

**SEATTLE PUBLIC UTILITIES
SEPA ENVIRONMENTAL CHECKLIST**

This SEPA environmental review of Seattle Public Utilities' NE 137th St Headwall Project has been conducted in accord with the Washington State Environmental Policy Act (SEPA) (RCW 43.21C), State SEPA regulations [Washington Administrative Code (WAC) Chapter 197-11], and the City of Seattle SEPA ordinance [Seattle Municipal Code (SMC) Chapter 25.05].

A. BACKGROUND

1. Name of proposed project:

NE 137th St Headwall Project

2. Name of applicant:

Seattle Public Utilities (SPU)

3. Address and phone number of applicant and contact person:

Samantha Menathy, Project Manager
Seattle Public Utilities
Seattle Municipal Tower, Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018
206-615-1953
Samantha.Menathy@Seattle.gov

4. Date checklist prepared:

April 7, 2022

5. Agency requesting checklist:

Seattle Public Utilities (SPU)

6. Proposed timing or schedule (including phasing, if applicable):

Project construction is scheduled to occur during the agency-approved in-water construction window (July 1 through August 31) in 2023 and is anticipated to require up to 20 working days.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

SPU currently has no plans for future additions or expansions related to the proposed project.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

SPU Geotechnical Engineering. 2021 (November). Draft Geotechnical Report NE 137th Culvert Headwall Replacement, Seattle, Washington.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

SPU is not aware of pending government approvals of other proposals that directly affect the properties covered by this proposal.

10. List any government approvals or permits that will be needed for your proposal, if known.

Implementation of this project may require some or all the following permits and approvals:

- Utility Major Permit (type 51, major projects) and Street Use Permits, City of Seattle Department of Transportation (SDOT) (includes traffic control plans, if required)
- Hydraulic Project Approval, Washington Department of Fish and Wildlife (WDFW)
- Clean Water Act, Nationwide Permit, U.S. Corps of Engineers

11. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

SPU has identified a project that would construct a headwall for the 36-inch diameter culvert conveying Littlebrook Creek under NE 137th St (SPU Project Number C600685). The existing roadfill embankment on the north side of the street is unraveling and could fail if not supported. The headwall would stabilize the embankment and protect the roadway. The project would install soldier piles with concrete wall panels to form a headwall; lay-back the roadfill side slopes to be more stable and to facilitate maintenance access; install a trash rack; and revegetate all disturbed soils. Piles would consist of a wide-flange steel H-beams placed in drilled holes filled with low-strength grout. Site-cast or precast concrete panels would be placed as lagging between the flanges of the piles to provide soil support between piles. All damaged and demolished paved surfaces would be replaced in-kind or as required by SDOT. Littlebrook Creek would be bypassed around the work area during construction using a cofferdam and flexible pipe bypass system.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project is in public street right-of-way for NE 137th St in the Cedar Park neighborhood of the City of Seattle, King County, Washington (Attachment A).

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:

- Flat Rolling Hilly Steep Slopes Mountainous Other:

b. What is the steepest slope on the site (approximate percent slope)?

The project site is flat.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing these soils.

The general geologic condition of the Puget Sound region resulted from the glacial and non-glacial activity occurring over the course of millions of years. Review of the geologic map covering the project site (Troost *et al.* 2005; <http://pubs.usgs.gov/of/2005/1252/>) indicates the project site is underlain primarily by Vashon-stade recessional outwash consisting of stratified sand and gravel and moderately to well-sorted and well-bedded silty sand to silty clay. However, urban development in these parts of the City and on and around the project site over the last 100 years has resulted in a predominance of disturbed native soils/sediments, cut slopes, and placements of fill material throughout the project site and immediately surrounding area. Surficial soils consist of placements of fill material.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe:

The project site has no indications or history of unstable soils.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate the source of fill.

The project would excavate, and backfill with, up to approximately 15 cubic yards (CY) of material. All excavation would be in existing street right-of-way that has been previously improved and disturbed. Imported material would be obtained from purveyors of such materials licensed to conduct business in Washington. New fill materials used to construct the headwall would be imported to the site. If suitable for that purpose, excavated materials would be used for backfill. If not suitable for that purpose, excavated materials would be removed and legally disposed at an approved upland location or used as fill material (if suitable) at other sites approved for filling and grading.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe:

Erosion could occur as a result of land-disturbing activity; however, the risk is low because a Construction Stormwater and Erosion Control Plan (CSECP) would be prepared and implemented. Disturbed areas would be restored to their near-original conditions and disturbed ground not covered by pavement or other impervious surfaces would be vegetated and protected from erosion. The project would comply with applicable provisions of the City of Seattle's Stormwater Code SMC Title 22, Subtitle VIII, relevant City of Seattle Director's Rules, and Volume 2 Construction Stormwater Control Manual. The completed project is not expected to be subject to erosion.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Existing paved and vegetated surfaces damaged or demolished by construction would be restored. The proposed work would not result in an increase or decrease in impervious surfaces.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

A CSECP would be prepared and implemented. Best Management Practices (BMPs) as identified in the City of Seattle’s Stormwater Code SMC Title 22, Subtitle VIII, relevant City of Seattle Director’s Rules, and Volume 2 Construction Stormwater Control Manual would be used to manage stormwater runoff, construction disturbance, and erosion during construction.

2. Air

a. What types of emissions to the air would result from the proposal [e.g., dust, automobile, odors, industrial wood smoke, greenhouse gases (GHG)] during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During construction, emissions would occur from vehicles and mobile and stationary equipment that combust gasoline and diesel fuels, such as crew vehicles, trucks, and construction equipment. Those emissions would include oxides of nitrogen, carbon monoxide, particulate matter and smoke, uncombusted hydrocarbons, hydrogen sulfide, carbon dioxide, and water vapor. Emissions during construction could also include fugitive dust related to ground-disturbing activities.

