# Cumberland Aggregate Mine Project

Community Meeting February 27, 2024





## Segale Properties



Fourth-generation family-owned company headquartered in Tukwila, WA.

Owns and operates commercial, industrial, residential, agricultural and natural resources properties throughout Washington State.

Reputation for being responsible and conscientious landowners/managers, providing jobs, land stewardship and economic and community benefits to the region.

Been in the aggregate business for over 60 years with active operations in King, Grant, Cowlitz, & Thurston Counties.

Long-term landowner that supports and partners with communities we operate in to create positive economic impacts for generations to come.

### Who We Are

# Segale Ownership

Total Project Site in Acres:

990.53





# **Project Process**

#### **Key Steps**

- Application submittal to King County in September 2023.
- February 27, 2024 community meeting.
- Written comments due March 12, 2024.
- SEPA environmental process led by County and their consultant team.
- SEPA environmental review process evaluates potential impacts and mitigation and issues Threshold Determination.

- process.



#### **Public Involvement**

 Multiple opportunities for public involvement through land use and SEPA

- Community Meeting.
  - Land use application and SEPA comments.

County web access to allow public tracking of application process and to provide on-going public comment.

Public input on proposed walking trails in forested buffer area between future mining activity and Cumberland community.

### Local Source for the Region

- Segale conducted a multi-county search for potential mining sites in 2003.
- Cumberland site was chosen based on size, location, and quantity of material.
- Washington Aggregates & Concrete Association forecasts growth in King County will create demand of 13 tons per person, per year.
- Maintaining adequate regional supply is required under GMA.
- Proposed operation to replace 668-acre Auburn Pit, which has ~3-5 years of material left before the operation is closed.



# Summary

- Proposed mine and accessory asphalt plant are allowed uses on Forest
   zoned property subject to
   County regulations and
   SEPA.
- Mining area will be greater than 1/4 mile away from existing residences, providing a wide buffer between mining activity and existing residences.

![](_page_5_Picture_3.jpeg)

Mining activity will be at least 10-feet above groundwater level.

Mining operations will comply with county setbacks, noise regulations, state air quality rules, and county and state stormwater quality regulations.

Mining truck traffic will avoid peak hour traffic and will be distributed to the region along arterial roadways.

### Mining Area & Adjacent Residences

![](_page_6_Figure_1.jpeg)

![](_page_6_Figure_2.jpeg)

![](_page_6_Figure_3.jpeg)

![](_page_6_Figure_4.jpeg)

# **Conceptual Mining Plan**

![](_page_7_Figure_1.jpeg)

![](_page_7_Picture_2.jpeg)

Portable & permanent crushing operations.

Office area/scale near entrance.

Maintenance shop/yard, truck & equipment parking area on-site.

Maintenance shop/yard, washed stockpiles, and asphalt operations will be located on impervious surfaces for capture, treatment, and recycling of all stormwater/process water into the closed loop system.

Asphalt plant/recycled asphalt facility designed with latest environmental protection measures to protect air and water quality.

### Potential Impacts & Mitigation Approaches

- No stormwater flows off-site, protecting adjacent surface water sources.
  - Processing operations located intentionally deep to minimize noise impact to negligible levels.
- Asphalt plant will utilize best management practices.

![](_page_8_Picture_4.jpeg)

Capture, treatment & recycling of all process water runoff will occur through closed system, eliminating possibility of discharge into adjacent areas.

Mine entrance/exit on Cumberland Kanaskat Road SE will include improvements and queuing areas to maximize safety and reduce congestion.

Wide forested buffers around the entire site provide view and sound buffering.

# Traffic Impacts

#### Michael Read

TENW

# **Primary Haul Routes**

![](_page_10_Picture_1.jpeg)

#### **Peak Season**

- 668 daily car & truck trips.
- 88 AM peak & 93 PM peak trips.
- Trips spread over 24-hours.

![](_page_10_Picture_6.jpeg)

#### **Off-Peak Season**

#### 298 daily car & truck trips.

- 68 AM peak & 63 PM peak trips.
- Trips spread over 18 to 24-hours.

No off-site intersection improvements warranted per traffic impact analysis.

## Access Improvements

#### **Proposed Lane Improvements**

- Acceleration and Deceleration Lanes.
- Ingress Queuing Lanes.
- Egress Queuing Lanes.
- LOS B or better into 2030 and beyond.

![](_page_11_Picture_7.jpeg)

Hydrogeology

Curtis Koger Associated Earth Sciences, Inc.

