Findings: The applicant is requesting approval to mine, crush, and stockpile rock on the site, and to use the site for uses accessory to that. Applicant does NOT request concrete, ready-mix, or asphalt batching plants at the site. The requested uses fall within the uses permitted by this Section. This Criterion is met.

Based on this response by the applicant it does appear that they do not want the concrete, ready-mix, or asphalt batching plants uses, however if the zone change is approved it appears it will be allowed in the future. If this is the case we want to go on record that adamantly apposed to this request.

If approval of this request includes the Asphalt and concrete plant uses there is inadequate information submitted to prove the impact on the surrounding area and homes will be acceptable. The impact on our

homes would not be acceptable.

If the Planning Commission can approve their request and permanently eliminate the possibility of the current owners or future owners form using the property for concrete, ready-mix, or asphalt batching plants then the Edgewaters Home owners association would not be opposed to the Big River Request.

12-20-07

President - Edgewater Terrace Ass. x William T. Quick II

Board members. x Dale Barrett

x Gary L Phelan

x Heidi Pilbeam

COPY

January 17, 2008

TO: Clatsop County Planning Commission

FROM: Neal and Angeline Wyatt 34091 W. Campbell Loop, Edgewater Terrace
Seaside OR 97138

RE: **Ordway Pit overlay proposal**

Dear Sirs,

Please note for the record our opposition for the current proposal as presented by the applicant and his attorney. It is too aggressive and does not address the concerns of the current residential community near the pit.

It has no buffer to the R2 areas near it and is not consistent with State land use planning guidelines. Drainage issues and salmon habitat are not addressed. Access and egress is not clearly defined to date. The applicants' attorney response to residents concerns was vague and inadequate and left too little time to respond.

Ryan Osburne made the same kinds of pitches a few years ago and failed to abide by his word to the commission and residents and constant problems have resulted. Does the Commission wish to police this project after the current applicant is set up and then sells to another company? I bet not. Neither do I or my wife or the other residents in the area. We have been down this primrose path once before.

Please keep the record open on this matter until at least after the February 12th Commission meeting that is scheduled.

Sincerely Yours

Neal & Angeline Wyatt

Neal and Angeline Wyatt

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JAN 17 2008
DEPT. OF PLANNING AND DEVELOPMENT
CLATSOP COUNTY

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JAN 17 2008
DEPT. OF PLANNING AND DEVELOPMENT
CLATSOP COUNTY

01-09-08

We hereby authorize our signatures, by proxy, be added to all petitions related to limiting further developement/re-zoning request by Big River Rock located @ mp 2.5 hwy 101.

Sincerely

Dana Sheehan
Mike Sheehan

32029 W. Campbell Lp
Seaside, Or.
Edgewater Terrace.

Ph: 503 579-4237
cell: 503-348-7567

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AND DEVELOPMENT
CLATSOP COUNTY

January 16, 2008

Clatsop County Panning Commission & Staff
800 Exchange
Astoria, OR 97103

Re: Zone Change Application by Big River Construction

Dear Planning Commissioners:

At a meeting of the Edgewater Terrace Home Owners Association, an email from Paul R Hribernick was discussed. It was agreed by all present that the proposal from Mr. Hribernick was inadequate in all areas and did nothing to address the concerns of the Home Owners.

We would like to propose that the public hearing be kept open until after the February 12, 2008 Planning Commission meeting so we might have time to work on resolving the many conflicts involved with the proposed zone change.

Sincerely,

Jim Hurd
Connie Hurd

Jim & Connie Hurd
34007 W. Campbell Loop
Seaside, OR 97138

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AND DEVELOPMENT
CLATSOP COUNTY

COPY

January 17, 2008

Clatsop County Planning Commission and Planning Staff
800 Exchange
Astoria, OR 97103

RE: Zone change of the existing Ordway Rock Quarry operated by Big River Holdings Inc.

Dear Planning Commission and Planning Staff:

The Edgewater Terrace Homeowners Association are proposing that the record be kept open until after the February 12, 2008 Planning Commission hearing. The homeowners association doesn't have enough time or information to agree to any of the proposed changes such as:

1. The proposed buffer of 100 ft. is too aggressive and certainly not enough
2. We don't see an adequate plan for blasting or plan on who is governing this?
3. The entrance currently used is a traffic hazard. Is there ODOT approval for an entrance change?
4. Conflicts with residential uses

Until these items can be addressed and agreed upon we are going to be opposed to the proposed zone change.

Attached is a letter signed by homeowners that we have heard from and all are opposed to the zone change.

Sincerely,

Edgewater Terrace Homeowners Association

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DEPT. OF PLANNING AND DEVELOPMENT
CLATSOP COUNTY

Johnson
34094 W. Campbell Loop
Seaside, OR. 97138

COPY

I give B.J. Quicke; President of Edge Water Terrace; Permission to represent me in oposition of the, BiG River Rock Expanding the Conditional use permit hearings.

Julie Johnson

DATE: JANUARY 16, 2008

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CLATSOP COUNTY

EDGEWATER TERRACE ASSOCIATION HOME OWNERS

PETITION: RECONFIGURATION AND EXPANSION OF THE EXISTING ORDWAY ROCK QUARRY OPERATED BY BIG RIVER HOLDINGS INC.

LOCATED: SW OF HWY 26 AT MILE POST 2.5

IN FAVOR OF

OPPOSED

Sharon Barnett
Dennis Servicey
Della Rolfe
Clove Rolfe
Sharon L. Penger
Maria E. Penger
Jim Roberts
Heidi Roberts
Bud Thomsen
Delene Thomsen
Neal A. Hall
Joe Cundiff
Barry L Phelan
Connie Hurd
Russell Barrett
Robert Brown
Patricia L. Brown
Rachel Tindell
Ollie Quick

Oregon Dept. of Geology & Mineral Industries
Mineral Land Regulation & Reclamation Program
229 Broadalbin St. SW
Albany OR 97321-2246
(541) 967-2039

OPERATING PERMIT -- Renewal
ISSUED SUBJECT TO ANY LISTED CONDITIONS

David & Lisa McClean Road Builder's Inc.
37222 Linda Lane
Seaside OR 97138

ID No.: 04-0070
County: Clatsop
Section: 22
Twp: 5N
Range: 8W
Tax Lot:
Site Name:

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OCT 17 2007
Oregon Department of Geology & Mineral Industries
CLATSOP COUNTY

This permit shall be in effect, unless revoked or suspended for cause, from the date of issuance and shall remain in effect so long thereafter as the Permittee pays the annual fee to renew the permit, complies with the provisions of ORS 517.750 through 517.955 as applicable, the Rules as promulgated to administer the Oregon Mined Land Reclamation Act, the approved reclamation plan, and any conditions attached to this permit, and maintains a performance bond as required by the Act.

Issuance of this permit is not a finding of compliance with state-wide planning goals or the acknowledged comprehensive plan. The applicant must receive land-use approval from local government before using this permit.

NOTE: Reclamation plans may be modified per ORS 517.830(4) and OAR 632-(30) and (35)-035.

CONDITIONS: *(Conditions may be appealed per OAR 632-30-030. If an appeal is made, this permit is invalid until the condition(s) appealed is/are resolved and the permit reissued.)*

The Permittee must:

1. control turbid water runoff with sloping of the quarry floor, seeding, ditching, using hay bales, or a sediment pond.

2. not sidecast oversize, mine waste material or other refuse on the outslope towards the west fork of Humbug Creek.

3. obtain a 1200 A permit prior to September 1, 2000.

4. submit a revised permit boundary map by September 1, 2000 to exclude the Willamette Industries property. This permit authorizes activity only on the property owned by Mary Hayden, formerly known as the "Waterhouse Joint Venture" property.

5. submit a revised reclamation plan by September 1, 2000 for DOGAMI review and approval.

Issued 10-15, 2007

Gary W. Lynch
Assistant Director

RENEWAL IS REQUIRED BY JUNE 30, 2008

c: Clatsop County Planning Department
DEQ NW Region
Mary Haden Peyton
Weyerhaeuser Company Federal Way
ODFW Astoria

Oregon
Theodore R. Kulongoski, Governor

Department of Geology & Mineral Industries
Mineral Land Regulation and Reclamation
229 Broadalbin Street SW
Albany, OR 97321-2246
(541) 967-2039
FAX: (541) 967-2075
www.oregongeology.com

Memo

RECEIVED
OCT 17 2007
CLATSOP COUNTY
PLANNING DEPT

TO: Larson Construction Co.
85029 Hwy 101
Seaside OR 97138-6339

ID NO: 04-0022
Browning Site

FROM: Cathy Cross
Office Specialist

DATE: October 12, 2007

SUBJECT: Closing File

There has been no response to the annual renewal request. The file should be closed.

To reopen the file, the Annual Report and Renewal Notice form and the $50 application processing charge must be returned to this office. Please note that you are not required by Oregon law to maintain a Grant of Total Exemption. They are voluntary registrations.

File closed by: Gary W. Lynch 10-15-07

Gary W. Lynch
Assistant Director

Date

Reclamationist: Bob Brinkmann

Acres reclaimed: _____

Acres Exempt: _____

Post Mining Use: _____

c: Clatsop County Planning Dept.
Perry Browning Astoria

S:\CLATSOP\04-0022 10-12-07CI CLOSE.DTB

Oregon
Theodore R. Kulongoski, Governor

Department of Geology & Mineral Industries
Mineral Land Regulation and Reclamation
229 Broadalbin Street SW
Albany, OR 97321-2246
(541) 967-2039
FAX: (541) 967-2075
www.oregongeology.com

Note to Reviewing Agencies

November 9, 2007

Applicant: Big River Excavating
DOGAMI ID: 04-0056 - Amendment Application for Volmer Creek in Clatsop County
Location: Section 14 Township 5N Range 10W Tax Lot(s): 101
Prepared By: Bob Brinkmann - Hydrogeologist and Vaughn Balzer - Natural Resource Specialist

An application to amend the DOGAMI operating permit has been submitted by Big River Excavating of Astoria. The amendment proposes to expand the permit boundary at the Volmer Creek Quarry (referred to by the current permittee as the Ordway Quarry) from seven acres to a total of approximately 42 acres. Please review the attached amendment documents and provide comments to DOGAMI within the 21-day review period.

Contact Vaughn Balzer at 541-967-2082 or vaughn.g.balzer@mlrr.oregongeology.com with any questions.

Enclosed with this Note are the Operating Permit Amendment Application, Operating and Reclamation Plan, Tax Lot Map (with the DOGAMI Permit Boundary), recent Aerial Image, Mine/Boring Locations map with site topography, rapidly moving landslide map and Exhibit 3 showing the mine plan.

SITE LOCATION

This upland quarry is located three miles east of the junction of Highway 101 and Highway 26. Access is east on Highway 26 to the access road at milepost 2.67, on the west side of Highway 26.

SITE HISTORY

An operating permit was issued to George Ordway for the Vollmer Creek quarry in 1982 for tax lot 101 (approximately 6.22 acres). In 2001, the permit was transferred to Osburn Brothers Rock from the estate of George Ordway. The permit was transferred to Big River Excavating (BRE) in 2006.

This amendment will add approximately 19.2 acres of property in tax lot 800 owned by Weyerhaeuser Company and 16.5 acres in tax lots 1203 and 900 owned by Big River Excavating to the permit boundary for this Operating Permit. The proposed permit boundary is delineated on the attached "Tax Lot Map".

CURRENT SITE CONDITIONS and PERMIT AREA

The following description of the current site conditions is based on a May 16, 2007 site inspection and is followed by general information about the site.

I was accompanied on this inspection be Troy Lindgren of Big River Excavating. This inspection was scheduled to review general site conditions and reclamation work associated with Big River Excavating Exploration Permit DOGAMI ID # 04-0084. Weather at the time of this inspection was sunny and dry.

During the time of this inspection material was being excavated from the main quarry floor with the use of a large excavator. The main highwall at this site is located along the western and northern property margin of tax lot 101, and ranges in height from 20 to over 200 feet with an overall slope of 0.25 H: 1 V. This highwall was excavated into the setback and left in its current over steepened condition by the previous operator. An agreement documented in a September 11, 2003 letter, DOGAMI agreed to allow the operator to reduce the setbacks to 50 feet. The amended operating and reclamation plan submitted with this amendment requests a 0-foot setback between the excavation and property lines. Leaving a 0-foot excavation setback is not acceptable. A 50-foot setback from the edge of the excavation and the approved DOGAMI permit boundary must be maintained. Written authorization must be received from DOGAMI to reduce this setback. The area proposed to be amended into this permit will allow the highwall to be excavated across the property line into tax lot 800. DOGAMI has conditioned this permit so that once the final approval is granted the permittee must reduce the slope of the highwall and submit a revised mine plan map.

During the inspection the portion of tax lot 800 proposed to be incorporated into the permit was inspected. The western portion of tax lot 800 was recently logged while the northern portion of the amendment area remains forested, primarily with Douglas Fir and other forest vegetation. Several exploration holes were drilled in the proposed amendment area

c: Big River Excavating
1050 Olney Ave.
Astoria OR 97103

under DOGAMI exploration permit ID # 04-0084. These drill holes encountered 0-15 feet of overburden consisting of clay and rock fragments above the rock resource. These holes were reclaimed and plugged and the drill pads had been recently seeded.

The current permit boundary, tax lot 101 (6.22 acres), is located on the eastern side of a small butte from elevations 268 feet to 473 feet above M.S.L. Mining related activity has affected areas beyond the current permit boundary on tax lot 1203. Mining related activity outside of the current permit boundary includes minor excavation of rock aud the sidecasting of overburden material along the access road as well as the operation of a scale facility. A significant portion of the sidecast overburden along the access road has been reclaimed and is currently vegetated with young alder trees. Imported fill material placed to the south of the scale facility is not considered to be mining related activity and is not regulated by DOGAMI.

