CONDITIONAL USE PERMIT APPLICATION SKAMANIA QUARRY

APPLICANT:

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Project Location:

Sections 17, 18, 19 & 30 Township 2N, Range 6E, Willamette Meridian Skamania County, Washington

August 20, 2021

Skamania County Community Development Department Conditional Use Application

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Project: Storedahl-12-01

1.0 INTRODUCTION

On behalf of J.L. Storedahl and Sons, Inc. (Storedahl, or Applicant), NV5 has prepared this Conditional Use Permit (CUP) application for the proposed Skamania Quarry project, submitted to the Skamania County Community Development Department (County). The purpose of this project is to establish a surface mining operation for the extraction, processing, and production of aggregate resources. This application is intended to satisfy the project description and conditional use criteria as outlined on the County's application form. This CUP application includes the following figures and appendices:

- Figure 1 Vicinity Map
- Figure 2 Property Ownership Map
- Figure 3 Existing Topography Map
- Figure 4 Reclamation Sequence Map
- Figure 5 Final Topography Map
- Figure 6 Cross Sections
- Appendix A State Environmental Policy Act (SEPA) Environmental Checklist
- Appendix B Geotechnical Assessment prepared by NV5, dated August 17, 2021
- Appendix C Transportation Impact Study prepared by DKS, dated February 19, 2020
- Appendix D Sound Analysis prepared by BRC Acoustics & Audiovisual Design, dated September 9, 2020

2.0 SITE DESCRIPTION AND BACKGROUND

2.1 SITE LOCATION

The site is located in unincorporated Skamania County approximately 10.5 miles northeast of Washougal, Washington and 3.5 miles northeast of the community of Skamania in Sections 17, 18, 19 and 30 within Township 2 North, Range 6 East of the Willamette Meridian. The site is accessed off McCloskey Creek Road via Mabee Mines Road and State Highway 14. The site location is indicated on Figure 1. Tax lot numbers and ownership of the site and surrounding properties are indicated on Figure 2. The site is bordered by timberlands under private and public ownership around most of its perimeter, and commercial timberlands comprise much of the land use in the surrounding area. A part of the eastern boundary is also bordered by federal lands of the Columbia River Gorge National Scenic Area (CRGNSA), and additional CRGNSA lands are located further east and south of the site. Several rural residences occupy an area further southwest of the site. The Bonneville Power Administration (BPA) has an easement for their power-line alignment running approximately east to west that is adjacent to the southern boundary of the proposed project area. The subject property is currently zoned as West End Commercial Resource Lands 40 (WE-CRL40).

2.2 BACKGROUND AND SITE CONDITIONS

The site has been historically used as commercial timberlands with multiple timber rotations being harvested. A small bedrock quarry is located in the southern site and has been used to produce aggregate for timber road construction and access on the property by Weyerhaeuser Company (Weyerhaeuser). The majority of the site was most recently logged in phases from 2013 to 2016 and has been subsequently replanted. After consultation with Weyerhaeuser's

resource division, Storedahl completed a series of due-diligence subsurface explorations in 2016 and 2018. These explorations determined that a significant quantity of high-quality aggregate resource was present at the site. Pending state and County approval of the proposed mine project, Storedahl plans to lease the mineral rights of the property from Weyerhaeuser to operate a crushed aggregate quarry until the completion of the mining operations on the property. Thereafter, the mine site will be reclaimed back to forestry use.

3.0 MINING

Consideration of the site as a potential aggregate resource was initially based on the quality of rock observed in the timber pit, located at the southern end of the proposed mine area, as seen in the aerial photo in Figure 2. Since the due-diligence explorations undertaken in 2016 and 2018, NV5 has worked in concert with Weyerhaeuser and Storedahl to develop a mine plan for the site that minimizes environmental impacts associated with mining activity, demonstrates adherence to state and local ordinance, and maximizes the economic value of the site.

3.1 MINE DESIGN GOALS

Mining is considered to be a temporary activity by Washington State, insofar as the site must be returned to an approved subsequent use compatible with the surrounding area's land use or site zoning. Reclamation of the site to forestry use is the ultimate goal of the project, and all proposed activities on site have been designed to have minimal short- and long-term effects on the environmental health of the property and its vicinity. The proposed mine has been planned to follow applicable sections of Skamania County Code (SCC) Chapter 19, as well as requirements of the Washington Department of Natural Resources (DNR) and the Washington Department of Ecology (DOE).

