ENVIRONMENTAL CHECKLIST

for the proposed

UWMC Outpatient Medical Center Expansion Project

prepared by

UNIVERSITY of WASHINGTON

June 2026

EA Engineering, Science, and Technology, Inc., PBC
NBBJ Architects
Shannon & Wilson
Geosyntec Consultants, Inc.
Tree Solutions, Inc.
Terracon
Transpo Group

PREFACE

The purpose of this Environmental Checklist is to identify and evaluate probable environmental impacts that could result from the ***University of Washington Medical Center (UWMC) at the Outpatient Medical Center Surgery Center Expansion Project (Outpatient Surgery Center Expansion Project)*** and to identify measures to mitigate those impacts. The proposed project would include interior renovation and an approximately 9,600 gross square-foot (GSF) expansion of the existing approximately 133,298 square-foot medical facility constructed in 1961. The proposed project would update existing medical spaces and create four new operating rooms and associated support spaces at the site.

The State Environmental Policy Act (SEPA)[1] requires that all governmental agencies consider the environmental impacts of a proposal before the proposal is decided upon. This Environmental Checklist has been prepared in compliance with the State Environmental Policy Act; the SEPA Rules, effective April 4, 1984, as amended (Chapter 197-11, Washington Administrative Code [WAC]), which implements SEPA.

This document is intended to serve as SEPA review for site preparation work, associated building construction, and operation of the proposed development comprising the ***Outpatient Surgery Center Expansion Project***. Analysis associated with the proposal contained in this Environmental Checklist is based on schematic plans for the project. While not construction-level detail, the schematic plans accurately represent the eventual size, location, and configuration of the proposed project and are considered adequate for analysis and disclosure of environmental impacts.

This Environmental Checklist is organized into three major sections. *Section A* of the Checklist (beginning on page 1) provides background information concerning the *Proposed Action* (e.g., purpose, proponent/contact person, project description, project location, etc.). *Section B* (starting on page 9) contains the analysis of environmental impacts that could result from implementation of the proposed project, based on review of major environmental parameters. This section also identifies possible mitigation measures. *Section C* (page 36) contains the signature of the proponent, confirming the completeness of this Environmental Checklist.

Project-relevant analyses that served as a basis for this Environmental Checklist review include the following: *Geotechnical Engineering Report* (Geosyntec Consultants, Inc., 2026), *Greenhouse Gas Emissions Worksheet* (EA Engineering, 2026), *Wetland Delineation Report* (Shannon & Wilson, 2026), *Arborist Report* (Tree Solutions, 2026), *Regulated Building Materials Survey* (Terracon, 2026), and *Traffic Study* (Transpo Group, 2026).

[1] Chapter 43.21C Revised Code of Washington (RCW)

TABLE OF CONTENTS

PREFACE i
TABLE OF CONTENTS ii
PURPOSE 1
A. Background 1
B. Environmental Elements 9
1. Earth 9
2. Air 12
3. Water 13
4. Plants 17
5. Animals 19
6. Energy and Natural Resources 20
7. Environmental Health 20
8. Land and Shoreline Use 24
9. Housing 26
10. Aesthetics 27
11. Light and Glare 28
12. Recreation 29
13. Historic and Cultural Preservation 30
14. Transportation 31
15. Public Services 34
16. Utilities 34
C. Signature 36
REFERENCES 37

List of Appendices

Appendix A - Geotechnical Engineering Report A-1
Appendix B - GHG Emissions Worksheet A-2
Appendix C - Arborist Report A-3
Appendix D - Regulated Building Materials Survey A-4

List of Figures

1. Vicinity Map 6
2. Aerial Map 7
3. Site Plan 8

PURPOSE

The State Environmental Policy Act (SEPA), Chapter 43.21 RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. The purpose of this checklist is to provide information to help identify impacts from the proposal (and to reduce or avoid impacts, if possible) and to help the University of Washington to make a SEPA threshold determination.

A. Background

1. Name of proposed project, if applicable:

University of Washington Medical Center (UWMC) at the Outpatient Medical Center Surgery Center Expansion Project (Outpatient Surgery Center Expansion Project)

2. Name of applicant:

University of Washington

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

Applicant
University of Washington Facilities
Box 359571
Seattle, WA 98195

Contact
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Environmental and Land Use Planner
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Seattle, WA 98195
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4. Date checklist prepared:

This Environmental Checklist was prepared on June 16, 2026, by the University of Washington as the lead agency under the authority of WAC 478-324.

5. Agency requesting checklist:

University of Washington Facilities
Box 359571
Seattle, WA 98195

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

The ***Outpatient Surgery Center Expansion Project*** analyzed in this Environmental Checklist involves site preparation work, construction, and operation of the proposal. Site preparation and construction are anticipated to begin in January 2027 with completion and occupancy expected in November 2028.

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

No future plans for further development of the project site are proposed at this time.

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

The following environmental information has been completed in support of the proposed project and is included as appendices to this Environmental Checklist:

- *Geotechnical Engineering Report* (Geosyntec Consultants, Inc., 2026)
- *Greenhouse Gas Emission Worksheet* (EA Engineering, 2026)
- *Wetland Delineation Report* (Shannon & Wilson, 2026)
- *Arborist Report* (Tree Solutions, Inc., 2026)
- *Regulated Building Materials Survey* (Terracon, 2025)
- *Traffic Study* (Transpo Group, 2026)

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.

There are no known other applications or proposals that are pending approval for ***Outpatient Surgery Center Expansion Project*** site.

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

The following permits/approvals will be needed for the proposed project, including:

University of Washington

- Project Approval
- Design Review

City of Seattle

Department of Construction and Inspections

- Building Permit
- Mechanical Permits

- Electrical and Fire Alarm Permits
- Comprehensive Drainage Control Plan Approvals (includes Construction Best Management Practices, Erosion and Sediment Control requirements)
- Stormwater Permit

Department of Transportation

- Utility Major Permits

Washington Department of Health

- Construction Review Services

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.

Existing Site Conditions

UWMC Outpatient Medical Center Building

The proposed ***Outpatient Surgery Center Expansion Project*** is located at the UW Medicine – Outpatient Medical Center addressed as 10330 Meridian Avenue N in the Northgate neighborhood of Seattle (see **Figure 1** and **2**). The three-story approximately 133,298 GSF facility is home to a number of UW Medicine programs and clinics, including: Allergy, Asthma & Immunology Clinic; Digestive Health Clinic; Nephrology Clinic; Primary Care Clinic; Sports Medicine Clinic; and Outpatient Surgery Center.

The existing Outpatient Surgery Center is located on the first-floor extension at the northeast portion of the Outpatient Medical Center building and currently operates as a 23-hour surgery center with four operating rooms and a staff capacity of 31 employees (**see Figure 3**).

Overall UWMC Outpatient Medical Center Site (Overall Site)

The overall Outpatient Medical Center site (overall site) is approximately 11.77 acres in size and is generally bound by a private driveway and multi-family residential buildings to the north, Interstate-5 to the east, an apartment complex and undeveloped, natural areas to the south, and Meridian Avenue N to the west (see **Figure 1** and **2**). The overall site contains the outpatient medical building, paved driveways, walkways, and parking areas, and landscaping with trees. Landscaping, trees, and paved pedestrian walkways are noted surrounding the building, access roads, and parking lot. Approximately 54 trees (six inches in diameter or greater at standard height) are located within the overall site boundaries. Of those trees, 15 met the criteria for Tier 2 and six trees met the criteria for Tier 3 per City of Seattle definitions.

A surface parking lot is located to the southeast of the existing building. Additionally, a vehicle drop-off area and five Americans with Disabilities Act (ADA) compliant parking stalls are located to the west of the main entrance of the building. Together, both of the parking areas provide spaces for approximately 502 vehicles, including over 20 ADA compliant stalls. Access to the medical facility and parking areas is obtained from the paved access drive off of Meridian Avenue N.

Outpatient Surgery Center Expansion Project Site (Project Site)

The area of the proposed site footprint of the ***Outpatient Surgery Center Expansion Project*** (project site) is limited to a small approximately 0.22-acre portion of the 11.77-acre overall site, located adjacent to the existing one-story northeastern extension of the Outpatient Medical Center building (see **Figures 2 and 3**). The project site (comprising a small portion of the overall site) is relatively level and consists of grass area, paved walkways and landscaping consisting of shrubs and trees, including four Tier 2 trees and one Tier 3 tree.

Proposed Project

The proposed ***Outpatient Surgery Center Expansion Project*** is intended to modernize and expand the existing facility to increase the overall quality and quantity of medical services provided at the UWMC Outpatient Center. This would be achieved by remodeling the four existing and developing four new operating rooms, including upgrades and additions to associated support spaces. Approximately 13,831 GSF of the existing building would be remodeled and approximately 9,645 GSF of new building space would be developed for a total of 23,476 GSF of project work. After the addition, the Outpatient Surgery Center would have a staffing capacity of 62 employees.

The proposed ***Outpatient Surgery Center Expansion Project*** would include the addition of four new operating rooms, new pre-post operation cubicles and observation rooms, and new mechanical and electrical spaces. Existing pre-post operation cubicles and operation rooms, sterile processing, and staff support spaces would be renovated and modernized. The proposed building addition would be located beyond the northeast corner of the existing building (see **Figure 3** for the proposed site plan).

As part of these on-site redevelopments, approximately four Tier 2 trees and one Tier 3 trees will be required to be removed. New replacement trees would be provided for every tree removed that is six inches or greater in diameter (including any Tier 1, Tier 2, and Tier 3 trees) and would be anticipated to meet or exceed City of Seattle tree replacement requirements.

No changes to the vehicle access roadways or paved parking are proposed. Other existing interior areas that are not slated for renovation or expansion will receive a new finish to match the proposed developments. The completion of the proposed ***Outpatient Surgery***

Center Expansion Project would result in eight operating rooms, 17 Post-Anesthesia Care Unit (PACU) cubicles, and two observation rooms.

With the approximately 9,645 GSF of new building space associated with the proposed ***Outpatient Surgery Center Expansion Project***, the overall GSF of the Outpatient Medical Center would increase from the existing 133,298 GSF to 142,943 GSF.

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 proposed ***Outpatient Surgery Center Expansion Project*** is located at 10330 Meridian Avenue N in the Northgate neighborhood of Seattle (see **Figures 1** and **2**). The overall site contains an outpatient medical center associated with UW Medicine and is generally bound by a private driveway and multi-family residential buildings to the north, Interstate-5 to the east, an apartment complex and undeveloped, natural areas to the south, and Meridian Avenue N to the west. The approximate 0.22-acre project site (comprising a small portion of the overall site) is located adjacent northeast to the existing one-story extension of the existing building.

Source: USGS Topographic Map and EA Engineering, 2026

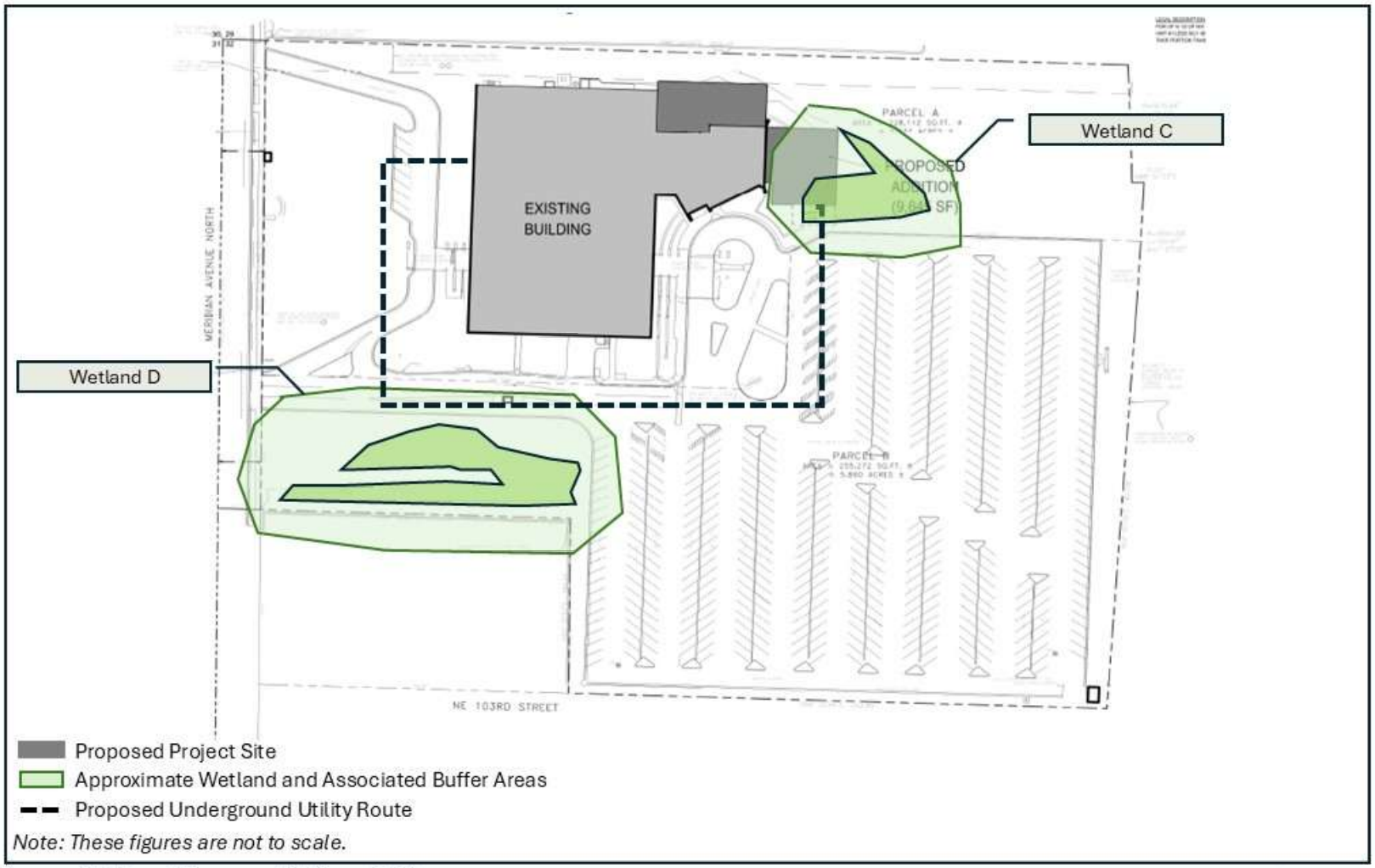
EA Engineering, Science, and Technology, Inc., PBC

Figure 1
Vicinity Map

Source: Google Earth and EA Engineering, 2026

EA Engineering, Science, and Technology, Inc., PBC

Figure 2
Aerial Map



Source: NBBJ and Shannon & Wilson, 2026

EA Engineering, Science, and Technology, Inc., PBC

Figure 3
Proposed Project Site Plan

B. Environmental Elements

1. Earth

a. General description of the site:
Circle or highlight one: flat, rolling, hilly, steep slopes, mountainous, other:

The topography of the ***Outpatient Surgery Center Expansion Project*** overall site is generally flat and gently sloping with elevations that range from approximately 255 feet at the southeast corner of the parking lot to 275 feet at the northwest corner of the parcel.[2]

The topography of the project site is generally flat with a west to east slope of 5 percent or less.

