



HEARING EXAMINER

BEFORE THE HEARING EXAMINER FOR THURSTON COUNTY

In the Matter of the Appeal of)	
)	FILE NO. SUPT 000788
Quality Rock Products, Inc.)	
)	FINDINGS, CONCLUSIONS
For Approval of a Special Use Permit.)	AND DECISION
_____)	

SUMMARY OF DECISION

The request for approval of a Special Use Permit for the expansion of an existing gravel mine and the establishment of associated accessory uses at 4711 – 88th Avenue Southwest is **GRANTED**, with conditions. The request for a setback reduction is **DENIED**.

SUMMARY OF REQUEST

Quality Rock Products, Inc. (Applicant) requested approval of a Special Use Permit (SUP) for the expansion of an existing gravel mine on property located generally at 4711 – 88th Avenue Southwest in Thurston County, Washington. The request is to allow the Applicant to expand the existing 26-acre mining site to 151 acres; to replace a previously approved concrete batch plant; to construct an asphalt hot mixing plant; and to resume concrete and asphalt recycling.

A hearing on the request was held before the Hearing Examiner of Thurston County on November 19, 2001, December 10, 2001, February 5, 2002 and February 11, 2002. At the hearing the following presented testimony and evidence:

Nancy Pritchett, Thurston County Development Services
David Ward, Applicant Representative
Laura VanDyke
Danial Bruck
Carole Willey
Michelle Blanhart
Nina Carter
Fayette Krause

Jerry Long
Mary Ann Veria
Mike Kain, Thurston County Development Services
Gwen Atkinson
Tina Peterson
Chris Rhodes
Charlie Isaacson
Kent Hauvre
Jerry Dierker
Jean Takekawa
Joe Simmons
Paul Holm
Mary Ingalls
Ed Rauser
Sanoma Jefferson
Greg Jenkins
Jim Likes
Robert Sand
Heath Packard
Jay Kobilansky
Sue Danver
Shirley Olson
Ann Smith
Carol Serdar
Gordon Boe
Donald Houston
Roger Kellum
Lori Tiedt
Richard T.
George Bennett
Roy Garrison
Ioana Park
Tim Sonnichsen
Ed Rauser
Randy DeAtley
Steve Johnson, Thurston County Roads & Transportation Services
John Ward, Thurston County Environmental Health
Nadine Romero
Jay Roach
Mark Hayes
Robert Mead, Thurston County Water and Waste Management
George Bennett

At the hearing the following exhibits were submitted and were admitted as part of the official record:

EXHIBIT 1 Development Services Department Staff Report

Attachment a	Notice of Public Hearing
Attachment b	Special Use Permit Application
Attachment c	Vicinity Map
Attachment d	Site Plans Illustrating Existing Conditions, Phases of Mining, Final Reclamation Plan
Attachment e	Geologic Vicinity Map with Existing Well Locations
Attachment f	Hydrogeological Cross Section and Hydrogeological Impacts Cross Section
Attachment g	Wetland Delineation Map
Attachment h	Mitigated Determination of Nonsignificance, issued October 4, 2001
Attachment i	Hearing Examiner Findings, Conclusions, and Decision of LTD-3-85 issued August 22, 1985
Attachment j	Hearing Examiner Findings, Conclusions, and Decision of LTD-3-85-Amendment issued July 7, 1986
Attachment k	August 3, 2001 Letter from SubTerra Inc.
Attachment l	October 4, 2001 Memorandum from Roads and Transportation Services
Attachment m	October 1, 2001 Memorandum from Roads and Transportation Services
Attachment n	June 21, 2001 Memorandum from Roads and Transportation Services
Attachment o	October 31, 2001 Letter from the Public Health and Social Services Department
Attachment p	January 5, 2001 Letter from the Public Health and Social Services Department
Attachment q	July 12, 2001 Letter from Washington State Department of Natural Resources

Attachment r	August 20, 2001 Letter from Washington State Department of Natural Resources
Attachment s	May 17, 2001 Letter of Agreement between Quality Rock Products and Bonneville Power Administration
Attachment t	OAPCA Notice of Construction Preliminary Determination dated May 21, 2001
Attachment u	<p>Public Comment Letters</p> <ol style="list-style-type: none"> 1. Letter from Darby and Leona Vixo dated October 24, 2001 2. Letter from Fayette F. Krause dated October 12, 2001 3. Letter from Paul Bakke dated September 10, 2001 4. Letter from Gordon Boe dated September 12, 2001 5. Letter from Gordon Boe and Myron Struck dated January 3, 2001 6. Letter from Sarah Skidmore and Rich Zeldenrust dated February 8, 2001 7. Letter from Harry Woodward dated January 4, 2001 8. Letter from Dr. & Mrs. Robert F. Sand dated January 3, 2001 9. Letter from P.W. Chapman dated January 2, 2001 10. Letter from Donald W. Huston dated December 26, 2001 11. Letter from Jean E. Takekawa dated January 8, 2001 12. Letter from Tony McNamara dated January 2, 2001 13. Letter from Ed and Deanna Rauser dated January 4, 2001 14. Letter from Pat McNamara dated January 6, 2001 15. Letter from Fayette F. Krause dated January 3, 2001 16. Letter from Mary Ann Veria dated May 26, 2001 17. Email from Shirley D. Olson dated July 8, 2001 18. Letter from Citizen, Neighbor to the Site, and Taxpayer 19. Letter from Shanna Diehl 20. Letter from Justin DeVries 21. Letter from Riger Kellam 22. Letter from David White 23. Letter from Tom Hoover 24. Letter from David Poston 25. Letter from Ardith Lowery 26. Letter from Richard Hall 27. Letter from Dale Smith 28. Letter from Shanna Diehl

29. Letter from Leland Bloom
30. Letter from Harriet Ferris
31. Letter from Mark Peryea
32. Letter from Stanley Badger
33. Letter from Evonne Peryea
34. Letter from Jalyne Lupo
35. Letter from Tamar Hathcock
36. Letter from Shon Hathcock
37. Letter from Linda Johnigh
38. Letter from Ron Skowronek
39. Letter from Danella Thompson
40. Letter from Rod Lypo
41. Letter from Carol Badger
42. Letter from David Chamberlin
43. Letter from Mary McGuire
44. Letter from Lina Jo Johnson
45. Letter from Kerry Chamberlin
46. Letter from Sussan Monroe
47. Letter from Rick Baldwin
48. Letter from Carolyn Johnson
49. Letter from Karen Clardy
50. Letter from Teresa Coley
51. Letter from Marion Smith and Maxine Smith
52. Letter from Patricia Gardner
53. Letter from David Gardner
54. Letter from Devon Emmons
55. Letter from Robert Breselow
56. Letter from Sanoma Jefferson
57. Letter from Marilyn Seed
58. Letter from James Seed
59. Letter from Greg and Debbie Anderson
60. Letter from Michelle and Shane Chapman
61. Letter from Vince Mitchell
62. Letter from Robert Freeman
63. Letter from Tina Freeman
64. Letter from Jessica Muth
65. Letter from Scott Feldtman
66. Letter from Jennifer Feldtman
67. Letter from Heath G. Packard, Black Hills Audubon Society dated October 18, 2001
68. Letter from Ed and Deanna Rauser dated October 19, 2001
69. Letter from Kari Rokstad, Department of Ecology, dated October 17, 2001
70. Letter from Carol Serdar, Department of Natural Resources, dated October 15, 2001
71. Letter from John Williams dated October 18, 2001

72. Letter from Fayette F. Kruse dated October 12, 2001
73. Letter from Don and Mary Ingalls dated October 15, 2001

EXHIBIT 2 Traffic Impact Analysis dated July 13, 2000

EXHIBIT 3 Written Testimony of Fayette F. Krause dated November 16, 2001

EXHIBIT 4 Written Testimony of Jerry Long with the following attachments: a) Sometimes Things Go Wrong; b) Excerpt from Hot-Mix Magazine Titled "Emissions;" and c) Miscellaneous Articles printed from the Internet

EXHIBIT 5 Written Testimony of Jean Takekawa, Nisqually National Wildlife Refuge, dated November 16, 2001 with attached Aerial of Proposed Asphalt Plant in relation to Refuge Boundary and Map of Phase 5 Excavation Plan

EXHIBIT 6 Written Testimony of Joe Simmonds dated November 18, 2001 and Petition List of Neighbors Opposed to the Project

EXHIBIT 7 Large Aerial Photograph of Project Site

EXHIBIT 8 Public Comment Letters

1. Letter from Sarah Broderick dated November 19, 2001
2. Email from Brenda Johnson dated November 15, 2001
3. Email from Ron Benson dated November 15, 2001
4. Email from Margaret Rader dated November 15, 2001
5. Email from Lisa Noble dated November 15, 2001
6. Email from Donna and William Roylance dated November 15, 2001
7. Email from Michael Ralston dated November 15, 2001
8. Email from Rick Schmidtke dated November 15, 2001
9. Email from Robert S. Cole dated November 16, 2001
10. Email from Krag Unsoeld dated November 16, 2001
11. Email from Tina Peterson dated November 16, 2001
12. Email from Keith Cotton dated November 15, 2001
13. Email from Mark Gray dated November 15, 2001
14. Email from Kathryn McLeod dated November 15, 2001
15. Letter from Robert W. Schanz, Chehalis River Council, dated October 17, 2001
16. Letter from Arnold and Shirley Olson dated November 14, 2001
17. Email from Shon Hathcock dated November 14, 2001
18. Email from Tamar Hathcock dated November 14, 2001
19. Letter from Robert Metzger dated November 13, 2001
20. Letter from Sarah Skidmore and Rich Zeldenrust dated November 14, 2001

21. Letter from Devon Emmons dated November 10, 2001
22. Letter from Citizen, Neighbor, and Taxpayer
23. Email from Andrew Hendricks dated November 15, 2001
24. Letter from Tamar Hathcock dated November 14, 2001
25. Letter from Shon Hathcock dated November 14, 2001
26. Email from Margaret Holm Rader dated November 15, 2001
27. Letter from Jean MacGregor
28. Letter from Beth Doglio, Black Hills Audubon Board dated November 15, 2001
29. Letter from Chris Hawkins, South Sound Greens, dated November 16, 2001
30. Email from Anonymous Person dated November 16, 2001
31. Letter from Zena H.
32. Email from Christopher Ellings dated November 16, 2001
33. Email from Karin Kraft dated November 16, 2001
34. Email from Jill Wasberg dated November 16, 2001
35. Email from Annie Szvetecz dated November 16, 2001
36. Email from Theresa Nation dated November 16, 2001
37. Email from Carolyn Trefts dated November 16, 2001
38. Email from Sue Sikora dated November 16, 2001
39. Email from Michelle Guerin dated November 16, 2001
40. Email from Annette S. Bristol dated November 16, 2001
41. Letter from William Vogel dated November 16, 2001
42. Email from Todd Wilson dated November 16, 2001
43. Email from Cathy Reynolds dated November 16, 2001
44. Email from Jay Kelly dated November 16, 2001
45. Email from Cathy and Jim Reynolds dated November 16, 2001
46. Email from Max Beauman dated November 16, 2001
47. Email from Peggy Bruton dated November 16, 2001
48. Email from Clint Burelson dated November 16, 2001
49. Email from Darlene Schanfald dated November 16, 2001
50. Email from Anita Christensen dated November 18, 2001
51. Email from Carey and Pamela Rader dated November 18, 2001
52. Letter from Dr. Robert and Maria Sand dated November 16, 2001
53. Letter from Heath Packard, Black Hills Audubon Society dated November 19, 2001
54. Letter from Lisa M. Godina dated November 19, 2001
55. Letter from Sue Danver dated November 19, 2001
56. Letter from Michelle and Shane Chapman dated November 19, 2001