3.2 MINE PLAN

Proposed site activities will include drilling, blasting, loading, hauling, crushing, screening, stockpiling, and commercial sales of crushed aggregate. The project will include a small operations and storage area, as well as the improvement and maintenance of an access road along the BPA easement to the southwest (see Figure 2). The proposed permit boundary for the site includes approximately 273.6 acres, of which approximately 180 acres will be disturbed by mineral extraction and other mining disturbance. Existing topography is shown on Figure 3, the mining and reclamation sequence map is shown on Figure 4, and the final topography map is shown on Figure 5. Mineral extraction will be divided into two segments: mine segment 1, at the north end of the site, with an approximate area of 140.4 acres, and mine segment 2, with an approximate area of 8.8 acres. Mining is anticipated to occur over the next 30 to 40 years and will involve the removal of approximately 24 million cubic yards of resource material, overburden and topsoil.

Prior to the start of mining activities, topsoil will be removed from the area of immediate operation; stockpiled in berms adjacent to the workings, in the central storage area, or intermittently on other portions of the site (see Figure 4); and promptly stabilized with vegetation and/or mulch. Mining of the bedrock will advance as an incised excavation into the project area from the top of the ridge downward, with benched slopes equivalent to a 2 horizontal to 1 vertical (2H:1V) slope gradient. Controlled blasting into relatively unweathered basalt bedrock

will be the primary means of rock extraction, and its frequency will be determined by market demand. Crushing and screening operations will be conducted at an operations area near the center of the site. The maximum depth of planned mining is approximately 240 feet below ground surface (BGS) to an elevation as low as 2,050 feet above mean sea level (MSL).

Proposed hours of operation are from 7 a.m. to 4:30 p.m. for commercial traffic. The site will likely have a staff between 5 to 10 employees depending on the season and market conditions. Employees may arrive approximately a half-hour before and stay for up to an hour after normal business hours to prepare for business and conduct closure and maintenance activities.

Proposed mining activities are planned to be at least 100 feet from mapped streams and 300 feet from mapped wetlands, as shown on Figures 4 and 5, corresponding to the maximum buffers described in SCC Section 19.05.040 and Section 19.03.040, respectively. As required by the DOE, Best Management Practices (BMPs) outlined in the Stormwater Management Manual for Western Washington will be used in stormwater design for the site. Appropriate grading and drainage measures will be utilized to ensure that stormwater generated on site is directed as much as possible into the mining disturbance and infiltrated into the floor of the mine areas. The stormwater management plan for the site will be designed to manage a 25-year, 24-hour precipitation event. Further discussion of environmental impacts of the mine and their proposed mitigation can be found in the Washington State Environmental Policy Act (SEPA) Checklist presented in Appendix A.

Mine plans have also been designed to avoid and/or mitigate potential geologically hazardous areas on site. A small, shallow landslide is mapped on the western boundary of the site by DNR, and its presence was confirmed by field reconnaissance in April 2021. Based on our observations of local geology and slide geometry, a 50-foot buffer area has been placed around the head scarp of the slide for all proposed site disturbances. Additional compliance with SCC Chapter 19.07, discussion and documenting of hazard areas on site, and proposals for mitigation in the context of the mine project can be found in the Geotechnical Assessment presented in Appendix B.

Access to the project is proposed along Kellet Road off of McCloskey Creek Road, which is a service road used by BPA to access its easement. Several residences also use this road to access properties located adjacent to the easement. An agreement to improve this roadway and use it for mine-related traffic has been coordinated with the BPA. As mine traffic could have a potential impact on residents and local industry, a detailed traffic study was completed for the site and is presented in Appendix C. This study outlines probable traffic volumes into and out of the site, likely routes, and the effect on the local road system and intersections. The findings of the report are discussed under Section 4 below.

3.3 RECLAMATION PLAN

Upon the completion of mining the site will be reclaimed back to commercial forestry use. A detailed reclamation plan will be developed to fulfill requirements of the site's Surface Mining Reclamation Permit, overseen and approved by the DNR. As part of this requirement, a bond for the reclamation cost of the mine, subject to periodic update and revision, will be required by the DNR for the lifetime of the mine. Current reclamation plans for the site involve a segmented

mine plan and the stockpiling of topsoil and overburden during mining operations. As the resource is exhausted, overburden and topsoil will be re-distributed within the mine excavations to create a more natural topographic appearance and facilitate reforestation. The disturbed area will be replanted with native species to return the property to use as commercial timberlands.