Greenhouse gas emissions are characterized as ‘direct’ (emissions from sources owned or controlled by the reporting entity) and ‘indirect’ (emissions from sources that are a consequence of the reporting entity, but which occur at sources owned or controlled by another entity [e.g., electricity purchased to operate facilities and equipment and embodied emissions associated with the manufacture of purchased materials]). This Checklist provides information regarding potential for new or increased direct greenhouse gas emissions resulting from construction and operation of the project, including indirect construction-related (embodied) emissions associated with replacement of demolished and damaged concrete/asphalt surfaces and structures. Embodied greenhouse gas emissions in other materials such as aggregate and pipe materials to be used in this project have not been estimated as part of this environmental review due to the difficulty of accurately calculating those emissions.

Construction would generate greenhouse gas emissions during the estimated 20 working-days via the operation of diesel- and gasoline-powered equipment and the transport of materials, equipment, and workers to and from the site. Because project construction methods were not completely known at the time this Checklist was prepared, estimates provided here are based on daily vehicle operation times for the estimated working-day duration; actual times may be less. The project’s direct greenhouse gas emissions related to construction are presented as total metric tons of carbon dioxide (MTCO₂e), calculated in Attachment B, and summarized in Table 1. Total

greenhouse gas emissions for the project are estimated to be about 13.3 metric tons of carbon dioxide emission (MTCO_{2e}), where one metric ton is equal to 2,205 pounds. Long-term maintenance of the project improvements would not result in increases in greenhouse gas emissions above current levels. The completed project would not generate additional air emissions beyond those required by the existing drainage asset.

Table 1. Summary of Greenhouse Gas (GHG) Emissions

Activity/Emission Type	GHG Emissions (pounds of CO _{2e}) ¹	GHS Emissions (metric tons of CO _{2e}) ¹
Buildings	0	0
Paving	22,050	10
Construction Activities (Diesel)	4,460.4	2
Construction Activities (Gasoline)	2,916	1.3
Long-term Maintenance (Diesel)	0	0
Long-term Maintenance (Gasoline)	0	0
Total GHG Emissions	29,426.4	13.3

¹Note: 1 metric ton = 2,204.6 pounds of CO_{2e}. 1,000 pounds = 0.45 metric tons of CO_{2e}

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**

There are no known off-site sources of emissions that may affect this proposal.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:**

During construction, impacts to air quality would be reduced and controlled through implementation of standard federal, state, and local emission control criteria and City of Seattle construction practices. These would include requiring contractors to use best available control technologies, ensure proper vehicle maintenance, and minimize vehicle and equipment idling. The completed project would not generate odors or generate additional air emissions.

3. Water

- a. Surface:**

- (1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If so, describe type and provide names. If appropriate, state what stream or river it flows into.**

The project would affect Littlebrook Creek, a tributary of Thornton Creek (a Lake Washington tributary). Lake Washington is more than 3,000 feet east of the project site.

- (2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If so, please describe, and attach available plans.**

During construction, Littlebrook Creek would be bypassed around the work area.

- (3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

Gravel-filled bags would be temporarily deployed in Littlebrook Creek to create a cofferdam for the flow bypass during construction. No other material would be placed in or removed from surface water or wetlands.

- (4) Will the proposal require surface water withdrawals or diversions? If so, give general description, purpose, and approximate quantities if known.**

Stormwater runoff from the project area is collected via an existing informal (ditch and culvert) stormwater conveyance system. The completed project would not change the volume or timing of stormwater runoff directed to the City's informal stormwater conveyance system. During construction, Littlebrook Creek would be temporarily bypassed around the work area and discharged back into the existing culvert downstream of the work area.

- (5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

No portion of the project lies within a 100-year floodplain.

- (6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

The proposed project would not produce or discharge waste materials to surface waters. The completed project would not affect volumes or destinations of stormwater conveyed through the City's public stormwater system.

b. Ground:

- (1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.**

Excavations may require dewatering during construction. If dewatering is required, SPU would require its contractor to prepare a Temporary Construction Dewatering Plan and collected water would be managed according to the Plan. Quantities of water that could potentially be collected during temporary construction dewatering and the discharge location(s) of that water are unknown. The project would not otherwise withdraw, discharge, or surcharge groundwater.

- (2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals...; agricultural, etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

No waste material would be discharged to groundwater for this project.

c. Water Runoff (including storm water):

- (1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

Project area stormwater runoff from paved surfaces within street rights-of-way, and from roof and yard drains from adjacent private properties, is collected via the existing local and informal stormwater drainage system. During project construction, stormwater runoff may need to be managed to prevent sediment from entering and leaving the construction site. Precipitation falling on the construction site would be directed to the existing stormwater collection and conveyance system or contained on-site and allowed to infiltrate. Barriers such as sandbags, wattles, straw bales would be used to prevent sediment from entering or leaving the construction area. Once construction is complete, temporary erosion control measures would be removed. Disturbed areas would be restored to their near-original conditions and disturbed ground would be vegetated and protected from erosion. The completed project would be revegetated with native plant species and would not create additional impervious surfaces or a need to manage additional stormwater runoff beyond currently existing conditions. Stormwater runoff on and adjacent to the project site would follow pre-construction drainage pathways.