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

Of the areas of proposed groundwork for the building addition, steepest slope on the project site is recorded at an approximate average inclination of 5% (Geosyntec Consultants, Inc., 2026). According to the City of Seattle's Environmentally Critical Area (ECA) Maps, there is no Steep Slope ECA located within or near the project site or overall site (City of Seattle, 2026).

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 any of these soils.

A *Geotechnical Engineering Report* was completed for the proposed developments by Geosyntec Consultants, Inc (**Appendix A**). The report included three exploration borings to define the general soil conditions at the project site and one of which was used as a monitoring well. All borings were located within or adjacent to the footprint of the proposed building addition. Exploration borings were completed to a depth of 32 and 40 feet below ground surface (bgs). The soils encountered on the site generally consisted of fill, Vashon till, Vashon advanced outwash, and Lawton Clay (Geosyntec Consultants, Inc., 2026).

Fill generally consisted of loose to dense silty sand with gravel. Directly below the existing fill was loose to very dense silty sand with gravel associated to Vashon till. Following the Vashon till, very dense silty sand with or without gravel characteristic of Vashon advance outwash was recorded. Beyond the Vashon till, hard silt with or without sand associated to Lawton Clay was noted. Additionally, a previously completed *Sub-Grade Investigation* report was completed for the apartment complex located immediately southwest of the project site that identified peat within the soil (Geosyntec Consultants, Inc., 2026).

According to the City of Seattle ECA GIS Maps, the overall site is located within a Peat

[2] Elevation data from Google Earth.

Settlement Prone ECA. Although peat was not recorded within the soil samples taken at the project site, the existing fill was determined to not be suitable for foundation support and should be over-excavated from the building footprint (Geosyntec Consultants, Inc., 2026). The *Geotechnical Engineering Report* recommends the project design utilize strip or spread footings on a leveling pad of at least six inches of compacted crushed rock overlying either the native glacial till (weathered or unweathered) to provide sufficient vertical support and any additional structural fill should also consist of Crushed Surfacing Base Course (CSBC) or quarry spalls per Washington State Department of Transportation (WSDOT) standards that extends horizontally beyond the edge of the footings by a distance at least equal to the thickness of the structural fill. With these building foundation design measures implemented, no impacts from the Peat Settlement Prone ECA are anticipated. See the *Geotechnical Engineering Report* in **Appendix A** for complete details on review of geologic hazards and footing and replacement fill requirements.

The overall site and the project site do not contain any agricultural land areas of commercial significance.

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

In general, the Puget Sound region is a seismically active region; thus, the project site could experience seismic activity, which may cause surface rupture, liquefaction and subsidence, and landslides. According to the City of Seattle ECA Maps, the project site is located within a Liquefaction Prone ECA (City of Seattle, 2026). Liquefaction evaluations were completed for the project site in the *Geotechnical Engineering Report* that indicated that some discontinuous strata of soils are susceptible to liquefaction; however, the resulting effects are negligible at the ground surface. Therefore, no adverse impacts from liquefaction should occur as a result of the proposed project. See the G*eotechnical Engineering Report* in **Appendix A** for further details on liquefaction at the project site.

Considering the overall low slope throughout the overall site and the project site, potential risk of slope movement or landslides is anticipated to be low. There are no indications or history of unstable soils on the site, and no evidence of landslide activity has been observed.

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

While the proposed renovations would be located within the existing building and would not require earthwork activities, construction of the proposed building expansion would require approximately 3,650 cubic yards of excavation, 4,350 cubic yards of grading, and 700 cubic yards of fill for construction of the proposed surgery center expansion and associated utilities. If on-site material is not suitable for fill, it would be removed and transported to an approved location. If imported materials are required for fill, they would be obtained from an approved source.

f. Could erosion occur because of clearing, construction, or use? If so, generally describe.

Erosion is possible in conjunction with any construction activity. Site work would expose soils on the project site, but the implementation of best management practices (BMPs) and a Temporary Erosion Sedimentation Control (TESC) plan during construction would mitigate any potential impacts. Additionally, the *Geotechnical Engineering Report* identified measures to minimize potential erosion. Those measures are summarized in Section B.1.h below. See **Appendix A** for complete details.

Once the project is operational, permanent erosion control would be achieved through the restoration of gravel surfaces and/or the re-establishment of vegetation and no impacts from erosion are anticipated.

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

The overall site currently contains an existing medical facility, paved driveways, walkways, parking, and landscaped areas. The project site (comprising a small portion of the overall site) includes manicured landscaping and trees. The existing percentage of impervious surface on the overall site is approximately 62%. With the completion of the proposed ***Outpatient Surgery Center Expansion Project***, approximately 65% of the overall site would be covered with impervious surfaces. Impervious surface would increase at the site due to the new building addition.

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

No significant erosion is anticipated with the construction of the proposed project. The proposed project would comply with City of Seattle regulations, such as implementing a TESC plan and utilizing construction BMPs. The *Geotechnical Engineering Report* for the project highlighted the following measures to minimize potential erosion:

- Local BMPs for stockpiling and erosion protection should be strictly followed.
- TESC measures should be used in accordance with local BMPs. TESC measures may include:
  - Appropriately placed silt fencing
  - Straw wattles
  - Rock check dams
  - Plastic covering of exposed slope cuts and soil stockpiles
- Existing vegetation should be retained wherever possible.
- Uncontrolled surface water or runoff should not be allowed to flow across the site and should be mitigated by upstream drainage area run-on control measures.
- All temporary slopes should be protected from erosion by installing a surface water diversion ditch or berm at the top of the slope.
- Temporary erosion control measures should be monitored and modified when needed to address varying site specific or weather conditions.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During construction, the ***Outpatient Surgery Center Expansion Project***, could result in temporary and relatively small increases in localized air emissions, carbon monoxide, and hydrocarbons associated with particulates from diesel and gasoline-powered construction equipment, operation, and vehicles, as well as construction worker traffic accessing the project site. The primary source would likely arise from particulates during onsite excavation and site preparation at the project outset. However, considering the relatively small scale of the project, the minimal amounts of excavation that would be required as described above under the Earth section, and the implementation of construction BMPs, air quality emission impacts are not anticipated to be significant.

Upon completion of the project, the primary source of emissions would be from operation of the building and vehicles traveling to and from the overall site. The increase in building square footage and vehicles traveling to the overall site is expected to be minimal and would not be anticipated to result in a significant adverse air quality impact.

Another consideration with regard to air quality and climate relates to Greenhouse Gas Emissions (GHG). In order to evaluate climate change impacts of the proposed project, a *Greenhouse Gas Emissions Worksheet* has been prepared (see **Appendix B** of this Environmental Checklist). This *GHG Worksheet* estimates the emissions from the following sources: embodied, energy-related, and transportation-related emissions.

Since the implementation of the proposed project would result in an increase of approximately 9,645 GSF of new outpatient medical building space, the total estimated lifespan emissions for the developments are approximately 12,927 MTCO2e. MTCO2e is defined as Metric Ton Carbon Dioxide Equivalent and is a standard measure of amount of Carbon Dioxide (O2) emissions reduced or sequestered. Based on assumed building life of 62.5 years, the proposed project would be estimated to generate approximately 207 MTCO2e annually. For reference, the Washington State Department of Ecology threshold for potential significant GHG emissions is 25,000 MTCO2e annually. Therefore, the proposed project would not be anticipated to generate a significant amount of GHG emissions.

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

The primary source of off-site emissions in the project vicinity is from vehicle traffic on surrounding roadways, including the private residential driveway to the north, Interstate-5 to the east, and Meridian Avenue N to the west. However, these emissions are expected to be minimal and therefore would have no impact on the proposed project. There are no other known off-site sources of air emissions or odors that may affect the proposed project.

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

Construction activities would be required to comply with Puget Sound Clean Air Agency (PSCAA) regulations, including Regulation I, Section 9.11 (prohibiting the emission of air contaminants that would be injurious to human health), Regulation I, Section 9.15 (prohibiting the emission of fugitive dust, unless reasonable precautions are employed), and Regulation III, Article 4 (Asbestos Control Standards). No significant air quality impacts are anticipated with the construction of the proposed project.

3. Water

a. Surface Water:

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 yes, describe type and provide names. If appropriate, state what stream or river it flows into.

There is no surface water body on or in the immediate vicinity of the ***Outpatient Surgery Center Expansion Project*** site. The nearest surface water body is Haller Lake located approximately 0.95 miles north of the project site. The nearest major surface water body is the Puget Sound located approximately 2.15 miles to the northwest of the project site.

According to the City of Seattle ECA mapper, the overall site contains a wetland located along the western portion of the southern parcel boundary (*City of Seattle, 2026*); this wetland and buffer is indicated as Wetland D on **Figure 3**. As indicated in **Figure 3** a portion of the Wetland D buffer extends over the existing paved main driveway serving the overall site. Additionally, a wetland delineation was completed for the overall site that identified a wetland not recorded within the City of Seattle ECA mapper. This wetland (Wetland C) is located in the grass area to the immediate southeast of the project site, with a portion of the wetland and associated wetland buffer extending to the project site (see **Figure 3**). Wetland C was determined to be jurisdictional by the City of Seattle.

The project development footprint would impact Wetland C and the entirety of the wetland would be mitigated. Mitigation for this wetland impact would be achieved through the City's in-lieu-fee program through an approved mitigation plan. The wetland delineation report is also on file with UW and is available for review upon request.

A new Seattle City Light utility connection would be required for the project to provide power and electricity. The new underground utilities would be routed via a utility trench from an existing Seattle City Light vault located in the western parking area to the east-west driveway to the south of the existing building, before turning east along the east-west driveway through the northern border of the mapped Wetland D buffer, then would travel north to connect to the proposed building expansion. See the proposed utility route illustrated on **Figure 3**. Although the trench would be located entirely in an impervious and non-vegetated area of the paved east-west driveway, the proposed utilities would be trenched through a portion of the mapped ECA wetland buffer. Therefore, the wetland buffer would be impacted due to proximity of the proposed route. Since there would be

impacts to this wetland buffer, additional wetland mitigation would be completed as required by City code and included in the mitigation plan, as necessary.

Additional wetlands are noted adjacent to the overall site beyond the eastern and southern borders, located approximately 260 feet east of the project site at its closest point. Due to the distance of the off-site ECA mapped wetlands to the proposed building expansion area and utility routes, the project would have no impact to these mapped off-site wetland ECAs or their associated buffers.

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

   As described in the section above, the proposed project would require work in and adjacent to existing wetlands on-site. No other work would be conducted over, in, or adjacent (within 200 feet) to a water body.

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.**

   Due to the identified Wetland C located within and adjacent to the proposed building expansion site footprint, this surface water feature would be filled. However, mitigation to this wetland would be achieved through the City's in-lieu-fee program.

   No other fill or dredge material would be placed in or removed from any surface water body as a result of the proposed project.

4. **Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.**

   The proposed project would not require any surface water withdrawals or diversions.

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

   The proposed project site does not lie within a 100-year floodplain and is not identified within a flood prone area on the City of Seattle ECA Mapper (*City of Seattle, 2026)*.

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.**

   There would be no discharge of waste materials to surface waters as a result of the proposed project. Any waste materials generated during construction (i.e., grading spoils and demolition debris) would be transported off-site to an appropriate disposal facility.

b. Ground Water:

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 a general description, purpose, and approximate quantities if known.**

   Geotechnical investigations completed in February 2026 encountered groundwater seepage between approximately 0.75 to 3.25 feet bgs at the boring locations. Depending on the season in which construction occurs, footing excavation may extend below the groundwater table. Structural fill should not be placed and standing water. If perched or groundwater seepage is encountered during construction, it should be properly drained from the project site. If dewatering is not feasible, quarry spalls can be placed as structural fill in the standing water to bring the grade up out of the water table before installing foundation. See the *Geotechnical Engineering Report* in **Appendix A** for additional details on potential groundwater management during construction. Permanent groundwater dewatering or discharge is not anticipated as part of this project.

