Welcome

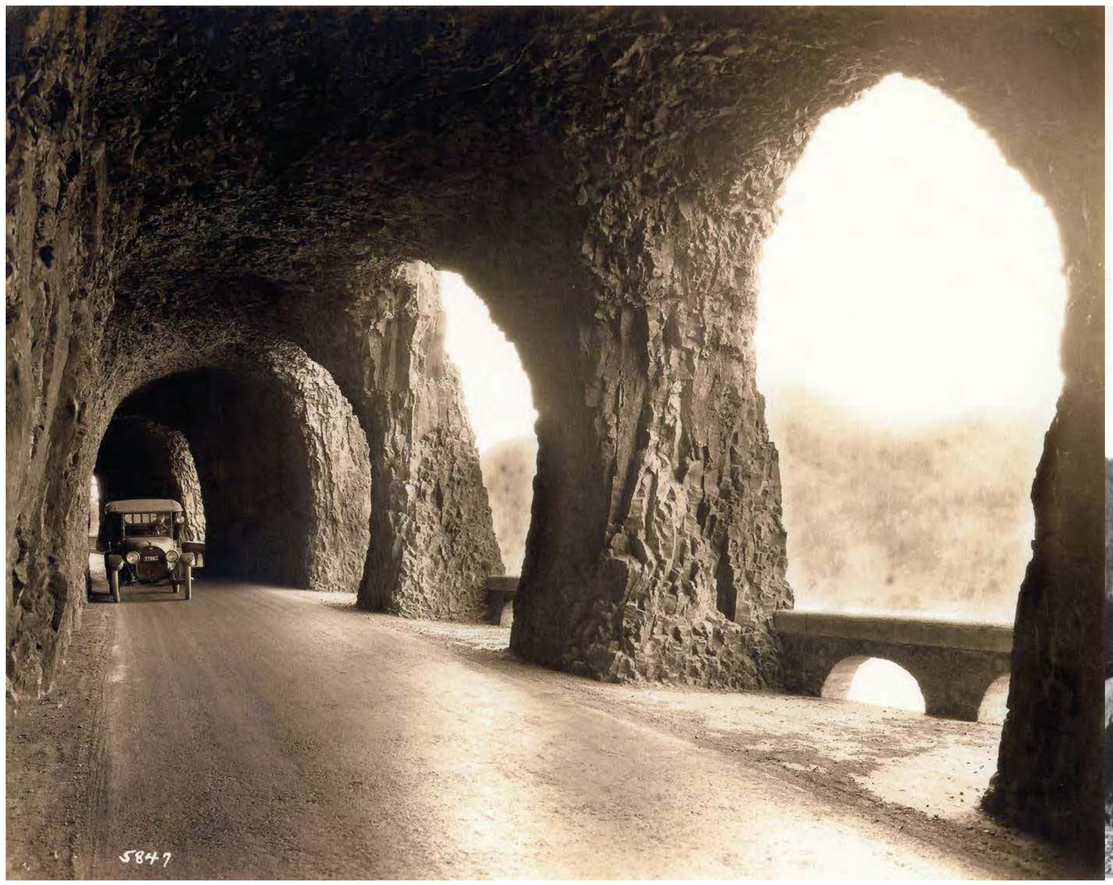
To our open house for the Mitchell Point Crossing

HISTORIC COLUMBIA RIVER HIGHWAY

History

Mitchell Point was the site of an iconic tunnel with its five arched windows overlooking the Columbia River. Constructed in 1915, the tunnel was closed in 1953 because it could no longer accommodate high traffic volumes and car sizes. It was destroyed in 1966 to widen the water-level highway, now Interstate 84.

Mitchell Point is a formidable mountain that requires a new bridge or tunnel to connect the western segments of State Trail to Hood River and The Dalles. ODOT received funds for design and construction of a new Mitchell Point Crossing.



Decision making criteria

In 2015, ODOT began evaluating seven design alternatives for a crossing at Mitchell Point. These alternatives included tunnels, a viaduct, a bridge and a trail alongside I-84.

ODOT narrowed the alternatives to several options. Below are the criteria for selecting the preferred alternative.

Trail users' experience

Users on State Trail should be able to experience the trail comfortably and safely and enjoy the scenic views.

Resiliency

How will rockfall, fires, weather or vandalism impact this trail segment over time?

Historic compatibility

Our mission: Remember, Restore and Reconnect the Historic Highway. The State Trail should follow the original alignment of the highway when possible, use the high-design standards and craftsmanship of the past, and highlight the beauty of the Columbia Gorge for users to experience.