This quarry site has been developed as a hilltop removal operation having begun as a side-hill cut. The Necanicum River is located ¼ mile to the northeast, and Vollmer Creek is located ¼ mile to the north. An unnamed drainage is located at the eastern base of the butte and in the past received treated storm water run off from the site (see below). Another unnamed drainage is located on the northwest side of the butte in the amendment area (this drainage can be seen in the Mine/Boring Locations map with site topography).

Undisturbed soils on top of the butte vary in thickness from 12-60 inches in depth. Soils on the butte are oxidized and contain lots of rock fragments. Historically, the butte has been logged for timber and replanted. Blackberries and alders continue to invade the less active parts of the quarry floor and access road.

Currently, there are no seeps present along the face of the highwall. In an August 2, 2007 e-mail to DOGAMI, Big River Excavating requested to increase the mine depth listed on the reclamation plan from 200 feet to 320 feet from the top of the butte. This increased mine depth would allow mining of the butte down to near the elevation of the valley floor. In the reclamation plan the permittee estimated the ground water depth to be approximately equivalent to the elevation of the creek near Route 26. Based on the Water Resources Department on-line well log database the distance to the closest well outside of the permit boundary is in section 10 approximately ¾ miles northwest. This well is completed to 20 feet below ground surface with a static water level of 6 feet.

It is not anticipated that the operation of this mine site will affect the aquifer supplying nearby wells, however, no dewatering of the excavation is intended or allowed under this application.

WETLAND FEATURES

A wetland delineation was not submitted with the application. No wetland features where identified on the butte. Wetlands may exist near the drainages at the base of the butte and on the west side of the butte; however this permit has been conditioned with mining operations setback from these drainages. Unless the setbacks are violated the drainages and their surrounding vegetation will not be directly impacted by mining activity. Any expansion of mining related activity onto the flatter ground at the base of the butte will require a permit amendment and a wetland delineation will be required at that point prior to allowing any mining related activity on the relatively flat ground.

STORM WATER

The quarry floor is sloped in such a way that much of the storm water interacting with the quarry floor and processing area will either infiltrate the quarry floor or evaporate. As the quarry is developed, the floor of the quarry should be sloped to maintain internal drainage. Storm water from the access road is diverted along a roadside ditch through a series of check dams, interconnected settling ponds and through a culvert over an unnamed creek at the eastern base of the butte prior to discharging into the adjacent field within tax lot 1203 (owned by the permittee), where it infiltrates the ground. All vegetation located between the access road and the creek at the base of the butte must be maintained. The site is covered under a DEQ NPDES 1200A storm water discharge permit and the site is operating in compliance with their storm water control plan. The storm water control system was inspected during two significant winter storms. No storm water discharges from the quarry operation were documented entering the adjacent creek during these inspections. Maintaining the DEQ 1200A discharge permit will be required.

As the quarry expands into the amendment area the storm water control plan will need to be modified to address the potential of storm water discharges to an unnamed drainage located on the northwestern side of the butte (see the drainage along the western margin of the "Proposed Mine Expansion Area" noted on the attached Mine/Boring Location map). An undisturbed setback of 25 feet must be maintained along this drainage. DOGAMI believes that the vegetation in the 25 foot setback will be sufficient to filter minor amounts of runoff and protect water quality as long as internal drainage of the quarry floor is maintained during the northward expansion of the quarry.

MINE AND RECLAMATION PLAN.

Under the proposed plan the current quarry highwall will be expanded to the north. DOGAMI has placed conditions on the permit requiring the highwall slope to be flattened to 1.5 H:1 V within one year of the final approval of this amendment. A property line setback of 50 feet from the eastern boundary of tax lot 800 will be enforced until a revised mine plan encompassing the whole 42 acre permit boundary is submitted and approved by DOGAMI.

A portable crusher will be used on the main quarry floor to crush pit-run into several marketable products. DEQ requires an air quality permit for the operation of portable crushers. Processed rock remains stockpiled on the upper quarry floor. Topsoil/overburden, fines and rejected material remain stockpiled on the quarry floor. All barren, unvegetated stockpiles of topsoil, overburden, fines, and rejected material must be seeded to prevent erosion prior to October 1 of each year.

The post mining land use will be forestry. All cut slopes must be excavated at slopes of 1.5H to 1V or flatter. All fill slopes must be maintained at 2H to 1V or flatter. All remaining stockpiles must be removed or used in the final reclamation process. All oversized rock will be sold, buried, or removed from the site during final reclamation. The permittee proposed a minimum soil replacement depth on the disturbed area of 12 inches; however, DOGAMI will require a minimum of three feet of suitable growth medium for all areas that will be replanted with trees. Tree planting densities on tax lot 800 must meet Weyerhaeuser Company planting requirements. Please submit Weyerhaeuser Company planting requirements prior to January 1, 2008.

Quarry floor and stockpile yard areas will be ripped to a depth of 18 inches to decompact the ground. During final reclamation, the permittee proposes to plant conifer seedling trees at a rate of 400 per acre and seed with 100 pounds per acre of big game seed mix. Please submit a list of plant species to be used in the big game seed mix prior to January 1, 2008.

LAND USE AND RECLAMATION SECURITY

Clatsop County will require a Conditional Use Permit (CUP) to expand the quarry beyond tax lot 101. Currently, this site has a $30,000 reclamation security. Based on the fact that there is already additional mining related disturbance in tax lot 1203, the fact that the site has had slope stability issues in the past and currently has an oversteepened highwall DOGAMI estimates an adequate reclamation security to be $40,000. Prior to the final approval of this amended permit Big River Excavating will need to increase the reclamation security to $40,000.

The following conditions are proposed for this amended operating permit. These conditions may be modified based on responses from other natural resource agencies.

The Permittee must:

1. clearly mark in the field the permit boundary and all property line and drainage setbacks prior to working within 100 feet of those setbacks.

2. stabilize all barren overburden stockpiles and the noise berms by seeding with ryegrass or other noninvasive hybrid cereal grain by October 1 of each year until vegetation is established.

3. retain adequate cover soil material to cover all areas to be reclaimed with twelve inches of topsoil material. The quarry floor and all other areas where trees will be planted will require a minimum soil replacement depth of three feet.

4. maintain a vegetated undisturbed 25-foot setback between all mining activity and the unnamed drainage on the northwestern side of the butte.

5. maintain the existing vegetation and conduct no additional mining activity along the unnamed creek at the eastern base of the butte.

6. maintain a 50 foot setback from the edge of the excavation and the permit boundary and permanently mark setbacks in the field.

7. maintain compliance with the 1200-A permit.

8. not conduct pit dewatering without first amending the DOGAMI Operating Permit.

9. not mine below the elevation of the valley floor at the base of quarry without first amending the DOGAMI Operating Permit.

10. submit for DOGAMI approval a revised mine plan map showing ALL mining related activity within the revised 42 acre permit boundary prior to conducting any new mining related activity on or within 50 feet of tax lots 900 or 1203. The new mine plan must be consistent all other permits and with the conditions as listed on this permit.

11. reduce the existing highwall slope to 1.5 H:1V within one year of the final approval of this amendment or submit a geotechnical report completed by a certified professional containing a factor of safety analysis stating that the highwall slope will remain stable in an over steepened configuration.

12. maintain excavated slopes of 1.5 H:1V and fill slopes of 2H:1V or flatter.

13. minimize vegetation removal and conduct no sidecasting in order to ensure that the surrounding slopes will remain stable during mining operations.

14. maintain internal drainage of the main quarry floor and update the storm water control plan as the quarry expands.

15. submit a post mining drainage plan for DOGAMI approval prior to 1 year before mine closure.

16. agree that if mining operations disturb any area outside of the permit area or area designated for active mining in the reclamation plan, including but not limited to disturbances caused by landslide, erosion or fly rock, the operator must restore the disturbed area to a condition that is comparable to what it was prior to the disturbance. Further, if areas outside of the permit boundary or outside of the area proposed for active mining in the reclamation plan are disturbed, DOGAMI may increase the amount of the required financial security to cover the cost of such restoration.

)GAMI – MINED LAND RECLAMATION
229 BROADALBIN STREET SW
ALBANY, OR 97321-2246

OPERATING PERMIT AMENDMENT APPLICATION

Under ORS 517.750-990

APPLICANT

List the name, address, etc. for the person or company the permit is to be issued to. Reclamation security must also be provided in this same name. *If the applicant is a business – the name must be registered with the Secretary of State's office to do business in Oregon.*

Name	Big River Excavating 95
Mailing Address	1050 Olney Avenue
Mailing Address	
City / State / Zip	Astoria, OR 97103
Phone	(503) 338-3878
Fax	(503) 325-3119
E-mail	bretroy@qwest.net

LANDOWNER(S)

Is the applicant the landowner of this property? ☒Yes ☐No
If no, list below. *(Attach a separate piece of paper if necessary.)* 94 92

Name	Weyerhaeuser
Mailing Address	Chris Antilla
Mailing Address	PO Box 998
City / State / Zip	Seaside, OR 97138
Phone	(503) 738-6351 ext. 114
Fax	(503) 738-9253
E-mail	chris.antilla@weyerhaeuser.com

CONTACT PERSON

List the contact person if different from the applicant.

Name	Troy Lindgren
Phone	(503) 338-3878
Other Phone	(503) 741-0763
E-mail	bretroy@qwest.net

CURRENT PERMIT INFORMATION

(Do not include expansion area information in this section.)

How many acres…

are covered in the current Operating Permit?	7
are currently affected by mining?	≈7
will be affected by mining in the next 12 months?	0

AMENDMENT DESCRIPTION

Describe reason for the proposed Operating Permit amendment (such as permit boundary modification, approval to pump groundwater to allow extraction, etc.)

Permit Boundary Modification, Expand site to develope quarry in a manner to better the operational, safety, visual + storm water aspects of the quarry and drainage structures.

Date mining to begin May/June, When goal 5 application is approved.

EXPANSION AREA INFORMATION

How many acres…

are in the expansion area?	≈25
are currently affected by mining?	0
will be affected by mining in the next 12 months?	≈2

SITE LOCATION

	Current Permit	Amendment Area
County	Clatsop	Clatsop
Section(s)	14	14
Township(s)	5N	5N
Range(s)	10W	10W
Tax Lot(s)	101	100, 800, 900, 1203

Is this site located within ¼ of a mile of a state or federal wild or scenic river corridor? ☐Yes ☒No

LAND-USE

If land-use approval has not been obtained, it may take up to 165 days after a complete land-use application is filed with the appropriate land-use agency before we can issue our permit.

Has land-use authorization been obtained? ☐Yes ☒No
If yes, provide documentation (copy of CUP, etc.).
If no, explain:

Currently submitting CUP/Goal 5 application to Clatsop County.

DOGAMI ID No. Ext. 04-0056

CONTINUED ON REVERSE

MAR 27 2007

MUCH OF THE INFORMATION REQUESTED CAN BE EXPLAINED ON THE MINE PLAN MAP. See enclosure *Map or Aerial Photo Requirements*.

1. PRE-MINE CONDITIONS

a) Current land use and zoning F-80

b) Average depth of topsoil 3 feet

c) Type and density of vegetation brush + trees, medium density

d) Are there any springs, seeps, intermittent or perennial streams on or near the site? ☒ yes ☐ no
If yes, list here and *locate on mine plan map.*
Intermittent

e) Has a wetland delineation been completed? ☐ yes ☒ no
If yes, attach report.

f) Has a landslide investigation been completed on this property? ☐ yes ☒ no
If yes, attach report.

2. POST-MINING LAND USE

a) What is the planned post-mining beneficial use of the permit area?

☐ Agriculture

☐ Range/Open Space

☒ Forestry Timber Production

☐ Housing/Construction

☐ Wildlife/Wetland

☐ Recreation

☐ Other

The post-mining use must be compatible with the local comprehensive plan or have specific land-use approval. For significant aggregate sites, which are zoned for mining, local government must determine the post-mining land use.

3. RECLAMATION TIMING

a) How many days after mining is completed will reclamation begin? 6 mos.

OR

b) If reclamation will be concurrent with mining, explain the procedure for concurrent reclamation.
Benching + sloping while mining

4. OPERATING PLAN

a) Mining method(s) to be employed (mark all that apply):
☐ single bench ☒ multiple bench ☐ pond excavation
☐ placer mine ☒ side hill cut ☒ hill top removal
☐ other:

b) Equipment to be used for mining:
Excavator, loader, dozer, rock drill

c) Will there be on-site processing? ☒ yes ☐ no
If yes, check type of processing:
☐ wash water contained in a closed system
source of water:
☐ wash water discharged off site
☒ dry processing
☐ other:

d) Will blasting be employed? ☒ yes ☐ no

e) Distance to closest structure not owned by permittee.
1100 ft.

f) Disposition of removed vegetation.
Harvest merch timber
Burn slash

g) Soil types which will be disturbed by mining, processing, or reclamation.
Top soil, Clay / Rock (weathered) mixture

h) Average soil salvage depth 1-2'

i) Overburden removal depth 10-15'

MAR 27 2007

04-0056

j) Will soil, overburden, rock waste or crusher reject dumps or stockpiles be created during mining? .....☒ yes ☐ no
If yes, list the estimated volume of each at the end of this form and *locate on a mine plan map.*

Additional information may be required for large dumps or those located on steep terrain.

k) Will this plan require excavating across any property lines? .....☒ yes ☐ no

l) How and where will soil or subsoils be stored for reclamation? Locate storage areas on mine plan map.
In stockpiles in permit area. Piles will be seeded and/or mulched to prevent erosion

m) What measures will be taken to reduce compaction and prevent water and wind erosion of the topsoil stockpiles and when will they be implemented?
Seeded and/or mulched: Prior to October

n) What will be the minimum property line setback:
for the excavation 0
for processing or storage 0

5. WATER RESOURCE PROTECTION

a) Will mining occur below groundwater level? .....☐ yes ☒ no

b) Will mine site dewatering be necessary? .....☐ yes ☒ no
If yes, explain procedure and estimated depth to which water will be drawn down inside of the mine and where water will be discharged.