EXHIBIT 9 Map of Black Lake Hills Wildlife Area

EXHIBIT 10 Written Testimony of Sue Danver dated November 19, 2001 with the following attachments: a) Chemical Injury Information Network Appendixes A-H; b) Excerpt from Environmental Toxicology and Chemistry, Vol. 18, No. 3, titled "Sensitivity of Fish Embryos to

Weathered Crude Oil" Part 1 and 2; c) Marine Ecology Progress Series (reprint); d) Article Titled "Changing Perspectives on Oil Toxicity Evaluation; d) Two Excerpts from Environmental Toxicology and Chemistry, Vol. 18, No. 7 and 8; e) Oil and Gas Issues in Alaska; f) The Precautionary Principle in Environmental Science; and g) Ascites, Premature Emergence, Increased Gonadal Cell Apoptosis, and Cytochrome P4501A Introduction in Pink Salmon Larvae Continuously Exposed to Oil-Contaminated Gravel During Development

- EXHIBIT 11 October 15, 2001 Letter to Gordon Boe from John Libbey, Thurston County Environmental Health
- EXHIBIT 12 Written Testimony of Heath Packard, Black Hills Audubon Society dated November 19, 2001
- EXHIBIT 13 Public Comment Letters from William Shelmerdine dated November 19, 2001 and Susan Danver dated November 19, 2001
- EXHIBIT 14 Public Comment Letter from Donald W. Houston dated November 16, 2001
- EXHIBIT 15 Technical Data of Applicant with Appendixes A-E
- EXHIBIT 16 Wetland Buffer Enhancement Plan dated October 20, 2000
- EXHIBIT 17 April 27, 2001 Letter to Janet Ramsey from Tim Sonnichesen, Sonnichsen Engineering, LLC regarding Air Quality Modeling Using SCREEN 3 Procedures
- EXHIBIT 18 Notice of Construction Preliminary Determination dated May 21, 2001 - prepared by Olympic Air Pollution Control Authority
- EXHIBIT 19 Olympic Air Pollution Control Authority Board of Directors Meeting Notes of July 11, 2001
- EXHIBIT 20 Application for Reclamation Permit
- EXHIBIT 21 June 19, 2001 Letter to Steve Johnson, Thurston County Roads and Transportation Services from George H. Bennett, SubTerra, Inc. regarding Updated Stormwater Drainage Plan
- EXHIBIT 22 November 16, 2000 Letter to Dave Hurn, Thurston County Development Services from George Bennett, SubTerra Inc.
- EXHIBIT 23 Littlerock Sand and Gravel Operation Slope Stability Analysis dated October 2001 - prepared by SubTerra, Inc.
- EXHIBIT 24 10 Before and After Photographs of the Littlerock Project

- EXHIBIT 25 Report on the Soils, Geology, and Ground Water dated July 2000
- EXHIBIT 26 Second Aerial Photograph of Project Site
- EXHIBIT 27 December 27, 2001 Order to Rectify Deficiencies; October 22, 2001 Amendment for Surface Mine Reclamation Permit; June 5, 2001 Letter of Correction, and July 12, 2001 Order to Rectify Deficiencies all from Carol Serdar, Department of Natural Resources
- EXHIBIT 28 December 9, 2001 Public Comment Letter from Robert Metzger
- EXHIBIT 29 May 4, 2001 Letter to Dave Hurn, Thurston County Development Services from George Bennett regarding Response to Nancy Pritchett February 2, 2001 Memorandum
- EXHIBIT 30 Public Comment Letters
1. Letter from Gwen Atkinson dated December 14, 2001
 2. Email from Stephen R. Klein dated December 13, 2001
 3. Email from Susan Baker dated December 13, 2001
 4. Email from Don A. Williams dated December 12, 2001
 5. Email from Cheryl Mongovin dated December 12, 2001
 6. Letter from Devon Emmons dated December 11, 2001
 7. Letter from Mary Ann Veria dated December 12, 2001
 8. Letter from Bruce and Ann Smith dated December 9, 2001
 9. Letter from Richard Tardiff dated December 13, 2001
 10. Email from Monica Mestas dated December 14, 2001
 11. Letter from Donald and Donna Huston dated December 12, 2001
 12. Email from Virginia Sand Balius dated December 14, 2001
 13. Email from Paul T. Holm dated December 14, 2001
 14. Email from Clarence Elstad dated December 14, 2001
 15. Email from Michael R. Balius dated December 14, 2001
 16. Email from Abraham Ringel dated December 15, 2001
 17. Email from Leslie H. Romer dated December 15, 2001
 18. Email from Anne Hankins dated December 15, 2001
 19. Email from John Daly dated December 16, 2001
 20. Letter from Robert Metzger dated December 16, 2001
 21. Letter from John W. Hunter dated December 13, 2001
 22. Letter from Donald and Donna Huston dated November 15, 2001
 23. Letter from Don Grower submitted December 17, 2001
 24. Letter from Jerry Lee Dierker Jr. dated December 16, 2001
 25. Letter from Darby and Leah Vixo dated December 14, 2001
 26. Letter from Dolores Sand submitted December 17, 2001
 27. Letter from Jeff Cederholm dated December 17, 2001
 28. Email from Richard Curtis dated December 17, 2001
 29. Email from Kevin Ryan dated December 17, 2001
 30. Email from Whittier Johnson dated December 17, 2001
 31. Email from Annette S. Bristol dated December 17, 2001

- 32. Email from Gary Wiles and Jan Sharkey dated December 17, 2001
 - 33. Letter from Thomas O. Skjervold dated December 17, 2001
 - 34. Email from Gretchen Callison dated December 17, 2001
 - 35. Email from Mark Bergeson dated December 17, 2001
 - 36. Email from Ben Kinkade dated December 17, 2001
 - 37. Email from Linda Newman dated December 17, 2001
 - 38. Letter with Attachments A-H from Heath G. Packard and Sue Danver dated December 17, 2001 and titled "Black Hills Audubon Society Land Use Hearing Written Testimony for Quality Rock Products, SUPT 000788"
 - 39. Letter with Attachments A-G from Heath G. Packard and Sue Danver dated December 17, 2001 and titled "Black Hills Audubon Society SEPA Withdrawal Request and Expert Testimony"
- EXHIBIT 31 County's Response Memorandum from Cynthia Wilson, Thurston County Development Services dated January 9, 2002 with attached Letter from Debbie D. Carnevali, Washington State Department of Fish and Wildlife dated January 3, 2002
- EXHIBIT 32 Applicant's Response Letter with Attachments from David Ward, Landerholm, Memovich, Lansverk & Whitesides, P.S. dated January 8, 2002
- EXHIBIT 33 February 1, 2002 Memorandum from Robert Mead, Public Health and Social Services regarding Quality Rock Background Information
- EXHIBIT 34 January 30, 2002 Habitat Evaluation for the Oregon Spotted Frog and Olympic Mudminnow at the Quality Rock Products, Inc. Little Rock Surface Mine
- EXHIBIT 35 No Exhibit
- EXHIBIT 36 Applicant's Brief on Wetland and Habitat Issues
- EXHIBIT 37 Resume of Nadine Louise Romero, Hydrogeologist/Geochemist
- EXHIBIT 38 Review of the Hydrogeologic Report for the Quality Rock Products Sand and Gravel Mine Expansion prepared by Nadine L. Romero dated February 4, 2002
- EXHIBIT 39 January 31, 2002 Letter from Carol Serdar, Washington State Department of Natural Resources regarding Documentation and Clarification of Items Observed during January 23, 2002 Site Visit to Quality Rock "Littlerock Pit"
- EXHIBIT 40 No Exhibit

- EXHIBIT 41 Photographs of Salmon in Ashley Creek dated December 25, 2001 and Photographs of the Berm
- EXHIBIT 42 Video Tape of Salmon in Ashley Creek dated December 22, 2001
- EXHIBIT 43 February 5, 2002 Written Opinion of Robert Metzger relating to Salmon and Hydrology Issues
- EXHIBIT 44 Public Comment Letter from Carla Jonientz dated February 5, 2002
- EXHIBIT 45 Public Comment Letter from Rich Kalman dated February 5, 2002
- EXHIBIT 46 Public Comment Letter from Ann Rockway dated February 4, 2002
- EXHIBIT 47 Public Comment Letter from Richard Curtis dated February 5, 2002
- EXHIBIT 48 Public Comment Letter from Robert and Carolyn Burreson dated February 5, 2002
- EXHIBIT 49 Public Comment Letter from Henry Romer dated February 3, 2002
- EXHIBIT 50 Public Comment Letter from Frank Chestnut
- EXHIBIT 51 February 8, 2002 Letter from Chris Chappell, Department of Natural Resources regarding Mitigated Determination of Nonsignificance
- EXHIBIT 52 Outline/Summary Testimony of Jerry Dierker
- EXHIBIT 53 Public Comment Letter from Gretchen Callison dated February 5, 2002
- EXHIBIT 54 June 17, 1986 Letter from Art Starry, Thurston County Health Department regarding Fairview Sand and Gravel LTD 3-86
- EXHIBIT 55 January 24, 2002 Letter from Mace G. Barron regarding Evaluation of Quality Rock Products Response to "Assessment of Potential Environmental Harm from the Proposed Quality Rock Facility"
- EXHIBIT 56 Clarification of the Location and Condition of Ashley Ditch with attached Map submitted by Donald Huston
- EXHIBIT 57 Mark Hayes Analysis of the "Habitat Evaluation for the Oregon Spotted Frog and Olympic Mudminnow at the Quality Rock Products, Inc. Little Rock Surface Mine" Report prepared by Ecological Land Services, Inc.
- EXHIBIT 58 January 18, 2002 Letter from John Peach, Department of Ecology regarding the December 17, 2001 Inspection Report

EXHIBIT 59 1995 Report prepared by Robert Mead titled "The Direct and Cumulative Effects of Gravel Mining on Ground Water Within Thurston County, Washington"

EXHIBIT 60 Table A1. Well, Spring, and Outcrop Records for the Study Area submitted by Robert Mead

EXHIBIT 61 February 7, 2002 Response to Testimony regarding Onsite Hydrology Special Use Permit Application prepared by George H. Bennett, SUBTERRA, INC.