Columbia River Gorge National Scenic Area compliance

The National Scenic Area sets specific provisions for scenic, cultural, natural and recreation resources. Consistent with the original intent of the highway, the State Trail should "lie lightly on the land" and carefully consider impacts to resources.

Constructibility

This criteria examines risks in design, including rock excavation, rockfall hazards, impacts to I-84 during construction and overall construction complexity.

Maintenance

The effort and cost of long-term maintenance is a factor that needs to be considered.

Geological Findings

Rock conditions

To study the rock, we drilled up to 150 feet into the slopes and took samples. We found that the rock conditions are suitable to construct a tunnel.

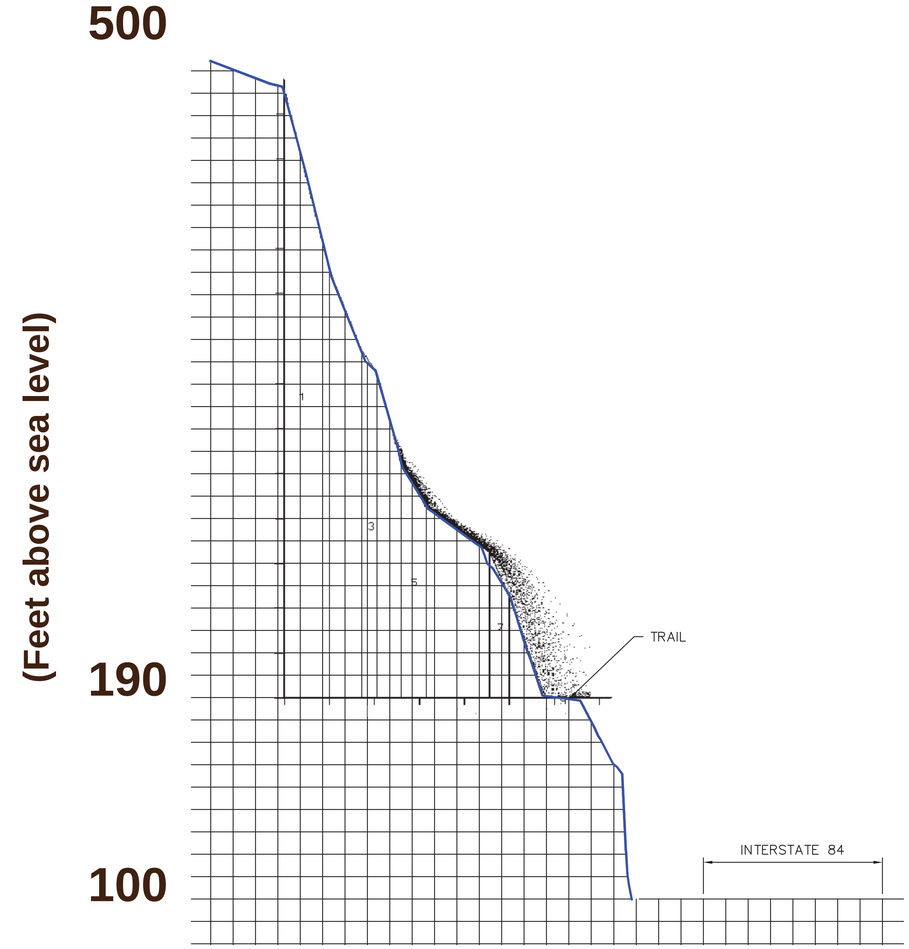
Rockfall hazards

We conducted rockfall simulations from the slopes above the trail to examine how much rock would fall directly onto the trail and how much rock would roll onto the trail.