WRD — *A permit may be required from the Water Resources Department for dewatering activity.*

c) Will process water be contained on site? N/A ☐ yes ☐ no

d) Will storm water be contained on site? .....☐ yes ☒ no

e) Will a pond(s) be used to contain water? .....☐ yes ☒ no
Explain containment procedures.

If the answer to c) or d) is no, please explain discharge procedures.
Storm water will be routed through ditches + settling ponds + then dispersed to natural ground + vegetation.

DEQ — *A permit from the Department of Environmental Quality may be required for off-site discharges and is required for any discharge into public waters, wetlands, streams or lakes. Contact DOGAMI for these permits.*

f) Will any drainages/streams be relocated? .....☐ yes ☒ no
If yes, complete Section 11.

g) What will be the minimum undisturbed setback(s) of the operation from all stream(s) or drainage(s)? 25 feet

List the name of stream(s) or drainage(s) and setback from each at the end of this form and locate on a mine plan map.

h) How will the buffer(s) be identified and protected during mining and reclamation?
Marked w/ ribbons + permanent tags on trees.

i) Describe methods employed to control erosion in the permit area. Be specific, i.e., seeding and mulching, sediment basins or ponds, contour ditching, waterbars, etc.
Ditches + settling ponds, culverts
Seeding and/or mulching
Water bars + out sloping

j) Will settling ponds/dams be constructed? .....☒ yes ☐ no
State the number and size of the impoundment(s) and how they will be built. Will the pond be excavated or will berms be constructed? *Locate on a mine plan map.*

ID No. Exst. 04-0056

Approx. 6, 4'w x 6'l x 4'd, excavated

k) If dams will be constructed, how high will they be and what is the maximum amount of water (in acre feet) to be impounded behind each dam?

N/A

WRD *If a dam is higher than 10 feet, and stores more than 9.2 acre feet of water, approval from the Water Resources Dept. is required prior to construction.*

l) If berms or a dam will be constructed, describe construction details and attach a sketch showing construction methods.

N/A

m) How deep will impoundment(s) be? 4'

n) If the impoundment(s) are to be removed upon completion of mining, how will they be drained and/or filled?

N/A

o) Will settling ponds, wetlands, or a water impoundment be left upon final reclamation?..... ☒ yes ☐ no

6. GROUNDWATER INFORMATION

a) Proposed mine depth ≈200 ft.

b) Groundwater depth ≈250+ ft.
(Under static (pre-mine) conditions)

c) What is groundwater depth estimate based on?

level of creek near Hwy 26 at base of hill

d) Flow direction of groundwater, if known. unknown

e) Distance to closest well outside the permit boundary. unknown

Wells within permit area must be shown on mine plan map. Attach a copy of the well log(s).

7. VISUAL AND NOISE SCREENING

Screening can be very effectively employed to isolate sites from public notice and to minimize noise from operations.

a) Does a natural landform or vegetative screen currently exist along the permit boundary? A portion ☒ yes ☐ no
If yes, what screen width will be maintained during mining?
Timbered hillside; 40 ft. plus+

b) Will a berm and/or vegetation be established to develop a visual screen for the operation? ☒ yes ☐ no
If yes, describe the height and width of the berms and/or the type and density of vegetation; show location on mine map.

(Crushed rock stockpiles, although not permanent, can also be used to reduce noise from the operation.)
10'-15' high, 15'-30' wide, grass + alder trees; Overburden + rock stockpiles.

8. EQUIPMENT AND STRUCTURES REMOVED

a) Upon final reclamation, will all structures, visual berms, equipment, and refuse be removed? ☐ yes ☒ no
If no, explain what will be left.
Timber buffers + vegetated berms.

9. RECLAMATION TECHNIQUES

a) What will be done with oversized rock not used during mining?
Used as safety barricades along slopes.

b) What will be the average depth of soil replaced on the area to be reclaimed? 1-2 feet

If less than 12" of topsoil is available, a substitute material may be required.

c) Will additional material be utilized as a soil substitute to complete the revegetation? ☐ yes ☑ no
If yes, specify type(s), amount(s), and source(s).

d) Will any waste products, such as tailings, crusher rejects, etc., be generated during mining? ☒ yes ☐ no
If yes, what will be done with them?
Sold as fill material

e) How will processing and stockpile sites be reclaimed? If they are to be revegetated, explain procedures which will be employed to decompact areas prior to topsoiling/seeding.
Areas will be ripped with a dozer or excavator

10. REVEGETATION TECHNIQUES

a) Species to be seeded/planted by type and amount.
Conifer seedlings / 400 per acre
Big game seed mix / 100 lb. per acre

b) Describe method and time of year for planned planting.
Seedlings - hand (manual) winter; Seed - manual; spring or fall.

c) List fertilizers and lime to be used (include amount).
N/A

d) List type and amount of mulch or other erosion control techniques such as erosion netting.
N/A

Vegetative survival comparable to the density of original ground cover will normally be considered acceptable.

11. RECLAMATION PROCEDURES - POST-MINE DRAINAGE CONTROL AND RECONSTRUCTION

a) During reclamation, will stream channel and/or bank stabilization and rehabilitation be necessary? ☐ yes ☐ no
If yes, attach plans. ☒ n/a

DSL *A Division of State Lands' permit is required for relocation of all perennial and some intermittent water courses.*

b) How will surface water runoff and erosion be controlled upon completion of mining? Describe and list structures that will be used.

Areas will be outsloped; roads will have ditches + culverts to disperse water.

12. RECLAMATION PROCEDURES - IMPOUNDMENTS & POND DECOMMISSIONING

a) Will dewatering be required? ..... ☐ yes ☒ no

b) Will it be necessary to backfill a water filled excavation pit or pond? ..... ☐ yes ☒ no

c) How will settling ponds be stabilized and revegetated?
Will be seeded.

d) How will quality of imported backfill be monitored to protect groundwater quality?
N/A

Monitoring may be required to ensure groundwater protection.

13. RECLAMATION PROCEDURES - LAND SHAPING

Long continuous slopes should be avoided or broken up with surface contours, ditches, or complex slope shape.

a) What will be the:

i) -steepest above-water *excavated* slopes left after mining? (1½:1 is generally maximum) 1½:1

ii) -steepest above-water *fill* slopes left after mining? (2:1is generally maximum) 2:1

b) What will be done to ensure the stability of excavated slopes?
Loose matil will be stabilized. Revegetate. Armor toes with oversize material.

c) What will be done to ensure the stability of fill slopes?
Don't fill unless it is neccessary. Revegetate. Don't fill on unstable slopes.

d) Will this site be shaped or backfilled to blend in with surrounding topography? ..... ☐ yes ☒ no

14. POST-MINING WATER IMPOUNDMENT(S)

a) Number of impoundment(s) N/A

b) Use of impoundment(s)
N/A

c) Total surface area in acres N/A

d) Average depth N/A

e) How much is the water level expected to fluctuate annually?
N/A

f) What will be the steepest and flattest in-water slopes left after mining? N/A

Generally 3:1 in-water slopes are the steepest allowable, except off islands. To increase potential for wetland habitat establishment, 5:1 to 20:1 slopes are needed.

g) Will shallow ponds, shorelines, or other areas conducive to wetland plant development be left? ..... ☐ yes ☒ no

h) What will be the impoundment water source?
N/A

WRD *A water right for the water source may be needed from the Water Resources Department.*

i) What will be done for wildlife & fish enhancement, e.g. fish structures, islands, peninsulas, and irregular shorelines?
Vegetate with a big game seed mix.

j) If wetlands are to be constructed, explain the methods and final configuration.
N/A

15. OTHER PERMITS

In order to assist other agencies in the review of this plan and their ability to ascertain compliance with their laws, list all permits by type and number that are held (or applications filed) for this mine site or processing equipment (such as fill/removal permits, water rights, air quality and stormwater or waste water permits).

Agency/Permit Type	Permit Number
DEQ 1200-A Existing Quarry	111965
DOGAMI ② Existing Quarry	04-0056
Clatsop Co. CUP Existing Quarry	1984, Amend 87 & 92

16. LANDOWNER CONSENT

As surface or mineral rights owner, I concur with the proposed subsequent use for any mining operation and with the operating and reclamation plan as submitted. I also agree to allow access to the State Department of Geology and Mineral Industries or their contractor for reclamation of the mine site if it is declared abandoned by the Department of Geology and Mineral Industries. By my signature below, I certify that I have a legal right to sign this document.

Appropriate signatures are needed for EACH land parcel.

I CONCUR (Surface Rights)

Name (Please Print or Type) CHRIS ANTILLA - FOR WEYERHAEUSER

Signature Chris Antilla

Title LAND USE MANAGER

Date 3/22/07

I CONCUR (Mineral Rights):

Name (Please Print or Type) CHRIS ANTILLA

Signature Chris Antilla

Title LAND USE MANAGER

Date 3/22/07

17. APPLICANT'S ACCEPTANCE

Name (Please Print or Type) Mike Sacra

Signature

Title President

Date 3-20-07

18. PREPARED BY (IF OTHER THAN APPLICANT)

Name (Please Print or Type) _____

Signature _____

Title _____

Company _____

Date _____

ID No. 04-0056 existing quarry

Use this page for additional space if necessary.
Number responses to correspond with question.

---

j) 5,000 CY approx. of topsoil / overburden

n) Mining will cross over common property lines between Big River Excavating + Weyerhaeuser, but permit area is well within Big River + Weyerhaeuser property.

5g) Unnamed drainage, NW side of Weyerhaeuser leased area. 25 foot buffer if quarry area gets to that vicinity.

Department of Geology & Mineral Industries
Mineral Land Regulation & Reclamation
229 Broadalbin St. SW
Albany OR 97321-2246
(541) 967-2039

RECEIVED
NOV 14 2007
Community
Development
CLATSOP COUNTY

TO: ODA - Natural Resources
Water Resources
Clatsop County Planning Department
DEQ - NW Region
ODFW - Tillamook
Landowner(s) - Chris Antilla, Weyerhaeuser Seaside

DATE: November 13, 2007

RE: Big River Excavating
DOGAMI MLRR ID No. 04-0056

The Mineral Land Regulation & Reclamation office of the Department of Geology and Mineral Industries has received the attached application for a surface mining permit.

Please comment and return this form by November 13, 2007. If you have no comments, it is not necessary to return the form. It is also not necessary to return the attached documents.

- ❑ We have no objection to the proposed project.
- ❑ We have no objection to the proposed project subject to the modifications listed below.
- ❑ We recommend that the conditions listed below be added to the permit. Include reasons for conditions.
- ❑ Other comments listed below.
- ❑ Please send a copy of the Operating Permit and future Inspection Reports.

Comments

DATE: _____ AGENCY: _____

BY: _____ PHONE: (_____) _____
Please print or type name/Title

SMLR-20 (REV. 9/99)