EXHIBIT 62 Washington State Department of Fish and Wildlife Species Status Search Results for the Oregon Spotted Frog, Olympic Mudminnow, Coho Salmon, and Coastal Cutthroat

Based upon the testimony and evidence submitted at the open record hearing, and upon the impressions of the Hearing Examiner at a site view, the Hearing Examiner makes the following Findings of Fact:

FINDINGS OF FACT

1. The Applicant requested approval of a SUP for expansion of the mining operation at 4741 – 885th Avenue Southwest, Thurston County, Washington. It is the intent of the Applicant to expand the existing gravel mine (LTD-3-85) on site from 26 acres to 151 acres; to replace a previously approved batch plant (LTD-3-85, Amendment); to add an asphalt hot mixing plant; and to resume concrete and asphalt recycling. *Exhibit 1, page 1; Exhibit 1, Attachments b, I, and j.*
2. The entire parcel is 151 acres and is zoned Rural Residential/Resource – One Dwelling Unit Per Five Acres (RRR 1/5). In this zone, mineral extraction is allowed upon the approval of a Special Use Permit. In review of the Special Use Permit, the general standards as set forth in TCC 20.54.040 and the specific standards set forth in TCC 20.54.070 are considered. *Exhibit 1, Staff Report; Pritchett Testimony.*
3. In the Thurston County Comprehensive Plan, at least a portion of the site is designated a Mineral Resource Land of Long-Term Commercial Significance.¹ This designation affords special protection to mineral extraction activities; however, a Special Use Permit is still required. All permits are subject to review

¹ The County's statement on page 5 of the Staff Report (Exhibit 1) that the entire 151-acre parcel carries the Mineral Resource Lands of Long-Term Commercial Significance designation is not supported by map M-43 of the Comprehensive Plan, which designates only 80 acres of the site. However, it is not clear whether the original Comprehensive Plan designation has since been amended to include the entire parcel. Both the County and the Applicant provided written testimony/argument that the entire parcel carries the designation. *Exhibit 1, pages 5 and 9; Applicant's Closing Memorandum.*

- by the Washington State Department of Natural Resources (DNR) and approval of a reclamation plan for the site. *Exhibit 1, Staff Report; Pritchett Testimony.*
4. In 1985, the Applicant's predecessor, Fairview Sand and Gravel Company, received approval of a Limited Use Permit to extract minerals from a 26-acre portion of the site and to operate a portable crusher/classifier. In 1986, the Limited Use Permit was amended to allow the addition of a dry cement batch plant. The batch plant use was discontinued several years ago (the exact date is unknown). In January of 2000, the Applicant purchased the site and now seeks to expand the mining operation to the entire 151-acre parcel and to resume use of the concrete batch plant. The County considers the 1986 Limited Use Permit amendment to still be valid for use of the concrete batch plant.² *Exhibit 1, page 2; Exhibit 1, Attachments i and j.*
 5. The 151-acre parcel is located west of Little Rock Road at the end of 88th Avenue Southwest and east of the Black River in unincorporated Thurston County. Attached hereto is Exhibit 1, Attachment c, which gives a general overview of the project location. Also attached hereto, is a reduced copy of a map depicting existing site conditions (Exhibit 1, Attachment d). On the map, the location of existing equipment and stockpiles are designated as well as the location of the Bonneville Administration power line running through the property, the adjoining Burlington-Northern Railroad right-of-way; and the El Paso natural gas line. *Exhibit 1, Staff Report; Exhibit 1, Attachments c and d.*
 6. The subject property is a gently rolling glacial upland that is on the east side of the Black River Valley. The elevation of the site ranges from 160 feet at the northeastern corner to 230 feet in the southwestern corner of the property. The mining activity that has occurred since 1985 has scarred a 26-acre portion of the 151-acre site. The proposed expansion area has been logged and is basically clear

² One of the criteria referenced in the 1986 permit specifies that approval of the dry cement batch plant would expire upon abandonment for one year. In the context of nonconforming uses, abandonment requires "an intention to abandon; and (b) an overt act, or failure to act, which carries the implication that the owner does not claim or retain any interest in the right to the nonconforming use." *Id.*, *Andrew v. King County*, 21 Wn.App. 566, 572 (1978). The showing of intent is required even when the zoning code deems a use abandoned after a specified period of time. *Andrew*, 21 Wn.App. at 572; *King County v. High*, 36 Wn.2d 580, 582 (1950). Although the abandonment of a nonconforming use may not be entirely analogous to the abandonment of a use authorized by a Special Use Permit, the cases suggest that the Hearing Examiner could not make a decision on the validity of the 1986 permit without additional testimony and evidence on the issue. Moreover, because the County defined the Hearing Examiner's jurisdiction as excluding review of the concrete batch plant, no formal appeal of the County's determination was filed, and no testimony or evidence was taken on the abandonment issue (the Audubon Society raises the issue only in its closing brief), the Hearing Examiner does not have jurisdiction to review the validity of the permit. The Hearing Examiner must defer to the County's interpretation that the permit is still valid.

with the exception of some scotch broom, an invasive, non-native species. There are wetlands associated with the Black River that are off-site and northwest of the property. The Black River is considered to be one of the last large, intact riparian systems in the Puget Sound area, and the U.S. Fish & Wildlife Service (USFW) is actively acquiring properties along portions of the Black River to preserve the existing wetland system and the habitat for migratory birds and fish and other species. The authorized boundary of the Black River Refuge, managed by USFW at Nisqually National Wildlife Refuge, surrounds the subject property on three sides (north, south and west). There are 3,800 acres of land within the boundary. To date, approximately 800 acres have been acquired by USFW. The former Hard Rock Mining Company site, directly west of the site, is under a purchase and sale agreement with USFW to be incorporated into the Refuge. *Exhibit 1, Staff Report; Exhibit 1, Attachment u-15; Exhibit 5; Pritchett Testimony; Bennett Testimony.* Members of the Black Hills Audubon Society and others describe the Black River area as peaceful, pristine, and valuable for canoeing, bird watching and observing wildlife. *Exhibit 13; Exhibit 8-37.*

7. Pursuant to the State Environmental Policy Act (SEPA), Thurston County was designated as the lead agency for review of environmental impacts resulting from the proposed development. On October 4, 2001, the County issued a Mitigated Determination of Nonsignificance (MDNS). Although comment letters were filed, no appeals were filed and the MDNS became final on October 25, 2001. *Exhibit 1, Attachment h.*
8. It is the intent of the Applicant to expand the mining operation on-site. The expansion would occur in several phases. The first three phases would consist of excavation above the groundwater table, beginning at the northwest corner of the site (Phase 1), then moving to the southwest corner of the site (Phase 2), and ending at the southeast corner of the site (Phase 3). The next three phases (Phases 3 – 6) would consist of excavation below the groundwater table, beginning at the southeast corner of the site and continuing in reverse order to the starting point. The floor of the existing pit would be lowered approximately 60 feet, or 40 feet below the groundwater table. A 75-acre lake would be created as part of the final reclamation of the entire site. Based on projections of the Applicant, the mining operation would continue for approximately 20 years, during which time approximately 14 million tons of aggregate would be extracted. Although the production rate is expected to be approximately 250,000 tons a year, during the first few years, the rate would increase too as high as 750,000 tons a year. In addition to this expansion, concrete and asphalt recycling is proposed on-site, as well as replacing a concrete batch plant and installing a new asphalt hot mixing plant. *Exhibit 1, Attachments d and f; Exhibit 25.*
9. Associated with the request to expand mining activities on site, the Applicant requests a variance to reduce the 100-foot setback required by the Mineral Extraction Code (TCC 17.20.230) to 50 feet along the south and west property lines. TCC 17.20.230 allows the “approval authority” to reduce the setback “if, due to topography, or adjoining easements or designated resource lands of long-term commercial significance, the purposes of this chapter can be met with

the reduced setback.” The purposes of the Mineral Extraction Code are “to increase the protection of ground and surface water from the effects of surface mining and other mineral extraction, to lessen conflicts between surface mines and other mineral extraction operations and nearby land uses, and to continue the availability of mined materials to the citizens and commerce of the area.” *TCC 17.20.010*. The former Hard Rock Mining Company site, directly west of the southwest corner of the site, is a designated Mineral Resource Land of Long-Term Commercial Significance. The other lands adjacent to the site do not carry the designation. However, the lands west and south of the site are within the authorized boundary of the Black River Unit of the Nisqually National Wildlife Refuge. The Refuge Manager objected to the variance request for a reduced setback along the southern property line. *Exhibit 1, page 9; Exhibit 1, Attachment k; Exhibit 5; Testimony of Ms. Pritchett*.

10. The Applicant proposes the establishment and operation of a hot mix asphalt plant on site. The location of the plant would be approximately 800 feet from the northern property boundary (*Exhibit 1, Attachment d*). The asphalt plant would be a drum-mix type asphalt plant with a three-zone dryer. Emissions from the dryer would be controlled by a reverse airflow type baghouse. The baghouse would include a separator that would remove 75 percent of the particulate from the airflow prior to bag filtering. Exhaust air would flow into one of three separate chambers for bag filtering. After the dust cake builds to certain point, the air flow would reverse, causing the dust cake to drop to a hopper, where it would be recycled back into the mix. The baghouse would remove more than 99 percent of the particulate from the exhaust stream. The Olympic Air Pollution Control Authority (OAPCA) determined that the proposed equipment represents the Best Available Control Technology pursuant to WAC 173-400-113(2). *Exhibit 18*.
11. The stack of the asphalt plant would be approximately 72 feet high, consistent with the “Good Engineering Practice” (GEP) stack height. As defined by the EPA, the GEP stack height is “[t]he height necessary to insure that emissions from the stack do not result in excessive concentrations of any air pollutant in the immediate vicinity of the source as a result of atmospheric downwash, eddies or wakes which may be created by the source itself, nearby structures or nearby terrain.” *Exhibit 17*. In calculating pollution impacts, the Applicant’s consultant considered off-site terrain including hills/peaks ranging from 354 to 2650 feet in elevation and located as far as 13 kilometers from the site. *Exhibit 17*.
12. The asphalt plant would be fueled by natural gas through an extension of the Puget Sound Energy natural gas line following 88th Avenue from Little Rock Road to the project site. Initially the asphalt plant would produce approximately 150,000 tons of asphalt per year. At peak production, the asphalt plant would produce approximately 270,000 tons per year. *Exhibit 1, Staff Report; Exhibit 1, Attachment t*.
13. The Olympic Air Pollution Control Authority (OAPCA) reviewed the proposal and preliminarily determined that, with conditions, the hot mix asphalt plant

would comply with applicable state and federal air quality standards. A Notice of Construction was issued on May 21, 2001 (Exhibit 18). According to the Notice of Construction, the maximum emission of particulate matter is projected to be 134.79 pounds per day, and the maximum emission of federally designated Hazardous Air Pollutants is projected to be 22.29 pounds per day. Emission of five chemicals designated by the state as Toxic Air Pollutants were identified, including polyaromatic hydrocarbons (PAHs), benzene, formaldehyde, nickel and naphthalene. The maximum emission of PAHs is expected to be 0.0466 pounds per day. With respect to ambient air quality, the OAPCA determined that the predicted impacts would be “less than the significance threshold” for these pollutants, measured to a distance of five kilometers. The OAPCA determination was based on asphalt production of nearly twice that proposed by the Applicant (500,000 tons per year), assuming ten hours of operation per day, six days per week. As noted previously, the Applicant anticipates a peak production of 270,000 tons per year. However, OAPCA noted that “around-the-clock” operations would result in higher emission rates. Thus, OAPCA recommended that Asphalt production be limited to ten hours per day and 500,000 tons per year. Other recommended conditions included paving the main access road from the terminus of 88th Avenue Southwest to the asphalt plant. *Exhibit 1, Attachment t; Exhibit 18.*

14. The manager of the Black River Refuge provided written testimony regarding the effects of PAHs on plants and wildlife. Effects on fish include “decreases in egg production, testosterone and estrogen levels, and fry survival and increases in egg mortality and morphological abnormalities.” Some PAHs are also toxic to birds and bird eggs, and small atmospheric particulate containing PAHs “are easily inhaled and may pose special problems for birds, insects, and bats.” Concern was raised that there is insufficient information on the containment of particulate and volatiles during the process of transferring asphalt to trucks. *Exhibit 5.* This testimony was supported by a written report of Dr. Mace Barron, an environmental toxicologist retained by the Black Hills Audubon Society. Dr. Barron cited scientific literature indicating that the types of compounds emitted from the facility “are toxic to fish in parts per billion concentrations.” Dr. Barron further explained that “PAHs can be toxic to benthic invertebrates at low parts per million and can accumulate in aquatic organisms from both sediment and water” and that PAH exposure to salmon embryos can cause untoward effects at concentrations as low as one part per billion. *Exhibit 30, Attachment 38(F), pages 7-8 (internal citations omitted).* No information was provided by Dr. Barron or any other consultant/witness regarding the concentration of pollutants from the facility that would be taken up by fish and wildlife within the Black River Refuge area. *Exhibit 32, December 28, 2001 Sonnichsen Engineering Letter.*
15. Nearby residents questioned whether the OAPCA’s determination adequately considered air pollution impacts. There was testimony that the area between the site and the Black Hills to the west form a “partial topographic bowl” which may collect emissions from the site and cause higher levels of pollution than indicated in the report. Although the OAPCA determination was based on a five-kilometer radius, the Applicant’s analysis, which was submitted to OAPCA, appears to have

considered terrain as far away as 13 kilometers. *Exhibit 1, Attachment t; Exhibit 10 (November 19, 2001 Letter); Exhibit 17; Exhibit 18; Testimony of Ms. Danver.*