   No groundwater would be withdrawn from a well and no water would be discharged to groundwater as part of the proposed project.

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (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.**

   Waste material would not be discharged into the ground from septic tanks or other sources as a result of the proposed project.

c. Water Runoff (including stormwater):

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.**

   A considerable portion of the existing ***Outpatient Surgery Center Expansion Project*** overall site is covered by impervious surfaces (such as the existing building, walkways, and parking). The project site (comprising a small portion of the overall site) contains primarily pervious surfaces including vegetated areas. With the completion of the proposed ***Outpatient Surgery Center Expansion Project***, approximately 65% of the overall site would be covered with impervious surfaces, compared to approximately 62% of the overall site under existing conditions.

The overall site is tributary to an unnamed wetland and to Thornton Creek before it is discharged into Lake Washington, which is a designated receiving water. A private upstream basin is tributary to the site and conveyed in an underground storm drain that will be rerouted around the building addition, maintaining existing drainage patterns.

The overall site is drained through a series of storm drainpipes and structures, as well as surface flow. The property includes two separate stormwater systems with one located at the northeast and one at the southwest portion of the site. Each system includes a series of 12 to 30-inch pipes that drain the parking lot, portions of the roof, and building entries. The storm drain systems eventually connect at a 30-inch Corrugated Metal Pipe (CMP) outfall that discharges into the existing wetlands located along the south side and adjacent to the south and east sides of the property. Stormwater conveyance then flows into a culvert that crosses Interstate-5 and is routed to Thornton Creek before ultimately draining into Lake Washington.

Because the proposed ***Outpatient Surgery Center Expansion Project*** would install approximately 23,920 square feet of new or replaced impervious surface area, on-site stormwater management is required for new and replaced hard surfaces where feasible in accordance with the City of Seattle Stormwater Manual. As the current stormwater systems on the overall site do not provide flow control or on-site stormwater management facilities, the proposed project would require new storm drain infrastructure to be compliant. Additionally, an increase in hardscape surfaces requires verification of the capacity of existing storm drains. Since the overall site is tributary to a wetland that discharges into Thornton Creek, flow control standards would be included in the project design, as required by the manual. New and replaced pollution generating impervious and pervious surfaces are below the threshold for requiring stormwater quality treatment; therefore, water quality treatment BMPs will not be implemented. Based on the soil composition described in the *Geotechnical Engineering Report*, on-site infiltration of stormwater is not feasible. All stormwater designs would be required to comply with the current City of Seattle Stormwater Manual at the time of permitting, Seattle Municipal Code (SMC) Title 22, and regulations for ECAs (SMC 25.09).

The proposed project must implement a construction stormwater control plan, as well as follow stormwater BMPs during all phases of construction. All stormwater controls and imported fill, and bioretention planter vegetation will comply with the current Seattle Stormwater Manual applicable requirements at the time of permitting.

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

The existing and proposed stormwater management systems for the ***Outpatient Surgery Center Expansion Project*** prevent waste materials from entering ground or surface waters. Additionally, erosion and sedimentation control measures would be implemented to prevent waste materials entering ground or surface waters per City of Seattle requirements.

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

   The proposed project would not alter or otherwise affect drainage patterns in the site vicinity.

4. **Proposed measures to reduce or control surface, ground and runoff water, and drainage pattern impacts, if any.**

   No impacts to surface, ground and runoff water, or drainage patterns are anticipated. Although an increase of impervious surfaces would occur with the implementation of the project, proposed stormwater management systems and mitigation would ensure no significant impacts to stormwater and drainage patterns. The following measures would be implemented to control surface, groundwater, and runoff impacts to reduce the risk of materials entering the stormwater systems:

   - The project proposes to mitigate stormwater by detaining runoff before discharging to match the predeveloped conditions in accordance with the City of Seattle Stormwater code.
   - In addition, on-site stormwater management systems will be implemented where feasible in compliance with City of Seattle Stormwater code.
   - A TESC Plan and construction BMPs would be approved and implemented during construction to reduce erosion and minimize impacts to water resources.
   - A Construction Stormwater Pollution Prevention Plan (SWPPP) would be prepared and approved for the proposed project.
   - Stormwater management for the proposed project would comply with applicable City requirements, including the current City of Seattle Stormwater Manual at the time of permitting.

4. Plants

a. **Check the types of vegetation found on the site:**

   ☒ **deciduous tree: alder, maple, aspen, other: ornamental broadleaf trees**
   ☒ **evergreen tree: fir, cedar, pine, other: native conifer trees**
   ☒ **shrubs**
   ☒ **grass**
   ☐ **pasture**
   ☐ **crop or grain**
   ☐ **orchards, vineyards, or other permanent crops.**
   ☒ **wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other: bluegrass**
   ☐ **water plants: water lily, eelgrass, milfoil, other**
   ☐ **other types of vegetation**

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

   Existing manicured grass areas with landscaping and trees are located around the

existing building and surface parking at the overall site. Areas of the vegetation located at the northeast corner of the existing building within the project site would be removed to accommodate construction of the proposed project. To the extent feasible, the retained grass areas within the project site would be returned to their original condition upon the completion of the proposed project.

An Arborist Report was completed for the ***Outpatient Surgery Center Expansion Project***, which identified a total of 54 trees with a diameter at standard height (DSH) of at least 6 inches throughout the overall site. Of the 54 trees recorded onsite, 15 were classified at Tier 2 trees (DSH equal to or greater than 24 inches but do not qualify as a heritage tree) and six were recorded as Tier 3 trees (DSH equal to or greater than 12 inches but do not qualify as a Tier 2 tree). Trees located on the overall site include ornamental broadleaf and native conifer trees. Refer to **Appendix C** for the Arborist Report.

Construction of the proposed project would require the removal of all existing vegetation and trees within the project site, as well as a tree protection plan for trees immediately adjacent to the project site. To accommodate construction of the proposed project, a total of 18 trees would be removed from the project site, of which four meet the definition of Tier 2 and one meets the definition of Tier 3. The proposed project would provide a tree replacement and a tree protection plan to comply with City of Seattle requirements.

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

No known threatened or endangered species are located on or proximate to the project site.

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

As part of the proposed project, replacement trees would be provided for every tree removed that is six inches or greater in diameter (Tier 2 and Tier 3 trees). As a total of five Tier 2 and Tier 3 trees would be removed as a part of the project site developments, a minimum of five replacement trees would be required. New trees would be planted on the project site and/or within the overall site. Project tree replacement would be anticipated to meet or exceed City of Seattle tree replacement requirements. New landscaping surrounding the proposed building expansion in the project site would also be installed to be consistent with City of Seattle requirements at the time of permitting.

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

Noxious weeds or invasive species that could be present in the vicinity of the site include giant hogweed, English Ivy, and Himalayan blackberry.

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.
Examples include:

- **Birds: hawk, heron, eagle, songbirds, other: crows, pigeons, seagulls**
- **Mammals: deer, bear, elk, beaver, other: squirrels, raccoons, rats, opossums, Eastern Cottontails**
- **Fish: bass, salmon, trout, herring, shellfish, other:**

Urban wildlife is known to be on and in the vicinity of the ***Outpatient Surgery Center Expansion Project*** site including crows, pigeons, squirrels, raccoons, rats, and opossums. Data obtained from the U.S. Fish and Wildlife Service (USFWS) indicates Bald and Golden Eagles are known to exist within the project site (USFWS, 2026); however, based on the developed nature of the project site and proximity to Interstate-5, no eagles are anticipated to be on or within the immediate vicinity of the project site.

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

The following are listed or proposed threatened, endangered, or candidate species that could be recorded near the overall site or surrounding vicinity based on data from the USFWS: Marbled Murrelet, Yellow-billed Cuckoo, Northwestern Pond Turtle, Bull Trout, Monarch Butterfly, and Suckley's Cuckoo Bumble Bee (USFWS, 2026). However, it should be noted due to the urban and developed nature of the overall site and surrounding area, none of the respective species' habitats have been observed and it is unlikely that these animals are present on or near the ***Outpatient Surgery Center Expansion Project*** site.

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

The proposed project site is not located within a specific migration route. However, in general, the entire Puget Sound area is within the Pacific Flyway, which is a major north-south flyway for migratory birds in America that extends from Alaska to Patagonia. Every year, migratory birds travel some or all of this distance both in spring and in fall, following food sources, heading to breeding grounds, or travelling to overwintering sites.

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

No specific measures are proposed to enhance wildlife and/or habitat.

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

There are no known invasive animal species on or adjacent to the project site; however, invasive species known to be located in King County include European starling, house sparrow, and eastern gray squirrel.

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.

Electricity and natural gas are the primary sources of energy that would serve the proposed ***Outpatient Surgery Center Expansion Project***. Electricity and natural gas currently serve the existing building. The electricity would be utilized to operate the building, including lighting, electronics, medical equipment, and heating.

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

The proposed project would not affect the potential use of solar energy by 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 significant energy impacts are anticipated with the ***Outpatient Surgery Center Expansion Project***. The proposed project would comply with Washington State Energy Code and the City of Seattle Energy Code. The proposed design for the building is intended to minimize lighting energy use by utilizing high-efficiency electric LED lights, as well as sensing, automatic shut-off, load shedding, local over-ride, and scheduling controls. Daylighting harvesting will be pursued when adequate daylight is available. Exterior lighting will be controlled and dimmed via a scheduling program, occupancy sensors, and exterior photocells and would use cutoff optics to reduce light trespass issues.

The project includes the following measures that would be utilized to conserve energy and minimize energy impacts:

- LED lighting and advanced lighting system controls to obtain LEED Gold certification.
- Photovoltaic panels included in the proposed building design.
- Prioritization use of electricity for heating and cooling with fossil fuel as a secondary back-up use.

7. Environmental Health

a. Environmental Health Hazards:

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

Accidental spills of hazardous materials from equipment or vehicles could occur in conjunction with any construction activity. However, the construction contractor would develop a spill prevention/control plan to minimize the potential of an accidental release of hazardous materials to the environment.

The overall site is currently recorded with an Underground Storage Tank (UST), as a hazardous waste generator, and with emergency generators (WA Ecology, 2026). Medical facilities commonly utilize USTs and emergency backup generators containing petroleum-based products, as well as handle medical hazardous waste due to the nature of the activities conducted onsite. As with any hazardous substances, it is required to properly handle, store, and dispose of materials to reduce health hazard risks and promote safety.

2. Describe any known or possible contamination at the site from present or past uses.

The Washington State Department of Ecology (WA Ecology) website was reviewed to identify any potential contaminated soils on or in the vicinity of the site, as well as potential issues related to the former Tacoma Asarco Smelter Plume. There are no records of any contaminated soils on or adjacent to the project site, and the site is located in an area where levels of arsenic and lead associated with the smelter plume are anticipated to be below state cleanup levels (WA Ecology, 2026).

Additionally, a Regulated Building Materials Survey was completed for the project by Terracon in December of 2025. As part of the assessment, the existing UW OPMC building was reviewed for asbestos-containing materials (ACM), assumed ACM, lead-containing coatings (paint), mercury-containing light tubes, switches, and thermostats, suspected high-intensity discharge (HID) lamps, and polychlorinated biphenyls (PCB)-containing fluorescent light ballasts. The survey included 143 samples of suspected ACM collected during the assessment.

Two of the samples were found to contain greater than one percent asbestos, none of the materials were assumed to contain asbestos, and none of the materials were found to contain less than one percent asbestos. Seven paint chip samples were collected and analyzed for lead content. None of the samples were determined to contain reportable levels of lead.

Mercury-containing fluorescent light tubes and HID lamps were identified within the building. Mercury-containing switches and thermostats were not observed in the project site. Observed light ballasts were electronic and therefore not suspected to contain PCBs (see **Appendix D** for complete details).

3. 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.

All asbestos-related work must be performed in compliance with Washington State

worker protection and environmental protection regulations. See WAC 296-62, WAC 296-65, and PSCAA Regulation III, Article 4 for more information. Additional suspect ACMs may be present in areas not inspected or that were inaccessible or concealed. If future maintenance, renovation, and/or demolition activities make these areas accessible, it is recommended that additional surveying or sampling of these spaces be conducted to confirm the presence or absence of additional suspect ACM. Until then, all such unidentified materials must be treated as assumed ACM in accordance with applicable federal, state, and local regulations.

The contractor would also address worker protection and proper handling, removal, and recycling of the recorded mercury-containing fluorescent light tubes and HID lamps prior to building demolition per 40 CFR 262, 40 CFR 265, and WAC 173-303.

While no suspect PCB-containing materials were identified during the survey, even ballasts labeled with "No PCBs" may have regulated quantities of PCBs and therefore should be handled in accordance with Washington Department of Ecology Requirements. Employers must inform their workers of mercury and PCB hazards in accordance with WAC 296-800-170. See **Appendix D** for complete details.

4. **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.**

   Chemicals stored and used during construction would be limited to gasoline and other petroleum products that are utilized by construction equipment and vehicles. Once the proposed project is operational, the potential chemicals that would be used on the site would generally be limited to standard household cleaning and medical supplies that would be stored in an appropriate and safe location.

5. **Describe special emergency services that might be required.**

   No special emergency services are expected to be required as a result of the project. As is typical of urban development, it is possible that normal fire, medical, and other emergency services may, on occasion, be needed from the City of Seattle.