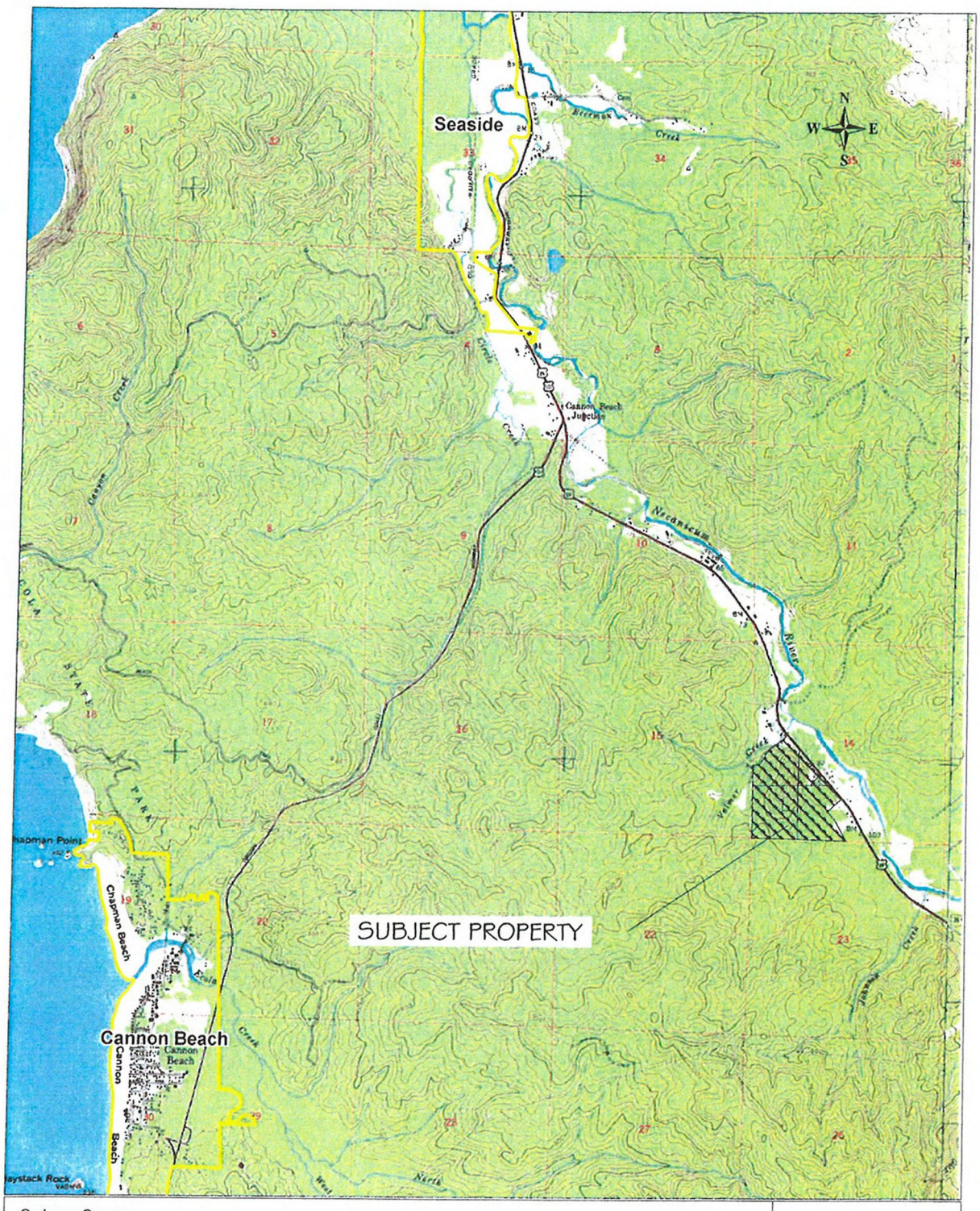
BOB/VAUGHN

PUBLIC HEARING

Clatsop County Board of Commissioners

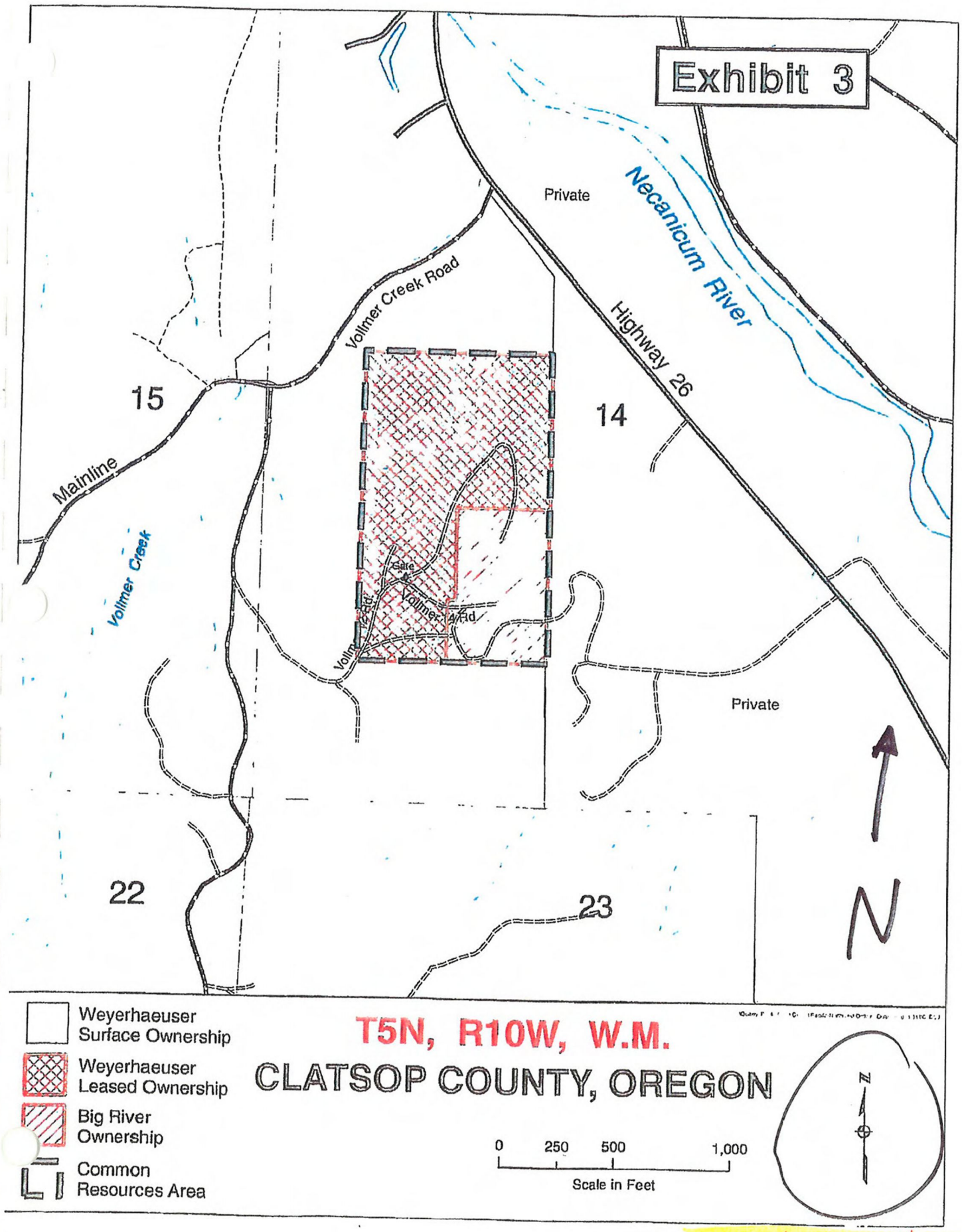
April 9, 2008
10 A.M.

Big River "Ordway" Aggregate Site

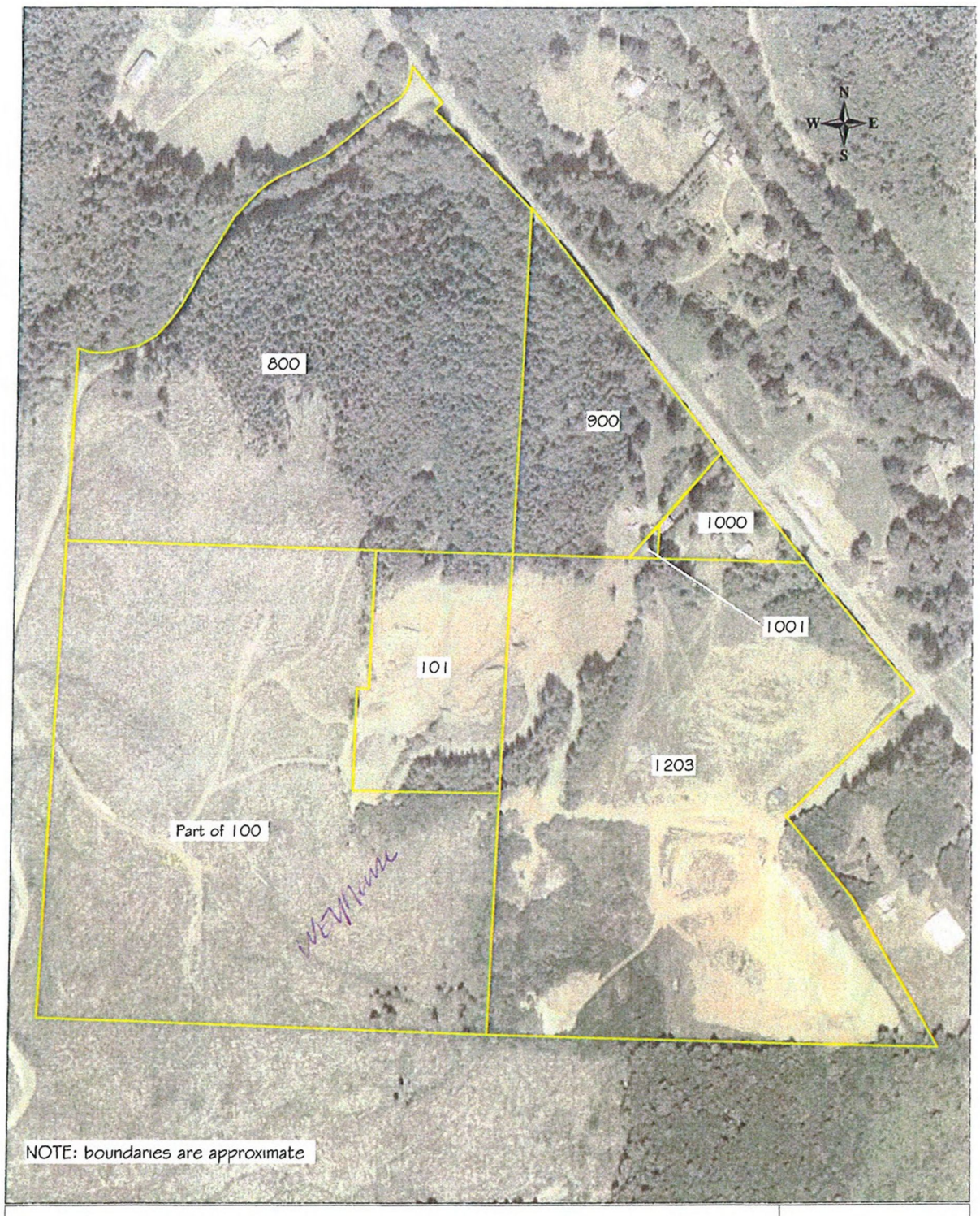


Ordway Quarry Tax lots 100, 101 Map 5-10-00 Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14 Clatsop County Seaside, Oregon	**LOCATION MAP**		FIGURE A
Source: USGS DRG 45123 h8	Environmental Science Associate, Inc. 10/01/07	Scale: 1" = 4000'	

previously submitted

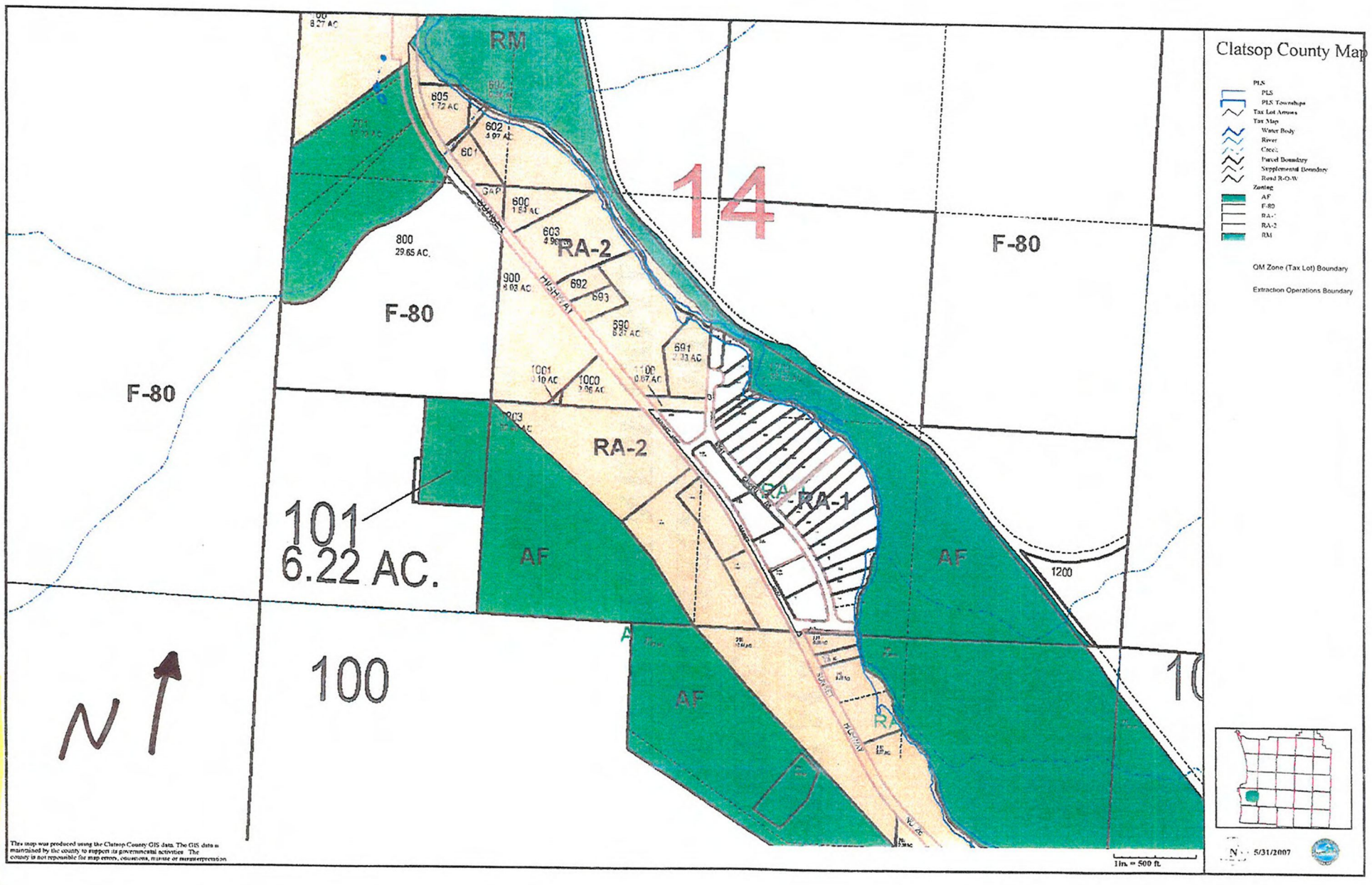


previously submitted



Ordway Quarry Tax lot 100, 101 Map 5-10-00 Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14 Clatsop County Seaside, Oregon	**TAX LOT MAP**	FIGURE B
Source: Spencer Gross 2002 ortho	Environmental Science Associate, Inc. 10/01/07	Scale: 1" = 420'

previously submitted



previously submitted

THE 8 MAIN STEPS IN REVIEWING A PROPOSED PLAN AMENDMENT FOR AN AGGREGATE MINING SITE UNDER THE NEW GOAL 5 RULE

Planning for Aggregate

A guide to planning for aggregate resources in Oregon

Oregon Department of Land Conservation and Development

Oregon Department of Transportation

For more information, please contact:

Gary Fish
Natural Resources Specialist
Oregon Department of Land Conservation and Development
635 Capitol Street NE, Suite 150
Salem, Oregon 97301
(503) 373-0050, Ext. 254
gary.fish@state.or.us

November 2001

Previously submitted

The 8 Main Steps in Reviewing a Proposed Plan Amendment for an Aggregate Mining Site Under the New Goal 5 Rule

1. Determine significance.
Determine whether the aggregate resource site is significant enough to merit inclusion in the plan's inventory of aggregate resources.