Depending on the amount of overburden soil and possible non-resource bedrock that is encountered during mining, excess non-resource material may be used to create backfill slopes against the completed mine slopes or to backfill the mine floor of the extraction areas. Backfill slopes will be created in accordance with a backfill plan required by the DNR. Topsoil will be separated from non-resource material in this process, so the topsoil is available to place as a final lift and provide rooting medium for subsequent revegetation and reclamation back to commercial forestry.

4.0 CONDITIONAL USE CRITERIA

As part of the CUP application for the proposed project, answers to the conditional use criteria as outlined in the County's Conditional Use Application informational packet are addressed below.

1. Be either compatible with other uses in the surrounding area or is no more incompatible than are other outright permitted uses in the applicable zoning district;

The site is currently zoned as West End Commercial Resource Lands 40 (WE-CRL40). According to SCC Section 21.67.100, this zone is intended to designate and protect forest, agricultural, and mineral resource lands of long-term significance. This includes consideration of the commercial extraction of minerals. Forest practices and extraction of rock for forestry purposes are outright permitted uses in this zone. Stone quarrying, mining, crushing, stockpiling and similar uses for the commercial development of mineral resources are listed as conditional uses in WE-CRL40. The minimum lot size must be forty acres, and no dwelling units are allowed in this zone.

The proposed project is compatible with the underlying zoning and with the lands adjacent to the project, which are also zoned WE-CRL40 except those in the CRGNSA. The primary use of this zone is development of natural resources, which has included multiple rotations of commercial timber and rock extraction to support these developments, including a small bedrock quarry located on the site. The proposed project will develop the same aggregate resource as a commercial operation, providing mineral resource of long-term significance to the local economy. The estimated lifetime of the mine, contingent on market demand, is approximately 30 to 40 years. As part of operational requirements by the DNR, a detailed reclamation plan will be implemented as mine segments are exhausted until the end of mining, whereupon the area will be reclaimed, revegetated, and returned to its previous use as commercial timberlands. Compatibility with isolated residences located further southwest of the site, and with existing industry (forestry) and general commerce in the area, are addressed in subsequent Questions 2 and 3.

2. Not materially endanger the health, safety and welfare of the surrounding community to an extent greater than that associated with other permitted uses in the applicable zoning district;

Mine operations will not pose a safety hazard nor have a significant effect on the health and welfare of the surrounding community. The mine will be located in a remote, resource-oriented location that has produced commercial timber for many years with accessory operation of a small bedrock quarry. The remoteness of the site and locking gates limiting site access will prevent the mine from posing a safety hazard to the surrounding community. McCloskey Creek Road and Mabee Mines Road already serve as primary corridors for timber hauling from the commercial timberland located in the site vicinity down to State Highway 14. Traffic from the mine will be of similar size and length to the timber trucks.

The SEPA Checklist included in Appendix A discusses a variety of environmental concerns with respect to the proposed project, which consider a wide range of potential health and welfare concerns. The principal potential concerns to the surrounding community are discussed below including erosion, runoff, slope stability, noise, and traffic (note that traffic is discussed under Question 3).

Erosion

Removal of vegetation, excavation of soil and rock, and stockpiling of materials on-site could potentially contribute to local erosion of soils within the project area. Soil erosion from mining-related disturbance will be minimized by incrementally removing and storing topsoil and overburden directly in advance of mineral extraction activity. Removed topsoil will be stored in perimeter berms around the mine excavation and intermittently on other portions of the site as mining progresses over the extraction area. Soil berms and stockpiles will be seeded and/or mulched to stabilize the soils from possible erosion. Stormwater will be directed inward into the mining disturbance to infiltration basins located in the mine floor as mining progresses across the excavation segments.

Additional Best Management Practices (BMPs) will be used to wet drive surfaces, prevent release of fugitive dust from the site, capture and control possible road runoff, and other methods to prevent erosion from transporting soil offsite. All of these mitigation efforts will be in accordance with the Surface Mine Reclamation Permit required by the DNR and other permits.