6. **Proposed measures to reduce or control environmental health hazards, if any.**

   A spill prevention plan would be developed and implemented during construction to minimize the potential for an accidental release of hazardous materials into the environment. In addition, as noted in the Regulated Building Material Survey, all hazardous materials within the area of the proposed project would be removed as part of the construction process in accordance with applicable regulations (see **Appendix D** for further details). With these implemented measures, no significant impacts from environmental health hazards are anticipated as a result of the proposed project.

b. Noise:

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

   The primary source of existing noise in the vicinity of the project site is vehicular traffic associated with I-5 to the east and Meridian Ave N to the west, as well as vehicular movement on the overall site associated with the surface parking lot and access drives; noise associated with visitors and staff is also present at the project site.

   Existing noise conditions in the vicinity of the project site are anticipated to continue with operation of the proposed ***Outpatient Surgery Center Expansion Project***. However, due to the nature of these noises, no adverse effects to the project are anticipated.

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)?**

   Short-Term Noise
   Temporary construction-related noise would occur as a result of the development of the proposed ***Outpatient Surgery Center Expansion Project***. Construction activities including excavation, grading, and building modifications would be the primary sources of noise during the development process, as well as noise from construction vehicles and equipment. The proposed project would comply with the provisions of Seattle's Noise Code as it relates to construction activities to reduce noise impacts during development.

   Long-Term Noise
   The proposed project would potentially result in a minor increase in noise from human voices and vehicles traveling to and from the overall site. The potential increase is expected to be minor and as a result, no significant noise impacts are anticipated.

3. **Proposed measures to reduce or control noise impacts, if any.**

   No significant noise impacts are anticipated with the proposed project. However, short-term noise impacts resulting from development activities are primarily mitigated through the adoption of construction noise control best practices. The project includes the following measures to minimize noise from construction:

   - Construction of the project would comply with provisions of the City of Seattle's Noise Code SMC 25.08; specifically: construction hours would be limited to standard construction hours (non-holiday) from 7:00 AM to 7:00 PM and Saturdays and Sundays (including holidays) from 9:00 AM to 7:00 PM.

   - In accordance with SMC 25.08, construction activities would be limited to applicable noise levels.

The noise levels associated to the operations of the proposed project would be regulated by SMC 25.08. However, given the amount of existing environmental noise in the vicinity and the minimal increase in noise anticipated by the proposed project, no mitigation measures would be necessary to reduce or control post-construction noise impacts.

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.

The overall site is currently developed with a three-story medical facility, paved parking lot, driveways, and walkways, and landscaping with trees. The project site contains existing manicured landscaping vegetation. See **Figure 2** for an aerial map of the existing conditions and **Figure 3** for the proposed site plan for the project.

Existing land uses adjacent to the overall site include multi-family residential properties to the north, Interstate-5 to the east, an apartment complex and undeveloped, natural areas associated with Barton Woods and North Seattle Community College to the south, and multi-family residences and commercial office buildings to the west. The primary land use in the overall site vicinity is a mix between residential, commercial, retail, and educational properties. Considering that the proposed ***Outpatient Surgery Center Expansion Project*** would expand on the existing medical use of the overall site and would not change existing medical use, no land use impacts to land uses surrounding the project site or overall site are anticipated.

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 because 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?

The project site has no recent history of use as a working farmland or forest land.

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?**

   The project site is located in an urban area and would not affect or be affected by working farm or forest land as no working farm or forest land is located in the vicinity of this urban site.

c. Describe any structures on the site.

The existing approximately 133,298 GSF UWMC Outpatient Medical Center building is located on the overall site. The overall site was originally developed with an office building and surface parking lot in 1961 and the structure was redeveloped as an outpatient

medical facility in 1994.

The project site (comprising a small portion of the overall site) includes a one-story extension at the northeast corner of the building and adjacent landscaped areas.

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

Localized areas of the existing building would be disturbed to support the proposed project, but the UWMC Outpatient Medical Center building will remain.

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

The current zoning classification for the site is Neighborhood Commercial 3 with a building height limit of 95 feet and mandatory housing affordability requirements (NC3-95 [M]) (*City of Seattle, 2026*).

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

The comprehensive plan future land use designation for the site is Regional Center (*City of Seattle, 2026*).

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

The project site is not located within the City of Seattle designated shoreline boundary (*City of Seattle, 2026).*

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

As previously discussed in **Section B.1.c** and **Section B.1.d**, the overall site and project site (comprising a small portion of the overall site) are located within Peat Settlement and Liquefaction Prone ECAs. Implemented mitigation measures noted in **Section B.1.h** are expected to result in insignificant impacts from these ECAs.

The overall site also contains and is located adjacent to wetland ECAs as described in **Section B.3.a.1**. The proposed development site footprint of the project site (comprising a small portion of the overall site) is located approximately 375 feet to the northeast of the onsite wetlands and 260 feet west of the off-site wetlands at the closest points. The potential for impacts to the buffer of the mapped wetland located on the overall site is discussed in **Section B.3.a.1**.

No other environmentally critical areas are located on or near the project site.

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

The proposed project would not provide any residential opportunities. Operation of the

Outpatient Surgery Center Expansion Project would be anticipated to provide employment for approximately 62 staff members, an increase of approximately 31 employees from existing staffing.

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

The proposed project would not displace any people.

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

No displacement would occur and therefore no mitigation measures are necessary.

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

The implementation of the proposed project would be compatible with existing land uses considering it would not change or alter current uses at the site or surrounding area. The project site is designated on the City of Seattle Comprehensive Plan Future Land Use Map as Regional Center. Regional Centers are places of regional importance with substantial housing, office, retail, institutional, and/or cultural and entertainment uses along with access to regional transit. The proposed ***Outpatient Surgery Center Expansion Project*** would be consistent with the future land use designation by providing community resources, such as job opportunities and medical facilities within a mixed-use residential area located near transit.

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

The project site is not located near agricultural or forest lands and therefore no mitigation measures are necessary.

9. Housing

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

No housing units would be provided as part of the project.

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

No housing presently exists on the project site and none would be eliminated.

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

No housing impacts would occur and therefore no mitigation would be necessary.

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 proposed ***Outpatient Surgery Center Expansion Project*** building addition would match the adjacent one-story height of the northwest corner of the existing medical facility. Principal exterior materials would be designed to match existing building character, and the addition would be intended to be complementary to the existing building.

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

The proposed ***Outpatient Surgery Center Expansion Project*** would not be anticipated to vary greatly from the existing viewshed or obstruct any views. Existing views of the site are generally limited to one block in all directions from the project site due to established one- to nine-story residential and office buildings, as well as trees, utilities, roadways, and other vegetation. Alteration of existing views of the project site is expected to be minimal with the addition of the 9,645 GSF building expansion. Due to the relatively small scale of the addition and the currently developed surrounding environment, the proposed project is not anticipated to significantly obstruct or alter existing background viewsheds (i.e., views of buildings and the environment beyond the site). Therefore, no significant aesthetic impact is anticipated.

The City of Seattle maintains public view protection policies are which are intended to "protect public views of significant natural and human-made features: Mount Rainier, the Olympic and Cascade Mountains, the downtown skyline, and major bodies of water including Puget Sound, Lake Washington, Lake Union, and the Ship Canal, from public places consisting of specified viewpoints, parks, scenic routes, and view corridors identified in Attachment 1 to the SEPA code[3]. However, there are no SEPA protected view sites on or in the vicinity of the ***Outpatient Surgery Center Expansion Project*** site. The closest designated protected viewpoint, Rainbow Point, located approximately 1.6 miles southeast of the project site (*City of Seattle, 2026).* The UWMC Outpatient Medical Center is not visible from this viewpoint and therefore no impacts are anticipated.

View protection from City-designated Scenic Routes is encouraged[4]. According to documentation from the City of Seattle, the closest designated scenic route to the project site is Interstate-5 located immediately east of the project site[5]. Although the ***Outpatient Surgery Center Expansion Project*** will be visible from Interstate-5, considering the proposed building modifications should be similar in nature to the existing conditions and would not significantly alter the existing viewshed at the site, no impacts to scenic routes are anticipated.

[3] SMC 25.05.675 P.2.a and the accompanying list of protected views in *Attachment 1*

[4] Ordinance #97025, Ordinance #114057, and Seattle DCLU, 2001

[5] Scenic routes provided by Seattle Transportation, Traffic Division Map within SMC 25.05.675

Views of designated historic landmarks are also a consideration[6]. The closest City of Seattle designated landmark is Licton Springs Park located approximately 0.45 miles southwest of the project site (*City of Seattle, 2026)*. The proposed ***Outpatient Surgery Center Expansion Project*** would not be visible from Licton Springs Park and would therefore have no impact on the view of landmark structures. There are no designated views of the Space Needle on or adjacent to the project site[7].

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

No significant impacts are anticipated with regard to aesthetics. The proposed building addition and renovation would be similar in nature to the existing conditions. No other measures are necessary.

11. Light and Glare

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

Short-Term Light and Glare: at times during the construction process, area lighting of the job site (to meet safety requirements) may be necessary, which would be noticeable proximate to the project site; however, such lighting would be temporary and is therefore not anticipated to occur on a regular basis during construction. In general, light and glare from construction of the proposed project is not anticipated to adversely affect adjacent land uses considering it is relatively minor and temporary.

Long-Term Light and Glare: with the proposed ***Outpatient Surgery Center Expansion Project***, there would be a minimal increase in light and glare with the building addition. Light and glare sources would primarily consist of interior and exterior building lighting, as well as lights from additional vehicles traveling to and from the site. However, these increases are anticipated to be very minimal and would be consistent in level/type with existing light and glare conditions, and therefore light and glare at the site is expected to remain similar to the existing conditions.

Exterior building lighting and other proposed outdoor lighting would be designed in accordance with applicable regulations and would be intended to focus light on the site and minimize impacts to adjacent properties. Additionally, exterior lighting would be controlled and dimmed via a scheduling program, occupancy sensors, and exterior photocells. The presence of retained/new trees and landscaping would provide a buffer between the medical building and existing off-site uses to minimize light and glare toward adjacent properties to the north. Glare from building materials (e.g., window glazing or other building materials) could also occur during certain times of day. However, based on the relatively small scale of the project, glare would not be anticipated to create a

[6] SMC 25.05.675 P.2.c
[7] SMC 25.05.675 P.2.d

significant impact. Overall, existing light and glare should not increase greatly from existing conditions and therefore no significant light impacts are anticipated.

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

Light and glare associated with the proposed project would not be expected to cause a safety hazard or interfere with views.

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

No off-site sources of light or glare are expected to affect the proposed project.

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

Exterior lighting will be controlled and dimmed via a scheduling program, occupancy sensors, and exterior photocells. All implemented light and glare designs will follow applicable City of Seattle requirements. No adverse impacts from light and glare are anticipated and therefore no additional mitigation measures are proposed.

12. Recreation

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

Currently, there are no recreational areas at the overall site or the project site. However, there are several parks and recreation areas in the vicinity of the project site (approximately one-half mile), including:

- Mineral Springs Park located approximately 0.2 miles northwest of the site.
- Licton Springs Park located approximately 0.45 miles southwest of the site.
- Hubbard Homestead Park located approximately 0.5 miles northeast of the site.
- Northgate Park located approximately 0.5 miles east of the site.
- Beaver Pond Natural Area Park located approximately 0.5 miles east of the site.

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

The ***Outpatient Surgery Center Expansion Project*** would not displace any existing recreational uses.

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

Considering the ***Outpatient Surgery Center Expansion Project*** site does not contain any recreational uses and would not displace any recreational uses, no mitigation measures are proposed.

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.

The UWMC Outpatient Medical Center building is a three-story structure that was constructed in 1961. Based on information of the City of Seattle Landmarks Map, Washington Department of Archaeology and Historic Preservation's (DAHP) Washington Information System for Architectural and Archaeological Records Data (WISAARD), and National Register of Historic Places (NRHP), the existing medical building is not recorded as an eligible or listed historic property.

While there are several buildings that meet the age threshold for registration in the overall site vicinity, based on local, state, or national preservation registers mentioned below, the following recorded resources are located with an approximate half-mile radius of the project site (*NRHP, City of Seattle, 2026*):

- Residence, located approximately 0.2 miles southwest of the site, is recorded within the WISAARD database as eligible for listing.
- North Seattle Community College, located approximately 0.4 miles south of the site, is recorded within the WISAARD database as eligible for listing.
- North Seattle College Library, located approximately 0.4 miles south of the site, is recorded within the WISAARD database as eligible for listing.
- Licton Springs Park located approximately 0.45 miles southwest of the site is recorded as a City of Seattle Landmark.

No other listed or eligible properties in any national, state, or local preservation registers are recorded in the site vicinity and considering the lack of visibility from listed structures to the project site (comprising a small portion of the overall site), no effect on historic properties is anticipated.

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.

There are no landmarks, features, or other evidence of Indian or historic use or occupation recorded on the overall site. There are no known material evidence, artifacts, or areas of cultural importance on or near the site. The DAHP WISAARD predictive model indicates that the overall site is comprised of an area that could be considered moderate risk for archaeological resources and recommends/advises that a Cultural Resources Assessment be conducted. The predictive model is a statewide planning tool that utilizes statistical predictive modeling based on several environmental factors such as soils, geology, distance to water, slopes and elevation.

The project site is not located within the designated City of Seattle Archaeological Meander Line Buffer (*City of Seattle, 2026*). The Meander Line relates to areas within approximately 200 feet of the shoreline with a higher likelihood of encountering archaeological resources. These areas are typically required to prepare an archaeological investigation as part of the SEPA process.