2. Define impact area.
If the site is found to be significant, define the "impact area" where mining, if allowed, might conflict with "existing or approved" land uses.

3. Identify conflicts.
Within the impact area, identify conflicts (situations where noise, dust, traffic, etc., from the mining would adversely affect nearby land uses).

4. Identify ways to minimize conflicts.
Identify "reasonable and practicable measures" that could be used to minimize such conflicts.

5. Evaluate ESEE consequences of mining.
If conflicts exist and cannot be minimized, analyze economic, social, environmental and energy (ESEE) consequences of allowing, limiting, or not allowing the mining.

6. Decide whether to allow mining.
Based on the ESEE analysis, decide whether to allow the mining.

7. Evaluate ESEE consequences of new uses.
If mining is allowed, evaluate the ESEE consequences of allowing, limiting, or not allowing new conflicting uses in the impact area.

8. Amend the plan.
If mining is allowed, amend the local plan and land use regulations to reflect that decision and to protect the site for mining.

previously submitted

STEP 1. DETERMINE SIGNIFICANCE

Significance is determined by quality, quantity and location of the aggregate resource.

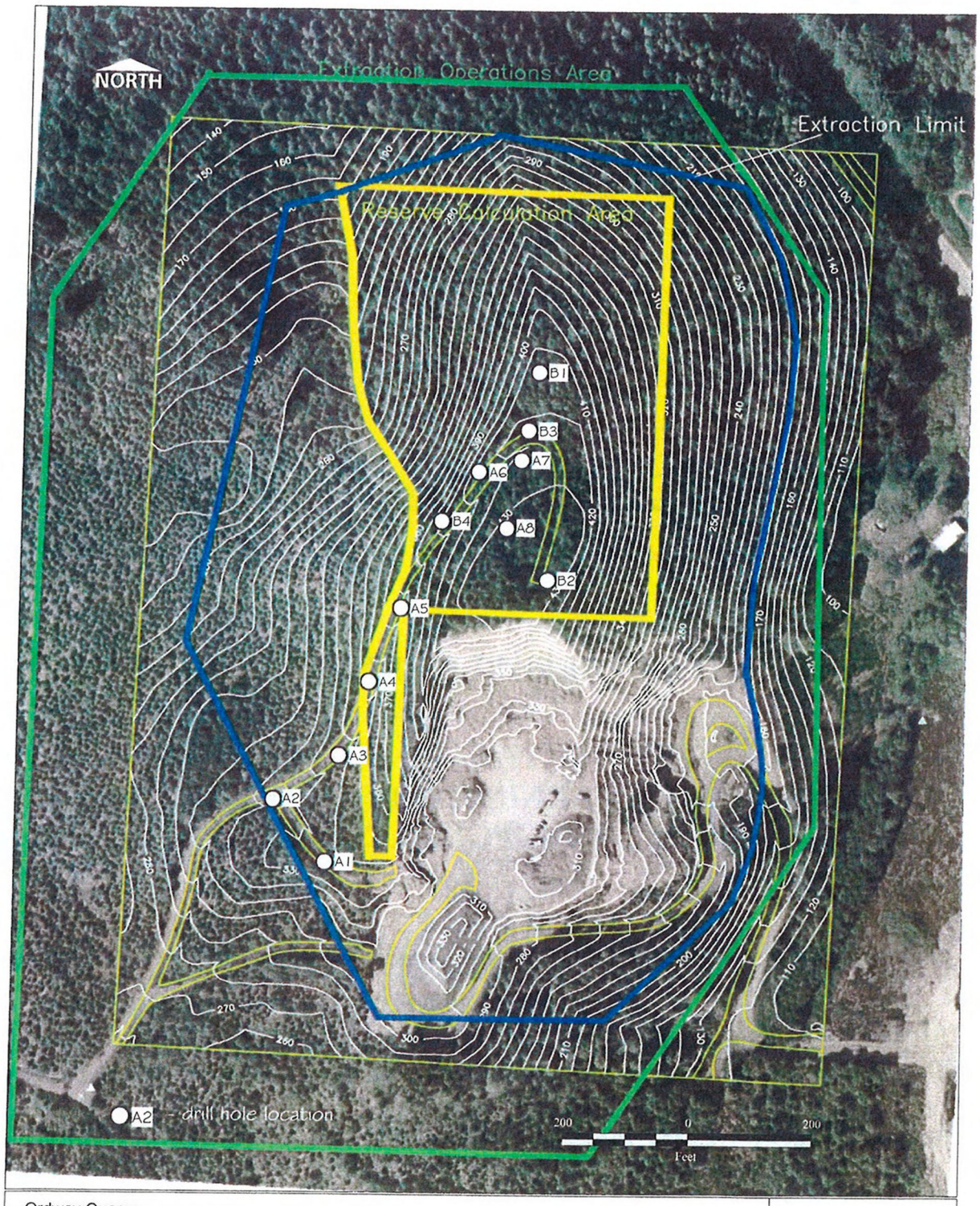
- **Quality:** Big River's resource meets relevant quality testing values for:
  1) the Los Angeles rattler test
  2) the Sodium Sulfate test; and
  3) the Oregon Degradation test.

- **Quantity:** Big River's resource exceeds the necessary abundance.
  - Environmental Science Associates estimate that the Big River site has over 8,000,000 tons of aggregate and mineral. The County requirement is only 250,000 tons
  - Big River will not mine on any Class I or Class II soils.

- **Location:** Big River has provided a map and description that details its location.
    - The location is immediately adjacent to a state highway and close to the growing south country market.

CONCLUSION:

The site is **SIGNIFICANT** and must be protected on the County's Goal 5 inventory.



Ordway Quarry
Tax lot 100, 101 Map 5-10-00
Tax lots 800, 900, 1000, 1001, & 1203, Map 5-10-14
Clatsop County
Seaside, Oregon

BOUNDARY & DRILL HOLE LOCATIONS

FIGURE 4

Source: Modified from 10/01/07 by PGM, Daly-Standlee & Associates, Inc.

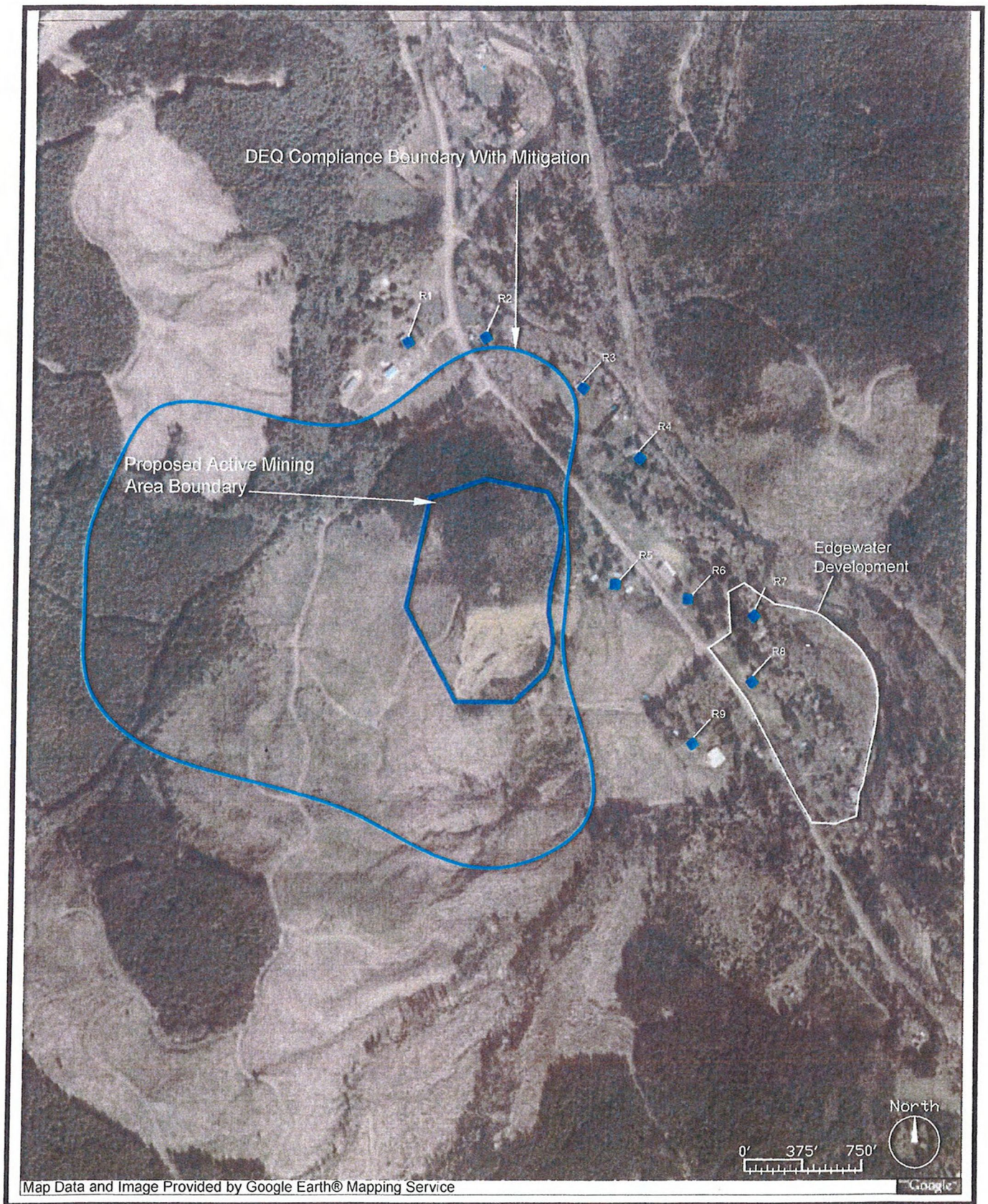
Environmental Science Associate, Inc.
10/15/07

N

previously submitted

STEP 2. ADOPT IMPACT AREA

- **IMPACT AREA GENERALLY DRIVEN BY NOISE ISSUES**
- **NOISE STUDY INDICATES ALL NOISE IMPACTS CAN BE CONTROLLED (MINIMIZED) TO MEET DEQ STANDARDS WITH PROPOSED CONDITIONS**
- **SOUND ENGINEERS DEVELOPED A "DEQ COMPLIANCE BOUNDARY" THAT SERVES AS A TEMPLATE FOR THE IMPACT AREA**
- **OTHER IDENTIFIED CONFLICTS CAN BE MINIMIZED**
- **PLACE COUNTY'S QMO OVERLAY DISTRICT ON IMPACT AREA**



Daly-Standlee & Associates, Inc.

ph: 503-646-4420
fax: 503-646-3385
email: DSA@acoustechgroup.com

Ordway Quarry

DEQ Noise Compliance Boundary with Mitigation

Project Engineer	DATE	PROJECT NO	
PGM	10/09/07	215061	FIGURE I

previously submitted

STEP 3. IDENTIFY CONFLICTS

Within the impact area, the Goal 5 Rule requires the County to identify and address:

1. Noise, dust and other discharges
2. Local roads
3. Airports
4. Other Goal 5 resource sites, and
5. Agricultural practices

FIRST CONFLICT CATEGORY
NOISE, DUST AND OTHER DISCHARGES

Noise

Big River engaged Daly-Standlee & Associates to assess noise impacts from the expansion and has recommended mitigation measures to ensure noise limits can be met and that conflicts can be minimized as required by Goal.

Noise Analysis

Daytime standards:
7 a.m. to 10 p.m. (will operate only until 6 p.m.)

L-50 55 DBA (Level that cannot be exceeded 50 percent of the time or 30 minutes in an hour)

L-10 60 DBA (Level that cannot be exceeded 10 percent of the time or 6 minutes in an hour)

L-01 75 DBA (Level that cannot be exceeded 1 percent of the time or 36 seconds in an hour)

- Worst case scenario - all equipment operating (crusher, screen, rock drill or dozer, 2 front-end loaders and cool wet weather -- noise dissipates faster in the summer)

- Comply at all times with minimal mitigation for rock drill or dozer. Mitigation only required as extraction approaches houses to the north and then only if there is a direct line of sight to rock drill or dozer (highly unlikely) (See Condition # 13)

- Blasting is well below DEQ standards
  - Sequential charges will reduce impacts further (See Condition # 7)

CONCLUSION:
Noise impacts will be **MINIMIZED.**

Dust

- Crusher has a DEQ Air Contaminant Discharge Permit (See Condition # 7)
- Big River will pave the entrance road to the scale station (See Condition # 8)
- Will use regular housekeeping measures such as sweeping to eliminate and minimize dust buildup (See Condition # 8)
- Uses a water truck to moisten non-paved areas (See Condition # 8)
- Truck speed will be strictly limited to 15 mph onsite (See Condition # 8)

No Concrete or Asphalt Batch Plant
(See Condition # 1)

CONCLUSION:
Dust impacts will be **MINIMIZED.**

Other Discharges

• Big River will operate the gravel pit so that stormwater is directed internally to the pit floor or to retention ponds.