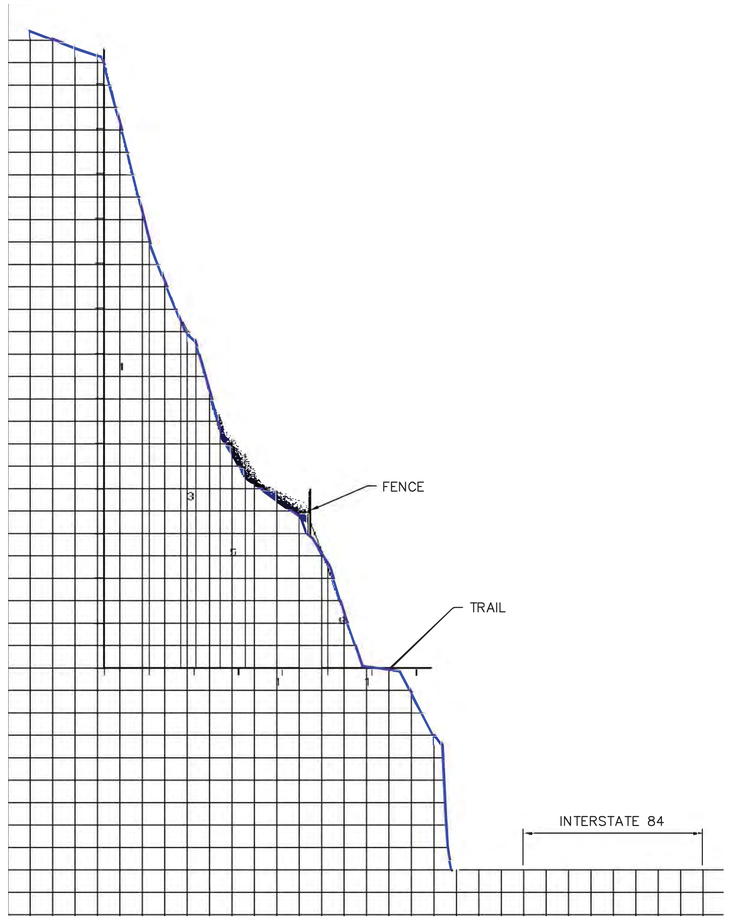
The existing conditions are considered hazardous without rockfall protection.

These results guide the type and amount of rockfall protection measures needed to design a safe trail.

Simulated conditions



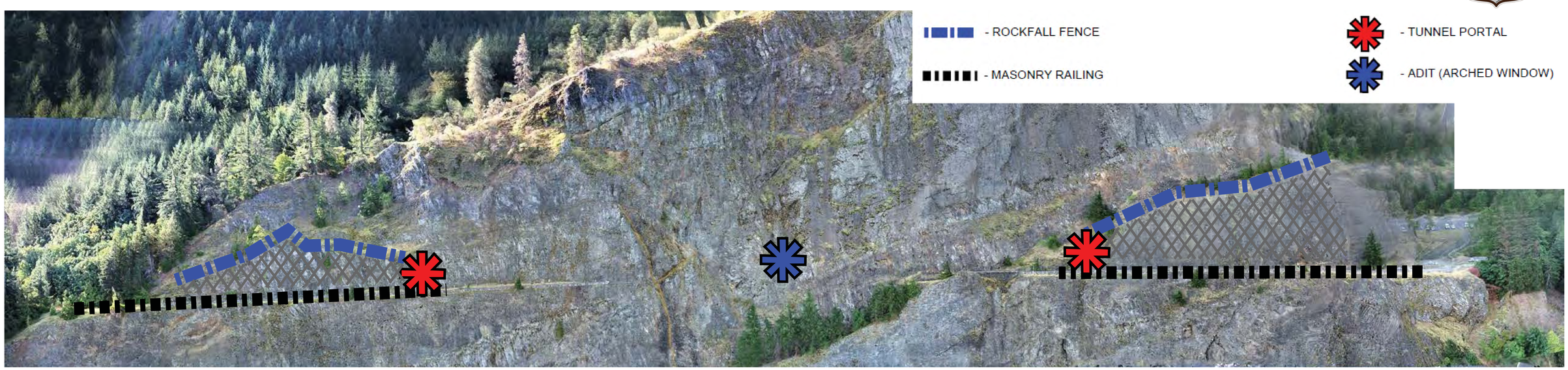
Conditions without rockfall protection



Conditions with rockfall protection installed

The dots show anticipated rockfall. A high concentration of dots means a significant amount of rock is expected to land in that area.

570-foot tunnel & trail



Benefits

Experience:

- The shorter tunnel at 570 feet provides a more open-air experience and wider views of the Gorge.
- Less of a perceived and/or real safety concern with a shorter tunnel.

Historic compatibility:

- A tunnel with “windows” is historically consistent. The trail would follow about 50 percent of the original highway alignment.

Challenges

National Scenic Area:

- Rockfall protection, likely mesh, is needed at each end of the tunnel. Mesh could impact vegetation on the slope.