The proposed ***Outpatient Surgery Center Expansion Project*** proposes relatively minimal ground disturbance at the project site. The site footprint shows evidence of prior development and soil disturbance that would have removed near surface soils and sediments with the potential to contain cultural deposits. Significant ground disturbing activities at the site include construction of the currently existing medical facility in 1961, as well as excavation and grading for associated and surrounding utility installation at the overall site and within the adjacent rights-of-ways. Therefore, considering the developments that have occurred at the site, the proposed project is anticipated to have a low potential to encounter significant archaeological materials.

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 archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

The DAHP WISAARD, City of Seattle Landmarks website, and the City of Seattle Archaeological Buffer online mapper were consulted to identify any potential historic or cultural sites in the surrounding area, as well as the potential for encountering archaeological resources in the area.

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.

Although archaeological resources are not anticipated on the project site, it is possible that undiscovered pre-contact or historic cultural material is present within the project site. In the event of an inadvertent discovery, King County, DAHP, and affected Tribes (including the Duwamish) would be contacted. If construction encounters any human remains, whether burials isolated teeth, bones or mortuary items, work in that area would be stopped immediately and the area secured surrounding the discovery. Local law enforcement, DAHP and affected Tribes would be contacted, and no further excavation would occur until a process has been agreed upon by those parties.

14. Transportation

It should be noted that the State of Washington adopted SEPA-related amendments on January 20, 2023, which removed parking as an element of the environment in WAC 197-11-444(2)(c)(iv). The amendment also removed the parking-related question from the environmental checklist in WAC 197-11-960(B)(14)(c). Pursuant to these updates, the City of Seattle will no longer identify and analyze parking impacts in its SEPA

analysis.

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 ***Outpatient Surgery Center Expansion Project*** overall site is generally bound by a private driveway to the north, Interstate-5 to the east, and Meridian Avenue N to the west. Access to the overall site is obtained via two driveways off of Meridian Avenue N. The northern driveway aligned with N 105th Street serves outbound site traffic only, while the southern driveway provides full inbound and outbound access to Meridian Avenue N. Sidewalks are provided throughout the overall site with connections between the east side of Meridian Avenue N and the various building entrances on-site. No changes to site access is proposed.

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?

The overall site and surrounding area are served by King County Metro Transit (Metro) bus public transportation. The closest bus stops to the site are provided along Meridian Avenue N. The northbound Metro bus stop is located directly across from the entrance of the medical building on Meridian Avenue N. The southbound Metro bus stop is located at the intersection of Meridian Avenue N and 105th Street to the northwest of the site. These stops are served by Metro Route 40, 345, and 365.

Metro Route 40 provides service between approximately 5:00 AM to 11:00 PM from Monday through Sunday between the Northgate, Crown Hill, Ballard, Fremont, and Downtown Seattle neighborhoods. Weekday headways (time between consecutive buses) are approximately 30 minutes. Metro Route 345 provides service between approximately 5:00 AM to 11:30 PM from Monday through Sunday between the Shoreline South, Bitter Lake, Northwest Hospital, and Northgate neighborhoods. Weekday headways are approximately 30 minutes. Metro Route 365 provides service between approximately 5:00 AM to 11:30 PM from Monday through Sunday between the Shoreline North, Shoreline South, Haller Lake, Northwest Hospital, and Northgate neighborhoods. Weekday headways are approximately 30 minutes.

c. 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).

Utility work in the surrounding rights-of-ways for new and upgraded connections to support the proposed addition would be completed as part of the project. Additionally, if required, ADA compliance improvements to sidewalks and walkways would also be completed in compliance with City of Seattle and federal regulations. The proposed project would not require any other new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities located outside of the site boundaries.

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

The project site is located approximately 0.5 miles from the Northgate Lightrail Station via the John Lewis Memorial Pedestrian Bridge. With minimal new trips generated by the proposed project, any increased use of the rail transit in the area would be negligible. The proposed project would not use or occur in the immediate vicinity of water or air transportation.

e. 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 nonpassenger vehicles). What data or transportation models were used to make these estimates?

Construction of the proposed project would temporarily generate a small number of additional vehicle trips per day associated with construction workers and equipment/vehicles travelling to and from the site during the construction process. Construction activities would be conducted in compliance with applicable City of Seattle regulations.

Trip generation rates specific to the existing Outpatient Medical Center were calculated based on the existing building size and multiple days of traffic counts collected at the overall site driveways. Based on this data, the proposed expansion is forecast to generate 16 new trips with three inbound trips and 13 outbound trips after construction is complete. This results in a total site trip generation of 160 trips during the PM peak hour with 34 inbound trips and 125 outbound trips. All new vehicle trips to and from the site generated by the project would be passenger vehicles with no change in the number of trucks travelling to and from the site. With only 16 new vehicle trips generated by the proposed project, no significant traffic impacts are anticipated.

f. 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 the movement of agricultural or forest products on streets in the area because no agricultural or working forest lands are located within the vicinity of the project site.

g. Proposed measures to reduce or control transportation impacts, if any.

The proposed project is not anticipated to result in any significant adverse impacts to traffic within the site or surrounding area. Therefore, no mitigation is required or proposed to accommodate the project. Construction activities would occur in compliance with applicable City of Seattle regulations.

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.

Operation of the proposed ***Outpatient Surgery Center Expansion Project*** would slightly increase staffing and patient capacity to the project site, and it is possible that additional standard fire, police, or medical services could be required. However, considering the change is relatively small, it is not anticipated to generate a significant increase in the need for public services. To the extent that emergency service providers have planned for gradual increases in service demands associated with general growth in city, no significant impacts are anticipated.

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

The increase in staff and capacity on the site may result in incrementally greater demand for emergency services; however, it is anticipated that adequate service capacity is available within the Northgate neighborhood area that would negate the need for additional public facilities/services.

16. Utilities

a. Circle utilities currently available at the site: <u>electricity</u>, <u>natural gas</u>, <u>water</u>, <u>refuse service</u>, <u>telephone</u>, <u>sanitary sewer</u>, septic system, other:

All underlined utilities are currently available at the site.

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.

The proposed project would require additional electricity, water, sewer, and refuse services for operation. Utilities and providers (in parentheses) proposed for the project would include the following:

- Electrical (Seattle City Light) – the existing medical facility ties into the electrical service via a connection located at the west side of the building. The proposed building modifications and associated medical equipment would be developed with new electrical connections to tie into the existing electrical providers for power.

- Water (Seattle Public Utilities) – the water supply for the site is provided by a connection at the north side of the building to a 12-inch water main along Meridian Avenue N. New water connections would be constructed within the proposed improvements to connect to the existing water service.

- Sewer (Seattle Public Utilities) – all wastewater collected from the building currently discharges into a 6-inch sanitary sewer lateral that connects at the southern portion of the site before connecting to an 8-inch line along 103rd Street. The line then feeds to an 18-inch sewer main on Meridian Avenue N and 103rd Street. New sewer connections would be constructed within the proposed improvements to connect to the existing sewer service.

- Refuse Service (Seattle Public Utilities/Waste Management Northwest) – Seattle Public Utilities, through a contract with Waste Management Northwest, provides refuse service for the City of Seattle area, including the project site, and would continue to provide service with the implementation of the proposed project.

- Natural Gas (Puget Sound Energy) – the medical building has a gas connection at the north side of the building and a medical gas storage room. The existing gas storage area would be expanded as a part of the proposed project.

- Other: a new Mechanical, Electrical, and Plumbing (MEP) yard would be developed to support the utilities of the proposed project.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:

Name of Signee:

Julie Blakeslee

Position and Agency/Organization:

SEPA Responsible Official

Date:

June 17, 2026

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APPENDIX A

Geotechnical Engineering Report

Geosyntec consultants

engineers | scientists | innovators

GEOTECHNICAL ENGINEERING REPORT

UW NW Outpatient Medical Center Expansion

Prepared for

University of Washington
10330 Meridian Avenue North
Seattle, Washington 98133

Prepared by

Geosyntec Consultants, Inc.
801 5th Ave, Suite 2200
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Project: 26001106

June 2, 2026

Geotechnical Engineering Report

UW NW Outpatient Medical Center Expansion

Prepared for

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June 2, 2026

TABLE OF CONTENTS

1. INTRODUCTION 1
1.1 Project Description 1
1.2 Scope of Work 1

2. SITE CONDITIONS 3
2.1 Surface Conditions 3
2.2 Geologic Setting 4
2.3 Subsurface Conditions 4
2.3.1 Field Investigation 4
2.3.2 Historic Geotechnical Explorations 4
2.3.3 Stratigraphy 5
2.3.4 Groundwater 6
2.4 Laboratory Testing 6

3. GEOTECHNICAL ENGINEERING CONCLUSIONS AND RECOMMENDATIONS 7
3.1 Seismic Hazards and Design Parameters 7
3.1.1 Liquefaction 8
3.1.2 Fault Rupture 8
3.2 Shallow Foundation Design and Construction 9
3.2.1 Vertical Support 9
3.2.2 Foundation Bearing Capacity 10
3.2.3 Lateral Support 10
3.3 Slab-on-Grade Support 10
3.4 Drainage 11
3.5 Stormwater Infiltration Feasibility 13

4. EARTHWORK AND CONSTRUCTION RECOMMENDATIONS 16
4.1 General 16
4.1.1 Wet Weather Considerations 16
4.1.2 Temporary and Permanent Erosion Control 16
4.1.3 Temporary Excavation Stability 17
4.1.4 Dewatering 17
4.2 Subgrade Preparation 17
4.2.1 Foundations and Slabs-on-Grade 17
4.3 Structural Fill 18
4.4 Utility Trenches 18

5. RECOMMENDATIONS FOR CONTINUING GEOTECHNICAL SERVICES 19

5.1 Additional Construction Services.....19

6. REFERENCES 20

7. LIMITATIONS.....22

LIST OF TABLES

Table 1: Seismic Design Parameters.....8
Table 2 Lateral Earth Pressures for Design of Traditional CIP Retaining Walls……13
Table 3 Lateral Earth Pressures for Design of Cantilevered Soldier Pile Walls…….14

LIST OF FIGURES

Figure 1: Site Location Map
Figure 2: Site and Exploration Plan

LIST OF APPENDICES

Appendix A: Subsurface Exploration Logs
Appendix B: Historical Geotechnical Exploration Logs
Appendix C: Geotechnical Laboratory Testing
Appendix D: Geophysical Testing Results
Appendix E: Report Limitations and Guidelines for Use

1. INTRODUCTION

This report presents the results of a geotechnical engineering study completed by Geosyntec Consultants, Inc. (Geosyntec) for the University of Washington (UW) to support design and construction of the proposed buildout/expansion of the existing Northwest Outpatient Medical Center (NW OPMC; Project) located at 10330 Meridian Avenue North in Seattle, Washington (Site). The Project consists of a one- to two-story buildout/expansion of the existing NW OPMC in the undeveloped spaces to the north and east of the existing wing. We previously provided a letter report summarizing our preliminary geotechnical assessment of the Site where we reviewed existing geotechnical data in the Site vicinity. The Project Site location is shown on Figure 1, and the Site layout and key features are shown on Figure 2.

This report summarizes geotechnical data collected to date and presents engineering conclusions and recommendations for geotechnical elements of the Project. The information and recommendations presented herein are provided to advise the design team of Site subsurface conditions and geologic hazards and geotechnical design and construction recommendations for the Project. The recommendations in this report are based on conceptual design of the Project. These recommendations should be reviewed to verify conformance and revised if needed as design progresses.

1.1 Project Description

The Project conceptually involves the buildout/expansion of the existing NW OPMC eastern wing, as well as landscaping, utilities, and on-Site stormwater management. We also understand that the surrounding areas to the west, east, and south of the existing NW OPMC are also of interest for potential, future development projects.

1.2 Scope of Work

Based on our understanding of the Project, we anticipate the following geotechnical design input will be needed:

- Geotechnical characterization of Site surface and subsurface conditions, based on the results of our subsurface investigation and review of available historical geotechnical data. A Site exploration map is provided (Figure 2) that shows the locations of new and historical geotechnical explorations as figures.

- Recommendations for seismic design criteria, shallow foundation design criteria, and qualitative stormwater infiltration feasibility.

- Earthwork recommendations, including foundation subgrade preparation, temporary excavation slopes, recommendations for structural fill materials, and compaction and wet weather considerations.

- Documentation of explorations performed for the Project and historical exploration logs, and results of laboratory testing.

We assume the Project design will be completed in general accordance with the 2021 International Building Code (IBC; ICC 2021).

2. SITE CONDITIONS

Our understanding of the Site is based on our Site reconnaissance observations, subsurface exploration program, review of aerial photos, published geologic mapping of the area, and nearby previous subsurface explorations. Relevant Site surface and subsurface conditions are summarized in the following sections.

2.1 Surface Conditions

The Site consists of the existing NW OPMC, a large asphalt parking lot, and an undeveloped lawn (Photograph 1). Site vegetation consists of coniferous trees lining the northern end of the Site and low-lying landscaping. The Site is bound by Interstate 5 to the east, Barton Woods to the south, College Way North to the west, and an apartment complex to the north.

Photograph 1. Site surface conditions during December 2025 field work. Viewing Northeast.

Site topography is mostly level with a slight slope up towards the north at an approximate average inclination of 5%. Site elevations range from approximately Elevation (Elev.) 260 feet at the southwest corner of the lawn to Elev. 265 feet[1] at the northeast corner of the lawn.