Runoff

Stormwater runoff from the site area could potentially impact sedimentation and turbidity of local streams, drainages, and wetlands. The uncontrolled release of fuel or lubricants used by mining equipment could also adversely impact local water quality. The mine will be required to apply for a Sand and Gravel General Permit overseen by the DOE. This permit will require the development of a detailed Site Management Plan – including an Erosion and Sediment Control Plan, Stormwater Pollution Prevention Plan, Spill Control Plan, and Monitoring Plan. These plans will collectively designate required BMPs for management and disposal of on-site stormwater and prevention and control of spills to avoid impacting adjacent lands and off-site critical areas.

Slope Stability

Based on geologic hazard mapping completed by the DNR, a small area at the west-central portion of the site is mapped as an interpreted landslide, as shown on Figures 3 through 5. DNR has also mapped a large, deep seated landslide complex located east of the project. In accordance with SCC Chapter 19.07, a Geotechnical Assessment was completed to address the potential geologic hazards that could be impacted by the project (Appendix B). Based on the findings, it is our opinion that the proposed mineral extraction and related earthwork activities will not exacerbate existing areas of slope instability on the site or its surrounds, nor will planned cut and fill sections onsite result in a likelihood for slope failure. No additional geotechnical studies are recommended. Slope stability concerns are discussed in greater detail in the Geotechnical Assessment report.

Noise

Mining and associated activities will generate intermittent daytime noise during normal site operations and brief intervals of noise from blasting. The nearest residential receptor to noise generated on site is located approximately 0.5 mile away from the closest proposed disturbance area within the permit boundary and approximately 0.75 mile from the proposed processing and storage area at the center of site. To assess the effect of mine-generated sound on the surrounding community, the applicant commissioned a Sound Analysis by an acoustical engineer (Appendix D). This analysis concluded that noise generated by the mine will meet the State of Washington's daytime and nighttime noise limits for the closest potential receptors as well as the undisturbed buffers surrounding the project are sufficient without requiring additional mitigation measures. Project-related traffic noise is not anticipated to exceed Federal Highway Administration abatement criteria for roadway traffic noise. The full report and associated discussion are provided in Appendix D.

3. Not cause the pedestrian and vehicular traffic associated with the use to conflict with existing and anticipated traffic in the neighborhood to an extent greater than that associated with other permitted uses in the applicable zoning district;

McCloskey Creek Road, Mabee Mines Road, and Salmon Falls Road are already used for timber hauling, which can result in hundreds of truck trips per day during harvest. Depending on market conditions, we anticipate up to 250 daily round trips could be generated by the proposed project during peak season and peak economic conditions, with heaviest volumes occurring mid-morning and later-afternoon. To assess and model the effect of mining operations on local transportation systems, the applicant commissioned a Transportation Impact Study by a traffic engineer (Appendix C). This study concludes that impacts to the Level of Service (LOS) for affected roads and intersections are within operating standards for rural areas as defined by the Washington State Department of Transportation (WSDOT). No impacts or increases to pedestrian traffic are anticipated for the local area.

4. Be supported by adequate service facilities and would not adversely affect public services to the surrounding area;

The principal impact to public services in the area is increased traffic along local roadways due to

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commercial hauling associated with the mine. The Transportation Impact Study commissioned for the site concludes that impacts to the LOS for affected roads and intersections are within operating standards for rural areas as defined by WSDOT.

No additional burden to local utility services, emergency services, or other public services are anticipated. The quarry will likely be staffed by 5 to 10 people depending on site operations and seasonal variances in activity. Bottled water and portable toilets will be provided for employees.

5. Not hinder or discourage the development of permitted uses on neighboring properties in the applicable zoning district as a result of the location, size or height of the buildings, structures, walls, or required fences or screening vegetation to a greater extent than other permitted uses in the applicable zoning district;

No permanent structures are planned as part of mining operations on site. A small office, scale house and scales will be temporarily present on-site during mining operations. These will be dismantled and hauled away during the reclamation phase of the project. Vegetated setbacks adjacent to the proposed mine area will be composed of topsoil berms and existing vegetation, will be a minimum of 50 feet wide, and will not be disturbed as part of mining operations.