16. The hours of operation for the existing operation are 7:00 a.m. to 5:00 p.m. Monday through Friday.³ The proposed hours of operation for the expansion are 7:00 a.m. to 4:30 p.m. Monday through Friday during off-peak seasons, and 7:00 a.m. to 7:00 p.m. Monday through Saturday during peak seasons (June through November). Also, there would be temporary nighttime operations as needed to provide for public agency projects. *Exhibit 1, Staff Report.* The County Mineral Extraction Code (Chapter 17.20 TCC) limits the hours of operation for gravel mining and accessory uses (including asphalt production) within or adjacent to residential districts to 7:00 a.m. to 7:00 p.m. Monday through Saturday. Certain activities are exempt from this limitation, including hauling to jobs under contract with a public agency when public notice is provided.⁴ *TCC 17.20.115.*
17. Truck traffic currently accesses the site from a single driveway connecting to the west end of 88th Avenue Southwest. *Exhibit 2, page 2.* Heffron Transportation Inc. (Heffron) analyzed the current and projected traffic conditions in a traffic study dated July 2000. The study assumed that the Applicant would sell between 250,000 and 750,000 tons of product per year for the next 20 years, with 250,000 tons per year sold from 2001 through 2003; 500,000 tons per year sold from 2004 through 2006; 650,000 tons per year sold from 2007 through 2010; and 750,000 tons per year sold from 2011 through 2020. *Exhibit 2, page 2.* With the proposed expansion and production increase, truck traffic would continue to access the site from 88th Avenue Southwest. *Exhibit 2, page 2.*
18. The majority of the traffic increase associated with the expansion would be truck traffic; only six additional employees are anticipated once the pit expands. *Exhibit 2, pages 2 and 5.* The traffic study assumed hours of operation of 7:00 A.M. to 4:30 P.M. Monday through Friday during the December through May off-peak season, and 7:00 A.M. to 7:00 PM Monday through Saturday during the June through November peak season. The employee hours would be similar to the hours of operation, with employees typically working 7:00 A.M. to 5:00 P.M. during the off-peak season and 7:00 A.M. to 7:30 P.M. during the peak season. *Exhibit 2, page 2.*

³ The Applicant's noise study reports that crushing plant operations currently begin at 6:30 a.m. *Exhibit 15, Appendix E.* Several residents commented that truck traffic has been heard before 5:00 a.m. and after 8:00 p.m. *Exhibit 8; Testimony of Ms. Jefferson; Testimony of Mr. Sand.* It is unclear whether any of the early morning or evening hauling was authorized by TCC 17.20.115.

⁴ Condition No. 3 of the MDNS issued for the proposal (*Exhibit 1, Attachment h*) requires the Applicant to limit gravel crushing to the hours of 7:00 a.m. to 10:00 p.m., in accordance with the recommendation of the Applicant's sound engineer. In addition, Condition No. 5 of the MDNS requires that nighttime asphalt production comply with applicable noise standards "if night time production is approved." These conditions should not be read as allowing the Applicant to exceed the operating limits set forth in the Mineral Extraction Code. TCC 17.20.115 specifies only three activities that are exempt from the 7:00 a.m. to 7:00 p.m. limit: 1) excavation and loading necessitated by flood emergencies; the early morning processing of concrete necessary to provide beneficial strength; and 3) hauling to jobs under contract with a public agency. It appears that neither crushing nor asphalt production would be allowed after 7:00 p.m. The Applicant is required to comply with the hours of operation set forth in the ordinance.

19. For the opening year (assumed sale of 500,000 tons of product for a conservative analysis), the proposal is expected to generate an average of 198 trips per day (considering both peak and off-peak seasons) and 298 trips per day during the peak season. These figures include traffic generated by aggregate trucks, concrete trucks, asphalt trucks, delivery trucks, and employee trips. The highest number of trips would occur during the A.M. peak hour, with 19 A.M. peak hour trips during the off-peak season (17 trucks and two passenger vehicles) and 29 A.M. peak hour trips during the peak season (27 trucks and two passenger vehicles). The amount of traffic attributable to the heavy trucks only (aggregate, concrete and asphalt trucks) during the peak season would be 260 trips per day, including 27 A.M. peak hour trips and 4 P.M. peak hour trips. *Exhibit 2; Testimony of Ms. Van Dyke.*
20. For the maximum production year (sale of 750,000 tons of product assumed), the proposal is expected to generate an average of 276 trips per day (considering both peak and off-peak seasons), including 27 A.M. peak hour trips, and 430 trips per day during the peak season, including 44 A.M. peak hour trips. The amount of traffic attributable to the heavy trucks only during the peak season would be 392 trips per day, including 42 A.M. peak hour trips. *Exhibit 2; Testimony of Ms. Van Dyke.*
21. Most of the product would be transported from the facility via heavy haulers (dump trucks with trailers, used to haul aggregate and asphalt) or concrete trucks. The maximum axle load of the trucks would be less than or equal to the maximum load limits set by WSDOT. *Exhibit 2, page 5.*
22. Heffron performed a Level of Service (LOS) analysis of the intersection of 88th Avenue Southwest and Littlerock Road Southwest for the years 2001 and 2020.⁵ The analysis was based on traffic generated by all three uses of the site and included all trucks accessing the site, not just the trucks operated by the Applicant. The use of single and double truck combinations was assumed. *Exhibit 2; Testimony of Ms. Van Dyke.* As described by Heffron, LOS is “a qualitative measure used to characterize traffic operating conditions.” LOS may range from “A” through “F”, with LOS A representing “good traffic operations with little or no delay to motorists” and LOS F representing “poor traffic operations with long delays.” *Exhibit 2, pages 17-18.* As of the 2000 date of the study, the northbound left turn movement of the intersection operated at LOS A during the A.M. peak hour and the eastbound movement (including vehicles turning left and right from 88th Avenue Southwest onto Littlerock Road Southwest) operated at LOS B. The study anticipated for the year 2001 that the LOS for both turning movements during the A.M. peak hour would remain the same, with or without the expanded gravel mining operations, even during peak production months. The study anticipated that for the year 2020, the northbound left turn movement would continue to operate at LOS A during the A.M. peak hour, with or without the expanded gravel mining operations, but the LOS of the

⁵ The study assumed that the expanded pit would be operational in 2001.

- eastbound movement would drop to LOS C. The drop to LOS C is expected to occur regardless of the expanded mining operation. During the PM peak hour, the LOS for neither turning movement would drop as a result of the expanded mining operations, either in 2001 or 2020. *Exhibit 2, page 18.*
23. Much public comment related to the truck traffic on 88th Avenue Southwest was received. In particular, it was noted that the road is of insufficient width to allow two trucks to pass and accommodate pedestrian traffic. There was testimony that the width of the trucks sometimes causes them to drive on or over the centerline of the road. There was also testimony that the trucks require more than one lane to turn corners. There are no sidewalks or shoulders on 88th Avenue Southwest; the roadside ditch is immediately adjacent to the roadway with no walking area. *Exhibit 1, Attachment u; Exhibit 8-17; Exhibit 8-18; Exhibit 8-24; Exhibit 8-25; Exhibit 8-56; Testimony of Ms. Olson; Testimony of Mr. Sand.*
24. The accident history of the intersection of 88th Avenue Southwest and Littlerock Road Southwest and the portion of 88th Avenue Southwest between the subject property and Littlerock Road was submitted as part of the Heffron Traffic study. Three accidents were recorded between January 1, 1993 and December 31, 1999; however, the quarry was dormant for the last five years. The three accidents, which occurred in 1993, 1994, and 1995, respectively, were not truck or pedestrian related. *Exhibit 2, page 17; Testimony of Ms. Van Dyke.*
25. Concern was also raised that the heavy truck traffic would damage 88th Avenue Southwest. *Testimony of Mr. Long; Testimony of Ms. Jefferson.* Although there was public comment that the road contains some cracks, the County has determined that the road is in “acceptable condition.” An existing Haul Road Agreement requires the Applicant to repair the roadway if damaged by Quality Rock operations. The Agreement would be updated prior to expansion. *Exhibit 1, Attachments k and l; Testimony of Ms. Jefferson.*
26. The Applicant performed a sound analysis in which the existing sound levels were compared with expected sound levels resulting from the expanded mining operations. Sound was measured at three locations in April of 2000. The first location was at the eastern property line, 1,300 feet south of 88th Avenue Southwest and 100 feet west of an existing residence. The second location was at the southwest corner of a residential property located northeast of the site on 88th Avenue Southwest. The monitor was approximately 300 feet southwest of the residence. The third location was 125 feet south of the centerline of 88th Avenue Southwest and 600 feet east of the site access. During the test, crushing and screening were taking place in the southern portion of the existing mine area. The working face shielded these activities. Earth-moving activities involving front-end loaders, an excavator, a bulldozer and a dump truck were taking place in the east and northeast portions of the site. In addition, a temporary road construction project was taking place near the east property line. *Exhibit 15, Appendix E.*
27. Thurston County ordinances limit the daytime (7 a.m. to 10 p.m.) noise level to 55 dBA and the nighttime (10 p.m. to 7 a.m.) noise level to 45 dBA. However, the

noise levels may exceed these limits for brief periods of time. The noise may exceed the limits by 5 dBA for no more than 15 minutes per hour, by 10 dBA for no more than 5 minutes per hour, and by 15 dBA for no more than 1.5 minutes per hour. Thus, the maximum hourly noise level is 70 dBA during daytime hours and 60 dBA during the nighttime hours for up 1.5 minutes. The increase in dBA is not directly proportional to the judged loudness of the noise. Although an increase of 5 dBA is considered to be a moderate increase in judged loudness, an increase of 10 dBA represents a doubling of the judged loudness. An increase of 20 dBA would be judged to be four times as loud. The Thurston County noise limits do not apply to the sound of trucks operating on public roads or to back-up warning beepers. *Exhibit 15, Appendix E; Testimony of Mr. Bruck.*

28. The existing sound levels at the three locations comply with Thurston County daytime and nighttime standards, except during the 6:00 a.m. hour, when existing crushing plant operations caused the sound levels to exceed the nighttime 45 dBA/60 dBA standards. The crushing plant operations currently start at 6:30 a.m. The Applicant proposes to change the crushing plant hours to begin at 7:00 a.m. *Exhibit 15, Appendix E.*
29. The sound levels that would be detected at the three identified locations would change over time according to the phase of development. During the first phase of expansion, crushing equipment would be placed in the northwest portion of the site, but it would be moved south during subsequent phases. The equipment would be operated behind a working face to the south and east. Noise mitigation measures would include a 20-foot berm along the east boundary from the first phase and a 20-foot berm along the south boundary during later phases. Stockpiles near the northeast corner of the site would provide additional protection, but the amount of the protection would vary. Additional noise mitigation would be required if mining operations were extended into nighttime hours. The Applicant proposes raising the height of the eastern berm from 20 feet to 30 feet above the site elevation in the event that nighttime activities commence. *Exhibit 15, Appendix E.*
30. Assuming continuous operation of all equipment, except haul trucks on-site, which were evaluated according to the number of trips per hour (23-36) and use of the noise mitigation measures, the sound at the receiving locations during all three phases of operation would not exceed Thurston County daytime noise limits. At location 1, the sound level would vary between 45 and 51 dBA, at location 2, between 43 and 54 dBA, and at location 3, between 40 and 50 dBA. As a point of reference, 40 dBA corresponds to the sound of a living room, 50 dBA corresponds to the sound of an office or classroom, and 60 dBA corresponds to normal conversation, measured at three feet. *Exhibit 15, Appendix E.*
31. The current noise level of traffic, measured approximately 125 feet south of the centerline of 88th Avenue Southwest and 600 feet east of the site access, is 50 dBA. However, this measurement was taken on an off-peak day. On a peak day, assuming the maximum extraction allowed by the existing permit, the predicted noise level is 56 dBA. With the proposed expansion, the noise level of traffic in

the year 2020 is expected to be 57 dBA during an average day, and 60 dBA during a peak day. The maximum dBA permitted by the Federal Highway Administration for residential receivers is 67 dBA. *Exhibit 15, Appendix E; Testimony of Mr. Bruck.*

32. There is a Class II wetland crossing the northeast corner of the site. Class II wetlands are defined as follows (TCC 17.15.920(B)):

“Class II wetlands” occur more commonly than Class I wetlands. These wetlands are those that: (1) provide habitat for very sensitive or important wildlife or plants, (2) are either difficult to replace, or (3) provide very high functions and values, particularly for wildlife habitat.