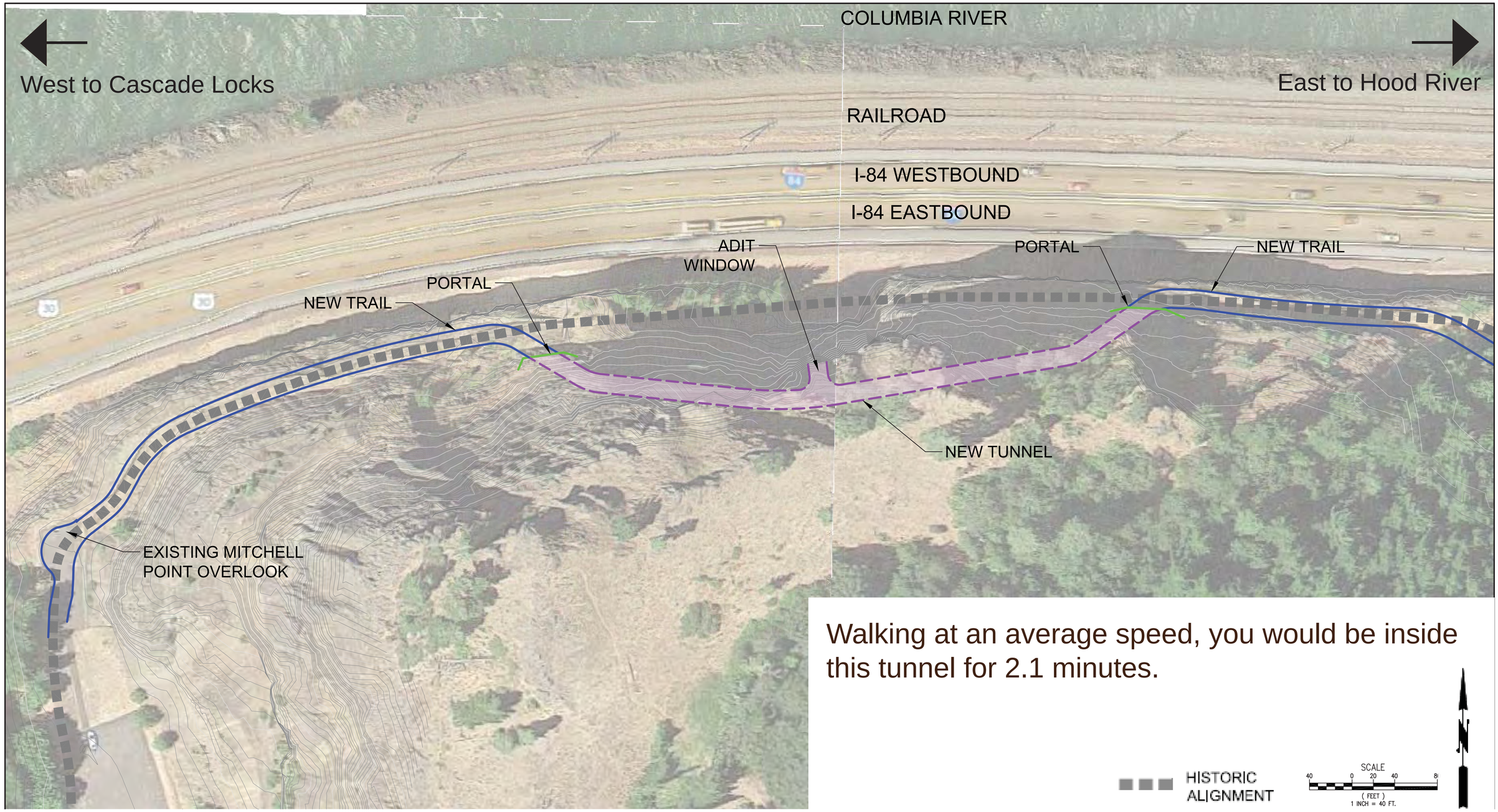
Maintenance:

- Rockfall mesh adds maintenance time and cost to clear accumulated rock.

Constructibility:

- The tunnel is set back significantly from the wall face.
- The tunnel may need electrical work.