- (2) Could waste materials enter ground or surface waters? If so, generally describe.**

No part of the proposed work involves discharging waste materials to surface or ground waters. However, construction activities such as concrete pouring and handling would generate pollutants that could potentially enter local drainage conveyance systems. Non-sediment pollutants that may be present during construction include:

- Petroleum products including fuel, lubricants, hydraulic fluids, and form oils
- Paints, glues, solvents, and adhesives
- Concrete and concrete washwater
- Chemicals associated with portable toilets.

Procedures to prevent and control pollutants, including hazardous materials such as hydrocarbons and pH-modifying substances, would be described in a spill prevention, control, and countermeasures plan prepared for the project and approved by the City of Seattle prior to the start of construction.

- (3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

The completed project would restore disturbed areas to near-original condition and would not create a need to manage additional stormwater runoff beyond currently existing conditions. Stormwater would follow pre-construction drainage pathways.

d. Proposed measures to reduce or control surface, ground, runoff water, and drainage impacts, if any:

No adverse impacts to surface, ground, or runoff water are anticipated. BMPs, as identified in the City of Seattle’s Stormwater Code SMC Title 22, Subtitle VIII, relevant City of Seattle Director’s Rules, and Volume 2 Construction Stormwater Control Manual, would be used as needed to control erosion and sediment transport from and to the project site during construction.

4. Plants

a. Types of vegetation found on the site:

<input checked="" type="checkbox"/> Deciduous trees:	<input checked="" type="checkbox"/> Alder	<input type="checkbox"/> Maple	<input type="checkbox"/> Aspen	<input type="checkbox"/> Other:
<input checked="" type="checkbox"/> Evergreen trees:	<input checked="" type="checkbox"/> Fir	<input checked="" type="checkbox"/> Cedar	<input type="checkbox"/> Pine	<input type="checkbox"/> Other:
<input checked="" type="checkbox"/> Shrubs				
<input checked="" type="checkbox"/> Grass				
<input type="checkbox"/> Pasture				
<input type="checkbox"/> Crop or grain				
<input type="checkbox"/> Orchards, vineyards, or other permanent crops				
<input checked="" type="checkbox"/> Wet soil plants:	<input type="checkbox"/> Cattail	<input checked="" type="checkbox"/> Buttercup	<input type="checkbox"/> Bulrush	<input type="checkbox"/> Skunk cabbage
<input type="checkbox"/> Other:				
<input type="checkbox"/> Water plants:	<input type="checkbox"/> water lily	<input type="checkbox"/> eelgrass	<input type="checkbox"/> milfoil	<input type="checkbox"/> Other:
<input type="checkbox"/> Other types of vegetation:				

b. What kind and amount of vegetation will be removed or altered?

Vegetated areas in the affected street right-of-way are dominated by invasive, non-native species such as grasses and Himalayan blackberry (*Rubus bifrons*). Adjacent private parcels consist mostly of impervious surfaces (i.e., roofs, driveways, and patios) and pervious areas vegetated with lawn, landscaping, weeds, and trees. Construction would not remove trees but may disturb small areas vegetated with weedy grasses and Himalayan blackberry.

c. List threatened or endangered species known to be on or near the site.

According to a review of the Washington Department of Natural Resources (WDNR) Natural Heritage Program’s document called “Sections that Contain Natural Heritage Features, Current as of July 15, 2021” (accessed at https://www.dnr.wa.gov/publications/amp_nh_trs.pdf, there are no documented occurrences of sensitive, threatened, or endangered plant species at or near the project site. No federally-listed endangered or threatened plant species or State-listed sensitive plant species are known to occur within Seattle’s municipal limits. The project site has been intensively disturbed by development and redevelopment over the last 100 years and has been extensively excavated, filled, paved, or occupied by street, utility, and other constructed features. There is no habitat for threatened or endangered plants.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Vegetated portions of the roadfill prism in the street right-of-way would be disturbed by construction. All disturbed ground not intended to be re-paved in street rights-of-way would be amended with suitable soil-improving materials (e.g., compost) and revegetated with native plant species.

e. List all noxious weeds and invasive species known to be on or near the site.

A review of information maintained by the King County Noxious Weed Program (available at King County iMap interactive online mapping program, <http://gismaps.kingcounty.gov/iMap/>) did not identify documented occurrences of noxious weeds within 1,000 feet of the project site.

5. Animals

a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site:

Birds:	<input checked="" type="checkbox"/> Hawk	<input checked="" type="checkbox"/> Heron	<input checked="" type="checkbox"/> Eagle	<input checked="" type="checkbox"/> Songbirds
	<input checked="" type="checkbox"/> Other: crow, pigeon, gull			
<hr/>				
Mammals:	<input type="checkbox"/> Deer	<input type="checkbox"/> Bear	<input type="checkbox"/> Elk	<input type="checkbox"/> Beaver
	<input checked="" type="checkbox"/> Other: possum, raccoon, squirrel			
<hr/>				
Fish:	<input type="checkbox"/> Bass	<input type="checkbox"/> Salmon	<input type="checkbox"/> Trout	<input type="checkbox"/> Herring
	<input type="checkbox"/> Shellfish	<input checked="" type="checkbox"/> Other: stickleback?		

b. List any threatened or endangered species known to be on or near the site:

Endangered Species Act-listed species for this portion of the Puget Sound (PS) region are marbled murrelet (*Brachyramphus marmoratus*, Threatened), streaked horned lark (*Eremophila alpestris strigata*, Threatened), yellow-billed cuckoo (*Coccyzus americanus*, Threatened), and gray wolf (*Canis lupus*, Proposed Endangered). Because the project site does not provide habitat for any of these or other threatened and endangered species, the project is expected to have no adverse effect on those species. A check of the Washington Department of Fish and Wildlife’s “Priority Habitat Species on the Web” database on March 16, 2022, indicates this project location may provide habitat for the State-listed Sensitive species little brown bat (*Myotis lucifugus*)—information inferred from a large, mapped polygon based on one or more historic records of this species.

c. Is the site part of a migration route? If so, explain.