Class II wetlands satisfy no Class I criteria and are:

1. Those that have a documented occupancy in the wetland of a federal or state listed sensitive plant, animal, or fish species; or
2. Those that contain priority species or habitats recognized by state agencies; or
3. Wetlands with significant functions which may not be adequately replicated through creation or restoration; or
4. Wetlands with significant habitat value of twenty-two or more points from the rating system.

33. The wetland in the northeast portion of the site carries the Class II designation because the habitat value exceeds 22 points from the Washington State Wetland Rating System and does not satisfy the Class I criteria. TCC 17.15.920 describes Class I wetlands as follows:

“Class I wetlands” can be described as the cream of the crop. Generally, these wetlands are not common and would make up a small percentage of the wetlands in the state. These are wetlands that (1) provide a life support function for threatened or endangered species that have been documented, and the wetland is on file in databases maintained by state agencies, (2) represents a high quality example of a rare wetland type, (3) are rare habitat type within a given region, or (4) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime. Class I wetlands are:

1. Those that have a documented occurrence in the wetland of a federal or state listed endangered, threatened plant, animal, or fish species; or
2. High quality native wetland communities which qualify for inclusion in the Natural Heritage Information System; or
3. Documented as regionally significant waterfowl or shorebird concentration areas; or

4. Wetlands with irreplaceable ecological attributes which are impossible to replace in a human lifetime, such as bogs.
34. When classifying the wetland, the Applicant's consultant, Ecological Land Services (ELS), followed the Washington State Department of Ecology Wetland Rating System (the Category I wetland in the Washington Rating System corresponds to Thurston County's Class I wetland). ELS evaluated the wetland using the Department of Ecology (DOE) forms. These forms provide a series of questions that establish a particular rating. Based on the wetland rating form, and using a conservative approach (more likely to find a higher wetland classification), ELS could not bring the wetland to a Class I rating. *Testimony of Mr. Garrison*. High intensity land uses, including commercial and industrial land uses, must maintain a 200-foot buffer from Class II wetlands. *TCC 17.15, Table 10*.
35. Although there are existing rock stockpiles and a topsoil berm within the required 200-foot buffer, none of the gravel mining expansion would occur within the buffer. Approximately three acres of the 200-foot wetland buffer are disturbed. The Applicant proposes wetland buffer averaging to increase the wetland buffer by three acres south and east of the wetland, and wetland buffer enhancement for a portion of the wetland buffer located between the wetland edge and edge of the expansion. The topsoil berm would be hydro seeded to prevent erosion, and removed after completion of mining. The berm footprint would then be replanted. The wetland buffer would be fenced. *Exhibit 16; Testimony of Mr. Garrison*.
36. Within the Class II wetland is a Type 3 stream, Ashley Creek. The stream carries the Type 3 designation because it contains Coho salmon (lower stream designations are for non-fish bearing streams). Coho salmon are not listed as state or federal endangered or threatened species. Pursuant to TCC 17.15.935, Type 3 streams are subject to 100-foot buffers.⁶ *Testimony of Ms. Wilson; Exhibit 28; Exhibit 31; Exhibit 30, Attachments 38 and 39*.
37. Ashley Creek originates from a spring east of the site, crosses the northeast corner of the property, and flows approximately one-half mile before entering the Black River wetland system. The point at which the stream discharges into the Black River wetland is 25 feet lower in elevation than the elevation of the stream where it leaves the site (160 feet). The portion of the stream channel crossing the property was excavated at some time in the past. *Exhibit 34, page 1*.
38. For approximately 1,000 feet downstream of the site, the stream is covered by a nearly unbroken canopy of vegetation, dominated by coniferous and hardwood forest species. The substrate consists of gravels and cobbles, except for small deposits of sand where pooling has occurred. The stream drops in elevation as it

⁶ Besides Coho salmon, Coastal Cutthroat are known to use the Ashley Creek/Black River system. The Coastal Cutthroat is not a state or federal listed species. *Exhibit 30, Attachment 21; Exhibit 62*.

- approaches the Black River wetland and increases in velocity. *Exhibit 34, pages 4-5*. On-site, the stream narrows and deepens for the first 300 feet upstream of the northeast corner of the property. Farther upstream, the trees were cleared for a buried gas line right-of-way, but there is grass cover along the banks. The substrate consists of gravels and cobbles. Within the wetland, the channel is shaded with a canopy of deciduous trees. There is a dense cover of reed canary grass along the banks. Within the channel there is large woody debris and encroaching grass. *Exhibit 34, page 5*.
39. The wetland classification was an issue of dispute due to the possible presence of the Oregon Spotted Frog in Ashley Creek. Because the Oregon Spotted Frog is state-listed as an endangered species (WAC 232-12-014), the presence of the frog would elevate the wetland to a Class I rating and a 300-foot buffer and Habitat Management Plan would be required. *Testimony of Ms. Wilson; Testimony of Mr. Garrison; Exhibit 31*.
40. Department of Fish and Wildlife studies published in 1997 and 2000 indicate that there are only three regions in Washington where the Oregon Spotted Frog is known to exist. One of these regions, Dempsey Creek, is in Thurston County. Dempsey Creek is west of site, across the Black River drainage system. In addition, the Oregon Spotted Frog has been observed within the Black River Refuge. *Exhibit 1, Attachment u-15; Exhibit 34, page 2; Testimony of Mr. Garrison; Testimony of Mr. Davis*.
41. There is no documentation of the Oregon spotted frog in Ashley Creek, nor is Ashley Creek listed in the Natural Heritage Information System as a high-quality wetland. Wildlife studies prepared by the Applicant's consultants, Biota Pacific Environmental Services, Inc. and ELS, concluded that there is little chance that the Oregon Spotted Frog inhabits the site. *Exhibit 15, Appendix C; Exhibit 34; Exhibit 51*. ELS's conclusion regarding habitat was based on the suitability of the site for active season habitat⁷ according to several factors including the stream current; the stream channel substrate (gravel and cobble rather than mud); the incised stream channel; the temporary and seasonal fluctuations in the water levels of the stream and wetland; and the proportion of open water to vegetation (see Exhibit 34 for a detailed review of the literature concerning preferred Oregon Spotted Frog habitat). *Exhibit 34, pages 5-6; Testimony of Mr. Hayes (regarding limitations of ELS report)*. The ELS review of the habitat was based on Fish & Wildlife reports but did not include consulting directly with Fish & Wildlife staff. ELS did not perform a wildlife survey (identifying the presence of wildlife) because of the winter season. *Testimony of Mr. Garrison*.
42. Credible testimony was provided from Mark Hayes, a research scientist with ten years of experience studying the Oregon Spotted Frog, that the ELS study failed to consider the suitability of the site for overwintering habitat. The overwintering

⁷ Habitat required by the Oregon Spotted Frog falls into three compartments: active season (March to October), breeding (late February to early March) and overwintering (November to late February). *Testimony of Mr. Hayes; Exhibit 57*.
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period is from approximately November to late February. The Oregon Spotted Frogs' requirements for overwintering habitat are different from active season habitat, and the distance the frogs travel between habitats may range from 200 to 1,000 meters. Thus, the site's unsuitability for active season habitat does not necessarily preclude its use for overwintering habitat. Some characteristics of Ashley Creek, such as the incised stream channel, support overwintering habitat. *Exhibit 57.*

43. Oregon Spotted Frogs are extremely difficult to locate during any season, and it is unclear whether further research would yield conclusive results in the near future. Mr. Hayes submitted that Oregon Spotted Frogs are "extraordinarily cryptic" even when surface active (three years elapsed between finding the first frog at Dempsey Creek and finding the larger population); that "the species is difficult to detect even when an individual's location can be pinpointed using radio-tracking;" that recognition of the species during between-season movements "can easily go entirely unnoticed without special directed trapping efforts;" and that "frogs are not surface visible" during overwintering. *Exhibit 57.*
44. Groundwater beneath the site flows from east to west, away from Ashley Creek and neighboring wells but toward the Black River. Storm drainage from the site would be infiltrated more than 1,200 feet east of the Black River after treatment in a biofiltration swale. The proposed mining activities are not expected to affect the quality of upgradient wells. There are no wells downgradient of the site; groundwater leaving the site follows the Black River to the south. Because groundwater west of the Black River flows in a west to east direction, wells west of the Black River would not be impacted by the proposal. *Exhibit 25, Figure 11; Exhibit 32, January 7, 2002 SubTerra Letter; Exhibit 33; Testimony of Mr. Bennett; Testimony of Ms. Romero.*
45. The DOE has listed the Black River as water quality impaired under Section 303(d) of the Clean Water Act, and has established Total Maximum Daily Loads (TMDLs) for the river that were approved by the U.S. Environmental Protection Agency. The water quality impairment was caused in part by low stream flows. Concern was raised that the proposal would further reduce water flows and thus exacerbate the water quality problems, particularly during the dryer summer months when production would be at its peak. Suggestion was made that any groundwater monitoring plan explicitly address impacts on Black River flows. *Exhibit 5; Exhibit 12; Exhibit 8-15; Testimony of Mr. Sand.*
46. The effects of gravel mining on groundwater depend on the specific activities proposed. The risk of groundwater contamination caused by excavating above the water table is relatively low. The risk increases for excavation within an aquifer, but in Thurston County the additional risk is small and is minimized by use of best management practices. Concrete batch plants cause the most significant risks to groundwater quality, as well as petroleum leaks and spills caused by equipment fueling, maintenance and washing. The process waters from concrete batch plants have high pH levels and can contain cement additives. Asphalt plants present a lesser risk than concrete plants. The risks to groundwater quality associated with