• There is a buffer area around the site consisting of densely wooded areas and flat grass areas that will allow for absorption of water

• Environmental Science Associates indicates no potential for effects on groundwater in the area.

Stormwater Permit will be obtained as part of DOGAMI permit process (See Condition #5)

Big River will work with local watershed council on water flow issues (See Condition # 2)

Big River will maintain vegetation along Highway 26 (See Condition # 14) and will maintain a wider buffer strip and make improvements on Tax Lot 1203 (See Condition # 16)

No Concrete or Asphalt Batch Plant
(See Condition # 1)

CONCLUSION:

"Other Discharges" will be **MINIMIZED.**

SECOND CONFLICT CATEGORY
LOCAL ROADS

Big River will continue to use the existing approved ODOT access directly onto Highway 26 at milepost 2.66.

Associated Transportation, Engineering and Planning analyzed transportation issues associated with the application. It concludes no local roads are impacted by the application and that the ongoing use of the existing access will not significantly affect any existing or planned transportation facility.

Traffic Analysis
Goal 12

Q: Do we "significantly affect" transportation facility?

A: No

Analysis: "Significantly affect" =

1. Change functional classification
2. Change standards about functional classification

3. Allow land use that would generate levels of travel inconsistent with functional classification (truck route arterial)

4. Worsen performance of facility projected to perform below minimum standards

- Currently have:
  ODOT approved access
- Our traffic is already calculated into traffic matrix
- Stay within ODOT approved trip numbers
- Cannot have any measurable effect on facility performance (its already measured and included)

  - Big River has developed a circular alternative to the current access in the event that ODOT would be willing to consider access alternatives and increased truck trips after County approval.

CONCLUSION:
Local Road conflicts are **MINIMIZED**

THIRD CONFLICT CATEGORY
PUBLIC AIRPORTS

- The Department of Transportation discourages water impoundments associated with gravel pits located 10,000 feet or closer to an airport

- The closest airport to the Big River site is the Seaside airport, located 5 miles away.

- Big River's basalt quarry will not create a permanent water impoundment

FOURTH CONFLICT CATEGORY
OTHER GOAL 5 RESOURCE SITES

Big River has reviewed the County's background documents and inventory for other acknowledged Goal 5 resources in the area.

- The Necanicum River is an inventoried Goal 5 resource, but it is buffered from the site by Highway 26 and intervening property

- Big River will continue to control stormwater on site

- ODF&W review finds no conflicts with fish resource in the Necanicum River

FIFTH CONFLICT CATEGORY
AGRICULTURAL PRACTICES

There is no significant agricultural activity that occurs in the area and, therefore, no conflicts

STEP 4. MIMIMIZE CONFLICTS

Noise is **MINIMIZED** through reorienting mining activities away from neighboring residents and compliance with Conditions # 6, 13 & 17

Dust is **MINIMIZED** through good housekeeping, paving access road, use of water truck and compliance with air discharge permits. (See Conditions # 7 & 8)

"Other Discharges" are **MINIMIZED** through improvements in mining plan/operations and compliance with stormwater requirements
(See Conditions # 2, 5, 14, 15 & 16)

Local Road issues are **MINIMIZED** by maintaining operation at its existing size, using currently approved ODOT access and pursuing circular access improvements with ODOT (See Conditions 3 & 4)

Conflicts with other identified Goal 5 resources (Necanicum River) are **MINIMIZED** by maintenance of stormwater permit, set backs, work with local watershed council, vegetative plantings and modifications of water flows
(See Conditions # 2, 5, 14, 15 &16)

There are no identified conflicts with public airports or agricultural activities.

Adopted Conditions of Approval

Ordinance # 08-04

1. Concrete and Asphalt Batch Plants are NOT approved under this land use approval. Within 30 Days of the expiration of all appeal periods of the approval, Big River shall record a deed restriction Prohibiting the Establishment of a Concrete/Asphalt Batch Plant on Tax Lots 1203 & 101.

   The Zone Change granted in this land use proceeding changes the zoning on portions of the affected properties from the County's RA-2, AF & F-80 Zones to the County's QM Zone. Ordinarily the QM Zone would allow Batch Plants as a Type I use. This Approval and Condition specifically override the provisions of the County's QM zone section 3.466§(2).

   In the event an applicant in the future would request a Batch Plant for these properties, such request shall be subject to the County's Type IV procedure and the post acknowledgement Processes of OAR 660-23-0180. However, the applicant would not be required to prove significance (i.e. Quantity, Quality, & Location) for the purposes of supporting the Batch Plant request.

2. Consistent with the Comments of the Oregon Department of Fish and Wildlife, the applicant/operator shall complete any required wetlands corrections resulting from activities and infractions of prior operators. Big River also agrees to voluntarily work with the local watershed council on a previously planned project on its bottomland property. For this purpose, Big River will provide limited access to portions of its property not used for extraction activities (Along Highway 26). Big River's Stormwater plan, required in Condition 6 Below, will include changes in Drainage on Tax Lot 1203 (Near the Existing "Spoils" site) to redirect a portion of water flow onto Big River Property (Tax Lot 1203)

3. Operations will continue to use the existing access point at milepost 2.66, consistent with the current permit from the Oregon Department of Transportation. No increase in the number of Average Daily Vehicle Trips is requested or allowed. No queuing (Lining Up) of truck Traffic on Highway 26 shall be permitted.

4. Should Big River wish to expand operations and increase truck trips, they would be required to pursue the circular alternative access as described in the application (i.e.: "In-Only" at the Existing access point – Mile Post 2.66 and "Out – Only at either mile post 2.50 or Vollmer Creek Road – Mile Post 2.26), such alternative access is allowed by this approval provided that ODOT requirements are met and/or an ODOT permit is granted to the operation for the alternative access. Big River shall initiate the process with ODOT within 30 days of the expiration of all appeal periods for the Land Use Approval.

5. Operator shall obtain, and maintain, a valid Oregon Department of Geology and Mineral Industries permit and shall post and maintain the bond required by DOGAMI. As part of the DOGAMI process the operator shall obtain a Stormwater Discharge permit, and shall comply with all provisions of such permit.

6. Operations shall be permitted year round. Hours of Operations shall be 7 am to 6 pm Monday through Friday, 8 am to 5 pm on Saturday with no operations on Sunday or Normal legal Holidays. Controlled Blasting shall be permitted as part of operations. Blasting Hours shall be 8 am to 5 pm Monday through Friday with no blasting on Weekends or Normal Legal Holidays. Blasting shall use sequential charges to minimize impacts. Owners in the general vicinity (1500

Feet, but including the Edgewater Terrace Subdivision) shall be notified 24 hours in advance of any Blast. Operators shall obtain a list from Clatsop County of the residents that must be notified. No More than 10 Blasting/Drilling sessions are permitted in any calendar year

_____ 7. Operator shall obtain and maintain a Department of Environmental Air Containment Discharge Permit for any crusher used on site. Operator shall comply with all applicable DEQ Standards.

_____ 8. Operator shall minimize dust through the following methods: Sweep the pavement intersection with Highway 26 on a regular Basis; Gravel all internal truck paths; Limit the speed of all vehicles on internal truck paths to 15 MPH or Less; Make a water truck available and moisten internal truck paths as necessary. Within 180 days of the expiration of all appeal periods for the land use approval, Big River shall pave the entrance road from Highway 26 (MP 2.66) to the existing Scale House, a distance of Approximately 250 Feet.

_____ 9. No Division or Parcelization of the Land is approved.

_____ 10. Operator shall follow the provisions of the erosion control and parking plans submitted with the application. Operator shall follow all DOGAMI Rules related to Erosion and Stability.

_____ 11. Operator shall obtain and Maintain Liability Insurance in an amount not less than $500,000 and shall annually provide proof of insurance to the County.

_____ 12. Access to the Quarry shall be gated when not in use.

_____ 13. Operator shall implement noise Mitigation measures as described in the Daly Standlee Noise Report when a Dozer or Rock Drill is in a Direct Line of Sight and within 1400 feet of an existing residence (Excluding Residences on the Site Itself). Specifically, a solid barrier (either a Berm or movable barrier) shall be used for a Rock Drill; a Berm Barrier, Residential Muffler or intermittent operation shall be used for a dozer. In addition, Operator shall, on an ongoing and declining basis, maintain a lip of rock to serve as a natural barrier to the East/Northeast to screen operations and minimize noise impacts.

_____ 14. Operator shall maintain existing vegetation for a distance of 50 feet along Highway 26 to promote screening. 50 Foot setbacks shall be maintained from any riparian area. Excavation shall be maintained from any riparian area. All quarry activities shall be setback 200 feet from any existing residence and Public Road right-of-way, including Excavation and Stockpiles. Sediment ponds shall be setback 25 feet from the perimeter of the site or any public road right-of-way.

_____ 15. A 200 Foot Wide Zoning Buffer strip along Highway 26 (See Attached Map A) shall be retained in the existing zoning (F-80 and RA-2) and within this Buffer strip, only the existing access and potential alternative access points shall be changed to the QM Zone. Access Roads are allowed within the 200-foot Buffer Strip.

_____ 16. A 200 Foot wide Zoning Buffer Strip along portions of the Southerly Boundary of Tax Lot 1203 (In the "Spoils" area) shall be retained in the AF Zone (See attached Map A). Access Roads are allowed within the 200 foot buffer strip. Within this buffer strip on tax lot 1203, Big River shall construct a 10-15 foot high Berm and slope the Stored material so that Run off is directed predominantly toward the Big River Property. Big River will also Plant Conifer vegetation in the 200 foot Buffer area on Tax Lot 1203 to mitigate run off onto adjacent parcels. Big River will also plant native vegetation on the South Hillside of the Existing Quarry.

_____ 17. Big River will make a good faith effort within a three (3) year time frame from the expiration of all appeal periods of the approval to reorient its extraction operations to the backside (westerly side) of the Hill. Big River will move the Crusher to the westerly side of the hill as soon as possible.

STEP 5. EVALUATE ESEE CONSEQUENCES OF MINING

Only if conflicts exist and cannot be **MINIMIZED**, the Goal 5 Rule requires the local government to analyze economic, social, and environmental and energy (ESEE) consequences of allowing, limiting or not allowing the mining to determine whether the mining should be approved notwithstanding the conflicts.

- All conflicts at the Big River site are **MINIMIZED** and, therefore, this step does not apply. No initial ESEE is required.

STEP 6. DECIDE WHETHER TO ALLOW MINING

Big River has demonstrated:

- The site is **SIGNIFICANT**
- Conflicts can be **MINIMIZED**

Therefore, the PAPA application should be approved.

BEFORE THE PLANNING COMMISSION
FOR THE COUNTY OF CLATSOP

In the Matter of

AN ORDINANCE AMENDING THE CLATSOP COUNTY COMPREHENSIVE PLAN / ZONING MAP AND TEXT ADOPTING CERTAIN FINDINGS AND CONDITIONS AND RESCINDING INCONSISTENT PROVISIONS

ORDINANCE # 08-04

RESOLUTION AND ORDER

080203

Recording Date: March 11th, 2008

RECITALS

THE ABOVE ENTITLED MATTER came before the Planning Commission at its regularly scheduled meeting on January 8th, 2008 for public hearing and consideration. The Commission in order to provide fair and reasonable time to review the application and submit additional evidence and testimony ordered the record to remain open until January 25th, 2008; and, allowed the applicants one (1) week from that date to submit additional evidence and rebuttal.

In addition to the afore mentioned order the Commission continued the public hearing to its next regularly scheduled meeting on February 12th, 2008. In accordance with the Commission's directive, Staff compiled and presented the testimony and supplemental evidence to the Commission at its February 12th, 2008 public hearing.

At the February 12th, 2008 hearing the Commission, in order to reach a beneficial outcome for all parties involved, continued the hearing to the next regularly scheduled meeting of March 11th, 2008. In addition the Commission offered all interested parties to enter into a collaborative meeting hosted by Staff on February 28th, 2008. The outcome of the collaborative meeting was an agreement between all parties, the conditions of which have been attached as conditions to this land use decision (*See Conditions*).

The Commission after reviewing the findings of fact in Exhibit "A" *(Executive Summary)* recognizes the need to revise and amend the Clatsop County Comprehensive Pan and Zoning Map and Text. In the interest of the health, safety and welfare of the citizens of Clatsop County and pursuant to State Law, the Commission has determined the proposed changes are consistent with Clatsop County's Comprehensive Plan and Statewide Planning Goals.

THE PLANNING COMMISSION considering all evidence and public testimony provided by the Planning Department Staff, the Applicant, Opposing Parties, and Supporting Parties at the public hearing and on the record, hereby RECOMMEND THE APPROVAL OF THE PROPOSED REQUEST FOR A COMPREHENSIVE PLAN / ZONING MAP AND TEXT AMENDMENT AS DESCRIBED IN EXHIBIT "A" *Executive Summary*, attached hereto and by this reference made a part hereof.

WHEREFORE , the Planning Commission finds and Resolves:

To Recommend Adoption of Exhibit "A" and append the findings & proposed conditions to Clatsop County's Comprehensive Plan "Goal 5 Element and Background Report" to the Board of Commissioners.

To Recommend the Comprehensive Plan Zoning Map and Text Amendment representing a change from Agriculture Forestry & Residential Agriculture-2 to Quarry Mining with a Quarry Mining Overlay be adopted as depicted in *Exhibit* "1" – *Map* "A" & "B"; and, recommend the impact area be designated as depicted by the Red on *Exhibit* "1" – *Maps* "C".