Seattle is in the migratory routes of many birds and other animal species and is part of the Pacific Flyway, a major north-south route of travel for migratory birds in the Americas extending from Alaska to Patagonia, South America. Also, Puget Sound, Lake Washington, the Lake Washington Ship Canal, and the Duwamish Waterway are important water migration routes for many animal species.

d. Proposed measures to preserve or enhance wildlife, if any:

The proposed work involves limited and short-duration work in Littlebrook Creek, which would be bypassed around the work area during construction. All disturbed ground intended to be landscaped would be amended with suitable soil-improving materials (e.g., compost) and revegetated with native plant species. The trash rack will provide 8 inches of clearance between the bottom of the trash rack and the streambed, which meets WDFW fish passage requirements. In addition, the trash rack would be fabricated from 6061 aluminum to avoid water quality issues as might be caused by using galvanized steel. The steel piles would likely be shop-coated with a zinc-rich primer, an intermediate epoxy coating, and a urethane-type top coat.

e. List any invasive animal species known to be on or near the site.

King County lists the European starling, house sparrow, eastern gray squirrel, and fox squirrel as terrestrial invasive species for this area (<http://www.kingcounty.gov/services/environment/animals-and-plants/biodiversity/threats/Invasives.aspx>).

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The completed project would not require electricity.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The completed project would not affect the potential use of solar energy by adjacent properties. No elements of the project would cast shade on adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

No additional energy conservation measures are proposed.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe:

Small amounts of materials likely to be present during construction include gasoline and diesel fuels, hydraulic fluids, oils, lubricants, solvents, paints, and other chemical products. A spill of one of these chemicals could potentially occur during construction due to equipment failure or worker error. Though unlikely, contaminated soils, sediments, or groundwater could also be exposed during excavation. If disturbed, contaminated substances could expose construction workers and potentially other individuals in the vicinity through blowing dust, stormwater runoff, or vapors.

(1) Describe any known or possible contamination at the site from present or past uses.

The project site is not known to have had industrial or commercial land uses that may have resulted in contamination of soil materials. However, it is possible contamination of soil or groundwater associated with past uses or activities on or near the site may be present.

(2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

There are no known hazardous chemicals or conditions that might affect project development and design.

(3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Construction activities such as concrete pouring and handling would generate pollutants that could potentially enter local drainage conveyance systems. Non-sediment pollutants that may be present during construction include:

- Petroleum products, including fuel, lubricants, hydraulic fluids, and form oils
- Paints, glues, solvents, and adhesives
- Concrete and concrete washwater
- Chemicals associated with portable toilets.

During project construction, Littlebrook Creek flows would be temporarily bypassed around the work site as required to accomplish project work. The completed project would not affect the volume or composition of conveyed stormwater. Potential for hazardous chemicals to be produced by or associated with substances present in, or chemical processes occurring in, the conveyed stormwater, would be the same as prior to construction. During normal operation of the project improvements, no toxic or hazardous chemicals would be stored at any time at the project site.

(4) Describe special emergency services that might be required.

No special emergency services would be required during construction or operation of the project. Possible fire or medic services could be required during construction, as well as possibly during operation of the completed project. However, the completed project would not demand higher levels of special emergency services than already exist at the project location.

(5) Proposed measures to reduce or control environmental health hazards, if any:

SPU's construction contractor would be required to develop and implement a Spill Plan to control and manage spills during construction. During construction, the contractor would use standard operating procedures and BMPs identified in the City's Stormwater Code SMC Title 22, Subtitle VIII, relevant City of Seattle Director's Rules, and Volume 2 Construction Stormwater Control Manual to reduce or control possible environmental health hazards. In addition, a spill response kit would be

maintained during construction and all workers would be trained in spill prevention and containment consistent with the City of Seattle's Standard Specifications for Road, Bridge, and Municipal Construction.

Soil discovered to be contaminated by previous land uses or by spills during construction would be excavated and disposed of in a manner consistent with the level and type of contamination, in accordance with federal, state, and local regulations, by qualified contractor(s) and/or City staff.

b. Noise

- (1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

Noise that exists in the area would not affect the project.

- (2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**

Noise levels near project construction would temporarily increase during construction. Short-term noise from construction equipment would be limited to the allowable maximum levels of applicable laws, including the City of Seattle's Noise Control Ordinance [SMC Chapter 25.08.425—Construction and Equipment Operations]. Within the allowable maximum levels, SMC 25.08 permits noise from construction equipment between the hours of 7 a.m. and 7 p.m. weekdays, and 9 a.m. and 7 p.m. weekends and legal holidays. Construction is estimated to require approximately 20 working days. The completed project would not generate noise.

- (3) Proposed measures to reduce or control noise impacts, if any:**

Construction equipment would be muffled in accordance with the applicable laws. SMC Chapter 25.08 (which prescribes limits to noise and construction activities) and Washington State Maximum Environmental Noise Levels (WAC Chapter 173-60) would be enforced while the project is being constructed and operated (except for emergencies).

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.**

Near the subject culvert, NE 137th St is a non-arterial (residential) asphalt paved two-lane road with single family residential properties on the north side of the street and multifamily residential and commercial properties on the south side of the street. The proposed work would not affect current land uses on nearby or adjacent properties.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or non-forest use?**

There is no documented history of the project site having ever been used for agricultural purposes.