### Hydrogeologic Investigation

#### Extensive Literature Review

Geologic Reconnaissance & Mapping

Subsurface Exploration & Analysis

#### Geophysical Exploration & Analysis

#### Monitoring of Groundwater & Surface Water

### Additional Subsurface Exploration & Analysis

- Groundwater modeling.
- DNR 16 monitoring wells.
- DNR 16 aquifer test well.
- Future surface water/groundwater quality monitoring at select perimeter locations.

![](_page_14_Figure_5.jpeg)

# Hydrogeologic Investigation

![](_page_15_Picture_1.jpeg)

## Subsurface Conditions

![](_page_16_Figure_1.jpeg)

### Findings: Affected Environment & Groundwater

- Groundwater flow generally towards the west and north.
- Groundwater discharge occurs from springs above the river, north and west of the site.
- Some subsurface discharge to the Green River occurs north of the site.
- Deep Creek is upgradient of the site.

![](_page_17_Picture_5.jpeg)

# Stormwater/ Process Water

#### **Owen Reese**

Aspect Consulting

# **Stormwater Management Protections**

![](_page_19_Figure_1.jpeg)

Mine floor and interior road stormwater runoff treated and infiltrated.

Stormwater facilities located to distribute recharge in multiple mine segment ponds.

Staggered and sequential clearings of ~50 acres to provide differentiation of material type, quality, and mixing.

Mining a minimum of 10-feet above groundwater table.

Use of Best Management Practices on internal haul road to manage stormwater run-off.

### Stormwater Management Protections

#### Each Facility Consists Of:

- 2 cell wet pond.
- Reverse slope pipe.
- Infiltration pond.

![](_page_20_Figure_5.jpeg)

#### **Mine Floor Stormwater Facilities**

Additional sand filter between wet pond and infiltration pond when located within 1/4 mile of Green River or Deep Creek.

Minimizes pipes and drainage structures for compatibility with reclamation.

Ponds remain after reclamation.

### Stormwater Management Protections

#### **Process Water Approach**

- Stormwater and process water
  managed under Ecology Sand and
  Gravel General Permit.
- Process water (and stormwater) from crushing operations, asphalt plant, wheel wash, and wash plant will be segregated from other mine areas, treated, and recycled in a closed loop process.

![](_page_21_Figure_4.jpeg)

# Protecting the Green

#### Horizontal & Vertical Setbacks

- Forested buffers of 50-feet minimum around perimeter.
- Horizontally separated from river by 350-feet to more than 800-feet.
- Vertically separated by 150 to 200-feet or more.
- Filtering of water as it moves towards the river ensures high water quality.

![](_page_22_Figure_6.jpeg)

![](_page_22_Figure_7.jpeg)

![](_page_22_Figure_8.jpeg)

![](_page_22_Picture_9.jpeg)

### **No Adverse** Impacts to Groundwater

![](_page_23_Picture_1.jpeg)

Groundwater recharge and water quality to be maintained through water treatment.

Cool groundwater recharge to Green River to be maintained.

No flow from site to Deep Creek.

#### Maintaining Water Quality

No surface water flow occurs in proposed mine area or flows off-site.

No reduction in off-site spring flows.

### No Adverse Impacts to **Green River**

![](_page_24_Picture_1.jpeg)

Processing and asphalt plant will be selfcontained so that no process or stormwater can leave the site.

No water quality or quantity impacts are expected.

One stream on-site that flows off-site via a waterfall to the Green River (barrier to fish passage) remains unaffected.

Groundwater flow beneath site discharges off-site as seeps/springs on the valley walls high above and adjacent to Green River or discharges directly to Green River aquifer.

#### Water Quality / Fish Impacts

![](_page_25_Figure_0.jpeg)

Goal of mine reclamation to return to forest

Completed under Reclamation Permit from

- Reclaim mined areas as they are completed.
- Reclamation involves:
- Stockpiling topsoil.
- Topsoil amendment with wash plant fines.
  - Mining to final grade.
- Topsoil placement.

Reclamation planting (native trees &

### **Positive Attributes** of the Proposal

- Provides long-term aggregate supply to the region.
- Promotes job creation and economic development regionally and locally.
- Haul route network disperses
  trips throughout the region,
  with no adverse impact on
  LOS for studied intersections
  or roadways.

![](_page_26_Picture_4.jpeg)

Reclamation plan will return site to Forest use.

Proposed use of Cumberland Co-Op Water System for wash water supply will result in substantial investment and upgrades to the system.

Creation of public access area for walking trails/dog walking adjacent to town of Cumberland. Questions?

Please Email Questions to: Mike Pruett mpruett@segaleproperties.com

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