To Recommend the Approval of the findings produced in regard to the Detailed Geologic Hazard Report submitted by the Applicant and addressed in the Record as Exhibits "4" & "12" contained in the Applicant's submitted application.

To Recommend the Approval of the Type I development permit to operate Quarry Mining Operations within the Quarry Mining Zone.

SO ORDERED this 11th day of March 2008

THE PLANNING COMMISSION FOR CLATSOP COUNTY

Bruce Francis, Chairman Clatsop County Planning Commission

Enclosures:

1) Exhibit "1" Conditions & Maps
    a. Exhibit "A" Executive Summary & Findings
2) Exhibit "2" ESEE Analysis

Coinciding application with evidentiary Findings and Public Comments will be retained in the Record

STEP 7. EVALUATE ESEE CONSEQUENCES OF NEW USES

If mining is allowed, the consequences of allowing, limiting or not allowing new conflicting uses in the impact area must be analyzed using the ESEE process.

Findings and staff review provide the basis for ESEE analysis.

Only issue is the relationship between the quarry and future noise sensitive uses in small areas of impact area that are not owned by Big River or Weyerhaeuser.

ESEE analysis recommended by Staff was approved by the Planning Commission.
(See attached)

ESEE ANALYSIS:

Conflicting Uses:

Only one use (residential use) has been identified which could give rise to conflicts if allowed to locate within the impact area at the Big River Ordway site. Because a conflict is possible, the Goal 5 Economic, Social, Environmental and Energy consequences analysis (ESEE) is required for approval of the application (Step 7 of DLCD guidance paper). The PAPA rule provides that where a conflicting use has been identified, the Goal 5 resource site may impact, and be impacted by, that use. Both the impacts on the resource site and on the conflicting use must be considered in analyzing ESEE consequences.

The Big River site is located on the southeast side of Highway 26 between mileposts 2.5 and 3.0. The property is surrounded by property zoned AF, F-80 and RA-2. No current agricultural activities occur near the site. A residential subdivision is located across Highway 26 to the northeast.

1. Economic Consequences Analysis.

a. Impacts on the resource of allowing conflicting uses.

The Big River site will provide at least 8 million tons of high quality aggregate. The material taken from the site will be utilized for critical infrastructure uses including road construction, structural foundation backfill, culverts, landscaping, and others. The site's proximity to Highway 26, Seaside, and Cannon Beach make it ideal for offering competitive prices on rock products and it will have a significant economic impact.

If a residential use was allowed in close enough proximity to Big River's Goal 5 mineral and aggregate resource to prevent or reduce use of the pit, it would have a significant adverse economic effect on the resource. For example, if a new dwelling was allowed to locate within the impact area, Big River might not be able to meet DEQ's noise regulations without extensive changes to its operations. Those regulations could require new sound walls or berms, changes in hours of operation, significant costs to alter operations, shrinking of the size of the mineral resource that could be extracted and, in a worst case scenario, the shut down of the mineral and aggregate operation because of an inability to comply with DEQ's noise regulations. And, if a residential use was allowed within the impact area, it would be extremely difficult, if not impossible, to design an extraction plan that would yield the fullest utilization of the mineral and aggregate resource or even to potentially obtain a small portion of the resource on the Goal 5 resource site. A residential use, if allowed, could result in the loss of jobs provided by Big River's site and the loss of the material provided by the quarry into the economy of the county.

Clatsop County benefits from long-term, reliable sources of high quality mineral and aggregate material. If conflicting uses were allowed in such location as to prevent or limit operation of the Big River Ordway site, the owner would suffer a significant

previously submitted

economic setback and the community would be denied access to much needed and highly valuable mineral and aggregate materials that help economic growth. These are significant and unacceptable negative economic effects.

b. Impacts on the conflicting uses of allowing the resource use.

No conflicting use currently exists inside the impact area of the Big River Ordway mineral and aggregate resource site. As such, any conflicting use that could occur would move to the area with full knowledge of the existence of the mineral and aggregate site and the potential noise effects. The question is whether it would be necessary for an individual to build a residence within those small portions of the neighboring properties that are within the identified impact area. Currently there are portions of each property affected by an impact area designation that are outside the identified impact area perimeter from the mineral and aggregate resource site. As such, if an individual wishes to build a residence he or she would have several options to choose from on any existing parcel. The ability to move the conflicting use to another location on the same parcel greatly reduces the economic impact on the conflicting use if the mineral and aggregate expansion is approved, located and operated. In addition, the property owners could enter into a waiver of remonstrance, noise easement or other agreement to allow the construction of a residence within the impact area and avoid adverse effects on the quarry. In sum, the economic consequences can be avoided, the economic costs can be lessened, and the owners can continue to make economic use of the properties. Outside the identified impact area, noise impacts can be controlled and DEQ standards can be met and there would be little or no economic impact on any approved use. Another major noise source in the area is created by Highway 26. The residents in the area constantly receive noise from the highway and the overall noise environment in the area is not pristine. As such, the incremental economic cost of noise from the quarry is not large if it, in fact, exists.

When balancing between the economic costs to the resource (potentially the inability to use the resource or operated in an economically sound manner) with the economic impacts from noise radiating from the site onto other properties, economic analysis supports the protection and operation of the mineral and aggregate resource site. If the mineral and aggregate resource site were unable to operate or able to operate without extraordinary noise controls that made the rock costs ineffective, the operator would suffer an economic loss, but more importantly, the county would suffer an economic loss because the mineral and aggregate resource would not be available in the county for infrastructure improvements. Contrasted with a potentially small and difficult to qualify loss in economic value of future uses that would be constructed within the identified impact area where the sound level could increase, it is our conclusion that the activities on the Big River site outweigh the small and difficult to define economic cost to landowners in the area who might wish to place a noise sensitive residential use within the impact area. As such, we believe that our consideration of the economic prong of the ESEE analysis tips clearly in favor of preserving the resource and allowing its operation because it provides for the greater economic good of the entire community.

2. Social Consequences Analysis.

a. Impacts on the resource of allowing conflicting use.

It is difficult to make a rational analysis of the social impacts in this matter because the impacts on mineral and aggregate resources are primarily economic in nature. However, there could be social impacts created that would negatively affect the resource if a conflicting residential use was allowed in close proximity to the site. It appears the most significant social cost to the landowner and the mineral and aggregate operator would be related to attempts to mitigate noise to the satisfaction of neighbors through modifications to the operation that potentially increase the cost of aggregate extraction.

The most probable social impact in allowing a conflicting residential use near the resource site would be to limit or prevent the site's use because of social dissatisfaction from the neighbors. If a conflicting residential use was allowed next to the resource sites, it is possible that the existing regulations controlling the operation of the site, particularly noise standards, might be difficult or impossible to meet at the site and that these regulations would be aired and enforced through social pressure. This social disruption could result in an increase in the price of aggregate materials with a loss of at least a portion of high quality aggregate resource at the site and make that site unavailable for a wide variety of uses in the county, including road and infrastructure construction. Aggregate materials have high social utility in the county and are a critical part of infrastructure, as well as commercial, industrial and residential construction. The increase in price or a decrease in the supply of high quality aggregate, such as that at the proposed site, would have a negative social impact in the greater county area potentially through increased prices of infrastructure, homes, highways and other products which depend on aggregate materials. This could implicate social costs by limiting the county's citizens' ability to afford these products and services and potentially reduce their standard of living.

b. Impacts on conflicting use of allowing the resource use.

If the impacts (largely noise) associated with the proposed operation are not properly controlled, there could be social impacts on new residential uses near the mineral and aggregate resource, such as neighbor dissatisfaction and unrest. However, the nature of the resource site, its location, the surrounding uses, the topographic features and the control mechanisms required by conditions, as well as the noise studies that have been provided, all serve to make any significant adverse social effects unlikely. The record demonstrates that the DEQ noise standards, which are designed to protect residences and human health, can and will be met by the operation at all residences in the area. Further, there is already ambient highway noise and it is hard to assign social value to any increase to ambient noise levels that may occur within the DEQ standards. Rock has a significant social utility and must be obtained at locations where high quality rock is located and where it is close to the market to reduce costs. In the end, the balance between the greater social utility of the mineral and aggregate resource and the personal social costs of individuals whose environment undergo a change as a result of the protection of the mineral and aggregate resource tips in favor of the resource site. The

greater social good of having a confirmed source of high quality mineral and aggregate outweighs the potential social impacts that have been identified by the neighbors immediately in the area.

3. Environmental Consequences Analysis.

a. Impacts on the resource of allowing conflicting uses.

A conflicting residential use would generally not have an environmental impact on the aggregate resource unless it was allowed in the impact area. If the residential use was allowed in the impact area, the environmental impacts on the resource could be severe and the resource potentially could not be used or its use would be severely restricted due to increased difficulties with environmental compliance (primarily noise compliance).

b. Impacts on the conflicting uses of allowing the resource use.

The proposed aggregate operations could potentially have an environmental impact (in the form of noise) upon a conflicting use if located within the impact area. Other potential impacts including dust and transportation will not have adverse environmental consequences because they will be controlled and mitigated. Applicant's noise expert indicates that outside of a mapped distance from the proposed extraction areas, mineral and aggregate operations can meet DEQ's standards. DEQ standards are designed to protect human health and human habitation areas and meeting DEQ standards helps mitigate and eliminate environmental conflicts. The mining and operations plan submitted by Big River provides a number of methods that will minimize environmental impacts (e.g., reorienting mining direction, reducing onsite truck speeds, etc.). It is possible that there would be an adverse environmental effect due to an increase in the ambient noise level even though DEQ standards are met. However, in establishing the noise levels, DEQ has provided a mechanism that adequately protects environmental values. Big River has demonstrated that DEQ's standards can be met within the mapped impact area. Further, Big River has used land forms, has incorporated berms, and has proposed a mining plan to mitigate these environmental issues. Big River's proactive approach in this area is an important consideration to the environmental analysis.

Regardless of where a mineral and aggregate site would be located in Clatsop County, a neighbor would be able to express concern about the adverse effects of the environment. If a mineral and aggregate site was required to have no effect on any person, that resource would be located well beyond the market area and significant additional amounts of fuel would be necessary to move the product to market. That would cause a separate type of environmental consequence that is avoided by locating the sites closer to the market area. Rock resources move by trucks and the more distance that is added (to escape environmental, social and economic consequences to adjoining properties) creates an equal and opposite environmental, social and economic consequence: the use of significantly more fossil fuel that powers the trucks that deliver the mineral and aggregate material. Further, transportation costs greatly increase the cost of aggregate and it is not in the best interests of citizens in Clatsop County to locate mineral and aggregate resources a significant distance outside the market area. .

With regard to the environmental prong of the ESEE analysis, the minimized environmental impacts on neighboring properties must be balanced against the greater environmental impacts caused by moving mineral and aggregate operations to locations that are farther and farther away. While there are potential environmental consequences in terms of noise, these consequences are greatly mitigated or even eliminated by the operator's proposal and they are outweighed by negative environmental consequences if the quarry were required to move farther and farther away from the market area.

4. Energy Consequences Analysis.

a. Impacts on the resource of allowing conflicting uses.

The only adverse energy consequences to a mineral and aggregate resource by allowing a conflicting use would be due to operational changes in the aggregate extraction operations that could make them less efficient and more energy consumptive. And as argued above (in the environmental analysis which we incorporate herein), it is also possible that locating a conflicting use near the resource sites could potentially cause greater energy impacts through fuel consumption by haul trucks that might be required to travel greater distances to bring the aggregate material to market from more distant locations.

b. Impacts on conflicting uses of allowing the resource use.

It is difficult to conceptualize how there would be adverse energy consequences to any conflicting use if the Big River application site is approved. Conceivably, existing neighbors (or new construction) would wish to replace single pane windows with double paned windows to counteract noise effects. This would potentially consume more energy by manufacturing new windows, but also could save energy in terms of increased efficiency of double paned windows. Similarly, it is possible that neighbors could attempt to berm or landscape their properties in a way to reduce the view of the mineral and aggregate sites or some of the potential operating effects. This, conceivably, could increase energy consumption directly related to the energy necessary to construct the berms.

Because transportation of mineral and aggregate materials is very energy dependent, we believe that our consideration of the energy consequences of the ESEE analysis tips slightly in favor of allowing the proposed use.

STEP 8. AMEND THE PLAN

Since the site is **SIGNIFICANT** and all impacts can be **MINIMIZED**, mining should be allowed, and the local plan and land use regulations should be amended to reflect that decision and to protect the site for mining.

Staff and Planning Commission recommend protection for the site for mining and allowing mining with conditions.

Before the Board of Commissioners
For Clatsop County, Oregon

In the Matter of

AN ORDINANCE AMENDING THE CLATSOP COUNTY COMPREHENSIVE PLAN / ZONING MAP AND TEXT AS ADOPTED BY THE BOARD OF COMMISSIONERS ADOPTING CERTAIN FINDINGS WITH CONDITIONS AND RESCINDING INCONSISTENT PROVISIONS

ORDINANCE # 08-04

Recording Date: _____

The Board of Commissioners of Clatsop County, Oregon ordains as follows:

SECTION 1. SHORT TITLE.

This ordinance shall be known as the Big River/Ordway Comprehensive Plan / Zoning Map and Text Amendments.

SECTION 2. RECITALS

The Board of County Commissioners of Clatsop County, Oregon recognizes the need to revise and amend the Clatsop County Comprehensive Plan and Zoning Map and Text. In the interest of the health, safety and welfare of the citizens of Clatsop County and Pursuant to State law, the Board of Commissioners hereby determines the necessity of amending the said Clatsop County Comprehensive Plan/Zoning Map and Land and Water Development and Use Ordinance # 80-14 as amended.