- asphalt plants include stormwater runoff, vehicle fueling and fuel storage. Although spills of asphalt cannot penetrate into the ground, spills of fuels needed to heat the asphalt and lubricate the equipment can contaminate stormwater discharges. All of the activities associated with gravel mining require regulatory oversight to ensure protection of groundwater quality. *Exhibit 59.*
47. The proposed mining activity below the water table would result in the creation of a 75-acre lake. The effect of the lake would be that the groundwater level upgradient of the lake would be lowered slightly and the groundwater level downgradient of the lake would be raised slightly at the lake boundaries. The County hydrologist, Robert Mead, anticipates that the drawdown of the aquifer would be less than one inch at the property line. *Exhibit 25, Page 9 and Figures 8, 11, and 14; Exhibit 59; Testimony of Mr. Bennett; Testimony of Mr. Mead.* Although the creation of the lake would result in the loss of approximately 9.5 million gallons of water per year through evaporation, this loss would be partially offset by increased storage capacity resulting from the lake. No water right is required for the evaporative loss of water. *Exhibit 25, page 10; Exhibit 32, January 7, 2002 SubTerra Letter; Exhibit 33; Exhibit 59 (for general information on evaporative losses and increased storage capacity).*
48. A primary issue raised at the hearing was the hydrologic connection between Ashley Creek and the adjoining wetland and the aquifer that would be impacted by the mining activities. According to the U.S. Geological Survey (USGS) mapping of the area and inferences made by data collected from wells ranging from approximately 1,000 to 3,000 feet from Ashley Creek, the Creek is perched, underlain by an approximate 30-foot layer of Vashon till (Qvt) separating it from the Vashon Advance Outwash (Qva) aquifer. The proposed expansion would occur within the Qva. The presence of Vashon till is significant because it has a low permeability, even with interbedded sand and gravel layers. A continuous layer of till would mean that impacts to the Qva aquifer would not significantly affect Ashley Creek or the adjoining wetland. Although no borings were made on-site in the wetland area, thus precluding a definitive determination as to the continuity of the till, some evidence suggests that the inferences are accurate, such as the 15-foot elevation difference between the wetland and the existing infiltration pond, which is hydrologically connected to the water table. Also, previous excavation below the elevation of the wetland did not produce water. The proposed expansion would not extend any farther east than the previously excavated area. *Exhibit 25; Exhibit 33; Exhibit 61; Testimony of Mr. Mead.*
49. As noted above (Finding of Fact No. 47), Mr. Mead anticipates that, based on computer modeling using the Theis Aquifer Analysis Program, version 3.2 (1992), the drawdown of the aquifer caused by the mining activity would not exceed one inch. The one-inch drawdown was calculated using the transmissivity rates contained in the USGS report entitled "Conceptual Model and Numerical Simulations of the Groundwater Flow System in Thurston County, Washington." Although the USGS report provided a 100-foot per day transmissivity rate for the area, Mr. Mead used a rate of 120 feet per day in his modeling to account for the courser materials typically found in mining sites. Because the Theis program

- requires that transmissivity be expressed in gallons per day per square foot rather than feet per day, Mr. Mead multiplied the feet per day rate by 7.48 to achieve the correct conversion. Thus, a figure of 898 was inputted into the Theis program. This figure yielded a drawdown of less than one inch. *Testimony of Mr. Mead; Exhibit 60.*
50. After performing a brief review of the Theis program and Mr. Mead's computer modeling, the Audubon Society's consultant, Nadine Romero, agreed that the one-inch result was consistent with the inputs Mr. Mead used, but questioned the appropriateness of using inputs that were not based on a site-specific study. The consultant "played around" with the inputs and came up with a drawdown of two feet for a well 1,000 feet from the site, based on a transmissivity rate of 100 gallons per day per square foot. *Testimony of Ms. Romero.* It was not clear from Ms. Romero's testimony why the 100 gallons per day per square foot rate was used; she did not comment on the reasonableness of using that rate. *Testimony of Ms. Romero.* In response to Ms. Romero's testimony, Mr. Mead suggested that Ms. Romero was attempting to use the USGS 100 feet per day transmissivity rate, but failed to make the necessary conversion to gallons per day per square foot before inputting the number into the computer. This theory is supported by testimony of Ms. Romero that she did not understand the 898 gallons per day per square foot number used by Mr. Mead. *Testimony of Mr. Mead; Testimony of Ms. Romero.*
51. Concern was also raised that there would be a loss of hydraulic head for the upgradient wells east of the site. Mr. Mead submitted that this change would be very minor. The wells east of the site are not artesian wells because they have water levels that range from six to 33 feet below the ground surface. For a well to be artesian, the groundwater pressure must be greater than the elevation of the ground surface. Mr. Mead submitted that none of the wells have water levels that are capable of creating an artesian situation. *Exhibit 33; Testimony of Mr. Mead.*
52. The Applicant submitted a Storm Water Drainage Plan that was preliminarily approved by the County Roads & Transportation Services Department as meeting the intent of the Drainage Design and Erosion Control Manual. All storm drainage would be infiltrated on-site. For the concrete batch plant, runoff from the paved truck rinse off area would flow across a concrete pad toward a series of sedimentation weirs and into secondary sediment settling basins. From the settling basins, the water would flow to a treatment and recycling area where the water would be recycled back to the batch plant. Excess water would be pH neutralized and directed to a lined overflow detention basin. The basin would be sized for the 25 year, 24 hour storm event per DNR requirements. An emergency overflow ditch would convey the water from the basin to a grass-lined swale for treatment prior to discharge into an infiltration pond. For the asphalt plant, runoff would be contained within a concrete pad with a perimeter curb. The concrete pad would be sloped to direct runoff into the grass-lined swale for treatment prior to discharge into the infiltration pond. The location of the infiltration pond is more than 1,200 feet from the Black River. The grass-lined swale would be 280 feet long, eight feet wide at the bottom and serpentine-shaped. Due to the soil

type, the swale would be lined with a minimum six-inch thickness of organic sandy loam.⁸ *Exhibit 1, Attachment n; Exhibit 21; Exhibit 32, January 7, 2002 SubTerra Letter; Testimony of Mr. Bennett.*

53. In addition to the requirements of the Thurston County Drainage Design and Erosion Control Manual, stormwater discharge from the site is governed by the U.S. Environmental Protection Agency's (EPA's) National Pollutant Discharge Elimination System (NPDES) permit regulations. These regulations are implemented, and enforced, by the Washington State Department of Ecology.⁹ *Drainage Design and Erosion Control Manual, Section 2.1.4; Exhibit 58.*
54. Spills of asphalt from the mixing plant do not present a significant risk to groundwater because asphalt solidifies quickly. The oil used in the asphalt plant would be shipped to the site in solid form and would thus not present a spill risk. Equipment fueling would occur on-site at a fueling station meeting the requirements of the Thurston County Fire Marshal's Office. The aboveground fuel tanks would be required to satisfy Fire Marshal and DOE standards for leak prevention and secondary containment. The County submitted that the Applicant has an adequate spill prevention and response plan of file with the Moderate Risk Waste Section of the Public Health and Social Services Department. *Exhibit 1, Attachment o.* Although the County Public Health and Social Services Department submitted in a memo dated October 31, 2001, that "the Ground Water section of this department has determined that the existing operations and proposed expansion does pose a significant risk to ground and surface water resources," it identified several conditions to address this issue, including the installation of two additional ground water monitoring wells, to be monitored quarterly. *Exhibit 1, Attachment o.* Compliance with these conditions is recommended by the County as conditions of SUP approval and included in the MDNS issued for the proposal.¹⁰ *Exhibit 1, page 13; Exhibit 1, Attachment h.*
55. Scientific literature submitted by the Black Hills Audubon Society on storm drainage treatment facilities (*see Exhibit 40*) indicates that the performance of such facilities is not consistent. For example, the reduction of Total Suspended Solids (TSS) may range from 20 to 98 percent in wet detention ponds. *Exhibit 40, Article: Performance of Urban Stormwater Best Management Practices.* Factors such as the size of the facility and the detention time impact the amount of pollution removed. *Exhibit 40, Article: Stormwater Pollutant Removal by Two Wet Ponds in Bellevue, Washington; see also Exhibit 5* ("maximum residence

⁸ The swale specifications appear to track the requirements set forth in section 7.4.1 of the Drainage Design and Erosion Control Manual. *Exhibit 21.*

⁹ According to its letter dated January 18, 2002, the DOE performed a site inspection in December of 2001 and found several aspects of the current storm drainage system to be out of compliance with NPDES requirements. This letter did not represent a formal enforcement action and it is unclear whether a formal enforcement action has been or will be initiated. The letter set forth a schedule for correcting deficiencies and indicated that there would be further DOE inspection of the site. *Exhibit 58.*

¹⁰ The conditions contained in the MDNS appear to be much more stringent than those identified in the Health Department memo. For example, while the Health Department memo recommends quarterly well monitoring for one year, the MDNS requires quarterly monitoring for two years, plus semi-annual monitoring after the initial two-year period. *Exhibit 1, Attachments h and o.*

time in bioswales and on-site treatment systems would help to reduce contaminant effects, however, this will be very limited”). In addition, the age of the facility is factor, as storm drainage facilities may provide reduced contaminant removal and need increased maintenance as they age. *Exhibit 40, Article: Stormwater Management Infiltration Practices in Maryland: A Second Survey*. Based on the literature submitted, the Black Hills Audubon Society argued that because there is uncertainty with respect to the effectiveness of storm drainage facilities, the Hearing Examiner has an inadequate record from which to assess the effect of the Applicant’s storm drainage facilities on water quality. *Post-Hearing Brief of Black Hills Audubon Society*.

56. There is an existing ridge in the northwest corner of the site. Although there is a notch in the ridge that *might* allow excess storm water to flow from the site into the Black River during flood events (this issue is being reviewed by DNR), the final site configuration would preclude a surface water connection between the new lake and the Black River and its associated wetlands. In the northwest corner of the site, the top of the pit slope would be 25 feet above the water table and lake level. A 300-foot buffer between the edge of the mine and the off-site wetland would be maintained. *Exhibit 32, January 7, 2002 SubTerra Letter and January 7, 2002 ELS Letter; Testimony of Ms. Serdar; Testimony of Ms. Takekawa*.
57. A concern raised by numerous residents was the possibility that contaminated materials are buried on-site, specifically materials from the Port of Olympia and the Cascade Pole superfund site. *Exhibit 1, Attachments u-4 and u-5; Exhibit 8-16; Exhibit 52; Testimony of Mr. Dierker*. The County submitted that solid waste from the Port of Olympia was transported to the site between 1982 and 1990 and buried in an excavated pit. The material was from the log storage, handling and processing area at the Port of Olympia, not the Cascade Pole site. The County did not consider any of the materials hazardous or dangerous waste. Pursuant to WAC 173-304, groundwater monitoring was required for the landfill activity, and monitoring wells were constructed. The wells were last tested in January of 2000. The tests revealed nitrate levels far below County standards, and low levels of tannins. *Exhibit 11*. Although evidence was submitted that there have been notices of violation issued in the past with respect to the landfill activity, these issues appear to have been resolved. *Exhibit 54*. Moreover, such issues are outside of the Hearing Examiner review of the SUP request.
58. Much public comment focused on the Applicant’s compliance history. Some compliance issues alleged include hours of operation that exceed code standards; violations of wetland requirements; drilling wells without a water right; and exceeding the 26-acre permit limit. *Exhibit 8 (see in particular 8-19; 8-46); Testimony of Mr. Packard*. The Black Hills Audubon Society requested that the project be subject to “regular and stringent compliance and environmental monitoring.” *Exhibit 30, Attachment 38*.
59. The current mining operation is subject to a Department of Natural Resources (DNR) Surface Mine Reclamation Permit (Permit No. 70-011988). The permit is for 26 acres, mined to a depth of 60 feet. The DNR has alleged several permit

- violations. Although the DNR permitting and enforcement process is separate from the local SUP process, and current compliance with DNR standards is not subject to Hearing Examiner review, the Black Hills Audubon Society and other interested parties questioned the Applicant's ability or willingness to comply with any SUP conditions. The Applicant has applied for a reclamation permit from the DNR for the proposed expansion. *Exhibit 12; Exhibit 20; Exhibit 39.*
60. Generally, numerous residents objected to the proposal and questioned its impacts on noise and air pollution, water quality and quantity for nearby wells and the Black River, health, property values, wildlife habitat, and traffic, both with respect to the proposed 88th Avenue Southwest access and any alternate access via Fairview Avenue. While some residents cited adverse noise, traffic, and dust impacts caused by current operations, others have not experienced such impacts. *Exhibit 1, Attachment u; Exhibit 4; Exhibit 6; Exhibit 10; Exhibit; Exhibit 8; Exhibit 30; Testimony of Ms. Atkinson; Testimony of Mr. Rhodes; Testimony of Mr. Simons; Testimony of Ms. Engels; Testimony of Mr. Rauser; Testimony of Ms. Jefferson; Testimony of Mr. Jenkins; Testimony of Mr. Sand; Testimony of Ms. Olson; Testimony of Ms. Tildt.*¹¹
61. Notice of the open record hearing was published in *The Olympian* on November 9, 2001, mailed to property owners within 2,600 feet of the site on November 6, 2001, and posted on-site on November 9, 2001. *Exhibit 1, Staff Report, page 5; Exhibit 1, Attachment a.*

CONCLUSIONS OF LAW

Jurisdiction

The Hearing Examiner is granted jurisdiction to hear and decide applications for Special Use Permits for gravel mining pursuant to TCC 20.06.010 and TCC 20.54.015.