- (1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?**

No working farm or forest land business operations exist at or near the project site.

- c. Describe any structures on the site.**

The proposed work is associated with a culvert conveying Littlebrook Creek under NE 137th St in improved street right-of-way used for vehicle and pedestrian travel and vehicle parking. Adjacent property uses are residential (some of which may include space for home-based occupations). Utilities are in street rights-of-way.

- d. Will any structures be demolished? If so, what?**

The project would not demolish any structures.

- e. What is the current zoning classification of the site?**

LR3 (M) is a Multifamily Residential zone where residential development such as townhouses, rowhouses, and apartments are allowed.

- f. What is the current comprehensive plan designation of the site?**

Multifamily

- g. If applicable, what is the current shoreline master program designation of the site?**

The project is not located in the City of Seattle's Shoreline Management District.

- h. Has any part of the site been classified as an "environmentally critical" area? If so, specify.**

The Seattle Department of Construction and Inspection's GIS map (<https://seattlecitygis.maps.arcgis.com/apps/webappviewer/index.html?id=f822b2c6498c4163b0cf908e2241e9c2>) indicates the project is in a Riparian Corridor Environmentally Critical Area (ECA).

- i. Approximately how many people would reside or work in the completed project?**

No people would reside or work in the completed project.

- j. Approximately how many people would the completed project displace?**

The project would not displace any people.

k. Proposed measures to avoid or reduce displacement impacts, if any:

There would be no displacement impacts.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The project would be compatible with existing and projected land uses and plans.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

There are no nearby agricultural and forest lands of long-term commercial significance.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

The proposed project would not construct any housing units.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

The proposed project would not eliminate any housing units.

c. Proposed measures to reduce or control housing impacts, if any:

No measures are proposed because there would be no housing impacts.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?

The project proposes to install or modify buried or surface-mounted elements.

b. What views in the immediate vicinity would be altered or obstructed?

Primarily, the project proposes to install or modify buried elements. The proposed project would not alter or obstruct views.

c. Proposed measures to reduce or control aesthetic impacts, if any:

No measures to reduce or control aesthetic impacts are proposed because the project would not alter or obstruct views.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The constructed project would not produce light or glare. No new streetlights are proposed or required. During construction, if an emergency situation calls for after-dark work, the construction contractor may deploy portable lights that temporarily produce light and glare.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

The completed project would not create light or glare.

c. What existing off-site sources of light or glare may affect your proposal?

There are no existing off-site sources of light and glare that would affect the proposal.

d. Proposed measures to reduce or control light and glare impacts, if any:

No measures are needed to reduce or control light and glare impacts because no impacts would occur. If an emergency requires after-dark work during construction, portable lighting would be adjusted as feasible to minimize glare.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

There are no designated recreational opportunities in the immediate vicinity of the project site, which is in improved street right-of-way used for informal recreational activities such as dog-walking, walking, jogging, and bicycling. There are no formal recreational facilities (such as City parks) within 2,000 feet of the project site.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The proposed work would not permanently displace any existing recreational uses. Project construction activities could result in short-term, temporary impacts to right-of-way access. Project construction activities would result in short-term temporary lane closure and detour impacts to the use of the affected streets by walkers, runners, and bicyclists.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Construction would require temporary lane closures. Such closures would comply with relevant policies administered by SDOT as part of their Street Use permitting process. There are numerous route alternatives for pedestrians, joggers, and bicyclists. The project would attempt to make those closures and detours as brief as possible. Project notifications through website updates, emails, and mailings would provide affected residents with advance notice regarding temporary closures and detours. In addition, SPU would take the following measures to avoid or reduce projects impacts on recreation activities:

- Coordinate all project work affecting streets in advance with SDOT;
- Comply with required SDOT Street Use Permits issued for the project;
- Ensure that safe pedestrian and bicycle routes are maintained at all times consistent with approved street use permits, and traffic control plans; and
- Place temporary project signs along affected streets prior to project construction to provide local residents with advance notice regarding temporary street closures and detours.

13. Historic and Cultural Preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.**

There are numerous residential and commercial buildings over 45 years old located in the vicinity of the project site, most of which have not been evaluated for cultural/historic significance. The project was checked against the registers listed in Item B.13.c below. None of these registers recorded any places or objects listed on, or proposed for, national, state, or local preservation registers located on or adjacent to the project site. However, aside from the drainage assets affected by this project, no buildings or structures would be disturbed by the project. These drainage assets may be older than 45 years but have not been evaluated for eligibility for listing in national, state, or local preservation registers.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.**

According to the information sources listed in Item B.13.c below, there are no such cultural resources at or near the project site. According to the Washington State Department of Archaeology and Historic Preservation's Landscape Predictive Model, the project site is in an area of High Risk for discovery of cultural resources. However, all ground disturbance and excavation would occur in existing street right-of-way and developed areas disturbed previously in recent times by installation of underground utility infrastructure, roads, and residential structures.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the Department of Archaeology and Historic Preservation, archaeological surveys, historic maps, GIS data, etc.**

To determine if National Register or Washington Heritage properties are in or adjacent to the project site, the project locations were checked against the following registers on March 21, 2021:

- Washington Information System for Architectural & Archaeological Research Data (WISAARD) maintained by the Washington State Department of Archaeology and Historic Preservation <https://wisaard.dahp.wa.gov/>
- King County and City Landmarks List maintained by the King County Historic Preservation Program, https://www.kingcounty.gov/~media/services/home-property/historic-preservation/documents/resources/T06_KCLandmarkList.ashx?la=en
- Landmark List, and Map of Designated Landmarks, maintained by the City of Seattle, Department of Neighborhoods, accessed May 6, 2021 <http://www.seattle.gov/neighborhoods/programs-and-services/historic-preservation/landmarks/landmarks-map>