6. Not be in conflict with the goals and policies expressed in the current version of the County's comprehensive plan.

The site is located within the area of the West End Community Comprehensive Subarea Plan ("West End Comp Plan", adopted by Skamania County in 2007). Under <u>Commercial Resource</u> <u>Land 40 (CRL40)</u>, p. 27, the West End Comp Plan designates the same uses for this area as described under SCC Section 21.67.100, as follows:

"The designation of commercial resource lands is designed to meet the minimum requirements of the Washington State Growth Management Act (Chapter 36.07A RCW) that mandates the designation and protection of forest, agricultural, and mineral resource lands of long-term commercial significance."

Thus, the development of a commercial aggregate quarry is compatible with the West End Comp Plan designation of the site as Commercial Resource Lands with a minimum lot size of 40 acres. The proposed project will develop mineral resources within a 273.6-acre permit boundary, providing over 20 million cubic yards of aggregate resource to the local economy for both public and private improvement projects. In accordance with the Growth Management Act, the parcels that enclose the site were designated as resource lands, have mineral resources of long-term significance, and should be developed for their intended use.

With regard to perceived conflicts that may be of concern to the local community, including several residences located southwest of the site along the proposed access through the BPA alignment, the West End Comp Plan also addresses potentially conflicting uses on p. 27:

"...regulations shall assure that the use of lands adjacent to agricultural, forest, or mineral resource lands shall not interfere with continued use, in the accustomed manner and in

accordance with best management practices, of these designated lands for the production of food, agricultural products, or timber, or for the extraction of minerals."

Mining and its associated activities are not without effect on the local community. A Traffic Impact Study and Sound Analysis were completed to evaluate potential impacts on surrounding residential receptors and local roadways. Based on the findings of those analyses, the proposed project will not have impacts that would exceed state or federal standards.

Through this CUP application and its associated documents and studies, we have demonstrated that potential impacts on the environment, community, and overall character of the area fall into two categories: Impacts that will be noticeable but are within parameters judged to be acceptable by applicable standards, and impacts that can be mitigated by adherence to policies and BMPs outlined by the DNR and DOE. The latter two agencies will require permits to be approved to their standards before any mining can be conducted on the property, and ongoing compliance with those permits will be required and inspected by staff from both agencies.

In the long term, the proposed mine is temporary, and the affected areas will be reclaimed back to commercial forest lands at the end of the mine's life cycle.

Attachments

One copy submitted (via email only) Document ID: Storedahl-12-01-082021-geor-CUP.docx © 2021 NV5. All rights reserved.

FIGURES

SITE COORDINATES:

DIRECTIONS TO SITE

LATITUDE: 45° 38' 24" N LONGITUDE: 122° 6' 43" W

WESTERN WASHINGTON



LEGAL DESCRIPTION THE PERMIT BOUNDARY IS LOCATED IN PORTIONS OF THE

FOLLOWING QUARTER-QUARTER SECTIONS:

- SW QUARTER OF THE SW QUARTER OF SECTION 17
- SE QUARTER OF THE SE QUARTER OF SECTION 18
- NW, NE, SE, SW QUARTERS OF THE NE QUARTER OF SECTION 19
- NW, NE, SE, SW QUARTERS OF THE SE QUARTER OF SECTION 19
- SE QUARTER OF THE SW QUARTER OF SECTION 19
- NE AND SE QUARTERS OF THE NW QUARTER OF SECTION 30

SKAMANIA QUARRY IS LOCATED NORTHEAST OF WASHOUGAL, WA. FROM WASHOUGAL, DRIVE EASTBOUND ON HIGHWAY 14

FOR APPROXIMATELY 8 MILES. TURN LEFT (NORTH) ONTO

SALMON FALLS ROAD. DRIVE NORTHBOUND FOR ROUGHLY 1 MILE, THEN TURN RIGHT (EAST) ONTO MABEE MINES ROAD.

FOLLOW MABEE MINES ROAD FOR APPROXIMATELY 2 MILES, THEN TURN RIGHT ONTO KELLET ROAD. FOLLOW KELLET

ROAD FOR APPROXIMATELY 1.75 MILES. SKAMANIA QUARRY

IS LOCATED ON THE LEFT (NORTH) SIDE OF KELLET ROAD.

NW AND SW QUARTERS OF THE NE QUARTER OF SECTION 30

NOTE: USGS TOPOGRAPHIC QUADRANGLE MAP REPRODUCED USING MAPTECH TERRAIN NAVIGATOR PRO®.



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