2.2 Geologic Setting

The most recent geologic mapping indicates the Site is underlain by Vashon till (Qvt) and Quaternary bog deposits (Qw) with Vashon advanced outwash (Qva) in the regional vicinity (Booth et al. 2009). The Vashon till is described as a very stiff and impermeable, non-stratified mixture of clay, silt, sand, and gravel deposited by advancing glaciers. The Quaternary bog deposits (Qw) are described as consisting of loose peat and alluvium. The advance outwash is described as fine to medium sand with pebble-sized gravel and some silt that was deposited by meltwater emanating from the advancing glacier during the most recent glaciation between 10,000 and 15,000 years ago. The Vashon till and advance outwash units are glacially overridden and are typically medium dense to very dense.

2.3 Subsurface Conditions

Our interpretation of Site subsurface conditions is informed by our December 2025 field investigation as well as by review of geologic mapping.

2.3.1 Field Investigation

Geosyntec conducted a subsurface investigation consisting of three soil borings, one of which was completed as a monitoring well (designated GB-01, GB-02, and MW-01). GB-01 was completed with a remote-control track-mounted hollow-stem auger (HSA) rig to a depth of 32 feet below existing ground surface (bgs); GB-02 was completed with a track-mounted HSA drill rig to a depth of 40 feet bgs; and MW-01 was completed with a track-mounted mud rotary drill rig to a depth of 40 feet bgs.

The locations of these explorations are shown on Figure 2. The exploration methodologies are described in detail, and boring logs are presented, in Appendix A.

2.3.2 Historic Geotechnical Explorations

We reviewed geotechnical data presented in the following documents:

- "Report for Preliminary Geotechnical Engineering Services, Health Resources Northwest Site" (GeoEngineers 1998). This geotechnical engineering study was completed to evaluate soil and groundwater conditions across undeveloped areas of the Site and provide a preliminary geotechnical evaluation for future site development. The full report was not available for review, but a site plan and boring logs were available. A total of 10 geotechnical borings were completed to depths ranging between 16.5 and 36.5 feet bgs for this study.

- "Sub-Grade Investigation, Taschner Apartment" (Pacific Testing Laboratories 1968). This geotechnical engineering study was completed to evaluate soil and groundwater

[1] Elevation data from Google Earth; North American Vertical Datum of 1988 (NAVD88).

conditions and provide foundation recommendations for the apartment building located immediately southwest of the Site at 10306 Merdian Avenue North. A total of four borings were completed to depths ranging between 19.5 and 29.5 feet bgs. The study identified up to approximately 10.5 feet of unsuitable soil (soft clay/silt and peat) at this site, and full removal and replacement of these soils was recommended to establish suitable bearing conditions.

- "Soils and Foundation Investigation, Northgate Apartment Complex" (Rittenhouse-Zeman & Associates, Inc 1979). This geotechnical engineering study was completed to evaluate soil and groundwater conditions and provide foundation recommendations for the apartment complex located immediately northeast of the Site at 2237 North 106th Street. The full report was not available for review, but a site plan and boring logs were available. A total of six geotechnical borings were completed to depths ranging between 24 and 29 feet bgs for this study.

The site maps and boring logs from these studies are provided in Appendix B.

2.3.3 Stratigraphy

The soils observed at the Site generally match those shown in geologic mapping, except for the Quaternary bog deposits (Qw), which were not observed in our borings. The primary geologic units observed at the Site, from shallowest to deepest, are fill, Vashon till (Qvt), Vashon advanced outwash (Qva), and Lawton clay (Qvlc). The following sections describe these geologic units in further detail.

Fill

From ground surface to a depth of 0.75 to 3 feet bgs, we encountered fill in all explorations. The fill generally consists of loose to medium dense, very moist to wet, brown silty sand with gravel (SM). We observed 2-to-3-inch layers of stiff, very moist to wet, gray-brown to gray sandy silt with gravel (ML) at the interface between the fill and the underlying Vashon till.

Vashon Till (Qvt)

Underlying the fill, we observed Vashon till (Qvt) extending to a depth of approximately 10 to 12.5 feet bgs. We interpret the upper approximately 9.25 feet of GB-01 and 4.25 feet of MW-01 to be weathered, medium dense, wet, gray-brown to gray silty sand with gravel (SM). The unweathered Vashon till consists of dense to very dense, wet, gray-brown to gray silty sand with gravel (SM) and silty gravel with sand (GM).

Vashon Advanced Outwash (Qva)

Underlying the Vashon till, we observed Vashon advanced outwash (Qva) extending to depths of approximately 25 to 32 feet bgs. The Vashon advanced outwash consists of dense to very dense, wet, gray-brown to gray silty sand, silty sand with gravel (SM), silty gravel with sand (GM), and sand with silt (SP-SM).

Lawton Clay (Qvlc)

Underlying the Vashon advanced outwash, we observed Lawton clay (Qvlc) extending to the maximum depth explored of 40 feet bgs. The Lawton clay deposits consist of hard, wet, gray, non-plastic to low plasticity silt (ML), silt with sand, and sandy silt (ML).

2.3.4 Groundwater

We observed groundwater seepage at depths of approximately 0.75 to 3.25 feet bgs. We observed saturated soil conditions extending to the bottom of all three explorations. Groundwater levels may fluctuate with changes in seasons, precipitation, irrigation, and site use.

2.4 Laboratory Testing

Laboratory tests were conducted on selected soil samples to characterize or correlate engineering properties/parameters of the soils. Testing included determination of fines content, grain-size distribution, and Atterberg limits. The laboratory tests were conducted in general accordance with appropriate ASTM International (ASTM) test methods. Detailed descriptions of the tests and results are presented in Appendix C, and the results were incorporated into the exploration logs shown in Appendix A.

3. GEOTECHNICAL ENGINEERING CONCLUSIONS AND RECOMMENDATIONS

Based on our review of existing Site conditions, field investigations, and engineering analyses we conclude the Project is feasible from a geotechnical engineering perspective provided the recommendations in this report are incorporated into design and construction.

3.1 Seismic Hazards and Design Parameters

Seismic design of the new building expansion will be in accordance with the 2021 IBC, which references the American Society of Civil Engineers (ASCE) Standard ASCE/SEI 7 16, Minimum Design Loads for Buildings and Other Structures (ASCE 2018) for seismic design. Supplements 1, 2, and 3 to ASCE/SEI 7-16 (ASCE 2018; ASCE 2021a and 2021b) should be referenced where applicable per Washington State Building Code Council Emergency Rule WSR 22 11-010 (WSR 22-11-010; WA Building Code 2022). In accordance with these codes, the seismic design will consider a "Maximum Considered Earthquake" (MCE) ground motion with a 2% probability of exceedance in 50 years, or a return period of 2,475 years.

The effects of Site-specific subsurface conditions on the MCE ground motion at the ground surface are determined based on the "Site Class." The Site Class can be correlated to the average standard penetration resistance (N-value), average shear wave velocity, or average undrained strength (for fine-grained soils) in the upper 100 feet of the soil profile. Geosyntec subcontracted Global Geophysics, LLC to perform Multichannel Analysis of Surface Waves (MASW) to provide an average shear wave velocity within the upper 100 feet of the soil profile (Vs100). They determined that the Vs100 at the Site is 945 feet per second. Global Geophysics, LLC's report is included as Appendix D of this report.

Based on the Vs100 from MASW, we conclude the Site soil profile can be classified as Site Class D (Stiff Soil).

The spectral response acceleration parameters adjusted for Site Class D in accordance with the 2021 IBC and ASCE/SEI 7-16 and its supplements are presented in Table 1 for the MCE. Alternatively, per WSR 22-11-010, a multi-period response spectra (MPRS) approach as described in ASCE/SEI Standard 7-22 may be utilized in lieu of a ground motion hazard analysis (ASCE 2021c).

Table 1: Seismic Design Parameters

Design Parameter	Recommended Value[2,3,4]
Site Class	D
Site Adjusted Peak Ground Acceleration (PGA_m)	0.651g[1]
Short Period Spectral Acceleration (S_s)	1.284g
1-Second Period Spectral Acceleration (S_1)	0.447g
Site Coefficient (F_a)	1.200
Site Coefficient (F_v)	1.853
Design Short Period Spectral Acceleration (S_{DS})	1.027g
Design 1-Second Period Spectral Acceleration (S_{D1})	0.552g

Notes:
1. g = gravitational force
2. Based on the latitude and longitude of the Site: 47.704749°N, 122.331763°W, North American Vertical Datum of 1988 (NAVD 88).
3. Based on the American Society of Civil Engineers (ASCE) hazard tool (ASCE 2026).
4. Values are suitable for Risk Category IV.

3.1.1 Liquefaction

Liquefaction occurs when loose, saturated, and relatively cohesionless soil deposits temporarily lose strength from seismic shaking. The primary factors controlling the onset of liquefaction include intensity and duration of strong ground motion, characteristics of subsurface soil, in situ stress conditions, and the depth to groundwater. Potential effects of soil liquefaction include temporary loss of foundation capacity and vertical and lateral ground deformations.

Liquefaction susceptibility maps for the area indicate that the Site has very low susceptibility to liquefaction (Palmer et al. 2004).

Using the soil and groundwater data from our three borings on the Site, we conducted liquefaction evaluations for the Site with the aid of WSliq (Kramer 2008). We used the ground motions for the MCE described above to perform the liquefaction analyses. The results of our analyses indicate that some discontinuous strata of the Site soils are susceptible to liquefaction, however, the resulting effects are negligible at the ground surface. Therefore, liquefaction should not be a design consideration for the project.

3.1.2 Fault Rupture

The Southern Whidbey Island Fault Zone passes approximately 1.3 miles northeast of the Site (Washington DNR 2026). In our opinion, due to the distance and suspected long recurrence interval of the nearest fault, the risk of fault rupture at the Site is very low and is not a design consideration warranting further analysis.

3.2 Shallow Foundation Design and Construction

In our opinion, shallow foundations (spread and strip footings) and slab-on-grade construction will be appropriate to support the proposed new expansion. The following subsections present design and construction recommendations for these elements.

3.2.1 Vertical Support

The existing fill on the Site is not suitable for foundation support and should be overexcavated from the foundation footprint. We recommend that strip or spread footings bear on a leveling pad of at least 6 inches of compacted crushed rock overlying either the native glacial till (weathered or unweathered) or new structural fill extending down to the native glacial till. This bearing layer is expected to be approximately 1 to 3 feet bgs but may be deeper in unexplored areas of the Site. The crushed rock leveling pad is recommended to bolster foundation settlement control and protect prepared subgrade surfaces from workers and equipment during foundation forming. The crushed rock should generally meet the requirements of crushed surfacing base course (CSBC) defined by the Washington State Department of Transportation (WSDOT) *Standard Specifications for Road, Bridge, and Municipal Construction* (Standard Specifications) Section 9.03.9(3) (WSDOT 2026), or similar material.

Any additional structural fill underlying building foundations aside from the aforementioned 6-inch crushed rock leveling pad should also consist of CSBC or may consist of quarry spalls per WSDOT Standard Specification 9-13.1(5) (WSDOT 2026). The structural fill should extend horizontally beyond the edge of footings by a distance at least equal to the thickness of the structural fill.

Depending on the season in which construction occurs, footing excavations may extend below the groundwater table. Structural fill should not be placed in standing water. We recommend excavation dewatering take place, as discussed below in Section 4.1.4, so that fill material can be placed on dry subgrade. If dewatering is not feasible, quarry spalls can be placed as structural fill in the standing water to bring grade up out of the water table before the crushed rock leveling pad is placed.

The CSBC structural fill should be compacted and tested to verify at least 95% of maximum dry density (MDD) as determined by the modified Proctor test method (ASTM D1557) and field nuclear densometer methods. Any quarry spalls placed as structural fill should be tamped in placed with an excavator bucket to firm and unyielding conditions.

Geosyntec should evaluate the subgrade prior to any structural fill placement and the final subgrade after structural fill placement and prior to foundation form construction. Prior to pouring foundation concrete, any apparent soft areas, topsoil, garbage, debris, or organic-rich material should be cleared and grubbed from the exposed foundation subgrade area and replaced with compacted structural fill.

Footings should bear a minimum of 18 inches below adjacent exterior grade for frost heave protection. Foundations shall not be placed on frozen subgrades.

3.2.2 Foundation Bearing Capacity

Strip footings and square footings varying from 2 to 8 feet wide, bearing on the sequence of materials described above, can be designed using a maximum allowable net bearing pressure of 3,000 pounds per square foot (psf). Maximum allowable bearing pressure may be increased by one-third (i.e., to 4,000 psf) for short-term transient loading conditions such as wind and seismic loading.

We estimate foundations designed for 3,000 psf bearing pressure will on average experience total elastic compression settlements of less than about 1 inch. Differential settlement between adjacent foundation elements and/or over a distance of about 50 feet along continuous strip footings may be estimated to be up to half of the total settlement. We anticipate the majority of elastic settlement will occur as loads are applied to the foundations during construction.

3.2.3 Lateral Support

Lateral forces can be resisted by passive soil resistance against the side of the foundations and frictional resistance along the base of the foundations.

The ultimate passive soil resistance (expressed as an equivalent fluid density) can be taken as 220 pounds per cubic foot (pcf) for foundations bearing against saturated Site soils. We recommend including a factor of safety equal to 1.5 to calculate allowable passive resistance (i.e., 150 pcf). The upper 1 foot of passive resistance should be neglected for design unless it is protected by pavement or slab-on-grade.

