

Drainage Repair at NE 103rd St and 17th Ave NE SEPA Determination of Non-Significance (DNS)

Description of Proposal

SPU owns and maintains an extensive stormwater collection and conveyance system in the City of Seattle. SPU's stormwater management system on NE 103rd St east of 15th Ave NE collects stormwater from road surfaces and adjacent impervious surfaces and directs that collected stormwater to a 12-inch diameter HDPE tightline that conveys the water down a steep slope above South Branch Thornton Creek. Stormwater discharges onto the slope through a hammerhead tee/diffuser near the bottom of that slope. Water discharging from the tightline over time has created severe erosion, including a void approximately 4 feet deep by 11.5 feet wide by 8 feet long about 50 feet upstream of Thornton Creek. Additional erosion immediately downstream is estimated at about 1 cubic yard. Erosion has exposed a groundwater discharge area in which discharged groundwater now collects in a channel and flows through the eroded area.

SPU proposes to restore the eroded ground to conditions that existed prior to the 2012 installation of the HDPE drainage pipe. The work would construct a reinforced soil slope (RSS) in the eroded area. An RSS is a geogrid-reinforced aggregate deposit that would provide long-term prevention of future stormwater erosion. The RSS would consist of several layers of geogrid reinforcement laid horizontally and spaced vertically by about 1 foot. A well-graded aggregate with less than 5% fines would be compacted in lifts in-between the layers of geogrid to achieve at least 90% compaction per ASTM D 1557. The downstream face of the RSS would consist of extended geogrid lined with geotextile (to prevent aggregate from leaking) that would be wrapped back around the 1-foot aggregate layer. The tail of the wrap-back would be embedded in the next lift of aggregate.

After constructing to within 6 inches of the final ground surface, the RSS would be topped with geocells backfilled with 2- to 4-inch quarry spalls for energy dissipation. The geocells would confine the spalls and prevent them from travelling downstream. The RSS would not be restored with vegetation on top due to the preference for supplemental energy dissipation. A 770 square foot staging area would be created adjacent to an existing user-made footpath near the location of the RSS.

Primary dissipation of stormwater energy would be accomplished by modifying the existing HDPE tee. The existing tee would be replaced with a 12-inch HDPE tee having slightly longer branches that are capped with half-blind flanges on the ends. Each branch would arrive on-site pre-manufactured with eighteen 2-inch diameter holes in 3 rows below the pipe spring line. The flanges would be removable for maintenance, if needed. The tee would discharge water on top of the RSS.

Proponent

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

Location of Proposal

Work would occur in the City of Seattle unopened street right-of-way for NE 103rd St, east of the NE 103rd St street-end, west of 15th Ave NE in the Maple Leaf neighborhood of the City of Seattle.

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

http://www.seattle.gov/utilities/neighborhood-projects/construction-impacts

Public and Agency Comments

Comments on this DNS must be submitted by July 22, 2024 and must be sent by email to:

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

Signature:		Issue Date: July 8, 2024
	Nathan Hart	

Appeals

Appeals of this DNS must be accompanied by an \$85 filing fee and must be filed by 5:00 p.m. on July 29, 2024. Please see the Office of the Hearing Examiner web site for Temporary Operating Rules During COVID-19: http://www.seattle.gov/hearing-examiner