Criteria

The Hearing Examiner may approve an application for a Special Use Permit only if the specific standards set forth in TCC 20.54.070 and the following general standards set forth in TCC 20.54.040 are satisfied:

1. Plans, Regulations, Laws. The proposed use at the specified location shall comply with the Thurston County Comprehensive Plan and all applicable federal, state, regional, and Thurston County laws or plans.
2. Underlying Zoning District. The proposed use shall comply with the general purposes and intent of the applicable zoning district regulations and subarea plans. Open space, lot, setback and bulk requirements shall be no less than that specified for the zoning district in which the proposed use is located unless specifically provided otherwise in this chapter.

¹¹ The list of names and exhibits is not exhaustive, but is representative of the comments received.

3. Location. No application for a special use shall be approved unless a specific finding is made that the proposed special use is appropriate in the location for which it is proposed. This finding shall be based on the following criteria:
 - a. Impact. The proposed use shall not result in substantial or undue adverse effects on adjacent property, neighborhood character, natural environment, traffic conditions, parking, public property or facilities, or other matters affecting the public health, safety and welfare. However, if the proposed use is a public facility or utility deemed to be of overriding public benefit, and if measures are taken and conditions imposed to mitigate adverse effects to the extent reasonably possible, the permit may be granted even though the adverse effects may occur.
 - b. Services. The use will be adequately served by and will not impose an undue burden on any of the improvements, facilities, utilities, or services existing or planned to serve the area.
4. Time Limits.
 - d. Time Limit and Re-Review. Where the approval authority is the hearing examiner, there may be a condition to provide time limits for the use. If it is determined after review that the special use no longer meets the conditions set by the hearing examiner at the time of the initial approval, the use may be terminated, or such standards added as will achieve compliance with the original hearing examiner conditions.

Conclusions Based on Findings

1. The Applicant requested approval of a SUP for expansion of the mining operation at 4741 – 885th Avenue Southwest, Thurston County, Washington. It is the intent of the Applicant to expand the existing gravel mine (LTD-3-85) on-site from 26 acres to 151 acres; to replace a previously approved batch plant (LTD-3-85, Amendment); to add an asphalt hot mixing plant; and to resume concrete and asphalt recycling. *Finding of Fact No. 1.*
2. An Applicant for a SUP is required to satisfy the general and specific use standards contained in TCC 20.54.040 and 20.54.070, respectively. One of the general criteria is that the use must comply with “all applicable federal, state, regional, and Thurston County laws or plans.” *TCC 20.54.040(1)*. However, pursuant to TCC 20.54.050, the Hearing Examiner “may impose such additional conditions, safeguards and restrictions upon the proposed use as it may deem necessary in the public interest.” Thus, the Hearing Examiner may increase identified standards to ensure that the use will not have substantial or undue adverse effects on adjacent property, neighborhood character, natural environment, traffic conditions or other matters set forth in TCC 20.54.040(3).
3. To be valid, conditions of SUP approval must:

1. not offend any provision of the zoning ordinance;
2. not require illegal conduct on the part of the permittee;
3. be in the public interest;
4. be reasonably calculated to achieve some legitimate objective of the zoning ordinance; and
5. not be unnecessarily burdensome or onerous to the landowner.

Woodinville Water District v. King County, 21 P.3d 309, 313 (2001).

4. Conditions of SUP approval must relate to zoning limitations on the use of the land and not to the detailed conduct of the Applicant's business. *Woodinville Water District*, 21 P.3d at 313. In *Woodinville Water District*, the court upheld a King County Conditional Use Permit (CUP) condition limiting the number of employees on site to the number analyzed in a traffic study. The condition did not violate the principle described above because it was designed to ensure that traffic impacts were adequately mitigated before additional expansion could occur. And, the employee limit was not absolute. Instead, it was the limit before additional CUP approval was needed. The conditions of the instant SUP are directly related to zoning limitations on the use of the land and ensure mitigation for impacts resulting from the proposed use of the site.
5. The proposed use would be in compliance with the Thurston County Comprehensive Plan.
 - a. The Comprehensive Plan designates a portion of the site as a Mineral Resource Land of Long-Term Commercial Significance. This designation is relevant because it establishes mineral extraction uses as a priority in an area. Some of the applicable Comprehensive Plan policies are to ensure that "the use of adjacent lands should not interfere with the continued use of the designated mining sites that are being operated in accordance with applicable best management practices" and to give designated lands "that are being operated in accordance with applicable best management practices and other laws and regulations increased protection from nuisance claims from landowners who have been notified of the presence of the long-term mineral extraction site." *Thurston County Comprehensive Plan, Natural Resource Lands, Goal 7, Policies 2 and 3*.
 - b. The Comprehensive Plan designation of Mineral Resource Land is not essential for mineral extraction to occur on the entire site. Although TCC 20.54.070(21)(f) states that "an application for designation as mineral resource lands of long-term commercial significance *may* accompany an application for a special use permit for mineral extraction", TCC 20.30B.010 makes clear that the Comprehensive Plan designation is not a

necessary prerequisite to SUP approval. That section, after setting forth the purpose of the designation, sets forth that “[n]othing in this chapter shall be construed as prohibiting mineral extraction on nondesignated sites.” Thus, an Applicant may seek designation for the extra protections it provides, but need not for SUP approval.

- c. Chapter Three of the Comprehensive Plan (Natural Resource Lands) contains policies applicable to Mineral Resource Lands of Long-Term Commercial Significance that may also be applicable to mineral extraction on non-designated sites. These include allowing mineral extraction industries to locate where prime natural resource deposits exist (Goal 7, Policy 1); restoring mineral extraction sites as the site is being mined (Policy 4); ensuring that extraction industries do not adversely impact adjacent or nearby land uses, public health or safety, or alter significant geologic features such as mima mounds (Policies 7 & 8); protecting areas where existing residential uses predominate against intrusion by mineral extraction operations (Policy 9); and ensuring that extraction activities do not negatively affect or endanger surface and ground water flows and quality (Policy 10).
- d. The proposal is consistent with the Natural Resource Lands policies. Restoration of the site would be pursuant to a DNR-approved reclamation plan. Compliance with the OAPCA Notice of Construction and state noise standards would minimize impacts to nearby residential land uses. Due to the geology of the area, the direction of groundwater flows, and proposed storm drainage improvements, the proposal is not expected to endanger ground and surface water flows or quality. However, quarterly groundwater monitoring would ensure that applicable water quality standards are met. *Findings of Fact Nos. 10, 11, 13, 15, 26-37, 44-49, 51-54, 56, and 59.*
- e. The proposal is consistent with the Land Use Chapter of the Comprehensive Plan (Chapter 2), which describes rural areas carrying the Residential – One Unit Per Five Acres designation as follows:

Primary land uses in the one unit per five acre areas are resource-oriented (farming, forestry, *mineral extraction*) and open space. Residential use may be limited due to physical land capability constraints.

Thurston County Comprehensive Plan, page 2-15. Findings of Fact Nos. 1-3.

- f. Chapter Nine of the Comprehensive Plan (Natural Environment) includes policies that are applicable to the proposal. These include protecting wildlife habitat for important species and protecting unique and rare habitats (Goal 1, Objective B, Policy 4); ensuring that land uses that produce air pollutants and odors comply with adopted air quality standards

for the region (Goal 1, Objective C, Policy 1); providing for the peace and quiet of residential neighborhoods through the use of screens, open space or other buffers and noise standards (Goal 1, Objective C, Policy 2); ensuring that land uses that produce noises comply with the Washington State Noise Control Act and Thurston County Laws (Goal 1, Objective C, Policy 3); ensuring that facilities that store, process or use hazardous materials use best management practices for the protection of ground and surface waters and be periodically monitored for compliance (Goal 1, Objective E, Policy 8); recognizing the hydrologic continuity between ground and surface water (Goal 2, Objective A, Policy 3); protecting groundwater aquifers, fish and wildlife habitat, and recreational functions of streams (Goal 2, Objective B, Policy 1); protecting streams from adverse impacts of activities occurring adjacent to their waters or within their watersheds by avoiding degradation of water quality (Goal 2, Objective C, Policy 1); and maintaining the quality and quantity of runoff entering wetlands and streams, ensuring that stormwater systems are adequately maintained, and preventing on and off-site erosion and sedimentation (Goal 2, Objective F, Policies 3, 4 & 6). Many of these requirements have been incorporated into the Special Use and Mineral Extraction Code standards.

- g. The proposal is consistent with the Natural Environment policies.
 - i. In applying the Natural Environment policies to the proposal, consideration must be given to the Mineral Resource Lands of Long-Term Commercial Significance designation. The designation is a determination that gravel mining is an appropriate use for the site, despite the significant environmental amenities contained within the Black River area. *Finding of Fact No. 3.*
 - ii. Due to the direction of groundwater flow in the area (east to west) and the low permeability of the Vashon till, neither the water quality or water quantity of Ashley Creek, the Class II wetland, or nearby wells should be significantly affected by stormwater runoff from the site or the creation of the 75-acre lake during the first three phases of operation as proposed by the Applicant. *Findings of Fact Nos. 24-54.* However, the impact to groundwater during the final three proposed phases of the operation is unclear. With no boring test results, *Finding of Fact No. 8*, there is no conclusive evidence of soil conditions including the sand and gravel layers under the wetland and the eastern boundary. As a result, there is no conclusive evidence on water quality and water drawdowns that would result from the final phases of the operation.-
 - iii. Insufficient evidence was provided that Ashley Creek provides habitat for endangered species and especially the Oregon Spotted Frog. There has been no documentation of the Oregon Spotted Frog in Ashley Creek, and a condition of approval requiring the

Applicant to continue searching for the frog would be unnecessarily burdensome because the frogs are extremely difficult to locate even with sophisticated equipment. Whatever current habitat is provided by Ashley Creek would be adequately protected with a 200-foot buffer, provided that erosion control measures are followed in accordance with DNR and DOE standards. The important habitat west of the site would be protected by the 300-foot buffer and the ridge in the northwest corner of the site. *Findings of Fact Nos. 32-43 and 56.*

- iv. The water quality of the Black River would be protected with the proposed storm drainage improvements. Although evidence was provided that there is some uncertainty with respect to the effectiveness of typical treatment facilities, the appropriate remedy is regular monitoring. The County has adopted the requirements of the Drainage Design and Erosion Control Manual, and only requires that the Applicant satisfy the Manual and any applicable water quality standards. The SUP hearing was not an appropriate forum to put the science of the Manual, or facilities mandated by the Manual, on trial. Because the Applicant proposes a storm drainage system that would comply with the Manual, any issue with respect to effectiveness should be resolved through the conditions requiring water quality monitoring. *Findings of Fact Nos. 52-56.*
 - v. With conditions established by OAPCA, the proposal would comply with adopted regional air quality standards. Although credible evidence was provided that even minute amounts of pollutant could adversely affect fish and other species, no evidence was provided regarding the amount of pollutants that would be ingested by those species. The Applicant has the burden of proof in a Special Use Permit request; however, the level of review contemplated by the Black Hills Audubon Society would be more appropriate in the context of an EIS. The MDNS issued for the proposal contains conditions that protect the environment, and it was not appealed. *Findings of Fact Nos. 10-14.*
 - vi. Noise from the facility would comply with county and state standards provided that noise attenuation measures are followed and the hours of operation are limited in accordance with ordinance standards. *Findings of Fact Nos. 26-31.*
6. With conditions, the proposed use would comply with applicable federal and state standards on air and water quality, noise, and reclamation. Environmental review was conducted pursuant to SEPA and an MDNS was issued. Although testimony was taken regarding the Applicant's compliance history, the existing permit requirements were not the subject of the SUP hearing. Sufficient evidence was provided to demonstrate that the proposal can comply with applicable standards.