570-foot tunnel & trail

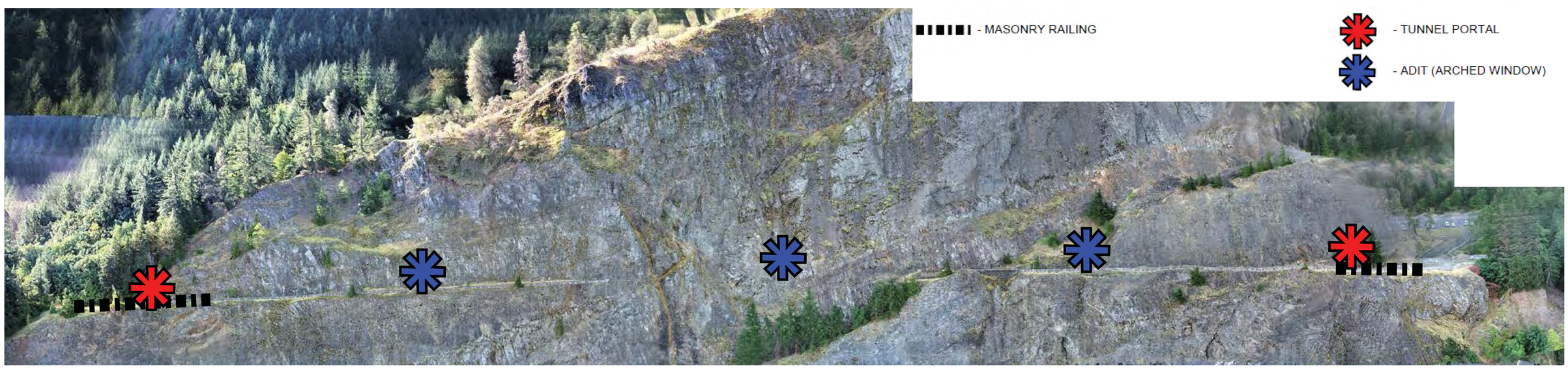


Walking at an average speed, you would be inside this tunnel for 2.1 minutes.

HISTORIC ALIGNMENT

SCALE
40 0 20 40 8
(FEET)
1 INCH = 40 FT.

1,335-foot tunnel



Benefits

National Scenic Area:

- Rockfall protection, likely mesh, would be minimal, which lowers the visual impact for Gorge users.
- Less impact to plants populations on the rock wall.

Maintenance:

- Less rockfall related maintenance.

Challenges

Experience:

- At 1,335 feet (1/4 mile) this tunnel is more than twice the length of the 570-foot tunnel.
- Perceived and/or real safety concerns from a long, dark tunnel.

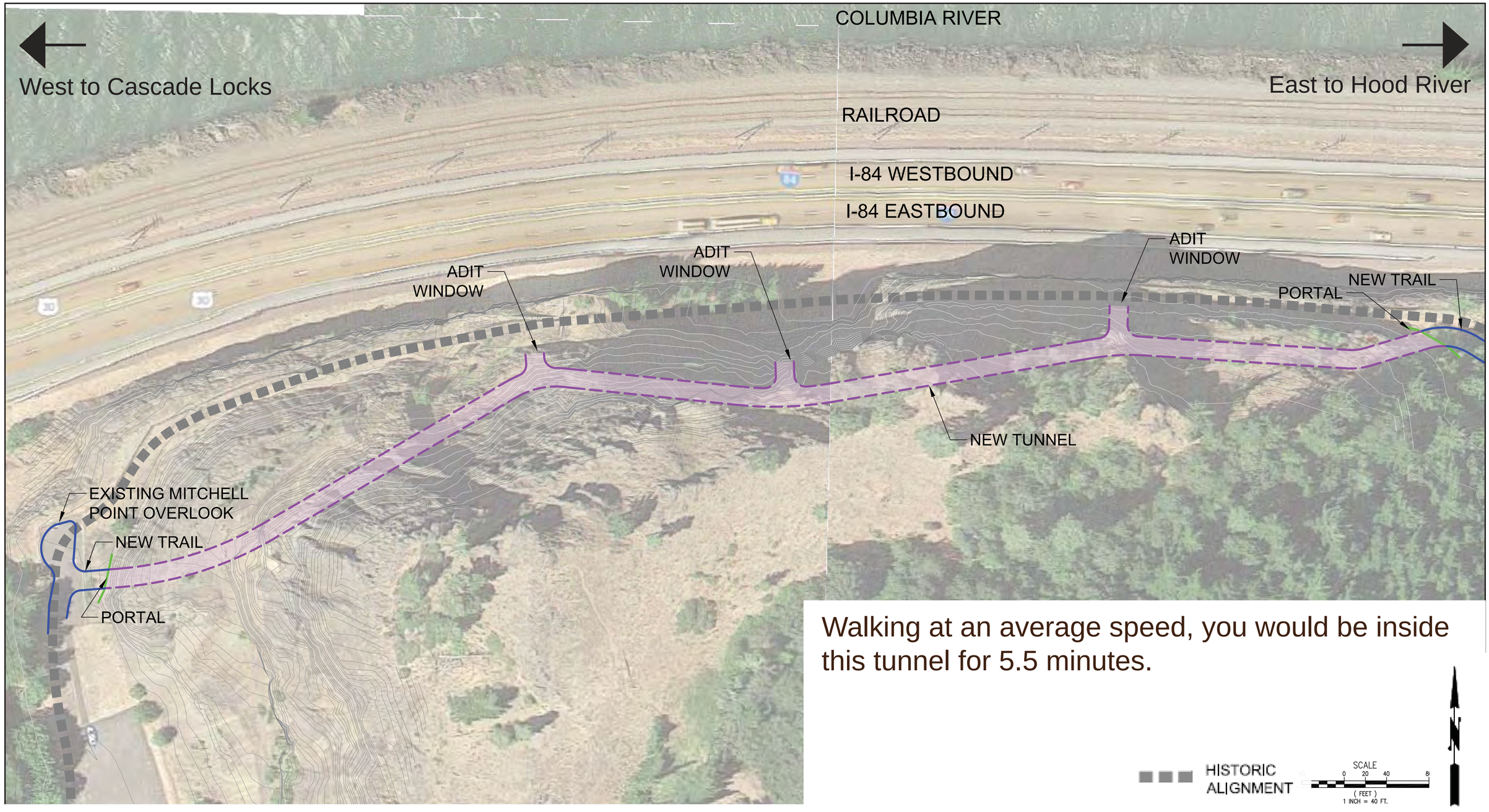
Constructibility:

- The long tunnel costs more to construct than the 570-foot tunnel.
- The tunnel is set back from the wall face. Placing “windows” to add adequate light is challenging. Electrical work could be significant.
- The west end of the tunnel has less favorable rock conditions, which could increase tunneling challenges.

Historic compatibility:

- The trail would not follow the historic alignment.

1,335-foot tunnel



Walking at an average speed, you would be inside this tunnel for 5.5 minutes.

HISTORIC ALIGNMENT

SCALE
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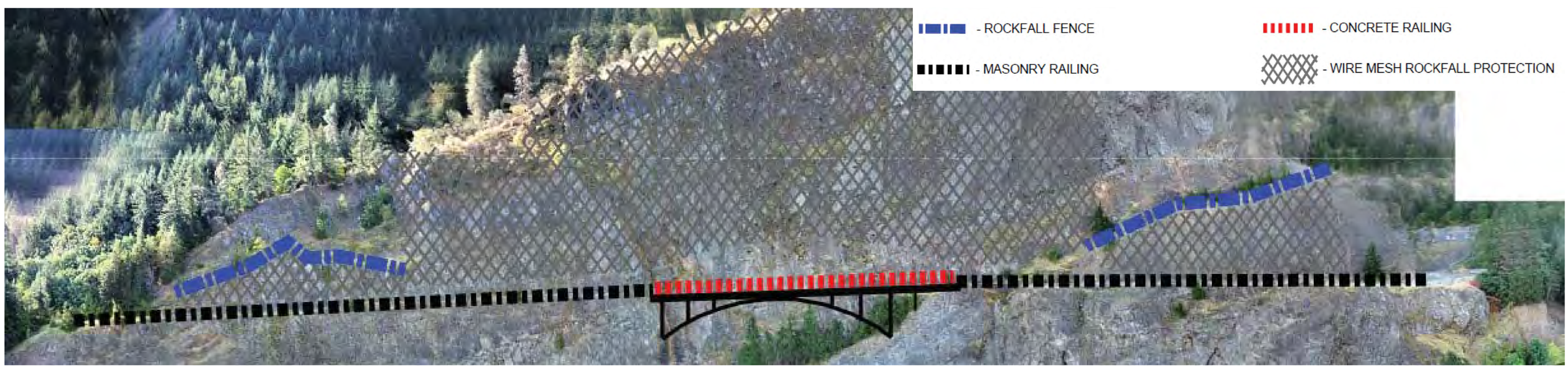
(FEET)
1 INCH = 40 FT.

Bridge & trail



Benefits

Experience:

- The bridge offers an open-air experience with an unobstructed view.

Constructibility:

- No significant electrical work is needed.
- Limited rock excavation is needed. Because no tunneling is included, there is less rock stability risk.

Historic comparability:

- This alternative uses a historic “shelf” from the highway and is the most compatible with the historic alignment.