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Proposed work would not affect buildings or known cultural resources. Only portions of SPU's municipal drainage system would be affected; none of those objects are considered historically or culturally important. Also, proposed work is in previously disturbed and filled upland areas, which significantly reduces chances of encountering contextually significant archaeological materials. However, an inadvertent discovery plan would be in effect and on-site during all ground-disturbing activity. Work crews would be trained on inadvertent discovery protocols should archaeological material be discovered. If evidence of cultural artifacts or human remains (either historic or prehistoric) be encountered during excavation, work in that immediate area would be suspended and the find examined and documented by a professional archaeologist. Decisions regarding appropriate mitigation and further action would be made at that time.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The project would occur in existing, improved street right-of-way for NE 137th St. Access would be by local arterials and residential streets.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Transit stops for Metro Routes 320, 322, 330, 372X, 50 are located near the project on Lake City Wy NE. Metro Route 65 uses 30th Ave NE. None of these transit routes would be impacted by construction. Requirements for flagging and traffic control would be identified by SDOT as part of their street use permitting for this project.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

Because the proposed work requires use of the street right-of-way, construction would require temporary closures of parking as well as travel lanes. Parking associated with the affected street right-of-way is currently on-street, free parking west and east of the subject culvert crossing and managed by the City of Seattle. During construction, there may be no or restricted parking on one or both sides of NE 137th St for an as-yet unspecified distance from the subject culvert. Project construction is estimated to temporarily eliminate up to approximately 20 on-street public parking spaces adjacent to the construction zone to accommodate contractor vehicles, mobilization, construction, and local and through access. Generally, however, there is ample on-street and off-street parking available elsewhere near this project site and most adjacent and nearby residences have their own off-street parking. Specific timing and duration of parking and lane closures are not known at this time, but such closures would comply with relevant policies administered by SDOT as part of its street use permitting process. The completed project would neither create nor eliminate parking spaces.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).**

The project would restore all demolished and damaged street surfaces to pre-construction conditions or better, as required by SDOT. No new permanent roads or streets would be constructed as part of the project.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The proposed project would not use water, rail, or air transportation.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?**

Project construction would generate up to approximately 130 daily vehicle trips due to workers and materials being transported to and from the site during the estimated construction period based on normal Northwest weather conditions. Those trips would occur during business hours (between 7 a.m. and 6 p.m.) on weekdays (Mondays through Fridays) and on weekend days. The completed project would not generate any additional vehicle trips beyond that which would normally occur for the on-going and routine operation, maintenance, and monitoring of the drainage assets in this area.

- g. Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.**

The proposal would not interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area.

- h. Proposed measures to reduce or control transportation impacts, if any:**

The following measures would be used to reduce or control transportation impacts:

- SPU would conduct public outreach before and during project construction to notify residents, local agencies, and other stakeholders of work progress and expected disruptions or changes in traffic flow.
- Access for emergency-response vehicles would be maintained at all times.
- Through access and vehicle access to private properties may not be available at all times during construction, but temporary closures would be minimized.
- Alternative routes for pedestrians, bicyclists, and those with disabilities would be identified and clearly signed, as needed.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.**

The proposed project is not expected to create an increased need for public services. The project would be required at all times to accommodate emergency access for buildings accessed via the affected streets. Emergency access would comply with relevant policies administered by SDOT as part of its Street Use permitting process.

- b. Proposed measures to reduce or control direct impacts on public services, if any.**

During construction, the project would be required at all times to accommodate emergency access for structures accessed via affected street rights-of-way. The project would avoid impacting known buried and overhead utilities, which include overhead electrical and communications utilities and buried gas, water, and sewers. No mitigation is being proposed because the project would have no adverse impacts on public services.

16. Utilities

- a. Check utilities available at the site:**

None
 Electricity Natural gas Water Refuse service
 Telephone Sanitary sewer Septic system
 Other: cable, fiber optics

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

During construction, this proposed work is not expected to interrupt or reconstruct other utilities. However, inadvertent damage to underground utilities could occur during construction. While such incidents do not occur frequently, they could temporarily affect services to customers served by the affected utility while emergency repairs are made. No other interruptions to regular utility services are expected during construction. The completed project would enhance life and serviceability of critical drainage facility and would continue to be owned, operated, and maintained by SPU.