The Board of County Commissioners determines and takes notice that the adoption procedure for this ordinance complies with the Post Acknowledgement rules of the Land Conservation and Development Commission. The County Planning Commission has sought review and comment and has conducted the public hearing process pursuant to the requirements of ORS 215.050 and 215.060. The Planning Commission held three public hearings on the matter; the first was held on January 15th, 2008; the second was held on February 12th, 2008; and the final hearing and date recommendation was rendered on March 11th, 2008. The Board of Commissioners Received and Considered the Planning Commission's recommendations on this request and held a public hearing on this ordinance pursuant to law on April 9th, 2008.

SECTION 3. CONFORMITY WITH THE LAW.

This ordinance shall not substitute for nor eliminate the necessity for conformity with any and all laws or rules of the State of Oregon, or its agencies, or any ordinance, rule or regulation of Clatsop County.

SECTION 4. INCONSITENT PROVISIONS.

This ordinance shall supersede, control and repeal any inconsistent provision of the Clatsop County Land Water Development and Use Ordinance, as amended, or any other ordinance or regulation made by Clatsop County.

SECTION 5. SEPARABILITY.

If any section, subsection, sentence, clause, phrase, or any other portion of this ordinance is for any reason held invalid or unconstitutional by a court of competent jurisdiction, such portion shall be deemed as a separate distinct and independent provision and such holding shall not affect the validity of the remaining portions of this ordinance.

SECTION 6. EFFECTIVE DATE.

This ordinance shall be in full force and effective 30 days following adoption of this ordinance.

SECTION 7. ADOPTION CLAUSE.

The Board of Commissioners hereby adopts the Big River/Ordway Comprehensive Plan and Zoning Map and Text Amendment with conditions as set forth in Exhibit 1 "*Adoption Packet*" recommended for approval by the Planning Commission and attached hereto and by this reference made a part herein of this ordinance in its entirety.

ADOPTED this ____ day of April 2008.

Board of County Commissioners
For Clatsop County, Oregon

By_____
Patricia Roberts, Chair

Approved as to Form: _____
Clatsop County Counsel

FIGURE JAN08 A: Zoning on Applicants' Property

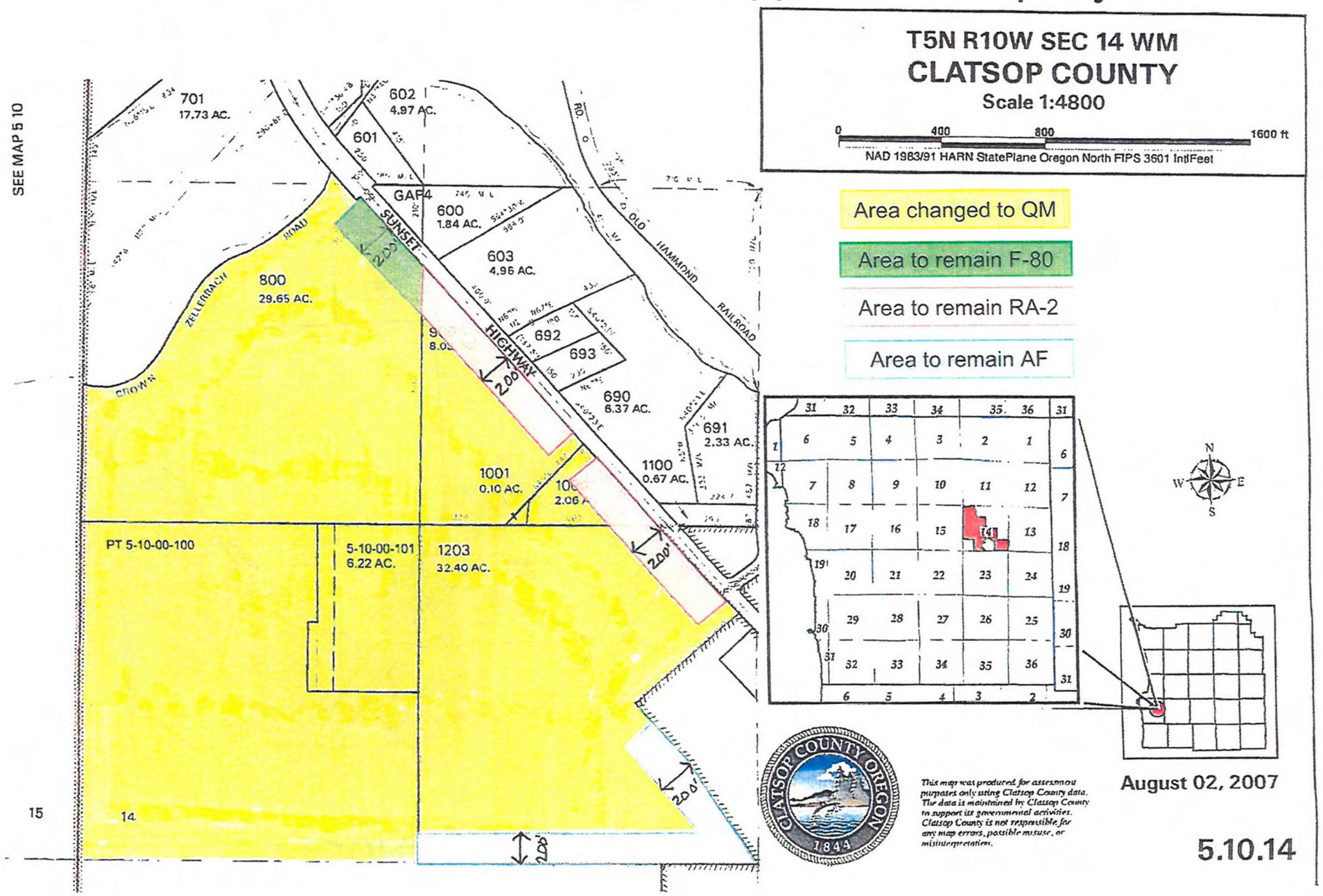


FIGURE JAN08 A

FIGURE JAN08 B: QMO Overlay Area

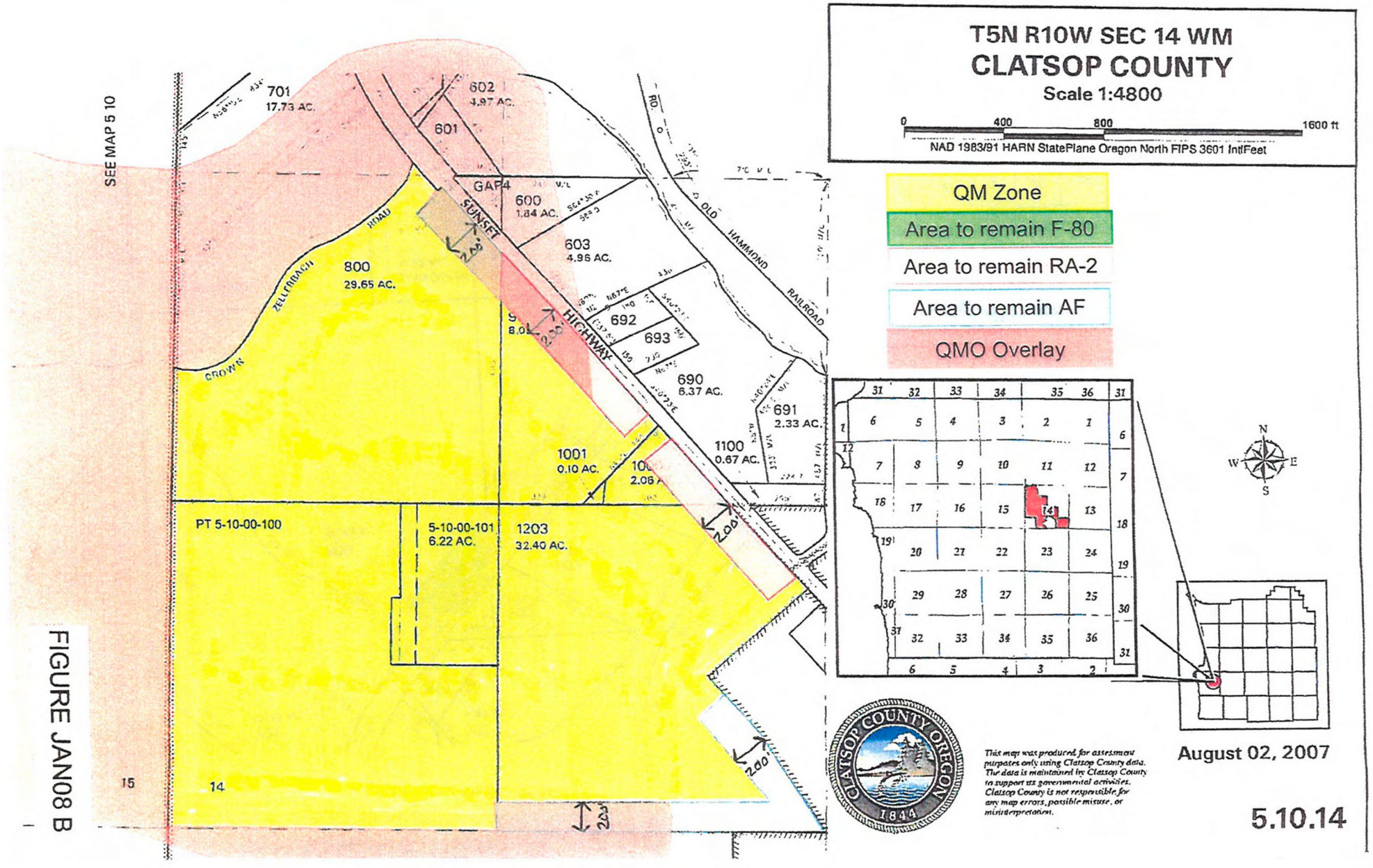


FIGURE JAN08 B

FIGURE JAN08 C: Impact Area

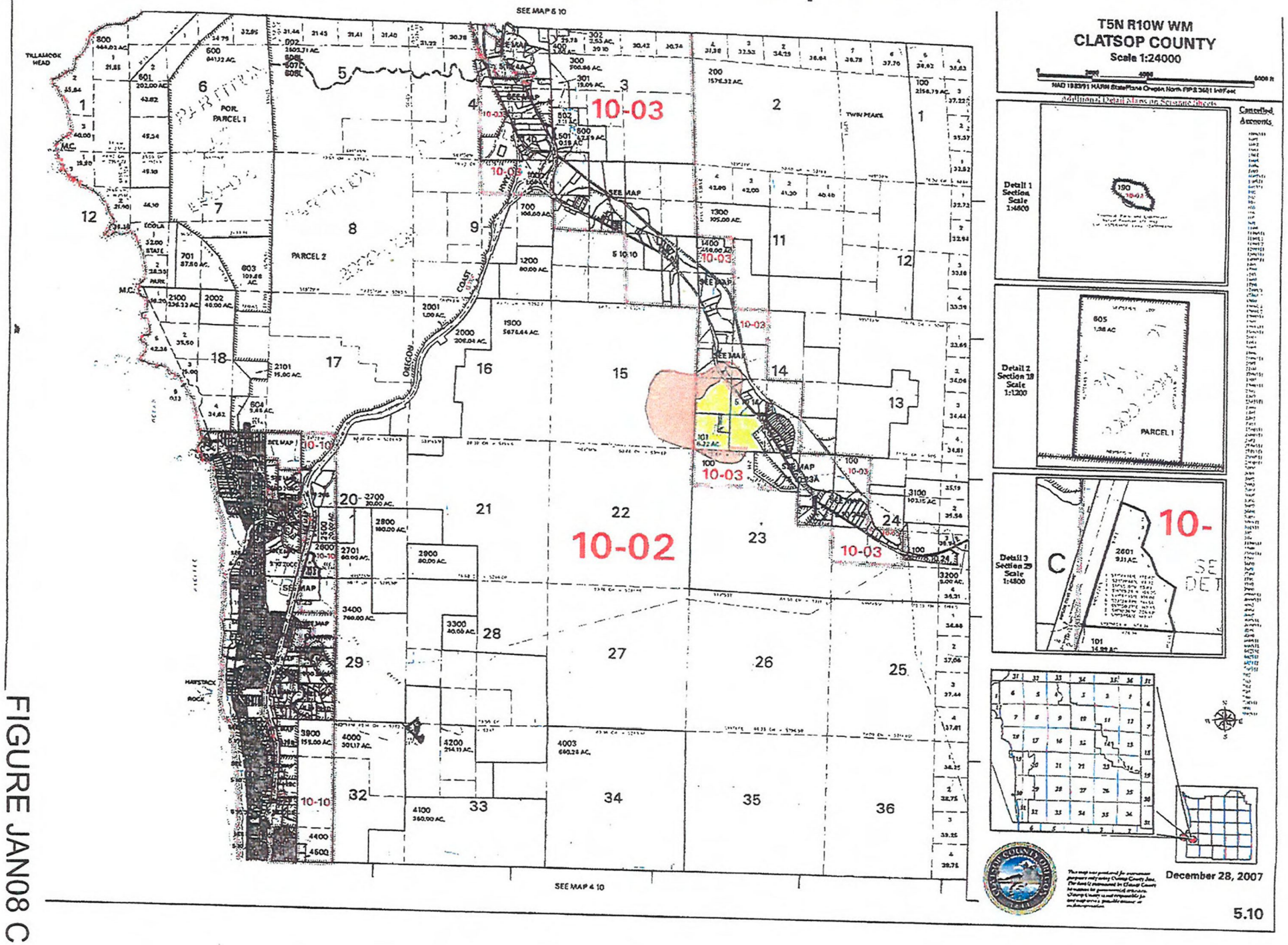


FIGURE JAN08 C