Challenges

National Scenic Area:

- This structure, although mirroring historic designs, would be visible from key viewing areas.
- A large amount of rockfall mesh, covering a significant part of the slope, is required. Mesh could impact vegetation on the slope.

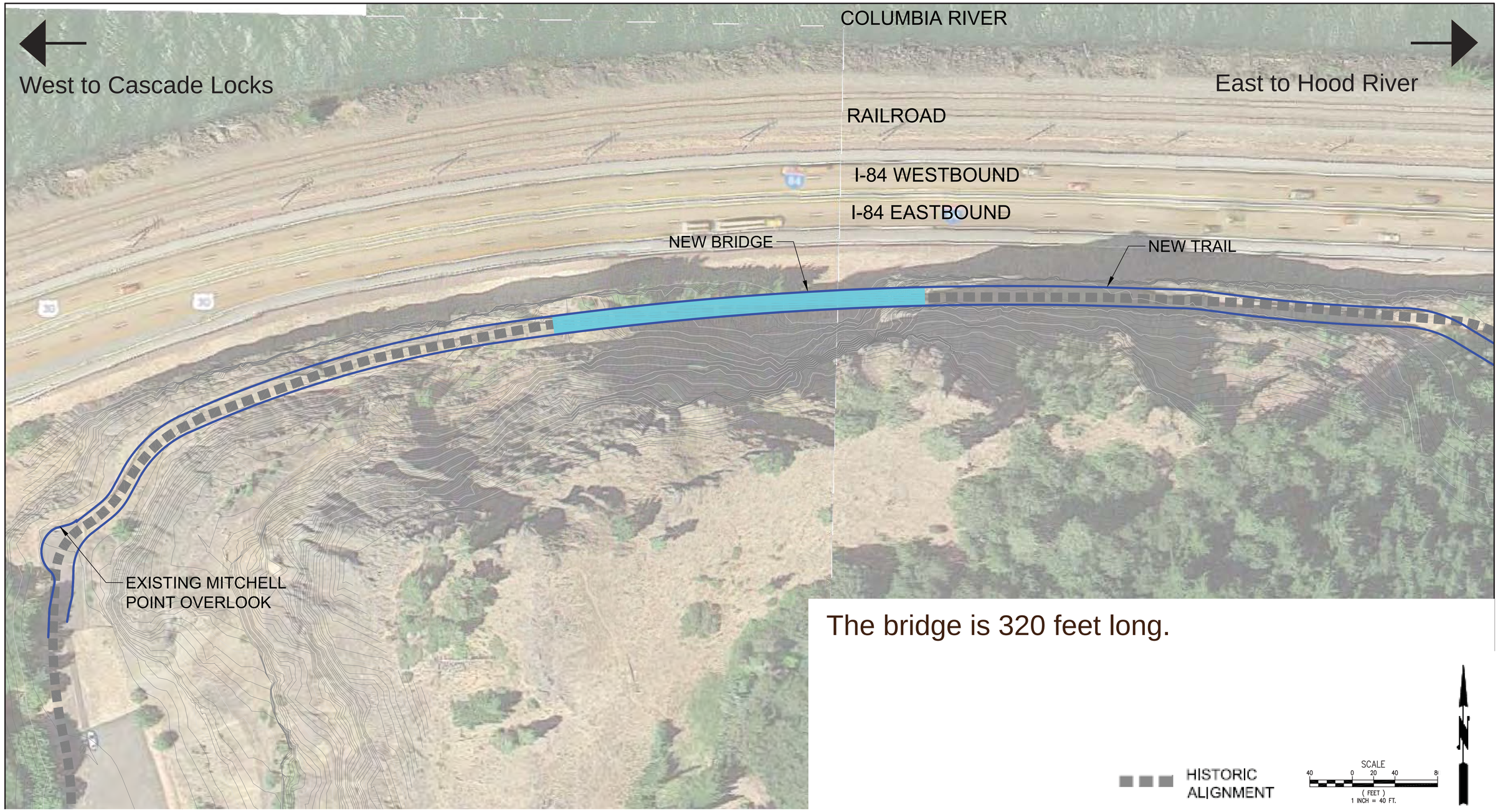
Maintainability:

- The cost to maintain the amount of rockfall mesh needed may be substantial.

Constructibility:

- The amount of mesh would likely require a helicopter and significant effort to install.