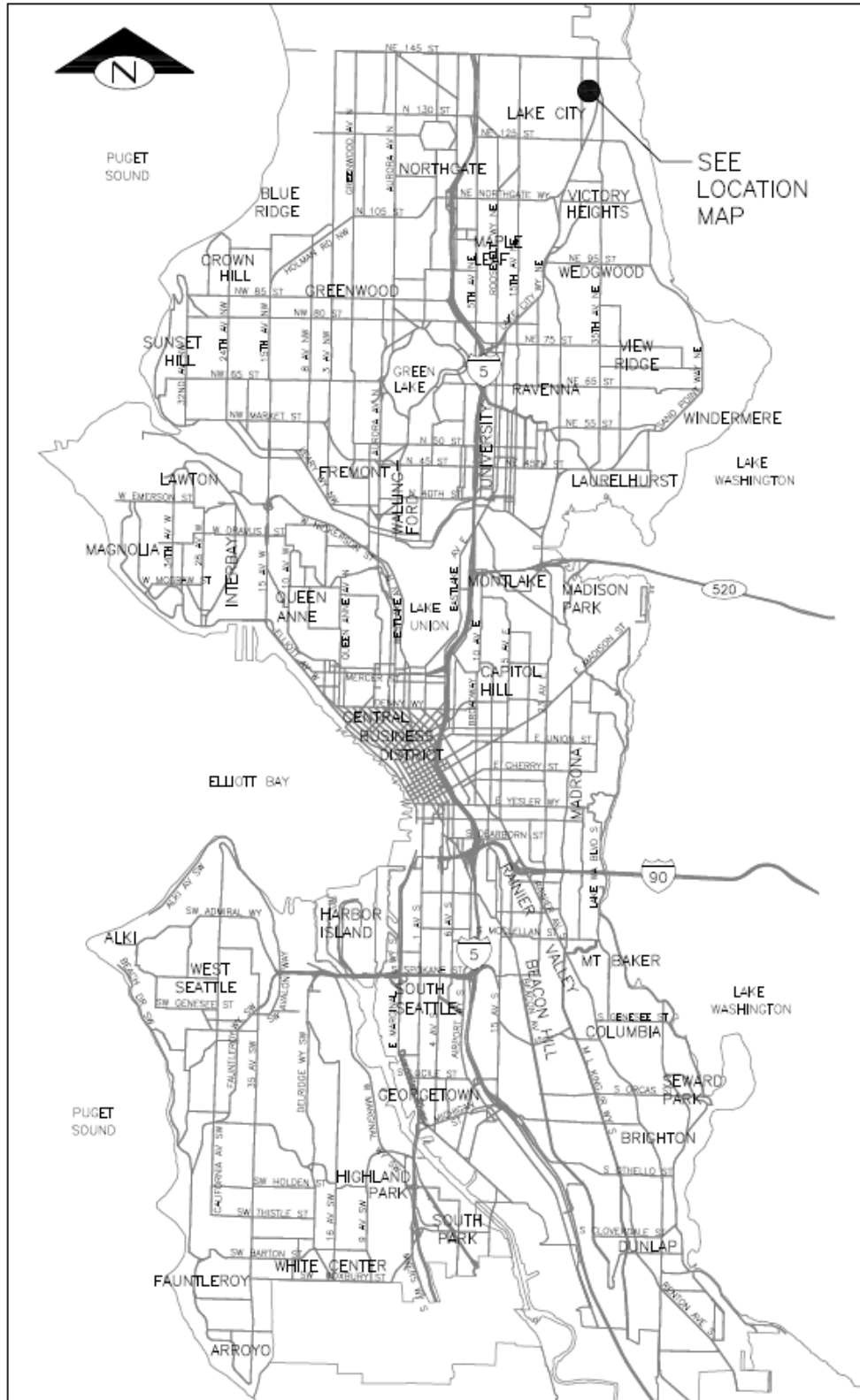
C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that SPU as SEPA Lead Agency is relying on them to make its decision.

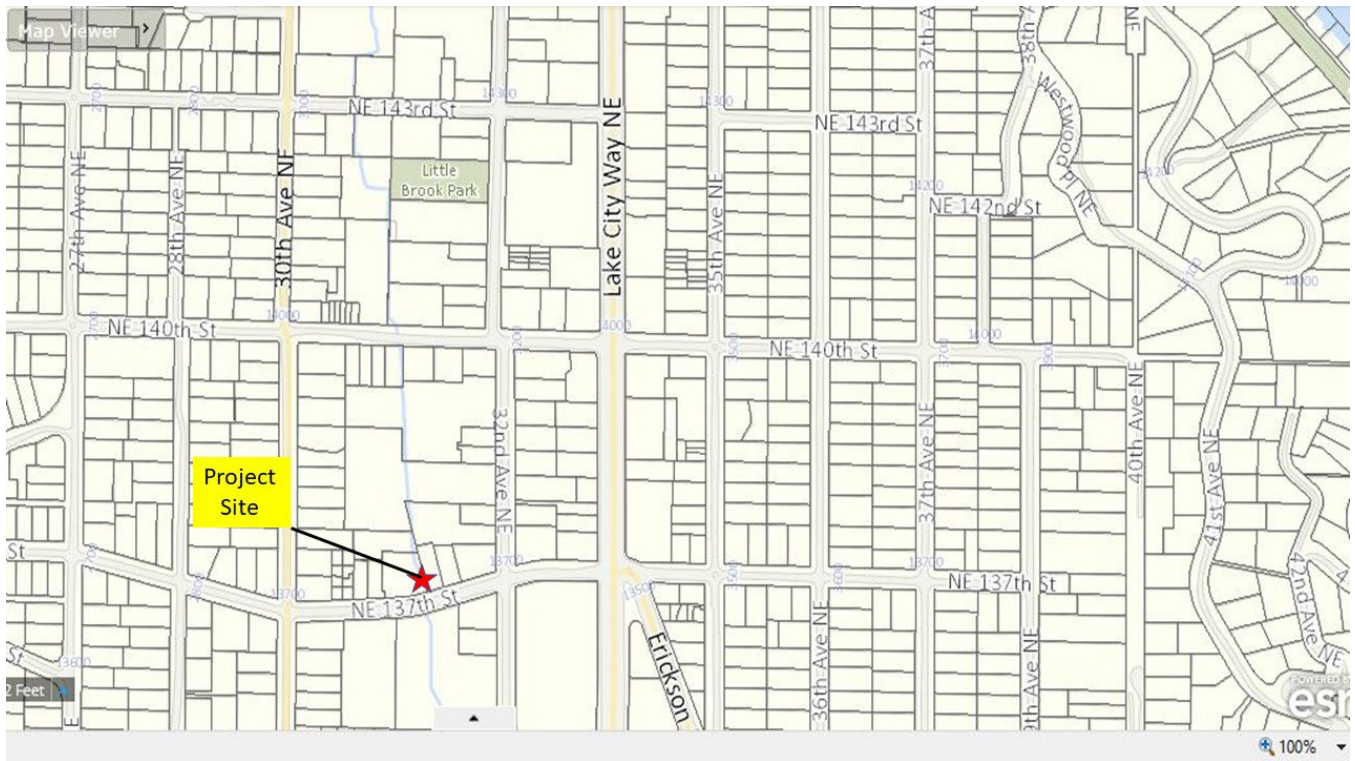
Signature: _____
Samantha Menathy
 Project Manager