It is the responsibility of the agencies with jurisdiction to enforce the standards if necessary. *Findings of Fact Nos. 3, 7, 10-13, 26-31, 45, 53, 54, 58, and 59.*

7. With conditions, the proposed use would comply with the requirements of the Mineral Extraction Code.
 - a. The Applicant has an approved spill prevention plan on file with the County. *Finding of Fact No. 54.*
 - b. Fuel storage would comply with Uniform Fire Code standards. At the concrete plant, trucks would be rinsed on a paved surface and the runoff would be recycled or treated prior to discharge into the infiltration pond. *Findings of Fact Nos. 46, 52, and 54.*
 - c. The storm drainage system would comply with the Drainage Design and Erosion Control Manual. *Finding of Fact No. 52.*
 - d. Although the mining activities are not expected to adversely affect the water quality of nearby wells, TCC 17.20.080 requires the Applicant to remedy any diminishment of water quality below state standards. *Finding of Fact No. 44.*
 - e. The Applicant would be required to maintain 88th Avenue Southwest pursuant to a Haul Road agreement. However, the narrow roadway may present a safety risk with the increase in truck traffic proposed. A condition is needed to ensure that the standards outlined in TCC 17.20.050(c) are satisfied. *Findings of Fact Nos. 23 and 25.*
 - f. Emissions from the facility would comply with state standards. The Applicant has received OAPCA preliminary construction approval. *Findings of Fact No. 13.*
 - g. Noise generated by the facility is expected to satisfy state and County standards. Pursuant to TCC 17.20.110, the noise levels must be monitored “at least quarterly after the initiation of the mining activity, during normal operating conditions and periods, and until or unless the health department determines that such monitoring is not necessary.” A condition is needed to set a schedule for noise monitoring that takes into consideration the peak production seasons and anticipated production increases over the next 20 years. On-site equipment would be muffled and equipped with ambient-sensitive back-up alarms pursuant to TCC 17.20.110(B). *Findings of Fact Nos. 17, 26-31.*
 - h. The hours of operation would comply with TCC 17.20.115. Allowing nighttime asphalt production would conflict with subsection (c) of the ordinance and would conflict with OAPCA conditions prohibiting “around-the-clock” asphalt production. *Findings of Fact Nos. 13 and 16.*

- i. Berms would be installed along the east and south sides of the mine, and fencing would be installed along the wetland buffer. *Findings of Fact Nos. 29 and 35.*
 - j. Reclamation of the site would be pursuant to a reclamation plan approved by DNR. *Finding of Fact No. 59.*
 - k. Pursuant to TCC 17.20.160, a condition is required to ensure that the Applicant submits to County inspection of the site prior to commencing expansion activities.
 - l. The MDNS issued for the proposal contains groundwater monitoring requirements. Condition No. 15 requires both water quality and water quantity monitoring. *Finding of Fact No. 54.*
 - m. The purposes of the Mineral Extraction Code would not be furthered by a setback reduction. The Black River Unit surrounds the property on three sides and includes the Hard Rock Mining Company site. A setback reduction would conflict with the USFW's conservation efforts. *Findings of Fact Nos. 6 and 9.*
 - n. Pursuant to the MDNS issued for the proposal, the berm along the eastern property line would be landscaped to prevent erosion. *Finding of Fact No. 35.*
 - o. Pursuant to TCC 17.20.280, noncompliance with the provisions of the mineral extraction code may result in civil penalties.
8. Mineral extraction is allowed in the RRR 1/5 zone upon approval of a SUP. With conditions, the proposal would comply with the use-specific standards set forth in TCC 20.54.070. Pursuant to TCC 20.54.070(21)(a), asphalt production is a permitted accessory use to mineral extraction. It appears that the submittal requirements contained in subsection (c) have been satisfied. As discussed in Conclusion No. 5, designated mineral land status is not required for SUP approval. The only remaining issue is the extent of permit review. TCC 20.54.070(21)(e) specifies that "any permit issued pursuant to this chapter shall be reviewed by the approval authority no less frequently than every five years from the date of the decision to approve the permit. The approval authority shall determine the frequency of the permit review. At the time of such review, the approval authority may impose additional conditions upon the operation if the approval authority determines it is necessary to do so to meet the standards of this chapter [TCC 20.54], as amended." In addition, TCC 20.54.040(4)(d) authorizes the Hearing Examiner to review SUPs for compliance with permit conditions.
9. Although the Applicant argued that an open record hearing before the Hearing Examiner at five-year intervals pursuant to TCC 20.54.070(21)(e) would violate RCW 36.70B, such a review would be consistent with RCW 36.70B. There

would be no conflict or overlap between the processes because it would be the same approval authority, and the review would be limited to previously identified standards and conditions. Due to the environmental issues that are at stake, however, review in less than five years is appropriate.

10. With conditions, the proposed use would be appropriate in the location for which it is proposed. The site is an existing gravel mine that has been designated, at least in part, as a Mineral Resource Land of Long-Term Commercial Significance. *Finding of Fact No. 3.*
 - a. Although the proposal would have impacts on adjacent property, neighborhood character, natural environment and traffic conditions, such impacts would not be “substantial” or “undue” according to the evidence that was submitted. The neighborhood character is already defined as including gravel mining operations, both on the Quality Rock site and the adjacent Hard Rock Mining Company site. Although the amount of traffic would increase, the increase would fall within acceptable LOS standards. The proposal would comply with state air quality standards, based on asphalt production that is nearly double the amount that is proposed. The noise generated by increased truck traffic would not exceed federal guidelines, and would represent only a moderate increase over existing conditions. *Findings of Fact Nos. 4, 6, 8, 10-60.*
 - b. The use would not impose an undue burden on facilities, utilities or services.

DECISION

Based upon the preceding Findings of Fact and Conclusions of Law, the request for approval of a Special Use Permit to expand an existing gravel mine, replace a concrete batch plant, construct a hot mix asphalt plant, and resume concrete and asphalt recycling, as depicted on project plans labeled Exhibit 1, Attachment d, is **GRANTED**. The approval is granted for the first three phases and is subject to the following conditions:

- A. The Applicant shall continue to comply with the conditions established through LTD-3-85 and LTD-3-85-Amendment (Exhibit 1, Attachments i and j).
- B. All requirements set forth in the Thurston County Environmental Health Department comment letters (Exhibit 1, Attachments o and p) and the Thurston County Roads and Transportation Services memoranda (Exhibit 1, Attachments l, m and n) shall be met prior to commencing mining activities within the expansion area.
- C. All requirements set forth in the October 4, 2001 Mitigated Determination of Nonsignificance (Exhibit 1, Attachment h) shall be met. None of the MDNS conditions shall be construed as authorizing activities that exceed the limits set forth in the Thurston County Mineral Extraction Code (TCC Chapter 17.20).

- D. The minimum setback from all property lines shall be 100 feet.
- E. The operation of all facilities on-site shall comply with the Thurston County Mineral Extraction Code (TCC Chapter 17.20).
- F. The hours of operation shall be limited to the Mineral Extraction Code standard of 7:00 a.m. to 7:00 p.m., Monday through Saturday. The exceptions set forth in TCC 17.20.115(C) shall apply.
- G. The access to the site shall comply with County and state road standards as specified in TCC 17.20.090. This ordinance may require road improvements to 88th Avenue Southwest. If alternate access is chosen to satisfy this requirement, the SUP proceeding shall be reopened for the limited purpose of considering impacts associated with the alternate access and to adjust conditions of approval accordingly.
- H. The speed limit for truck traffic on 88th Avenue Southwest shall be 25 miles per hour. The Applicant shall require that all of its truck drivers be instructed on the driving condition of the road and the speed limit.
- I. The Applicant shall file an updated Haul Road Agreement with the Thurston County Roads and Transportation Services Department to reflect the increased truck traffic.
- J. The Applicant shall comply with all conditions set forth in the OAPCA Order of Approval for Notice of Construction (01NOC116) and any other applicable OAPCA regulations.
- K. The Applicant shall comply with all local, state and federal permits and regulations.
- L. The Applicant shall obtain a solid waste handling permit prior to the recycling of asphalt and concrete.
- M. The Applicant shall submit a copy of the Washington State Department of Natural Resources approved reclamation plan to Thurston County Development Services prior to any mining activity within the expansion area.
- N. The floor of the excavation area shall be designed and maintained in such a manner that stormwater discharge will flow to the sedimentation pond.
- O. All turbid water and storm drainage shall be retained within the sedimentation pond as depicted on the site plan.
- P. Measured daytime noise levels shall not exceed the following levels, as established in WAC 173-60-040:

Adjacent to Hard Rock Mining Company property: 60 dBA

Adjacent to all other property lines and Burlington
Northern right-of-way: 55 dBA

Between 10:00 p.m. and 7:00 a.m., all measured noise levels shall be 10 dBA lower than the levels stated above. If noise monitoring reveals noise levels along any property line exceeded the limits set forth in WAC 173-60-040, the Applicant shall be required to mitigate with berms or other approved methods.

- Q. Noise levels shall be monitored at the property boundaries and at the easement boundary of the Burlington Northern right-of-way at least quarterly during normal operating conditions and during both daytime and nighttime hours. When and if the Health Department determines that quarterly monitoring is no longer necessary (TCC 17.20.110), the monitoring shall continue at least on a yearly basis, with the sound measurement taken during normal operating conditions during the peak season (June – November).
- R. A 20-foot high noise berm shall be installed in the eastern portion of the property. The noise berm shall extend to the south property line, be located outside the wetland buffers, and run parallel to the west side of the Burlington Northern Railroad easement that crosses the southeast corner of the property. The berm may be located within the 100-foot setback (TCC 17.20.230) and shall be landscaped to prevent erosion.
- S. All equipment used on the site shall be equipped with mufflers and properly maintained to reduce noise.
- T. All loaders and dozers shall be equipped with ambient-sensitive back-up alarms.
- U. The operation of facilities on the site shall be consistent with the site plan as approved by the Hearing Examiner (Exhibit 1, Attachment d).
- V. Groundwater monitoring shall be in accordance with the requirements of the October 4, 2001 Mitigated Determination of Nonsignificance (Exhibit 1, Attachment h).
- W. The Applicant shall submit to a County inspection to ensure compliance with Mineral Extraction Code requirements prior to commencing activities within the expansion area.
- X. The Special Use Permit for the first three phases shall be reviewed by the Hearing Examiner within three years of the effective date of the permit to determine whether the conditions of approval have been complied with and whether additional conditions are needed to satisfy the Mineral Extraction Code. Thereafter, the SUP shall be reviewed by the Hearing Examiner every five years.
- Y. The last three phases of the operation shall be subject to further review including detailed analysis of the impact of groundwater to the site, the aquifer and the

Black River. This information shall be presented at a public hearing at the appropriate time.

Decided this 5th day of April 2002.

James M. Driscoll
Hearing Examiner for Thurston County

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