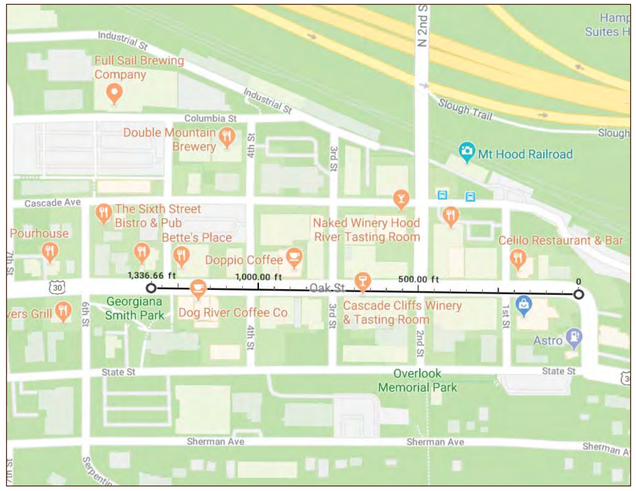
Bridge & trail



The bridge is 320 feet long.

Tunnel “windows” and portal

How long is 1,300 feet?



The length of the long tunnel is approximately, 1,300 feet (a 1/4-mile), equals one lap around a track.

A football field is 360 feet long. The longer tunnel is the length of 3.6 football fields.

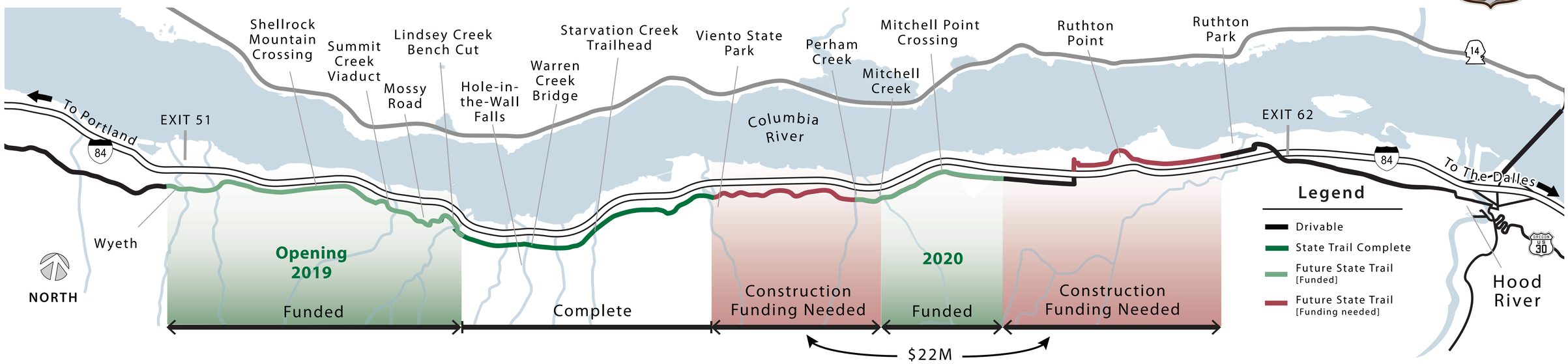
That is the same distance as from Bridgeside to the Columbia Market in Cascade Locks or from Front Street to 5th Street in Hood River.

Photo simulations are for informational purposes only

Next Steps

- **At the May 21 meeting**, the Historic Highway Advisory Committee is expected to recommend a design alternative to ODOT and Oregon Parks and Recreation for the Mitchell Point Crossing. We will share your comments with the Advisory Committee to help inform their recommendation.
- This summer, the Oregon Parks and Recreation Commission and the Oregon Transportation Commission will have the opportunity to endorse the Advisory Committee's recommendation.
- Design will continue on the preferred alternative, and ODOT is targeting Spring 2020 to begin construction.

The Final 5 Miles



Construction

- A three-mile segment of the Historic Highway State Trail is under construction from Wyeth to Lindsey Creek.
- Construction began spring 2017 and is scheduled to be complete in summer 2019.
- Project elements include: a new trailhead at Wyeth, the Summit Creek Viaduct with stunning views of the Gorge, the Lindsey Creek Bench Cut and a trail around Shellrock Mountain.

Design

- The Mitchell Point Crossing is one piece of the final five-mile gap to reconnect the Historic Highway. ODOT is also currently designing trails to connect to either side of Mitchell Point.
- Segments from Viento State Park to the west and Ruthton Park to the east are beginning design.
- These segments will improve the trailhead at Viento State Park, provide access to the Historic Wygant State Park nestled along Perham Creek and treat users to breathtaking views of orchards along the Columbia River from Ruthton Point.