

# Lakeridge Slope Stabilization SEPA Determination of Non-Significance (DNS)

# **Description of Proposal**

SPU owns and maintains a 10-inch diameter sanitary sewer line buried in the east and west slopes of Dead Horse Canyon in Lakeridge Park. Two slope areas have recently evidenced movement. Additional slope movement could damage the buried sewer. A sewer failure at either of these locations would result in a sanitary sewer overflow to Taylor Creek and be difficult to manage and repair. As a result, SPU has identified the Lakeridge Slope Stabilization Project that would install two micropile slope stabilization structures: one approximately 70-foot-long structure on the east side of Taylor Creek and one approximately 140-foot-long structure on the west side of the Creek. Micropiles are small-diameter, bored, cast-in-place composite piles in which the applied load is resisted by steel reinforcement (drill casing or high-strength reinforcing bar) and cement grout. Pile load is transferred to the surrounding ground by skin friction. Micropiles would be designed for a service life of between 50 and 75 years and require no maintenance for that duration.

Each micropile structure would consist of a row of drilled and grouted 6-inch diameter micropiles extending from a few feet below the ground surface to depths of between 15 and 30 feet below ground surface. The west structure would install 68 micropiles on 2-foot centers. The east structure would install 45 micropiles on 1.5-foot centers. A 2-foot wide concrete beam would be constructed to structurally connect the tops of the micropiles, a few feet below the ground surface. Narrow-width tracked and wheeled vehicles, and hand labor, would be used to conduct the work. Vehicles and laborers would use existing pedestrian trails to access both work sites.

Construction of a buried micropile slope stabilization system would begin with excavation of an approximately 6-foot-wide and 2 to 4-foot-deep trench along the micropile alignment. Mini-excavators capable of completing micropile excavation are available with track widths as narrow as 39 inches and operating weights of approximately 4,500 pounds. After the trench has been excavated, a small drill rig would drill holes for the micropiles. Micropile drill rigs with track widths as narrow as 28 inches and an operating weight of approximately 5,000 pounds are available locally. Steel reinforcing bar is then inserted in each drilled hole and the annular space is filled with pressurized grout. A small skid-mounted grout plant would be used to mix grout on-site and to place grout into the drilled holes. Grout and reinforcing materials would be delivered to work sites using small trailers towed by off-road vehicles.

In addition to slope stabilization, the Project would extend two 10-inch diameter culverts approximately 10 lineal feet downstream at an existing boardwalk structure near the proposed west micropile structure. The two culverts convey surface runoff and baseflows (discharged groundwater) from the uphill side of the boardwalk (west) to the downhill side of the boardwalk (east). The culvert outlets do not extend to the toe of the embankment supporting the boardwalk and have become partially buried, which has increased potential for instability of the embankment. The culvert extensions will be below the ordinary high water mark of the Creek. Failure of the embankment would damage the boardwalk and an SPU sewer attached to the boardwalk. As described above, narrow-width tracked and wheeled vehicles, and hand labor, would be used to conduct the work. Vehicles and laborers would use existing pedestrian trails to access both work sites. All ground disturbed by the Project would be stabilized and revegetated with native plants.

Proponent Seattle Public Utilities Seattle Municipal Tower Suite 4900 P.O. Box 34018 Seattle, WA 98124-4018

## Location of Proposal

The proposed Project is on King County tax parcel 0123049002 (unaddressed) in southeast Seattle in the Rainier View neighborhood of the City of Seattle and adjacent unincorporated King County. This parcel is owned and managed by SPR. All work would occur in riparian areas above Taylor Creek in its Dead Horse Canyon in the City of Seattle's Lakeridge Park (T23N, R4E S1). The Project is in the Lake Washington/Cedar/Sammamish Water Resource Inventory Area (WRIA 8). Surrounding land uses include urban residential, parkland, and open space.

#### Lead Agency

Seattle Public Utilities, the lead agency for this proposal, has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

This Determination of Non-Significance (DNS) is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for fourteen (14) days from the issuance date below. A copy of the environmental checklist is available online at

Taylor Creek Restoration Project - Utilities | seattle.gov

#### Public and Agency Comments

Comments on this DNS must be submitted by February 8, 2024 and must be sent by email to:

Nathan Hart, SEPA Responsible Official Seattle Public Utilities nathan.hart@seattle.gov

Signature:

Nathan Hart

Issue Date: January 25, 2024

## Appeals

Appeals of this DNS must be accompanied by an \$85 filing fee and must be filed by 5:00 p.m. on February 15, 2024. Please see the Office of the Hearing Examiner web site for Temporary Operating Rules During COVID-19: http://www.seattle.gov/hearing-examiner