Attachment A: Vicinity and Location Maps
 Attachment B: Greenhouse Gas Emissions Worksheet

Attachment A: Vicinity and Location Maps







Attachment B: Greenhouse Gas Emissions Worksheet

54.8 Section I: Buildings						
Type (Residential) or Principal Activity (Commercial)	# Units	Square Feet (in thousands of square feet)	Emissions Per Unit or Per Thousand Square Feet (MTCO _{2e})			Lifespan Emissions (MTCO _{2e})
			Embodied	Energy	Transportation	
Single-Family Home	0		98	672	792	0
Multi-Family Unit in Large Building	0		33	357	766	0
Multi-Family Unit in Small Building	0		54	681	766	0
Mobile Home	0		41	475	709	0
Education		0.0	39	646	361	0
Food Sales		0.0	39	1,541	282	0
Food Service		0.0	39	1,994	561	0
Health Care Inpatient		0.0	39	1,938	582	0
Health Care Outpatient		0.0	39	737	571	0
Lodging		0.0	39	777	117	0
Retail (Other than Mall)		0.0	39	577	247	0
Office		0.0	39	723	588	0
Public Assembly		0.0	39	733	150	0
Public Order and Safety		0.0	39	899	374	0
Religious Worship		0.0	39	339	129	0
Service		0.0	39	599	266	0
Warehouse and Storage		0.0	39	352	181	0
Other		0.0	39	1,278	257	0
Vacant		0.0	39	162	47	0
TOTAL Section I Buildings						0

Section II: Pavement						
						Emissions (MTCO _{2e})
Pavement (sidewalk, asphalt patch)						
Concrete/asphalt (50 MTCO _{2e} /1,000 sq ft of pavement at a depth of 6 inches or 18.5 CY)		200 sq ft 6 inches thick)				10
TOTAL Section II Pavement						10

Section III: Construction						
(See detailed calculations below)						Emissions (MTCO _{2e})
TOTAL Section III Construction						3.3

Section IV: Operations and Maintenance						
(See detailed calculations below)						Emissions (MTCO _{2e})
TOTAL Section IV Operations and Maintenance						0

TOTAL GREENHOUSE GAS (GHG) EMISSIONS FOR PROJECT (MTCO_{2e})						13.3
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Attachment B: Greenhouse Gas Emissions Worksheet, continued

Section III Construction Details		
Construction: Diesel		
Equipment	Diesel (gallons)	Assumptions
Front-end Loaders/Excavators (1)	140	20 hours x 7 gallons/hour (345 hp engine)
Dump Truck (10 CY capacity)	2	1 round trip x 10 miles/round trip ÷ 5 mpg
Flat-bed Truck	20	5 round trips x 20 miles/round trip ÷ 5 mpg
Drum Compactor	2	4 hours x 0.5 gallons per hour
Concrete/Asphalt Truck (10 CY capacity)	4	1 round trip x 20 miles/round trip ÷ 5 mpg
Subtotal Diesel Gallons	168	
GHG Emissions in lbs CO₂e	4,460.4	26.55 lbs CO ₂ e per gallon of diesel
GHG Emissions in metric tons CO₂e	2	1,000 lbs = 0.45359237 metric tons

Construction: Gasoline		
Equipment	Gasoline (gallons)	Assumptions
Pick-up Trucks or Crew Vans	120	20 working days x 3 trucks x 2 round-trip/day x 20 miles/ round trip ÷ 20 mpg
Subtotal Gasoline Gallons	120	
GHG Emissions in lbs CO₂e	2,916	24.3 lbs CO ₂ e per gallon of gasoline
GHG Emissions in metric tons CO₂e	1.3	1,000 lbs = 0.45359237 metric tons

Construction Summary		
Activity	CO ₂ e in pounds	CO ₂ e in metric tons
Diesel	4,460.4	2
Gasoline	2,916	1.3
Total for Construction	7,376.4	3.3

Section IV Long-Term Operations and Maintenance Details		
Operations and Maintenance: Diesel		
Equipment	Diesel (gallons)	Assumptions
Subtotal Diesel Gallons	0	
GHG Emissions in lbs CO₂e	0	26.55 lbs CO ₂ e per gallon of diesel
GHG Emissions in metric tons CO₂e	0	1,000 lbs = 0.45359237 metric tons

Operations and Maintenance: Gasoline		
Equipment	Gasoline (gallons)	Assumptions
Subtotal Gasoline Gallons	0	
GHG Emissions in lbs CO₂e	0	24.3 lbs CO ₂ e per gallon of gasoline
GHG Emissions in metric tons CO₂e	0	1,000 lbs = 0.45359237 metric tons

Operations and Maintenance Summary		
Activity	CO ₂ e in pounds	CO ₂ e in metric tons
Diesel	0	0
Gasoline	0	0
Total Operations and Maintenance	0	0