For frictional resistance, an ultimate coefficient of friction of 0.55 may be taken for cast-in-place concrete poured on the prepared/compacted CSBC leveling pad. We recommend including a factor of safety of 1.5 to calculate allowable frictional resistance (i.e., 0.36).

3.3 Slab-on-Grade Support

Slabs-on-grade should gain support from 8 inches of CSBC, as described in Section 4.3, overlying compacted in-situ fill or glacial till soils.

For interior slabs-on-grade, we recommend the uppermost 8 inches of the subgrade consist of compacted capillary break material (in lieu of 8 inches of crushed rock) to provide uniform support and moisture control. The capillary break material should consist of free-draining, clean, fine gravel, and coarse sand with a maximum particle size of about 1 inch and less than 3% material passing the U.S. No. 200 sieve by weight (fines). Angular material manufactured by crushing is preferred over rounded material, such as bank run sand and gravel, to provide a subgrade surface that is not easily disturbed by workers laying steel rebar and concrete formwork. The capillary break material should be compacted to relatively firm and unyielding condition and evaluated by Geosyntec prior to placement of steel rebar and formwork.

For building areas where moisture intrusion would be detrimental to the finished interior space (such as air-conditioned office areas that may be covered with flooring), consideration should be given to placement of a moisture protection barrier over the capillary break.

With respect to moisture intrusion control as it relates to the interior environment of the structure, detailed design and performance issues are beyond the expertise of Geosyntec. Moisture protection barriers are specifically for moisture control and should not be confused with vapor barriers required for other gas/vapor mitigation (such as radon). An environmental engineer and building envelope specialist or contractor should be consulted to address these issues, as needed.

We recommend using a vertical modulus (K_{v1}) of 100 pounds per cubic inch (pci) for design of slabs-on-grade bearing on the sequence of subgrade materials described above. Note that K_{v1} is appropriate for a 1-foot by 1-foot surface and the initial subgrade modulus used for design (K_s) will need to be adjusted based on the width of the slab considered using the following equation:

$$K_s = \frac{K_{v1}(B+1)^2}{4B^2}$$

Where B = slab width (in feet).

3.4 Drainage

At a minimum, the outside edge of all perimeter footings should be provided with a drainage system consisting of an appropriately sized, perforated Schedule 40 PVC pipe surrounded by at least 6 inches of washed gravel meeting WSDOT *Standard Specification 9-03.12(4) for Gravel Backfill for Drains* requirements (WSDOT 2026). The drainage pipes should include cleanouts for periodic maintenance and inspection.

The design team may also wish to consider underslab drainage to collect water that could potentially perch on top of the relatively impermeable glacial till below the building. The underslab drainage should consist of an interior perimeter drain and a series of cross drains placed on about 20-foot centers. The drains should be constructed as described above for outside perimeter drains. The drainage pipe inverts should be at least 12 inches below the finished floor elevation. We recommend supplementing the underslab drainage with a vapor barrier beneath the slab. The vapor barrier should be installed in accordance with the manufacturer's recommendations.

As an alternative to underslab drainage and a vapor barrier, a waterproofing system can be used below slabs to control moisture intrusion. A waterproofing expert/specialist should be consulted to evaluate a suitable waterproofing system. For a waterproofing approach, the slab design would have to consider upward pressure due to buoyancy.

Final grades around the building should be sloped such that surface water drains away from the building. Soil cover over the foundation drains should consist of at least 12 inches of low permeability soil to reduce the potential for surface water to enter the foundation drains. Downspouts and roof drains should not be connected to the foundation drains to reduce the potential for flooding and clogging of the foundation drains.

3.4.1 Drainage Discharge Rates

Should the design team move forward with only outside perimeter footing drains, we recommend the following equation for preliminary drainage discharge rates simplified from the equation for

trench dewatering presented in *Construction Dewatering and Groundwater Control: New Methods and Applications* (Powers 2007):

$$Q = \frac{K H^2}{2000}$$

Where:

- Q is discharge in cubic feet per second (cfs) per linear foot of perforated drain
- K is hydraulic conductivity of the surrounding soil in feet per second
- H is the vertical height of water above the perforated pipe in feet

Should the team move forward with outside perimeter footing drains and under slab drainage, we recommend the following equation for preliminary drainage discharge rates, also simplified from Powers 2007, which calculates the dewatering discharge of an area using an equivalent sized well:

$$Q = \frac{\pi K H^2}{ln(\frac{R_0}{\sqrt{\frac{A}{\pi}}})}$$

Where:

- Q is discharge in cubic feet per second (cfs)
- K is hydraulic conductivity of the surrounding soil in feet per second
- H is the vertical height of water above the perforated pipe in feet
- A is the area of building being served by under-slab drainage in square feet
- R_0 is the radius of influence in feet determined by the following equation:

$$R_0 = 1660 H \sqrt{K}$$

For the purpose of these calculations, we recommend a conservative hydraulic conductivity of the surrounding in situ soil of $1x10^{-4}$ feet/second. It should be noted that these equations for drainage discharge are accurate only for ***preliminary order of magnitude estimates***. Should a more precise dewatering design be needed, a full dewatering analysis using numerical modeling methods should be completed. Geosyntec is available to perform these analyses as an additional service, if requested.

3.5 Stormwater Infiltration Feasibility

We recommend stormwater infiltration be considered infeasible at the Site. Per Appendix Section D-2.4 and D-2.5 of the City of Seattle Stormwater Manual, the minimum vertical separation between the bottom of a proposed infiltration facility and either groundwater or a hydraulically restrictive layer should be at least 1 foot during the wet season (Seattle 2021). We performed our explorations during the wet season (December 2025), and observed groundwater less than 1 foot bgs (in MW-01) and in what we consider to be a hydraulically restrictive layer (the Vashon till geologic unit) less than 1 foot bgs (in GB-01).

3.6 Lateral Earth Pressures for Retaining Wall Design

The design team may wish to incorporate retaining walls into the Site grading. We understand that they are considering conventional cast-in-place (CIP) concrete retaining walls and cantilevered soldier pile walls. Conventional CIP walls shall be backfilled with, and designed for, material meeting requirements of gravel borrow as discussed in Section 4.3. Conversely, design of cantilevered soldier pile walls shall be governed by earth pressures from in situ soils. Table 2 and Table 3 present our recommended earth pressures for design of each type of wall, respectively:

Table 2 Lateral Earth Pressures for Design of Traditional CIP Retaining Walls

Earth Pressure Condition[6]	Equivalent Fluid Weight (pcf)[1,3]	Surcharge Pressure (psf)[1,4]	Seismic Equivalent Surcharge Pressure (psf)
Active with level backslope[2]	34	0.26*S	9*H
Active with 2.5H:1V Backslope[2]	44	0.34*S	22*H
At-Rest	54	0.41*S	-
Passive[5]	220	NA	-

Notes:

1. psf = pounds per square foot; pcf = pounds per cubic foot.
2. To invoke active earth pressure conditions, the wall must be capable of yielding laterally at least 0.001 to 0.002H (where H is the exposed height of the wall); otherwise, at-rest earth pressure condition shall be assumed.
3. The Equivalent Fluid Weight provided above are distributed triangularly along the exposed height of the wall.
4. The Surcharge Pressure is distributed uniformly (rectangularly) along the exposed height of the wall. S is the vertical surcharge pressure at the ground surface immediately above/behind the wall.
5. Ultimate passive pressure is presented; a factor of safety of 1.5 should be applied for design. Passive pressure contribution should be ignored within 2 feet of the ground surface.
6. Active and at-rest earth pressures assume the wall can drain freely so that no hydrostatic pressure builds up behind the wall. Passive earth pressures assume the subgrade and passive soils are saturated, given the high ground water table.

Table 3 Lateral Earth Pressures for Design of Cantilevered Soldier Pile Walls

Earth Pressure Condition[6,7]	Equivalent Fluid Weight (pcf)[1,3]	Surcharge Pressure (psf)[1,4]	Seismic Equivalent Surcharge Pressure (psf)
Active with level backslope[2]	31	0.24*S	8*H
Active with 2.5H:1V Backslope[2]	40	0.31*S	18*H
At-Rest	50	0.38*S	-
Passive[5]	284	NA	-

Notes:

1. psf = pounds per square foot; pcf = pounds per cubic foot.
2. To invoke active earth pressure conditions, the wall must be capable of yielding laterally at least 0.001 to 0.002H (where H is the exposed height of the wall); otherwise, at-rest earth pressure condition shall be assumed.
3. The equivalent fluid densities provided above are distributed triangularly along the wall. The uniform lateral surcharge is distributed uniformly (rectangularly) along the exposed height of the wall.
4. S is the surcharge pressure at the ground surface immediately above/behind the wall with level backfill/backslope. If surcharge pressures are not immediately above/behind the wall or backfill is sloped, Geosyntec should be consulted to evaluate/revise surcharge pressure recommendations working in tandem with the Project structural engineer.
5. Ultimate passive pressure is presented; a factor of safety of 1.5 should be applied for design. Passive pressure contribution should be ignored within 2 feet of the ground surface.
6. Active and at-rest earth pressures assume the wall can drain freely so that no hydrostatic pressure builds up behind the wall. Passive earth pressures assume the subgrade and passive soils are saturated, given the high ground water table.
7. Active / At-Rest pressures act along the entire wall (including lagging). Passive pressures act over 2.5*pile diameter.

3.7 Stormwater Vaults

We understand through coordination with the Project civil engineer that buried stormwater vaults are planned for the Project. The following sections provide recommendations for design buried vaults, including vertical support, wall design, and groundwater effects.

3.7.1 Vertical Support

Support of stormwater vaults shall follow the same recommendations for vertical support as for building footings. See Sections 3.2.1 and 3.2.2 above.

3.7.2 Vault Walls

We recommend the vault walls be designed to support an effective at-rest equivalent fluid pressure of 54 pounds per cubic foot (pcf) above the water table and 28 pcf below the water table, plus hydrostatic pressure and a uniform rectangular horizontal live load surcharge of 100 psf.

In our opinion, below-grade vaults do not need to be designed for incremental seismic loading. The buried structure will be restrained by the surrounding ground and will not be subject to vibratory amplification (like a bridge or building). Washington State Department of Transportation's (WSDOT) *Bridge Design Manual* (BDM; WSDOT, 2022) policy on buried vault

design is to neglect seismic effects for vaults not supporting roadways or structures and with span lengths less than 20 feet.

3.7.3 Groundwater Effects

Below-grade structures are subjected to potential upward buoyancy forces when the groundwater level around the structure is higher than the base of the structure.

The excavation surrounding the vaults will be backfilled with pervious structural fill. Over time, there is a potential that groundwater will accumulate within the pervious backfill and perch over the underlying low-permeability glacial till. In this condition, the vaults could be susceptible to critical buoyant uplift. To avoid the potential for a buoyancy failure, the vault should be designed for a long-term high groundwater level on the vault exterior. We recommend assuming groundwater level is at the existing ground surface. Buoyancy design parameters and calculations are provided on Figure 3. We recommend the vaults be designed with a factor of safety of at least 1.3 against buoyancy failure. It may be necessary to design the vaults with expanded bases to achieve the recommended factor of safety.

Waterproofing and internal pumping provisions should also be considered, if deemed necessary, by the Project designer.

4. EARTHWORK AND CONSTRUCTION RECOMMENDATIONS

4.1 General

Based on our explorations performed at the Site and our understanding of the Project, it is our opinion that the Contractor should be able to complete earthwork activities using standard construction equipment. Although not encountered in our explorations, we recommend the Contractor anticipate the possibility of large wood debris and tree root balls during excavation of fill. Similarly, excavations in Vashon till may contain boulders.

4.1.1 Wet Weather Considerations

Site soils encountered during explorations at the Site may be moisture sensitive and difficult to handle, prepare, or compact with construction equipment during periods of wet weather. Earthwork is typically most economical when performed under dry weather conditions. If earthwork is to be performed or fill is to be placed in wet weather or under wet conditions when soil moisture content is difficult to control, the following recommendations should be incorporated into the contract specifications:

- Earthwork should be performed in small areas to minimize exposure to wet weather. Excavation or the removal of unsuitable soils should be followed promptly by the placement and compaction of structural fill. The size and type of construction equipment used may have to be limited to prevent soil disturbance.
- The ground surface within the construction area should be sealed by a smooth drum vibratory roller (or equivalent) and under no circumstances should be left uncompacted and exposed to moisture. Soils which become too wet for compaction should be removed and replaced with compacted structural fill.
- All structural fill materials (including on-Site materials considered for reuse) should be stockpiled and covered during wet weather to ensure they do not become excessively wet. On-Site material that becomes excessively wet or contains significant fines content should not be reused as structural fill and may need to be disposed of off-Site.
- Local best management practices (BMPs) for stockpiling and erosion protection should be strictly followed.
- Excavation and placement of structural fill should be observed by Geosyntec to verify that all unsuitable materials are removed and suitable compaction is achieved.

4.1.2 Temporary and Permanent Erosion Control

To prevent Site erosion during construction, appropriate temporary erosion and sedimentation control (TESC) measures should be used in accordance with the recommendations above and the local BMPs. Specific TESC measures may include appropriately placed silt fencing, straw wattles, rock check dams, and plastic covering of exposed slope cuts and soil stockpiles. Outside of the proposed construction areas, the existing vegetation should be retained.

Permanent erosion control within the areas of construction should be achieved through the restoration of gravel surfaces and/or the re-establishment of vegetation.

At no time should uncontrolled runoff or surface water be allowed to flow across the Site. We recommend upstream drainage area run-on control measures are taken to avoid surface water flowing across the Site. Local BMPs for erosion protection should be strictly followed.

4.1.3 Temporary Excavation Stability

Temporary excavation slopes will be required for installation of shallow foundations, or mass excavation (if required). Temporary excavations and slopes should not exceed the limits specified in the local, state, and federal regulations. The stability of temporary excavations and slopes shall be the responsibility of the Contractor.

The existing fill and Vashon till soils are estimated as Type C soil in accordance with the Washington Administrative Code (WAC) 296-155 Part N (WSL 2023). Temporary excavation slopes in Type C soils are anticipated to stand as steep as 1.5H:1V.

The estimated maximum cut slope inclinations are provided for planning purposes only, are applicable to excavations without groundwater seepage or runoff, and assume dewatered conditions. Flatter slopes will likely be necessary in areas where groundwater seepage exists or where construction equipment surcharges are placed near the crest of the excavation.

With time and the presence of seepage and/or precipitation, the stability of temporary unsupported cut slopes can be significantly reduced. Therefore, all temporary slopes should be protected from erosion by installing a surface water diversion ditch or berm at the top of the slope. In addition, the Contractor should monitor the stability of the temporary cut slopes, and adjust the construction schedule and slope inclination accordingly. Vibrations created by traffic and construction equipment may cause caving and raveling of the temporary slopes. In such an event, lateral support for the temporary slopes should be provided by the Contractor to prevent loss of ground support.

4.1.4 Dewatering

Due to the shallow groundwater observed during drilling, we anticipate that excavation for footings will require dewatering. In our opinion, seepage into footing excavations can likely be managed locally with sumps and pumps. However, dewatering concepts will be dependent on the final Project design as well as the Contractor's means and methods.

4.2 Subgrade Preparation

4.2.1 Foundations and Slabs-on-Grade

Foundation and slab-on-grade subgrades should be observed and evaluated by Geosyntec prior to placing structural fill and capillary break to verify they have been prepared in conformance with our recommendations in Sections 3.2 and 3.3. We should also observe structural fill below foundations after it has been placed and prior to placing steel rebar and pouring concrete.

4.3 Structural Fill

Soils placed beneath or around foundations, slabs-on-grade, pavement, and utilities should be considered structural fill. For these fill areas, we provide the following recommendations:

- Site-derived soil is generally not suitable for reuse as structural fill.
- Fill below foundations and slabs should consist of CSBC, WSDOT Standard Specification 9-03.9(3) (WSDOT 2026), except in slab areas that need moisture protection, the upper 8 inches should be capillary break.
- Fill used to raised grade in standing water should consist of quarry spalls per WSDOT Standard Specification 9-13.1(5).
- Fill used to backfill against/around foundations should consist of granular material meeting the requirements for Gravel Borrow, WSDOT Standard Specification 9-3.14(1) (WSDOT 2026).
- Structural fill should only be placed on a relatively firm and unyielding subgrade.
- Structural fill should be compacted to a relatively firm and unyielding condition to a minimum density of 95% of the MDD as determined by ASTM International D1557 (ASTM; ASTM 2026).
- Structural fill should be placed in lifts with a loose thickness no greater than 12 inches when using relatively large compaction equipment, such as a vibrating plate attached to an excavator (hoe pack) or a vibratory smooth drum roller. If small, hand-operated compaction equipment is used to compact structural fill, lifts should not exceed 6 inches in loose thickness.
- The moisture content of the structural fill should be controlled to within a few percentage points of the optimum moisture. Optimum moisture is the moisture content corresponding to the maximum modified proctor dry density.
- Structural fill material shall not be placed if subgrade is frozen.
- Fill placed in softscape, general grading, landscape, or common areas that are not beneath or around structures, utilities, slabs-on-grade, or below paved areas that can accommodate some settlement should be compacted to a relatively firm and unyielding condition.

4.4 Utility Trenches

Utility trench backfill should consist of structural fill and should be placed in lifts of 12 inches or less (loose thickness) when using heavy compaction equipment, and 6 inches or less when using hand compaction equipment, such that adequate compaction can be achieved. Each lift must be compacted prior to placing the subsequent lift.

5. RECOMMENDATIONS FOR CONTINUING GEOTECHNICAL SERVICES

Throughout this report, we have provided recommendations where we consider it would be appropriate for Geosyntec to provide additional geotechnical input to the design and construction process.

Before construction begins, we recommend that Geosyntec performs the following:

- Continue to meet with the design team as needed to address geotechnical questions that may arise throughout the remainder of the design process.
- Review the geotechnical elements of the Project plans, specifications, and cost estimates to provide geotechnical input and see that the geotechnical engineering recommendations are properly interpreted.
- Revise our geotechnical report if the design evolves differently from the assumptions in this report.

5.1 Additional Construction Services

We are available to provide geotechnical engineering and monitoring services during construction. The integrity of the geotechnical elements depends on proper Site preparation and construction procedures. In addition, engineering decisions may have to be made in the field if variations in subsurface conditions become apparent.

During the construction phase of the Project, we recommend that Geosyntec be retained to perform the following tasks:

- Review applicable submittals.
- Observe and evaluate subgrade and structural fill placement.
- Observe and evaluate significant grading or earthwork.
- Attend meetings, as needed.
- Address other geotechnical engineering considerations that may arise during construction.

The purpose of our observations is to verify compliance with design concepts and recommendations, and to allow design changes or evaluation of appropriate construction methods in the event that subsurface conditions differ from those anticipated prior to the start of construction.

6. REFERENCES

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7. LIMITATIONS

Work for this project was performed for University of Washington (Client), and this report was prepared consistent with recognized standards of professionals in the same locality and involving similar conditions, at the time the work was performed. No other warranty, expressed or implied, is made by Geosyntec Consultants (Geosyntec).

Recommendations presented herein are based on our interpretation of site conditions, geotechnical engineering calculations, and judgment in accordance with our mutually agreed-upon scope of work. Our recommendations are unique and specific to the project, site, and Client. Application of this report for any purpose other than the project should be done only after consultation with Geosyntec.

Variations may exist between the soil and groundwater conditions reported and those actually underlying the site. The nature and extent of such soil variations may change over time and may not be evident before construction begins. If any soil conditions are encountered at the site that are different from those described in this report, Geosyntec should be notified immediately to review the applicability of our recommendations.

It is the Client's responsibility to see that all parties to this project, including the designer, contractor, subcontractors, and agents, are made aware of this report in its entirety. At the time of this report, design plans and construction methods have not been finalized, and the recommendations presented herein are based on preliminary project information. If project developments result in changes from the preliminary project information, Geosyntec should be contacted to determine if our recommendations contained in this report should be revised and/or expanded upon.

The scope of work does not include services related to construction safety precautions. Site safety is typically the responsibility of the contractor, and our recommendations are not intended to direct the contractor’s site safety methods, techniques, sequences, or procedures. The scope of our work also does not include the assessment of environmental characteristics, particularly those involving potentially hazardous substances in soil or groundwater.

All reports prepared by Geosyntec for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Geosyntec. Geosyntec’s original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

Please refer to Appendix E titled “Report Limitations and Guidelines for Use” for additional information governing the use of this report.

We appreciate the opportunity to perform these services. If you have any questions, please call Kale Spina, PE, Professional Geotechnical Engineer at (530) 318-8938.

FIGURES

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APPENDIX A
Subsurface Exploration Logs

Appendix A: Subsurface Exploration Logs

Geosyntec's field exploration program consisted of advancing three machine-drilled borings, designated GB-01, GB-02, and MW-01, to depths of 32.0 to 41.5 feet below ground surface (bgs).

The borings were advanced between December 17 and 19, 2025. The borings were advanced using a combination of hand tools, vactor excavation, hollow-stem auger drilling, and mud-rotary drilling, with a truck-mounted vactor rig and track mounted hollow-stem auger and mud-rotary rigs operated by Boretec1, Inc. and Holocene Drilling under subcontract to Geosyntec.

Hand tools excavation was performed in the upper 2.5 feet of GB-01 and GB-02. Vactor truck excavation with large-diameter hose was performed within the upper 5 feet of the MW-01 borehole to locate potential unknown buried utilities or unforeseen obstacles to drilling. Samples were collected from the vactor excavations by hand. Once a location had been determined to be clear of utilities or obstacles, the drillers positioned the drill rig over the hole and continued the exploration via hollow-stem auger and mud-rotary methods. Samples were obtained at 2.5 foot intervals from 5 to 15 feet bgs, and then at 5 foot intervals to the depths explored using the Standard Penetration Test (SPT) in general accordance with ASTM International (ASTM) Method D1586 (ASTM 2025). The test involved driving a 2-inch- or 3-inch-outside-diameter split-barrel sampler to a distance of 18 inches into the soil with a 140-pound automatic-trip hammer free falling from a distance of 30 inches. The number of blows for each 6-inch interval was recorded, and the number of blows required to drive the sampler the final 12 inches is known as the Standard Penetration Resistance ("N") or blow count. The resistance, or N-value, provides a measure of the relative density of granular soils or the relative consistency of cohesive soils. If a total of 50 blows are recorded for a single 6-inch interval, the test is terminated, and the blow count is recorded as 50 blows for the total inches of penetration. Samples were placed in labeled plastic bags or jars and taken to a laboratory for further classification.

A Geosyntec field representative was present throughout the field exploration program to observe the drilling and excavation, collect soil samples, and prepare descriptive logs of the explorations. Detailed descriptions of the subsurface conditions encountered in our explorations, as well as the depths where characteristics of the soils changed, are indicated on the logs presented here in Appendix A. The depths indicated on the log where conditions changed may represent gradational variations between soil types. Soils were classified per the Unified Soil Classification System (USCS) in general accordance with ASTM D2488, *Standard Practice for Description and Identification of Soils (Visual and Manual Procedure)*. The subsurface conditions depicted are only for the specific date and locations reported, and therefore, are not necessarily representative of other locations and times. A key to the symbols and terms used on the logs is provided in the Exploration Log Key.

Upon completion, borings B-01 and B-02 were backfilled with 3/8-inch bentonite chips in accordance with requirements of the Washington State Department of Ecology.

Boring MW-01 was completed with a monitoring well to allow groundwater levels to be measured and monitored. The monitoring well was backfilled with sand through the slotted screen interval, followed by bentonite, and cement grout. The well was completed with a traffic-rated, flush-mounted monument, as illustrated on the exploration logs.

The locations of the explorations are shown on Figure 2.

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APPENDIX B
Historical Geotechnical Exploration Logs

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APPENDIX C
Geotechnical Laboratory Testing

Appendix C: Geotechnical Laboratory Testing

We submitted selected samples from our explorations for laboratory testing to characterize the grain size, fines content, and Atterberg limits of the Site soils. The laboratory tests were conducted in accordance with the standards below:

- ASTM D6913, Standard Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis;
- ASTM D442, Standard Test Method for Particle-Size Analysis of Soils;
- ASTM D1140, Standard Test Methods for Determining the Amount of Material Finer than 75- micrometers (No. 200) Sieve in Soils by Washing; and
- ASTM D4318, Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

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APPENDIX D
Geophysical Testing Results

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APPENDIX E
Report Limitations and Guidelines for Use

Appendix E: Report Limitations and Guidelines for Use

Geoscience is Not Exact

The geoscience practices (geotechnical engineering, geology, and environmental science) are far less exact than other engineering and natural science disciplines. It is important to recognize this limitation in evaluating the content of the report. If you are unclear how these "Report Limitations and Guidelines for Use" apply to your project or property, you should contact Geosyntec Consultants, Inc. (Geosyntec).

This Report and Project-Specific Factors

Geosyntec's services are designed to meet the specific needs of our clients. Geosyntec has performed the services in general accordance with our agreement (the Agreement) with the Client (defined under the Limitations section of this project's work product). This report has been prepared for the exclusive use of the Client. This report should not be applied for any purpose or project except the purpose described in the Agreement.

Geosyntec considered many unique, project-specific factors when establishing the Scope of Work for this project and report. You should not rely on this report if it was:

- Not prepared for you;
- Not prepared for the specific purpose identified in the Agreement;
- Not prepared for the specific subject property assessed; or
- Completed before important changes occurred concerning the subject property, project, or governmental regulatory actions.

If changes are made to the project or subject property after the date of this report, Geosyntec should be retained to assess the impact of the changes with respect to the conclusions contained in the report.

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of the Client. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against liability claims by third parties with whom there would otherwise be no contractual limitations. Within the limitations of scope, schedule, and budget, our services have been executed in accordance with our Agreement with the Client and recognized geoscience practices in the same locality and involving similar conditions at the time this report was prepared

Property Conditions Change Over Time

This report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by events such as a change

in property use or occupancy, or by natural events, such as floods, earthquakes, slope instability, or groundwater fluctuations. If any of the described events may have occurred following the issuance of the report, you should contact Geosyntec so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

Geotechnical, Geologic, and Environmental Reports Are Not Interchangeable

The equipment, techniques, and personnel used to perform a geotechnical or geologic study differ significantly from those used to perform an environmental study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually address any environmental findings, conclusions, or recommendations (e.g., about the likelihood of encountering underground storage tanks or regulated contaminants). Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding the subject property.

APPENDIX B

GHG Emissions Worksheet

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 (MTCO2e) Embodied	Energy	Transportation	Lifespan Emissions (MTCO2e)
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		**9.6**	39	737	571	**12927**
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**

Section II: Pavement

Pavement		0.00				**0**

Total Project Emissions: **12927**

APPENDIX C

Arborist Report

On File with the University of Washington

APPENDIX D

Regulated Building Materials Survey

On File with the University of Washington